

**EXAMINING DISASTER RESILIENCE OF MOTHERS ON MASS WASTING EVENT:
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ABSTRACT

The increasing world population and expansion of settlements have pushed communities from flatlands to hilly or mountainous areas, making them more vulnerable to natural disasters such as landslides. This study investigates the resilience strategies of mothers in Barangay Marilog Proper, a landslide-prone area in Davao City, Philippines. A qualitative design was employed utilizing Participatory Action Research (PAR) to examine maternal disaster resilience, focusing on mothers affected by the 2024 mass wasting events. Through direct key informant interviews, the researchers collaborated with ten mothers residing in Barangay Marilog Proper. Among the participants, three are homemakers, three are engaged in farming, two are self-employed, and two are currently unemployed. With the conducted interview transcriptions, analyses using coding, and thematic analysis methods, the research revealed a significant theme – the impact of landslides on mothers – with two subthemes (1) emotional responses of fear, panic, and anxiety, subsided with courage and strength, and (2) challenges in safeguarding their family members and means of livelihood when landslides occur in the vicinity. Another separate theme was identified that gauged the awareness of mothers on their vulnerability, which was divided into two sub-themes: perceived high vulnerability and acquired knowledge that improved risk preparedness. Lastly, the evaluation of push and pull factors for residing in landslide-prone areas - resulted in two themes: (1) lack of alternative options or socio-economic factors and (2) the community's historical background. Furthermore, with the results gathered through this research, the proponents are hopeful for the local government to consider the provision of alternative income sources, and safer housing relocation sites to secure the families living in landslide-prone areas.

Keywords:

Disaster resilience, Landslide-prone areas, Maternal resilience strategies, Vulnerability, Emotional responses, Challenges in safeguarding, Risk preparedness, Case Study

INTRODUCTION

The world population is still growing and formed settlements are increasing. Communities from flat land have been relocating to hilly or mountainous areas. These communities used to move from place to place to avoid natural disasters such as landslides and flooding, however, it is no longer possible to implement relocation due to rapid population increase and scarce resources. A lot of research has been conducted to assess the vulnerability and risk of settlements to disasters, aiming to identify imperative solutions or interventions to respond to such incidents. However, scholars have observed a paradigm shift from hazard-centric to people-focused approaches, seeking a deeper understanding of the experiences of individuals and communities about disasters (Arora, 2020). Also, various humanitarian organizations have recognized the importance of examining gender studies in both disaster response and recovery as a priority subject (Moreno & Shaw, 2018). In the study of Arora-Jonsson (2011), it was also highlighted that women are seen as either vulnerable, resilient, or both in the gender and disaster literature. In a particular study by Sharma, et. al (2015) focusing on the disaster preparedness of women as an invisible resilience in Delhi, India, among the 754 total mothers aged 18 years old and above, she found that there was a huge gap in women's knowledge and preparedness in disasters. (Sharma, et.al, 2015). While, in the study of Cajucom and Estaur (2018), which was

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focused on women affected by typhoons and earthquakes in the Philippines, it was found that women employ various coping strategies to navigate the challenges posed by disasters. Their findings highlighted that Filipino women have adaptive coping strategies post-disasters, and they can play key roles in community resilience efforts. While gender-specific challenges are evident, like caregiving responsibilities, policy interventions in such communities need to be gender-sensitive and empowering to women.

Women play vital roles in community development, being mothers and household caretakers, as well as in building community resilience despite experienced disasters. Hemachandra et al. (2017) highlight the pivotal role of mothers in disaster response and recovery at the household level. In Davao City, Barangay Marilog Proper is one of the communities identified as vulnerable to mass wasting or landslide incidents. Based on the Davao City DRRMO Hazard and Risk Assessment Report on Multiple Mass Wasting Incidents and Reported Tension Cracks in Various Puroks at Barangay Marilog Proper, Marilog District (Feb. 12, 2024), on January 31, 2024, at approximately 11:00 PM, a mass wasting event occurred in Marilog Purok 12, Sitio Qulmasog, Brgy. Marilog Proper, Marilog District, Davao City, following torrential rainfall associated with the Trough of Low-Pressure Area (LPA). During the CDRRMO on-site assessment, it was found that the ground movement resulted in significant damage to residential structures and the terrain. Landslide debris consisting of soil, uprooted mango, and coconut trees, accumulated on a section of the national highway (southbound going towards Davao). The landslide incident affected a total of five families, comprising 22 individuals, who were evacuated to nearby relatives as a safety precaution. Other mass wasting events were identified in Purok 19, Purok 21, and Purok 25 of the same barangay. Consequently, other areas in the Marilog District were assessed and some were observed to have visible tension cracks, indicating potential ground instability and a heightened risk of future landslides. The local government has conducted evacuation/resettlement efforts, applied long-term mitigating/engineering measures, various Information, Education, and Communication (IEC) campaigns, and continuous monitoring. However, mothers living in barangay Marilog have limited involvement in organizational decision-making within disaster risk governance. Improved education, awareness of possible alternate sources of livelihood, and upskilling may help improve the living situations of mothers in barangay Marilog.

This study aims to examine the lived experiences of mothers in landslide-prone areas, determine the level of awareness of mothers of the potential threats existing in their community, understand the push and pull factors for mothers residing in areas susceptible to landslides, and establish the resilience strategies of mothers in barangay Marilog Proper. The gathered results of this study will be analyzed through the lens of the Triple Role of Women framework by Moser (1993), focusing on the multiple roles that women often portray in society: productive, reproductive, and community-managing roles.

Furthermore, Moser's theory highlights the need for policies and interventions that address the multifaceted dimensions of women's roles and responsibilities within the context of households and communities. (Moser, 1993). The proponents of this research believe that through the data gathered from this study, there can be a relevant reference for planned improvements in existing local policies and programs for landslide-prone areas in Davao City.

STATEMENT OF THE PROBLEM

This study primarily examines mothers' disaster resilience to mass wasting events in Barangay Marilog Proper, Davao City, to come up with possible interventions that the government can apply in landslide-prone areas that are more gender-sensitive and empowering to mothers.

In particular, the study aims to address the following inquiries.

1. What is the socio-economic profile of the participants?
2. How are mothers in Barangay Marilog Proper aware of their vulnerability to landslides?
3. What are the push and pull factors for mothers residing in areas susceptible to landslides?
4. What resilience measures do mothers take to protect themselves?

RELATED LITERATURE

Mothers in Disaster Risk Governance and Resilience

In recent years, the escalating frequency and severity of disasters underscore the urgency for innovative approaches to disaster risk reduction and resilience. Hemachandra et al. (2017) highlight the pivotal role of mothers in disaster

response and recovery at the household level. However, their involvement in organizational decision-making within disaster risk governance remains limited, exacerbating equity and equality issues within affected communities.

In addition, Alam & Rahman (2014) in their study affirmed that recent developments highlight women, particularly mother's significant capacities and skills in disaster response, emphasizing their notable function in carrying out effective governance and resilience by ensuring the inclusiveness of their interests and addressing specific needs. Consequently, this suggests that comprehensively understanding and overcoming potential barriers in engaging women and mothers in disaster risk reduction and government endeavors is a huge step toward the success of responding to any disaster in the community.

Furthermore, based on the findings of Reyes & Lu (2016), to address the specific needs and vulnerabilities of women and married women in disaster situations, promoting gender-sensitive approaches must be utilized to oversee both genders in terms of skills training, capacity building, policy formulation, and among others. Reyes & Lu (2016) in their study, utilized both men and women as their respondents to capture comparative data for each indicator, thereby suggesting which is more vulnerable and resilient. With this, the essence of gender-sensitive approaches is seen as an important intervention tool. However, the study was unable to conduct profiling of the respondents as this can contribute to the demographic profile of the respondents and add in-depth analyses based on the profile of respondents. As for the study of Drolet, et.al (2015) women's empowerment and participation in disaster resilience-building activities have been shown to contribute to more sustainable and effective disaster risk reduction strategies in the community.

Challenges and Coping Strategies of Mothers

Women, notably mothers, confront problems while trying to acquire the knowledge and tools necessary to plan, react, and recover from a disaster effectively. These resources and tools include early warning systems, secure housing, financial accounts that safeguard money from losses, and reliable income. (World Bank, 2021)

There may be limitations for women and mothers during disasters. However, their innovative thinking in challenging situations by drawing insight into the particular challenges they encounter and outlining the coping strategies they employ affirms their resiliency (Enarson, 2006). According to Pender (2008), the impact of climate change can potentially exacerbate challenges for women and mothers in disaster-prone areas, which pose additional hurdles for women yet manifest how they navigate issues and possible coping strategies they may utilize. (Islam and Sharmin, 2013)

By that means, the challenges women have faced during a disaster are further understood using the lens of Moser's theory on the triple burden of women (1993) which provides a critical lens for understanding the multifaceted roles women play in disaster risk reduction. The theory identifies three primary burdens: (1) Productive Work, which includes economic activities that generate income; (2) Reproductive Work, which involves household and family maintenance tasks; and (3) Community Work, which includes participation in local organizations and voluntary activities. These overlapping responsibilities highlight the need for gender-sensitive policies that support women across all domains.

Moreover, Enarson & Murrow (1998) stated that women and mothers are present in every disaster response. They act as mitigators, preparers, rescuers, caregivers, sustainers, and rebuilders. Mother's daily work hones these vital mitigation skills and knowledge, yet it is inevitable to acknowledge that mother's caregiving roles were intensified rather than abandoned during the crisis. (Enarson & Murrow, 1998)

On February 5, 2024, personnel from the City Disaster Risk Reduction and Management Office-Operations and Warning Division (CDRRMO-OWD), alongside Sangguniang Barangay Member Hon. Mark Caminade of Marilog Proper, conducted a hazard and risk assessment in Purok 12-Sitio Quimasog, Purok 19-Sitio Upper Kibalang, Purok 12-Sitio Balite, Purok 25-Sitio Upian, and Brgy. Marilog Proper, Marilog District, following multiple mass wasting events from January 31 to February 1, 2024. On January 31, at approximately 11:00 PM, a mass wasting event occurred in Purok 12-Sitio Balite due to heavy rainfall associated with a Trough of Low-Pressure Area (LPA) in Davao City, followed by another event 50 meters away at around 3:00 AM on February 1. These incidents were reported to the CDRRMO at 7:00 AM on February 1 by Barangay officials, and the second event was noted to be 200 meters from a previous incident assessed in September 2023 at Balite View Deck. On February 1, a subsequent mass wasting event occurred in Purok 19, Brgy. Marilog Proper, again linked to heavy rainfall from the LPA. This incident

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highlighted concerns about a potential road slip failure along the national highway due to the absence of a cross-drain where the road intersects an intermittent creek. Although no casualties were reported, the Barangay Disaster Risk Reduction and Management Committee evacuated nearby residents as a precautionary measure to mitigate further risk, warranting a re-evaluation of the landslide susceptibility classification for the affected area. This pushed the researchers to delve much further into the resiliency of the affected, specifically the mothers noting how the event frequently occurred.

METHODOLOGY

This study employed a qualitative design that utilized Participatory Action Research (PAR) to examine maternal disaster resilience in Brgy. Marilog Proper, Davao City, focusing on mothers affected by the 2024 mass wasting events. Through direct key informant interviews, the researchers collaborated with mothers, guided by PAR's principles of action and reflection (Ariyadasa, 2014; McIntyre-Mills, 2014). Initial findings are drawn from interviews with ten mothers residing in susceptible landslide areas, aiming to capture their realities. Voice audio recordings were used during interviews, followed by transcription and analysis using coding and thematic analysis methods. The study aims to elucidate the socioeconomic characteristics of participants to comprehend their vulnerabilities and resilience.

RESULTS AND DISCUSSION

Socio-Demographic Profile of the Participants in the Study

This study involved the participation of ten mothers residing in Barangay Marilog Proper, Davao City. Regarding age, four participants are 17 to 30 years old, three mothers are aged between 31 to 45, and the remaining three are over 45 years old. Most participants have attained a high school or elementary level of education, with only one interviewee pursuing a vocational degree. Among the participants, three are homemakers, three are engaged in farming, two are self-employed, and two are currently unemployed.

Potential Threats of Landslides to Mothers Living in Brgy. Marilog Proper

Mothers living in landslide-prone areas associate the word "fear" with their situation. Many of the interviewed mothers have experienced the devastating effects of landslides, causing them emotional distress and raising concerns about their livelihoods and everyday living. Most expressed that the situation caused them significant fear and anxiety whenever it rained. They were particularly concerned about the safety of their children. This fear drove them to be resilient and robust, ensuring they could protect their families despite the challenging circumstances. Additionally, they were worried about their living conditions. The majority of the respondents depend on agriculture and livestock for their livelihood, which are also vulnerable to losses due to landslides. Despite the absence of alternative options and luxuries, mothers are compelled to remain strong for the sake of their children and families. These factors have contributed to the resilience of the respondents when faced with adverse events. They exhibit resilience by adapting to challenging circumstances with determination and grit.

Themes 1: The impact of landslides on Mothers

For theme 1, the impact of landslides on mothers revealed that two sub-themes emerged: the emotional response and the practical and livelihood concerns. From the statement provided by the respondents, it was evident that the emotional responses of Mothers have a common denominator and it was more of fear, anxiety, and stress. These mothers employ how the incident affects them and how they view the situation. This also suggests that the emotional well-being of mothers is vulnerable during the disaster, realizing that they must safeguard the well-being of their family above all, especially Miss A, D, and E, who have children to take care of, which mirrors the triple burden of Moser (1993). Consequently, the mothers had to stand firm amid any circumstances, this is supported by Miss H who hadn't slept during the incident and stayed vigilant.

Sub-themes 1: Emotional Response

The participants revealed that the emotional response of Mothers during the unprecedented landslide disaster in the community has become perceptible. However, these emotional responses, such as fear, panic, and anxiety, subsided with courage and strength. The following are their responses:

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"Nahadlok ko pag-ayo kay nakadungog ko ug pag hugno sa yuta. Nataranta ko kay unsaon nalang akong pamilya hilabi na nga naa koy anak nga buntis pa unya mga apo nga mga gagmay pa. (Miss A) "
(I was really scared because I heard the earth rumble. I panicked thinking about my family, especially with my pregnant child and my young grandchildren.)

".Nakulbaan ug nahadlok ko unya naa pa gyud mga bata nga atimanon. (Miss D) "
(I was anxious and scared especially because I have children to take care of.)

"Hadlok kaayo to ug nakulbaan ko kay ulan kaayo to...Stress sad ko kay akong mga anak gikalintura pa gyud. (Miss E) "
(I was very scared and nervous because it was raining heavily..I was also stressed because my children have fever.)

"Hadlok ug nagkara-kara gyud mi tawon. Wala ko katulog anang panghitaboa. (Miss H)" (We were really scared and panicked. I couldn't sleep because of that incident)

Nakuyawan gyud kay nagliki na ang nakapalibot sa among area ug ang gilid sa balay. (Miss G) (We were really frightened because the surroundings in our area and the side of the house started to crack.)

Sub-themes 2: Practical and Livelihood Concerns

In this case, mothers face challenges not only in safeguarding their family members but also in protecting their belongings and means of livelihood when the threat or incidence of landslides occurs in the vicinity. Many depend on agriculture and animal husbandry to meet their nutritional requirements and generate income. Consequently, their efforts are significantly disrupted when mass wasting events occur, impacting their livestock and residential structures.

"Kato among mga silingan nga kahoy-kahoy lang ang balay kay wala na gyud , nadala gyud ilang balay. Ang among mga gulayan ug baboyan na apektohan gyud. (Miss A) " (Our neighbors who had houses made of wood lost them; their houses were completely destroyed by the incident. Our vegetable gardens and pig pens were also affected.)

"Ang among baboyan naapektohan gyud. Unya sa among silingan kay na bar down gyud ilang mga panimalay. (Miss B)" (Our pigpen was really affected. And our neighbor's houses were also completely destroyed.)

"Pero padayon lang gihapon mi bisan nawala na to.." (Miss C) (Yet we must persist, even though it's lost..)

Recognizing the typical arrangement of livestock habitats, such as pig pens in Marilog, typically located in backyards amid vegetable gardens, it becomes evident that these areas were impacted during the mass wasting event. However, despite this challenge, mothers remain resilient. As articulated by Miss C, they are compelled to persist even in the face of livelihood loss. This sentiment echoes findings by Hemachandra et al. (2017), underscoring the indispensable role of mothers in both disaster response and subsequent recovery efforts.

Awareness of Mothers on their Vulnerability

The recognition of their vulnerability motivates mothers to exhibit resilience. Despite the absence of a history of landslides or mass wasting events in their area, they displayed unwavering courage as mothers. They developed crucial skills as mitigators, sustainers, and preparers (Enarson & Murrow, 1998). This resilience was evident in the response to a report from the City Disaster Risk Reduction Office, which noted a displacement of 1-2 inches in the concrete wall of a nearby house, signaling potential future land movement. Residents were advised to monitor the situation closely. The affected homes are near an intermittent creek that intersects the national highway. This highlights the need for a proper cross-drain to manage the creek's flow, especially during heavy rainfalls. Despite these challenges, the level of awareness mothers possess affirms what Alam & Rahman (2014) stated: that women, especially mothers, effectively recognize and address specific needs during disaster situations. They ensure a more comprehensive and effective response and possess notable capacities and skills crucial in disaster response efforts. Enarson (2006) further

highlighted that despite potential limitations, women and mothers demonstrate resilience during disasters through innovative problem-solving in challenging circumstances. Drawing insight from their specific challenges, mothers employ coping strategies to manage these situations effectively.

Themes 1: Vulnerability Awareness

In this case study, mothers fully know their vulnerability and landslide susceptibility. With this significant awareness, the study came up with two sub-themes: perceived high vulnerability, knowledge, and risk preparedness.

Sub-themes 1: Perceived High Vulnerability

Based on recent disaster events, it has become evident that the land where the mothers and their families reside is susceptible to landslides, particularly during periods of heavy rainfall. Many of them are already aware of the potential for landslides due to the accumulation of soil from the construction of highways.

Kay naagian naman gyud mi dire. Mabalikan gyud mi. (Miss D) (Because we've experienced it here. We could really be hit again.)

...ug mag sige ug ulan dili na gyud mag kompyansa. (Miss E) (whenever it rains heavily, we don't take any chances)

Ang yuta gyud namo diri, tinambak na yuta gyud na sukad sa pag-widening sa kalsada (Miss F) (Our land here, it's truly been filled in ever since they widened the road.)

Tambak gyud ni among yuta gikan sa ibabaw. Dako na pud kaayo ang bangag ilalom sa among balay. (Miss G) (Our land here has really been filled in from the top. The hole underneath our house has also become very large)

Kay tambak na ang yuta gikan sa dalan. Maong gamay lang nga ulan, muhomok gyud dayon ang yuta. (Miss H) (Because the soil has been filled in from the road. That's why even with just a little rain, the soil easily turns into mud.)

Daan na nga tambak sa mga yuta ang amo area ug gamay ulan lang muhumok dayon ang yuta. (Miss I) (Our area has long been filled with soil, so even a light rain quickly turns the ground into mud)

According to the mothers, based on what they have observed in the area, their land has been filled ever since the widening hence when heavy rain pours, their soil becomes muddy, stated by Miss H and was supported by Miss I, which can lead to possible mass wasting and worse landslides again. Hence, they become vigilant most of the time to prepare themselves and their families for the possibility.

Sub-themes 2: Knowledge and Risk Preparedness

Mothers revealed that landslide disasters are taboo in their community, noting that there has been no history of the event happening over the years. However, it is the instincts of mothers that guard their families from disasters. Such as prompt response to formulate strategies for handling landslides, including evacuation plans and staying vigilant during rainy seasons.

"Wala gyo'y lain, dapat mag paka-strong gyud, dili mag luya-luya kay naa pay anak nga atimanon. Ug maging alerto gyud. (Miss C)" (There is nothing but to be strong. I have to spare myself from feeling weak because I have to safeguard the welfare of my child. And I need to stay alert)

"Alerto dapat pero kalma gihapon sa pag sagubang sa sitwasyon kay basin maratol akong mga sakop pud. Unya mamakwit gyud dayon mi ug wala nako nag hunahuna sa among mga gamit pa. Dapat maka hawa dayon mi. (Miss D)" (We need to stay alert but remain calm in handling the situation because my family might also get distressed. And we'll evacuate immediately without thinking about our belongings. We need to get out quickly.)

Kalmahon gyud ang kaugalingon. Dili kay magtaranta arun makabalo pa unsay angay buhaton... (Miss G) (It's important to keep calm. Don't panic so you can still figure out what needs to be done...)

The accounts of Miss C, D, and G reveal that they lack formal training in disaster response. However, despite this, they demonstrate a proactive approach to safeguarding their families. Miss C's resilience stems from her courage, while Miss D and Miss G prioritize maintaining calmness to prevent accidents and ensure smooth evacuation. This resourcefulness and readiness to face risks, as observed in mothers, align with Enarson's findings (2006). The study highlights their ability to devise coping strategies during adversity, or improvise innovative thinking as response.

Push and Pull Factors for Residing in Landslide Prone Areas

The push and pull factors influencing residency in landslide-prone areas in Marilog shed light on the underlying reasons why people choose to live in an area now known for its susceptibility to hazards. The reasons generated in this study include the lack of alternative options, socio-economic factors, and historical ties that explain why respondents still choose to stay and live in the area. The respondents are fully aware that the soil was filled during the construction of the national highway, yet they choose to remain in the area rather than return to the more complicated and remote locations they previously resided in. This decision is influenced by several factors: proximity to their children's school, the presence of their husbands' livelihoods in the area, and the lack of alternative options for housing. Additionally, the majority of respondents have nowhere else to stay, and living in the countryside would require their children to cross a river, lengthening their journey. Furthermore, the current location is the only available lot for some respondents, and returning to farmland would only exacerbate the difficulties they face in their daily lives. The two main possible reasons are the lack of alternative options, socio-economic factors, and historical ties that prevent them from moving away from the area.

Sub-themes 1: Lack of Alternative Options and Socio-Economic Factors

The result states that there have been limited options for the mothers and their families due to financial and resource constraints.

“Wala nami laing kabalhinan pud. Ang trabaho kay naa lang diriduol. Ako pud mga apo naa ra pud diri nag-skwela. Mutabok pa mi ana sa sapa padulong diri kung didto mi sa akong payag mupuyo. (Miss H) (We don't have any other option. The work is just nearby. My grandchildren also go to school here. We would have to cross the river if we were to live in my small house)

“Sa mga bata nga nagskwela kay malayoan man sila kung sa bukid kay mutabok pa ug sapa. Mao lang pud ang lote na naa ug pwede namong kapuy-an. Kayahon ra namo dire. (Miss I) (For the children who go to school, it would be far for them if we lived in the countryside because we would have to cross a river. This is the only lot available and suitable for us to live on. We will persist here.)

“Kung balik mi sa among layo nga bukid pa gyud, luoy mga bata kay sa ilahang pagswkela mutabok pa ug sapa musamot pa kadugay. (Miss J) (If we go back to our farmland, it would be hard for the children because they would have to cross a river to get to school, which would make their journey even longer.)

Moreover, the result implies hardship in finding safer housing alternatives within their means. Reliance on livelihood opportunities in the area was also observed, thereby holding them from moving away from the vulnerable land. Furthermore, despite the extra obstacles faced by mothers residing in areas prone to hazards due to soil type and slope, they demonstrate their ability to cope with challenges. For instance, Miss I exhibits steadfast determination, affirming her resilience. Additionally, heavy rainfall triggers soil erosion in the region, a consequence of climate change, posing further difficulties for mothers in disaster-prone areas (Pendor, 2008). Nevertheless, their courage illustrates their capacity to overcome these challenges (Islan and Sharmin, 2013).

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Sub-themes 2: Historical Reasons

According to the mothers, their occupancy was due to their respect for Datu and Lumad's offer to them. There was no exact monetary exchange as payment for the land. However, a donation was mentioned. It could be through money and other resources available to them.

"Naka-balay mi kay tungod atong gioffer ni datu. Nakipuyo man sad ko sa akong inahan ato. Wala gyud mi kabalo nga mahimo diay ning landslide prone among lugar kay sauna wala man gyud ni nahitabo. (Miss B)

"We were able to have a house because of what datu offered to us. I also lived with my mother at that time. We don't have any idea that where we live will become a landslide prone area because it never happened before. (We were able to have a house because of what Datu offered us. I also lived with my mother at that time. We had no idea that where we lived would become a landslide-prone area because it had never happened before.)

"Donate mani, nag hatag mi sa mga lumad. (Miss D)(It was donated; we gave back to the Lumads)

CONCLUSION

The research findings revealed a significant theme – the impact of landslides on mothers – that sheds light on the potential threats mothers face in Barangay Marilog Proper, Davao City. This theme further gave rise to two sub-themes – emotional response and practical and livelihood concerns. A separate theme was identified to gauge the awareness of mothers on their vulnerability, which was divided into two sub-themes: Perceived High Vulnerability and Knowledge and Risk Preparedness. Lastly, the main theme for the Push and Pull Factors for Residing in landslide-prone areas - resulted in two themes: Lack of Alternative Options and Socio-Economic Factors and Historical Reasons.

CONCLUDING REMARKS

Although mothers have become more prepared and informed in dealing with landslide incidents, they continue to seek local government support to ensure the safety of their families. Proposed actions involve local government initiatives such as livelihood diversification programs, identification of safer housing relocation sites, safety training for women, and collaboration with stakeholders to enhance effective disaster risk management. These measures are designed to bolster the resilience of mothers and families in Barangay Marilog Proper against landslide threats and to improve their overall well-being and safety.

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ANNEX A

Photos during the Conducted Site Visit and Key Informant Interviews in Barangay Marilog Proper, Davao City



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Photo of affected site in Barangay Marilog Proper, Davao City.



ANNEX B

Tabulated Responses from Interviewed Participants

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Age | 28 years old | 27 years old | 27 years old | 27 years old | 27 years old | 27 years old | 27 years old | 27 years old | 27 years old | 27 years old | 27 years old |
| Sex | Male | Male | Male | Male | Male | Male | Male | Male | Male | Male | Male |
| High School Completion | Completed | Completed | Completed | Completed | Completed | Completed | Completed | Completed | Completed | Completed | Completed |
| Occupation | Household helper | Household helper | Household helper | Household helper | Household helper | Household helper | Household helper | Household helper | Household helper | Household helper | Household helper |
| Duration of Residence (Years) | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Reason for Migration? | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. | Search for a better life, looking for work, and to be closer to family. |
| How would you describe the environment in your hometown? | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. | Very clean, green, and peaceful. There are many trees and a lot of water. |
| How would you describe the environment in your current location? | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. | Very dirty, noisy, and crowded. There are no trees and a lot of trash. |
| What are the biggest challenges you face in your current location? | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. | Lack of clean water, no electricity, and no internet. |
| How do you feel about your current location? | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. | I feel sad and lonely. I miss my hometown. |
| What advice would you give to someone who is considering migrating? | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. | Be prepared for everything, have a plan, and don't give up. |