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Rising Tides, Resilient Noveletaños: Understanding Flood Experiences and Community Recovery Strategies in the Lens of Barangay Captains

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Abstract

This study aims and explores the strategies and experiences of barangay captains in Noveleta, Cavite, following significant flooding events that occur in their term. Utilizing a transcendental phenomenological approach, the research engaged ten participants through purposive sampling to delve into the lived experiences, coping mechanisms, and contextual influences affecting their responses to floods. The findings are organized into four major themes: Disaster Preparedness and Response, Community Engagement and Cooperation, Infrastructure and Environmental Concerns, and Communication and Reflection. These themes

encompass various aspects such as preparedness, emergency response, government support, community awareness, leadership, environmental management, communication tools, and the contribution of flood control projects. The study highlights the critical role of local leadership in disaster response and community resilience, emphasizing the need for improved infrastructure, effective communication strategies, enhanced community training to mitigate the impacts of future flooding events, and what can be the possible solution to lessen the risk of flooding.

Keywords: Flooding, Catch Basin, Barangay Captains, Strategies, Experiences, Recovery, Community, Leadership, Coping Mechanism, Emergency Response, Preparedness, Disaster, Risk, Solutions, Phenomenological, Awareness, Impact

Introduction

One of the issues that the residents of Noveleta Cavite deal with is flooding, which significantly impacts them. Many people were affected by the flooding in Noveleta, and many took time to recover. However, despite the flooding, Noveleta Cavite residents gradually recovered with the assistance and suggestions of the local barangay captains. After the flooding, the people or the residents of Noveleta could resume their everyday lives because of the barangay captains' remarkable efforts to improve their conditions.

Awareness and strategies can prevent the loss of one life and lead to good strategies that each barangay captain can use in emergencies. According to Saquillo (2023), a disaster can be prevented or mitigated if each resident has enough awareness and planning when the disaster hits their place. This statement shows that risk management or strategies can reduce the threat of some flooding events; it can serve as a guide for the barangay captains on how they will prevent the loss of life during flooding events.

A disaster can occur at any time and severely threaten human lives and the physical structure. As a result, every place that has been part of a lowland area needs to be prepared for emergencies (Elayda *et al.*, 2023)^[29]. This statement claims that a severe flood or a disaster can affect the lives of residents in every area affected by a typhoon. Noveleta is one of the municipalities of Cavite that is part of the lowland areas. The statement can also be an insight for barangay captains in Noveleta on what they need to prepare for emergencies like flooding. Many houses, establishments, and businesses were destroyed, and this disaster impacted some. Even though Noveleta is the catch basin area, when there is a flood, the government officials in the municipality take reasonable care and ensure fast recovery for the Noveletaños.

Flooding is a significant challenge for coastal communities worldwide, including Noveleta, Cavite. Situated in a region prone to typhoons and affected by climate change, Noveleta struggles to handle flood risks and protect its residents and properties. The literature review focuses on the direct and indirect economic impacts of natural disasters, namely flooding. Direct impacts refer to the destruction of properties, businesses and physical and mental health impacts caused by flooding. Likewise, indirect

impacts refer to the changes in economic activities due to the disaster.

The Intergovernmental Panel on Climate Change (IPCC) warns of a sea level rise of 0.26 to 0.77 meters by the end of the century due to global warming, heightening flood risks in coastal areas like Noveleta (IPCC, 2021) ^[44]. Rapid urbanization and poor land use planning also worsen the town's vulnerability. Converting natural wetlands and mangrove forests into residential and commercial areas reduces the land's ability to absorb water, leading to increased surface runoff during heavy rains (Tacoli, 2020) ^[93].

Flooding in Noveleta brings severe socio-economic consequences, including loss of livelihoods, damage to infrastructure, displacement of communities, and health risks, especially for vulnerable groups (Dasgupta *et al.*, 2020) ^[20]. Understanding residents' perspectives, primarily through barangay captains, is essential for developing effective community-based adaptation strategies.

This research aims to explore the perceptions and experiences of Noveleta residents' regarding typhoon-induced flooding, highlighting factors influencing vulnerability and resilience. Through collaboration with barangay captains, the study seeks to identify community-driven solutions and policy recommendations to address flooding challenges and enhance resilience in the face of future typhoons that can cause flooding in the municipality. This research also interrogates the effectiveness of present infrastructure and emergency response mechanisms in mitigating the effect of typhoon-caused flooding, aiming to offer insights for enriching preparedness and response approaches in any matter. The aim is to pursue the analysis of flooding activities in Noveleta to advance predictive fashions to count on circumstantial flood dangers and take proactive measures.

Objectives

The main objective of this study is to help barangay captains to solve the flood problem they are facing. This study aims to (1) identify the main problem that the barangay captains are facing in their barangay; (2) determine if the barangay captains take actions when they are facing the disaster like flood; (3) determine how disasters such as floods affect the lives of every barangay captain and resident in the town of Noveleta Cavite.

Materials and Methods

The research design of the study on flood experiences and community recovery strategies in Noveleta, Cavite, focusing on barangay captains, employs a qualitative approach to gather insights from these key community leaders. The research design is phenomenology. A phenomenological study is a qualitative research method that aims to explore and understand the lived experiences and perspectives of individuals regarding a particular phenomenon. It involves in-depth interviews and thematic analysis to uncover the essence of the phenomenon as experienced by the participants (Lee, 2022) ^[60]. This qualitative approach seeks to understand the meaning and essence of a particular experience or phenomenon as perceived by the participants (Ibrahim *et al.*, 2022) ^[43]. The primary goal of a phenomenological study is to identify and understand the underlying themes and essence of experiences as perceived by the participants (Isnawan *et al.*, 2022) ^[45]. In this context,

the study aims to explore the perceptions and experiences of Noveleta residents regarding typhoon-induced flooding, highlighting factors influencing vulnerability and resilience. By collaborating with barangay captains, the research seeks to identify community-driven solutions and policy recommendations to address flooding challenges and enhance resilience in the face of future typhoons that can cause flooding in the municipality. The main objective is to understand if barangay captains took action after the flood event, exploring their lived experiences about flooding incidents in Noveleta, how they coped with them, and what situations or contexts affected their experiences. This study is significant as it can benefit municipality officials in handling flooding situations effectively, improve residents' awareness and preparedness for floods, and provide valuable insights for future researchers and disaster management strategies.

In brief, this qualitative research study uses the phenomenology design to gather the lived experiences and community recovery strategies with the help of barangay captains in the whole town of Noveleta. The researchers aim to find the lived experiences of residents in the Municipality of Noveleta meaningful and use them to construct new and best strategies that the town of Noveleta could have.

Data gathering procedures include conducting interviews with barangay captains to document their experiences and strategies as a resident but also a leader in their barangay. This is designed to extract valuable insights contributing to understanding the flood impacts, experiences, and recovery efforts for each barangay of the municipality of Noveleta. One area where this move in center is particularly clear is inside the field of mass spectrometry-based proteomics. In a survey of data-independent securing mass spectrometry-based proteomics and program gadgets, Zhang *et al.* (2020) highlighted the requirement for more distinctive data-gathering methodologies in this field. They contended that the overreliance on composing overviews has confined the capacity of investigators to totally explore the potential of mass spectrometry-based proteomics and called for the assignment of present-day data-gathering procedures to update examination in this area.

The reason for purposive sampling is the better matching of the sample to the aims and objectives of the research, thus improving the rigor of the study and trustworthiness of the data results (Campbell *et al.*, 2020) ^[16]. Utilizing purposive sampling of non-probability methods with Noveleta, Cavite barangay captains could be a vital approach to pick up in-depth bits of knowledge into local governance and community elements. Analysts can obtain firsthand data on local issues, choice forms and the effect of arrangement approaches at grass roots level when they select these key accomplices by taking under consideration their importance and potential. This focus on strategy not as it were guarantees the study's significance and validity but too cultivates collaboration, belief, and community strengthening by including barangay captains within the inquire about preparation, eventually contributing to a more nuanced understanding of the challenges and openings inside Noveleta's barangay.

The researchers are focusing on a populace of sixteen (16) Barangay Captains from Noveleta, Cavite for their study on flood experiences and community recuperation methodologies. They consider points to investigate the discernment and encounters of Noveleta residents' with

respect to typhoon-induced flooding, centering on components impacting vulnerability and resilience. By collaborating with barangay captains who assumed office between 2018 to 2023, the inquirer looks to recognize community-driven arrangements and arrangement suggestions to address flooding challenges and upgrade flexibility within the face of future tropical storms. The most objective is to explore in case barangay captains took activity after the surge occasion, centering on their encounters, adapting components, and relevant components influencing their reactions. The study's scope incorporates building up community recuperation methodologies inferred from barangay captains to define modern approaches for moderating surge calamities in Noveleta.

The primary actors in the local governance structure of Noveleta in the present study would be barangay captains, who had been elected for the 2018 to 2023 term. For their connections, data and capacity for sharing methods and experience in disaster planning, the former Barangay Captains have been chosen. They are more proficient at giving experiences into calamity recuperation endeavors and are recognizable with their constituents' needs. These previous barangay captains have confronted various challenges due to calamities in their community, unlike newly elected barangay captains that lack experience in leading during disasters. The study focuses on interviewing these barangay captains to get the noteworthy activities they executed to help their communities in recouping from flooding catastrophes. This study will use thematic analysis for the researchers to identify patterns, themes, and meanings in a data set. Thematic analysis is a step-by-step process of analyzing and converting the raw data into themes of data (Krishna 2021). The major steps in a thematic analysis are familiarizing with the data, generating the initial codes, searching for themes, reviewing the identified themes, and producing the manuscripts (Kiger and Varpio, 2020) [56].

In conclusion, this study used a phenomenological type of qualitative research. Purposive sampling technique and thematic analysis was used to better understand the situation of the barangay captains in a certain phenomenon, named flooding.

Results and Discussion

Theme 1: Disaster Preparedness and Response

The purpose of this theme is to identify the different strategies and responses that can be conducted in case the typhoon hits certain places. The way each barangay captains deal with these projects or strategies and how effective this response is. The flood project was made to reduce the impact on the future flood, because the biggest problem that has a big impact on people is due to the poor implementation of the project (Wang *et al.*, 2023) [100].

Natural Disaster Preparedness and Response: It is a preparation after or before a disaster occurs, an immediate response to an event when a disaster occurs. Mitigating the effects of these disasters depends on our ability to correctly predict and prepare for them (Jain *et al.*, 2023) [47]. Cap. Benito stated that,

“Noong panahong bagyo ni Paeng talagang grabe dinanas namin dito niyan dahil napakalaki ng tubig”

The barangay of Salcedo 1 experienced massive water in typhoon Paeng, they had a hard time dealing with this typhoon because it was one of the strongest typhoons to hit the town of Noveleta. According to the study by Williams *et al.*, (2020) which supports what Cap. Benito said, most of the country is at risk of flooding including their barangay due to the increase in sea level and from severe weather-related events. Everyone in this barangay suffered badly, Salcedo 1 was also one of the most affected by the said flood event according to the barangay captain of Salcedo 1.

The barangays of San Rafael 1 & 3, San Jose 2, Sta Rosa 1, San Antonio 2, and Poblacion and their barangay captains shared their preparations in dealing with the flood and post-flood recovery. Below are their statements about how they deal with the disaster or the flood.

“Kapag kasi nagkakaroon ng baha mayroon kaming preparedness na ginagawa kinakailangan na ihanda yung mga kakailanganin sa baha na darating. Katulad ng mga pagkain, mga safety yung mga ginagamit sa pagbaha, life vest.”

“Ang ginagawa namin kapag may paparating na baha unang una is emergency meeting or sa session pero actually nagkakaroon kami ng meeting with the NDRRMO at barangay disaster committee. And then pinaguusapan kung ano yung mga dapat na gawin, kung may mga kailangan bilhin o mga kailangang ilabas”

"Yung ating mga ambulance pinapa-siren na natin to alarm ang ating mga kababayan yung ating mga kabarangay na maging aware sila na puno na iyong ilog at the same time para makapag handa sila."

"Para ma-prevent o para maiwasan ang ating casualties bilang paghahanda siguro kung may bagyo 1 day before dumating si bagyo sa ating area of responsibility dito sa Cavite ay naka monitor na kami sa barangay."

“Kasi bago pa man mangyari iyong pagbaha nakapag warning na tayo so papaalalahanan natin sila kaya nandon nalang ako sa barangay to monitor.”

"Kailangan laging may sistema at plano."

As Cap. Jun, Cap. Melvin, Cap. Jay, Cap. “Superwoman”, Cap. Benjie, and Cap. Jerome shares their different preparations to deal with floods. According to the study of Paauw *et al.*, (2024) [78] flood risk management is one of the strategies that is done when there is a flood, where it supports the statement of the barangay captains in the town of Noveleta. That flood risk management is one of the things that can provide people's needs during and after the flood. The barangay is preparing food for their residents. There is an immediate warning so that people can be ready in case there is a flood. Others are preparing life vests or flooding equipment so that in case they need to rescue someone, they will be on hand. Each barangay captain is always in their barangay at the time of disaster to monitor what is happening in their area. The most important thing in planning is to have a system, when you prepare you should

have a system so that you will not get confused with what you should do as a barangay captain. Like in the barangay of Poblacion, it is necessary to prepare a day before the typhoon to reduce the number of casualties or deaths, the same in other barangays, they continue to prepare before the disaster arrives to avoid the major effects of flooding. Most barangay captains said that,

“Yung hindi ko makakalimutan din yung mayroong humihingi ng saklolo sa akin dahil na trap sila ng tubig, hindi na sila makalikas dahil malaki na ang tubig at malakas na ang agos at delikado.

"May humingi na ng saklolo at ang tanging paraan ay tinuro lang namin ang gagawin sa pamamagitan ng call, sa may second floor umakyat."

“Ang naging epekto lang talaga is yung rescue kasi mayroong nga senior citizen na noong gabi tatawagan ka, paano mo ire-rescue na kung ikaw nga rin mismo ay hindi makababa dahil sa baha.

“hindi namin kaya mag rescue"

"Masakit kasi gusto kong tumulong hindi ako makababa ang baha rito inabot kami hindi ko talaga makakalimutan yung napakasakit."

“Iyan ang pinaka masakit na dinanas walang makababa, gusto kong tumulong may mga text cap hindi kami makalabas dito, yung iba bubong na talaga."

Cap. “Superwoman”, Cap. Allan, Cap. Rudolfo, Cap. Jay, and Cap. Tony did not have the ability to rescue during the flood because they were one of the most affected by the flood so they also could not move because it would be dangerous for the barangay captains if they would go down in the flood even if they wanted to help. Many of the barangay captains were hurt because even if they wanted to help, they couldn't do it, even the navy or coast guard themselves couldn't get out of the flood because of the excessive size or height of the flood water. Cap. Tony said that,

“Mayroong nangyari na namatay dito sa amin sa sakop ng barangay ko dahil huli na siya lumikas, ng tumawid siya hindi na niya kinaya ang agos ng tubig malakas kaya nadala siya."

This statement shares that there is a casualty in the barangay of Salcedo 2, Noveleta, Cavite. Because the resident was already late to evacuate and the water was already big, the resident went down and was carried away by the current of the flood water, the current was so strong that he was carried away when he went down, and whoever went down will also be carried away by the flood because of the strong current of water. Cap. Jay, Cap. Benito, Cap. Melvin, and Cap. “Superwoman” stated that,

"Ang malaking pagbaha ang naging epekto niyan, tulad ng naiiwanang bakas ng baha kasi ang pag apaw ng ilog hindi malinis na tubig yan. Yan ay nag iiwan ng mga basura, makakapal na putik. May mga ilan na

nalulubugan ng gamit yun ang epekto na nangyayari sa mga tao."

“Sabi ko kanina ang bakas ng bagyo ang pinakamabigat ay paglilinis."

“Ang pinaka mahirap yung mga kalat, mga dumi na nandoon sa daan pinakamahirap”

“Ang pinaka matindi yung after yung kinabukasan."

"Dinalaw ko yung mga nasa evacuation center, tinignan ko kung may mga pagkain na sila galing sa DSWD, nakapag provide na rin kami ng pagkain para sa kanila. Tapos noong talagang maliit na ang tubig nag linis naman kami sa mga kalsada kasi yung mga putik halos dalawang araw namin nilinis iyon."

The four barangay captains gave their experience after the flood. Cap. Jay explained that the flood left garbage and mud on their barangay, they had a hard time cleaning it because this was the effect of the flooding in their area. The study by Amato *et al*, (2020) supported the testament of the barangay captains where almost all waste is left in the areas when the heavy rain in the local geology causes flooding and landslides. Cap. Benito said that garbage and dirt are the most difficult to fix after the flood, you will really need help from the government or other barangays. The barangay captain or Cap. “Superwoman” said that the day after the flood is the most difficult event, because the flood is over—you can see the damage left by the flood in your barangay. Cap. Melvin visited the evacuation center after the flood to see if the victims have food from the DSWD and if not he will ask the mayor, if you notice the answer is almost the same on how they suffered after the flood.

“Sabi ko nga sa inyo advance kahit hindi mangyayari isipin niyo ano pa nangyari, posibleng mangyari so magiging handa ka”

"Huwag kang kampante, expect the unexpected."

In this statement, Sta Rosa 1 and Poblacion had advanced thinking, you should still think about the possible events even if you think that it will not happen. Just always think about what might and not happen so that you can still be prepared in case there is an impending disaster. The Cap. Benito mentioned the forced evacuation law for those who don't want to evacuate because when they arrive late or if it takes too long, the water suddenly hits and they cannot be rescued, so forced evacuation is used to make the residents safe. The barangay captain explain that,

“Ang tao habang medyo nandiyan palang ang pagtaas, bago palang iniinform na para makalikas, kaya nga ngayon may batas na talagang sapilitang pag alis hindi puwedeng hindi kayo aalis."

The barangay of Sta Rosa 1 and Poblacion said that their barangay is already used to flooding. Every resident is used to the flooding they experience. Everyone is getting ready because they know what can possibly happen. Cap. “Superwoman” said that every resident in the noveleta is used to flooding, especially unexpected events that

happened at night.

"Sabihin natin tayo dito sa Noveleta parang sanay na tayo na kapag oras ng gabi oras ng kasagsagan sanay na tayo na bumaha."

"Hindi pa naman ako nakaranas na humingi ng tulong sa ibang bayan kasi nga nakahanda kami, ready kami sa mga possible na mangyayari dahil nga sanay na ang mga tao rito sa baha kaya it's time to bangon ulit."

An unexpected event is an event that you did not expect to actually happen. Cap. Melvin told a story where he did not expect an event. He didn't think that the house next to the river would also be flooded. Cap. Melvin said that,

"Doon sa papuntang RIO's yung mga nakatirang tao roon na nakaikot sa ilog at sa simbahan, yung iba naman kasi nailikas na namin silang nandoon lang na hindi umalis kasi hindi naman halos makakarating sa kanila ang baha noong nakaraan. Ngayon lang talaga kasi malaki talaga ang tubig."

Every resident on the barangay of San Rafael 1 and 3 is notified by their respective barangay captain to prepare, it is necessary to be prompt to those who have not yet come or experienced a disaster. Cap. Melvin always reminds their residents to prepare early. Both barangay captains notify their residents before the disaster occurs so that everyone will be prepared.

"Kailangan maging maagap, hindi pa man dumarating yung sakuna kailangan lagi ka ng alerto."

"Ayun nga sasabihan mo silang maging handa, mayroon naman kaming mga sinasabi sa barangay tungkol sa disaster. Hindi lang naman tungkol sa baha may mga lindol, nagkaroon kami ng mga seminar atsaka yung mga actual practice."

The barangay of San Juan 1 and Salcedo 1 have preparations being made before flooding, during flooding and after the flood. In Salcedo they hold meetings and discuss what can be done in their barangay. In San Juan 1 they are preparing for the arrival of the flood such as preparing the chainsaw and ropes to clear and make a way to help the food arrive in their area. Both barangays are preparing equally to avoid high flooding. They also mentioned that,

"So ayun minsan naman tinutulungan naman kami ng munisipyo nag conduct kami ng mga meeting tapos pinaguusapan yung mga bagay na dapat tumutulong sa barangay kagaya sa mga basura."

"Tapos lahat naman ng pang baha yung mga life vest, mga lubid yun talaga ang dapat maka first aid muna sa kanila tapos mayroon kaming first aid kit palagi akong nag dadala niyan. Laging nasa labas lagi iyan, may mga palakol or chainsaw nakahanda po yan lagi, tapos generator nakahanda iyan para halimbawa mawalan ng power makacharge"

To monitor is to keep an eye on something or a situation. The barangay captain of Poblacion y watched over the

Ylang-Ylang river during the flood season to notify the residents when the water is rising and so that they can be prepared for what may happen.

"Time to time and nag mo-monitor kami ng ilog kung gaano siya kabilis, siguro mga level 4 ayan na binabalaan na natin lahat yung mga tanod pinagigising ko na yung mga residente."

Emergency Equipment and Facilities: Emergency equipment and facilities for flooding are essential for getting ready, responding to, and getting back to normal after a flood. Emergency generators are there to keep important things working when the power goes out during floods. If your power goes out, emergency generators act as a working source of power so your electronics can still function as usual (PGAmanage, 2022) ^[79]. During an outage or emergency during a flood, it's important to have power not only for comfort and convenience, but for safety reasons as well. Water pumps are used to get rid of extra water from places that are flooded. Communication systems help emergency workers, people affected by the flood, and officials talk to each other. Emergency shelters give a safe place to stay and things like food and water to people who had to leave their homes because of the flood. First aid kits have medical stuff to help with injuries during emergencies. And there are also boats and gear to help rescue people and keep emergency workers safe. All of these things are super important for reducing the bad effects of floods and keeping people safe when floods happen.

Each barangay gave their own story about how they faced the flood. The captain of barangay Salcedo 2 gave his story about their need for heavy equipment after the flood. The former barangay captain said that,

"Dito sa nakatambak na basura—kinailangan namin ng heavy equipment dahil nga hindi kaya ng mano-manohin dahil sa dami ng basura na iyon. Humiram kamo ng backhoe sa Noveleta, kay Mayor Dino Chua."

The resulting damage and the generated wastes and debris emerge at the end of the natural event, after the floodwaters recede (Amato *et al.*, 2020). By the statement given—it can be seen that the said flooding really had a big impact, a lot of large mud or garbage was left behind after the flooding. It even came to the point that the former barang captain had to ask the Mayor of Noveleta, Mayor Dino Chua, for help. They asked for help because they could not manage the effects brought after the flooding. Heavy and large equipment will be needed to immediately recover from the flooding. Other barangays also share some of their experiences about the lack of equipment during the flood. Like the two barangay captains of San Antonio 2 and Salcedo 1, they gave a statement about the lack of their barangay.

"Marami rito naman nanggagaling ang tubig ang nahingi ng tulong yung tabi ng creek kasi pag malalim na yan tskaa yung sa Jordan hindi na kami makagalaw dahil wala kaming sasakyan wlaa kaming bangka para mapuntahan sila."

"So kami, although kulang kami sa mga equipment syempre ang budget ng barangay ay limited."

Can be read in this statement where they said the needs of their barangay due to the lack of equipment and limited budget of the barangay. The barangay of San Antonio 2 had difficulty in rescuing because the water from the flood also came from there. The former barangay captain of Sta Rosa said that the budget of the barangay is limited, so there is a lack of equipment to be used in the event of a disaster. However, the former barangay captain of San Jose 2 also shared his moments during the flood in their barangay.

"Isa pang kakulangan kapag may disaster na sa barangay hindi kakayanan ng supply ng evacuation, kasi ilang din yan, yung mga pagkain."

Also, the barangay captain of San Jose 2 shares his experience about the lack of barangay where the supply to the evacuation center is not able to handle when there is a disaster such as flooding. Because many people enter or go to the evacuation center especially during flooding, the barangay is unable to supply food or equipment for the residents there. So, it's getting to the point where they ask for help from the higher ups. Insufficient resources were another challenge of evacuation (Ahmadi *et al.*, 2022). The major problems encountered at the evacuation centers were "not enough food and other necessary items" (a major concern of evacuees regarding the evacuation centers before their evacuation) and "lack of privacy" (Izumi *et al.*, 2022) ^[46]. The barangay captain of Salcedo 1 gave a statement where they lack facilities for future disasters.

"Tapos kung saan puwedeng pumunta kasi ang evacuation namin kasi parang wala kaming evacuation dito sa Salcedo Uno."

The former barangay captain in Salcedo 1 tells his subordinates to go where they can during a disaster because they don't have an evacuation center in their area. In this statement it can be seen that there may be a big problem in dealing with the flood due to the lack of their area such as facilities. But even then they are still notifying the residents to be prepared during the disaster.

Government Support and Assistance: Government support and assistance is asking or giving help to its constituents, especially during disasters. Many are asking for help or aid from the government especially during the flood because flooding is one of the most severe disasters to be experienced in the town of Noveleta. Governments have the ability to help their constituents and have access to a wide range of resources for the purpose of FRM or flood risk management (Raikes *et al.*, 2023) ^[82].

Each barangay captain of the Noveleta suggested their method of how they overcame the typhoon Paeng and its flooding. Almost all of them gave the same answer, asking for help from the municipality, asking for help from the government and asking for help from the family. Their request for help regarding the rescue during the flood, their request for food after the flood, and their request for help to clean their areas after the flood. Their statements asking for help from governments and family members can be seen below,

"Nanghihingi naman kami ng tulong kay mayor kay congressman diyan kami ng hingi ng tulong kung ano kailangan namin lalo na pag tapos na ang pagbaha

kung kailangan namin heavy equipment nahingi kami"

"Nagpapasalamat tayo sa butihing Mayor dahil talagang puspos din yung mga binibigay nila mga bigas o relief sa mamamayan ng aming barangay San Juan Uno."

The statements from Cap. Rudolfo and Cap. Allan contained their request for help from the Mayor, the Mayor of Noveleta, Mayor Dino Chua, they had to ask for help after the flood because of the mud and garbage scattered on the road. They also asked for gratitude for the Mayor's help in their barangay. Which they added,

"So far kasi ang hiningian ko ng tulong yung NGU ang ating mga municipal sa ating office of congressman."

"Ginawa ko ay dahil hindi kaya manually noong pangalawang araw tumawag na ko sa kapitolyo sa PSO or sa engineering's office ng PEO ng trece nag request ako sa kanila ng back up so doon gumaan ang aming problema."

"Halos nakasalubong namin ang mga kahoy, mga basura kung ano man ang madala ng baha, nasa harap din kami ng barangay. Wala kaming marescue kaya tumawag nalang ako sa munisipyo at saka roon sa navy, sila ang pumunta."

"Unang una, tinatawag muna kami sa munisipyo, sinasabi sa amin ang mga dapat gawin. Wala naman kaming motor boat na puwedeng ipasok dito. Kaya nakahanda na yung navy na tumulong sa amin para kung sakaling hindi na namin makaya"

Each of these statements have different help requested but the request is the same. These barangays are San Antonio 1 & 2, Salcedo 1, Sta Sosa 1 and San Rafael 1 & 3. Some of them asked for help regarding rescuing because the water was already big at that time, and some asked for help for food and for cleaning. Cap. Rudolfo and Cap. Tony mentioned that,

"Pinilit ko pa ring kumontak dun sa mga malapit sa lugar na iyon na paki tulongan niyo itong pamilyang 'to na natrap na."

"Dadaan mo nalang sa matiwasay na pakikipag usap at hindi puwedeng anuhin kung kaya mong trabahuhin hihingi ka din ng tulong sa kasamahan mo hindi mo puwedeng sarilihin dapat magtulongan kayo."

There are also people who asked for help from their families, even if they are not related to each other but can be considered as family, this is the barangay of Salcedo 1 and San Antonio 1 said, they asked for help in rescuing those who were trapped during the flood. They cannot take the problem to themselves so they communicate well with the people that they consider to be family during the flood.

"Akala ko nga ay katapusan na namin noong time na iyon, tapos ang ginawa namin humingi kami ng tulong

doon sa pinsan namin lubog na iyan kung makikita ninyo."

Cap. Jerome, the barangay captain of Poblacion, talked about what he experienced during the flooding. He thought that it was the end for his family due to the force of the impact of the typhoon and their relief was that they asked for help from his cousin who was not really affected by the flood. This was his strategy in dealing with the flood and even though he thought it was the end of them, he still did not give up and thought about how will they continue.

The barangay of Poblacion, Noveleta is one of the most affected by the flood in the entire noveleta; they are also one of those who needed government assistance. Providing aid from the government, handing out cleaning supplies, food for the victims and anything else that can be used by the victims.

"So ayun nangailangan ako ng heavy equipment noong bagyong Paeng pero thankful din ako kasi mayroong mga ibang katulad ng ating mga government kagaya ng navy, coast guard ang nakita ko naman sila diyan to assist the situation

"Ang pagkain naman sobra-sobra rin ang bigay sa atin ng munisipyo, kapag may kailangan ako na mga heavy equipment yung mga NGO na tinatawag din naman ako."

"Para ma-prevent ang pagbaha, sana matuloy na yung mga projects ng ating gobyerno katulad sa mga catch basin."

Immediate Response: It is an immediate help to those in need especially during flood events, responding to floods or disasters is complicated by unstable environments. Quick response and improving residents' evacuation awareness will not only reduce the damage caused by post-disaster evacuation actions but also improve overall disaster response from a long-term perspective (Matsuki & Hatayama, 2023)^[65].

"On the day na iyon, humupa lang ang baha nandoon na kami"

Cap. "Superwoman" stated that they are ready immediately after the flood, when the flood really recedes, they are immediately there in the areas in their barangay that were really hit too much.

Flood Control Project: Flood control projects are keeping the water out, an example of this is the breakwater. It lessens the impact of each resident that is near the river. Floods have been the biggest threat to people near the rivers. In order to reduce the losses caused by floods, the flood control projects are the most effective way to reduce the impact (Ji He *et al*, 2023). This study showed that flooding is one of the problems faced by every resident in every barangay of Noveleta, Cavite. And one of the bright ideas to reduce this disaster is the flood control projects, Cap. "Superwoman", the barangay captain of Sta. Rosa 1 during the Typhoon Paeng, explained that,

"Kaya nga ako, yung flood control na sinasabi nilang gagawin nila is okay naman din sa akin kahit marami

ang tumututol okay din sa akin kasi talagang makakatulong iyon para maiwasan ang pagbaha considering hindi naman na natin mababago ang location natin."

Flood control projects have advantages and disadvantages, like what Captain "Superwoman" said, many people oppose it because their place or residence may be affected. But it will also help a lot for the Municipality of Noveleta area because the Noveleta is the catch basin in Cavite. When the flood control is carried out, the major impact of the flood will be avoided, even if it will not disappear completely, but the impact on those who will be affected by the flood will be reduced, which is a great help to the residents. Doeffinger and Rubinyi (2023)^[26] said that Kahn *et al*, (2020) provide several examples of how the flood protection or flood control projects create some benefits to residents. This study of Doeffinger and Rubinyi (2023)^[26] supports Moth-der claims that flood control projects can reduce the impact of the flood to residents and have benefits.

Diversion River Project: The diversion river project is one of the ways to improve the flow of water in the river. This is one of the government's thought methods to reduce the impact of flooding for the other residents. One of the reasons is the change in the flow of water in disturbances or disasters experienced by other residents, especially flooding (Jin *et al*, 2023)^[51]. This study revealed that river diversion is one of the positive ways to reduce the impact of flooding in certain places. But according to cap. Benito, when they carry out the river diversion many households will sacrifice their area, the impact of future floods will be reduced on them but they will sacrifice their house.

"Mayroong ginagawa ang gobyerno na diversion river na dadaanan ng tubig kaya nga lang sakripisyo ng mga matatamaan na bahay para sa ilog na gagawin dito sa Noveleta."

The river diversion has advantages and disadvantages just like the citizens sacrificing their homes. To carry out this river diversion many houses will be hit, many residents will lose their homes. But it also has an advantage, once this river diversion is done the impact of flooding will not be that great. The flood will not disappear because it cannot be avoided, but its impact on the residents will be reduced. Sedighkia *et al*, (2023)^[87] said that water lakes flood, their diversion has its own benefits including the reduction of environmental impact and sacrifices. This statement supports the claims of Cap. Benito said that the diversion river project can give us neither positive or negative results. Also Cap. Benito gave a statement about the interference of the diggers in the river or for the river diversion.

"May mga intervention na ginawa kasi sabi ng maghuhukay ng malaking ilog pa mayroon pang mga sinasabi na malaking huhukayin, dalawa pa iyon"

This statement by Cap. Benito says that there are still people interfering with the excavations of the river and there are two more to be dug. The statement of Jin *et al*, (2023)^[51] one of the reasons why the residents are facing the big impact of disaster is because of the change of the flow in the water. It supported what the barangay captain of Salcedo

said that the digging in the rivers is still being interfered with.

Drainage Clean Up Drive: The drainage clean up drive is a project of various barangays to maintain cleanliness in the canals that can lessen the impact and flow of flooding. This helps to continue the flow of water and not to block the canal of each barangay. It is also done to help the community to be clean and pleasant. Cleaning sewage is an important task to be clean and avoid disasters. It's the same with cleaning the canal, it needs to be cleaned every day to avoid disasters that will be faced in the future such as flooding. The main system and the process currently used to clean the drains are manual or sanitary workers (Nandini *et al*, 2023) ^[75]. One of the strategies implemented by the barangay captain of San Antonio 1 is the cleaning of the canals, he explained and shared that,

"Ayun nga katulad ng dredging nililinis namin, pinalilinis namin yung ilog at yang mga kanal diyan pinapa-ano namin at nagsasagawa pa kami ng program para maayos yang kanal na yan at maalis yang pag baha."

Cap. Rudolfo implemented programs to clean the canals in their barangay, this is a good strategy so that there is a chance that flooding will be lessening because the flow of water will be continuous when there is no blockage in the canals based on his statement. However, Cap. Benito also carried out canal cleaning to improve the flow of water. Cap Benito stated that,

"Minsan nililinis namin yung mga kanal, yung mga dadaanan ng tubig yung maayos na ang pagtatapon nila ng basura kasi yun ang nagiging problema kapag ang kanal is madumi na, mataas na hindi na maka accumulate yung mga tubig madali ng bumaha."

This statement claims that cleaning the drain is one of the solutions to prevent flooding because one of the big problems in our environment is the lack of discipline in throwing garbage in the trash where it is just thrown away so it ends up in the drain. The canal fills up with flood water quickly.

Cap. "Superwoman", the barangay captain of Sta. Rosa 1 stated some information on how they cope up to prevent the flooding.

"Kami talaga, pagdating ng rainy season which is tag-ulan, no 1 nag gagawa kami ng mga kanal, iyang mga kanal na iyan pinahuhukay ko yan. Lahat ng daluyan ng tubig papahukay ko yan, papalinis ko yan."

Cap. "Superwoman" came up with the idea of cleaning the canals to regulate the flow of water. According to her, all water channels in the canal are dug and cleaned especially during rainy season. She prepared and thought about the possible consequences if she will not be prepared. Also Cap. Melvin shared information about their drainage cleaning drive,

"Nag ca-canal cleaning kami hanggang doon sa may ilog pero kung talagang buong ilog ang lilitinis hindi kakayanin ng barangay na pondo. Tapos meron

kaming mga evacuation center para alam ng mga tao na doon ang punta, magbibigay kami ng babala maaga pa."

Cap. Melvin said that they did canal clean up to the river but if they clean the entire river, their barangay will not be able to handle it. Because the barangay is small and the people in charge of the barangay cannot handle it and the funds of the barangay cannot handle it either. During the flooding, the barangay captain said that they had an evacuation center and that they warned their residents on their barangay early. The active role of the former barangay captain for his constituents can be seen, they have done projects that will help to reduce the impact of the flood on the residents of San Rafael 3. He also added that there is a new project to be done in the Ylang-Ylang river near the Noveleta market. Cap. Melvin also mentioned that,

"Yung paglilinis ng mga kanal sa ilog, yung ilog natin na Ylang-Ylang River mayroon silang ginagawa ngayon na by pass papuntang dagat. Nakaplano na iyon kasi inabot ko yon sa mga panahon na iyon sa public hearing, sa Salcedo bubuksan iyan kasi yung sa ligtong diba magka karugtong ang dagat bubuksan yan. Yan ang nakaka solusyon para sa baha."

Cap. Melvin said that there will be a bypass that is being made in the Ylang-Ylang river of Noveleta that goes to the sea. The river of each barangay is connected to go directly to the sea. This is what the barangay captain thinks that could be the most effective way to avoid the flood's impact. They cannot stop it, but they can reduce the chance of a big flood,

Cap. Jun gave a statement on how he managed the canal cleaning drive.

"Yung daanan ng tubig ito ang dapat unahin ang linis para umagos ang tubig ng mabilis. Kung mababaw ang tinatakbuhan ng tubig talagang aapaw agad ang tubig."

Cap. Jun shared his suggestion on how to avoid rapid flooding during the rainy season. The barangay captain suggested that the canals should first be cleaned so that the water can flow freely, because if the water course is really shallow, the water will actually overflow. There will definitely be a flood, so almost everyone in the barangay captain during the typhoon Paeng conducted a drainage cleaning up program to prevent or reduce the possible effects of flooding.

Fix the breakwater: Fixing the breakwater will help the residents to prevent the upcoming floods on their places. Cap. Rudolfo explained that. The breakwater is the wall that people see on the side of the river which supports to raise the river more and not accelerate the rise of water during the rainy season. The constant rise of water in the river indicates that there may be a severe disaster such as flooding. The breakwater is not effective against the waves that come from the sea but it will be effective if a little material is placed to be used in the construction (Vona & Iacopo, 2023) ^[98].

"Unang-una diyan breakwater para maibsan ang baha, taasan natin break water para wala tayo masyadong baha."

Cap. Rudolfo discussed that the breakwater is needed to prevent the flood. The breakwater needs to be raised so that the flood does not overflow quickly. Cap. Benjie also gave a statement about the breakwater in the river.

“Ayun lang kailangan mabago, matapos agad iyong break water”

The breakwater needs to be completed and replaced immediately to prevent the river from overflowing especially during the rainy season. The breakwaters must be built immediately with no shortage of materials and without hurry.

“Yung sa mga ilog natin yung mga riverwalk minsan mahina na kaya bumibigay kapag bumigay iyon at hindi na macontain yung tubig lalabas na iyon sa daanan.”

Having a breakwater also has disadvantages because sometimes the volume of water cannot be handled by the breakwater, and the water from the river will spread and overflow. The water from the river can no longer be contained, so the water will come out on the road. Cap. Allan shared that,

“Ang kakulangan syempre gobyerno rin yung iba minsan break water kaya tayo pinapasok ng baha ang break water na sira syempre gagawin tapos hindi naman matatapos nagkakaroon ng problema kaya nung time na iyon pinasok kami ng baha.”

Cap. Allan stated his opinion about the breakwater. He said that the government is the one who is lacking why the town of Noveleta is being flooded because of the construction of breakwaters is not being finished, so eventually the breakwater is damaged and the flood enters the town of Noveleta. Resident’s are struggling to deal with the flood because of the government inadequacies in what they are supposed to do. When the breakwater is damaged, of course it will be repaired but it will not be finished, Cap. Allan the father of San Juan 1 explained that,

“Ang number one lang ay break water e kapag walang sira ang break water hindi makakapasok ang tubig matataas na ang break water sa Noveleta, matataas na halos lahat.”

Cap. Allan added that the only problem is the breakwater, if the breakwater is not damaged the water will not enter in many houses, if the breakwater is high the water will not overflow. Almost all the breakwaters in Noveleta are high, almost all of them, according to Cap. Allan.

River Dredging. River dredging is usually done to deepen the river. Removing the sediments and debris from the bottom of the lake. But there is also a disadvantage in river dredging that it may affect some properties of residents in the upstream part that is planned to be dredged (Kusumastuti *et al*, 2023)^[58]. Cap. Melvin gave a statement about the river dredging in Noveleta,

“Yung ilog gusto kong madredging talaga iyan papuntang Cavite City iyon ang kailangang kailangan talaga, dahil sa nakita ko kasi ako taga rito ako rito ako lumaki. Ang ilog nayan noong ako’y maliit

nakikita ko iyan malinis e ngayon sa dami na rin ng pagbaha yung mga putik diyari na naipon, yung mga basura meron din. May mga nakaharang na kahoy-kahoy minsan ayun ang isa sa mga hinihiling ko na pagbabago para sa bayan.”

Cap. Melvin explained his experience in times of flooding, he said that he wants to do the river dredging up to Cavite City because it is one of the most necessary things to do to prevent the river from overflowing. Back then the river was still clean but now it can be seen that it is almost full of dirt, garbage and so on because of the floods that happened—things have accumulated in the river and sometimes there are still trees blocking it. This is what the former barangay captain is asking for a proper, clean and deeper river, river dredging is the only way that can be done to prevent or reduce the impact of floods on the residents or community.

Theme 2: Community Engagement and Cooperation

The objective of this theme is to detailedly talk about the different experiences of barangay captains in the municipality of Noveleta and to share how they surpass all of the challenges that they have faced for being a barangay captain in times of flooding event. According to the study of Leigh *et al*, (2023), community engagement focuses on the concerns of each resident and officials by engaging and collaborating with them to create sustainable community-based programs.

Community Engagement and Awareness: Community engagement is important to ensure the safety and awareness of the local community (Mazlan *et al.*, 2020)^[67]. Giving awareness to everyone must be necessary in order to achieve the safety of the whole community. Consequently, officials, especially barangay captains, must need to learn and seek knowledge for them to be able to share the right and efficient awareness for their constituents. According to Cap. Rudolfo,

“Nakuha kami ng impormasyon din sa NDRRMO—sa disaster”

This statement proves that even the officials also need a guide from the experts, but in order to achieve the knowledge they are seeking for—they must also examine and analyze it very well. Based on the study of Merkley and Loewen (2021), anti- intellectualism or the suspicion of the expert intellectuals is important in order to explain the public's engagement with confirmation or advice with scientists or experts. This statement must also be shared to those people who seek knowledge. Cap. Jay added that,

“Ang layunin ko ay madagdagan pa ang kaalaman ng bawat isa katulad ng training, seminar, at proper disposal”

As Cap. Jerome said, they want the leaders to learn for them to adopt the knowledge and lead well their constituents. Yet, there are also some challenges in learning like misinterpretation or misinformation. According to Kim *et al*, (2020)^[57], misinformation can reduce insufficiency of the information that can lead to disbelief and avoidance of the information. As also said earlier, we must analyze and interpret well every information that we take. By learning

and seeking for knowledge, we can now implement and share what we have learned in order to improve our knowledge. Cap. Jerome stated that,

"Nag m-meeting kani ng mga ating chairman ng NDRRMO ng barangay, Risk Reduction Council."

Meetings can also share and add from our knowledge especially when we have experts to lead and share some information for the meeting. Faculty can learn and adopt new knowledge and valuable insight for sharing and teaching (Ye *et al.*, 2021) ^[77]. We all know that in conducting a meeting, we also need other people's opinions and suggestions. Cap. Rudolfo said that,

"Syempre paguusapan namin, hindi pwedeng ako lang—kailangan mag meeting kami, pag uusapan namin yan para malaman kung ano yung solusyon para maiangat natin yan"

This statement explains the importance of everyone's opinion in order to achieve a successful decision making. All of this can be achieved by conducting a meeting. Meetings can help a person to develop a human relationship because of having proper communication, a good communication can be earned if there is trust in both ways (DeLisi, 2024) ^[21]. Knowledge can earn not only meetings but also in seminars, meetings are more likely for leaders or officials for them to use the knowledge that they earn in a seminar in their community. Based on Cap. Benjie,

"Kailangan ma train natin ang ating mga tao, hindi lang sa barangay kundi halos maaari sa mga residents—kaya lang iyon ang dapat nilang gawin pagdating diyan sa ganiyang pagbaha"

The point of this statement is to share knowledge for everyone, not only for the barangay officials to attend a seminar and learn but they also want their residents to learn for them to adopt this kind of knowledge in order to learn for future safety and awareness. Meetings and other programs or gatherings like seminars become a dynamic principle to earn collaboration and inspiration (Delgado, 2023) ^[22]. Cap. Jay also added an importance of giving knowledge,

"Wag mag sawa mag bigay ng mag bigay ng training kalo na ang campaign tungkol sa environment, syempre bilang namununo kailangan hindi tayo mag sawa"

Leadership must always lead the way of promoting a campaign that can have a good effect on their community. Sharing awareness can be the other way of promoting a campaign in the community. This will be a favour for all the residents. Cap. Tony stated that,

"Noong maaga pa nakapag announce na kami sa mga ka-barangay ko na mag ingat dahil nga sa lakas ng bagyo, dahil alam naming talaga ngang babaha"

By improving flood risk awareness, it can help to lessen the risk and vulnerability that a disaster like flood can bring to a certain community (Mondino *et al.*, 2020) ^[73]. Cap. Jay added that,

"Ginagawa namin yung pagbibigay abiso sa pamamagitan ng pagbahay-bahay, mayroon ding system na kung saan napapansin niyo ang buong barangay ng San Jose 2 may speaker. Kapag narinig na nila yung wang-wang alam na nila kung ano ibig sabihin non"

As Cap. Jay said, he explains what can be the response of their residents when they hear the wang-wang. Early flood warnings are also important to allow residents' to evacuate in time (Alias *et al.*, 2020)

Community Unity and Cooperation: Cooperation and unity is a great way to overcome all of the epidemic and challenges that we are going through (Xi, 2020). It is better to have unity in our community especially in times of crisis, help and cooperate for fast retake. Filipinos cannot deny the unity or heroism they do especially in times of disaster. Some barangay captains gave a statement about the unity they did during the typhoon flooding event.

"Ako bilang isang punong barangay bago ko mag desisyon kailangan inuuna ko muna—inuuna ko rin yung pag iingat ng mga kasama ko."

The statement of the former barangay captain of barangay Salcedo 1 gave a statement where he said that he puts his comrades first before he makes a decision in times of disaster. He prioritizes the safety of his companion before making a decision in the face of disaster. It can be seen here that there is a good and decent captain in this barangay because he puts his subordinates first for their safety. The study of JV (2022) ^[53] can support this statement, and that study is all about decision making that should be apply properly by the leaders or barangay captains. However, the barangay captain in San Antonio 1 also gave a statement about the cooperation of everyone. How they help each other.

"Napag tutulong tulungan at nakiki sabi sa tao na tayo ay makipag tulungan hindi namin kayang nanunungkulan ang lahat ng solusyon diyan."

"Pagtapos ng baha tulong tulong kami nag lilinis."

It can be seen in the statement of the former captain of the barangay in San Antonio 1 that after the flood, they will help in cleaning to speed up the recovery of their barangay. He added that he will tell the people to cooperate so that the work can be done faster. Because those who are in charge or in charge are not able to act for their barangay by themselves. Cooperation and unity are also needed to facilitate their work. According to the study of Nawawi *et al.*, (2020) ^[76], by active participation of everyone—it can make a project development successful for the community. This study proves that we can make everything possible and successful by the help of cooperation. The barangay captain of San Jose 2 told a story about the unity of their barangay when the flood season comes.

"Syempre ang pagkakaisa, hindi naman kakayanin ng punong barangay ng wala ang mga barangay counselor, lahat ay may papel."

"Ang natutunan ko diyan ang pagkakaisa. Hindi gaanong kabigat ang magiging trabaho ng isang namumuno."

The barangay captain can't handle the tasks without the barangay counselors, the barangay captain of San Jose 2 pointed out that things cannot be done if only one person do the work—it cannot be done without the help of unity because unity and cooperation is the key to do and speed up every work that will have a successful outcome. The study of Khorl (2024), communication plays a vital role and this is the primary guide or principle in order to make organization. This stand is also connected to the study of Adlit and Martinez (2023) ^[1], which talks about the "bayanihan" or cooperation of people especially in times of natural calamities, and as said in this study—bayanihan spirit is culturally embedded in every Filipino. In the situation of our barangay captains, their work will be easy if their constituents have cooperation and unity.

Leadership and Responsibility: When we hear the word leader, we can also think about the word responsibility, because leaders correspond with their own responsibility. According to Kempster and Jackson (2021) ^[54], leadership also depends on the effectiveness of their followers that can make it pivotal. As we all know, leaders are the one who makes decisions that leads them to a responsibility. As Cap. Jerome stated that,

"Kailangan titignan mo rin ang mga residente lalo na ang mga senior citizens baka mamaya kapag sinabi mong nandiyan na yung baha lalong atakihin lalong nag panic so iisipin mo kung paano mo sila makukumbinsi na hindi sila nag w-worry"

Based on the study of JV (2022) ^[53], decision making skills are one of the most important characteristics that a leader must have. In the statement above, the barangay captain considered the safety of all residents as part of his decision making. Cap. Tony also added that,

"Ako bilang isang punong barangay, bago ko mag desisyon kailangan inuuna ko muna—inuuna ko rin yung pag iingat ng mga kasama ko"

This statement also reflects from the study that is recently mentioned. Every decision making corresponds with a responsibility. Cap. Tony said that,

"Alam mo talagang mahirap, ngayon kung ih-handle mo ng mabigat—mabibigatan ka, hinahandle ko ng maagan kasi bilang isang punong barangay ayokong makita ng ka-barangay ko na sumusuko ako, kailangan malakas ako. Doon nagkakaroon ng pag-asa ang aking mga ka-barangay"

According to the study of Saha *et al.*, (2020), personal values also share an impact on the leadership of an individual. As the barangay captain stated above, his personal way of surpassing these kinds of challenges is to think positively for him to easily get through the challenges or the hardship of a leader. Cap. Rudolfo stated that,

"Ang mga pagsubok ay talagang nandiyan yan—hindi mawawala yan kadi ang nangyari sa kinatitirang pagpapalitan ko to pag titiisan ko kung ano ang ibato sa kinatitirang pagpapalitan ko, ngayon ako naman gagampanan ko kung ano ang kaya kong gampanan"

Challenges will always be there and our goal is how we will handle and surpass all of it. The study of Howard and Irving (2021) highlights the relationship between resilience and differentiation of self on the role of obstacles in leadership. Cap. Benito also added that,

"Effort talaga, mag t-trabaho ka talaga para makita ng tao na ginagawa mo yung tungkulin mo bilang barangay captain, yung iba akala ganoon lang kadali ang maging kapitan—kasi ang tao umaasa sa iyo"

According to the study of Eutaquio (2023) ^[30], the role of being a leader corresponds with a commitment and responsibility for them to fulfill and a conduct that emphasizes the effectiveness in every action and decisions that they do. A leader always puts effort in everything that they do in order to fulfill the needs of their constituents and to fulfill their own duty. Cap. Tony shares a motivation telling that,

"Bilang isang leader, bilang isang punong barangay ipakita mo sa mga ka-barangay mo na hindi ka pwedeng tirahin ng mga ganyang pangyayari—kailangan lalo kang maging malakas, maging matatag kapag may mga ganyang sakuna"

Cap. "Superwoman" emphasizes that leaders or either all of us should be strong in order to surpass all of the challenges that we are facing and it will serve as motivation for our constituents to also fight their battles like what their leaders do. The study of Walsh (2020) ^[31] emphasizes that we will be able to surpass all of the challenges with the help of positive adaptation and resilience. Cap. "Superwoman" added that,

"Kailangan matatag ka kasi lahat pwedeng mangyari, lahat ng problema ikaw ang nag hahandle. Ngayon kailangan may malasakit—hindi mo maaabit every corner ng barangay para malaman yung mga problema na naranasan nila, kasi mas maganda yung every corner ng barangay mo naaabot mo"

Their aspiration is truly surprising and amusing, leaders always care for their constituents that they want to make sure that all of them are doing good and in a good condition. Positive thinking plays a vital role in order to help strengthen our future mental health (Waters *et al.*, 2022). We know that it's hard to lead a community especially in times of pandemic and disasters. Cap. Jun said that,

"Bago mag desisyon ang mga kagawad, sa akin nagmumula ang mga dapat gawin. Yung mga pangyayaring nagaganap noon, ang mga tao nanan ay may kaligtasan. Bago naman mangyari yung malalaking baha, maaga palang kinukuha na namin yung mga tao na nasa mababang lugar"

Every decision depends on them, but they are analyzing the situation carefully in order to make a decision for their whole community. Leaders are the whole shape and aspire for their team for future situations (Homan *et al.*, 2020)^[41]. They always play a vital role in our community therefore we must treasure all of their hard work for all their constituents. Cap. Allan stated that,

"Nagkaroon ako ng sakit dahil pinuwera ko dahil nag sarili ako—pinuwera ko mag isa maglinis para makadaan dito"

By this statement we can prove that their dedication to their work and responsibility is truly amusing. According to the study of Søvold *et al.*, (2021)^[90], when we talk about dedication— we can disregard our own safety and health in order to fulfill our duty. Cap. "Superwoman" also added that,

"Parang iniisip ko na lang kapag deep in your heart alam mo kung ano ang tungkulin mo hindi ka mahihirapan gawin, hindi ka mahihirapang mag decide kung ano ang mga dapat mong gawin"

The hardships of a leader can hinder their job performance and job satisfaction and physiological well-being (Raja *et al.*, 2020). Cap. "Superwoman" said that,

"Ako alam ko kung ano yung pinasok ko, alam ko yung papel ko so sa madaling salita wala akong karapatang mag reklamo na "ay napapagod ko" pero kapag puso ang umiral sayo wala iyan, mawawala iyang — simple "thank you" ng isang ka-barangay sapat"

The study of Ghazawy *et al.*, (2021)^[33] explains that they can feel the satisfaction and fulfillment of their work by a supporting environment and performance feedback to reduce their hardships and difficulties. Cap. Benito stated that,

"Ang aral doon mahirap manungkulan, minsan nga satisfaction mo sa sarili mo kung nagagampanan mo ang tungkulin mo bilang kapitan"

Their hardships will also bring them satisfaction in their job. According to the study of Purwanto (2020)^[81], commitment can turn into intention and work satisfaction can turn over intention. As said earlier, leaders play a vital role in our society and community therefore those leaders need enough knowledge to support and lead their constituents. As Cap. "Superwoman" said,

"Dapat ang mga punong barangay ay bigyan ng serious training, tutukan ang proper training para maging alam talaga nila kung ano ang purpose nila"

According to Cabrera (2023)^[15], training for barangay captains will equip them to handle the challenges that they might encounter while leading their community.

Social Impact and Response: Social impact and response in flooding refer to how flooding affects communities and how societies deal with it. Flooding can cause many problems for

people, like having to leave their homes, damage to buildings and roads, and losing important things like electricity and water. It can also harm people's health and make them feel bad emotionally. According to Twiddy *et al.* (2022)^[96], the effects of flooding on health are understood but the long-term impact on the well-being of those affected need to be considered. This study emphasizes that flooding can have lasting effects on people's mental and emotional health, including feelings of stress, anxiety, and trauma caused by the loss of homes and possessions. In flooding, we respond and deal with it by making plans before it happens, like having ways to warn people early, knowing where to go if they need to leave, and building things to stop the water. During the flooding, they might provide places for people to stay safe and give them things they need like food and blankets. Afterward, they might fix the things that got broken, help people who are hurt, and try to stop it from happening again. The barangay captain of San Antonio 1 during the typhoon Paeng describes that,

"Malaking pinsala ang inabot"

This statement indicates that a considerable amount of damage has been inflicted in San Antonio 1 during the typhoon Paeng. This explains the aftermath of the typhoon where communities endure substantial losses. It emphasizes the seriousness of the situation and draws attention to the extensive damage incurred. He further added,

"Masakit at malaking hirap para saamin ang nangyaring pagbaha samin"

This statement describes how the flooding deeply affected both the emotional well-being and physical circumstances of the speaker and their community. The term "masakit" indicates the emotional pain and turmoil caused by the event, emphasizing the personal and heartfelt impact experienced. Additionally, this statement also highlights the extensive challenges and struggles encountered as a consequence of the flooding. The flood has numerous human, economic, social, cultural and social consequences (Ahmadi *et al.*, 2022). These difficulties may encompass various aspects such as damage to property, loss of livelihoods, displacement, and disruptions to daily routines. The statement underscores the significant toll taken by the flooding. It emphasizes the importance of providing support and assistance to help individuals and communities cope with the aftermath of the disaster effectively. The barangay captain of Salcedo 2 during the typhoon Paeng states that,

"Yung karanasan talagang mahirap"

"Yung disaster mahirap kalabanin iyan"

These statements reflect on the tough nature of the mentioned experience, indicating that it's genuinely challenging to endure. It underscores the immense difficulty in confronting disasters. It portrays disasters as formidable opponents, highlighting the pain of dealing with them. Together, these statements highlight the immense hardships and obstacles associated with both experiencing and managing the aftermath of the typhoon Paeng. However, according to Brotherson (2020)^[13], pain from loss and tough times can be eased when people keep talking with each

other. Also, the barangay captain of San Rafael 1 during the typhoon Paeng explained that,

"Matagal bago nalagpasan kasi bago maging normal yung kapaligiran napakatagal. Bawat purok dapat malaman mo kung maayos na. Minsan hindi mo na kaya, minsan kahit maliit ang barangay hindi mo na makaya o hindi na kaya ng powers mo na tumulong sa barangay lalo na yung mga putik na tatanggalin mo."

The statement highlights the extensive and challenging journey of recovery following a disaster, emphasizing the considerable time it takes for the environment to recover fully. This underscores the immense strain endured by those engaged in the cleanup process after the disaster, reflecting the challenges inherent in rebuilding communities in the aftermath of such events.

Moreover, the barangay captain of Poblacion during typhoon Paeng explains how we should handle these challenges caused by typhoon Paeng. He said that,

"Lagyan natin ng sistema tignan din natin yung capability ng kapwa natin kung kaya paba nila or ano kung hindi kaya pahinga yung mga mayroong sapat na lakas iyon yung ating ginagamit."

"Wala akong nakitang masyadong epekto, bukod doon sa makikita mo lahat pagod kasi nga naglinis sila pagod sila."

These statements show how important it is to plan carefully when handing out tasks. They also highlight how committed and determined individuals can be, even when they don't see immediate results. It underscores the significance of evaluating each person's capacity and leveraging the strengths of those who are capable. According to Guerrero *et al.* (2023) ^[36], collaboration is critically important in addressing complex social and environmental problems because it creates the conditions for multiple actors to solve problems that would be unsolvable on their own. However, it's important not to over-rely on individual cooperation and recognize the limitations of individuals. While teamwork can move things forward, it's essential to recognize that individuals have their own abilities, boundaries, and constraints. Knowing and respecting these boundaries is the key to setting realistic goals, making the most of teamwork, and achieving long-lasting results.

On the other hand, the barangay captain of San Antonio 1 mentioned how he himself struggles to help his own family. He stated,

"Bahay namin lumubog misis ko diko natulungan dito kasi ako'y nandon sa labas"

"Basta ang nangyari lumubog ang bahay ko hindi ako nakagalaw rito sa bahay nasa iba ako naka rescue."

This statement highlights the emotional chaos and regret experienced by the barangay captain of San Antonio 1 for not being able to help their loved one during the crisis. At the same time, he recalls their own inability to address the sinking of their house because they were occupied rescuing others elsewhere. When calamity strikes, the Punong-Barangay is on the front lines (Menguin, 2023) ^[69].

The role of barangay captain is very important when it comes to helping people in need. This underscores the sacrifice demonstrated by the barangay captains, who prioritized the safety and well-being of others over their own personal crisis. It showcases their unwavering dedication and commitment to aiding those in need, even in the face of their own adversity. The barangay captain of San Jose 2 during the typhoon Paeng also supports the statement of San Antonio 1. He said,

"Isa sa pinakamahirap lang sa aming nanunungkulan ay yung malaking baha, kailangan mo unahin ang kaligtasan ng nasasakupan mo na ang mahirap sa amin na hindi namin alam ano ha ang nangyayari sa aming mga pamilya, na kung safe ba sila, kung yung mga gamit ba namin ay naitaas na yun ang pinakamahirap na nangyari sa amin."

This statement talks about the tough times leaders like him face during big floods. It shows how important it is for leaders to keep people safe, which gets really hard when they can't check if their own families are okay. This shows how leaders feel worried about their families and their stuff while trying to help everyone else. Basically, it's about how being a leader during disasters is really tough because you have to handle both work and personal worries at the same time.

Meanwhile, the barangay captain of Salcedo 1 during the typhoon Paeng explains the fear they experienced. He said,

"Minsan natatakot sila, nag f-fear na baka may mangyaring hindi maganda sa family so ayun may mga mamatay."

His statement shows that sometimes people get scared, worrying that something bad might happen to their family, which could lead to serious consequences. It highlights how deeply concerned individuals are for the safety and happiness of their loved ones. This fear comes from thinking about possible bad things happening, which could end up causing terrible outcomes for their family. It emphasizes how much people care and worry about their family members. He further added,

"Syempre kinakabahan din kami dahil nakaranas na kami ng mga pagbaha, nakaranas na kami at nakita namin talagang ang hirap ng kondisyon kapag bumabaha."

This statement reflects the people's anxiety about flooding, rooted in their past experiences with its hardships. Having faced floods before, they feel nervous about potential future occurrences. According to the study conducted by Dutchen (2022) ^[28], Politico reported in 2017 that depression and anxiety can spread to those who are repeatedly exposed to news about flooding on television or social media. This suggests that regularly seeing images or hearing stories about floods can impact people's mental health, even if they're not directly involved. It highlights the need to pay attention to what we watch or read, as it can affect how we feel, particularly during stressful or difficult times. Their firsthand encounters have shown them the severity of flooding plus on what they possibly saw in social medias or television, emphasizing the challenges and traumas it brings.

Overall, this statement highlights the people's concern, based on their past encounters and observations of flooding's impact.

Cap. "Superwoman", the barangay captain of Santa Rosa 1 during the typhoon Paeng also explains that,

"Syempre yung nararamdaman mo is unang una, hindi naman yung takot na takot pero nandoon yung pangamba"

This statement describes how people feel when they face a flood as the saying by the barangay captain of Salcedo 1 during the typhoon Paeng. It highlights the main emotion they feel first, which isn't extreme fear but more like worry or nervousness. Even though they're not completely scared, there's still a sense of discomfort or unease lingering in the situation. The barangay captain of San Rafael 3 during the typhoon Paeng explained that,

"Nakakatakot yon kasi malakas ang current pagbalik namin hanggang sa na trap na kami sa barangay hall na hindi kami makauwi doon nalang kami talaga, atsaka hindi naman na talaga ako uuwi dahil kailangan ako sa barangay hall."

This statement shares a scary moment during a flood. The speaker explains how they, along with others, tried to go back home but couldn't due to the strong water flow, which trapped them in the barangay hall. Even though they wanted to go home, they stayed at the hall because help was required there. It shows the fear and feeling stuck during tough times, along with the sense of responsibility to help others.

Furthermore, the barangay captain of San Rafael 1 during the typhoon Paeng states that,

"Katulad ng sa Paeng, ito at medyo madugo kasi dito sa aming barangay hanggang dibdib ang tubig. Barangay ang takbuhan ng mga tao, nakakapag rescue naman kami ng ilan pero yung iba hindi namin marescue kasi sobrang lakas na. Pinapakain naman namin sila."

"Talagang wala kaming magawa dahil ito ang catch basin, hindi lang naman San Rafael 1 and 2. Ang iniisip lang namin wag lang umabot sa lagpas tao ang baha"

These statements illustrate a tough situation during a flood, particularly in their neighborhood. The floodwaters surged up to chest level, compelling people to seek shelter in the barangay. Despite the efforts of the speaker and others to rescue people, some couldn't be reached due to the strong currents. Nonetheless, they made sure to provide food for those stranded. The situation is described as severe, with the barangay acting as a basin for flood waters not just from nearby areas but possibly from other places too. The primary goal is to keep the floodwaters from rising too high. Overall, these statements paint a grim picture of the flood's impact, highlighting the community's struggles to save lives and ensure safety amid the rising waters.

However, despite the challenges, there are still some positive insights to be found in the experiences of the barangay captain of Poblacion during the typhoon Paeng. He

explained that,

"Nakikita ko naman yung eagerness nila, yung kanilang pagpupunyagi na okay lang iyon Cap kasi yung mga gamit mababawi natin basta tayo safe lang yung ganoon."

The statement depicts how he notices the determination and resilience of others in the face of difficulties. They offer reassurance by stating that it's okay, highlighting the belief that material things can be replaced as long as everyone stays safe. This underscores the importance of putting safety above material possessions when dealing with tough circumstances.

Theme 3: Infrastructure and Environmental Concerns

The purpose of this theme is to identify the importance of environmental cleanup and maintenance in addressing infrastructure and environmental concerns during flooding events. Infrastructure is like the basic stuff that helps a place work, like roads, schools, and power plants. Environmental concerns about infrastructure are all about making sure that building and running these things doesn't mess up the environment, like causing pollution or hurting the homes of animals. It means doing things in a way that doesn't harm nature, like using clean energy and not wrecking natural areas.

Infrastructure and Environmental Concerns: The increasing frequency and intensity of flooding in Noveleta, Cavite have brought many problems including infrastructural and environmental concerns. These are important to control floods in community landscapes, and minimize infrastructural destruction caused by flooding. Flood management is widely recognized as an effective way to reduce the adverse consequences, and a more resilient and sustainable flood management approach has been the goal in recent studies (Wang *et al.*, 2022)^[99]. It emphasizes the need for major modifications in flood management practices to control floods. This study argues that these modifications are essential to minimize infrastructural destruction caused by flooding. As we know improper waste disposal is one of the major problems that can cause floods and affect the environment. Cap. Tony explained that,

"Kayo mga kabataan ay dapat matuto kayo dahil ang malimit na pinagmumulan ng baha ay ang mga basura, hindi maayos na pagtatapon ng basura sa mga kanal katulad sa mga ilog"

This statement highlights why it's crucial for young people to understand something important: How throwing away garbage improperly can lead to more flooding. It points out that when trash isn't disposed of correctly, especially in places like rivers and drains, it can block the water flow and make flooding worse. That's why it's essential for everyone, especially young folks, to learn how to handle garbage properly to prevent these problems and keep our communities safe. Young people have a big advantage when it comes to learning about the right way to get rid of waste. When garbage is thrown into canals and rivers in the wrong way, it can cause floods. It's important to understand that education plays a key part in dealing with environmental problems. This shows that we need to spread awareness and

run programs to help young folks develop good habits for managing waste responsibly. The main benefits of waste management are to reduce pollution, conserve resources, and prevent damage to ecosystems. By properly disposing of waste, we can greatly reduce the number of harmful chemicals and pollutants that enter our water, air, and soil (Sumich, 2022).

Moreover, the barangay captain of Salcedo 1 during the typhoon Paeng also described improper waste disposal as one of the main problems. Cap. Benito states that,

"Sa ngayon nga kahit na tayo ay nasa normal na tayo hirap pa rin kami dahil sa number one sa basura ang hirap, ang tao basta nalang tapon nang tapon ng basura"

Here, the barangay captain points out how the community is still struggling with managing waste properly even though things seem to be back to normal. He talks about how people are still throwing trash around carelessly. This ongoing problem of not handling waste correctly keeps causing trouble in people's daily lives, showing that we really need to focus on making changes that last and on getting people to act differently. He further added,

"Ang tao sa totoo lang ako naniniwala ako mas marami ang Pilipino na hindi disciplined, ang hirap specially sa mga basura."

He believes that many Filipinos lack discipline, especially regarding waste management, which makes it difficult to address the issue. According to Cua & Ismael (2023)^[19], an official of the Department of Science and Technology (DoST) believes that Filipinos lack discipline when it comes to waste management. This statement explains the viewpoint of a Department of Science and Technology (DoST) official, who believes that Filipinos struggle with being disciplined in managing waste. It suggests that there's a perception that many Filipinos find it hard to stick to good habits when it comes to handling trash properly. This might be due to various reasons like not having enough knowledge about waste management or not having the right facilities to dispose of garbage. It highlights the need to focus on changing behavior and finding better ways to deal with waste in the Philippines. Salcedo 1 barangay captain explained that the improper waste disposal and the people itself is the main problem. Cap Jun states that,

"Naging problema kaya nag babaha ay dahil sa basura, iyan ang dahilan kung bakit nagbabara ang mga kanal. Ang tubig at hindi na dumadaan sa kanal. Pangalawa, dapat humingi na ng tulong sa health government para malinis ang mga kanal, kung barangay lang ang aasahan natin, hindi kaya."

The statement emphasizes the need for collaboration between local communities and government authorities to address infrastructure issues and ensure effective waste management practices. It suggests seeking help from government authorities to clean the canals, as relying solely on local barangays is insufficient. There's a call for collaborative efforts between local communities and government authorities to address infrastructure issues and ensure effective waste management practices.

San Antonio 2 barangay captain described Noveleta as a part of lowland area. He said,

"Nalaki na ang tubig, talagang mababa kasi itong Noveleta."

This remark underscores the vulnerability of Noveleta to flooding due to its low elevation, highlighting the need for tailored flood management strategies and infrastructure improvements. Noveleta being part of a lowland area really is the problem.

Another notable encounter, Cap. Jay shared an instance where Noveleta serves as the catch basin for surrounding higher areas during strong typhoons, leading to flooding. He said,

"Tuwing may malakas na bagyo ang Noveleta kasi ang catch basin ng matataas na lugar"

This highlights Noveleta's role as a part of a lowland area where water accumulates during heavy rainfall, underscoring the municipality's susceptibility to flooding during extreme weather events.

Another notable encounter, Cap. Jerome states that,

"Concrete na lahat, nandiyan na yung subdivision, nandiyan na yung mga pabrika, kaya sino pa ang mag-ho-hold ng tubig?"

His statements reflect on the extensive urbanization and infrastructure development in the area, questioning who is responsible for managing water flow and drainage systems. It raises concerns about the inadequacy of existing infrastructure to handle increased urbanization, indicating a need for improved water management and flood prevention measures alongside urban development. He further added,

"May mga bahay na natatakpan na rin ang drainage natin, kaya talagang isang malaking dahilan kung bakit bumabaha."

It also points out that some houses obstruct drainage systems, contributing significantly to flooding. It underscores the importance of ensuring that urban planning and development consider proper drainage design and maintenance to minimize flood risks. He also explained that,

"Dapat magkaroon ng disiplina rin yung mga tao, sumunod, wag matigas ang ulo."

"Pinaka-the best iyon, disiplina, pagkakaisa, kasi kahit sinong mamuno rito sa lugar natin kung hindi ninyo pahahalagahan ay walang mangyayari."

These statements emphasize the importance of discipline among people, urging them to follow rules and avoid stubbornness. It emphasizes that discipline and unity are crucial, as without the community's care and cooperation, leadership efforts will be ineffective.

Cap. Tony, Cap. Allan, Cap. Melvin and Cap. Jerome recounts another same situation but different problems including the loss of properties, foods and appliances. They say,

"Maraming nasirang mga gamit, marami ang nawalan ng pagkain, nabasa ang mga pagkain, mga tindahan na wash out din, mga bahay maraming nasirang bahay." (Cap. Tony)

"Malaking dagok talaga ang kinaharap namin kasi halos lahat dito talaga yung lubog, ultimo ref, washing machine, o kung ano mang appliances sa bahay talagang lubog. Halos nga hanggang leeg ba ang baha rito e." (Cap. Allan)

"Ang masakit lang talaga halos yung inipon nila na ma appliances talagang ubos panibagong ano sila." (Cap. Allan)

"Noong una syempre wala naman akong na kitang nasiraan, unang una syempre kabuhayan, pagkain yung iba hindi makapasok sa trabaho malaki rin ang epekto syempre. Kaya nagkaroon kami ng mga relief goods na pinamimigay sa kanila." (Cap. Melvin)

"Ganoon pa rin, talagang yung iba back to zero kagaya noong mga naunang baha talagang kalimitan kasi rito ay walang taas ang bahay so back to zero talaga, lahat ng gamit na naipundar hindi man naanod ng baha talagang nasira kahit mga higaan nila talagang ganoon back to zero." (Cap. Jerome)

This emphasizes the emotional and economic impacts of flooding on affected residents. It illustrates the severity of flooding events, indicating significant property damage and disruption to daily life for residents, underscoring the importance of disaster preparedness and recovery efforts to support affected communities. Cap. Jerome further added,

"Dahil sanay na rin ang iba wala naman akong nakita na psychological effects, ang ano ko lang dito ay panghihinayang sa mga gamit."

This highlights the resilience of some community members in coping with adversity, while also acknowledging the material losses incurred, suggesting the importance of providing support for affected individuals to rebuild their lives. According to Munawar *et al.* (2021)^[74], resilience is not only about the capacity to bounce back to the original state after adversity but also about advancing in it by learning from past experiences and adaptation. This study emphasizes that resilience means more than just going back to normal after tough times. It's not just about getting better; it's also about getting smarter by understanding what happened and changing because of it. So, instead of just going back to how things were, being resilient means using what we've been through to get better and do well even when things are hard.

Environmental Cleanup and Maintenance: Environmental cleanup and maintenance involve actions taken to make sure nature stays healthy. Environmental cleanup may involve decontaminating an area affected by a radiological release, containing an oil spill, or remediating a Superfund site or brownfield (Maxwell *et al.*, 2020)^[66]. Cleanup usually means getting rid of things that harm the environment, like picking up trash or cleaning up after disasters like oil spills. Maintenance is all about keeping things in good shape over

time, like checking water and air quality regularly, fixing up habitats, and finding ways to stop pollution and waste. By doing this, we help keep nature safe and make sure it stays around for everyone to enjoy. Cap. "Superwoman", stated that,

"I preferred na unahin yung dadaanan kasi daanan kung paano ba makakarating yung tulong kung hindi maayos yung way mo."

The statement emphasizes how crucial it is to plan and make sure there are clear ways to get help during emergencies. It points out how important it is to have easy paths for aid to reach people in need. It highlights the importance of taking action ahead of time to get ready for disasters, like making sure emergency responders and people bringing help can get where they need to go easily. This means getting everything ready so when something bad happens, we can help out quickly and effectively. Cap. Tony explained that,

"Yung pagtatapon ng basura, kailangan diyan talaga lalo na yung nga plastic na tinatapon natin basta basta lang dahil diyan nagsisimula yung pagbara sa mga kanal kaya lumalaki ang tubig hanggang doon sa ating mga ilog o dagat, kapag napuno na iyan wala na tayong magagawa talaga babaha na iyan."

This statement highlights how throwing away trash carelessly, especially plastics, can really mess up drainage systems, rivers, and oceans. It stresses that when waterways get all clogged up, it's like a domino effect leading to flooding, and once it starts, it's hard to stop. It highlights how important it is to manage waste properly to stop flooding and keep nature safe. This shows why it's so important for everyone to understand the problem and start acting differently, like by using less plastic and making sure trash is thrown away properly. According to Alsadey (2021)^[5], improper solid waste disposal has a negative environmental impact that may be seen almost everywhere in the developing countries. This study highlights the serious environmental problems caused by improper solid waste disposal, particularly in developing countries. It suggests that the harmful impacts of this waste mismanagement are widespread in these regions. This underscores the urgent need to find improved methods for handling waste in these areas to protect the environment and address the severity of the issue.

In addition, Cap. Jay, Cap. "Superwoman", and Cap. Jun claimed that,

"Unang pagbabago, importante disiplina ng bawat isa, bakit ba sa panahon ngayon ang pagbaha ganoon kalaki na. Disiplina, napaka importante ng segregasyon, yung pag gamit ng mga plastik, pag recycle." (Cap. Jay)

"Kailangan lahat ng basura segregate, kailangan yung proper disposal kasi ayun ang nakikita kong problema." (Cap. "Superwoman")

"Kailangan natin mapaganda ang lugar. Kailangan matutunan kung papaano ang segregation ng nga basura kasi iyan ang tanging problema natin." (Cap. Jun)

Here, the barangay captains emphasize the importance of individual discipline, particularly in learning how to segregate waste properly, as waste management is identified as the primary concern. It highlights the role of individual actions in shaping broader environmental outcomes, emphasizing the need for disciplined waste management practices and a shift towards sustainable behaviors such as recycling. Unplanned waste management, lack of commitment, too much freedom, and lack of self-discipline made the garbage problem a gigantic battle (San Jose, 2021). It's saying that because waste management isn't organized, people aren't committed enough, they have too much freedom in how they dispose of garbage, and they lack the self-discipline needed to handle waste properly. These factors combined make the garbage issue a huge battle that's difficult to overcome.

Theme 4: Communication and Reflection

The purpose of this theme is to focus on the field of communication and media, religious and spiritual guidance, and reflection of the community which encompasses various aspects in different types of crisis. According to Binh *et al.* (2020) ^[9], people-centered risk communication has been proposed as an effective strategy that can stimulate people to protect themselves against flood risks. This study found that focusing on people's needs when communicating flood risks can help them protect themselves better. By listening to what people care about and involving them in planning, they're more likely to understand the risks and take action to stay safe. This approach encourages everyone to work together to prepare for floods and respond effectively, making communities stronger against disasters.

Communication and Media: Social media is an important element in disaster and health crisis related communication (Yu *et al.*, 2020) ^[105]. This study showed that having communication in times of crisis deals a great help to many people which helps them to know what's going on in a community. Cap. Jay explained that.

“Katulad dito sa barangay ang panahon ngayon ay social media na, sa panahon ng kalamidad naglalabas kami ng update.”

This shows that social media has been a great help in times of crisis. Social media has been recognized as an effective platform for experts to quickly convey accurate information about hazards, such as flooding. Chen *et al.* (2020) ^[18] highlighted that government social media can promote citizen engagement during crises, such as COVID-19 pandemic. So, we can assume that it's very helpful during a crisis not just in COVID-19 pandemic but also in times of disasters like flooding. Cap. “Superwoman” explained that,

"Ako kasi lahat ng kabarangay ko open ang messenger ko, basta kilala ko siya nakita kong taga amin kapag inadd niya ako inaccept ko at may gc ako na every area kahit sino basta gustong mag join iadd mo."

As she explains, social media has been a great help. But in her way it is very obvious that she has a great communication within her community that leads them (the people of community) to contact the barangay captain in an easy way in times of crisis.

Moreover, Cap. Jay also described the advantages of giving warnings in flooding. The barangay captain of San Jose 2 states that,

“Malaking epekto ang pagbibigay abiso, kasi nakakapaghandang bawat isa, naililigtas na nila ang mga gamit sa bahay lalo ang mga importante naitaakay na sa mataas na lugar.”

We know that flooding is a natural disaster that poses significant risk to human life, property, and infrastructure. So, the ability to provide early warnings for floods is essential for managing the impacts of these events. According to Hammood *et al.* (2021) ^[38], a flood early warning and response system (FEWRS) is essential to ensure that all stakeholders receive the right information and are provided with necessary actions and response information to avoid loss of lives and property. This proves that having an advance warning is very important as it gives enough time to local authorities to mobilize and prevent fatalities and injuries to the local population.

Religious and Spiritual Guidance: We also need to have a deep sense of faith in God for guidance and protection. Seeking guidance to God has been a long-standing practice for many individuals across different cultures and religions. The study of Lyden (2020) ^[64] explains the importance of seeking guidance to God in the midst of a crisis, particularly during the COVID-19 pandemic. It suggests that turning to spiritual or religious practices can provide comfort and support during challenging times. Seeking guidance to God helps you to be calm in times of crisis or calamities. Cap. “Superwoman” said that,

“Nangangamba ka at the same time panay dasal”

Which means that seeking guidance to God is important, it lessens the fear and strengthens the faith and makes it a source of guidance and strength in times of crisis. We must seek Him to know and not just assume anything (James, 2020) ^[48]. Also Cap Allan, the barangay captain of San Juan 1 during the Typhoon Paeng described that,

"Pano kagaya ko Quiapo pa ako nasimba ayan sisimba ako roon ang sinasabi ko "Pa marami pong salamat at nakarating ako ng matiwasay sa inyong tahanan sana ganoon din po sa aking pag uwi bigyan niyo ako ng magandang kaayusan sa aking pag uwi, bilang ako po ay ama ng barangay sa bayan ng Noveleta. At sana po ay ilayo niyo sa anumang sakuna o delubyo na darating sa aming barangay."

As he described, Cap Allan shared his way of seeking guidance to God. He said,

"Unang-una sa taas, sa kanya bago ako umalis bago ako lumabas ng kwarto, bago inaayos ang mga problema ko kinakausap ko siya, bigyan mo ako ama ng lakas ng loob para maging tamang salita ay manggagaling sa iyo upang maintindihan ng bawat panig."

Seeking guidance to God really is important, like what San Juan 1 captain said, before you do something you need to

seek guidance from God. Don't engage in an activity without doing wise planning which includes getting some sound guidance (James, 2020)^[48].

Reflection: After seeking guidance from God, we need to understand what happens when the flood is around, what are the lessons we learnt, how can we reflect on it and how can we apply it to ourselves. Cap. Jay explained that.

“Ang naging epekto mas naging handa ang bawat tao sa maaaring mangyari kagaya ng sabi ko kanina ang kalamidad ay hindi natin alam kung kailan darating yan, kaya ang naging epekto niyan sa tao naging handa sila, naging may alam.”

The devastating impacts of natural disasters such as floods, have been observed over the years in Noveleta, Cavite. According to Cap. Jay the community reflect and provide a comprehensive understanding of the lesson learned after the flood.

Cap. “Superwoman”, the former barangay captain of Santa Rosa 1 during the typhoon Paeng mentioned that community awareness is an important part of understanding floods. She states that,

“Mas naging aware sila sa mga pwedeng maging impact ng mga susunod pa man na baha o bagyo, baka sa mga darating na panahon maging resilient na yung mga mamamayan.”

This statement claims that people may become resilient in time. According to Wang *et al.* (2022)^[99], integrating the concept of resilience into the framework of risk management is a better approach in future flood management directions. This study proves that having a comprehensive understanding to address the challenges posed by floods and having reflection in the context of lessons learned after the flood makes people more resilient and ready.

Conclusion

In conclusion, a barangay captain in the Municipality of Noveleta, Cavite has a major responsibility for disaster management, community involvement, and environmental conservation in addition to administrative tasks. Although the barangay leaders have faced huge challenges from the recurrent flooding incidents, they have shown courage and leadership. To protect their citizens, they use a variety of tactics, such as early flood alerts, resource allocation for disaster management, and disaster preparedness programs.

But a number of variables, such as the intensity of the typhoon, the barangay's level of readiness, and the threat of the flood's effects, affect how well these tactics work. The level of community participation and collaboration together with the cultural background of "bayanihan" all play a part in the community's resilience and the effectiveness of the response measures. Driving these initiatives and making sure that their constituents are safe and well are mostly the responsibility and leadership of the barangay captains.

Concerns with infrastructure and the environment highlight how difficult the problems are. There has to be a coordinated reaction to the growing frequency of major flooding, which is made worse by inadequate waste

management and infrastructure problems. The barangay captains urge a cooperative strategy including the local people and government authorities and emphasize the importance of discipline and unity in garbage management and environmental cleaning. Although the challenges are phenomenal, the barangay captains and their communities have shown a spirit of collaboration, resiliency, and leadership that attests to their will to get beyond them and create a better and cleaner environment for everyone.

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