

Exploring Community Resilience Strategies in Disaster Management: A Qualitative Study

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Abstract

This study explores community resilience strategies, community perspectives, and challenges in disaster management. It also examines the role of local leaders and organizations in fostering resilience and the effectiveness of collaboration with external agencies in disaster preparedness and response.

The purpose of this study was to identify the disaster resiliency of community members as they face its occurrences.

The study was participated by 3 key informants composed of one community member, one barangay official, and one Personnel from MDRRMO. The participants of the study gave their consent during the one-on-one interviews. The study's objectives were to determine the (1) strategies of the community members to enhance their resilience to the occurrences of disasters. (2) perceive resilience and the extent of disaster management efforts (3) Local leaders and organizations' role in fostering community resilience (4) Challenges Encountered by the Subject in Community Resilience Effort.

The study found that disaster awareness, capacity building, community engagement, psychological preparedness, coordination, and access to essential resources. Awareness and preparedness are the foundational pillars, while capacity building and training are crucial for bolstering response capabilities. Community engagement in disaster management is vital, involving stakeholders in decision-making processes and fostering public trust. Maintaining a positive psychological state is essential for effective disaster management. Effective coordination among government agencies, non-government organizations, community groups, and the general public is crucial for successful disaster management. Access to essential resources is crucial for post-disaster adaptation and recovery. Overall, a multi-faceted and collaborative approach is essential for enhancing community resilience to disasters.

The community perceives disaster management efforts as effective, with information dissemination and communication being key factors. Members feel personally resilient due to authorities' programs, while barangay officials acknowledge the community's resilience but suggest improvement. MDRRMO views successful rescue operations as indicators of resilience.

Real-time updates on social media are crucial for fostering preparedness and resilience. Proactive information dissemination through community meetings and official social media pages informs residents about potential risks and precautions.

The challenges encountered by the participants in community resilience efforts are diverse and impactful, with themes of lack of funds, coordination, cooperation, and miscommunication prevalent among the different perspectives shared.

Keywords: Community resilience strategies, Disaster management, Community Resilience

INTRODUCTION

Millions of people worldwide are more often affected by various occurrences, including hurricanes, floods, earthquakes, wildfires, and pandemics. These incidents have grave repercussions, including fatalities, evictions, economic disruptions, and long-term social and psychological effects on the impacted communities.

In the realm of disaster management, understanding and enhancing community resilience strategies are paramount for effective response and recovery. This qualitative study aimed to explore the diverse array of strategies adopted by communities to fortify their resilience in the face of disasters. By delving into the lived experiences and perspectives of community members, local leaders, and organizations, this research seeks to uncover the nuanced approaches utilized across different communities and disaster scenarios. Through in-depth interviews, observations, and analysis, this study endeavors to shed light on the key factors that underpin the success or failure of these strategies, ultimately contributing valuable insights to the field of disaster management and community resilience.

Disaster causes serious disruptions in the community, which call for the global community to take action and steps to reduce the impacts of the calamities (Ventura, 2020 as cited in Kim et al. 2020).

The Philippines is one of the countries that frequently experiences an unlimited number of deadly natural disasters due to its geographic location along the Pacific Ring of Fire (Olores et al., 2023). Due to the Philippines' location on two significant tectonic plates, there are often 100 to 200 earthquakes yearly. Various natural disasters, including typhoons, storm surges, earthquakes, volcanic eruptions, floods, and landslides frequently hit the nation.

Furthermore, The National Disaster Risk and Management Council (NDRRMC) reported that the number of Yolanda-related fatalities has risen to 6,300, and the total number of injuries individuals are still missing; it reports that the cumulative losses with a total of 39.8 billion pesos, with 20 billion pesos in agriculture. With these pressing problems, it is imperative to determine the resilience to know what factors or strategies to improved to increase community resilience.

Sharifi and Yamagata's (2016) analysis defines community resilience as the capacity of a community to adapt more successfully to unfavorable events and restore equilibrium. In addition to outcome-based metrics like speed of recovery and loss estimation, the definition also emphasizes the use of participatory approaches and process-based metrics. Norris et al. (2008) highlights the challenges in defining community resilience, and that the evolving definition of community challenges the idea of community resilience as an organization with geographic borders and a shared purpose, consisting of constructed nature, and natural resources.

Building and achieving community resilience relies heavily on effectively controlling risks using various risk reduction strategies. However, the transformative effects of natural disasters on our lives physical, social, and psychological facets can make this task challenging. After a disaster, as well as during the recovery and reconstruction phases, communities are faced with a new reality that often differs significantly from their pre-disaster norms. As a result, people must adjust to the changed reality (either the disaster itself or the social response to it) (Paton et al. 2001). According to Collins et al. (2011), defining resilience follows Paton's opinion that it is a consequence rather than a process. Second, the situation determines the proper meaning of resilience. Learning from natural disasters is subtler. No single catastrophe typically prompts major change on its own. Instead, significant changes, such as the enactment of disaster management legislation like the Stafford Act, often occur after several major disasters have taken place (Birkland 2006)

Communities play a pivotal role in disaster resilience, whether it involves combating natural disasters such as floods and heavy rainfall due to sudden climate changes. Community resilience and the effectiveness of disaster recovery efforts have a direct impact on reducing disaster recovery time, making community-level responses indispensable in disaster loss reduction and disaster management. Concurrently, community resilience and its role in responding to disasters have gained significance as integral components of disaster prevention and mitigation efforts. The concept of disaster resilience has evolved to introduce novel perspectives in disaster management, particularly in the context of comprehensive multi-hazard prevention. Rather than regarding society's obligation as merely adapting to the failures that precipitate local-level disasters, resilience is viewed as the capability to diminish the risk and repercussions of crises and disasters at the grassroots level. This entails more than just grasping the adaptive potential of social systems. Despite the involvement of higher tiers of government, emergency management frequently places greater responsibility for service delivery on local authorities (Murphy, 2007)

The concept of community resilience is based on the widespread belief that disasters are always local, and that local communities are the key stakeholders in every stage of disaster management. In fact, the 2015 Sendai Framework for Action emphasized local communities as the foundational layer of society and highlighted their role in disaster risk reduction.

The Municipality of Sta. Teresita, a 4th-class municipality with 16,727.07 acres and 19,573 inhabitants, has four coastal areas: Centro East, Caniugan, Simpatuyo, and Simbaluca, which are susceptible to flooding and volcanic eruptions. Sta. Teresita faces a significant challenge with its four coastal areas being susceptible to both flooding; volcanic eruptions and it is prone to typhoons. This confluence of hazards creates a complex and urgent need to understand the specific risks, develop effective mitigation strategies, and build community resilience. Researching the municipality's vulnerability to these hazards can provide valuable insights into the effectiveness of existing disaster preparedness plans, identify gaps in community knowledge and resources, and ultimately inform the development of tailored solutions to protect lives and livelihoods. The research can also serve as a model for other coastal communities facing similar challenges, contributing to a broader understanding of disaster risk management in vulnerable areas.

Theoretical & Conceptual Framework

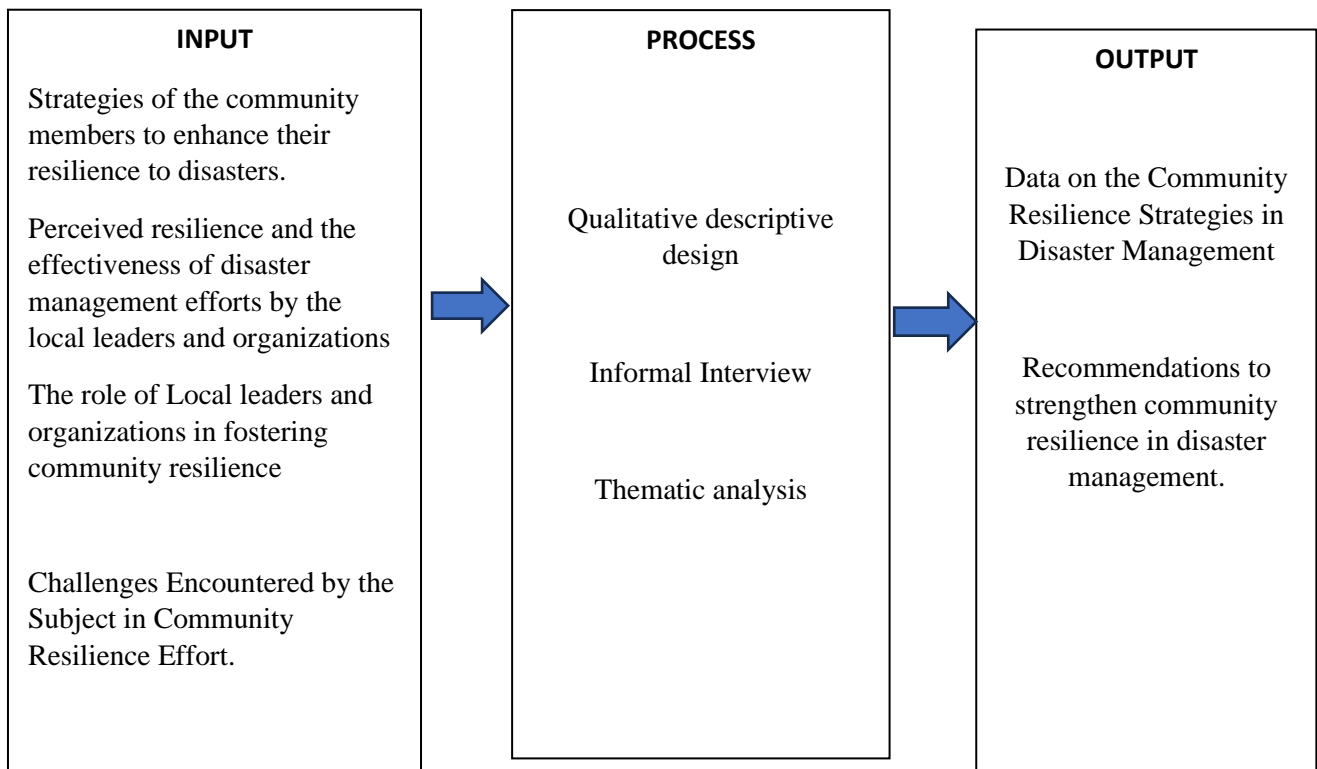
Community resilience is the central concept, focusing on how communities prepare for, respond to, and recover from disasters. Disaster management strategies form the foundation, encompassing the processes and actions taken to mitigate the impact of disasters. Community engagement is critical, examining the active involvement of communities in decision-making and resilience-building efforts. Understanding risk perception sheds light on how communities perceive and interpret disaster risks.

The study is anchored on the philosophical leanings of humanism emphasis on human agency, well-being, and progress providing a valuable framework for understanding and promoting community resilience in disaster management. Humanistic values, such as compassion, empathy, and a commitment to social justice, are central to fostering resilient communities. By prioritizing the needs and experiences of individuals within a community, a humanistic approach encourages collaboration, empowerment, and a sense of collective responsibility. This aligns with the core principles of community resilience, which focuses on building capacity, fostering social cohesion, and enabling communities to respond to and recover from disasters effectively. A qualitative study exploring community resilience strategies through a humanistic lens would delve into the lived experiences of individuals, their perceptions of risk, and how they mobilize resources and support networks to build resilience. Such a study could shed light on the role

of human agency, social connections, and shared values in shaping community responses to disasters, ultimately contributing to more effective and equitable disaster management practices.

According to Béné (2013), resilience relies instead on the synergy of three capabilities: absorption, adaptation, and transformation. For Chen et al. (2020), resilience to disasters can be summarized by three distinct capacities: the capacity to resist, adapt, and recover quickly.

The Paradigm of the Study



Significance of the Study

The study on exploring community resilience strategies in disaster management in the local municipality of Santa Teresita is significant for various reasons.

Firstly, it sheds light on the methods employed by community members to enhance their resilience in the face of disasters. Understanding these strategies can help in developing more effective disaster management plans tailored to the specific needs of the community.

Secondly, the study aimed to investigate how community members perceive resilience and the effectiveness of disaster management efforts. This insight is crucial for improving communication and collaboration between residents and authorities in times of crisis.

Lastly, the research also focused on the role of local leaders and organizations in fostering community resilience. By highlighting their contributions, the study can potentially lead to better coordination and support systems within the municipality, ultimately building a more resilient community.

Objectives of the Study

The objective of this study is to present a Qualitative Study about Community Resilience Strategies in Disaster Management

It specifically answered the following problems:

1. What are the strategies of the community members to enhance their resilience to disasters?

2. What are perceived resilience and the extent of disaster management efforts by the local leaders and organizations?
3. What are the roles of local leaders and organizations in fostering community resilience?
4. What are the challenges encountered by the participants

MATERIALS AND METHOD

This study shall be using the Qualitative Descriptive research method which is usually used in qualitative research which is typically descriptive (Kim, H., et. al., 2016). Qualitative descriptive design is most appropriate for the study as it aims to reveal the phenomenon through an in-depth analysis of the themes. The qualitative approach was preferred because it allows the researcher to understand and explore the (McMillan and Schumacher, 2010). The researcher will use purposive sampling. The data will be collected through document analysis, face-to-face interviews, and open-ended questionnaires. Triangulation of data sources will be used in this study; qualitative researchers generally use this technique to ensure that the data is strong. All the data gathered in this study will be analyzed thematically in line with qualitative research approaches and treated with the utmost confidentiality.

Research Method

This study was conducted in the Municipality of Sta. Teresita, Cagayan is the locale of the study considering that the place is where the permanent residence of the researcher.

Population and Locale of the Study

The study consisted of 3 groups of key informants namely: community members living in disaster-prone areas, barangay officials in disaster-prone areas, and the personnel from the Municipal Disaster Risk Reduction Office.

Data Gathering Tools

The researcher conducted an informal interview using an approved interview guide. A letter of consent was distributed among the respondents for their approval before the interview was undertaken

Data Gathering Procedure

An approved Communication letter addressed to the Municipal Mayor was routed to the key informants. Likewise, there was an approved letter of consent from the participants, and the researcher notified participants about the objectives of this study. The researcher also explained the content of the interview guide before conducting the interview. All answers were consolidated and kept confidential.

Treatment of Data

The data was analyzed using thematic analysis. The researcher will make use of the method established by Braun and Clarke's in doing TA. The six steps are as follows:

1. Familiarising yourself with your data This step requires the researcher to be fully immersed and actively engaged in the data by firstly transcribing the interactions and then reading (and re-reading) the transcripts and/or listening to the recordings. Initial ideas should be noted down. It is important that the researcher has a comprehensive understanding of the content of the interaction and has familiarised him-/herself with all aspects of the data. This step provides the foundation for the subsequent analysis.
2. Generating initial codes. Once familiar with the data, the researcher must then start identifying preliminary codes, which are the features of the data that appear interesting and meaningful. These codes are more numerous and specific than themes but indicate the context of the conversation.
3. Searching for themes. The third step in the process is the start of the interpretive analysis of the collated

- codes. Relevant data extracts are sorted (combined or split) according to overarching themes. The researcher's thought process should allude to the relationship between codes, subthemes, and themes.
4. Reviewing themes. A deeper review of identified themes follows where the researcher needs to question whether to combine, refine, separate, or discard initial themes. Data with themes should cohere together meaningfully, while there should be clear and identifiable distinctions between themes. This is usually done over two phases, where the themes need to be checked with the coded extracts (phase 1), and then for the overall data set (phase 2). Athematic 'map' can be generated from this step.
 5. Defining and naming themes. This step involves 'refining and defining' the themes and potential subthemes within the data. Ongoing analysis is required to further enhance the identified themes. The researcher needs to provide theme names and clear working definitions that capture the essence of each theme in a concise and punchy manner. At this point, a unified story of the data needs to emerge from the themes.
 6. Producing the report. Finally, the researcher needs to transform his/her analysis into an interpretable piece of writing by using vivid and compelling extract examples that relate to the themes, research questions, and literature. The report must relay the results of the analysis in a way that convinces the reader of the merit and validity of the analysis. It must go beyond a mere description of the themes and portray an analysis supported by empirical evidence that addresses the research question.

Ethical Considerations

This study complied with legal and ethical requirements, put participants' welfare first, got permission from the appropriate authorities, and made sure participants knew why they were being studied. Study participation was entirely voluntary. The participants were informed that there would be no consequences if they withdrew at any moment. To conceal the interviewees' identities, the researcher employed codes. To properly acknowledge the study's authors, citations are based on the American Psychological Association's 7th edition.

The interview guide employed included informed consent that detailed the participant's rights as well as the goal of the study. Participants also received assurances regarding their secrecy and anonymity. Their identities were kept private, and the study did not in any way disclose or link their personal information to the answers they provided.

Additionally, the information collected from the participants was stored on a password-protected laptop that the researcher alone could access. After the study was over, hard copies of the interview guide were stored and then destroyed.

RESULTS AND DISCUSSION

A. STRATEGIES OF THE THREE GROUPS OF PARTICIPANTS TO ENHANCE THEIR RESILIENCE TO DISASTER

A.1 DISASTER AWARENESS AND PREPAREDNESS

The awareness will save lives and the economy by educating the barrio communities about the various disasters. More so, Malonecio (2023) concluded that better planning and preparations are made to counteract the terrible effects of a disaster as a result of familiarity and awareness of the many types of disasters. Higher awareness reduces susceptibility to a particular disaster, but awareness of the disaster enhances the ability to deal with issues brought on by it.

According to Muasya (as cited in the study of Malonecio, 2023), disaster awareness is the ability to recognize and lessen the effects of a disaster by using pertinent knowledge and skills in disaster management.

Awareness can be closely connected to one's understanding of a situation brought about to him/her from acceptable sources of information and authorities. Being aware does not always mean that a particular person or institution is ready enough in times of natural disasters and calamities that may come because, as we all know, logistics and infrastructural preparedness would be included as a count in the cycle preparation (Maminta, 2019).

Risk knowledge means being aware of the possible risks, local hazards, and possible exposure to disaster impact. Disaster readiness is the process used to mitigate, prepare, respond, and recover from disaster. Disaster adaptation is a process to reduce the potential disaster associated with climate change. Disaster risk perception means how people respond to possible hazards and know whether the hazards could turn into a disaster (Oppenhimer, 2021).

There have been disasters all across the world, and no nation is exempted from this issue. The intensity and amount vary depending on the nation. Schools that are properly prepared for disasters are particularly good at managing the risks (Wanjala & Oyango, 2018).

Preparing for natural disasters in advance helps a community immediately address physical-health problems, lowers the risk of mental stressors on residents, and helps the community recover faster (Johnston et al., 2022).

Although, being aware is not enough, practicing sustainability of the program needs to be carried out (Kurniawan & Sari, 2019). Individually or collectively, there are activities to address exposure and vulnerability to risks that are influenced by disaster awareness (Glago, 2019). According to Rosmadi (2023), people may not be aware of the risks associated with natural catastrophes and may be reluctant Chong, (2018) even mentioned that if the community is well-informed with a high level of awareness and sound knowledge on disaster preparedness and mitigation, greater incidence of human casualties could be prevented and socio-economic loss to the community reduced.

The need for disaster preparedness is a common thread that unites community members, barangay officials, and disaster risk reduction and management officers (MDRRMO). K1 emphasizes the importance of staying informed about the current location and potential impact of disasters, recognizing that this knowledge empowers individuals to identify ways to mitigate the risks. K2, from the perspective of a barangay official, underscores the critical need for awareness and understanding of the necessary actions to be taken in the event of a disaster. K3, representing the MDRRMO, highlights the importance of being aware of the possible location and impact of disasters, implying a proactive approach to preparedness. These diverse perspectives converge on a shared goal: to build a resilient community capable of effectively responding to and recovering from disasters.

Furthermore, Harowati (2021) defines disaster preparedness as the work and actions done in advance of a natural disaster in order to be ready to react swiftly and efficiently to events that arise, as well as those that arise right after them. Likewise, Disaster preparedness is the work and action done in advance of a natural disaster in order to be ready to react swiftly and efficiently to the events that arise as well as those that arise right after them. Disaster preparedness is creating a structure emergency response system that helps people, groups, and organizations deal with the risk associated with natural disasters. Being prepared is crucial because it can minimize various descriptions brought on by disaster, save lives, minimize injuries, and limit property losses (Herowati, 2021).

K1 (Community) To enhance awareness and preparedness by being updated on the current location or possible impact of disaster and it could help me identify means to reduce its possible impact.

K2 (Barangay Official) I think we need to be aware and knowledgeable enough on what steps are need to be undertaken when there is a disaster

K3(MDRRMO) Be aware of the possible location or impact of the disaster

A.2 Capacity Building or Training on Disaster Management

Capacity building is one of the important pillars of resilience enhancement (Mukherjee & Hastak, 2016). According to UNISDR (2009) capacity is the combination of all the strengths, attributes and resources available within a community, society or an organization that can be used to achieve agreed goals and they can exist in the forms of infrastructure and physical means, institutions, societal coping abilities, human knowledge, skills, and collective attributes such as social relationships, leadership and management. Capacity building activities like training, establishment of institutions, community based training, information and coordination sharing under the Disaster Risk Reduction (DRR) programme helped in establishment of a more interactive partnership between the different stakeholders involved in development and disaster mitigation related activities of the concerned area. (ADPC, 2006 as cited in Yaadav, & Barve 2014)

According to McEntire (2012) capacity building describes an increase in the ability of interested individuals or groups to adapt to unusual events in their own lives

Development of human resources has been one of the core strategies to promote and to enhance the capacity of disaster prone communities (Tadele and Manyena, 2009).

According to Bretty (2013), participation is an empowering process in which people, in partnership with each other and those able to assist them, identify problems and needs, mobilize resources, and assume responsibility to plan, manage, control and assess the individual and collective actions that they themselves decide upon

Establishing and strengthening the capacities of communities to anticipate, cope with, and recover from the negative impacts of disaster could be the long term goal of the community Disaster Risk Reduction Management (Mohammed, 2018).

The importance of continuous learning and capacity building in disaster preparedness is evident in the statements from K1, K2, and K3 as one of their strategies in disaster resilience. K1, a community member, recognizes the value of practical training like earthquake drills conducted by the MDRRMO, demonstrating a proactive approach to enhancing their knowledge. K2, a barangay official, emphasizes the need for theoretical knowledge and skills development through seminars and workshops on disaster management. This highlights the importance of both practical and theoretical knowledge in disaster preparedness. Finally, K3, an MDRRMO rescuer, underscores the need for ongoing learning and adaptation of new strategies to maintain effectiveness in rescue operations. This emphasizes the dynamic nature of disaster response and the need for continuous professional development. Collectively, these statements highlight the critical role of capacity building across different levels of a community, from individual citizens to government officials and emergency responders. By investing in training, knowledge enhancement, and ongoing learning, communities can better prepare for and respond to disasters, ultimately saving lives and minimizing damage

K1(Community) Attend training to enhance my knowledge like earthquake drills conducted by the MDRRMO

K2 (BARANGAY OFFICIAL) Be ready to enhance my knowledge by attending seminar-workshop on dis-

aster management

K3 (MDRRMO) Being up to date on disaster strategies as a rescuer I have to learn new things to be more effective.

A.3 Community Engagement in Disaster Management

Participation is a collective effort to increase and exercise control over resources and institutions on the part of groups and movements of those hitherto excluded from control. This definition points toward a mechanism for ensuring community participation. Participation as a process through which stakeholder's influence and share control over development initiatives, and the decisions and resources which affect them. A descriptive definition of participation programs would imply the involvement of a significant number of persons in situations or actions that enhance their well-being, for example, their income, security or self-esteem (Akintobi et al., 2012)

Community participation, generally, refers to the involvement of people in any project to solve their own problems or to develop their socio-economic conditions. They participate in setting goals and preparing, implementing and evaluating plans and programs (Hossain, 2013) Community participation enhances public trust, which in turn strengthens community resilience. (Inoue et al., 2022).

Community engagement is a critical component of emergency management and action to reduce disaster risk and strengthen resilience. Australian Institute for Disaster Resilience. (2020)

The active participation of the local communities will be more effective in enhancing local capacity building to recover the disaster-affected coastal people in Bangladesh (Islam and Hasan, 2015).

Rowlands (2013) indicates that empowering the community and maximizing the community's participation at the local level will give the community control of the process and enable it to take charge of its rebuilding. This means tapping into the community's resourcefulness; tapping local providers to supply materials and services (such as psychology and social work); and tapping workers to rebuild the community is required to ensure meaningful disaster recovery projects within the social and cultural sectors of natural disasters

According to Amirzadeh & Barakpour (2021), community people must be involved in the development and execution of programs to enhance resilience. These procedures must be inclusive, participatory, and transparent

Community participation is very important in increasing disaster resilience. The priorities for action based on the Hyogo Framework for community participation are: training and learning on Disaster Risk Reduction and reduction of underlying risk factors. Community resilience depends on participation of individuals and their functional needs. Consequently, the framework attempts to characterize the vulnerable population of the community. Individual participation is characterized by community engagement in formal organizations and processes such as religious groups and electoral processes. Three interconnected areas involving individual participation are: who participates and why; how organizations and other engagement avenues affect participation; and the effects of participation on community conditions. These explain the nature and extent of grass-roots participation in hazard mitigation and resilience efforts (Norris et al., 2008).

Effective disaster preparedness requires a collaborative effort between the community, barangay officials (BO), and the Municipal Disaster Risk Reduction and Management Office (MDRRMO). Each stakeholder plays a critical role in building resilience and ensuring a swift and effective response during emergencies. Active involvement of the community is paramount. Participation in earthquake drills and other barangay activities related to disaster management fosters a sense of ownership and responsibility.

These drills provide practical experience in emergency procedures, evacuation routes, and the importance of individual actions during a disaster. This knowledge empowers residents to act confidently and effectively, minimizing panic and maximizing safety.

The Barangay Officials serve as vital liaisons between the community and the MDRRMO. They play a crucial role in encouraging community involvement by conducting "tambully" or community meetings. These meetings serve as platforms to inform residents about potential risks, educate them on disaster preparedness measures, and encourage active participation in drills and other initiatives. This proactive approach ensures that residents are well-informed and prepared to respond effectively during an emergency.

The MDRRMO provides the technical expertise and resources necessary for effective disaster management. Conducting regular drills and developing comprehensive disaster plans are crucial for ensuring a coordinated response. Identifying and mapping danger zones within each barangay empowers both residents and BOs to make informed decisions during an emergency. This information, disseminated through community meetings and awareness campaigns, helps residents understand potential risks in their area and take necessary precautions.

This collaborative approach has far-reaching implications. A well-prepared community is less vulnerable to the devastating effects of disasters. Active participation in drills and community activities fosters a sense of unity and responsibility, strengthening social cohesion and community resilience. Informed BOs, equipped with relevant knowledge and resources, can effectively lead and guide their communities during emergencies. The MDRRMO's expertise ensures a coordinated and efficient response, minimizing casualties and damage.

Furthermore, a collaborative approach involving the community, BOs, and the MDRRMO is essential for building a resilient community capable of effectively mitigating the impact of disasters. This approach not only saves lives but also strengthens community bonds and fosters a culture of preparedness, ensuring a safer and more secure future for all.

K1(COMMUNITY):Participation during earthquake drill and other barangay activities & MDRRMO relating to disaster management

K2 (BO): The conduct of tambully or informing them about the possible risk of disaster to encourage community involvement

K3(MDRRMO): The Conduct Drills and Making disaster Plans, informing them on the location of danger zone in their respective barangays to enhance Participation of community members & Barangay officials

A.4 Psychological State and Mindset

Staying calm allows you to think logically and make decisions accordingly. Clarity of mind is extremely important when you are dealing with problems. If your mind is free and relaxed, your clarity with help you work through solutions much easier and logically.(Dos Santos,2021)

(Ahangama& Prasanna, 2016) Discovered that the resilience of the PAOs' knowledge networks, postulated from their ability to stay calm over calamity, which is linked to their task delegation and endurance in the face of a disaster.

Folke (2003) study the inclusion of human and social factors which were important components of resilience. Resilience is not just the ability to deal effectively with negative situations and instantly recover from the negative impacts. But also, mental preparedness for future situations and vulnerabilities.

Wachinger et. al. (2013) further states that supportive strategies, including emotional and material strategies, act as an important help to deal with the post-disaster experiences. Emotional supportive

strategies comprised programs focusing on stress reduction, transforming and modifying the maladaptive behaviours to the socially acceptable behaviours and informing people how to respond to the emotional stressful situations.

Living in a disaster-prone barangay demands a unique set of skills and attitudes for effective disaster management. A calm and adaptable mindset is crucial for both community members and those responsible for their safety. The community's ability to remain calm and positive during a disaster is essential for their own well-being and the success of any rescue or evacuation efforts. A positive attitude helps to minimize panic and encourages cooperation. Adaptability is equally important, as residents must be prepared to deal with potential damages and disruptions to their lives. This includes accepting the need for evacuation and understanding that their homes may be affected.

Barangay Officials play a critical role in maintaining order and assisting community members, especially during evacuation. Their calmness and composure are vital in dealing with residents who may be hesitant or resistant to leaving their homes. Patience and understanding are key in persuading those who are reluctant to evacuate, ensuring their safety and the smooth operation of the evacuation process.

The MDRRMO is responsible for making crucial decisions during emergencies and rescue operations. Their ability to remain calm under pressure is essential for effective leadership and decision-making. Calmness allows them to assess situations clearly, prioritize actions, and coordinate rescue efforts efficiently, ensuring the safety of all involved.

A community that can remain calm during a disaster is more likely to cooperate with authorities, follow evacuation orders, and minimize injuries. BOs who are calm and patient can effectively manage the evacuation process, ensuring the safety of all residents. A calm and composed MDRRMO can make sound decisions, coordinate rescue operations effectively, and minimize the impact of the disaster.

Furthermore, community's ability to remain positive and adapt to potential damages, the BOs' ability to remain calm and patient while assisting residents, and the MDRRMO's ability to make sound decisions and coordinate rescue efforts. By fostering this mindset, we can significantly improve our community's resilience and preparedness for future disasters.

K1(Community):Considering that our barangay is a flood-prone area I think it needs a Positive attitude and being Calm when there is disaster and ability to adapt to possible damages

K2(BO):Being calm in assisting the community members especially during evacuation because there are some that are hard headed they don't want to evacuate

K3(MDRRMO):Being Calm to make proper decisions in times of emergencies and rescue operations

A.5 Coordination

The effectiveness of disaster management relies heavily on cross-sectoral cooperation involving government, non-government agencies, community organizations, the private sector and the general public. Strong coordination and effective communication among all these parties are required, as well as the use of information technology to monitor, collect data and analyze risks in real-time (Lee, 2022)

Coordination is a critical factor in the successful planning for disaster risk reduction, preparedness, and response activities. Effective coordination requires all actors to understand the roles and responsibility of the institutions and actors involved, with clarity on how different elements and stakeholders within the system interact and communicate with each other and how decisions are made. Effective coordination saves resources, time and, most importantly, lives.

Coordination is the act of organizing and making different people organizations work together and integrate their activities for a common goal of the mission. It is a managerial function in which different

activities of the people are properly adjusted and interlinked (Parkash,2015)

According to Bharosa et al. (2010) the ability to collaborate effectively is greatly affected by the fact that disasters tend to unfold suddenly with a great level of uncertainty creating threats to urban infrastructure. This causes considerable strain on materials, equipment, electricity and transport etc., hence impacting on the effectiveness of collaboration among agencies.

Additionally, coordination affects the supply chain efficiency levels by giving essential data on all supply processes and related procedures (Akhtar et al., 2012). It is crucial for the overall relief efforts to establish and maintain efficient coordination procedures (Ergun et al., 2014).

Coordination affects the capacity of humanitarian NGOs to share information, which affects the integration of well-informed decisions pertaining to the overall process, which affects the decision-making process encountered in the logistical assistance chain (Akhtar et al., 2012).

Coordination among multi-agencies during disaster collaboration forms a key issue due to the various challenges faced when there is interaction between agencies (Salmon et al, 2011)

Coordination is described as an efficient designation of useful recourses in order to effectively achieve the common objectives or is determined as common efforts designed to reduce reworks in the measures and also to reduce gaps in providing services. (Parmar et al, 2007)

Coordination in natural disasters as close relationship of organizations that need their services in time of natural disaster occurrence, so that all are aware of their duties against each other, and collaborate with each other to achieve a common goal, under the command specified by the predetermined plan (Rabiee et. al. 2013)

The statements from K1, K2, and K3 highlight the interconnected roles of community members, barangay officials, and the MDRRMO in ensuring effective coordination with proper authorities during disasters. K1 emphasizes the importance of community members actively coordinating with barangay officials, particularly during evacuations and dangerous situations.

This demonstrates a clear understanding of the barangay's role as the first line of response and the need for community members to rely on their expertise and resources. K2 focuses on the crucial role of barangay officials in disseminating information to the community, ensuring they know when to seek help and reporting the barangay's situation to higher authorities or rescue teams. This highlights the vital link between the community and external support systems, facilitated by the barangay's proactive communication and situational awareness. Finally, K3 emphasizes the MDRRMO's responsibility to keep both the barangay and the community informed about disaster management protocols, ensuring a coordinated response. This underscores the need for consistent communication and information sharing to maintain a unified approach during emergencies.

These statements collectively demonstrate the importance of a well-defined chain of command and communication flow within the community, with each entity playing a distinct yet interconnected role. This coordinated approach, where community members rely on the barangay, and the barangay relies on the MDRRMO, ultimately ensures efficient communication with proper authorities, leading to a more effective and timely disaster response.

K1(Community): Coordinating with the Barangay Officials especially if I need their services during evacuation and dangerous situations

K2(BO): Keeping the community members informed so that they will know when to ask for help and reporting the current situation of the barangay to the authorities or the rescuers

K3(MDRRMO): Keep the barangay and the community informed on the protocols in disaster management to maintain coordination

A.6 Access to Essential Resources

The importance of resources for post-disaster adaptation, it is critical to study the processes behind building up and maintaining resources (Southwick, et al, 2014).

According to the Conservation of Resources theory (COR), when confronted with an event threatening to deplete one's resources (e.g. job loss), people try to offset such losses by drawing on available resources in their environment (e.g. savings, social networks) (Hobfoll, 2002). Because of this role of resources in the coping process, a threat of resource loss, their actual loss, or a lack of resource gain after investment of resources leads to psychological distress.

Food preparedness at the household level still play an important role in disaster mitigation (Hiatt et al. 2022) Numerous factors influence household food security in disaster-threatened areas. Firstly, the characteristics of a household, such as population composition, economic status, and living environment, may influence that household's food utilization methods and storage quantities. The demographic composition of a household influences both the quantity and variety of food that its residents require (Chakalian et al. 2019)

According to Wachinger et. al. (2013) Material supportive strategies include the policies introduced for maintaining harmony in the environment by providing the victims with proper distribution of resources, proper access to resources and by assisting the affected people in creating social and economic well-being. The responses from the participants highlight distinct strategies employed by community members, barangay officials (BO), and the Municipal Disaster Risk Reduction and Management Office (MDRRMO) to enhance their resilience to disaster. K1's focus on securing basic needs like food, water, and clothing before a disaster underscores the importance of community preparedness. This proactive approach ensures that individuals and families have access to essential resources in the immediate aftermath of an event, mitigating potential suffering and facilitating a quicker recovery. K2's emphasis on ensuring readily available relief goods demonstrates the crucial role of local government leadership in disaster response. By pre-positioning resources, the barangay can effectively respond to the community's needs during the critical initial hours and days following a disaster, ensuring timely aid and support. K3's emphasis on acquiring and maintaining resources for rescue operations underscores the crucial role of specialized agencies in disaster management. The MDRRMO's focus on preparedness and operational readiness ensures that trained personnel and specialized equipment are available to conduct swift and effective rescue operations, minimizing casualties and maximizing the chances of survival.

The combined strategies of these three groups are essential for building a resilient community. Community preparedness, local government leadership, and specialized agency response work in tandem to create a robust system capable of mitigating the impact of disasters, ensuring the safety and well-being of the community.

K1(Community): Getting ready for the needed resources like the basic needs (food, water, clothes) before the disaster

K2(BO): Assure that relief goods are ready for the community.

K3(MDRRMO): Acquire and maintain the resources needed for the rescue operation

B. Perceive Resilience and the Extent of Disaster Management Efforts of the Participants

B.1 Perceived that Disaster Management Efforts is Effective

Disaster management is a process of effectively preparing for and responding to disasters. It involves strategically organizing resources to lessen the harm that disasters cause. It also involves a systematic approach to managing the responsibilities of disaster prevention, preparedness, response, and recovery. Tulane University School of Public Health and Tropical Medicine (2021)

The effectiveness of disaster management policies in reducing the impact of natural disasters largely depends on several key factors: early warning systems, community preparedness, infrastructure resilience, and coordinated response efforts. Studies indicate that well-implemented policies that prioritize risk assessment, public education, and resource allocation significantly mitigate the damage and loss of life during natural disasters Samuel (2024)

Disaster management policies are critical frameworks designed to mitigate the adverse impacts of natural disasters through structured preparation, response, recovery, and mitigation strategies. Four prevalent disaster management policies include preparedness planning, early warning systems, resilient infrastructure development, and community-based disaster risk management. Preparedness planning involves the development of emergency plans and training programs to ensure communities are equipped to handle disaster scenarios effectively (Perry & Lindell, 2020 cited in Samuel 2024)

According to Gabriel and Mangahas (2016), “the effectiveness of a public policy rests on effective implementation”. Gabriel and Gutierrez (2017) also pointed out that creation of enabling laws in local government is not enough to create an enabling environment. An enabling environment is when people’s participation in local legislation provides them a sense of ownership of the policies which are useful for effective implementation.

Based on a study by Boyle (2000) it clearly reveals that performance measurement is a vital element in the successful operation of performance management in the public service. The performance of the BDRRMCs in the four thematic areas, as reflected by their organizational effectiveness, definitely ensures the attainment of the goal of the R.A. 10121. And for the policies to be appreciated by the community, sufficient public involvement in local decision making is needed to ensure that primary objectives of the policies reflect community concern Klotz & Martin, (2000). This way the effective implementation and performance of the barangays will be assured of community resilience.

Effective disaster management preparedness will result to effective disaster response. Hence, successful response measures are an indication of successful preparations. This denotes the importance and interrelatedness of each thematic area with each other. The performance of the barangays on one area will have an effect on their performance on the other areas. This is true in disaster response. If the people know what to do and follow the specified early warning and evacuation procedure (disaster preparedness) the need for emergency services and public assistance in times of disaster would be reduced (Cuya-Antonio & Antonio, 2017)

The perception of resilience within the community varies among the different individuals mentioned in the statements. The first participant (K1) feels personally resilient and appreciative of the effective programs conducted by authorities that help protect their family during disasters. The second participant (K2) views the community members as moderately resilient but sees room for improvement, suggesting that the effectiveness of disaster efforts may depend on the community's attitude. Lastly, the third participant (K3) perceives the effectiveness of disaster response positively, citing unity of command during rescue operations and the absence of casualties in the Municipality of Santa Teresita as indicators

of community resilience. Each perspective offers valuable insights into the collective resilience and effectiveness of disaster response efforts.

K1(Community):I perceived that I am resilient because the programs conducted by the authorities are somewhat effective our family is thankful for these programs because they help us not to be harmed during a disaster.

K2(BO):I perceived that the community members as moderately resilient with room for improvement, I think as of now the disaster efforts of authorities are effective but I still believe that effectiveness may vary depending on the attitude of the community

K3(MDRRMO): I Perceived it as effective, due to unity of command during rescue operations and I can say that the community members in our town are resilient due to the absence of casualties recorded during disaster

B.2 Seek Real-Time Update through Social Media

Social media during a disaster provides up-to-the-minute news information - road closure updates, evacuation routes, designated help areas, shelter locations, and more (hence why connecting with the right groups and people beforehand is a major advantage).Adjusters International. (2024)

Moreover,social media data in disaster research often relate to the validity of such information. Rumors have been a common concern during disasters (U.S. Department of Homeland Security 2018), but the growth of ‘fake news’ in social media raises new questions for social media use in disasters. The spreading of fake news – including both misinformation (inaccurate or outdated information) and disinformation (deliberatively fabricated false information) – is especially problematic and may critically affect people and communities during the time of disasters (Rajdev & Lee 2015)

Lindsay’s 2011 description of two broad applications for social media in disasters foreshadowed these recent events. The first application, which researchers and practitioners have traditionally focused on, sees social media as a passive, information-sharing mechanism to communicate warnings and other time-sensitive content similar to traditional media. The second application Lindsay described did not exist at the time – that social media could be a tool for emergency management and broader communities to gather, organize, and respond to real-time information such as victim requests for assistance, pictures of damages for situational awareness and assessment of needs, among many others.

Social media allows people to participate and create conversations instead of merely receiving information. According to Velev and Zlateva (2012), during natural disasters there is an increase in communication among people since they try to contact their family and friends in the areas where disasters happen, and get information about how to obtain food, find shelter and transportation. They further added that social media has played an essential role in information dissemination about natural disasters by allowing people to share information and ask for help.

The gradual but quick evolution in the Internet “has transformed the intimacy of word-of-mouth behavior into a broadcast-like ability to communicate with the masses, whether a group of friends or hundreds and thousands of online-but-connected strangers at computer keyboards” (Blackshaw & Nazzaro 2004)

According to Howel and Taylor (2012), social networking sites are now a powerful medium to assist crisis communication practitioners in disaster and crisis awareness as well as develop better relations with key stakeholders through sharing of information. Through its interactive nature, social media allows regular citizens to share their own stories, photos and videos of natural disasters. They also found out that in times of disasters, individuals turned to social media sites and selected Facebook, next to watching television even before accessing online news services. Also, due to social media everyone can become watchdogs,

citizen journalists, photo journalists and be constantly vigilant of what's happening in the world around them and share these online. Holmes (2011)

The statements from K1, K2, and K3 provide valuable insights into the community's perception of resilience and the effectiveness of disaster management efforts conducted by the authorities. K1's statement highlights the importance of real-time updates, specifically through social media, in fostering a sense of preparedness and resilience. Receiving timely information about potential disasters empowers individuals to take necessary precautions and adapt to the possible impacts, enhancing their ability to cope with the situation. K2 emphasizes the role of proactive information dissemination, specifically through "tambully," in building community resilience. This suggests that pre-disaster awareness campaigns and community engagement initiatives contribute significantly to a collective sense of preparedness and readiness. K3 underscores the significance of providing real-time updates and support to encourage active participation and continuous communication with other authorities, as evidenced by their use of the MDRRMO's official page. This emphasizes the importance of a collaborative and transparent approach to disaster management, where information is shared readily and effectively, leading to a more coordinated and efficient response.

These statements collectively suggest that the community perceives the disaster management efforts conducted by the authorities as effective, particularly in terms of information dissemination and communication. The availability of real-time updates, pre-disaster awareness campaigns, and a collaborative approach to information sharing contribute to a heightened sense of resilience within the community. This, in turn, strengthens their ability to respond to disasters effectively and minimize potential risks. The use of social media and official platforms like the MDRRMO's page further demonstrates the authorities' commitment to utilizing modern communication tools to reach a wider audience and ensure timely information dissemination.

K1(Community): I think real-time updates helped me a lot to face the danger of disaster and to be ready on the possible impact of it.(social media)

K2(BO): The conduct of tambully or information dissemination before disaster helped the members of the community to be more resilient (through the Barangay Face Book Page)

K3(MDRRMO): Provisions of real time up-to-date to support to encourage active participation and continuous communication with other authorities.(We Post on the official page of MDRRMO)

C. Local Leaders and organizations' Role in Fostering Community Resilience.

C.1 Collaborative Effort

According to Gaillard& Mercer (2013) social networks, trust, and collaboration among community members are crucial for promoting community resilience.

In the study of Daswati et al. (2019) it provides evidence that collaborative mechanisms can improve disaster response effectiveness. While Rambaree and Rambaree (2021) further illustrate that collaboration fosters resilience and enhances adaptive capacity among stakeholders. Tang et al. (2021) also support this point of view by showing how collaborative efforts can lead to more efficient disaster management practices.

Inter-agency collaboration serves as an integral component of modern disaster management(Waugh & Streib 2006). Disasters, be that natural or man-made, open up window of opportunity for bringing multiple actors together. More often than not, such actors not only belong to different nationalities but also vary considerably in terms of their capacities, values, norms and objectives (Mitchell 2006).

(Ying&Pheng,2014) emphasize, collaboration during disasters differs markedly from collaboration in normal circumstances. It prompts the fundamental question: what factors hinder stakeholders from effectively collaborating during disasters to achieve common goals that are unattainable through individual efforts.

The coordination is described as an efficient designation of useful recourses in order to effectively achieve the common objectives or is determined as common efforts designed to reduce reworks in the measures and also to reduce gaps in providing services(Parmar et. al. 2007)

The statements from K1, K2, and K3 highlight the crucial roles of local leaders and organizations in fostering community resilience, particularly in facilitating collaboration. K1 emphasizes the importance of consistent reminders and guidance from local leaders in building community resilience. By reminding residents of what to do during a disaster, local leaders reinforce preparedness measures and promote a sense of collective responsibility. This fosters coordination and cooperation within the community, as residents become more aware of their roles and responsibilities during emergencies. K2 focuses on the information dissemination role of barangay officials during disasters. By providing accurate and timely information to community members through barangay councilors, they ensure that residents are well-informed and can effectively execute disaster management plans. This highlights the vital link between local leaders and the community, ensuring that information reaches the grassroots level and facilitates a coordinated response. Finally, K3 emphasizes the proactive and collaborative approach of the MDRRMO in contributing to community resilience. Through pre- and post-disaster forums and continuous monitoring of barangays, the MDRRMO ensures that all authorities, including community members, are informed and involved in disaster management efforts. This highlights the importance of ongoing communication and collaboration between different levels of government and the community, ensuring a unified and effective response.

These statements collectively underscore the importance of facilitating collaboration as a key driver of community resilience. Local leaders, including barangay officials, play a critical role in building trust and communication, disseminating information effectively, and promoting a coordinated response. This collaborative approach, where local leaders act as a bridge between the community and higher authorities, ensures that information flows smoothly between different levels of government and that resources are effectively allocated. This ultimately strengthens community resilience and facilitates a more effective and timely disaster response.

K1(Community):The local leaders plays a vital role to enhance community resilience by assisting us by reminding us from time to time on what to do through their authority it build coordination and cooperation to the community.

K2(BO): my role is to provide correct and proper information by keeping in touch with the community members through the barangay councilors in charge per purok during disaster and necessary contingencies to execute the disaster management plans and objectives of the barangay

K3(MDRRMO): I perceived our role as effective as part of the contributing factor in the community resilience due to the pre-disaster and post-disaster forum and continuous monitoring of the barangays that ensure that all authority's concerns will be kept informed including the community members

C.2 Preparedness Effort

Preparedness is not only a state of readiness, but also a theme throughout most aspects of emergency management. It should be a dynamic and continuous management process, directly affecting the performance of emergency response capabilities, thus determining the development and evolution of the

situation (Haddow et al. 2013). It comprises measures that enable different units of analysis—individuals, households, organizations, communities, and societies—to respond effectively and recover more quickly when disasters strike. Sutton & Tierney (2006)

According to Slepski et. al. (2019) Leaders are those who use advanced skills such as communication, organizational, problem-solving, analytical, and interpersonal abilities to influence the actions of others. During a disaster event, it is essential for leaders to set the tone for their team and reach the highest levels of performance possible by all involved

According to Harjono (2014), local leaders in dealing with disaster situations tend to be heard by the community rather than leaders from the national level, thereby emphasizing the significance of regional-level leadership in the context of DRR practices is considered more effective in carrying out community-based activities and also promoting values, such as the value of local wisdom.

The success of disaster management at the local level is greatly influenced by the strength of regional leaders. Social system support and efficient cultural mechanisms organise communities to increase local capacity in dealing with disasters and the existence of superior human resources such as local figures is very much needed in disaster management. The role of local leadership, especially for community leaders, is an important component in various DRR actions based on local wisdom. (Ruslanjari et. al, 2024)

The statements from K1, K2, and K3 highlight the crucial role of local leaders and organizations in fostering community resilience. K1 emphasizes the importance of proactive communication through platforms like "tambully" (information dissemination) to prepare communities for potential disasters. This ensures that residents are informed about potential risks and can take necessary precautions. K2 underscores the need for a holistic approach to resilience, encompassing pre-disaster preparedness, disaster response, and post-disaster recovery. Providing relief goods and resources demonstrates a commitment to supporting community members during and after emergencies. K3 reinforces the significance of structured disaster management programs, emphasizing the need for community involvement in program execution. This approach empowers residents to actively participate in their own safety and recovery, building a stronger sense of ownership and responsibility. By working together, local leaders and organizations can effectively equip communities with the knowledge, resources, and support needed to mitigate the impact of disasters and build a more resilient future.

K1(Community): Local leaders provide us the capacity to anticipate and prepare for the possible impact of disaster by keeping us informed through the tambully or information dissemination

K2(BO): I think we can help the community members to become resilient by guiding them not only during disaster but also before disaster and after disaster; giving relief goods and other resources that our barangay can provide for them

K3(MDRMO): We provide disaster management programs to the people in the community we can help them enhance their disaster resilience by guiding and properly executing the plotted program that involves them.

D. Challenges Encountered by the Participants in Community Resilience Effort.

D.1 Lack of Funds

Fekete et al. (2014) if the resilience of communities is to be built, it is not enough to provide the necessary financial resources without supporting material means with the appropriate investment in human resources Van Niekerk (2015) elaborated that often the problem is not that there is no budget allocated towards disaster risk management (DRM) in developing countries, but rather that budget allocations are so minimal

that it limits the ability of DRM institutions to invest in long-term risk reduction and capacity building activities

According to Poterie and Baudoin (2015), the lack of funding for DRR in a less-affluent-country context can be closely linked to competing focus and investment in other development issues that these countries face—for example housing, poverty alleviation, and job creation

Linnerooth-Bayer and Mechler (2007) argued that limited funding allocated means that DRR projects have very little chance to have a meaningful impact and that reconstruction and rehabilitation efforts face substantial funding gaps that need to be augmented by humanitarian aid or development loans.

The statements from K1, K2, and K3 paint a stark picture of the challenges faced by communities in their efforts to build resilience against disasters. A consistent theme emerges: limited financial resources. This lack of funding hinders their ability to effectively prepare for, respond to, and recover from disasters.

K1 highlights the struggle to adequately support the basic needs of evacuees in evacuation centers, suggesting a lack of resources for essential items like food, water, sanitation supplies, and medical care. K2 emphasizes the difficulty in acquiring crucial rescue equipment, particularly for flood situations, which can hinder timely and effective rescue operations. K3 underscores the broader financial constraint faced by the MDRRMO (Municipal Disaster Risk Reduction and Management Office), limiting their capacity to implement comprehensive disaster management programs and effectively respond to emergencies.

These statements collectively point to a systemic issue of underfunding in disaster preparedness and response. The implications are far-reaching: limited resources hinder the development and implementation of effective preparedness plans, including training, drills, and community awareness campaigns. Insufficient equipment and personnel hamper the ability to conduct timely and efficient rescue operations, potentially leading to increased casualties and property damage. Lack of resources hinders the provision of essential aid and support to affected communities, delaying the recovery process and exacerbating long-term impacts. Communities with inadequate resources are more susceptible to the devastating consequences of disasters, potentially leading to a cycle of vulnerability and poverty.

K1(Community): Limited budget to support our needs in the evacuation center

K2(BO): Limited Budget to buy the needed equipment for rescue operations, especially during floods

K3(MDRRMO): Insufficiency of funds to provide the needed equipment and hire additional personnel

D.2 Lack of Coordination

Lack of inter- organizational coordination and cooperation can lead to detrimental effects on human beings and financial resources. (Kaynak & Tuğer ,2014)

During a disaster, multiple agencies are involved in providing relief and rescue efforts, but due to a lack of coordination, there may be duplication of efforts, delays in response time, and inefficient allocation of resources (Gupta and George, 2016).

Lack of coordination in the disaster management sector is on the timeliness in the designation of disaster status. (Holloway & Fan, 2020)

It seems like there is a common thread in the observations made by the different individuals regarding people's attitudes during evacuation in the community. There appears to be a reluctance or unwillingness among some community members to follow evacuation orders, even when faced with flooding. This can be a concerning issue as it puts not only their lives at risk but also the lives of those who may need to rescue them in emergency situations.

When looking at the behavior of actors and actresses in dealing with disasters, especially during evacuations, it is essential to consider the influence they have on the public. Their attitudes and actions

can greatly impact how seriously the general population takes evacuation orders and disaster preparedness. If these public figures are seen as dismissive or nonchalant about such serious matters, it could potentially lead to a lack of urgency among the public when it comes to following safety protocols.

Overall, there is a need for a collective effort to change attitudes and behaviors towards disaster preparedness and evacuation procedures. It is crucial for both individuals in the community and public figures to take these matters seriously and set a positive example for others to follow. By fostering a culture of preparedness and cooperation, we can better ensure the safety and well-being of everyone in times of crisis.

K1(Community): I think the attitude of the people like unwillingness to follow the authorities during evacuation

K2(BO): Some of the Community members refuse to evacuate even though their place is flooded

K3(MDRRMO): The attitude of the actors and Actresses in dealing with disaster, especially during evacuation.

D.3 Lack of Cooperation

A lack of cooperation combined with a lack of binding agreements hampers the global community's ability to tackle significant problems like climate change, disaster risk and the sustainable management of limited resources. United Nations University(2023)

According to the study of Parkash (2015), it was revealed that the experiences often reveal a lack of good cooperation, coordination, and team spirit among different stakeholders, leading to unnecessary delays and inaction or wrong actions for disaster management.

It appears that there is a recurring theme of lack of cooperation and unwillingness to follow disaster management protocols within the community, as highlighted by the different perspectives shared. The issue of time constraints leading to a lack of participation in disaster management programs such as drills and seminars is a common challenge faced by many communities. This can hinder preparedness efforts and ultimately jeopardize the safety of residents during emergencies.

In the case of preemptive evacuations enforced by barangay officials, the reluctance of some community members to cooperate and instead choose to stay in their homes poses a significant risk. It is crucial for all individuals to heed evacuation orders to ensure their safety and that of others who may need to respond to emergencies effectively.

Furthermore, the presence of miscommunication among authorities can exacerbate the lack of cooperation and coordination in disaster management efforts. Clear and effective communication is essential in ensuring that all stakeholders are on the same page and working towards a common goal of safeguarding the community during disasters.

Addressing these challenges requires a multi-faceted approach that includes improving time management for disaster preparedness activities, enhancing community engagement and education on the importance of cooperation, and establishing clear communication channels among authorities. By fostering a culture of collaboration and effective communication, communities can better mitigate risks and respond efficiently to disasters, ultimately ensuring the safety and well-being of all residents.

K1(Community): Lack of Cooperation on the Implementation of Disaster Management Programs like drills and seminars due to time constraint

K2(BO): We always enforce pre-emptive evacuation in our barangay but some of the members of the community do not cooperate and prefer to stay in their houses

K3(MDRRMO): Mis-communication among authorities that causes lack of Cooperation

D.4 Mis-Communication

Mis-communication, or indeed deliberate spread of dis-information, is widely seen as a barrier to science being ‘useful, usable and used’ and a pervasive bottleneck in disaster risk governance endeavours (Aitsi-Selmi et al., 2016).

The communication problem involves not being able to communicate, which may lead to loss of lives of both first responders and those of whom they are tasked to save.(Griffen, 2014).

It seems that the issue of miscommunication among authorities leading to a lack of cooperation within the community is a prevalent concern based on the various perspectives shared. When community members rely on the news rather than the official mandates of authorities, it can lead to confusion and poor decision-making during times of crisis. Effective communication between authorities and the public is crucial for ensuring a coordinated and timely response to the needs of the community.

Miscommunication can result in delays in addressing critical issues and responding to emergencies promptly. When there is a lack of clarity or conflicting information from authorities, it can undermine trust in official guidance and lead to disorganization among community members. This breakdown in communication can have serious implications for disaster response efforts and overall community safety. To address these challenges, it is essential for authorities to prioritize clear and consistent communication with the public. Transparency, timely updates, and accurate information are key to building trust and ensuring that community members are well-informed and prepared to respond effectively to emergencies. By fostering a culture of open communication and collaboration, authorities can enhance cooperation, strengthen community resilience, and ultimately improve disaster response outcomes for the benefit of all residents.

K1(Community): Lack of communication to authorities, base on my observation some members of the community rely on the news not on the mandate of the authorities.

K2(BO): Mis communication that causes poor response to the needs of the community

K3(MDRRMO):Mis-communication among authorities that causes lack of cooperation

CONCLUSION

The different points of view provided by every participant highlighted the challenges and possibilities to strengthening community disaster resilience. Although everyone has various interpretations of resilience, all agree that strong disaster management is essential to developing a resilient community. However, there are major barriers to reaching the ideal levels of resilience, such issues with coordination, cooperation, miscommunication, and a lack of funding.

RECOMMENDATIONS

1. The MDRRMO together with the Barangay Officials must strengthen inter-organizational coordination and cooperation to streamline disaster management efforts and avoid duplication of resources and delays in response.
2. The Baranagay Officials in cooperation with the MDRRMO must establish clear and efficient communication channels among authorities, community members, and stakeholders to ensure timely and accurate information dissemination, fostering trust and cooperation.
3. The LGU, MDRRMO and Barangay Officials must Advocate for increased funding allocation towards disaster risk reduction and management to support long-term risk reduction, capacity building activities, and effective disaster response.

4. The MDRRMO and Barangay Officials must encourage active participation and engagement of community members in disaster management programs, drills, and seminars to enhance preparedness and response capabilities.
5. The LGU in Cooperation with the Offices of Civil Defense must empower local leaders and organizations with the necessary skills and resources to lead disaster management efforts effectively, set positive examples, and influence community behavior positively.
6. A parallel Study must be conducted to include the following variables the participation of the members of the community belong to vulnerable sectors, assessment of the programs and projects implemented by the LGU in relation to Disaster Management

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