

Navigating Challenges and Addressing Complexities: Lessons from the 565th Engineer Battalion Disaster Response Operations

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ABSTRACT

Disaster is defined as an unexpected natural or man-made catastrophe of substantial extent causing significant physical damage or destruction, loss of life or sometimes permanent change to the natural environment. Each disaster is unique in that each affected region of the world has different social, economic, and health backgrounds. While disaster response operations are crucial in ensuring that immediate help will be given to all affected communities provided usually by the uniformed personnel, specifically in the disaster response.

This study was focused on the 565th Engineer Battalion, 51st Engineer Brigade of the Philippine Army. It systematically described their experiences, the strategies utilized in a disaster response with an objective to allow a reflective improvement in the future disaster response operations. The study employed descriptive research design highlighting the experiences and lessons from the disaster response operations of the 565th ECB. A Qualitative research method was utilized through KII, FGD, and documentary analysis.

Key findings of the study underscored the critical importance of preparedness, collaboration, adaptability, and community engagement in mitigating the impact of disasters and building resilience, were the focal result of the shared experiences of the 565th Engineer disaster response team during Disaster response activity that greatly had a devastating impact in Camarines Sur from 2006 to 2020.

Key Words: Disaster Response, Disaster Risk Reduction, Preparedness, Collaboration, Adaptability and Community engagement.

INTRODUCTION

The Philippines by virtue of its geographic circumstances is highly prone to disasters caused by natural hazards, such as earthquakes, volcanic eruptions, tropical cyclones and floods; making it as one of the most disaster-prone countries in the world, contributing to the countries increasing poverty rate and disaster vulnerability. Data showed that at the household level, poverty is the single most important factor determining vulnerability (Asia Pacific, 2008). Frequent disaster hinders the Philippine Government's efforts to reduce the incidence of poverty and reduce the number of people and assets vulnerable to these hazards, exacerbated by the rapid urbanization, environmental degradation and the increasing risk of environmental disasters, the Philippine becomes so vulnerable to these disasters.

From 2009 there had been a drastic increase all over the world. Ondoy (international name Ketsana) hit the Philippines on September 26, 2009, causing widespread flooding and considered as one most devastating typhoon in modern history wherein 73 dead and more than 300,000 people left homeless. It appears global climate change is dealing island nations some of the hardest blows; disaster made most of us realize that the threat of climate change is real and the impact is indeed great. Many scientists and experts in the world predict additional calamities as the rise in average ocean levels from global warming and the effects of iceberg and glacier meltdown continue to grow. Unfortunately, the coastal areas of the world and island nations such as the Philippines are once again most at risk.

The province of Camarines Sur, located in the Bicol Region in the Philippines, is one of the highly vulnerable provinces to a variety of natural hazards, including tropical cyclones, floods, landslides, and volcanic eruptions. Its geographical location exposes it to frequent hydrometeorological hazards, which leads to recurrent disasters.

With the disaster risk not far, the challenges to address a potential multi-factorial and sectoral approach in disaster remains to be a challenge.

The 565th Engineer (*Bicol Builders*) Battalion of the Philippine Army, with its commitment to service not just in the peace keeping of the area but also in disaster response operations within Camarines Sur. The battalion currently located within the province is composed widely of highly trained and dedicated personnel. It is tasked with providing essential engineering support and humanitarian assistance during times of crisis; including during disaster response. Although highly trained and experienced, the battalion has encountered numerous challenges and complexities in disaster response operations, ranging from resource constraints and logistical limitations to security risks and coordination difficulties. However, in spite of the challenges it faced, the 565th ECB has demonstrated resilience, adaptability, and professionalism in its response efforts, employing innovative strategies and collaborative approaches to address the evolving needs of disaster-affected populations. Through its proactive and multidisciplinary approach, the battalion attempts to enhance preparedness, resilience, and community empowerment in disaster-prone areas within Camarines Sur.

Objective of the Study

The objective of the study is to scientifically examine the experiences, challenges, successes, and strategies of the 565th Engineer Bicol Builders Battalion (565ECB) of the Philippine Army in responding to past disasters in the province of Camarines Sur. Further, the study aimed to extract key insights that can reformulate future disaster preparedness, response, and recovery efforts, that would further address complexities for improved preparedness and resilience.

METHODOLOGY

The study employed a descriptive research design focusing on a case study approach. The case study design is appropriate as it is meaningfully describing the experience, practices, and strategies utilized by the 565th ECB as part of their disaster response duty to areas within the Province of Camarines Sur. For this study it utilized the Key informant interviews (KII), Focused group discussions (FGD), and secondary document analysis to gain insights on the operations of the ECB response team. The data gathered were analyzed using content and thematic analysis and was presented through themes discussing the disaster context, disaster preparedness, response, recovery, and the lessons learned.

A total of 40 Key informants were interviewed, after which the transcription of their interview was validated through the FGD method. Similar themes and context were clustered and their implications relative of the study on hand was given.

RESULTS AND DISCUSSION

After KII and FGD interview were transcribed, clustered and classified, thematic areas were now identified and they were the following; (a) the disaster context, (b) army operation, (c) disaster preparedness, (d) response, and (e) lessons learned by the 565th ECB response team during their disaster operations.

Majority of the respondents are stakeholders and prime movers in Disaster Risk Management, as distributed according to the SRR Operation Manual. Table 1 depicts the distribution of the key informant and the description of their roles along disaster response.

Table 1: Profile Of The Key Informants (N= 40)

	Number of Key Informant	Key Role in Disaster Response
LGU	35	Taking lead “frontline” in DRRM; primary Point of Contact at local level

PDRMO	5	Key leader in in local DRRM efforts
FRIENDLY Forces DRO (AFP, PNP, BFP)	5	Provides manpower, logistical support and security during DRO
Total	40	

Table 2 depicts the summary of findings based from the key informant’s responses; the responses was arranged thematically and clustered per respondents’ response during the focus group discussion.

Preparedness, Response and Recovery

Both LGU and PDRMO adheres with their mandated responsibilities and duties under Republic Act 10121. For the friendly forces, they stated that the mobilization of personnel equipment and resources to respond to the disaster-affected areas as soon as the event occurs or as soon as access is feasible is very important. They conduct Rapid Damage Assessments and Needs Analysis (RDANA) in the affected communities and contribute to life-saving efforts. The provision of transportation and augmentation of personnel assistance in the distribution of emergency relief supplies are their primary duty during the disaster response and recovery phase. These actions are ensured to be executed with utmost important. The two units ensured equipment among others are prepared even before hazards strike.

Lessons learned

All key informant agreed that *“Effective coordination and collaboration among various agencies, organizations, and stakeholders involved in disaster response efforts are essential for success.”* While logistical constraints are the lessons learned by both the PDRMO and the LGU personnel, in all three (3) cluster of key informants’, coordination and collaboration has come up, which means that in any phase of disaster response, the coordination and collaboration is a vital procedure.

Key Challenges in all DRRM Operations

Majority of the key informant expressed that *“Disrupted communication networks, power outages, and limited access to reliable communication channels hinder coordination, information sharing, and decision-making among response teams and stakeholders.”* Both PDRMO and LGU expressed that the limited resources remain to be a challenge to them. While for the friendly forces, the coordination when there is an overwhelming number of populations affected is their top challenge and their safety and security *Challenges such as jurisdictional disputes, conflicting priorities, and communication barriers may impede seamless coordination and hinder the delivery of timely and integrated assistance.”*

Table 2. Thematic Analysis

THEME FROM KEY INFORMANTS	KEY INFORMANT RESPONSE		
	PDRMO	LGU	FRIENDLY FORCES of Disaster Operation
Preparedness, Response & Recovery	As mandated by RA 10121	As mandated by RA 10121	Mobilization of its personnel, equipment, and resources to respond to the disaster-affected areas as soon as the event occurs or as soon as access is feasible. Conducts RDANA to affected communities and contribute to life-saving efforts.

			Provision of transportation and augmentation of personnel assistance in the distribution of emergency relief supplies
<p>Lessons Learned</p> <p><i>“Effective coordination and collaboration among various agencies, organizations, and stakeholders involved in disaster response efforts are essential for success”</i></p>	<p>Logistical Constraints</p> <p>Coordination And Collaboration</p>	<p>Logistical Constraints</p> <p>Coordination And Collaboration</p>	<p>Coordination And Collaboration</p>
<p>Key Challenges in all DRRM Operations</p> <p><i>“Disrupted communication networks, power outages, and limited access to reliable communication channels hinder coordination, information sharing, and decision-making among response teams and stakeholders.”</i></p>	<p><i>Limited Resources</i></p> <p><i>“Resource limitations, including shortages of heavy equipment, construction materials, and specialized tools needed for infrastructure repair and reconstruction”</i></p> <p><i>Communication Breakdowns</i></p>	<p><i>Limited Resources</i></p> <p><i>Communication Breakdowns</i></p>	<p><i>Coordination when there is an over whelming number of affected population</i></p> <p><i>“Challenges such as jurisdictional disputes, conflicting priorities, and communication barriers may impede seamless coordination and hinder the delivery of timely and integrated assistance.”</i></p> <p><i>Communication Breakdowns</i></p> <p><i>Safety And Security Risk</i></p>
<p>Best Practices Established</p>	<p>The aim for long-Term Resilience and Recovery</p> <p><i>Help must be linked to initiative. Protracted relief could breed mendicancy, stunt local initiative and suppress native creativity</i></p>	<p>Community Engagement and Cultural Sensitivity</p> <p><i>“Building trust, understanding local customs, and engaging community members in decision-making processes are critical for effective disaster response”</i></p>	<p>For 565ECB, the swift and rapid deployment ensures that the battalion can provide immediate assistance and support;</p> <p>conducts RDANA to evaluate the extent of damage to infrastructure, homes, and critical</p> <p>Emergency repairs are prioritized to ensure that critical lifelines are restored as quickly as possible, minimizing disruptions to essential services.</p>

CONCLUSION

Based on result of the study, the following conclusions are drawn:

Understanding that disaster is borderless, and is trans-bounded remains to be a challenge to many countries, if not all. The need for a disaster resilient province has drastically increased overtime and having an institutional policies and practice is essential to overcome destabilizing events.

Disaster response teams should underscore the critical importance of preparedness, collaboration, adaptability, and community engagement in mitigating the impact of disasters and building resilience.

An integrated and comprehensive approach in disaster risk reduction and institutionalization of vital key offices/agencies that is developed for the empowerment of its stakeholders is important. This can be attained through proactive planning, interagency coordination, investment in training and technology, and a commitment to community empowerment, the unit has demonstrated its ability to navigate the complexities of disaster response and contribute to the resilience of the province.

In times of disaster, the principle of “Demand driven not donors driven” must remain. Disaster Risk Reduction and Management Plans must be considered basic input in the Regional Development Master Plan. Disaster Recovery should be pursued in the context of development strategy and geared towards building back better.

RECOMMENDATION

Based from the findings and conclusion, it is believed that gaps are still inevitable in the disaster response and that crucial points need to be address to ensure holistic, both contextual and operational must be addressed in disaster response particularly in the area of the Philippine Army. The following activities are hereby recommended to enhance and strengthen disaster preparedness and response operations:

Cross-Training and Skill Development: The 565th Engineer (Bicol Builders) Battalion emphasizes cross-training and skill development among its personnel. Army Engineers must be trained in a wide range of tasks, including infrastructure repair, search and rescue operations, water purification, and emergency shelter construction. This versatility enhances the battalion's flexibility and readiness to address diverse challenges during disaster response.

Investment in Technology and Innovation: Continue to invest in advanced technologies such as GIS mapping, drones, and early warning systems to enhance situational awareness, streamline decision-making processes, and improve the overall effectiveness of disaster response operations.

Enhanced Interagency Collaboration: Strengthening partnerships with local government units, humanitarian organizations, and community groups is essential for optimizing resource allocation, sharing information, and coordinating response efforts effectively.

Community-Centered Approach: Empowering local communities through capacity-building initiatives, participatory decision-making processes, and awareness campaigns fosters a culture of resilience and enhances the ability of communities to prepare for, respond to, and recover from disasters.

Long-Term Resilience Planning: Integrating resilience-building measures into disaster recovery and reconstruction efforts, including sustainable infrastructure practices, ecosystem restoration, and land-use planning, helps build resilience to future disasters and minimize vulnerabilities. Which shall be strengthen by establishing mechanisms for regular review, evaluation, and learning from past experiences ensures that this unit can adapt its strategies and approaches based on lessons learned, emerging challenges, and changing circumstances.

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