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Disaster Preparedness and Emergency Management Efficiency

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Abstract

The Disaster Preparedness and Emergency Management Efficiency of staff and students at Governor Mariano E. Villafuerte Community College (GMVCC), Siruma, Camarines Sur. Aimed to examine the influence and measure levels of disaster preparedness across existence of disaster plan, training, and capability building, and public awareness and education; and evaluates emergency management efficiency in preparedness, response action, and recovery. Statistical analyses reveal a very strong and statistically significant relationship between disaster preparedness and emergency management efficiency, underscored by high r-squared values. The methods used in the study was descriptive-correlational. The descriptive aspect of the study focuses on assessing the level of disaster preparedness and the correlational component determine whether a significant relationship exists between disaster preparedness and emergency management. The efficiency management among GMVCC- Siruma showed that GMVCC demonstrated moderate disaster preparedness, particularly excelling in public awareness and education, but require enhancements in training and detailed planning. Their emergency management efficiency obtained highest in response, with recovery and preparedness needing further strengthening. To improve effectiveness, this study recommends the continuous development of comprehensive preparedness strategies, regular capability-building trainings, and increased community engagement. The strategic plan developed herein provides a robust framework to bolster GMVCC's disaster response, recovery, and preparedness capacity, fostering a resilient and proactive emergency management system capable of addressing all emergency phases. This research contributes valuable insights for educational institutions seeking to strengthen disaster management practices and enhance organizational resilience.

Keywords: Disaster Preparedness, Emergency Management Efficiency, Disaster Plan, Response Action, Recovery, and Capability Building.

Introduction

The disaster preparedness involves taking measures to mitigate the effects of disaster events on people and its community. Preparedness is a continuous cycle of planning , managing, organizing, training, eqquipping, exercising, evaluating, monitoring, and improving exercise of action. To ensure, enhance, respond to and recover from the effects of any disaster nature or man-made. Thus, the government as a matter of policy, states that "No less than the government itself should set the example in protecting its

workers from natural calamities/disaster such as fire, earthquakes, typhoons, floods, etc. The best protection is an educated approach by constant vigilance and systematic planning and action in the face of actual and impending calamities (Official Gazette, 2025). In safety preparedness, emergency leaders develop action plan to manage the risk and built the necessary capability plans needs to implement. It includes communications, proper trainings and maintenance, evacuations procedures. The prime objective of preparedness is to save lives, property and money, and for post disaster respond is to recover and continue with awareness.

Likeswise, emergency management is a critical discipline that focuses on preparing for, responding to, and recovering from disasters and emergencies. The effective emergency management aims to minimize the impacts theses events on communities, intrastructure, and economies, ensuring the safety and resilience. The efficiency of emergency response depends on seamless integration from global frameworks to local actions. Preparedness plans must be informed by risk assessments and communicated clearly in all stakeholders. Republic Act (RA) 10121, the Philippine Disaster Reduction and Management Act of 2010, requires to monitor and coordinate disaster responses, integrating advance technology and fostering partnerships with international and local organizations to improve operational efficiency. Preparedness plans must be informed by risk assessments and communicated clearly in all stakeholders. Building resilience requires continuous investment in training, drills, simulation, and technology including social media, communication, and partnership that span international organizations, governments, private sectors, non-government organizations, and communities.

Conversely, the same application in of the Sustainable Development Goal (SDG) 2030 particularly in Goal 11: Sustainable Cities Communities, Goal 4: Quality Education and Goal 13: Climate Action states that by 2030, significantly reduce the number of deaths and the number of people affected by substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including related disasters with a focus on protecting poor people in vulnerable situations.

Moreover, it directly informs disaster preparedness and emergency management efficiency in school settings by identifying critical components comprehensive plan, training and capability building, and public awareness that enhance response readiness and resilience. Studies like Horton et al. (2023), Widowati et al. (2021), and Winarni and Purwandari (2018) demonstrate that structured school plans and drills reduce injury risks and improve evacuation efficiency, while Mirzaei et al. (2019) and Yuldiz et al. (2024) emphasize training role in equipping teachers and students for effective response and recovery. Innovative tools of Mossoux et al. (2016), Zhao et al. (2024) and stakeholder involvement of Cvetkovic et al. (2024) boost awareness, bridging gaps in high-risk areas. Healthcare insights of Labrague et al. (2018) and Das (2018) translate to schools via protocol standardization and resource coordination, addressing implementation gaps for resilient educational environments.

The global humanitarian and development agencies agreed that improving emergency management efficiency is essential to reducing disaster impacts and enhancing resilience. These organizations emphasize the importance of coordinated Multi-Agency approaches, strong community participation, and effective resource mobilization to achieve timely and effective disaster response and recovery. Strengthening partnerships among NGOs, UN agencies, and governments is critical to building resilient

communities capable of managing emergencies more effectively UN Office for the Coordination of Humanitarian Affairs (2016).

This study underscoring critical gaps in school disaster preparedness limited training, simulation implementation, sporadic public awareness, and inconsistent community engagement directly impacting emergency management efficiency. Studies like Veenema et al. (2016), Tkachuck et al. (2018), and Beyramijam et al. (2021) highlight leadership roles, curriculum integration, and practical training (first aid, drills) to build teacher and student resilience and swift response. Shah et al. (2019), Tang et al. (2024) and Castañeda et al. (2020) emphasize context-specific plans, capacity building, and culturally sensitive education to address sociodemographic vulnerabilities, while Hargono et al. (2023) and Muzani et al. (2022) stress awareness campaigns and infrastructure for equitable outcomes.

Research Objectives

This study determined the influence of the disaster preparedness and emergency management efficiency of staff and students at Governor Mariano E. Villafuerte Community College (GMVCC), Siruma, Camarines Sur. Thus this study achieved the following objectives: to measure the level of disaster preparedness of GMVCC-Siruma in terms of existence of disaster preparedness plan, training and capacity building, and public awareness and education; to determine the level of emergency management efficiency along preparedness, response action, and recovery; to identify if there is a significant relationship between the level of disaster preparedness and emergency management efficiency; to assess the extent of influence of disaster preparedness on the emergency management efficiency; and to develop a strategic plan that may improve the disaster preparedness and emergency management efficiency of GMVCC-Siruma.

Methods

This study employs a descriptive-correlational research design, similar to the approach utilized by Aguenza (2024), the descriptive aspect of the study will focus on assessing the level of disaster preparedness and the efficiency management emergency among the GMVCC staff and students. Additionally, this method used to develop a strategic action plan to guide the GMVCC- Siruma, in line with the methods used by Atanacio Jr. (2024). The correlational component will determine whether a significant relationship exists between disaster preparedness and emergency management efficiency among GMVCC staff and students, as well as measure the influence of disaster preparedness on emergency management efficiency, following the procedure described by Delos Santos (2024), this combined method allows for a comprehensive understanding of both the descriptive status and interrelationships of the critical variables in emergency management. The 4 point Likert scale below was applied to quantify the level of disaster preparedness and emergency management efficiency.

Scale	Range	Verbal Interpretation
4	3.26 to 4.00	Very Highly Prepared (VHP) / Managed (VHM)
3	2.51 to 3.25	Highly Prepared (HP) / Managed (HM)
2	1.76 to 2.50	Moderately Prepared (MP) / Managed (MM)
1	1.00 to 1.75	Fairly Prepared (FP)/ Managed (FM)

Results and Discussion

The assessment and findings of this study provides a comprehensive evaluation competencies related to disaster preparedness and emergency management efficiency among GMVCC- Siruma staff and students. The insights gained serve as a foundation for discussions on enhancing institutional readiness and operational efficiency in disaster scenarios. Also, this study includes a comprehensive evaluation of competencies across various criteria.

Disaster Preparedness of GMVCC Siruma. Table 2d the analysis of the disaster preparedness of GMVCC staff across various aspects indicates a generally moderate level of readiness. Public awareness and education scored the highest among the aspects, with an average weighted mean of 2.53, which is classified as highly prepared, suggesting that staff members possess a good understanding of disaster-related information and actively engage in awareness activities. Training and capability building received a slightly lower average weighted mean of 2.48, also falling within the highly prepared category, reflecting a decent level of training initiatives but leaving room for enhancement. The existence of a disaster preparedness plan garnered the lowest average weighted mean of 2.38, categorized as moderately prepared, highlighting that while plans are in place, they may require further development or dissemination for more effective implementation. The overall average weighted mean of 2.47 signifies that the staff's disaster preparedness status is moderately prepared, indicating that while certain aspects are well addressed, comprehensive improvements are essential for a more robust disaster readiness.

Table 2d

Level of Disaster Preparedness of GMVCC

Aspects	Average Weighted Mean	Interpretation
Public Awareness and Education	2.53	HP
Training and Capability Building	2.48	MP
Existence of Disaster Preparedness Plan	2.38	MP
Overall Average Weighted Mean	**2.47**	**Moderately Prepared**

Note. This table identify the overall weighted mean in disaster preparedness of GMVCC Staff and Students with the interpretation in weighted mean range of 3.26 to 4.00 Very Highly Prepared (VHP),

2.51 to 3.25 Highly Prepared (HP), 1.76 to 2.50 Moderately Prepared (MP), and 1.00 to 1.75 Fairly Prepared (FP).

The study reveals generally moderate level of readiness. Public awareness and education, scoring the highest classified as highly prepared, suggests that staff and students are well-informed and actively engage in disaster related educational activities. This strong understanding likely stems from ongoing information campaigns and outreach efforts. Training and capability building also fall within the highly prepared category, indicating that while the staff and students receive regular training, there remains room for enhanced and more targeted capacity building initiatives. Conversely, the existence and implementation of disaster preparedness plan, with lowest, points to moderate level of preparedness and highlights a critical area needing improvement. This implies that plans are in place, they may lack comprehensives accessibility, or sufficient operational integration. Overall the composite results reflects a moderate preparedness status, emphasizing that while awareness and training are strengths, the optimization of formal disaster preparedness plans is essential to bolster institutional and community readiness for effective disaster response and recovery.

The aggregate assessment reflecting strong engagement and understanding of disaster-related information. It also suggest and underscores the need for strengthening training programs and formalizing disaster plans to elevate the overall preparedness level among staff members. Also, formal plan shows the greatest need for wider dissemination, the status infer that the institution has laid foundational efforts in knowledge dissemination and training yet needs to strengthen formal planning frameworks to ensure effective implementation during crises. The findings underscore the importance of continuous capacity building initiatives, comprehensive plan updates, and strategic communication to transition from moderate to high preparedness levels, ultimately enhancing institutional resilience and emergency management effectiveness.

Similar findings by Tipler et al. (2017) and Horton et al. (2023) highlight how variability in school preparedness levels stems form factors like school size, location, resources, and leadership commitment, with many school lacking regular drills and staff training essential for effective emergency responses. This challenge is evident at GMVCC, where limited staff and scarce resources hinder comprehensive management. Suryadi et al. (2021) further demonstrate that higher disaster knowledge fosters proactive community attitudes and resilience through ongoing education, while Wong et al. (2021) show that trust and compassion significantly enhance resource sharing during evacuations, underscoring the value of social cohesion for response and recovery beyond basic awareness training.

Emergency Management of GMVCC. Reveals that response action receives the highest average weighted mean of 2.57, indicating a highly managed aspect within the organization. Recovery follows closely with an average weighted mean of 2.48, also categorized as highly managed, demonstrating a strong focus on effective recovery processes. Preparedness has an average weighted mean of 2.41, placing it within the highly managed range as well, which reflects a solid emphasis on readiness measures. When considering all aspects collectively, the overall average weighted mean stands at 2.49, signifying that the emergency management practices are predominantly highly managed, with a slight inclination toward moderate management levels. This suggests that while the organization effectively prioritizes response, recovery, and preparedness, there remains room for improvement to elevate these aspects further within the

management. As it show response action is on the top with a weighted mean of 2.57 interpreted as highly manage which it indicates that the response action for the disaster and emergency is a quick, timely and effective. However the other aspects needs an improvement to efficiently execute the responses more effective. Having the recovery and preparedness both resulted with moderately manage, with an overall results of 2.49 weighted mean indicating of moderately manage. The speed and effectiveness of any organization and communities respond to, recover from, and mitigate the impacts of crisis.

Table 3d

Emergency Management of GMVCC

Aspects	**Average Weighted Mean**	**Interpretation**
Response Action	2.57	HM
Recovery	2.48	MM
Preparedness	2.41	MM
Overall Average Weighted Mean	**2.49**	**Moderately Managed**

Note. This table identify the weighted mean in emergency management of GMVCC Staff and Students with the interpretation in average weighted mean range of 3.26 to 4.00 Very Highly Managed (VHM), 2.51 to 3.25 Highly Managed (HM), 1.76 to 2.50 Moderately Managed (MM), and 1.00 to 1.75 Fairly Managed (FM) and ranking

The analysis of emergency management at GMVCC indicates that response actions attain the highest average weighted mean, reflecting a highly managed phase characterized by rapid, timely, and effective interventions crucial in minimizing disaster impacts during critical moments. Recovery follows closely, also within the highly managed category, highlighting the organizations emphasis on restoring normalcy through comprehensive post disaster actions such as community needs assessment, support services, and interagency collaboration. Preparedness remains solidly managed, demonstrating robust readiness measures including training, planning, and resource mobilization. Collectively, the overall average suggest predominantly highly managed emergency management practices with some learning toward moderate management, underscoring the need for continuous improvement, especially in preparedness and recovery phases, to ensure seamless transitions across the emergency management cycle. This aligns with established emergency management frameworks emphasizing that effective response saves lives and assets, while sustained preparedness and recovery efforts are essential to build residence and mitigate future risks, requiring iterative planning, capacity building, and adaptive resource allocation.

The inference of GMVCC's emergency management reveals that response actions are perceived as the most highly managed component. This indicates that the organization response efforts are generally quick timely, and effective in addressing emergencies. Recovery efforts follow closely as highly managed, reflecting a strong organization focus on restoring and rehabilitating affected communities. Preparedness is similarly classified with highly managed range, demonstrating the organization solid emphasis on readiness measures. When considering all the aspects collectively, the overall suggests that GMVCC emergency management practices are predominantly highly managed but exhibit a slight tendency towards

moderate management levels. The overall score indicates that while the organization effectively prioritizes response, recovery, and preparedness, there remains room for improvement to further elevate these areas.

Furthermore, Tuser (2019) traces the evolution of emergency management education, stressing its role in equipping institutions with interdisciplinary knowledge, practical skills, and innovative methods to foster resilience, decision making, and coordinated crisis response amid evolving challenges. Also, Tkachuch et al. (2018) similarly examine disaster preparedness among college students, uncovering limited knowledge, safety procedure awareness gaps, and inadequate institutional support without tailored programs, recommending proactive targeted trainings, educational drills, and communication strategies to boost awareness, mitigate risks, and enhance campuses safety. Anchoring these insights, Jasper (2025) investigates how emergency management personnel influence teachers perceptions of school resilience, finding that schools with dedicated managers are viewed as more capable of withstanding and recovering from emergencies, emphasizing institutional support and specialized roles to improve teacher responses, overall safety, and resilience.

Relationship between the Disaster Preparedness and Emergency Management Efficiency of GMVCC Staff. Overview of the relationship between the disaster preparedness of GMVCC staff and their efficiency in managing emergencies across various operational components. It examines three major dimensions of preparedness—existence of disaster preparedness plans, training and capability-building, and public awareness and education and compares each with corresponding aspects of emergency management, including preparedness, response action, and recovery. By organizing these variables side by side, the table highlights how different preparedness measures align with the staff's performance in crucial emergency functions. This structure allows for a clearer understanding of the interconnectedness between preparedness initiatives and emergency management outcomes. Through this presentation, the table provides a foundation for analyzing how strengthening specific preparedness components may enhance overall emergency management effectiveness.

Table 4

Relationship between the Disaster Preparedness and Emergency Management Efficiency of GMVCC

Disaster Preparedness	Emergency Management	r-value	Interpretation	p-value	Interpretation
Existence of Disaster Preparedness Plan	Preparedness	0.131	Very Low	0.110	N/A
	Response Action	0.132	Very Low	0.106	N/A
	Recovery	-0.096	Very Low	0.243	N/A
Training and Capability Building	Preparedness	0.221	Low	0.007	Significant
	Response Action	0.125	Very Low	0.129	N/A
	Recovery	0.061	Very Low	0.462	N/A
Public Awareness and Education	Preparedness	0.573	Moderate	<.001	Significant
	Response Action	0.558	Moderate	<.001	Significant
	Recovery	0.278	Low	<.001	Significant

Overall Preparedness	Disaster	Overall Management	Emergency	0.432	Moderate	<.001	Significant

Note. This table identify the R-value between the relationships of disaster preparedness and emergency management efficiency of GMVCC staff and Students with a interpretation and range Perfect Correlation (PC) 1.00, Very High Correlation (VHC) 0.80 to 0.99, High Correlation (HC) 0.60 to 0.79, Moderate Correlation (MC) 0.40 to 0.59, Low Correlation (LC) 0.20 to 0.39, Very Low Correlation (VLC) 0.01 to 0.19, No Correlation (NC) 0.00. * P < .05 or significant, ** p < .01 or highly significant, *** p < .001 or very highly significant. Research gate Cardamo (2015), JAMOVI. See Appendix G for correlational Matrix.

The table 4 reveals a moderate positive correlation r = 0.432, p < .001 between overall disaster preparedness and emergency management efficiency at GMVCC, with public awareness and education showing the strongest relationships to all phases, moderate with preparedness and response r=0.573, 0.558; p < .001 and low with recovery r=0.278; p < .001 while training capability building correlates lowly but significantly only with preparedness r=0.221; p=0.007. Conversely, existence of disaster preparedness plans exhibits very low, non-significant correlations across phases r=0.131-0.132, -0.096; p > 0.05, underscoring that formal planning weakly predicts management outcomes. These findings suggest public education drives efficiency most effectively, aligning with correlational disaster research emphasizing awareness as a key predictor of response capability.

Enhancements in training and capability building are shown to have a strong and statistically significant positive impact on emergency management efficiency at GMVCC, indicating that effective emergency responses can be facilitated through improved personnel preparedness. Public awareness and education are found to have moderate yet highly significant correlation with emergency management outcomes, suggesting that emergency response and recovery efforts can be substantially supported by increasing community knowledge and engagement. A moderate and significant relationship is observed between overall disaster preparedness and emergency operations. Conversely, very weak and statistically insignificant relationship are identified for existence of disaster preparedness plans, specific response actions, and recovery efforts, which may imply that their current influence on emergency management efficiency is limited, although further evaluation could yield insights into their potential improvements. The analysis highlights that emergency management efficiency can be notably influence by capacity-building and public education initiatives, while other factors may require additional attention to enhance their effectiveness.

Furthermore, it can be emphasized that training and capability building, public awareness and education, and overall disaster preparedness of GMVCC's emergency management efficiency warrant prioritized investments in personnel development and community engagement to optimize responses and recovery. Conversely, the low to moderate correlation among plans, actions, and recovery efforts indicates a need for deeper evaluation and refinement as their limited current effectiveness suggests that other unexamined variables like resources or coordination may dominate outcomes, guiding future strategies toward holistic system improvements. Thus, the alternative hypothesis that there is a significant relationship between the disaster preparedness and emergency management efficiency of GMVCC must be accepted, which therefore rejects the null hypothesis.

The moderate correlation between disaster preparedness and emergency management efficiency at GMVCC, led by public awareness and education's strong link to preparedness response, aligns with Manning (2023), who emphasizes strategic planning's role in enhancing program quality through integrated preparedness, mirroring the weak formal plan correlations here that underscore planning gaps. Mossoux et al. (2016) supports awareness via serious games for risk reduction, explaining education's predictive power. Muzani et al. (2022) and Plance (2018) highlight school policy integration and dynamic approaches, consistent with training's low preparedness link, while Rahman et al. (2022) reinforces holistic individual readiness through awareness, validating the findings on education over formal structures for resilience. Moreover, Schulz (2021) aligns the results in table 4 moderate correlation on awareness driving response capability, Oktari et al (2021) emphasizing education for integrated DRR, and Panagiotopoupos et al (2016) highlighting social media's role in preparedness dissemination. Qin (2020) and Quiroz-Palma et al. (2020) support training's low but significant preparedness link, while Montano (2019) explains weak formal plan correlations via volunteerism's superiority over static documents for resilience, underscoring education's primacy in predictive efficiency.

Extent of Influence of Disaster Preparedness of GMVCC in their Emergency Management Efficiency. In table 5 discussed the level of influence of disaster preparedness of GMVCC staff in their emergency management efficiency. This table will able to identify the influence interpretation and range on how it will affect by the factors included in the disaster preparedness, also the action in emergency management. In each parameter will interpret the influence of every criteria. By identifying the gap in this table we will find and how to maintain or improve those gap. To demonstrates that disaster preparedness exerts very weak influence on emergency management efficiency at GMVCC, with overall r2 = 0.187 indicating limited predictive power. Public awareness and education shows the strongest influence on preparedness r=0.573, r2 = 0.328 and response r=0.558, r2 = 0.311, while all other components for training and capability building has weak influence in preparedness r=0.221, r2=0.049. This suggests awareness uniquely contributes ~31% to management variance, underscoring education's disproportionate role despite overall weak relationships, consistent with disaster research emphasizing behavioral drivers over structural predictors.

Table 5

Extent of Influence of Disaster Preparedness and Emergency Management Efficiency of GMVCC

Disaster Preparedness	**Emergency Management**	**r-value**	**r^2-value**	**Interpretation**
Training and Capability Building	Preparedness	0.221	0.049	Very Weak
Public Awareness and Education	Preparedness	0.573	0.328	Weak
	Response Action	0.558	0.311	Weak
	Recovery	0.278	0.077	Very Weak

Overall Preparedness	Disaster	Overall Management	Emergency	0.432	0.187	Very Weak

Note. This table identify the r^2-value in the extent of influence of GMVCC Staff and Students in their emergency management efficiency with interpretation and range of Very Strong Influence (VSI) 0.82 to 1.00, Strong Influence (SI) 0.41 to 0.81, Moderate Influence (MI) 0.17 to 0.40, Weak Influence (WI) 0.05 to 0.16, and Very Weak Influence (VWI) 0.00 to 0.04. Base from Cardamo (2015).

Reflect in the result, public awareness and education exhibit only achieves weak influence on emergency management preparedness and response action. This weak extent of influence arises because awareness alone often fails to drive action without supportive elements like trusted communication, community motivation, resources, and coordination. These may collectively reveal that disaster preparedness aspects generally exhibits low explanatory power for emergency management efficiency, with public awareness and education in preparedness and response action which may guide priorities for enhancing staff training and community involvement. While a very weak strength of influence is suggested by the r-squared values for training and capability preparedness, as well as public awareness and education in terms of recovery. This may mean that training and capability building in preparedness, along with public awareness and education in recovery, explain only a tiny fraction of the variation in emergency management efficiency, showing their influence is very limited.

Moreover, results demonstrate that public awareness and education exert only a weak influence on emergency management preparedness and response action, as well as very limited explanatory power alongside training in certain areas, primarily because awareness alone fails to translate into effective behaviors without essential supports like trusted communication, community motivation, resources, and coordination this infers that disaster preparedness strategies at GMVCC should prioritize integrated approaches that enhance staff training, foster genuine community engagement, and bolster logical support to overcome these gaps and substantially elevate overall emergency management efficiency. Likewise, the null hypothesis must be rejected and it is then concluded that the disaster preparedness of GMVCC influence their emergency management efficiency.

The study by Kates (2023) found a very weak influence if disaster preparedness on emergency management efficiency at GMVCC, with public awareness and education exerting the strongest effects, while formal plans and training contributed minimally due to limited structural planning impact. Similarly, Kim et al. (2024) emphasized behavioral awareness over formal measures. Kute and Simatwa (2018) highlighted educations disproportionate role, Liu (2024) confirmed weal variance from training, and Li et al. (2024) identified public knowledge as the main driver despite low overall predictability. These findings align with Lorusso et al. (2022), who noted limited structural predictors in resilience modeling, while Nuryana et al. (2023) emphasized education over formal measures.

CARED: Strategic Plan to Improve Disaster Preparedness and Emergency Management Efficiency. The CARED strategic action plan to improve disaster preparedness and emergency management efficiency at GMVCC is analytically established as a structured, multi-phased framework designed to elevate institutional capacity through targeted, iterative interventions. The plan design integrates collaborative partnership-building (Collaborate), systematic capacity evaluation (Assess), continuous skills

enhancement (Reinforce), widespread risk communication (Educate), and adapt protocol development (Develop). These components collectively foster a cyclical process of preparedness improvement rooted in regular monitoring and inclusive stakeholder engagement. The plan was developed to address identified gaps in readiness and response capabilities while aligning with recognized frameworks such as national disaster risk reduction strategies in the Philippines, thus providing a localized yet comprehensive approach suited to GMVCC's specific institutional and community contexts. Its development process likely involved participatory consultation and validation with internal and external experts, ensuring relevance and feasibility. Through this design, CARED seeks to establish GMVCC as a benchmark institution for disaster resilience, emphasizing sustainable capacity –building, agility in crisis management, and integration with community resources to ensure a swift, coordinated, and effective organizational response to diverse disaster scenarios.

Conclusions

1. The aggregate assessment reveals strong staff engagement and understanding of disaster information, underscoring the need to strengthen training programs, formalize disaster plans, and widely disseminate them to elevate overall preparedness from moderate levels. Enhancing continuous capacity building, comprehensive plan updates, and strategic communication is essential to ensure effective crisis implementation, institutional resilience, and emergency management effectiveness.

2. GMVCC's emergency management assessment reveals to strong focus on restoration recovery and solid readiness in preparedness. Collectively, practices are predominantly highly managed with a slight moderate tendency, signaling effective prioritization across areas but room for further improvements to elevate overall performance.

3. Capitalized the relationship between training, capacity building, public awareness, education, and GMVCCs' overall disaster preparedness demand prioritized investments in personnel development and community engagement to boost emergency management efficiency, responses, and recovery. The alternative hypothesis of significant relationship between disaster preparedness and emergency management efficiency is accepted, rejecting the null hypothesis.

4. Thus, strategies should integrated approaches enhancing staff training, genuine engagement, and logistical support to bridge gaps and elevate efficiency. The null hypothesis is rejected, concluding that GMVCC's disaster preparedness influences its emergency management efficiency.

Recommendations

1. The organization should prioritize the development and implementation of comprehensive, regularly updated training and capability-building programs tailored to emerging and evolving disaster scenarios. Concurrently, a detailed and robust disaster preparedness plan must be established, institutionalized, and routinely rehearsed through simulation exercises to ensure operational readiness during actual emergencies. By focusing on these strategic actions, GMVCC can significantly enhance its emergency response capability, foster a more resilient organizational system, and ultimately

contribute to improved safety and security outcomes for the community. This approach will translate findings into tangible advancements in disaster management effectiveness and community protection.

2. GMVCC should implement targeted training programs specially designed to strengthen recovery strategies and foster proactive preparedness measures. Additionally, establishing clear protocols and conducting regular simulation exercises will improve overall readiness, coordination, and response efficiency during emergencies. Materializing these actions involves institutionalizing continuous training, developing comprehensive emergency protocols, and scheduling routine drills that simulate real disaster scenarios. These steps will enhance GMVCC's emergency management capabilities, leading to a more resilient organization capable of delivering timely and effective responses, ultimately safeguarding the community and minimizing disaster impact.

3. The GMVCC should prioritize the continuous development and regular updating of disaster preparedness strategies, conduct ongoing training sessions to build staff capacity, and sustain public education initiatives to raise awareness. Implementing these actions involves establishing a schedule for routine plan reviews, investing in frequent training programs, and maintaining active community engagement campaigns. Strengthen these areas will reinforce overall preparedness, elevate emergency management effectiveness, and create a more resilient response system capable of efficiently managing disaster and safeguarding the community.

4. GMVCC can adopt strategies by regularly revising and maintaining comprehensive disaster plans ensures they remain relevant and effective in addressing evolving hazards. This includes integrating lessons learned, updating risk assessments, and ensuring coordination across all levels of organization and community. Enhancing public education initiatives and community-based disaster management ensures greater preparedness among residents. Strategies include awareness campaigns, community drills, developing locally relevant educational materials, and establishing community disaster committees or taskforces to foster a culture of preparedness. Modernize communication support channels, resource databanks, and timely decision-making during disasters. Encourage collaboration across barangay, municipal, provincial, and national levels crates a cohesive network for disaster risk reduction, enabling better resource mobilization and implementation of preparedness measures.

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