

**DISASTER RESILIENCY MODEL AMONG WOMEN IN THE SELECTED FLOOD PRONE AREAS IN DAVAO CITY: BASIS FOR INTERVENTION ACTIVITIES****Mary Grace Z. Agbas, PhD<sup>1</sup>****Mary Ann C. Cacananta, PhD<sup>2</sup>****Gaudencio G. Abellanosa, EdD, DPA, DBA Ph.D, DM-HRM<sup>3</sup>****\*<sup>1,2,3</sup>, College of Development Management, University of Southeastern Philippines,  
Mintal Campus, Davao City, Philippines****ABSTRACT**

The study was conducted to determine the framework and model of disaster resiliency among women in the flood-prone areas, particularly in the first congressional district, Davao City. The output of the study served as the basis for formulating intervention activities. The study employed non – experimental quantitative research design to systematically collect, analyze, and interpret numerical data. Survey questionnaire was employed to elicit answers from the respondents. Non-probability technique, particularly convenience sampling was utilized. There were 150 respondents who were adult women, residents of selected flood-prone barangays in Davao City. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were used to identify the framework and best-fit model on disaster resiliency among women.

There are six dimensions of disaster resiliency among women in the flood-prone areas such as safe and proactive flood recovery, responsible safety behavior, ensuring health and safety, household readiness, personal safety, and utilization of safety devices. Framework was developed based on the identified dimensions. There are three attributes identified such as responsible safety behavior, ensuring health and safety and household readiness. A model was developed and intervention activities were formulated based on the model particularly on psychosocial management, social communication network and local leadership among women.

**Keywords:**

Disaster Resiliency, Women, Flood Prone-Areas

**INTRODUCTION**

The Philippine islands are located inside the Pacific Ring of Fire and span an area of approximately 15,400 square miles. The Pacific Ocean basin is at risk from earthquakes and volcanic eruptions. A low-pressure system and the southwest monsoon also affect the area, causing flooding due to severe rainfall and harming livelihoods. Eighteen tropical storms, mostly tropical depressions, affected the nation in 2022 alone (Statista, 2024). The Philippines is ranked third among all countries with the highest risk of disasters, with an index rate of 25.14%, making it one of the most disaster-prone countries in the world (World Risk Report, 2018).

In this context, located in a geographically exposed area, the Philippines faces heightened risks from extreme weather events, rising sea levels, and changing climate patterns that disproportionately affect standing partnership on climate change and disaster risk reduction and management, the Australian Government, DILG, and UNDP collaborated on a new program to build the resilience of communities through the transformative power of partnerships through local governments, as they are the first responders to disasters and emergencies (UNDP, 2023).

In addition to sporadic earthquakes and volcanic eruptions, the Philippines experiences an estimated 20 storms a year. Approximately 74% of Filipinos are susceptible to the effects of different dangers that impact 60% of the nation's land area. Over the past ten years, landfall storms have grown stronger and more stressful, raising the nation's risk of calamity. Storms with gusts surpassing 155 mph, classified as storm signal 5, devastated the Philippines in 2012 and 2013. The nation's weather events have been made worse by climate change. Due to loose urban growth, flooding risks are predicted to get worse in the next days (Asian Disaster Reduction Center, 2016). Women are disproportionately affected socially by environmental disasters. Women are more vulnerable to disasters due to current inequalities. Women are disproportionately affected by disasters due to social shifts and global influences. Because they have fewer resources that are within their own control and independent of others, women are more vulnerable than men. They encounter conventional, needless, and gender-biased discrimination and are not permanently integrated into decision-making processes (United Nation Disaster Risk Reduction, 2025).

Women are frequently more susceptible than males in post-disaster scenarios. Their roles providing care growth experience demonstrates that their access to resources for recovery is severely limited following a disaster. Accounts from Numerous regions of India hit by disasters demonstrate that even in cases where women have had access to cyclones, shelters, they have had to obtain fuel against their own safety imperatives and put in more effort than normal for preparing food. Their unique health requirements particularly those of expectant and nursing mothers are disregarded. When it comes to the utilization of resources, women predominate. The role of women in rural regions is still present confined by the home environment. Nonetheless, the female relationships that are most supportive of the groupings being disaster-prone is a crucial component in creating communities that are resilient to calamities (Okai, 2022).

This research is anchored on the *emergency management theory* by McEntire (2005) encompasses the study and application of principles, strategies, and practices to effectively prepare for, respond to, and recover from disasters and emergencies, anticipates future disasters and takes preventive and preparatory measures. The principles of emergency management have been elaborated, and scholars have argued that the phases of disasters are more complex than initially meets the eye. Research also reveals that bureaucratic approaches to emergency management are based on false assumptions and are too rigid. Theoretical work on disasters and emergency management has examined planning, improvisation, and spontaneous planning.

#### **OBJECTIVES OF THE STUDY**

The study was conducted to determine the framework and model of disaster resiliency among women in the flood-prone areas, particularly in the first congressional district, Davao City. The output of the study served as the basis for formulating intervention activities. Specifically, it sought answers to the following questions:

1. What are the dimensions of disaster resiliency among women in the flood-prone areas?
2. What framework can be developed based on the identified dimensions?
3. What model can be developed from the identified dimensions?
4. What intervention activities can be formulated based on the model particularly on psychosocial management, social communication network and local leadership among women?

#### **SCOPE AND LIMITATION**

The study was conducted to determine the framework and model of disaster resiliency among 150 women as respondents in the flood-prone areas, particularly in the first congressional district, Davao City. Non-probability technique, particularly convenience sampling was utilized. The study was conducted during the first semester of school year 2025-2026.

#### **METHODOLOGY**

The study employed non – experimental quantitative research design to systematically collect, analyze, and interpret numerical data. Moreover, purposive sampling a type of non-probability sampling was utilized. The survey questionnaire was drafted by the researchers from interviews and literature reviews. According to Lavrakas (2008), purposive sampling aims to generate a sample that can reasonably represent the target population through the careful selection of participants based on the researcher's expert judgment and understanding of the population. There were 150 respondents who were adult women, residents of selected flood-prone barangays in Davao City

*Exploratory Factor Analysis (EFA)* was used to identify dimensions and *Confirmatory Factor Analysis (CFA)* was used to identify the best-fit model on disaster resiliency among women.

#### **RESULTS AND DISCUSSION**

Presented in this section are the analysis and interpretation of numerical data. It discloses on the results of statistical tools using *Exploratory Factor Analysis (EFA)* and *Confirmatory Factor Analysis (CFA)*

**KMO and Bartlett's Test.** Table 1 shows the Keiser Meyer Olkin Measure of Sampling Adequacy and Bartlett's test of sphericity. The KMO of .685 implies that the samples are in high correlations and it allows factor analysis that fits for data. The level of significance is .000 smaller than .001 signifies that it allows the data to proceed factoring the underlying structures of disaster resiliency. Moreover, the Bartlett's test of Sphericity implies to reject the null hypothesis and there are dimensions that determine the disaster resiliency among women in the flood prone areas.

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.685
Approx. Chi-Square	4067.303
Bartlett's Test of Sphericity df	435
Sig.	.000

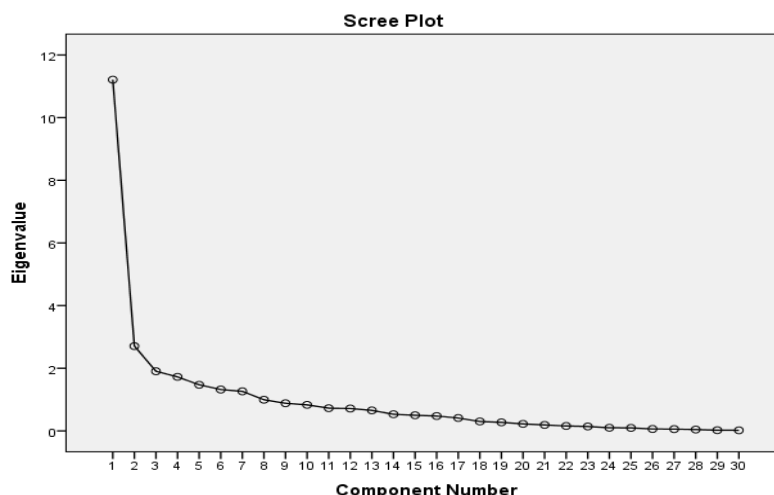
**Total Variance Explained.** Presented in the Table 2 is the number of dimensions extracted, the initial Eigen values of the associated specified dimensions, the percentage of total variance and the cumulative percentage of each dimension. Using the criterion factors, six components obtain. The initial Eigen value of 1 or greater are the six dimensions that defines the disaster resiliency among women in the flood prone areas.

Table 2: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.211	37.369	37.369	11.211	37.369	37.369	4.541	15.138	15.138
2	2.706	9.019	46.388	2.706	9.019	46.388	4.477	14.922	30.060
3	1.903	6.342	52.731	1.903	6.342	52.731	3.753	12.511	42.572
4	1.724	5.747	58.478	1.724	5.747	58.478	2.422	8.074	50.646
5	1.471	4.905	63.382	1.471	4.905	63.382	2.254	7.512	58.158
6	1.321	4.402	67.784	1.321	4.402	67.784	2.121	7.071	65.229
7	1.263	4.211	71.995	1.263	4.211	71.995	2.030	6.766	71.995
8	.994	3.314	75.310						

Extraction Method: Principal Component Analysis.

**Scree Plot.** Figure 2 shows the graphical explanation of the total variance explained and the graph of the Eigen values against all the factors. The Scree Plot shows the gradual trailing of the Eigen values and identifies the relatively fit of each component base on its relative importance. The graph is very useful for determining how many factors will be retained. The point of interest is where the curve flattens. As observed, the curve gets flatter as it reach component number six since it is where Eigen value less than 1 begins if the items of each dimension are less than minimum the dimension will be discarded. Therefore, there are only six dimensions considered as structures retained.



### Rotated Matrix on the Identified Dimensions on the Disaster Resiliency among Women in the Flood Prone Areas

Presented in the Table 3 are the identified dimensions on the disaster resiliency among women in the flood prone areas. The researchers determined six dimensions such as *safe and proactive flood recovery, responsible safety behavior, ensuring health and safety, household readiness, personal safety, and utilization of safety devices.*

**Safe and Proactive Flood Recovery.** Based on the responses of the respondents *throwing away medicine, food, or water that had contact with floodwaters* garnered a factor score of .811, *watching out animals that might enter*

in flood waters with .807, examining walls, floors, doors, windows, and ceilings for risk of collapsing with .797, keeping windows and doors open for ventilation to remove foul odors after flooding with .787, checking electrical system damage and gas leaks with .671, being careful particularly when flooding occurs at night with .660 and checking house damages like crack in the foundations with .556 respectively.

This means that the women should observe proper safety and sanitation measures after flooding to prevent health hazards and accidents. Medicines, food, water, and even canned goods that came into contact with floodwaters must be discarded to avoid contamination. They should remain alert for animals that may enter floodwaters and pose potential risks. It is also important to inspect walls, floors, doors, windows, ceilings, and house foundations for cracks or possible structural damage that may lead to collapse. Proper ventilation should be maintained by keeping windows and doors open to remove foul odors and moisture after flooding. In addition, electrical systems and gas lines must be carefully checked for damage or leaks to ensure household safety. Extra caution should be exercised during nighttime flooding when visibility is limited and risks are heightened.

This finding affirms Almaraz (2023) that proactive approach to disaster prevention emphasizes foresight and preemptive planning. It minimizes risk by identifying potential threats before they manifest and formulating strategies to counteract them effectively. One critical aspect of proactive disaster management is to implement emergency response plans. Moreover, it corroborates with Miller (2020) that proactive disaster management plan always helps to identify the root of the problem, recognize probable ways to set it right and finally implement the same to suspend further surge of damage and control of the problem over the situation.

**Responsible Safety Behavior.** Disclosed from the responses of women, calling 911 for assistance and giving the exact location garnered a factor loading of .803, wearing sturdy shoes to avoid diseases with .750, not allowing children to play around during flooding with .700, shutting off water, gas, and electrical before leaving with .651, disconnecting electrical appliances and avoid touching it with .616 and returning for home until authorities indicate for safety with .549 respectively.

**Table 3: Dimensions on the Disaster Resiliency among Women in the Flood Prone Areas**

Item	Attributes	Factor Score	Dimension
27.	Throwing away medicine, food, or water that had contact with floodwaters (including canned goods).	.811	Safe and Proactive Flood Recovery
25.	Watching out animals that might enter in flood waters.	.807	
24.	Examining walls, floors, doors, windows, and ceilings for risk of collapsing.	.797	
28.	Keeping windows and doors open for ventilation to remove foul odors after flooding.	.787	
23.	Checking electrical system damage and gas leaks.	.671	
12.	Being careful particularly when flooding occurs at night.	.660	
21.	Checking house damages like crack in the foundations	.556	
19.	Calling 911 for assistance and giving the exact location.	.803	Responsible Safety Behavior
22.	Wearing sturdy shoes to avoid diseases.	.750	
17.	Not allowing children to play around during flooding.	.700	
15.	Shutting off water, gas, and electrical before leaving.	.651	
10.	Disconnecting electrical appliances and avoid touching it.	.616	
20.	Returning for home until authorities indicate for safety	.549	Ensuring Health and Safety
30.	Cleaning by disinfecting the house that got wet	.826	
29.	Keeping the power off until an electrician has inspected the system.	.769	
8.	Directing family members to evacuate during flooding.	.629	
26.	Asking for medical assistance in case of minor wounds and illnesses	.571	Household Readiness
13.	Avoiding flooded areas as well as crossing flowing water.	.553	
1.	Listening television and radio stations for weather forecasts.	.790	

2	Not waiting until water is rising because flood rises quickly.	.728	Personal Safety
5	Preparing first aid supplies for flooding.	.617	
6	Identifying safety places to go not prone to flooding.	.777	
3	Avoiding areas prone to flooding.	.723	
9	Moving valuables and furniture to higher level	.711	Utilization of Safety Devices
4	Preparing supplies such as batteries, flashlight, cellphone and clothing in case of a flood.	.653	
18	Using floatation device like spare tire and a large ball.	.548	
7	During the flood, I left immediately for evacuation.	.501	

Women should immediately contact emergency services, such as 911, and provide the exact location whenever assistance is needed. Before evacuating, water, gas, and electrical connections must be turned off, and electrical appliances should be disconnected to prevent accidents. Wearing sturdy footwear is also important to minimize exposure to diseases and injuries. Children should not be allowed to play in floodwaters, and families should only return home once authorities have officially declared the area safe.

This finding aligns the concept of Sari and Ozer (2024), collaboration and coordination are critical components in disaster management. Collaboration refers to working with others towards a common goal, while coordination is the process of organizing and synchronizing actions to achieve that goal. In disaster management, collaboration and coordination are essential for effective planning, resource allocation, implementation, monitoring, and evaluation of response efforts.

**Ensuring Health and Safety.** Based on the responses of women, *keeping the power off until an electrician has inspected the system* garnered a factor score of .769, *directing family members to evacuate during flooding* with .629, *asking for medical assistance in case of minor wounds and illnesses* with .571 and *avoiding flooded areas as well as crossing flowing water* with .553 respectively. Women should guide their family members during evacuation, avoid flooded and fast-flowing areas, and seek medical assistance for minor injuries or illnesses. Upon returning home, they ensure that the electricity remains off until the system has been inspected by a qualified electrician.

This finding is in tangent with Dariagan, Atando, and Asis (2021), local governments were found highly vulnerable to tropical cyclone and flood while vulnerable to earthquake, drought, and landslide. They were partially prepared regardless of profile, but the coastal, middle-earning, most populated, having the least number of villages, and middle-sized had higher levels of preparedness. Those highly vulnerable to flooding were prepared, yet only partially prepared to flood and other untoward calamities. The diverse attitude of stakeholders, insufficient manpower, and poor database management were the major problems encountered in executing countermeasures.

**Household Readiness.** The responses of women disclose that *listening television and radio stations for weather forecasts* obtained a factor score of .790, *not waiting until water is rising because it rises quickly* with .728 and *preparing first aid supplies* with .817 respectively. Women monitor television and radio weather updates for possible flooding, prepare first aid kits and emergency supplies, and evacuate early without waiting for floodwaters to rise rapidly.

This finding conforms to European Civil Protection and Humanitarian Aid Operations (2023) that disaster preparedness plays an important role in building the resilience of communities. Understanding the occurrence and frequency of natural hazards, as well as the risks, vulnerabilities and potential impact on people and assets, helps to improve preparedness. Instead of providing emergency response only, international efforts should help governments and communities invest in understanding risks and building preparedness capacities for pre-emptive and early action. Disaster preparedness is cost-effective and saves aid money.

**Personal Safety.** Based on the responses of women, *identifying safety places to go not prone to flooding* garnered a factor score of .777, *avoiding areas prone to flooding* with .723, *moving valuables and furniture to higher level* with .71 and *identifying safety places to go not prone to flooding* with .711 respectively. The women move valuables and furniture to higher level for safety during flooding and identify safety places to go not prone to flooding particularly on the evacuation sites.

This finding affirms Samaniego (2023) that in times of disaster, effective communication plays a critical role in mitigating the impact and facilitating response efforts. Whether facing a devastating typhoon or any other emergency, a robust communication network becomes the lifeline for coordinating rescue operations and keeping

the public informed.

**Utilization of Safety Devices.** The women responded that *preparing supplies such as batteries, flashlight, cellphone and clothing in case of a flood* garnered a factor loading of .653, *using floatation device like spare tire and a large ball* with the factor loading of .548 and *left immediately for evacuation* with .501 respectively. This means that women should prepare necessary supplies and gadgets before flooding.

This finding coincides with Gougelet (2015) who said that to ensure essential utilities, such as electricity and phone service, continue to be available throughout a natural disaster. The economic damage of post disaster recovery from a major flood or attempts to educate the public on how to reduce their risk of exposure during flooding.

#### Framework Developed Based on Exploratory Factor Analysis

Presented in Figure 2 is the framework depicting the identified six dimensions such as *safe and proactive flood recovery, responsible safety behavior, ensuring health and safety, household readiness, personal safety, and utilization of safety devices*.

These identified dimensions are very important for women in flood prone areas. They must be resilient, knowledgeable and equip of these needed dimensions before and on flooding. The figure presents the different factors that contribute to disaster resiliency among women. At the center of the figure is "*Disaster Resiliency among Women,*" showing that resilience is shaped by several interconnected behaviors, skills, and preparedness practices. The diagram emphasizes that women's ability to cope with disasters is influenced not only by personal strength but also by safety awareness, preparedness, and proactive action.

One important factor shown in the figure is **responsible safety behavior**. Women who follow safety protocols, stay informed about disaster warnings, and make careful decisions during emergencies are more likely to protect themselves and their families. Responsible behavior also encourages others in the community to remain calm and prepared during difficult situations.

Another key factor is the **utilization of safety devices**. The use of emergency kits, flashlights, first aid supplies, life vests, and communication tools can greatly reduce risks during disasters. Women who understand how to use these devices are often better prepared to respond effectively to emergencies and ensure the safety of their households.

The figure also highlights **personal safety** and **ensuring health and safety** as essential elements of resilience. Women often prioritize the well-being of their children, elderly family members, and other dependents during disasters. Maintaining hygiene, accessing medical assistance, and protecting mental and physical health are important in surviving and recovering from disaster situations.

In addition, **household readiness** plays a major role in disaster resiliency. Preparing emergency plans, storing food and water, securing important documents, and discussing evacuation procedures with family members help reduce panic and confusion during emergencies. Women commonly take the lead in organizing these preparations within the home.

The factor **safe and proactive flood recovery** shows the importance of taking immediate and organized action after a disaster. Women contribute to recovery efforts by cleaning homes, restoring daily routines, supporting family members emotionally, and participating in community rebuilding activities. Their proactive involvement helps communities recover more quickly and effectively.

Overall, Figure 2 demonstrates that disaster resiliency among women is built through preparedness, awareness, responsible action, and care for both personal and community well-being. The figure highlights the significant role women play in strengthening disaster response and recovery, proving that empowered and prepared women contribute greatly to safer and more resilient communities.



Figure 2: Framework Developed Based on Exploratory Factor Analysis

### Extracted Attributes Using Confirmatory Factor Analysis

Presented in Table 4 are the extracted attributes from the identified dimensions. Among the six identified dimensions, it was reduced to three attributes using confirmatory factor analysis. The identified attributes were responsible safety behavior, ensuring health and safety and household readiness. These attributes met the requirement for the goodness of fit measures having the *CMIN/DF* of 1.342, *p-value* of .194, *NFI* of .961, *TLI* of .980, *CFI* of .990, *GFI* of .972, *RMSEA* of .048 and *Pclose* or .469 respectively.

**Summary of Goodness of Fit Measures**

Index	Criterion	True Model
CMIN/DF	0<value<2	1.342
p-value	>.05	.194
NFI	>.95	.961
TLI	>.95	.980
CFI	>.95	.990
GFI	>.95	.972
RMSEA	<.08	.048
Pclose	>.05	.469

CMIN/DF- Minimum Discrepancy divided by Degrees of Freedom

p-value- probability value

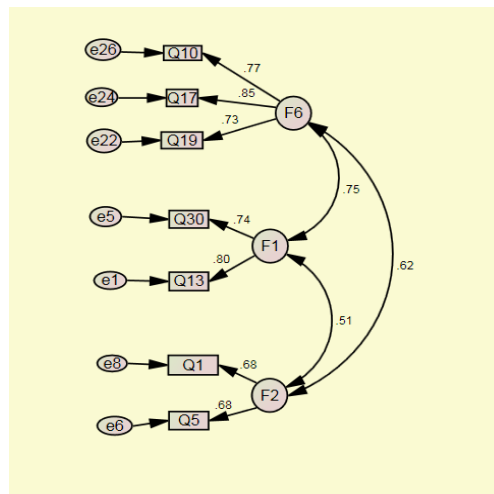
NFI- Normal Fit Index

RMSEA-Root Mean Square Error of Approximation

CFI- Comparative Fit Index

GFI- Goodness of Fit Index

Pclose – test of Close Fit



**Figure 3: Final Model Depicting Attributes**

**Table 4: Extracted Attributes Using Confirmatory Factor Analysis**

Disconnecting electrical appliances and avoid touching it if I am wet or standing in water.	<i>Responsible Safety Behavior</i>
Not allowing children to play around during flooding.	
Calling 911 for assistance and gave the correct location information.	
Cleaning and disinfecting the areas in the house that got wet after flooding.	<i>Ensuring Health and Safety</i>
Avoiding flooded areas as well as crossing flowing water.	
Preparing first aid supplies for flooding.	<i>Household Readiness</i>
Listening to television and radio stations for weather forecasts.	

### INTERVENTION SCHEME FROM THE MODEL

This section presents the proposed intervention scheme tailored to address the specific needs

identified through an in-depth analysis of disaster resilience among women in Talomo District, Davao City. Grounded in the three dimensions identified such as responsible safety behavior, ensuring health and safety and household readiness these intervention strategies aim disseminate crucial information and empower women and communities to prepare for, respond to, and recover from flooding. By addressing the distinct needs and priorities of the community, these intervention strategies endeavor to enhance disaster resilience among women.

**Table 5. Intervention Matrix on Psychosocial Management among Women**

Key Result Area	DRRM Thematic Area	Specific Objective	Strategies	Success Indicators	Time frame	Persons Involved	Budget
Responsible Safety behavior	Preparedness and Response	To enhance women’s knowledge and practice of safe behaviors before, during, and after flooding events information	1. Conduct gender-responsive DRRM orientation and psychosocial preparedness training 2. Simulation drills on electrical safety and emergency response	1. At least 85% of participants demonstrate correct safety practices during drills 2. Increased awareness scores (pre- and post-test) 3. Reduced incidence of unsafe practices during flooding	Quarterly (one day session)	Women participants, Barangay DRRM Committee, CDRRMO staff, Psychologists, NGO partners	P30,000 From LGU
Ensuring Health and Safety	Response and Rehabilitation	To strengthen women’s capacity in maintaining household sanitation, hygiene, and physical safety during and after flooding	1. Training on water sanitation, hygiene and disease prevention 2. Demonstration of safe cleaning and disinfection practices 3. Distribution of hygiene kits and safety guidelines.	Well informed women in the Barangays	(one day session)	Women, Barangay Personnel, CDRRM Personnel and Psychologist	P20,000 From LGU
Household Readiness	Prevention, Mitigation and Preparedness	To improve preparedness of women-led households through resource planning and risk awareness	Conduct Information Dissemination psychosocial Training to the Affected Barangays	Well informed women in the Barangays	(one day session)	Women, Barangay Personnel, CDRRM Personnel and Psychologist	P20,000 From LGU

**Table 6. Intervention Matrix on Social Communication Network among Women.**

Key Result Area	DRRM Thematic Area	Specific Objective	Strategies/ Activities	Success Indicators	Time frame	Persons Involved	Budget
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Responsible Safety Behavior	Preparedness and Response	To strengthen women’s adaptive safety behaviors through effective communications during disasters	1. Conduct DRRM-oriented training on electrical safety and flood response 2. Establish barangay-level emergency communication’s systems (SMS groups, hotlines) 3. Facilitate simulation drills and scenario-based learning 4. Disseminate IEC materials aligned with RA 10121 guidelines	1.85% of participants demonstrate appropriate safety responses 2. Functional and responsive communication networks established 3. Increased DRRM knowledge scores (pre/post-test)	Quarterly (one day Session)	Women, Barangay Officials, CDRRMO, communication’s Officers	P20,000
Ensuring Health and Safety	Response and Rehabilitation	To enhance women’s capacity to manage health risks and sanitation during and after disasters	1. Conduct health and sanitation training post-disaster 2. Establish community-based health communication groups 3. Coordinate dissemination of health advisories via local networks	1. Reduced incidence of post-disaster illnesses 2. 80% adherence to sanitation protocols 3. Active engagement in health communication’s platforms	Semi-annual + post-disaster response	Women, Barangay Health Workers, CDRRMO, Local Health Units, NGOs	P25,000
Household Readiness	Prevention, Mitigation and Preparedness	To improve household-level disaster preparedness through communication’s platforms and planning	1. Train women on emergency preparedness planning 2. Promote access to early warning systems (TV, radio, mobile alerts) 3. Develop household communication and evacuation plans 4. Conduct drills for early warning and evacuation response	Well informed women in the Barangays	Annual training (one day Session) + periodic drills	Women, Barangay Officials, CDRRMO, NGOs, communication’s Officers	P25,000

**Table 7. Intervention Matrix on Local Leadership among Women**

Key Result Area	DRRM Thematic Area	Specific Objective	Strategies/ Activities	Success Indicators	Time frame	Persons Involved	Budget
		To develop women	1. Conduct leadership-oriented disaster response	1. % of trained women leaders demonstrating	Quarterly (one	Women	P20,000

Responsible Safety behavior	Preparedness and Response	leaders capable of promoting and modeling responsible disaster safety practices within communities	training (electrical safety, evacuation leadership, emergency coordination) 2. Organize women-led simulation drills and role-playing activities 3. Establish peer mentoring among women leaders	correct safety practices 2. Increased community compliance during drills 3. Number of peer mentoring sessions conducted	day session)	leaders, Barangay DRRM Committees, CDRMO	
Ensuring Health and Safety	Response and Rehabilitation	To strengthen women's leadership in ensuring health, sanitation, and safety during and after disasters	1. Capacity-building on emergency health response 2. Women-led monitoring of sanitation practices post-disaster 3. Development of localized health communication protocols	1. Reduction in post-disaster health risks 2. % of households adopting sanitation measures 3. Active women-led monitoring teams	Bi-annual training; continuous monitoring	Women and CDRM Personnel	P20,000
Household Readiness	Prevention, Mitigation and Preparedness	To empower women leaders in promoting and sustaining disaster preparedness at the household level	1. Training on household disaster planning and risk assessment 2. Women-led information campaigns on emergency kits and early warning systems 3. Establishment of household preparedness	1. % of households with preparedness plans and kits 2. Increased awareness of early warning systems 3. Number of households reached through campaign	One day	Women leaders, households, LGU DRRM Office	P20,000

### CONCLUSION

Based on the findings, the researchers identified six key dimensions of disaster resiliency among women living in flood-prone areas: safe and proactive flood recovery, responsible safety behavior, ensuring health and safety, household readiness, personal safety, and the effective use of safety devices. From these dimensions, a conceptual framework was developed to better understand how women prepare for and respond to flooding situations. Among these, three core attributes emerged as particularly significant: responsible safety behavior, ensuring health and safety, and household readiness. These attributes highlight the essential roles women play in maintaining safety and preparedness within their families and communities. The researchers designed a model that served as the basis for targeted intervention activities. These interventions focused on strengthening psychosocial management, enhancing social communication networks, and promoting local leadership among women. Overall, the study emphasizes the importance of empowering women as active agents in disaster preparedness and resilience-building efforts.

### RECOMMENDATION

Based on the findings and conclusion, the following are recommended:

The interventions formulated by researchers may be implemented by the LGU in the affected Barangays.

Programs aimed at strengthening disaster preparedness should prioritize the enhancement of responsible safety behavior, health and safety practices, and household readiness among women. Training workshops and community-based education initiatives may be conducted to reinforce these core attributes.

Local government units and relevant organizations are encouraged to institutionalize the developed framework and model by integrating them into existing disaster risk reduction and management (DRRM) programs. This will ensure that the identified dimensions of resiliency are consistently addressed in policy and practice. Intervention activities should be sustained and expanded, particularly in the areas of psychosocial management, social communication networks, and local leadership. Providing continuous support, such as counseling services, peer support groups, and leadership training, can further empower women in flood-prone communities.

Women may have access to safety devices and resources. Ensure that households are equipped with essential tools for disaster preparedness and response. Future research is recommended to further validate and refine the proposed model across different contexts and populations. This may include longitudinal studies to assess the long-term impact of the interventions on women's disaster resiliency.

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