

Disaster Risk Reduction and Management of the Province of Siquijor: A Basis for a Strategic Development Plan

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Date received: May 4, 2025

Date revised: June 2, 2025

Date accepted: June 29, 2025

Originality: 99%

Grammarly Score: 99%

Similarity: 1%

Recommended citation:

Zerna, E. (2025). A disaster risk reduction and management of the province of Siquijor: A basis for a strategic development plan. *Journal of Interdisciplinary Perspectives*, 3(7), 812-827. <https://doi.org/10.69569/jip.2025.354>

Abstract. This study aimed to determine the extent of implementing the Disaster Risk Reduction and Management Program (DRRMP) in the province of Siquijor and its impact on the communities that are victims of hazards. The study employed a descriptive-correlational research method using a standardized questionnaire. It was conducted with a sample size of 60 DRRM council members and 300 randomly picked community members. The statistical tools used are mean, Pearson Product-Moment Correlation Coefficient, Kruskal-Wallis H-test, and t-test. Necessary protocols stipulated by the Ethics Committee of Foundation University were strictly followed. The salient findings are as follows: DRRM council rated the implementation of the DRRMP as Very High, while community members assessed the implementation as High; the result underscored notable discrepancies between the two assessments as the community members disclosed some inadequacies in implementing the program. They revealed their sentiments by giving a lower rating compared to that of the council members' assessment, particularly in disaster preparedness, disaster response, and disaster recovery and rehabilitation; the extent of DRRMP's impact on the victims is High; no significant relationship exists between the importance of the DRRMP implementation and its effects on the victims of hazards; and DRRM council members' age, experience, and training cannot account for the differences in the extent of DRRMP implementation. Consequently, it was concluded that if every local government unit prioritizes these inadequacies of the program and implements it effectively, the country will be better prepared for any upcoming challenges. Thus, a strategic development plan is recommended for implementation.

Keywords: Community members; Hazards; Implementation; Mitigation; Preparedness.

1.0 Introduction

Since ancient times, humans have enjoyed nature's blessings while confronting its dark forces. These dark forces, so-called hazards, wreak havoc and destruction on people in fearsome magnitude and dimensions. Natural hazards increase worldwide, resulting in significant destruction and lasting impacts (Torani et al., 2019). According to Carswell et al. (2022), many people around the globe suffer from the effects of natural hazards, which have caused billions of dollars in terms of economic losses, human injuries, and death. Ramanathan and Crawley (2021) also reported that in 2020, 416 natural hazards were documented worldwide, emphasizing the increasing frequency and impact of such events globally. Fazeli et al. (2024) also noted that the global community has increasingly mobilized collective actions and strategic interventions to tackle these complex and interdependent problems.

Based on the study of Chan et al. (2019), the Philippines is one of the countries in Asia with the greatest frequency of natural hazards, particularly the Province of Siquijor, wherein most areas are coastal. The coastal areas were severely impacted by Typhoon Odette in December 2021, resulting in significant damage throughout the island (PIA-Siquijor, 2022). According to a partial report dated January 27, 2022, 4415 houses were affected. Consequently, the Provincial Disaster Risk Reduction and Management (PDRRM) Council of Siquijor declared a state of calamity for the province. The Philippines, situated along a typhoon belt, has been confronted by countless typhoons, tropical storms, earthquakes, and other calamities.

The frequency and severity of natural hazards are increasing, making it essential to have an effective Disaster Risk Reduction Management Plan (DRRMP) in place. Numerous studies have been conducted on DRRMPs, but they primarily focus on assessing the implementation of these plans. The study by Mamhot (2019) attempted to determine the extent of DRRMP implementation in the province of Siquijor and the extent of stakeholders' participation. Similarly, Sala (2019) conducted a study on the functionality of the DRRMP in the province of Negros Oriental. These studies primarily focused on the implementation aspect, highlighting a significant knowledge gap due to the lack of evidence regarding its impact on victims of hazards. Therefore, this study aimed to shed light on the DRRMP implementation and the program's impact on those affected by calamities.

Motivated by dual roles—as a supervisor within the Department of Education and an active member of the Provincial Disaster Risk Reduction and Management Council (PDRRMC) in Siquijor—the researcher embarked on this study with the primary aim of enhancing public safety and protection during emergencies and hazards. The research seeks to strengthen community resilience and evaluate the effectiveness of DRRMP initiatives. Moreover, this research supports the objectives outlined in Sustainable Development Goal 11, which calls for advancing inclusive urban and rural areas, prioritizing safety and resilience, and promoting long-term sustainability in the face of growing environmental and societal challenges.

2.0 Methodology

2.1 Research Design

This study employed a descriptive-correlational research design to examine the extent of implementation of the Disaster Risk Reduction and Management Plan (DRRMP) and its perceived impact and effectiveness in randomly picked disaster-affected municipalities in Siquijor. The design is descriptive as it aims to document the level of DRRMP implementation and correlational, as it seeks to determine the relationship between the implementation of the DRRMP and its impact on victims of hazards. Specifically, the study analyzed how variations in the extent of DRRMP implementation correlated with outcomes experienced by affected communities.

2.2 Research Locale

The study was conducted in the province of Siquijor, focusing mainly on municipalities predisposed to hazards such as typhoons, floods, tsunamis, landslides, and pandemics. Siquijor has a total land area of 343.5 square kilometers. Based on the 2020 PSA census, it has a total population of 103,394. It comprises six (6) municipalities—Siquijor (the island's capital town), San Juan, Lazi, Maria, Enrique Villanueva, and Larena—and 134 barangays.

Popularly known as the "Island of Fire" and recently the "healing island," Siquijor is becoming one of the most popular tourist destinations in the Philippines. It is the smallest of the four provinces in the Central Visayas and the third smallest in the Philippines. Its towns are on the narrow floodplains and deltas around the coast. Most of the interior portion of the island is either hilly or mountainous, and rising to a central peak is Mt. Bandilaan at 557 meters above sea level.

2.3 Research Participants

The study involved 360 respondents selected from Siquijor municipalities predisposed to natural hazards. The participants comprised two groups: sixty (60) members of the Municipal Disaster Risk Reduction and Management (DRRM) Councils, who were purposively selected based on their direct involvement in disaster preparedness and response initiatives, and three hundred (300) community members who were randomly picked from the same municipalities to avoid biases in the assessment as the questionnaire is a self-rating scale on the part of the DRRM Council members. This combination of purposive and random sampling ensured expert insights from key personnel and community-level perspectives from affected residents for check and balance.

2.4 Research Instrument

The tool that was used in the study is a survey questionnaire adopted from the Provincial Disaster Risk Reduction and Management Plan. It covers four (4) thematic areas that identify the programs, projects, and activities undertaken by the DRRM Council and its stakeholders. Thematic Area 1 deals with disaster prevention and mitigation; Thematic Area 2 is on disaster preparedness; Thematic Area 3 is about disaster response; and Thematic Area 4 covers recovery and rehabilitation.

The questionnaire was reviewed by a panel of experts and the researcher's adviser to ensure content validity and that the study's objective was addressed. Although a standardized one, it underwent a dry run in one of the municipalities not covered in the study to ensure item reliability. Results showed acceptable internal consistency and reliability of 0.99 (Disaster Prevention & Mitigation), 0.99 (Disaster Preparedness), 0.94 (Disaster Response), 0.98 (Disaster Recovery & Rehabilitation), 0.98 (Impact of Prevention & Mitigation), 0.99 (Impact of Disaster Preparedness), 0.99 (Impact of Disaster Response), and 0.99 (Impact of Recovery & Rehabilitation). The tool utilized a 5-point scale with a standardized range to determine the extent of implementation and impact of the DRRMP.

2.5 Data Gathering Procedure

Prior to conducting the study, the researcher sought formal approval from the Dean of the Graduate School Program to secure the necessary endorsement. Upon receiving the Dean's endorsement, the researcher submitted a formal letter of request to the Municipal Mayors of the selected municipalities in Siquijor, seeking permission to administer the research instruments within their respective jurisdictions. A final copy of the research questionnaire was attached to the request letter for their review and approval. The researcher personally administered the questionnaire to ensure accuracy and consistency in the data collection process. A schedule of visits was strategically arranged in coordination with local officials to minimize disruptions and ensure the respondents' availability and preparedness. During each visit, the study's purpose, objectives, and significance were thoroughly explained to the participants to encourage informed participation and gain their full cooperation.

2.6 Ethical Considerations

This study adhered strictly to ethical research standards to ensure all participants' protection, dignity, and rights. The researcher prioritized confidentiality by safeguarding participants' personal information and ensuring that all data were used solely for academic purposes. Anonymity was maintained by refraining from collecting identifying information that could link responses to individual participants. The guidelines set by Foundation University's Ethics Committee ensured that ethical principles were observed throughout the research process. Before data collection, the researcher consulted with academic and ethical advisors to ensure that the research topic was clearly defined, socially relevant, and ethically sound. Participants were informed of the study's purpose, voluntary participation, and right to withdraw at any time without consequence. The researcher approached the entire process objectively and respectfully, maintaining a nonjudgmental and neutral stance. Data were gathered and reported with integrity, without alteration or manipulation. Academic standards properly cited all sources of information and references used in the study to ensure intellectual honesty.

3.0 Results and Discussion

3.1 Implementation of DRRMP

Implementation of Disaster Prevention and Mitigation

Table 1 presents a comparative analysis of the extent of implementation of the DRRMP, as assessed by the DRRM Council and community members, in terms of Disaster Prevention and Mitigation. The results revealed that the DRRM Council rated the extent of their implementation as "Very High," with a composite mean of 4.59, while the community members rated it as "High," with a composite mean of 4.09. It appears that the DRRM Council's ratings are higher than those of the community members.

The DRRM Council members rated their implementation of the DRRMP in their municipalities as "Very High," as evidenced by their assessment scores, which ranged from 4.28 to 4.73. They claimed to be particularly strong in areas such as conducting trainings and meetings with the local DRRM Council, hazard mapping, establishing an "Early Warning System," orienting DepEd personnel on the DRRMP, and disseminating information on hazards and vulnerabilities to the communities, with weighted means ($\bar{x}$) ranging from 4.67 to 4.73. A similar trend was observed by Sala (2019), wherein Council members reported a very high extent of DRRMP implementation, particularly in the area of Disaster Prevention and Mitigation.

Table 1. *Extent of Implementation of the DRRMP in terms of Disaster Prevention and Mitigation*

Indicators		DRRM Members 60		Community Members 300	
		w $\bar{x}$	V.D.	w $\bar{x}$	V.D.
1.	Creates DRRM organizational structure in schools and districts.	4.63	SA	4.31	SA
2.	Provides orientation on DRRM to DepEd personnel.	4.67	SA	4.20	A
3.	Conducts quarterly evacuation and safety drill for teachers and students.	4.53	SA	4.13	A
4.	Provides a lecture on road safety in school.	4.28	SA	3.93	A
5.	Augments mobility assets during evacuation	4.52	SA	3.94	A
6.	Identifies measures used to ensure the programs and projects do not contribute to further risks.	4.55	SA	3.93	A
7.	Conducts trainings and meetings with local DRRM councils to enhance their skills in reducing risks during calamities.	4.73	SA	4.02	A
8.	Requires students to plant trees in their respective areas.	4.40	SA	4.22	SA
9.	Conducts inventory, vulnerability, and risk assessment of critical facilities and infrastructures.	4.67	SA	4.07	A
10.	Disseminates information on hazards and vulnerabilities to the communities	4.65	SA	4.22	SA
11.	Conducts hazard mapping and assessment at the municipal / barangay level.	4.73	SA	4.08	A
12.	Establishes "Early Warning Systems" (EWS) for various hazards.	4.72	SA	4.01	A
Composite mean:		4.59	SA	4.09	A
Extent of Implementation		Very High		High	

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA); 1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

Although community members rated the DRRMP implementation in terms of disaster prevention and mitigation as "High," they identified specific areas as "Very High." These included the creation of DRRM organizational structures in schools and districts ($\bar{x}$ = 4.31), requiring students to plant trees ($\bar{x}$ = 4.22), and disseminating information on hazards and vulnerabilities to the communities ($\bar{x}$ = 4.22). This can be attributed to the mandate for schools and districts to organize their respective DRRMCs in coordination with the Local Government Unit (LGU).

To synthesize, while DRRM Council members rated the extent of DRRMP implementation in terms of disaster prevention and mitigation as "Very High," community members rated it as "High." It is not unexpected that Council members assessed themselves more favorably, as they are program implementers seeking to demonstrate compliance with the mandate of R.A. 10121. Nevertheless, the results still reflect adherence to R.A. 10121, which strengthens the Philippine Disaster Risk Reduction and Management System at the LGU level and institutionalizes the Local DRRM Councils. The data show that the DRRM Council places greater emphasis on training, hazard mapping, and information dissemination. This aligns with the statement of Fazeli et al. (2024), who asserted that individual training and education can help mitigate the impact of disasters on people's lives. From the perspective of the community members—who are the recipients of the program and often the victims of hazards—their lower ratings likely reflect perceived gaps or inadequacies in the implementation. This sentiment highlights a disconnect between the program's delivery and its reception on the ground.

Additionally, Torani et al. (2019) emphasized that people are better able to respond to various hazards when they are adequately trained. Enhancing community preparedness contributes to more effective disaster responses, reduced economic losses, increased community resilience, better resource allocation, and improved recovery processes. Moreover, they posited that acquiring and applying knowledge is the most effective way to mitigate the negative effects of hazards. However, during interviews with some randomly selected respondents, it was disclosed that they lacked sufficient information regarding government intervention programs and mitigation measures aimed at reducing the effects of hazards. This suggests that information dissemination may not be thorough or uniformly implemented. Some areas may have been overlooked, or specific community members may lack disaster awareness or remain passive toward the program. These factors may have contributed to the discrepancies in the ratings between the DRRM Council and the community members.

Implementation of Disaster Preparedness

Table 2 presents a comparative analysis of the extent of implementation of the DRRMP in terms of Disaster Preparedness, as assessed by both DRRM Council members and community members. The data show that DRRM

Council members rated the implementation as “Very High,” with a composite mean of 4.45. In contrast, community members rated it as “High,” with a composite mean of 3.86.

Table 2. *Extent of Implementation of the DRRMP in terms of Disaster Preparedness*

Indicators		DRRM Members 60		Community Members 300	
		w $\bar{x}$	V.D.	w $\bar{x}$	V.D.
1.	Conducts “Kapihan Forum” to communicate and educate the public on the different effects of a particular disaster in their lives.	4.15	A	3.90	A
2.	Motivates people to contribute to what they can do to prevent the adverse effects of a certain disaster.	4.47	SA	3.89	A
3.	Informs the people of the government’s intervention programs and mitigating measures.	4.40	SA	3.68	A
4.	Applies strict observance of environmental fire, disaster consciousness, advocacies, and other related activities.	4.52	SA	3.95	A
5.	Conducts earthquake and other simulation drills and exercises for the community.	4.67	SA	3.92	A
6.	Gives leaflets to the people about tips on what to do before, during, and after a disaster.	4.35	SA	3.85	A
7.	Conducts training for medical first aid responders and the Psychosocial Processing Team.	4.62	SA	3.74	A
8.	Conducts training on Basic Life Support-Cardiopulmonary Resuscitation to DRRM Team.	4.63	SA	3.79	A
9.	Enters MOA with NFA for rice allocation.	4.37	SA	3.81	A
10.	Enters MOA with private contractors for the use of their heavy equipment.	4.12	A	3.76	A
11.	Coordinates with private and public sectors for support such as food, water, light, and other needs.	4.45	SA	4.10	A
12.	Enhances DRRM teams’ preparedness and response strategies, including coordination mechanisms and infrastructure.	4.60	SA	3.93	A
Composite mean:		4.45	SA	3.86	A
Extent of Implementation:		Very High		High	

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA); 1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

The DRRM Council members’ responses reflect strong agreement with the disaster preparedness measures being implemented, as indicated by weighted means ranging from 4.35 to 4.67. The highest-rated activities include conducting earthquake and other simulation drills, training sessions on Basic Life Support–Cardiopulmonary Resuscitation (BLS–CPR) for the DRRM team, and training for medical first aid responders. These activities recorded weighted means between 4.62 and 4.67, suggesting that council members perceive these preparedness efforts as consistently and effectively implemented. In contrast, the study by Sala (2019) found that DRRM Council members gave their disaster preparedness efforts only a “High” rating.

On the other hand, community members rated the implementation of the DRRMP in terms of disaster preparedness as “High,” but with notable variation in the magnitude of their assessments. Their ratings were generally lower than those of the council members, a trend also observed in Sala’s (2019) study, where community members assessed disaster preparedness lower than the council’s self-evaluation. Particularly low ratings were given to the conduct of medical first aid and BLS–CPR training, distribution of informational leaflets on disaster response, and awareness of government intervention programs and mitigating measures.

According to Gagliardi et al. (2022), although numerous methods for promoting disaster preparedness exist, they are rarely well-documented, and their effectiveness is seldom evaluated. Preparedness extends beyond the home or school. In the article *Plan for Location* (2019), the United States Department of Energy emphasized that business owners, homeowners, and local leaders must take an active role in preparing for energy disruptions. Furthermore, the health and human services sector should address emergency preparedness issues specific to hospitals and healthcare settings. Although the DRRM Council members claim a “Very High” level of implementation for disaster preparedness, the findings suggest that community members are not yet fully prepared to face hazards. This discrepancy highlights a gap between implementation and impact at the community level.

Mamhot (2019) found a similar situation in the province of Siquijor, where school heads conducted meetings and monitored mitigation measures only upon receiving directives from higher authorities. This finding is concerning, as schools are expected to play a vital role in educating the public on disaster preparedness. Yet, they are not always able to fully implement the DRRMP independently. The article “*In it Together*” by the Province of British

Columbia (n.d.) emphasizes that preparedness begins with individuals in their daily lives and includes items and training essential during disasters or calamities. Preparedness evolves through stages—from individual, family, and community preparedness to that of non-profit organizations and government institutions. Effective disaster preparedness requires the integration of these various levels.

These findings support the International Federation of Red Cross and Red Crescent's (2019) statement, which asserts that preparedness is essential for mitigating the effects of hazards, particularly among vulnerable populations, and for ensuring an effective disaster response. Fazeli et al. (2024) also emphasized that disaster preparedness encompasses various dimensions, including knowledge and awareness, risk assessment, physical and mental readiness, planning, and the capacity to act during calamities. These dimensions are evident in the Province of Siquijor, as reflected in the PDRRMO-led simulation drills for earthquakes and fire preparedness (PSA - Region VII Report, 2023).

Implementation of Disaster Response

Table 3 shows the extent of implementation of the DRRMP in terms of disaster response, as assessed by both DRRM Council members and community members. Results show that DRRM Council members “strongly agree” that disaster response measures are being implemented to a “Very High” extent, with a composite mean of 4.59. In contrast, community members rated the implementation as “High,” with a lower composite mean of 3.88.

Table 3. *Extent of Implementation of the DRRMP in terms of Disaster Response*

Indicators		DRRM Members 60		Community Members 300	
		w $\bar{x}$	V.D.	w $\bar{x}$	V.D.
1.	Establishes a coordinated and efficient relief operation.	4.62	SA	4.10	A
2.	Conducts rapid needs assessment in affected areas.	4.62	SA	4.03	A
3.	Implements a system for Search, Rescue and Retrieval Operation (SRR) and proper disposal	4.62	SA	3.96	A
4.	Evacuates safely and timely manner.	4.58	SA	3.85	A
5.	Organizes an evacuation system in coordination with other agencies	4.58	SA	3.90	A
6.	Establishes a data management system for the number of victims, areas, affected, and support given.	4.60	SA	3.80	A
7.	Collects DRRM supports and products and distributes them fairly to the community affected by the calamity.	4.60	SA	3.87	A
8.	Provides a safe, healthful, temporary shelter for affected families.	4.63	SA	3.85	A
9.	Provides basic health services to affected areas, whether inside or outside the evacuation center.	4.63	SA	3.65	A
10.	Restores lifetime facilities such as water and light, and conducts immediate repairs.	4.52	SA	4.03	A
11.	Conducts stress debriefing for victims undergoing trauma.	4.50	SA	3.73	A
12.	Establishes an early recovery system or mechanism to determine the actual needs of victims.	4.56	SA	3.80	A
Composite mean:		4.59	SA	3.88	A
Extent of Implementation:		Very High		High	

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA); 1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

The council members rated all indicators under disaster response as very highly implemented. Leading the list are the provision of safe, healthy, and temporary shelters for affected areas and the delivery of basic health services, both of which obtained a weighted mean of 4.63. These are followed by the establishment of a coordinated and efficient relief operation, the conduct of rapid needs assessments in affected communities, the implementation of Search, Rescue, and Retrieval (SRR) operations, and the proper disposal of waste, all of which earn a weighted mean of 4.62. This trend aligns with the findings of Sala (2019), who likewise found that DRRM Council members rated their disaster response efforts as very highly implemented. As for the community members’ assessment, although the overall rating also falls within the “High” category, the weighted means vary in magnitude. The highest-rated aspect is the establishment of a coordinated and efficient relief operation ($\bar{x}$ = 4.10), followed by the conduct of rapid needs assessments and the restoration of lifeline facilities such as water and electricity, both rated at 4.03. Other indicators were also rated “High” but with lower weighted means, ranging from 3.65 to 3.90.

The data suggest a degree of dissatisfaction among community members, particularly in areas such as the provision of basic health services inside and outside evacuation centers, delivery of psychological stress debriefing for trauma victims, the establishment of early recovery systems, and data management systems related to victim tracking, affected areas, and the distribution of support. These indicators received the lowest ratings. This result could serve as an eye-opener for the officials concerned as the community continues to expect a more effective response during times of need. The primary objective of disaster response is to save lives and meet the basic subsistence needs of disaster-affected individuals and families, adhering to acceptable standards during and after a disaster (PDRRMO, 2015–2019).

The aforementioned sentiments of community members regarding DRRM disaster response are also reflected in Mamhot's (2019) study, wherein stakeholders who participated in the assessment of the DRRMP rated the implementation of disaster response lower than the council members' self-assessment. Considering that the Philippines is predisposed to geologic hazards such as earthquakes, landslides, tsunamis, volcanic eruptions, and subsidence (PDRRMP Report, 2015–2019), the results imply that every municipality must have an evacuation center equipped with facilities that meet specified standards. In interviews, some community members disclosed that while evacuation centers exist, they are not adequately equipped according to those standards.

According to the World Bank (2019), the frequency and intensity of typhoons in the Philippines are projected to increase, resulting in greater damage. Hence, preparedness is essential to ensure efficient responses during hazard events. However, Azad et al. (2019) argued that despite efforts to raise public awareness about disaster risks, the level of people's preparedness remains generally low. Zhang et al. (2023) emphasized that disaster response is crucial for saving lives and minimizing damage after a disaster occurs. Similarly, Sun et al. (2024) stated that due to the growing severity of natural hazards, it is necessary to establish robust disaster response systems and formulate effective emergency measures to address the complexity and unpredictability of such events. Mills et al. (2017) outlined that disaster response typically involves three stages: (1) provision of emergency services and public assistance with an emphasis on saving lives; (2) delivery of immediate services following the disaster, aiming to restore the affected areas; and (3) long-term improvement of the conditions in the affected areas.

Implementation of Recovery and Rehabilitation

Table 4 reveals the extent of implementation of the Disaster Risk Reduction and Management Plan (DRRMP) in terms of recovery and rehabilitation, as assessed by both DRRM Council members and community members. The findings indicate that the DRRM Council members rated the implementation as "Very High," with a composite mean of 4.58. In contrast, community members rated it at a "High" level, with a significantly lower composite mean of 3.68.

Table 4. *Extent of Implementation of the DRRMP in terms of Recovery and Rehabilitation*

Indicators		DRRM Members 60		Community Members 300	
		$w\bar{x}$	V.D.	$w\bar{x}$	V.D.
1.	Conducts post disaster needs assessment.	4.65	SA	3.70	A
2.	Coordinates with responsible agencies on the damages and losses that need assessment.	4.68	SA	3.65	A
3.	Formulates Strategic Action Plan for disaster affected areas up to the barangay level.	4.65	SA	3.67	A
4.	Restores peoples' means of livelihood and continuity of economic activities.	4.55	SA	3.70	A
5.	Reconstruct infrastructures and other public utilities (schools, markets, health center, etc.)	4.63	SA	3.68	A
6.	Assists in the physical and psychological rehabilitation of people who suffered from the effects of the disaster.	4.56	SA	3.60	A
7.	Distributes seeds to rehabilitate damage crops.	4.50	SA	3.55	A
8.	Implements strictly Fire Code and Building Code in the rebuilding effort.	4.53	SA	3.65	A
9.	Assists in the reconstruction of change house settlements.	4.53	SA	3.50	A
10.	Restore infrastructure facilities according to safety and resiliency standard.	4.62	SA	3.58	A
11.	Report status update through press and broadcast releases.	4.50	SA	3.80	A
12.	Restores normal education and children's activities for service delivery.	4.58	SA	4.10	A
Composite mean:		4.58	SA	3.68	A
Extent of Implementation:		Very High		High	

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA); 1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

The DRRM Council members' assessment shows consistently high ratings across all indicators, with weighted means ranging from 4.50 to 4.68. The highest-rated activity is coordination with responsible agencies to assess damages and losses ($w\bar{x} = 4.68$). This is followed by the conduct of post-disaster needs assessment and the formulation of strategic action plans for disaster-affected areas, both with a weighted mean of 4.65. Other highly rated indicators include the reconstruction of infrastructure and public utilities ($w\bar{x} = 4.63$) and the restoration of infrastructure by safety and resiliency standards ($w\bar{x} = 4.62$). On the other hand, community members perceived the implementation of DRRMP initiatives in recovery and rehabilitation as generally "High," with notable variation in the level of perceived effectiveness. Among the indicators, the restoration of regular education and children's activities emerged as the highest-rated aspect, suggesting the community's prioritization of educational and psychosocial recovery for children following disasters.

Despite the overall "High" rating from community members, several areas were identified as needing further enhancement. These include providing assistance for house reconstruction, distributing seeds to rehabilitate damaged crops, and ensuring that restored infrastructure complies with safety and resiliency standards. The perceived gaps in these areas suggest that recovery efforts may not be fully responsive to the specific needs of affected communities. This observation aligns with the findings of Mamhot (2019), who reported that the budget allocated for recovery and rehabilitation is often insufficient to support immediate and comprehensive recovery efforts.

Extent of DRRMP Implementation Summary

Table 5 summarizes the extent of DRRMP implementation across the four thematic areas as assessed by DRRM Council members and community members. Results show that the council members rated all thematic areas as "Very High," with an overall mean of 4.55. In contrast, community members assessed all areas as "High," with an overall mean of 3.88, with recovery and rehabilitation, as well as disaster preparedness, receiving the lowest ratings.

Table 5. Summary Table on the Extent of Implementation of DRRMP

Thematic Area	DRRMP council		Community Members	
	$w\bar{x}$	V.D.	$w\bar{x}$	V.D.
Disaster Prevention and Mitigation	4.59	VH	4.09	H
Disaster Preparedness	4.45	VH	3.86	H
Disaster Response	4.59	VH	3.88	H
Recovery and Rehabilitation	4.58	VH	3.68	H
Average $w\bar{x}$	4.55	VH	3.88	H

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA); 1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

The result implies that there is still a need for the DRRM Council to strengthen the preparedness of community members, as this area remains the least developed in terms of magnitude. According to the UNISDR (n.d.), enhancing people's preparedness is one of the primary strategies for reducing risk during hazard events. Disaster risk is an indicator of poor development; therefore, reducing such risks requires the integration of Disaster Risk Policy (DRP) and Disaster Risk Management (DRM) practices into sustainable development goals.

Similarly, the International Federation of Red Cross and Red Crescent (2019) emphasizes that disaster preparedness activities embedded with risk reduction measures can help prevent hazardous situations, save lives, and support communities in returning to normalcy. Disaster preparedness is a continuous and integrated process that stems from a wide range of risk reduction initiatives.

3.2 Extent of Impact of the DRRMP

Impact of Disaster Prevention and Mitigation

Table 6 presents the extent of the DRRMP's impact on disaster victims about disaster prevention and mitigation. The results generally show that community members who have experienced disasters assessed the effects of the DRRMP's prevention and mitigation efforts as "High," with a composite mean of 4.15. Although the overall rating is high, there are specific areas that were rated as having a "Very High" impact. Notably, the presence of a DRRM team in every school received a weighted mean ($\bar{x}$) of 4.22, indicating a very high perceived impact in that area.

Table 6. *Extent of Impact of the DRRMP on Municipalities Relative to Disaster Prevention and Mitigation*

Indicators		w $\bar{x}$	V.D.
1.	Every school has its own DRRM team.	4.21	SA
2.	Pupils' awareness about DRRM is enhanced.	4.20	A
3.	The local DRRM team is capacitated with the necessary skills to reduce risk during disasters.	4.09	A
4.	Quarterly evacuation and safety drills to students and teachers are observed.	4.10	A
5.	Tree-planting activity in schools is observed.	4.22	SA
6.	An Early Warning System (EWS) for various hazards is established in the municipality.	4.08	A
Composite mean:		4.15	A
Extent of Impact:		High	

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA);
1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

The following areas have been assessed to have a “High” impact: pupils’ awareness of Disaster Risk Reduction and Management (DRRM) has significantly improved, receiving an average rating ($\bar{x}$) of 4.20. Additionally, quarterly evacuation and safety drills for students and teachers are being conducted, with an average rating of 4.10. The local DRRM team has also been equipped with the necessary skills to reduce risks during hazards, achieving a rating of 4.09. Lastly, the establishment of an Early Warning System (EWS) in the municipality received the lowest average rating of 4.08.

Overall, the impact of the DRRMP on disaster prevention and mitigation for disaster victims is rated as “High.” This result affirms the statement of Asih et al. (2023), who asserted that integrating DRRM into development planning can create sustainable and resilient communities that are prepared and well-equipped to face and recover from hazards. Additionally, Fazeli et al. (2024) emphasized that training and educating individuals on disaster risks have a significant impact, as preparedness enables them to respond effectively to various phases of hazards. According to their findings, understanding people, training them, and enhancing their capacities to confront the destructive forces of nature can lead to a more effective disaster response.

The results also indicate that certain aspects of disaster prevention and mitigation still require improvement—particularly the establishment of Early Warning Systems (EWS) for various hazards, which was perceived to have the least impact on communities. According to Troglić et al. (2022), Early Warning Systems play a crucial role in risk reduction and public safety. Timely and accurate warnings can save lives, protect property, and foster public trust in the system. Furthermore, Linardos et al. (2022) noted that advancements in Machine Learning (ML) and Deep Learning (DL) have significantly enhanced our capacity to manage the scale and impact of hazards, enabling better responses to their often severe and catastrophic consequences.

The principle of Total Quality Management (TQM) may be applied to the DRRMP, as it promotes a philosophy of continuous improvement across all organizational processes—particularly the capacity-building of its members. The findings also suggest that the DRRM team should not be complacent with their existing knowledge and skills in hazard prevention and mitigation. Continuous improvement is necessary. They must remain up to date with the latest trends and techniques, as their effectiveness directly influences the safety and well-being of the community. Barczak et al. (2021) posited that effective crisis management and risk mitigation are vital to organizational resilience. The ability to manage crises and mitigate strategic risks determines an organization’s capacity to withstand disruptions, maintain stakeholder trust, and protect its reputation.

A forum spearheaded by Understanding Risk (UR) Caribbean on March 15, 2019, emphasized the importance of identifying, assessing, and reducing disaster risk. The forum's key concerns included identifying information gaps and needs in disaster risk data across agencies and sectors, as well as providing in-depth training in areas such as coastal protection, risk financing, stakeholder participation, and community resilience. It also focused on sharing knowledge and best practices from global partners to enhance disaster risk management (World Bank, 2019).

Impact of Disaster Preparedness

Table 7 presents the extent of the impact of the Disaster Risk Reduction and Management Plan (DRRMP) on victims of hazards, specifically in terms of disaster preparedness. The findings indicate that disaster preparedness has a “High” impact on victims, with a composite mean of 3.78. While the overall impact is rated as high, there is variability in the degree of impact across different indicators.

Table 7. *Extent of Impact of the DRRMP on Municipalities Relative to Disaster Preparedness*

Indicators		w $\bar{x}$	V.D.
1.	The community is well-informed about the DRRMP.	3.50	A
2.	The community is aware of the hazards and risks of disasters.	3.85	A
3.	Community cooperation in times of disaster is developed.	4.00	A
4.	Every family is prepared in terms of disasters.	3.56	A
5.	The private and public sectors are aware of their responsibilities and roles in times of disaster.	3.71	A
6.	Every barangay has an evacuation center in times of disaster.	4.03	A
Composite mean:		3.78	A
Extent of Impact:		High	

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA);
1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

When ranked by magnitude of impact, the leading factor is the presence of an evacuation center in every barangay during calamities, with a weighted mean of 4.03. This is followed by the development of community cooperation, rated at 4.00. Community awareness of hazards and risks ranks third, with a weighted mean of 3.85. The understanding of responsibilities among both private and public sectors is rated at 3.71, while the preparedness of each family in terms of disaster response is rated 3.56. The least impactful factor, according to the data, is having a well-informed community about the DRRMP, which received the lowest weighted mean of 3.50. These findings are supported by the results presented in Table 1 and interviews with randomly selected community members, who expressed a lack of sufficient information about government intervention programs and mitigation measures to prevent the severe effects of hazards. Community members reported having limited knowledge of what to do before, during, and after a hazardous event.

The strong sense of cooperation and helpfulness among community members may be attributed to the values and cultural traits of the Filipino people. These traits have consistently been demonstrated during times of calamity. Filipinos have consistently demonstrated remarkable resilience, often emerging stronger in the aftermath of disasters. They are known for their ability to bounce back, even without government assistance (Guyton, 2022). Furthermore, the International Federation of Red Cross and Red Crescent (2019) emphasized that disaster preparedness plays a crucial role in minimizing the adverse impacts of natural hazards. Being prepared involves anticipating potential disaster locations, implementing risk-reduction measures—especially for vulnerable populations—and ensuring adequate response mechanisms are in place when hazards occur. By integrating risk reduction strategies into preparedness efforts, communities can significantly reduce the likelihood of loss of life, property damage, and disruption to livelihoods.

Impact of Disaster Response

Table 8 illustrates the impact of the Disaster Risk Reduction and Management Plan (DRRMP) on disaster victims in terms of disaster response. The results indicate a "High" impact on communities affected by disasters, with a composite mean of 3.83. However, the impact varies in magnitude across different factors.

Table 8. *Extent of Impact of the DRRMP on Municipalities Relative to Disaster Response*

Indicators		w $\bar{x}$	V.D.
1.	The spirit of pakikipagkapwa-tao is enhanced.	3.90	A
2.	The bayanihan system is activated.	3.87	A
3.	DRRM teams are quick to respond.	3.71	A
4.	The community knows where to go or seek refuge.	3.76	A
5.	Food distribution is systematic and fair.	3.79	A
6.	The value of cooperation in times of disasters is realized.	3.95	A
Composite mean:		3.83	A
Extent of Impact:		High	

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA);
1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

Ranked by intensity, the leading factor is the realization of cooperation during times of disaster, with a weighted mean of 3.95. This is followed closely by the enhancement of the spirit of *pakikipagkapwa-tao* (community solidarity), which received a weighted mean of 3.90. The activation of the *Bayanihan* system ranks third, with a mean of 3.87. Next is the systematic distribution of food, ranked fourth with a mean of 3.79. In fifth place is the community's knowledge of where to seek refuge, with a rating of 3.76. The least impactful factor is the quick response of DRRM teams, which received a weighted mean of 3.71. It is unfortunate to note that the disaster response of the DRRM teams was perceived to have the least impact on the community.

The results indicate that Filipinos are generally helpful individuals. The concept of *pakikipagkapwa-tao* is deeply rooted in Filipino culture and lies at the core of Filipino values. Filipinos maintain close relationships with their neighbors, as observed in most barangays, where people know one another, support and protect each other, and share burdens during times of need. This characteristic has been evident during the numerous calamities that have struck the country. Filipinos have consistently demonstrated to the world that, by working together as a nation, they possess the resilience to recover from even the most challenging situations (Abrugar, 2019).

According to Guyton (2022), the *Bayanihan* spirit enables Filipinos to undertake tasks such as building and moving houses, planting and harvesting crops, and constructing roads—all with minimal cost—through mutual assistance. In times of calamity, Filipino people naturally help one another. The *Bayanihan* spirit fosters unity and collective action within communities. Additionally, a study by Gallego and Balahagno (2024) found that despite the challenges posed by crises, victims of hazards often recover naturally and return to their previous levels of functioning. Resilient, caring, and coping mechanisms enable people to thrive even in the face of adversity, with culture and traditions playing a vital role in shaping their adjustment and adaptation to current circumstances. In summary, the values of cooperation, the *Bayanihan* system, and the spirit of *pakikipagkapwa-tao* have the most significant impact on disaster victims in the context of disaster response. These values reflect the Filipinos' strong sense of social responsibility and communal care (Solis, 2023).

Impact of Disaster Recovery and Rehabilitation

Table 9 presents the perceived impact of the Disaster Risk Reduction and Management Plan (DRRMP) on victims, specifically in the areas of disaster recovery and rehabilitation. The findings indicate a generally “High” level of impact, as reflected by the composite mean score of 3.45. While the overall rating is high, the indicators differ in terms of intensity. The highest-rated aspect is the prompt restoration of livelihood, with a weighted mean of 3.73. This is followed closely by the quick and smooth resumption of regular classes ($\bar{x}$ = 3.71) and the speedy rehabilitation of schools and public utilities ($\bar{x}$ = 3.70). The mobilization of concerned agencies ($\bar{x}$ = 3.67) and the conduct of needs assessment ($\bar{x}$ = 3.46) follow suit. The lowest-rated indicator is the existence of strategic action plans for disaster-affected areas in every barangay, which received a mean of 3.45. These findings align with the data in Table 4, where community members also rated the extent of DRRMP implementation in disaster recovery and rehabilitation as “High,” with particular emphasis on the restoration of livelihood as the most impactful component.

Table 9. *Extent of Impact of the DRRMP on Municipalities Relative to Disaster Recovery and Rehabilitation*

Indicators		w $\bar{x}$	V.D.
1.	Needs assessment of speed.	3.46	A
2.	Concerned agencies (NHA, Private Cooperatives, NGO) are tapped and mobilized.	3.67	A
3.	Fast restoration of livelihood.	3.73	A
4.	Fast rehabilitation of schools and public utilities.	3.70	A
5.	Quick and smooth resumption of regular classes.	3.71	A
6.	Every barangay has a Strategic Action Plan for disaster-affected areas.	3.45	A
Composite mean:		3.62	A
Extent of Impact:		High	

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA); 1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

In the study by Sala (2019) and Mamhot (2019), however, they disclosed that the restoration of livelihood has the least impact on the victims. As stated under Thematic Area 4 of the DRRMP, referring to disaster recovery and rehabilitation, the primary aim of this area is to restore people's means of livelihood, restore shelter and public utilities damaged by hazards, and assist in the physical and psychological rehabilitation of a person who suffered from the effects of hazards (PDRRMP, 2015-2019).

Furthermore, as posited by the United Nations on the Rights of Persons (n.d.), meeting the established objectives for disaster recovery and rehabilitation remains a significant challenge due to a range of socio-economic and environmental vulnerabilities, including poverty, exposure to natural hazards, and compromised infrastructure. The timeline for effective response and recovery is influenced by various factors, such as the severity of the disaster and the socio-economic and political conditions of the affected area. This aspect of the Disaster Risk Reduction and Management Plan (DRRMP) requires substantial financial resources, particularly for long-term recovery and rehabilitation efforts. Mamhot (2019) similarly observed that funding allocated for recovery and rehabilitation is often insufficient to support immediate needs. While the tangible results of recovery initiatives may not be

immediately evident, their long-term impact can be realized through consistent and well-executed implementation of the DRRMP.

Impact of DRRMP Summary

In addition, Amatya and Khan (2023) emphasized that achieving the intended goals of disaster recovery and rehabilitation is particularly challenging due to multiple socio-economic and environmental factors, including widespread poverty, vulnerability to environmental risks, and damaged infrastructure. The effectiveness and timeliness of response and recovery efforts largely depend on the intensity of the hazards and the prevailing socio-political and economic landscape of the affected community. Among the key components of the Disaster Risk Reduction and Management Plan (DRRMP), post-disaster recovery and rehabilitation demand considerable financial investment. Supporting this view, Mamhot (2019) reported that existing budget allocations for these activities are often inadequate to address urgent recovery requirements. Although the positive effects of these interventions may not be immediately visible, they become more evident over time when the DRRMP is implemented consistently and with strategic planning.

Table 10. Summary Table on the Extent of Impact of DRRMP on Municipalities Affected by Disaster

Thematic Area	w $\bar{x}$	V.D.
Disaster Prevention and Mitigation	4.15	H
Disaster Preparedness	3.78	H
Disaster Response	3.83	H
Recovery and Rehabilitation	3.62	H
Average w$\bar{x}$	3.84	H

NOTE: 4.21-5.00 = Strongly Agree (SA); 3.41-4.20 = Agree (A); 2.61-3.40 = Moderately Agree (MA); 1.81-2.60 = Disagree (D); 1.00-1.80 = Strongly Disagree (SD)

In addition, Amatya and Khan (2023) emphasized that achieving the intended goals of disaster recovery and rehabilitation is particularly challenging due to multiple socio-economic and environmental factors, including widespread poverty, vulnerability to environmental risks, and damaged infrastructure. The effectiveness and timeliness of response and recovery efforts largely depend on the intensity of the hazards and the prevailing socio-political and economic landscape of the affected community. Among the key components of the Disaster Risk Reduction and Management Plan (DRRMP), post-disaster recovery and rehabilitation demand considerable financial investment. Supporting this view, Mamhot (2019) reported that existing budget allocations for these activities are often inadequate to address urgent recovery requirements. Although the positive effects of these interventions may not be immediately visible, they become more evident over time when the DRRMP is implemented consistently and with strategic planning.

3.3 Relationship between DRRMP Implementation and its Impact on Disaster Victims

Table 11 presents the analysis of the relationship between the level of Disaster Risk Reduction and Management Plan (DRRMP) implementation and its corresponding impact on hazard-affected individuals. Statistical results indicated no significant correlation between the variables, as evidenced by p-values of -0.1193 (Disaster Prevention & Mitigation), 0.1319 (Disaster Preparedness), -0.1316 (Disaster Response), and -0.1065 (Recovery & Rehabilitation). These values are all well above the 0.05 level of significance, thereby supporting the null hypothesis, which posits no significant relationship between the extent of DRRMP implementation and its impact on disaster victims. In essence, the implementation level of DRRMP does not appear to have a measurable influence on how victims perceive its impact.

Table 11. Relationship Between the Extent of Implementation of the DRRMP and its Impact on the Victims of the Disasters

Indicators	r	Decision Rule	Remarks
Disaster Prevention and Mitigation and Its Impact on Victims	-0.1193	Do not reject H ₀₁	Not significant
Disaster Preparedness and Its Impact on Victims	0.1319	Do not reject H ₀₁	Not significant
Disaster Response and Its Impact on Victims	-0.1316	Do not reject H ₀₁	Not significant
Disaster Recovery and Rehabilitation and Its Impact on Victims	-0.1065	Do not reject H ₀₁	Not significant
Overall Relationship	-0.1070	Do not reject H₀₁	Not significant

r significant level at 0.05, df 58 = 0.2500

Interpretation of r:

± 0.01 to ± 0.19	Negligible relationship
± 0.20 to ± 0.29	Weak relationship
± 0.30 to ± 0.39	Moderate relationship
± 0.40 to ± 0.69	Strong relationship
± 0.70 or Higher	Very strong relationship

The supporting data in Tables 1 to 5 indicate that, although all DRRMP components were rated “Very High” in terms of implementation, their corresponding perceived impacts were only rated “High.” It was initially hypothesized that greater implementation would yield greater positive outcomes for affected individuals. However, findings contradict this assumption, highlighting a disconnect between program execution and tangible outcomes for beneficiaries. This discrepancy may be partly explained by cultural context. Filipino resilience, a well-documented national trait, allows many individuals to recover independently, often without relying on government assistance (Isidro & Calleja, 2020). Gallego and Balahagno (2024) similarly observed that Filipinos tend to resume their normal routines and regain stability despite limited external support, attributing this capacity to deeply rooted cultural values that foster adaptability during crises. Additionally, Mamhot (2019) highlighted financial limitations as a major constraint, pointing out that insufficient funding for recovery and rehabilitation often results in many affected communities receiving little to no government aid. This lack of adequate support further weakens the potential impact of even well-implemented disaster response plans.

3.4 Difference in Assessment between DRRM Council Members and Community Members

Table 12 presents the test for significant differences in the assessment of Disaster Risk Reduction and Management Plan (DRRMP) implementation between DRRM Council members and community members. Results show that in all thematic areas—namely disaster prevention and mitigation, disaster preparedness, disaster response, and disaster recovery and rehabilitation—there is a statistically significant difference in perceptions between the two groups. The DRRM Council consistently gave higher ratings for implementation, as evidenced by the p-values of .0001 for all thematic areas. These values are well below the 0.05 significance level, providing strong justification to reject the null hypothesis, which posited no significant difference in assessments between the two groups. This finding confirms that DRRM Council members and community members have differing views on the extent of implementation.

Indicators	$w\bar{x}$	t	df	p-value	Decision Rule	Remarks
Prevention & Mitigation						
• DRRM council	4.59	+ 9.14	22	0.0001	Reject H_{02}	Significantly different
• Community members	4.09					
Disaster Preparedness						
• DRRM Council	4.45	+ 9.56	22	0.0001	Reject H_{02}	Significantly different
• Community members	3.86					
Disaster Response						
• DRRM council	4.59	+ 17.72	22	0.0001	Reject H_0	Significantly different
• Community Members	3.88					
Recovery & Rehabilitation						
• DRRM Council	4.58	-18.81	22	0.0001	Reject H_0	Significantly different
• Community Members	3.68					

Level of significance = 0.05

Level of significance = 0.05

Such divergence in opinion may be rooted in the long-established principle of individual differences. As explained by Paresashvili et al. (2020), perception is inherently subjective and varies depending on a combination of heredity, environmental influences, and situational context. These individual factors could lead some respondents to either overestimate or underestimate performance, which the researcher has also acknowledged as a limitation of the study. Further insight into this disparity can be gained through Luft and Ingram’s Johari Window, which conceptualizes self-awareness through four dimensions: open, blind, hidden, and unknown. The “blind” area refers to traits or realities visible to others but not recognized by the individual (Yamanaka & Hassell-Goodman, 2023). Applying this framework, DRRM Council members may have certain “blind spots” in their perception of how effectively the DRRMP is being carried out. As the direct beneficiaries of the program, community members

may be more attuned to deficiencies or shortcomings in its implementation, which may explain the lower ratings it provides.

3.5 Difference in Council Members' Assessment of their Performance Based on their Profile

Table 13 examines whether DRRM Council members' assessments of the DRRMP implementation vary when grouped according to profile variables such as age, years of experience, and relevant training. Statistical findings reveal no significant difference in their assessments based on these factors. This is shown by p-values of 1 for both age and experience and 0.8895 for training, all of which exceed the 0.05 significance threshold. In particular, the p-value of 1 suggests that the data perfectly aligns with the null hypothesis, indicating no variation whatsoever. Thus, the null hypothesis cannot be rejected. These results imply that regardless of age, professional experience, or participation in training programs, DRRM Council members hold relatively consistent views on the extent of DRRMP implementation.

Table 13. *Test on Significant Difference in the Assessment as to their Performance in the Implementation*

Variables	N	$\bar{wx}$	H	df	p-value	Decision Rule	Remarks
Age	N						
30 & Below	9	4.61					
31 – 40	18	4.63	-8.89	3	1	Do not reject H_{03}	Not Significant
41 – 50	22	4.48					
51-up	11	4.52					
Total	60						
Experience							
1-5 years	29	4.53					
6-10 years	20	4.61	-7.01	2	1	Do not reject H_{03}	Not Significant
11 years – up	11	4.55					
Total	60						
Trainings							
1-10 days	15	4.53					
11-20 days	14	4.56	0.63	3	0.8895	Do not reject H_{03}	Not Significant
21-30 days	15	4.63					
31 days – up	16	4.53					
Total	60						

Level of significance = 0.05

This result contradicts the findings of Sala (2019), who concluded that age, relevant training, and experience can significantly influence the assessment of DRRM Council members regarding the functionality of the DRRMP. In contrast, several more recent studies support the current findings that these demographic variables do not account for differences in performance or evaluation. For instance, Sarte (2021) found that age is not a reliable predictor of individual performance. Their studies emphasized that individuals demonstrate varying approaches to work and decision-making regardless of their age and that age alone does not determine how effectively one performs. Similarly, Murphy and DeNisi (2022) challenged prevalent age-related stereotypes in the workplace, including the notion that older workers are less creative, less adaptable, and less interested in training. Their research showed that actual performance data do not support such assumptions. In many cases, older workers perform as well as or even outperform their younger counterparts.

Regarding training, Sarte (2021) found that individual performance levels remained consistent regardless of the extent or frequency of training. Although her study focused on teachers, the implication holds across professions: training alone does not guarantee improved performance. This is further supported by Sison (2022), who argues that an employee's educational background and training history are insufficient indicators of skill or job efficiency. As for experience, Suyo (2020) affirmed the findings of the present study by revealing that years of experience do

not necessarily translate into better performance. While the adage “Experience is the best teacher” is often quoted, global research, including Schell's (2019) study, suggests otherwise. Schell's study emphasized that self-awareness, rather than experience, academic qualifications, or even emotional sensitivity, is the most critical factor for effective leadership. Self-aware individuals are more likely to succeed in their roles because they understand their responsibilities and adapt accordingly. In summary, the assessment of DRRM Council members regarding the implementation of the DRRMP does not vary significantly based on their age, training, or experience. This suggests a relatively uniform perspective among council members, regardless of their professional background or tenure.

4.0 Conclusion

Hazards are increasing worldwide, leaving behind devastating consequences. The Philippines is grappling with numerous significant calamities, including severe weather events, floods, landslides, earthquakes, financial and economic losses, and the tragic loss of lives. These events highlight the country's vulnerability to natural disasters and emphasize the critical need for a comprehensive disaster risk reduction and management program to minimize their impact on communities and the economy. The Disaster Risk Reduction and Management Program (DRRMP) is not merely an option or a matter of compliance but an absolute necessity. A well-implemented DRRM program helps reduce loss of life, protects communities, and ensures faster and more efficient recovery. Effective disaster risk management is not just about responding to disasters; it's about proactively building resilience within communities. The recent calamities experienced by communities serve as a stark reminder of the urgent need for a robust DRRMP that can minimize hazard impacts, safeguard lives and livelihoods, and promote sustainable development. Therefore, the sooner the government prioritizes the inadequacies revealed in the study, such as disaster preparation, disaster response, and disaster recovery and rehabilitation, and implements this program effectively, the better prepared the country will be for the challenges.

5.0 Contributions of Authors

This inquiry is exclusively authored by the writer from its conceptualization until the final stage.

6.0 Funding

This research is not funded by any agency.

7.0 Conflict of Interests

The author declares that there are no conflicts of interest associated with this academic paper.

8.0 Acknowledgment

The author is especially thankful to his dissertation adviser, statistician, method specialist, and members of the panel for their immense contribution to the improvement of this paper. Profound gratitude is also extended to the Schools Division Superintendent of Siquijor Province, the six Municipal Mayors of Siquijor, the DRRM Council members and community members in the province, and Foundation University. Most of all, the author dedicates this endeavor to his family, whose selfless love and support are truly invaluable.

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