

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Disaster management is undeniably one of the most complicated facets of governance. National issues such as disasters require a tumultuous effort among government agencies and stakeholders to effectively combine resources and successfully address the needs of the affected communities. Recently, collaborative undertakings with multiple organizations emphasizing the importance of collaboration across organizational and sectoral boundaries in carrying out public purposes (Agranoff and McGuire, 2003) are becoming a popular innovative strategy. This mechanism is often referred to as cross-sectoral collaboration (Bryson et al., 2006), collaborative governance (Ansell and Gash, 2008), or network governance (Provan and Kenis, 2008) among others.

Significantly, disaster management entails the integration of various efforts and initiatives from the community. Citizen participation in the decision making and implementation process are necessary towards good governance. Hence, capitalizing on the norms and belief of the people can be an effective way of empowering the community to engage in disaster governance. For instance, in Al Qur an, As Shaf (4), Allah mentioned

إِنَّ اللَّهَ يُحِبُّ الَّذِينَ يُقَاتِلُونَ فِي سَبِيلِهِ صَفًّا كَانَتْهُمْ بُنْيَانٌ مَّرْصُوصٌ

. Indeed, Allah loves those who fight in His cause in a row as though they are a [single] structure joined firmly.

The preceding verse in Al Qur a discusses Arabic terms *bunyanun marsus* (*Bunyan* – construction, and *marsus* - lead) which pertains to the unified and strong construction of the society against

those who promise to help the community but failed to deliver. Thus, God Almighty is saying that Divine Wrath is in store for those who did not act upon their words but those who act upon their words and loved by Him **بُنْيَانٌ مَّرْصُوصٌ**.

Thus, everyone must act together especially in times of disasters. *Bunyanun marsus*, as a term, may also refer to collaborative governance. Ansell & Gash (2008) explained that collaborative governance is “the process of establishing, steering, facilitating, operating and monitoring cross-sectoral organizational arrangements to address public policy problems that cannot be easily addressed by a single organization as the public sector alone.” Hence, collaborative governance is an ideal approach to addressing social concerns such as disasters.

Geographically, the Philippines is highly susceptible to at least 20 typhoons every year and with the characteristics of the populated communities, these typhoons may likely bring disasters in the archipelago. Among the various hazards faced by the Philippines, the most frequent and the catastrophic since 1990 – 2014 are typhoons (UNISDR). On the data posted by the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA) (see Table 1.1), the Philippines experiences three types of tropical cyclones annually: tropical depression tropical storm and typhoons. Figure 1.1 shows no clear pattern in the frequency, yet it can be observed that there is a trend in every five-year period since 1990. PAGASA recorded that the Philippines has been hit by 387 tropical cyclones since 1990 until 2010 or at least 38 cyclones annually since 1990. Subsequently, in 2010, the Philippine government enacted an overarching policy towards resilience: The Republic Act 10121 or the Philippine law on Disaster Risk Reduction and Management (DRRM). The Republic Act 10121 provided authority to the government agencies and its partners to develop the necessary capacities in order for the Filipino

communities to withstand the impacts of disasters. Given the mandates and protocols established in the Philippine law on DRRM in 2010, several challenges related to accessibility, leadership, and availability of resources occur in the actual response operations particularly during Typhoons Washi in 2011, Bopha in 2012 and Haiyan in 2013 (Enriquez 2013 and Rasquinho et al. 2013).

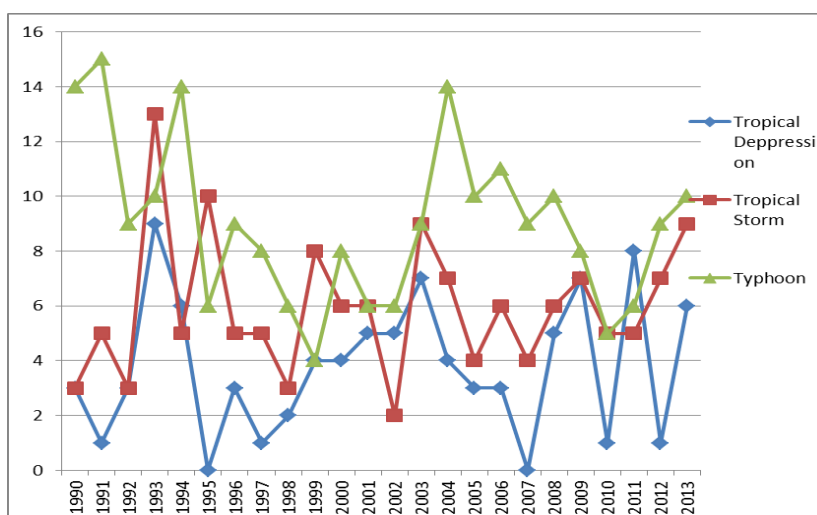


Figure 1.1 Tropical Cyclone Frequency in the Philippines, 1990-2013
Source: PAGASA

Rasquinho et al., (2013) found that the major problems during Typhoon Washi were the unreliable communication systems and inefficient equipment and capacities for immediate response. The power outage in the region and the offices in the regional level which was expected to facilitate the entire response operations were affected by flood themselves, thus it undermined their capacity to address the demand for operations (Rasquinho et al., 2013). Similarly, the impacts of the power outage and the lack of access to the affected areas were the main challenges after Typhoon Bopha left the country in 2012. Access Aid International (2013) reported that the entire disaster response operations were delayed because the roads and

bridges were impassable and water supply was disrupted in many areas. On the same vein, there was a lack of clarity on who will lead the disaster response operations after Typhoon Haiyan in 2013. Enriquez (2013) explained that the coordination of tasks was unclear and there were “shortages of tents and satellite phones in the first few days after the disaster, which the NDRRMC sourced from other agencies such as Public Works and Highways and the Philippine Navy.”

Table 1.1 List of Devastating Typhoons in the Philippines 2010-2015

Dates	Duration in days	Name	Damages in Php (billions)	Deaths	Missing
Dec 2015	8	Nonoy / Melor	6.46	42	4
Oct. 2015	8	Lando / Koppu	11	48	83
Dec 2014	3	Seniang / Jangmi	1.27	66	6
Dec 2014	7	Ruby / Hagupit	3.35	18	0
Sept 2014	4	Mario/Fung-wong	3.4	18	4
Aug 2014	5	Jose / Halong	1.62	2	0
July 2014	4	Glenda/Rammasun	38.6	106	6
Nov 2013	3	Yolanda / Haiyan	89.6	6,300	1,081
Oct 2013	5	Santi / Nari	3.29	15	5
Aug 2013	4	Labuyo / Utor	1.42	11	3
Dec 2012	7	Pablo / Bopha	42.2	1,901	844
Dec 2011	4	Sendong / Washi	2.07	2,546	181
Sept 2011	4	Pedring / Nesat	15.6	85	0

The impacts of disasters which trigger coordination and cooperation among agencies led to intergovernmental and inter-organizational relations which are complex interactions among the multiple levels of government. Coordinated efforts between government and non-government organizations during a disaster or crisis management demands several capacities among responders and public managers because "organizing cooperative efforts is almost as difficult as the problems they are created to address" (Kapucu, Arslan, & Collins, 2010). Primarily, collaboration and trust among government agencies at all levels are required towards an effective

inter-organizational cooperation during emergency management (Kapucu, 2005). However, in order to build trust, the agencies involved should be willing to trust their partner agencies, after all, common cause and intentions are inadequate towards successful disaster management (Kapucu, Arslan, & Demiroz, 2010). Moreover, the performance of multiagency disaster management will improve when the relevant obstacles such as lack of incentives at institutional, organizational and individual levels, lack of understanding with regard to the overall operational dependencies between the various agencies, organizational norms, and values, among others, are dealt with (Bharosa, Lee, and Janssen, 2010).

The dynamic and sometimes complicated relationship between and among agencies suggests the arduous role of public managers. Sementelli et al., (2007) noted that administrative theories on disaster management emphasize the specific managerial challenges during crisis such as the need for a timely response (Moore, 1956); the necessity to identify issues related to the coordination among personnel, structures and responders (Drabek, 1985); and to determine the limitations of command and control (Voogd, 2004).

Despite the complexities of these inter-organizational relationships, it is noteworthy to understand the dynamics within these partnerships. Theoretically, Bryson, Crosby, and Stone (2006) pioneered the comprehensive approach to cross-sector collaboration with an emphasis on the challenges and constraints in the aspects of collaborative process and structures (configuration and governance). Thomson and Perry (2006), Ansell and Gash (2008), Agranoff (2007), Provan and Kenis (2008), Emerson, Nabatchi, and Balogh (2011) and Koschmann, Kuhn and Pfarrer (2012) empirically explored the variables of collaborative management, network theory as well as the various factors and contingencies that lead to successful collaboration. On the other hand, Kapucu (2015), Kapucu, Arslan and

Demiroz (2010), Kapucu, Arslan and Collins (2010) examined emergency management response scenarios and postulated theories on what constitutes better and effective disaster response.

Earlier studies revealed that cross-sector collaboration in disaster management provides valuable implications. Developing polycentric and multi-layered institutions and structures are ideal governance architectures for improved performance and for building national resilience to local and transboundary multi-hazard risks and disaster but it is not completely adequate for dealing with local field earthquake generated tsunami risks due to problems of fit, adaptability, institutional diversity and norms in Indonesia (Chang Seng, 2010). Moreover, a new network structure for the Indonesian maritime was suggested to improve the coordination and information sharing within the Indonesian maritime network after it was found that the existing structure does not adequately support the information sharing process (Jatmiko and Tandiarrang, 2014). After reviewing the data of previous disasters and comparing the cross-sectoral governance in managing the disasters in Aceh, Merapi and Kelud Volcano, and Way Ela Dam burst, it was revealed that the different types of disasters in Indonesia created different models of cross-sector governance (Nurmandi et al., 2015).

This research is conducted in the Philippines, one of the most vulnerable countries in the world where 52.46% of its population are highly exposed to natural disasters (UN-ESCAP, 2015). Among the 17 administrative regions, the focus is on Region X owing to its susceptibility to typhoons since 2011. The Philippine Atmospheric, Geophysical, and Astronomical Services Administration reported that Typhoons Washi in 2011 and Bopha in 2012 are two of the worst typhoons in the country since 1947 and have mostly affected the Province of Misamis Oriental and the Cities of Iligan and Cagayan de Oro. According to the final report of the NDRRMC, a total of 131,618 families/698,882 persons were affected by the tropical storm

Sendong in 866 barangays of 60 municipalities and nine cities in the 13 provinces of Regions VI, VII, IX, X, XI, CARAGA, and ARMM. However, it was stated that Region X suffered the most which, on the other hand, affirmed that Iligan City along with Cagayan de Oro City experienced enormous infrastructure damage and loss of lives, among others (NDRRMC, 2012).

This research pioneers in exploring the Philippine disaster management in the context of cross-sector collaborative emergency management. The intent of this article is to analyze how the Philippine government manages typhoon-related emergencies by looking into the structure and governance process of the disaster response network. This article analyzes the Philippine DRRM network response operations since the 2011 Typhoon Washi.

1.2 Research Problem

To answer the central question in this research which is “Why does the Philippine disaster risk reduction management system fail to effectively respond during the 2010 Typhoon Washi?” the following specific questions are investigated:

1. To what extent does the structure of the Disaster Risk Reduction and Management (DRRM) Council affect its performance during disaster response?
2. To what extent do the aspects of governance process (initial agreement, leadership, trust, planning and managing conflict) affect the performance of the DRRM Councils in the Philippines?

1.3 Objectives

To fully grasp the reasons behind the perennial challenges faced by the Philippine disaster management during typhoons, this research aims to explore the extent to which the structure and governance processes of the network affects its performance in the context of the Philippine disaster management.

Also, this research aims to shed light on the impacts of the collaborative disaster governance in Region X, the Philippines to the social capital and trust of the community among its members and its local political leaders. In doing so, the output and outcome of the collaborative governance in the context of the disaster management during the 2010 Typhoon Washi are assessed too.

1.4 Purpose of Research

This research aspires to broaden the analysis of disaster collaborative governance. Works of literature on collaborative governance that utilizes network approach alongside with governance framework in understanding the outcome of a collaboration nor the performance of the network, specific in the context of the Philippines is not yet vast. Academic articles suggest the lack of connection between theory and practice in collaborative undertakings among public service delivery. Hence, the findings of this study propose new and basic knowledge of public administration in the context of disaster management.

As this research offers an empirical analysis of what constitutes successful disaster governance in the context of the Philippines. The output can serve as the basis for national and local governments to consider and effect institutional changes appropriate and flexible to the needs of implementing agencies and affected communities. The results can be utilized as a basis for new concepts

and perspectives in disaster governance which are not yet fully explored in the field of public administration.

The social contribution of the research lies on the governance issues of the existing disaster response operations which the local and national government need to address in order to be more effective in responding to the impacts of disasters. This research is significant among disaster management networks in building stronger ties by effectively working together in aligning their efforts towards a better disaster response in the country.

1.5 Limitations of this research

This research is limited in terms of its scope and methodology. First, the research setting only covers the Cities of Iligan and Cagayan de Oro and Province of Misamis Oriental in Region X, Philippines being the most susceptible areas to typhoon according to PAGASA. Second, data were only gathered among the disaster-response related agencies of the disaster management networks. Third, the data gathered and analyzed were only from 2010 until 2017.

With this, future researches may address these limitations and explore a new approach in analyzing the disaster governance of the Philippines.

1.6 Structure of the Dissertation

Figure 1.2 gives an overview of the research process, capturing the main research structure and progressive steps from first defining the research problem, to data analysis and presentation. The diagram in Figure 1.2 is very useful for quickly assessing the material

presented in the study. The study consists of seven chapters following the first chapter. Chapter 2 focuses on the discussion of the key research concepts and frameworks. It presents the conceptual framework used to study the collaborative governance in the Philippine disaster management networks and its impact on performance and social capital. Chapter 3 discusses the research methodology.

The findings and analysis of this research are divided into three chapters. Chapter 4 discusses the experience of Region X Philippines during Typhoon Washi in 2011, followed by the analysis and discussion on the structure of the disaster management network. The implications of the structural characteristics and centrality to the performance of the disaster management at the Regional and Local Government levels are discussed. Chapter 5 presents the findings on the relationships among the variables in the governance process and how such a relationship affects the performance of the disaster management network. Primarily, the relationship between and among initial agreement, leadership, trust, planning, managing conflict, and performance is analyzed where significant findings were derived on how the actual Philippine disaster management operates during post-disaster conditions such as response, rescue, and evacuation. Chapter 6 outlines the social capital in the community in terms of trust and solidarity and institutional support. Particularly, the impacts of collaborative disaster management to the mentioned dimensions of social capital are analyzed and presented.

Lastly, Chapter 7 presents the summary and conclusion of the study. The limitations and recommendations of this study both in terms of theory and practice are provided in the last chapter.

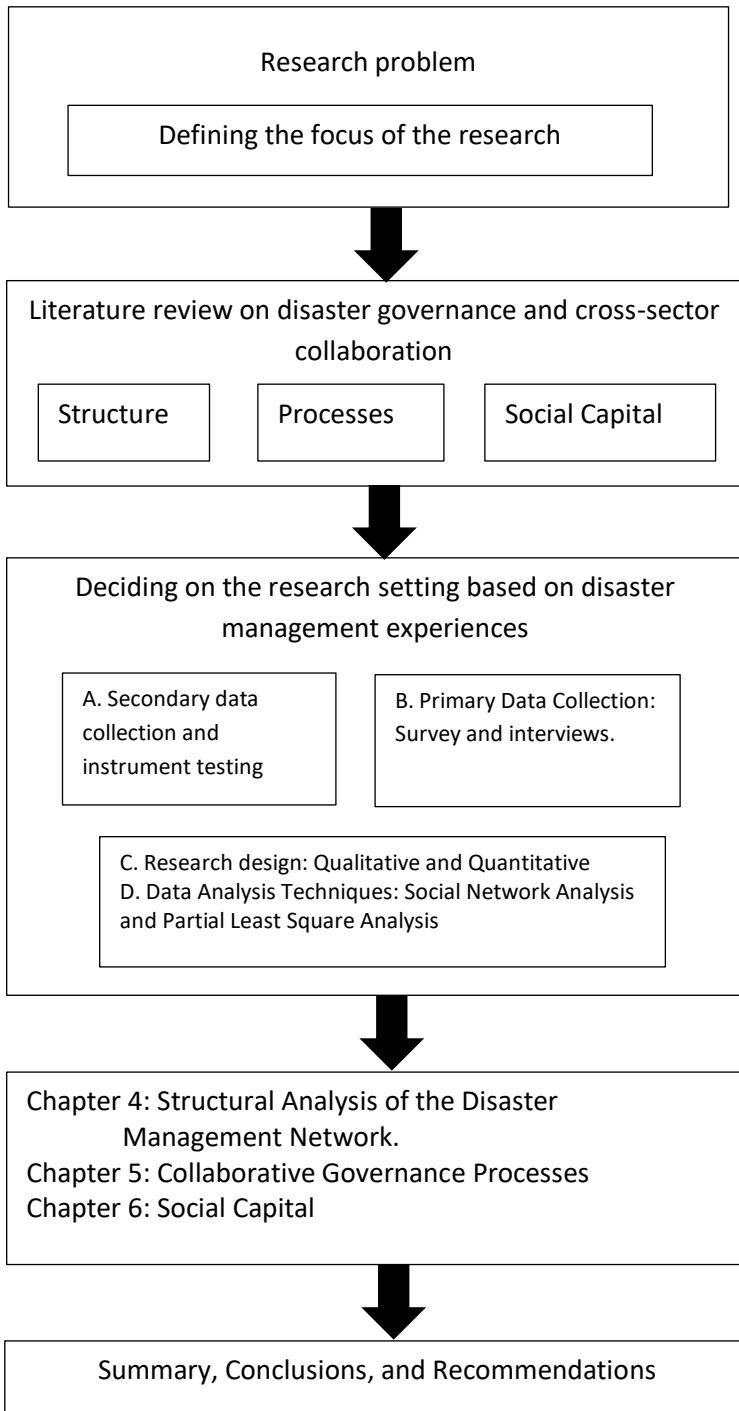


Figure 1.2. Structure of Dissertation

1.7 List of published scientific works

Nurmandi, Achmad and Hazel Jovita (2017) Putting Public Values in Public Procurement Agenda. Global Encyclopedia of Public Administration, Public Policy, and Governance. pp 1-6

Jovita, Hazel and Achmad Nurmandi (2018) Bureaucratic Inertia. Global Encyclopedia of Public Administration, Public Policy, and Governance.

Jovita, Hazel, Achmad Nurmandi, Dyah Mutiarin and Eko Priyo Purnomo (2018). Why does network governance fail in managing post-disaster conditions in the Philippines? *Jambá: Journal of Disaster Risk Studies*.