The Policies, Practices and Politics of Dealing with Disasters

An Analysis of How Disaster Risk Reduction Policies and Actions are Framed in the Philippines

A Research Paper presented by:

Maryanne Jude Mendoza
Philippines

in partial fulfillment of the requirements for obtaining the degree of
MASTERS OF ARTS IN DEVELOPMENT STUDIES

Major:
Governance, Policy, and Political Economy
GPPE

Specialization:
Public Policy and Managment
PPM

Members of the Examining Committee:
Dr. Des Gasper (Supervisor)
Dr. Dubravka Zarkov (Second Reader)

The Hague, The Netherlands
December 2014

Disclaimer:

This document represents part of the author's study programme while at the Institute of Social Studies. The views stated therein are those of the author and not necessarily those of the Institute.

Inquiries:

Postal Address:

Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

Location:

Kortenarkade 12
2518 AX The Hague
The Netherlands

Telephone: +31 70 426 0460

Fax: +31 70 426 0799

Acknowledgements

I am eternally grateful to a lot of people who have helped me get through this learning process. Foremost, I wish to extend my sincerest gratitude to my supervisor, Dr. Des Gasper, whose guidance, encouragement and insights have helped me tread the landscape of frames and discourses. Thank you for generously lending me your books and for introducing me to possible resource persons, particularly, Dr. Hilhorst.

On that note, I would also like to thank Dr. Thea Hilhorst, who has graciously met with me and has opened a line of communication that enabled me to raise questions and clarifications about the ever-changing topic of disasters.

I would also like to convey my appreciation to my second reader, Dr. Dubravka Zarkov. Thank you for your comments on my draft. This has undoubtedly forced me to rethink, recalculate and narrow down the research I wanted to pursue. Truly, I have learned a lot from you.

To Bobby Julian, who has been such a great mentor and friend, nurturing my interest in studying disasters even in my earlier days working in the Senate of the Philippines, and for connecting me with some of my key respondents Yeb Saño of the Climate Change Commission, Cathy Vidar of World Bank, and Babes Supetran of UNDP.

To my respondents, who have generously shared their time despite busy schedules and field visits: Usec. Manny Esguerra, Asec. Mon Liboro, Mina Marasigan, Commissioner Yeb Saño, Cathy Vidar, Anne Orquiza, Mr. Kusakabe, Prof. Mel Luna, Babes Supetran, Agnes Palacio, and Malu Cagay. Your insights have greatly enriched my paper.

To my colleagues from the Office of Senator Guingona, especially, Levin, thank you for making constant visits to the Senate Records and Archive section when I needed copies of transcripts, speeches and press statements.

Lastly, to my family and friends, for always being there, for the overwhelming love and support. We may be in different parts of the world, but your cheers and words of encouragement has been strongly felt.

Contents

List of Maps

List of Figures

List of Tables

List of Acronyms

AIPA	ASEAN Inter-Parliamentary Assembly
ADPC	Asian Disaster Preparedness Center
CEA	Civil Emergency Administration
CRED	Center for Research on the Epidemiology of Disasters
DILG	Department of Interior and Local Government
DND	Department of National Defense
DOST	Department of Science and Technology
DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction and Management
DSWD	Department of Social Welfare and Development
EO	Executive Order
GFDRR	Global Facility for Disaster Reduction and Recovery
HFA	Hyogo Framework for Action
IDNDR	International Decade for Natural Disaster Reduction
ISDR	International Strategy for Disaster Risk
NCDA	National Civil Defense Administration
NCDC	National Civil Defense Council
NDCC	National Disaster Coordinating Council
NDRRMC	National Disaster Risk Reduction and Management Coordinating Council
NEC	National Emergency Commission
NEDA	National Economic and Development Authority
OCD	Office of Civil Defense
OPARR	Office of the Presidential Assistant for Rehabilitation and Recovery
PD	Presidential Decree
PIDS	Philippine Institute for Development Studies
PNRC	Philippine National Red Cross
Project NOAH	Nationwide Operational Assessment of Hazards
RA	Republic Act
UNDP	United Nations Development Programme
UNISDR	United Nations International Strategy for Disaster Risk
UNOCHA	United Nations Office for the Coordination of Humanitarian Assistance

Abstract

This paper utilized frame analysis in trying to understand the politics of disaster governance in the Philippines. It sought to answer this research question, "How far does the framing of DRRM policies and its use influence the politics of disaster governance in the Philippines? I argue that the Philippines despite adhering to a comprehensive national disaster risk reduction and management policy that promotes a proactive stance towards disasters, reverts back to its reactive approach because within the domain of disaster governance, exists two conflicting frames.

To answer the question, a review of national disaster management structures, related laws and policies were revisited with the view that organizational/ institutional structures influence a group of actors' manner of framing policy problems and actions towards it. Therefore, the Philippines' bias towards the hazard frame, is largely due to its disaster management measure being highly associated with a top-down approach that is present in military set-ups. The hazard frame has been the dominant frame in the Philippine disaster management story, however, a conflicting frame, the vulnerability frame, was introduced by the global paradigm shifts prioritizing disaster risk reduction. What are implications if there are two conflicting disaster management frames? This paper explores the policies, practices and politics of dealing with disasters.

Keywords

Disaster, Disaster Management, Disaster Risk Reduction, Disaster Governance, Framing, Hazard Paradigm, Vulnerability Paradigm, Reactive Approach, Proactive Approach, Philippines

Chapter 1
A Land in the Path of Disasters

I've seen it all too often, the morning after the rain clouds had passed, the howling of the wind had died down and the floodwaters slowly making its way back to an already saturated earth. Typhoon Ketsana[1] had just swept through Metro Manila - my city looks overwhelmingly gray and spent. There is a vague familiarity of seeing fellow Filipinos, looking stricken, clutching remaining family members behind their toppled houses, trying to muster enough will to rebuild their homes and lives. Growing up in a country frequented by hydro-meteorological disturbances makes one strangely used to these images. I've seen it all too often, but these are lived experiences by many Filipinos across the country, a land, lying in the path of disasters.

Perhaps a rather simplistic narration of a post-disaster scenario, nevertheless, it cannot be denied that these occurrences are no longer infrequent events. The number of climate-related disasters brought about by natural hazards has been rising in the last few decades (Hilhorst 2013:1), especially, with the mounting and unpredictable threat of climate change[2] (Baas et al. 2008:1; Llosa and Zondrow 2011:1). In the year 2013 alone, the Center for Research on the Epidemiology of Disasters (CRED) have reported that there were a total of 330 recorded rapid-onset natural disasters caused by a range of natural hazards worldwide; claiming the lives of 21,610 people, affecting a total of 96.5 million of the global population and reaching US$118.6 billion worth in economic damages (Guha-Sapir et al. 2014:13). These numbers although high are modest in comparison to the other trends in previous years. In the last three decades, more than 1.2 million people have died due to natural disasters in the Asia Pacific region alone as reported by a study sanctioned by the United Nations (Lee-Brago 2014). However, disasters are not just statistics that gage human and socio-economic losses. "Disasters are a complex mix of natural hazards and human action" (Wisner et al. 2004:5). It cannot be overlooked that when a disaster happens, there are multi-tier relationships between and among multiple actors, and layers of processes that shape and determine how actors react and prepare for it, but most of all, how they are affected by it, which people lose, which people don't, and which people even gain.

This research hopes to shed light on the process of the evolving disaster management policies of a nation in the grips of handling one disaster after another – a country which is in a constant struggle to deal with its vulnerabilities. Ribot (2014:18) explains that there are three points that share in the fundamental cause of the vulnerability and security structure in society, these are: 'policy, policy making and the politics of influence'. I believe that these points plus getting a sense of the institutional structures are key ingredients in gaining perspective on how governance works in the case of disasters. This paper takes the analytical approach that view 'disasters as political exercises' (Feria-Miranda 1994:249 as cited in Bankoff 2003a:83). In the domain of disaster governance, there are multiple actors that constantly interact and affect policies, practices and politics of disaster management.

---

[1] Typhoon Ketsana hit Metro Manila on September 24, 2009, it is considered to be one of the most devastating typhoons to hit the capital, submerging portions of the country in 20 feet (6.1 m) of floodwater.

[2] See discussion on the rise of climate-related disasters based on anthropogenic climate change by Ribot (2014:1-2).

1.1 The Problem

Disasters in layman terms are often seen as an extreme event that is out of the ordinary, something that interrupts normal community living (Quarantelli 1998:2; Ahrens and Rudolph 2006:207; Furedi 2007:482). When disasters strike, it doesn't happen in isolation (Hannigan 2013:1; Tierney 2012:343). This might bring images of headline-grabbing events that occupy the imaginations of peoples, a disturbance that literally sweeps passed and reshapes a community's physical environment, such as the eruption of Mt. Pinatubo in 1991, classified as the second largest volcanic eruption in the 20th century; the Aceh earthquake in 2004 that triggered the South Indian Ocean tsunami; Hurricane Katrina in 2005, considered to be the costliest disaster in the history of the United States of America; or more recently, of Typhoon Haiyan in 2013, considered to be the biggest typhoon to have ever made landfall in the last century. Besides altering the physical topography of a particular location, disasters also have a profound ability in changing a community or even a country's social, political and economic landscape.

Wisner, Blaikie, Cannon and Davis, in the book, *'At Risk'*, points out that "Disasters are a break on economic and human development" (2004:5). Discussions on disasters have always been linked with discussions on development, and debates on how the former affects the latter and vice versa are raised. Mark Pelling (2003:4) underscores that natural disasters have the capacity to hinder development (Hilhorst 2004:54; Schipper and Pelling 2006:19). In addition, Omar Cardona (2004) argues that the absence of development is caused by exposure to vulnerabilities and the UNDP global report entitled *'Reducing Disaster Risk: Challenge to Development'* draws attention to how past development actions pursued and decisions adopted by various actors can inadvertently decide the uneven exposure to disaster risk an individual or community faces (UNDP 2004:9).

UNDP raises an alarming concern that during a time of global economic growth the risk from disaster and its negative effects have increased (UNDP 2004:11). Studies have attributed the increase of disaster incidences due to demographic pressure, rapid urbanization, massive deforestation, etc. (Wisner 2011:2; UNISDR 2002:4). In view of the magnitude of the adverse effects that disasters have in not just any country's present day situation, but also it's development trajectory, disasters, as Comfort et al. highlight, "have become a policy problem of global scope" (Comfort et al. 1999:39).

Today, several authors argue that disaster risk reduction (DRR) cannot be perceived completely separate from discourses on climate change and human development (Schipper and Pelling 2006; Gaillard 2010; Hannigan 2012). Disasters are linked to climate change, because it is believed that the latter exacerbates the former. While discussions on disasters connect with human development, because it is viewed that disaster reduction is seen as sharing core principles with human development, such as addressing vulnerabilities. The intertwining relationship of these discursive discussions have led the central discourse on disaster strategies to progress from managing disasters, which focus on post-disaster relief operations to adaptation and mitigation, then later to addressing vulnerabilities. However, disasters and DRR are highly mobile concepts that continue to evolve, Gaillard and Mercer (2012:94) describes it as follows, "*the field of DRR is a battlefield of knowledge and action*". This, I believe, ultimately influences the framing of policies. The successful discursive justification of government initiatives are crucial, it is needed to mobilize different arms of the

government, allocate and utilize funds, as well as gaining support from other key local and international actors.

Historically, varying actors, ranging from governments, supranational organizations, donors and even community-based emergency response teams have converged whenever a disaster struck. Earlier involvement of multiple actors was usually limited to humanitarian assistance focused on relief and response operations. In the 1990s, after the world bore witness to multiple disasters, the United Nations General Assembly declared it as the International Decade for Natural Disaster Reduction. It became the catalyst for changing the perception of addressing disasters, from managing disasters to disaster reduction (Heijmans 2001:1). In 1994, the Yokohama Message started taking note of the social factors in defining disasters, taking into account vulnerability (Wisner 2003:2). In 2005, the Hyogo Framework for Action elevates the issue of adhering to Disaster Risk Reduction (DRR) practices to a more global arena, highlighting the importance of preparing for disasters in the international, regional, national and local levels. These global frameworks and calls for action have invited even more DRR actors to engage in this discourse.

Although, the Hyogo Framework for Action is non-binding and is voluntary for countries to adhere to, several countries[3] have patterned their national frameworks, policies and the necessary legislation to embody these strategies. Manyena et al. (2013) explains that national legislation has been to an extent shaped in the context of these talks of global disaster paradigms.

> *"The disaster legislations have not been evolving in a vacuum. They have been, to some extent, shaped by shifts in the disaster paradigms, characterized by a constellation of values, assumptions, methods and exemplars"* (Gregory et al., 2011 as cited in Manyena et al. 2013:1787).

In 2010, after a long legislative struggle, Republic Act 10121, the Philippine National Disaster Risk Reduction and Management Act (DRRM Act of 2010) was passed, this effectively changes the whole disaster management framework of the country, from the more than three decade old Presidential Decree enacted during the Presidency of Ferdinand Marcos, upgrading the disaster response and relief operations approach to a more comprehensive preparedness and mitigation-centered approach.

Britton (2006:2) in his article *'Getting the Foundation Right: In Pursuit of Effecting Disaster Legislation for the Philippines'*, makes an important point on the role of setting up the necessary legislation, he says, "How governments deal with risk says a lot about their institutions and political culture". The passing of DRRM Act of 2010 is just the beginning of institutionalizing the paradigm shift to pursuing disaster risk reduction. How does the new law influence the political interests of the key players in the national government?

[3] According to Hyogo Framework for Action (HFA) Midterm Review 2010-2011, the countries that have adopted or updated existed legislation adhering to the tenets of the HFA are: India, Sri Lanka, El Salvador, Saint Lucia, Saint Vincent, Grenadines, Anquilla (UK), Gambia, Indonesia, Egypt, the Philippines, Zambia and Papa New Guinea (UNISDR 2011:22). On a separate study, South Africa was also reported to have enacted a law following the HFA principles (IFRC and UNDP 2014).

1.2 Objective and Research Questions

My refined research question emerged from my work during fieldwork studying disaster discourses, taking note of the general themes that arose from my respondents. This paper attempts to analyze the politics of disaster governance in the Philippines by identifying how the policies and practices of disaster management are framed.

The main research question that guides this paper is:

How far does the framing of DRRM policies and its use influence the politics of disaster governance in the Philippines?

Sub-questions:

1. What is the role of the national government in disaster management in the Philippines?
2. How are the disaster management institutional structures set up in the national level?
3. What were the factors that contributed for the Philippines to change its disaster management paradigm?
4. How are disaster risk reduction and management policies and actions framed by the national government?

1.3 Brief background on the Philippine disaster profile

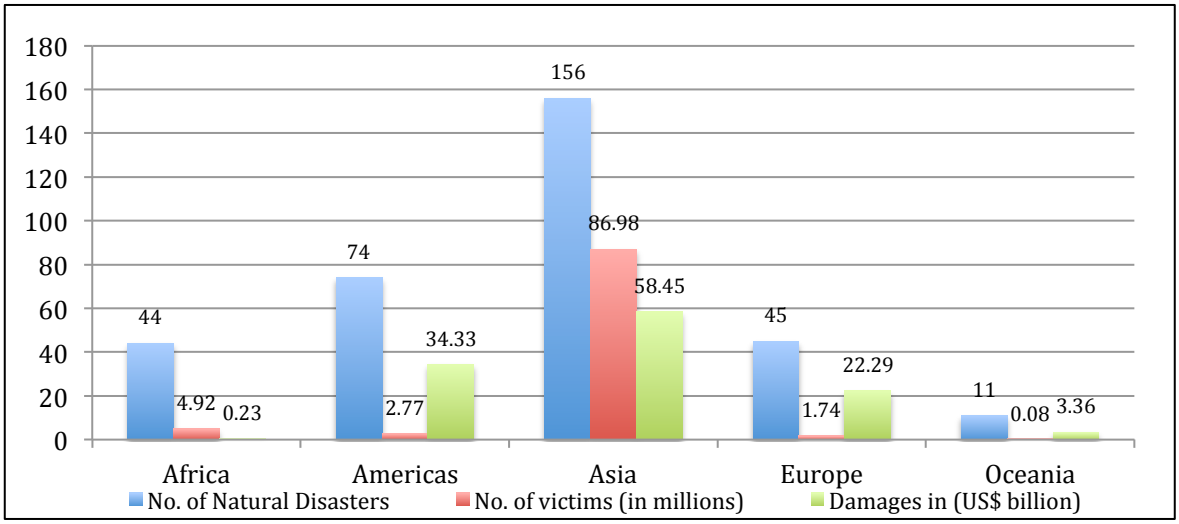
> *"Disasters are a fact of life in the Philippines. A socially and economically vulnerable population combines with one of the world's most hazardous landmasses to make disasters a frequent life experience"* (Bankoff, G. and D. Hilhorst 2009:4).

Uring, Pablo, Ruping, Sendong, Trix, Yoyong, Sisang, Frank, Rosing, Undang and Yolanda (Vila 2014); these are some the Filipino names of typhoons that have made their mark in Philippine history and in the minds of Filipinos, because of their scale, intensity and the total amount of damage they have cost and the lives that they have impacted.

A factor that determines exposure to hazards is geographical location. In the *Annual Disaster Statistical Review 2013*, published by CRED, state that amongst the different regions in the world, Asia was ranked first, as being most frequently hit by natural hazards, with 156 instances (47.3%) out of the total 330 recorded disasters (See table below for a regional summary of the findings). Out of these 156 occurrences in Asia, 112 or 71.79% can be attributed to hydro-meteorological sub-classification of disasters (i.e. extreme weather, floods, cyclone, storm and storm surges) (Guha-Sapir et al. 2014:27). Historically, between 1970 and 1997, Asia and the Pacific Region has consistently ranked high in terms of being highly exposed to disasters, it was recorded that 75% of the world's major natural disasters happened in that region (World Bank and NDCC n.d.). The Annual Disaster Statistical Review 2013 reports that for more than a decade, the Philippines, together with China, the United States, Indonesia and India have comprised the top five countries that have been most visited by natural disasters (Guha-Sapir et al. 2014:1). According to a UNISDR (2002:3) study entitled *'Natural Disaster and Sustainable Development'*, it says that no country is

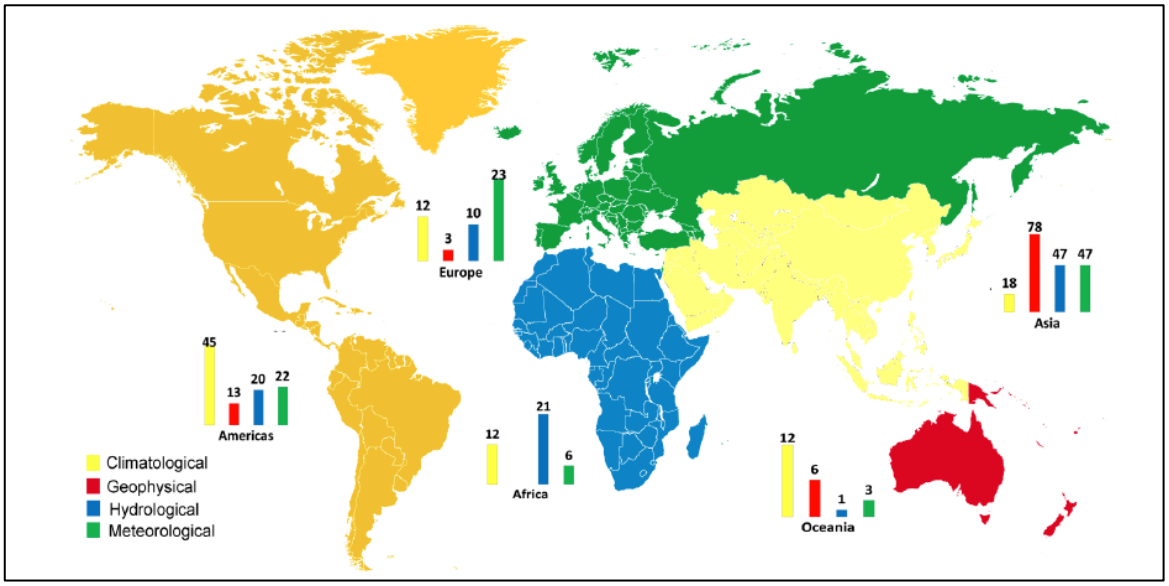
completely free from disasters, however, developing countries have a more difficult task of increasing its capacity in reducing the effects of hazards.

Figure 1. Own table of the regional summary of the total number of disasters, victims and damages for 2013



Source: Annual Disaster Statistical Review 2013 published by CRED

Map 1. A map showing the reported instances of disasters as classified for each disaster sub-group[1] and continent for 2013



Source: Annual Disaster Statistical Review 2013 published by CRED

Due to its geographic coordinates, the Philippines is classified as one of the most highly vulnerable countries to hydro-meteorological (e.g. typhoons, storm surges, floods) and geological (e.g. earthquakes, volcanic eruptions, tsunami) hazards (World Bank website; Pulhin et al. 2010:218). The Philippines is an archipelagic state composed of 7,107 islands

situated in the passage of the world's most active typhoon belt, the western basin of the Pacific Ocean (ADPC[4] website; Pulhin et al. 2010:218). On average, twenty typhoons pass by the country in a year. The Philippine islands also lies at the intersection of two major tectonic plates as part of Circum-Pacific seismic belt (also known as Pacific Ring of Fire), making the country highly susceptible to volcanic eruptions, earthquakes and tsunamis (ADPC website; AIPA[5] 2011). Because of such circumstances, Bankoff (2003b:31) describe the Philippines as "one of the world's natural hazard 'hotspots"'.

Besides, the highly hazard-prone topography of the Philippines, another contributing factor that shapes the country's disaster profile, is its vulnerabilities. Lewis states that, "The vulnerable state of populations and settlements is as much a contributor to the cause of 'natural' disasters as are the physical phenomena with which they are associated" (Lewis 1999:4). Publications from World Bank, the Philippine Institute for Development Studies (PIDS) (Ordinario 2014), and the Mid-term Philippine Development Plan (National Economic Development Authority 2014:9) have pointed out the constant battered state of the Philippines from disasters is an obstacle to the country's efforts of poverty reduction[6] and reduction of the level of vulnerability of the population and their assets. The PIDS article stress that disasters have the ability to affect the development progress the Philippines had been making particularly in achieving its MDG goals, and may even pushback the deadline to 2021 in achieving some of these (Ordinario 2014).

1.4 Scope and Limitations

As earlier mentioned, the focus of this paper is to understand the politics of disaster governance in the context of the Philippines. I focus my research paper on the Philippines, a country considered to be one of the most at risk and vulnerable to natural hazards in the world[7]. While many other countries in the Southeast Asian region share this classification, the Philippines' recent policy shift on disaster management after a disaster in 2010 and its adherence to global frameworks on DRR, such as the Hyogo Framework for Action makes it a highly interesting country focus.

While it is given that Philippines pose high exposure to a range of disasters, from 'natural' to man-made, this paper will be limited at looking at rapid-onset hydro-meteorological disasters, such as typhoons, floods and storm surges. Hydro-meteorological disasters occur more often in the Philippines, according to the CRED International Disaster Database, the top ten disruptive disasters in terms of affecting the population were all climate-related disasters, such as storms and floods.

This paper recognizes that when disaster governance is discussed it refers to multiple stakeholders; it departs from the classical notion that zeroes in on just government activities

4 Asian Disaster Preparedness Center (ADPC)

5 ASEAN Inter Parliamentary Assembly (AIPA)

6 PIDS report that disasters have pushed people who are classified as non-poor into the poor category, and those already in the poor category, see themselves getting into deeper poverty.

7 According to the World Risk Index 2012, the Philippines ranked as 3rd most at risk, after Vanuatu and Tonga with 27.98%. It is the most at risk large country. The World Risk Index measures global disaster risk hotspots based on their exposure to natural hazards in relation to the identified vulnerabilities of the society (World Risk Report 2012).

(Tierney 2012:342). Tierney further discusses varying elements of disaster governance and adds that, "State-based action is a fundamental element in disaster governance, but international and global institutions, such as the United Nations and World Bank, are important actors in shaping the contours of disaster governance on a global scale, especially in developing countries" (Tierney 2012:345). Having said that, this research also acknowledges Wisner's argument, that "the current development agenda holds the nation state responsible for both human development and risk reduction" (Wisner 2003:3), and Bankoff and Hilhorst's (2009:2) point that due to the "…rise and growth of centralised structures and bureaucracies in modern society so that, in a sense, disasters have perforce been 'nationalised' much as any other function of social service". This paper does not dismiss the fact that disaster governance in the Philippines involves multiple actors, however, due to time limitations in doing the research, the paper will focus on national DRR policies adopted and will analyze actions taken by the national government.

1.5 Justification of the Research

The reasons for pursuing the subject of disaster governance are twofold. First, climate change is an imminent global threat. It fuels the creation of hazards that society has not experienced before, uncertainties abound – in totality, disasters are a force to be reckoned with, physically and policy-wise. Looking beyond, the adversative outcomes disasters are remembered for - it compels societies to reflect on lessons from the past and prepare for the future. There will always be room to contribute to gain a wider understanding about this complex event.

Second, the study of governance in the field of disasters is generally new (Tierney 2012). It is interesting to study the politics of state-society relations created in the case of disasters.

1.6 Methodology

The approach in this research is informed by the three key words from the main research question - framing, policy and actions. The paper makes "framing" an integral part of the analytical process. In this light, it is imperative to ask – what is "framing"?

Robert Entman in *"Framing: Towards Clarification of a Fractured Paradigm"* explains that framing "essentially involves selection and salience" (1993:51). In summary, Entman says frames, "define problems", "diagnose causes", "make moral judgments" or "suggest remedies" (1993:51). In this paper, frames will be used to look at how the problem of disasters and its appropriate strategies are viewed and are later acted upon by the national government.

This paper also takes note of the use frame analysis in the study of organizational research by Hoffman and Ventresca (1999:1371), stating that, institutions and organizations have a pivotal part in framing policy issues. Ventresca and Washington (1998) argue that taking the "institutional approach directs us to consider the interplay of varied organizational actors and the contending institutional logics, authority structures, and conflicts that occur among them to understand the shape of the policy debates (as cited in Hoffman and Ventresca 1999:1371). Thus, the manner in which organizational actors frame the policy debate, create solutions, and act on it are largely shaped by the institutional structures built (Creed et al. 2002:36).

In learning about how DRRM policies and actions are framed by the national government, I began my research by understanding the basics of DRRM in the Philippines, starting from the process of its legal inception. Looking at how the current National DRRM policy was framed, required building a historical narrative, this covered reading related laws that pertain to disaster management. While tracing the context wherein the National DRRM framework was formed, I learned that historical and international milestones; such as the International Decade for Natural Disaster Reduction in 1990, the Yokohama Message in 1994 and the Hyogo Framework for Action in 2005 have greatly influenced the DRR policy changes in the Philippines.

To supplement the initial data gathered, I conducted key informant interviews. My intent for interviewing key DRR practitioners and some members of the National Disaster Risk Reduction and Management Council (NDRRMC) in the country was to gain a better perspective on the DRR landscape, taking note of themes that were similar and recurring amongst my interviews. It also gave me an insight on the issues, challenges and politics in the disaster management realm. My informants gave me rich examples and anecdotes based on their personal interactions working with other agencies within the government or with donors and civil society organizations.

Below is a list of the people I have interviewed:

1. Emmanuel Esguerra, Deputy Director-General of the National Economic and Development Authority (NEDA)[8];
2. Staff from the Office of the Deputy Director-General for Investment Programming of NEDA;
3. Raymund Liboro, Assistant Secretary of the Department of Science and Technology (DOST)[9];
4. Romina Marasigan, Chief Press Officer of the Office of Civil Defense (OCD)[10];
5. Naderev Saño, Commissioner of the Climate Change Commission (CCC)[11];
6. Catherine Vidar of the World Bank Philippine Office;
7. Anne Orquiza of the Australia's Department of Foreign Affairs and Trade;
8. Engr. Takaaki Kusakabe, the JICA OCD Policy Adviser;
9. Amelia Supetran of the United Nations Development Programme (UNDP) Philippine Office;
10. Agnes Palacio of the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) Philippine Office;
11. Prof. Emmanuel Luna of the University of the Philippines and Disaster Risk Reduction Network Philippines (DRRNet Philippines);
12. Malu Cagay of the Center for Disaster Preparedness Foundation Inc. (CDP).

---

8 NEDA sits as the Vice-Chairperson for Disaster Rehabilitation and Recovery. Deputy Director-General Emmanuel Esguerra is NEDA's Undersecretary for Planning. He usually sits in Secretary Balisacan's stead in NDRRMC meetings.

9 DOST sits as the Vice-Chairperson for Disaster Prevention and Mitigation. Assistant Secretary Mon Liboro. He usually sits in Secretary Montejo's stead in NDRRMC meetings.

10 OCD sits as NDRRMC's secretariat.

11 CCC has signed a Memorandum of Understanding with the NDRRMC to mainstream DRR and CCA in the Philippines. Naderev "Yeb" Saño is the lead climate change negotiator of the Philippines in the climate change talks.

Requesting and scheduling interview dates was probably the most challenging task during my fieldwork. I had initially secured a meeting with Undersecretary Austere Panadero of the Department of Interior and Local Government (DILG)[12], however, due to many pressing concerns, our meeting kept on being rescheduled until his availability can no longer be secured. The Department of Social Welfare and Development (DSWD) likewise, also proved to be a challenge, with the congressional hearings on the national budget commencing in August and having to focus on the recent flooding that had happened in Metro Manila last July, it was difficult to secure a schedule with the Ms. Cabrera, the Assistant Secretary for Operations.

I had hoped to interview either Undersecretary Pama, currently the Executive Administrator of OCD. Alas, Undersecretary was travelling for a roadshow with the Department of Science and Technology, thus, I was only granted access to Ms. Romina Marasigan, who was in-charge of the Press Office.

1.7 Organization of the Paper

This paper is organized into six chapters. The introduction, gave a broad overview of the problem disasters confer globally, building the case for the urgency to address the adverse effects of disasters on the population and on development. It gave a context of why the study of focus is in the Philippines is a brief background on the disaster profile of the country. It outlined the two main reasons why the Philippines is prone to disasters, citing its location and its vulnerabilities.

It is followed by a review of important concepts in Chapter 2, entitled, 'Understanding Disasters and Disaster Governance'. It begins by laying the groundwork on the debates about disasters and vulnerabilities and how it shapes the disaster paradigms. The chapter ends with an elaboration of what disaster governance is – how different groups of actors from various domains or within the same domains interact.

Chapter 3, "Overview of the DRRM policy frameworks in the Philippines", is divided into two parts. It traces the historical roots of the disaster management practice in the national level, particular attention is given to the institutional structures created as mandated by laws and the national strategies pursued.

In Chapter 4, "Building a Safer, Adaptive and Resilient Communities", I explore the various frames used in the present National DRR context in the Philippines. There are two groups of frames identified: the global and local. The global frame discusses the global paradigm shifts on disaster strategies, particularly giving focus on the role of the United Nations in influencing these shifts. While the local frames, explores how the national DRRM act are framed - what principles and values does it give emphasis to? Both global and local frames produce and reinforce specific perceptions on disaster risk reduction.

Lastly, Chapter 5, "Of policies, politics and practice" gives the conclusion.

[12] DILG sits as the NDRRMC's Vice-Chairperson for Disaster Preparedness.

Chapter 2
Understanding the Nature of Disasters and Disaster Governance

This chapter explores more in depth the concepts briefly touched on in the introduction, such as, disaster, vulnerabilities and disaster governance. The first part of the chapter explores the varying perceptions of disasters, how the terminology has evolved from equating it to an act of nature to it being a consequence of societal action, ultimately highlighting that society's vulnerabilities as the main contributory factor to the occurrence of disasters. It is important to lay down the concepts of disasters and vulnerabilities since these are central in understanding how the Philippine state frames its disaster risk reduction policies, and how the Philippine government structures mandated to focus on it, respond and prepare for it.

The chapter rounds off with a discussion on the domain of disaster governance as discussed by Hilhorst (2004:52), situating it in the wider discourse on governance, the role of knowledge and politics in the ecology of governance.

2.1 The Nature of Disasters and Vulnerabilities

> *"There is danger in treating disasters as something peculiar, as events that deserve their own special focus. It is to risk separating 'natural' disasters from social frameworks that influence how hazards affect people"* (Wisner et al. 2004: 4).

Earthquakes, tsunamis, typhoons, flooding and volcanic eruptions are natural hazards and are not necessarily disasters (Carr 1932:211 as cited in Furedi 2007:483), this ideation of disasters stem from earlier studies that give focus on it being "trigger" events that result from nature (Wisner et al. 2004:10; Kent 1987:207). The 'natural' in 'natural disasters' has often been overemphasized in headlines (Wisner 2003:1; Wisner et al. 2004:28), this framing, however, leaves out the role that humans play. Quite oppositely, Carr (1932:211) stresses that, "a disaster is defined by human beings and not by nature" (as cited by Furedi 2007:484); the mere presence of hazards does not constitute a disaster, but exposure of communities and taking into account their internal capacities to cope with it make it possible. Other literature, such as by Benthall (1993:11) points out that disasters are a result of humans' interaction with nature, underlining that they are the manifestations of the negligence of society to oversee the use and distribution of its resources; in still another interpretation, disasters are viewed as "unresolved problems of development" (Yodmani 2000:1) (see Quarantelli 1986:3 for further discussion)[13].

The questions 'where do disasters come from?' or 'how do disasters happen?' have been live in scientific and social studies for decades, and Quarantelli offers an interesting discussion on the historical perceptions of the origins of disasters. He delineates these perceptions as:

[13] According to Quarantelli (1986:3), "Another value of thinking of disaster as social rather than physical happenings, is that emphasis comes to be on internal rather than external factors. A disaster in this view is not an outside force that impacts upon a social system, but a manifestation of internal flaws and problems in the society. Thus, the threat is not vaguely "out there," but concretely within the social systems".

'Acts of God'[14]; 'Acts of Nature'; 'Acts of Men and Women', and 'Acts of Society'; highlighting the progression in the conceptualization of disasters from events being caused by 'supernatural forces' to scientific explanations of earth processes; from disasters being a "social phenomena", an outcome of intended or unintended human actions, through to disasters as products of 'sociocultural systems' (Quarantelli 1986:2-3; Quarantelli 1998:4-6; Comfort et al 1999:39; Furedi 2007:483). Ribot (2014:1) comments that in the age of the Anthropocene, climate-related disasters cannot be blamed as an act of God or being purely a product of nature any more. He adds that these types of disasters are partly due to social causes, and can be connected in part to 'human agency and responsibility' (ibid).

The myriad perceptions on disasters have been widely debated, but can be broadly categorized into two contending paradigms, hazard paradigm (Gaillard 2010:221) and social vulnerability paradigm (Gaillard and Mercer 2012:93). The hazard paradigm derived from the natural sciences, identifying technical know-how to understand the physical dimensions of hazards is the core basis of making plans and policies (Yodmani 2000:1). Thus, figuring out where the fault lines, flood plains and immediate path of volcanic eruptions, for example, will be the main determinants in identifying possible disasters. Contrastingly, the social vulnerability paradigm, which stem from social discourses, recognizes the critical part of social vulnerabilities, plus exposure to risk and hazards as variables to what constitutes a disaster (Hilhorst 2003:52-53; Gaillard and Mercer 2012:93).

The fundamental differences in the two approaches largely lie in the innate fact that disasters are complex, lines between nature and those affected by human action have been increasingly blurred (Park and Miller 2006:10). Oliver-Smith (1996:303) makes a similar point, stating that disasters "occur at the interface of society, technology and environment and are fundamentally the outcomes of the interactions of these features". Questions on the extent of how human action's interaction with nature influences its own vulnerabilities are raised. Bankoff (1999:382) raises the point that there is still a "certain ambiguity" in delineating the role of man and nature in relation to disasters.

Since, the hazard paradigm was developed much earlier than the vulnerability paradigm, it has its fair share of critiques. According to Smith and O'Keefe (1980) the gaps in the hazard paradigm is that: first, it perceives human influence and activity are completely distinct from nature; second, it heavily relies on the naturalness of disasters, and accepts that it only becomes hazardous when it cross paths with human action; and third, that "humans are assumed to be absorbed by natured" (as cited in O'Brien et al. 2010:501).

Wisner, Gaillard and Kelman explain that a vital aspect of studying the nature-society relationship of disasters is to recognize that the 'natural' environment is two-faced – environment can be "the origin of both a series of possible opportunities and a series of possible hazards" (2012:20). The 'natural' environment is ultimately shaped by political, economic and social factors. Earlier on, O'Keefe et al. (1976) recognized that to fully

[14] See Artur and Hilhorst (2012) for an interesting discussion on the three alternative discourses that explain disasters in Mozambique – they cite the will of God, the role ancestors and witchcraft. See also Bankoff (2004:92) for his study on how culture shapes a societies attitude towards impending hazards, he gives a fascinating account of the role of religion in influencing the Filipinos' perception of nature.

identify the social vulnerabilities, one must understand that it is links to the altering nature of political economy (as cited in O'Brien et al. 2010:501).

What are these political, economic and social factors that form disasters? These factors can be called vulnerabilities. Blaikie et al. (1994) define vulnerability as a "combination of characteristics of a person or group, expressed in relation to hazard exposure which derives from the social and economic condition of the individual". Several authors have been establishing the linkage between poverty and vulnerability, stating that former compounds the latter (Yodmani 2000; Heijmans 2001).

2.2 Disaster Governance as the Theoretical Framework

> *"In a disaster a collectivity of intersecting processes and events –social, environmental, cultural, political, economic, physical and technological – transpiring over varying lengths of time are focused. Disasters are totalizing events…They reveal the operation of physical, biological, and social systems and their interaction among populations, groups, institutions and practices, and their concomitant sociocultural constructions"* (Oliver-Smith 1999:20-21).

Hannigan begins his line of argumentation on the relation between disasters and politics by stating, "Alas, there is a wide gap between what should be and what is" (2012:11). Established in earlier discussions, it is stated that disasters are complex, various perceptions and interpretations about it compound the disaster discourse. What heightens this complexity is agency. Hilhorst (2004:54) citing Waldrop (1992) explains complexity theory as "stability and change in a system" largely determined by various distinct agents, acting and reacting in many different ways. For Tierney (2012:342), disaster governance acknowledges that there is no one dominant actor that has the power to ensure that all actors fulfill and partake in the whole disaster governance process. Hilhorst (2004:55) also emphasize that due to the complex nature of disasters, there is no straightforward manner in which it could be dealt with. Essentially, according to Tierney "disaster governance consists of the interrelated sets of norms, organizational and institutional actors, and practices (spanning, predisaster, transdisaster, and postdisaster periods) that are designed to reduce impacts" (2012:344).

This section begins by briefly situating disaster governance in the discussion of governance. Then this paper proceeds and tries to bridge the discussion on 'what should be' and 'what is' by focusing on two main points. First, on 'what should be' – it brings to focus discussions on knowledge and the role of 'focusing events' in changing the dominant discourse on disaster strategies; and second, on 'what is' – it raises argumentations on politics and practices of the use of these strategies. These will be the building blocks in analyzing how national DRRM policies and actions are framed in the Philippines, as will be elaborated in Chapters 4 and 5.

David Levi-Faur (2012:8) in, *'From 'Big Government' to 'Big Governance'"* discusses the four common meanings of governance based on the literature - governance as: a structure, a process, a mechanism and a strategy.

Hilhorst defines social domains in the context of response to risk and disaster as "areas of social life that are organized by reference to a central cluster of values, which are recognized as a locus of certain rules, norms and values, implying a degree of social commitment" (2004:57). Hilhorst's (ibid) framework for disaster response is composed of three domains on disaster response, these are: the domain of international science and disaster management (science and management) [author's own short cut]; the domain of disaster governance; and the domain of local knowledge and coping practices. She explains that these social domains are not rigid in its delineations and can "constitute multiple realities" (Hilhorst 2004:57). It also recognizes that interactions do not just happen among and between actors across domains but within each domain in itself. Each domain is characterized as domains of knowledge and action, and is subject to their own internal discourse on disasters.

In this paper, the domain of disaster governance is given primary importance. I argue that the science and management domain is subsumed within the domain of disaster governance, and further political processes are undertaken to negotiate the interpretation of DRR in practice.

What then are the domains of science and management, and disaster governance? Hilhorst (2004:58-59) explains that the science and management domain is biased towards a hazard paradigm. However, she admits that while this is a dominant paradigm in this domain, it does not claim complete hegemony. Hilhorst lays the foundation of her discussion on how the domain of science and management perceives nature and society on Escobar's (1999) argument that these elements are viewed as separate, wherein the former (nature) can be 'controlled' by the latter (society) (2004:58). Thus, it requires technocratic solutions, such as early warning systems, geohazard maps, etc. Bankoff (2004) and Hilhorst (2004:58) explain that a majority of the countries which experience devastating losses due to natural disasters are classified as developing countries, wherein, it is highly probable that expert international knowledge are imported to 'control' disasters.

In this paper, the domain of science and management is not necessarily limited to a specific disaster paradigm (hazard or vulnerability). The paper essentially views the domain of science and management as space to negotiate the knowledge that is later accepted (or negotiated further) in the domain of disaster governance. Knowledge becomes an integral part of the process of governance.

Knowledge is not easily created (Stone 2012:341) nor readily adopted. Many actors vie for control of knowledge production and compete to set these in the agenda. In Chapter 4, the policy and the context wherein it was passed is dissected, looking closely at the knowledge production by 'knowledge actors' (Stone 2012:340). Paying particular attention, in the process of agenda-setting and policy adaptation. I principally look at how the 'what should be' came to be.

There is classic notion that policy-making is limited to government (Stone 2012:345), but as discussions move from government to governance (Levi-Faur 2012:3), it is accepted that the domain of policy-making is no longer confined to traditional actors in the government. Stone argue that, "there is an upwards decentralization of governance into an intersecting array of new global and regional decision-making forums of mixed public-private

composition" (2012:339). I illustrate in Chapter 4, that this "global and regional decision-making forums" is a big factor in what is defined in the domain of science and technology.

I also add that to gain traction and prominence globally and locally, I argue that the dimension of the knowledge created and exported in the science and management domain, need "focusing events" (Birkland 1997:1) to help hasten the internal negotiations or prioritization in the agenda.

For Stone, these "knowledge actors" build "epistemic communities", she explains –

> *"Epistemic communities" are argued to have considerable influence in circumstances of policy uncertainty. Indeed, there is a common theme in the ideational literature that ideas matter more (or at least their impact is more observable) in circumstances of uncertainty where interests are unformed or some kind of crisis (war, environmental catastrophe, election swings) disrupts established policy patterns and provokes paradigmatic revision. Knowledge actors are represented with a "window of opportunity" to redefine the policy context"* (Stone 2012:347).

Now that the domain of international science and disaster management has been made clear, what then is the domain of disaster governance?

Hilhorst describes the domain of disaster governance as the domain -

> *"where society's priorities regarding risk and vulnerability are defined. It is the domain where disaster knowledge and management is mediated and altered through political and bureaucratic governance practices and institutions…also the domain in which it becomes apparent how disasters affect state-society relations and, vice versa, how, state-society relations affect responses to risk and disaster"* (2004:59-60).

Hilhorst explains that the official policies that guide this domain are often derived and are products of the domain of science and management (2004:60). However, recipient countries of the knowledge created in the domain of science and management, mostly from developing countries, vary in capacities, which leaves gaps in 'what should be' and 'what is'. These gaps are created by perceptions of these various actors within both domains - actors, such as scientists, advocates and lobbyist from the domain of science and management differ from the actors in the domain of disaster governance, which are dominated by policymakers, politicians and bureaucrats. I argue that their perceptions frame the DRRM policies in various manners, which might cause conflicting practices within the domain of disaster governance.

The assumption that is embedded in Hilhorst's definition that I want to draw out is these domains are not linear and are highly political.

> *"Natural disasters occur in a political space. They are not driven by politics, nor are they immune from politics. Incentives faced by human actors can affect the prevention, mitigation and damage of natural disasters, even if they cannot affect the likelihood of rainfall in a specific area or seismic activity along a particular fault line"* (Cohen and Werker 2008:795).

Chapter 3
Overview of the Disaster Risk Reduction Policy Frameworks in the Philippines

The purpose of this chapter is to bring about the underlying disaster management frame by reviewing the organizational or institutional structures. It hopes to provide an understanding of the Philippine's approach to disasters by tracing the government policies in disaster management. This hopes to answer two sub-questions; first, "What is the role of the national government in disaster management in the Philippines?" and second, "How are the disaster management institutional structures set up in the national level?"

To do this, a thorough appraisal of related laws and regulations is necessary. How will this be achieved? Foremost, the historical roots of disaster management in the Philippines will be discussed, it starts with the colonial period, where early practices of early warning systems began, followed by the American colonial period where some form of organization of the national government to deal with emergencies were initiated; and then the presidency of Ferdinand Marcos to present – where a more specialized organization such as the National Disaster Coordinating Council was created, it laid out the national framework the Philippines has followed for more than thirty years; to the current national DRRM policy with the main objective of creating a "Safer, adaptive and disaster resilient Filipino communities".

3.1 Historical Roots of the DRRM Frameworks in the Philippines

Given that the Philippines' geographic location identifies it to be highly susceptible to several types of hazard, through the years, the country had gone through several changes in its approach to dealing with varying forms of disasters, from natural to man-made.

I hope to highlight the disaster management structures and practices that were created, particularly landmark pieces of legislation that help frame the disaster risk reduction and management discourse in the country. Highlighting the role of legal arrangements and frameworks, Mattingly states that, "These laws may dictate – or encourage – policies, practices, processes, the assignment of authorities and responsibilities to individuals and/or institutions, and the creation of institutions or mechanisms for coordination or collaboration action among institutions" (2002:20). By discussing the disaster management systems created, I also hope to introduce important actors involved in the disaster management narrative in the Philippines.

3.1.1 The Colonial Period (1521 – 1946)

The Spanish colonizers arrived in the Philippine islands in 1521. They soon found out that the Philippines' strategic location in between the South China Sea and the Pacific Ocean, although ideal sea routes for their growing maritime trade, made it exposed to frequent number of natural hazards, such as typhoons, volcanic eruptions and earthquakes. There had been many historic accounts wherein the Spanish started to monitor and record the natural hazards, those frequently cited were the work done by the Spanish Jesuit missionaries (ADPC[15] 2001; Bankoff 2003:35; Ribera et al. 2008:194-195). The Jesuits established the Manila Observatory in 1865, and later founded a network of meteorological stations. By 1879, they were disseminating early warnings

[15] Asian Disaster Preparedness Center (ADPC).

for approaching typhoons, and ventured to the observance of earthquakes in 1880. With the important role they have forewarning the populace about impending hydro-meteorological hazards, a royal decree issued by the Spanish government elevated the status of the Observatory as the Philippine's official scientific institution in charged of weather forecasting in 1884 (Manila Observatory website n.d.). Up until the Second World War, the Manila Observatory and its subsidiary weather stations were managed by the Jesuits, these were then handed over to the Philippine National Weather Service (Ribera et al. 2008:194). The present day early warning systems for certain types of natural hazards, were said to be derived and developed from the earlier empirical studies, practices and instruments introduced by the Spanish (ADPC 2001:8). In comparison with other Southeast Asian countries, the Philippines was classified as having a relatively complete accounting of hazard related data at that time (Bankoff 2003:35).

During the Spanish period, institutions on weather forecasting were created, in 1901 the Philippine Commission enacted, Act No. 31, creating the Weather Bureau. This office drew up the first weather map in the region, and disseminated news bulletins on weather forecasts, benefiting a lot of seafarers, traders and shippers. The early warnings they produced were used as basis for the call to evacuate (ADPC 2001:13).

When the Americans took over from the Spanish covering the years 1899 to 1946, there were several changes in the manner the country approached disaster management (Agoncillo 1974 cited by ADCP 2001:8). Since the period was marked by conflict, the coverage of disaster management went beyond natural hazards, and now included man-made disasters, including civil emergencies.

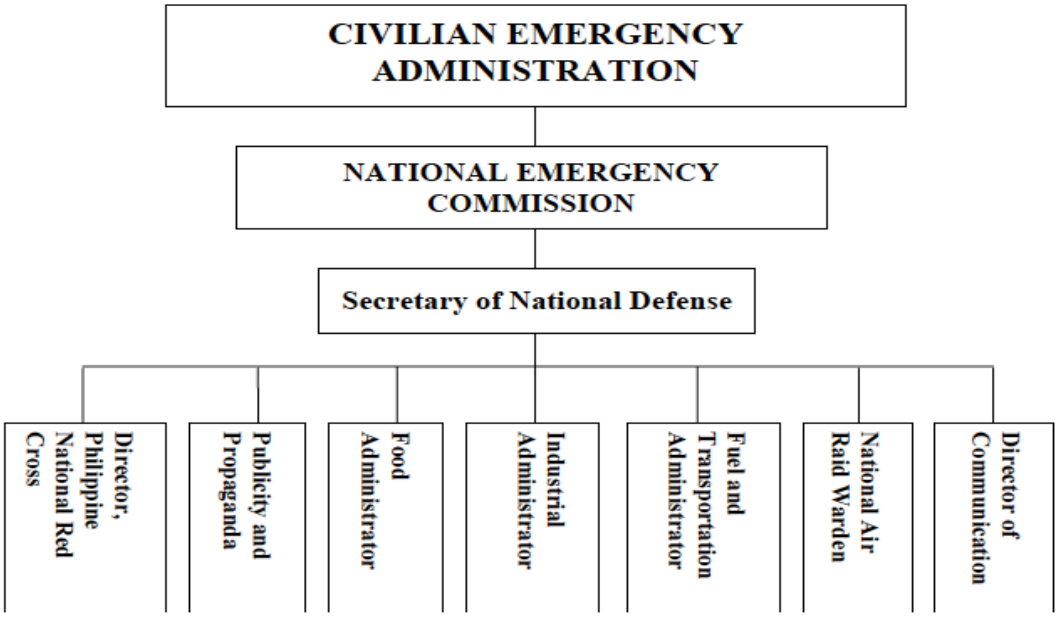
The Philippines was assimilated by the Americans, and thus, was under their leadership. It was the government of the United States of America who formally initiated disaster management policies, creating the necessary institutions.

The first two real policies to safeguard civilian in grave emergencies were signed by President Manuel Quezon during the commonwealth period[16]. In 1941, in anticipation of the war in Europe shifting to the Pacific, President Quezon, the 2nd president of the republic, signed Executive Order (EO) 355 on 1 April 1941 and EO 337 on 16 April 1941. EO 355 essentially created the Civilian Emergency Administration (CEA) (Britton 2006:1). The main objective of the CEA was to "provide coordination and control of civilian organizations for the protection of civil population in extraordinary and emergency conditions" (Executive Order No. 355 1941). Tanikalang (2001) explains that EO 355, allowed for the strengthening of the military training of the youth, information awareness on first aid was given in schools and other groups, as well as practice air raid drills (as cited in ADPC 2001:9). The CEA was administered by the National Emergency Commission (NEC), which was chaired by a member of the President's Cabinet, the National Defense Secretary and required representatives from each executive department as members (See Figure 2 for the CEA Organizational Chart). The NEC was the main policy-making body that formulated necessary policies and plans with regard to their mandate. Another key component of the EO 355 is the creation of the Provincial Emergency Committee in each province. The Provincial Emergency Committees was chaired by the governor and was composed of the provincial treasurer, fiscal, inspector of the constabulary and agricultural supervisor, together with the district engineer, health officer, and division superintendent of

[16] The Commonwealth of the Philippines covered the years 1935-1946.

schools as members. The committee had control over the Municipal and City Emergency Committees.

Figure 2. The CEA Organizational Chart



Source: ADPC 2001:10

While, EO 337 published the rules and regulations for the organization of the city and municipal Volunteer Guards. The EO authorized each city or municipal mayor to establish Volunteer Guards in their respective cities and municipalities. Each Volunteer Guard in chartered cities and municipalities was organized into the following sub-units: (a) police, traffic control and guard duty unit; (b) first aid unit; (c) rescue unit; (d) fire fighting unit; (e) demolition and repair unit; and the (f) decontamination unit (Executive Order 337:1941).

3.1.2 Post-World War II – 2010 (1947 – 2010)

Reeling from the effects of the Second World War, the disaster management systems put in place were mostly geared towards responding to big, national, civil emergencies. Spanning seventy years, from the early 1950s until 2010, the national disaster management system has continuously evolved (ADPC 2001:13).

The National Civil Defense Administration to the Office of Civil Defense (1954)
On 30 August 1954, under the Presidency of Ramon Magsaysay, Republic Act 1190 was enacted, founding the National Civil Defense Administration (NCDA). It's a body under the Office of the President, its mandate, similar to EO 355 of 1941, is to "provide protection and welfare to the civilian population in times of war and other national emergencies".

RA 1190 initiated the National Civil Defense Council (NCDC). This later became the pattern for other national councils created. The NCDC had a similar composition to the Civil Emergency

Commission during the Commonwealth period – the position of Chairman and NCDC Administrator is appointed by the President of the Republic, other members include: Committee Chairs of National Defense and Security of both Houses of Congress, the Chief of the Philippine Constabulary, Social Welfare Commissioner, the Manager of the Philippine National Red Cross, the Manager of the National Development Company and the Manager of the Price Stabilization Corporation (Republic Act 1190, s.4).

The law also allowed for the creation of the local level civil defense councils, these are: the provincial, city and municipal civil defense councils. Each local defense council organized their own National Defense Organizations, and these organizations form sub-operating services, such as: the warden, police, fire, health, rescue and engineering, emergency welfare, transportation, communication, evacuation, air-raid warning and auxiliary services (Republic Act 1190, s. 4).

The NCDA had several other ad hoc tasks that were born out of the necessity of the events that unfolded, such as the creation of the National Committee on Disaster Operation through Administrative Order No. 151, this was signed by President Ferdinand Marcos on 2 December 1968, as a reaction to a 7.3 magnitude earthquake[17] that hit other parts of the Philippines including Manila on August of that same year. The Committee on Disaster Operation was assigned to oversee the smooth management of all inter-agency efforts during geological, hydro-meteorological, and the presence of other disasters (see ADPC 2001:14-15 for an elaboration).

It was also under the Presidency of Ferdinand Marcos where the first comprehensive Disaster and Calamities Plan was drafted in 1970. This was urgently under way after Typhoon Sening pummeled through the provinces of Bicol and had caused massive flooding in Metro Manila.

The Office of Civil Defense (1972)

Shortly afterwards, President Marcos re-organized the NCDA into the Office of Civil Defense (OCD) through the Letter of Implementation No. 19, Series of 1972. The mandate of the OCD is to–*"coordinating, on the national level, the activities and functions of various agencies and instrumentalities of the National Government and private institutions and civic organizations devoted to public welfare so that the facilities and resources of the entire nation may be utilized to the maximum extent for the protection and preservation of the civilian populace and property during time of war and other national emergencies of equally grave character"* (Letter of Implementation No. 19 of 1972, s. 13).

The National Disaster Coordinating Councils (1978)

Presidential Decree No.1566 (PD 1566) was issued by President Ferdinand Marcos on 11 June 1978. Its main objective is to capacitate and reinforce the national disaster management mechanism and to create a national disaster management framework that organizes a disaster preparedness program for the national and community levels (provincial, city/municipal, and barangay[18]).

[17] On 2 August 1968, a 7.3 magnitude earthquake had its epicenter in the city of Casiguran in the Province of Aurora, 324 kilometers away from the capital Manila, yet the brunt of the damage was felt in the capital (Dela Cruz 2014).

[18] The barangay is the smallest administrative division in the Philippines. This concept is similar to that of a neighborhood.

There are five main highlights in this decree, these are: (a) the creation of a National Disaster Coordinating Council (NDCC) (b) the promulgation of efficient disaster coordination by creating Regional and Local Disaster Coordinating Councils; (c) the drafting of a National Calamities and Disaster Preparedness Plan; (d) it shall be chaired by the Secretary of National Defense; and (e) the OCD shall execute and monitor the implementation of the policies and programs of the NDCC, while providing secretariat support for the whole Council (ADPC 2001).

The NDCC is chaired by the Secretary of National Defense and has twenty-two members from various government agencies (See Annex A for full list). The NDCC does not have its own line item in the national budget. Therefore, it is the responsibility of each member-department to finance preparation and mitigation projects. Delfin and Gaillard (2008:191) in their study of the dichotomies of disaster management in the Philippines, commented that with the Secretary of National Defense as the chair, it closely linked the country's disaster management structure to the military and defense structure, which means adhering to top-down approaches.

Historically, the national government deploys personnel of the Armed Forces of the Philippines as responders during disasters.

The NDCC structure remained unchanged for more than thirty years. However, in 1991, the Local Government Code (Republic Act 7160) was enacted, identifying the pivotal role of local government units (LGU) in creating and implementing disaster preparedness and response measures (Delfin and Gaillard 2008:192). The passage of the Local Government Code allowed for the creation of the LGU's Local Calamity Fund, permitting the allocation of up to 5% of the LGU budget for disaster activities. However, before the fund is disbursed, a "state of calamity" must be declared by the local sanggunian (the local legislative council) (Delfin and Gaillard 2008:192). Again, this practice reinforces, a reactive approach.

It was the time of President Joseph Ejercito Estrada in 1999 wherein the NDCC promulgated new set of guidelines on the use of the National Calamity Fund (Calamity Fund). The Calamity Fund is an important source of emergency funds. It is appropriated under the General Appropriations Act, which is debated and approved in both Houses of Congress. There are three main purposes for the fund and these are: (a) For urgent and emergency relief operations, health services for affected populations; (b) For repair, rehabilitation and reconstruction of damaged public infrastructure that are not emergency in nature but are necessary for disaster mitigation; and (c) For pre-disaster activities out side the regular budgets of line agencies and proposed capital expenditures for pre-disaster operations (ADPC 2000:31).

In 2005, the NDCC drafted the Four Point Action for Preparedness, which aims to enhance the overall awareness of the public on disasters by upgrading the forecasting system, investing in capacity building for Local Government Unit and communities in vulnerable areas, and improve government and private sector partnerships in the post-disaster phase – relief and rehabilitation (Kellett and Peters 2014:7).

3.2 Policy in Focus: The National DRRM Act of 2010 (2010)

Republic Act 10121 refocused the country's approach to disasters. It drafted a national policy that envisions a "Safer, adaptive and disaster resilient Filipino communities towards sustainable

development" (NDRRMP[19]). The strategies that inform the implementation of this policy fall under four identified priority areas: disaster preparedness, disaster response, disaster prevention and mitigation and disaster rehabilitation and recovery (See Figure 3 for a full description of the four priority areas).

The DRRM Act of 2010 created the National Disaster Risk Reduction and Management Council (NDRRMC), essentially renaming the National Disaster Coordinating Council (NDCC) but maintaining most of its organizational structure (RA 10121, s. 5). Like the NDCC, the NDRRMC is classified as the highest national body that is tasked to draft policies, coordinate, integrate, supervise, monitor, evaluate and advise the President on issues relating to disasters. However, the law emphasizes that the NDRRMC is not just a coordinative body for response measures but is foremost responsible for the development of the National DRRM Framework, outlining the countries long-term disaster risk reduction plan.

The NDRRMC's structure shares a striking resemblance to the much older NDCC. This is also chaired by the Secretary of the Department of National Defense. Quite interestingly, the role of Vice-Chair has been divided to four Department Secretaries (See Figure 3). The membership to the NDRRMC has grown to thirty-three representatives, mostly comprising of representatives to various government agencies, even those that do not directly work with on risk and vulnerability (See Annex B for complete list). While the intention behind multiplying the number of members was to emphasize that the NDRRMC is inclusive and is employing a highly participative approach to disaster policymaking, questions about its effectiveness has been raised.

A larger number of members could also mean blurring the lines of those who are responsible and accountable. Majority of the respondents of this paper have mentioned that one of the biggest challenges to working with national agencies related to disasters is that, it is uncoordinated and the sheer number of those involved causes confusion.

> *"Agency politics begins with the choice of the public organization that will take the lead in carrying out a policy…Agency politics are exacerbated by multiple agencies' populating policy areas among which the tasks required to implement a policy are divided, thus contributing to turf wars"*(Krane 2007:32).

Take for example the simple task of generating geo-hazard maps. Amelia Supetran of UNDP recounts stories of government agencies not cooperating with each other because of turf wars. Another example would be during the recovery operations during Typhoon Haiyan, Agnes Palacio of the UN Office for the Coordination of Humanitarian Assistance (UNOCHA) stated that, local governments who needed aid and international organizations who want to give aid were puzzled as to who or which agency to approach (personal interview:2014). Secretary Voltaire Gazmin is the Chair of the NDRRMC, however, during the field operations in Tacloban[20] City in the Province of Leyte, it was Secretary Mar Roxas of the Department of Interior and Local Government (DILG) who was seen on the ground. While former Senator Panfilo Lacson was assigned as the Presidential Assistant for Rehabilitation and Recovery

[19] National Disaster Risk Reduction and Management Plan (NDRRMP).

[20] Tacloban City is one of the hardest hit cities when Typhoon Haiyan entered the Philippine Area of Responsibility.

(PARR). The Office of the Presidential Assistant for Rehabilitation and Recovery (OPARR) did not have real authority to disburse funds, its job was to coordinate the efforts and facilitate the creation of the master rehabilitation plan, this steps on the job of the National Economic and Development Authority to draft a comprehensive plan.

The OPARR is not the first ad hoc body created with similar functions with fully functioning agencies. (See Table 2 for the most recent ad hoc bodies created)

Table 1. Summary of the task forces and ad hoc bodies created post-disaster

Disaster	Task Force/ Ad hoc body	Mandate	Head
Typhoon Pablo in Compostella Valley in 2012	Task Force Pablo	To ensure orderly rehabilitation in areas hit by Typhoon Pablo in 2012.	Cabinet Secretary Rene Almendras
Typhoon Yolanda in 2013	Office of the Presidential Assistance for Rehabilitation and Recovery for Yolanda (OPARR)	President Aquino signed Memorandum Order 62, which enables OPARR to be over-all manager and coordinator of rehabilitation, recovery and reconstruction efforts of government departments, agencies and instrumentalities in the affected areas.	Former Senator Panfilo Lacson

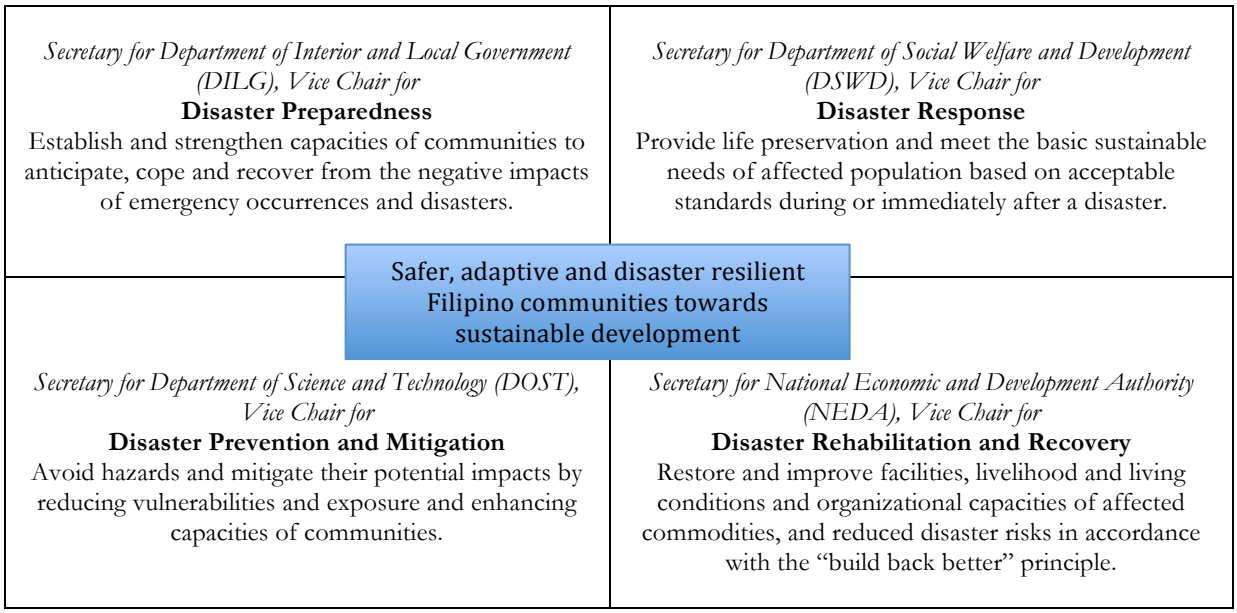
Source: Author's own table

The OCD remains as the administrative body under the NDRRMC, albeit, it has more responsibilities. The OCD – "*shall have the primary mission of administering a comprehensive national civil defense and disaster risk reduction and management program by providing leadership in the continuous development of strategic and systematic approaches as well as measures to reduce the vulnerabilities and risks to hazards and manage the consequences of disasters"* (RA 10121, s.8). The retention of the OCD as the administrative arm or the necessity to create a separate agency was one of the most contentious parts of the Bicameral Conference[21] in congress during the legislative debates on the passage of the bill. During the deliberations Former Cabinet Secretary and head of the Reconstruction Commission[22], took the position that for expediency's sake, the OCD, in its form could suffice and further amendments can be looked into after its passage (2nd Bicameral Conference Committee 2010:27-29). The current OCD head and executive director at that time, Retired AFP General Glenn Rabonza gave a testimony to the body, reassuring them the current OCD can undertake the new responsibilities and will just need additional funds to strengthen it (2nd Bicameral Conference Committee 2010:55).

[21] The 2nd Bicameral Conference Committee on the Disagreeing Provisions of Senate Bill 3086 and House Bill 6985 (Disaster Risk Management) was held last 27 January 2010.

[22] Executive Order 838 issued by President Gloria Macapagal Arroyo dated 22 October 2009, created the Special National Public Reconstruction Commission (Public Commission), mandated to oversee the reconstruction efforts on the areas hit by Typhoons Ondoy, Pepeng and Frank (Executive Order No. 838, 2009).

Figure 3. The four priority areas as outlined in the National DRRM Framework and in the National DRRM Plan



Source: The NDRRMC Brochure (n.d.), with revisions from the author

3.3 Institutional Structures that Enable the Hazard Paradigm

> *"Existing policies thus often reflect the 'hollowing out of the state' in facing the risk of disaster. Outdated state policies very much resemble strategies and structures developed in times of war (Gilbert, 1995). Indeed, in many countries DRR policies are handled by the army or civil protection institutions which rely on military chains of command, treating natural hazards as enemies which should be fought against* (Gaillard and Mercer 2012:101).

Table 2. Summary and Timeline of the Disaster Management Organizations in the Philippines

Year Enacted	1941	1954	1978	2010
Law that Created it	Executive Order 355	Republic Act 1190	Presidential Decree 1566	Republic Act 10121
Policy - Making Body	National Emergency Commission	National Civil Defense Council	National Disaster Coordinating Council	National Disaster Risk Reduction and Management Council
Chair	Secretary of National Defense	Secretary of National Defense	Secretary of National Defense	Secretary of National Defense
Administrative Body	Civil Emergency Administration	National Civil Defense Administration	Office of Civil Defense	Office of Civil Defense

Source: Author's own

As Creed (2002) suggests studying the organizational structure can lead to a broader understanding of how policies are framed by certain actors and can explicate the rationale behind their actions. This chapter traced the history of Philippine disaster management and focused on

specific laws that created the necessary national institutional mechanisms to address disasters. There are four main points that have emerged.

Principally, disasters are still defined in the context of the hazard-paradigm. During the Spanish colonial period, the measures that could study the patterns of hazards -where it would strike and how intense it would be, preoccupied the disaster management approach. It generally equated disasters as "emergency" events. When "emergency" is used, it connotes that it as something unexpected - it is treated as deviation from the "normal", an "extreme event". Viewing disaster as such, limits policymakers, local chief executives, first responders, etc. in really solving the root causes of why disasters happen – the idea of vulnerabilities are left out.

Second, the national institutional structures, particularly from the Commonwealth period up until in 2009, give priority to a top-down approach in facing disasters. The creation of the Civil Emergency Administration gave the foundations for the longstanding National Disaster Coordinating Council (NDCC). However, these were all under the umbrella of a Civil Defense Office and the Department of National Defense. Having disaster management under the purview of these types of government agencies, has its advantages, due to its high military structure, deployment for disaster relief operations are organized logistically, however, it is also due to the same organizational structure where hierarchy and chains of command are given importance. This runs counter to the new proactive approach that seeks out bottom-up participation and dealing with the root cause of natural disasters. Plus, does the OCD, in its current state have the capacity to cope with more than just response work?

Third, largely because of the hazard-paradigm, there is cause and effect manner type of disaster management systems, making the strategies reactive. Recalling that a lot of the laws and administrative orders were born out of the lessons learned from previous disasters or emergency circumstances, this leaves little room to think proactively particularly in the case of natural disasters.

Four, the creation of the National Disaster Risk Reduction and Management Council (NDRRMC) was promising, since there will be a new government body that will be dedicated to DRR, however, the reality is the NDRRMC does not convene regularly, and the every day administration is left with the same agency, the OCD. The OCD, who has since 2010 been run by retired military personnel. The list of OCD Administrators is as follows: Ret. Gen. Glenn Rabonza (prior to 2009, and during the deliberation of the passage of the law), Major General Benito Ramos (2010-January 2013), Ret. General Eduardo Del Rosario (January 2013 – May 2014), and Vice Admiral Alex Pama as its current head. How can the vulnerability agenda be strengthened when the frame of mind of the NDRRMC and OCD towards disaster preparedness is a more efficient rescue and relief operations?

These are the disaster management structures that the Philippines inherited from the Commonwealth period, and continue to nurture, and thus will be subject to make adjustments to fit with the new principles advocated by the Hyogo Framework for Action. These organizational structures espouse one frame, a frame that is biased towards the hazard paradigm. Even with the introduction of the new policy direction in RA 10121, as long as the structure remains unchanged, the reactive approach will still dominate the disaster management strategies of the country.

Chapter 4
Building safer, adaptive and disaster resilient Filipino communities: Framing of the National DRRM policy

> *"It is said that disasters, depending on the scale and magnitude, have the propensity for policy change" (Balgos 2014:127).*

"Safer, adaptive and disaster resilient Filipino communities" is the Philippines' new goal for propelling the country's disaster risk reduction agenda as identified in the National Disaster Risk Reduction and Management Plan. The new goal embodies the proactive approach the Hyogo Framework for Action has been advocating for. By the end of the chapter, I hope to have answered the following sub-questions, "What were the factors that contributed for the Philippines to change its disaster management paradigm?" and "How are disaster risk reduction and management policies and actions framed by the national government?"

Earlier, in Chapter 2, I briefly discuss the domain of international science and disaster management, in this chapter, I argue that the global paradigm shifts are outcomes of the process how knowledge about disaster risk reduction has gained popularity amongst international and national actors. In the first part, I discuss the progression of the discourse on disaster strategy as negotiated and strongly promoted by the United Nations and call it "Global Frames".

The second part of this chapter, discusses the emergence of the disaster risk reduction and management discourse in the Philippines, called "Local Frames". It tries to compare which principles in disaster management were carried over from the Global to the Local Frames.

There seemed to be two particular points that pushed the DRRM Act of 2010 into being enacted, these are: adoption of the international framework for disaster risk reduction, and a focusing event such as Typhoon Ketsana. Page (2013:8) explains that since the International Decade for National Disaster Reduction from 1990-2000, particularly the creation of UN International Strategy for Disaster Reduction (UNISDR) in 1999 and launching of the Hyogo Framework for Action (HFA) in 2005, the UNISDR has become a "powerful entrepreneur of disaster management".

"Knowledge production in the global system tends to be based on complex interactions" (Stone 2012:346). Largely influenced by the growing understanding of what disasters are, various approaches and strategies were brought forth globally, the first part of this chapter discusses the global frames on paradigm shifts in disaster strategies, and the latter section gives the context on how the global frames in conjuncture with other factors influenced the local frames. Lastly, it discusses the two disaster management frames created by these global and local framing.

4. 1 Global Frames: The Paradigm Shifts from Emergency Management to Disaster Risk Reduction

To be able to understand the present politics of disaster governance, this paper needs to revisit paradigm shifts that shaped how the world views disasters. The perceptions on disasters inform the strategies and policies undertaken by supranational bodies, national and other local actors.

Contemporary approaches often speak of DRR being at the fore of disaster management discourse, however, according to Hannigan (2012:135) this has not been well received. There has been previous manner of thinking that looked at various approaches, such as disaster relief and management, and contingency planning.

Page (2013:8-9) raises an interesting discussion on the role of the United Nations as an institution creating "constitutive norms". She uses the definition of "constitutive norms" by Finnemore and Sikkink (1998), stating that these "create new actors, interests, or categories of action" (as cited in Page 2013:8). This section tries to explain what these paradigms are and give the global context in which these shifts have emerged, giving particular focus on the role the United Nations has played in creating and promoting these shifts. This section shall discuss the arguments and critiques being made for the paradigms.

There are six main fields of studies that build the vast coverage of disaster studies, these are: geographical, anthropological, sociological, developmental, medical and technical (Alexander 1993 as cited in O'Brien et al. 2010:498). In the 1950s, the study on disasters was dominated by natural scientists. Since that time, the disaster discourse has rapidly branched out and up to this day continues to engage other fields of studies.

Through the 1960s, the UN General Assembly adopted several measures to assist countries that were affected by severe natural disasters, such as the Buyin-Zara earthquake in Iran killing more than 12,000 people in 1962; the earthquake in Skoplje, Yugoslavia with death tolls reaching 1,200 people in 1963; the hurricane that hit Central America also in 1963; and another devastating earthquake that hit Iran killing 10,000 people in 1968 (UNISDR website, n.d.). The assistance requested were mostly for food and shelter relief for victims; livelihood rehabilitation for the affected areas and economies; and scientific and technical studies on the origin of the earthquakes, as well as the preventive measures that can be taken against these forms of disasters (see the following UN Resolutions: Res. 1753; Res. 1882; Res. 1888; Res. 2378).

In the 1970s through the 1980s, the emphasis of the global interventions by the UN was still focused on post-disaster relief. There are two particular notable resolutions that strongly resonates the hazard paradigm, UN Resolution 2717 and 2816. Briefly, UN Res. 2717 (1970) sought the Secretary-General to make recommendations on the following: (a) having better mobilization and coordination of the assistance being provided; (b) pre-disaster planning, giving importance to immediate contingency plans once a disaster strikes; (c) stockpiling of emergency supplies and earmarking for logistical needs; (d) use of science and technology to prevent and control natural disasters, which include, awareness and information dissemination about disasters; (e) designing training for relief personnel; (f) provision of short-term, low-cost housing; and (g) planning for the reconstruction and development of disaster areas. While, UN Res. 2816 (1971) sought to establish the UN Disaster Relief Office, the particular function of the appointed Disaster Relief Coordinator that would show a hazard-centered understanding would be: "(f) To promote the study, prevention, control and prediction of natural disaster…". Yodmani (2000:1) points out that although contingency planning has made the relief operations better overall, questions of whether focusing on disaster relief as an effective means of support started to be raised.

Before the 1990s, the world witnessed several disasters globally, such as the massive floods in Bangladesh and Sudan, typhoons in the Philippines and pest infestation in parts of Africa

(UNISDR website, n.d.), with the total average amount spent on disaster relief reaching billions of dollars annually, the hazard paradigm that gives primary focus on post-disaster humanitarian assistance has raised questions on its effectiveness in preparing and capacitating vulnerable individuals and communities. Linnerooth-Bayer et al. recognize the importance of post-disaster humanitarian assistance geared towards recovery operations and reconstruction, they however, highlight that these efforts do not necessarily reduce the overall exposure to disaster risk that communities in developing countries face (2005:1044). In the same article by Linnerooth-Bayer et al. *'Refocusing Disaster Aid'*, they highlight that there is more assistance after a disaster has already struck, notwithstanding the fact that there is more proof that there is a bigger returns on investment when it is done prior to said event (2005:1044). Seeing that a lot of disasters continue to happen, Linnerooth-Bayer et al. says that there is a growing realization from the side of donors, that place importance on initiatives that are geared towards disaster prevention (2005:1044).

With the premise that funding for development initiatives are being diverted to disaster relief, the shift to disaster prevention oriented approach was also highlighted by the United Nations International Strategy for Disaster Reduction (UN/ISDR).

"The emphasis on *disaster response and humanitarian assistance has absorbed significant amounts of resources*, which would normally be allocated for development efforts. *If this trend were to persist, coping capacities of societies* in both the developed and developing countries, *are likely to be overwhelmed*." (UNISDR 2002:3, emphasis supplied).

The UNISDR report entitled *"Living with Risk"* recognized that in the early stages of the International Decade for Natural Disaster Reduction (IDNDR) was influenced by scientific and technological communities (UNISDR 2004:9). The UNISDR explain that the initiative to create the IDNDR came from the science and technology groups, due to fact that they would like to further develop the capabilities in reducing disaster losses. It cannot be denied that science and technology have a pivotal role in studying hazards and vulnerabilities, particularly, studying its patterns to be able to have informed strategies. However, the UNISDR note that, "the limitations of science and technology in responding to the problems of people and political processes identifying and managing risks need to be carefully considered" (2004:9). Wisner et al. offers a critique on a having a bias for a scientific strategy, stating that, "sustainable DRR requires significant changes in the structure of societies, not-short-term band-aid solutions, specially not those focused on only hazards" (Wisner et al. 2012:11).

Global discussions on the need for disaster reduction began in 1990 during the International Decade for Natural Disaster Reduction (INDR) covering the years 1990 to 2000. In this period, several main points emerged: first, there was a lack of international organization and cooperation in terms of natural disaster reduction; and second, there is a growing trend among states that react to disasters, rather than be proactive (Page 2013:8). It was widely recognized that the economic and human losses brought about by natural disasters were on the rise, inevitably, increasing the vulnerability of societies. So, through UN Resolution 44/236 (1989), the UN established the five main goals for the INDR, these are: (a) capacity building of each country in mitigating the effects of disasters; (b) taking note of the multiplicity of cultures and economies across the world in creating the necessary guideless and strategies in the application of existing scientific and technical knowledge; (c) continuing to fill the research gap in the sciences and engineering in order to minimize disaster losses; (d) information dissemination that concern disaster assessment,

prediction and mitigation; and (e) create technical assistance programs that are altered for particular types of disasters and locations.

The importance of a systematized global effort in disaster preparedness was established in 1994, during the World Conference on Disaster Reduction in Yokohama, Japan. The conference's output the Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, and Mitigation and its Plan of Action (Yokohama Strategy) laid the foundation for establishing the integrated goals for disaster response that were later used in the Hyogo Framework for Action 2005-2015 (HFA) (Page 2013:3). In the Yokohama Message, message no. 3, makes a case for the need for the shift to disaster prevention measures and its advantages.

> *It reads: "3. Disaster prevention, mitigation and preparedness are better than disaster response in achieving the goals and objectives of the Decade. Disaster response alone is not sufficient, as it yield only temporary results at a very high cost. We have followed this limited approach for too long. This has been further demonstrated by the recent focus on response to complex emergencies which, although compelling, should not divert from pursuing a comprehensive approach. Prevention contributes to lasting improvement in safety and is essential to integrated disaster management"*(Yokohama Strategy and Plan of Action 1994:4; emphasis supplied).

After the Indian Ocean Tsunami in 2004, the drive of the international community to prioritize disaster preparedness has been strengthened further. In January 2005, the World Conference on Disaster Reduction assembled and launched the HFA 2005-2015, called upon nations to promote disaster reduction by addressing social vulnerabilities through clearly set strategic goals and priorities for action. The three main goals identified are the following: (a) the integration of disaster risk reduction initiatives into policies, plans and programs for sustainable development and poverty reduction that is supported by international partnerships; (b) to develop and strengthen of institutions, mechanisms and capacities at all levels, particularly, the community level; and (c) the systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery in affected communities (HFA 2005:3-4).

Since the HFA in 2005, DRR has gained global recognition as an important strategy to curbing disaster losses. How did DRR gain dominance in the field of disaster management? Many authors have pointed out that it is the fact that the disaster risk reduction with the development and poverty reduction agenda having similarities in terms of its core objectives (Yodmani 2000:1; Wisner 2003:2). Other authors link disaster reduction with climate change adaptation, stating that both strategies can reinforce one another, which can be used to support the sustainable development agenda (Schipper and Pelling 2006:20). Since its inception many countries have adhered to its principles, by either establishing the necessary national frameworks through legislation or through national platforms (See footnote #3 on p.7 for a list of countries who have recently adopted the principles of the HFA).

The United Nations was not the only international body that was supporting the shift to DRR. The World Bank has also become an active player in this field. The World Bank's Development Grant Facility has given US$30 million worth of support the UN International Strategy for Disaster Reduction (UNISDR) in the last seven years (GFDRR website:2014). Catherine Vidar, a representative from World Bank that I had interviewed mentioned that World Bank initiated the Global Facility for Disaster Reduction and Recovery (GFDRR) (personal interview). The

GFDRR is a partnership amongst 25 donor partners and is management by the World Bank, it was actively lobbied by the World Bank in mid 2005 to 2006. The main rationale for the creation of this facility was due to the shared sentiment amongst donors that they wanted to "deal with other things other than reconstruction, wherein the main focus will be on the resilience agenda" (Vidar interview: 2014).

4.2 Local Frames: Framing of the National DRRM Policy

> *"You do have now an excellent legal framework for disaster risk reduction and an excellent legal framework for climate adaptation" Margareta Wahlström [23] (Ubac 2012).*
>
> *"We have in the Philippine the best two laws – not only in Asia-Pacific, but in Margareta's words- in the world" Senator Loren Legarda[24] (Ubac 2012).*

With the memories of floodwaters forcing Metro Manila to a standstill for days. People reeling from the loss of their homes- the impact of Typhoon Ketsana still fresh in the country's mind, the momentum DRR advocates and practitioners were hoping for to pass the landmark legislation that would change disaster management in the Philippines had finally arrived. Despite leaving a trail of loss and devastation amounting to US$4.38 billion[25], twin disasters, Typhoon Ketsana and Typhoon Parma proved to be the tipping points to finally legislating Republic Act 10121, the Philippine Disaster Risk Reduction and Management Act of 2010 (DRRM Act of 2010), a law ten years in the making.

The law was approved on May 27, 2010, a month before then President Gloria Arroyo would need to step down and give way to the newly elected president, Benigno Aquino III. The DRRM Act of 2010 repealed the thirty-two year old law, Presidential Decree 1566 focusing on disaster response. Comfort (2005:355) points out there are cases, such as the 11 September 2011 attack on the twin towers in the United States, that jumpstart a thorough assessment of government performance, reviewing closely the actions done by government pre and post disaster, causing an overzealous drive to pass new policies, and restructure necessary organizations to meet the new needs and address gaps.

It was worth noting that the Global Facility on Disaster Reduction and Recovery (GFDRR) also had an important role in pushing for their resilience agenda, highlight the proactive approach in dealing with disasters. Catherine Vidar from World Bank said "The GFDRR supports country programs in developing capacities. In the case of the Philippines, one of the entry points of GFDRR was the flooding in 2009 because of Typhoon Ondoy (Ketsana). The World Bank fielded Post-Disaster Needs Assessment teams, and recommended a comprehensive flood control plan". Whilst the Post-Disaster Needs Assessment was being completed, a US$ 250 million loan from World Bank to finance the recovery and rehabilitation efforts of the Philippines after Typhoons Ketsana and Parma was made available ("World Bank okays $250

[23] Margareta Wahlström is the Special Representative of the Secretary General of the United Nations for Disaster Risk Reduction.

[24] Senator Loren Legarda is the main sponsor of the Climate Change Act of 2009 and is the Senate cosponsor of the Disaster Risk Reduction and Management Act of 2010.

[25] According to the report published by the Global Facility for Disaster Reduction and Recovery, back-to-back typhoons, Ketsana and Parma caused a total damage and losses amounting to US$4.38 billion, equivalent to roughly 2.7 percent of the country's GDP.

million loan" 2010). The timing of everything was a bit curious, because a loan of that amount was made available so late in the term of President Arroyo. The question of whether or not, passing the law in any state its at is a possible payoff is raised.

This law was not passed overnight; the policies it prescribes, the institutional mandates it has created, and the budget it receives went through a process of negotiation.

Britton (2006:1) explains the crucial role legislation plays in establishing a solid basis for a country's disaster strategy. Law can be used to provide penalties and incentives by enforcing standards, to empower existing agencies or establish new bodies with new responsibilities, and to assign budget line items (Pelling and Holloway 2006). In short, legislation enables and promotes sustainable engagement, helps to avoid disjointed action at various levels and provides recourse for society when things go wrong" (Llosa and Zodrow 2011:1-2). Comfort (2005:339) simplifies the link between policy and action by stating that, "the intent of policy is to guide practice".

The timing of the passage of the bill could not have been more critical and testing for a new administration. Although, Republic Act 10121 (DRRM Act of 2010), was signed into law on May 2010 by President Gloria Macapagal-Arroyo, all eyes are on President Benigno Aquino's administration, as it implements a crucial legislation.

Birkland explains that in the hierarchy of issues that needs to be resolved, disasters are usually ranked low in priority up until the issue is brought to forefront by a "completely, exogenous and largely unpredictable event" (1997: 49). While focusing events such as disasters have a trigger effect in terms of pushing it to the top of the policy agenda, Margareta Wahlström in a press briefing on the 6th Ministerial Conference for Disaster Risk Reduction held last June 2014 said that, "It is morally unacceptable that we need regular big catastrophes to continue to action" (Evangelista 2014). Wahlström explains that people have "short-term memory" and "complacency" when it comes to the lessons learned (ibid). Where does disaster risk reduction fit into this administration's agenda? Is RA 10121, one of the many laws that have just become tokens?

Why then do I zero in on the national government as a primary actor when clearly one of the salient features the new law has is to encourage bottom-up participation, pushing for, community-based disaster risk reduction? Schneider explains that in the case of the United States, the "government is viewed as the only institution with the resources, authority and capabilities to help citizens cope with large-scale cataclysmic events like natural disasters" (2008:715). This view is not just held in the United States, even in the Philippines, the first entity that people look at is the government. It is expected that the government when everything else has been cut off, will be the first to respond and rebuild the community.

Alex de Waal in his article that discusses political components of disasters argues that "Governments respond when there are political incentives to do so" (2006:131). Massive disasters that gained global attention, those that require a great amount of humanitarian assistance can cause the public to cast doubt on the competency of the public authorities and its policies (Wisner 2003:1). This creates immense pressure from elected officials, as well as Department Heads (Members of the President's Cabinet).

This section of the paper looks at how the national government frames the DRRM policy through the actions and practices it has exhibited by looking at the state of the nation addresses of President Benigno Aquino; statements made by other key officials from President Aquino's cabinet.

Every year since President Aquino was elected into office, his administration has faced one disaster after another. In President Aquino's inaugural year, within months from his election, Typhoon Juan (International Name Megi) hit Manila on October 2010.

4.2.1 Redefining Disasters, Locating Hazards and Vulnerability in the Equation

The local frames in this paper are espoused by two groups of actors, which are active in the sphere of policy-making and implementation. The first group of actors is composed of my respondents during the interview, most of whom are long-time advocates and practitioners of DRR and humanitarian assistance, and the second group of actors is composed of elected and appointed officials and politicians. These two groups of actors, frame disasters quite differently, DRR practitioners tend to focus on addressing vulnerabilities, while the other group, tend to gravitate towards a hazard paradigm approach.

The Philippines' high exposure to hydro-meteorological and geological hazards largely lies on its geographic location. However, "it is unfair to categorize the Philippines as disaster-prone", recounts Romina Marasigan, a representative from OCD[26] (Personal Interview, 2014). Romina Marasigan explains that the Filipinos may feel and experience natural hazards, but these do not mean they can be automatically classified as disasters. Highlighting the "naturalness" of these disasters is no longer a predominantly accepted idea in the country, at least among DRRM practitioners. There seems to be a consensus among my respondents, from the representatives of Philippine agencies to donor institutions, with the definition of the disasters that they use.

DRRM practitioners across the spectrum when discussing about disaster put premium on how hazards affect human systems and structures, Cohen and Werker (2008:2) refers to disasters as the "net impact of shock on the population". Catherine Vidar of World Bank[27] says disasters simply put are a "failure of human systems to deal with some shock, natural or man-made" (Vidar Interview: 2014). While Philippine Climate Change Commissioner, Yeb Saño[28] putting it in even simpler terms, "If there are no people or no human assets, even if there is a strong hazard, we can prevent disasters. It really circles on impact on human society" (Personal Interview: 2014).

Many of my respondents, a majority of which has been working in the DRR sector for years, have emphasized the link between disasters and reducing a community's vulnerabilities. Who are the most at risk and most vulnerable?

---

[26] Personal interview with Romina Marasigan, Chief Press Officer of the Office of Civil Defense, conducted last August 2014 (hereinafter, Marasigan interview).

[27] Personal interview with Catherine Vidar, Disaster Risk Management Specialist of World Bank, conducted last August 2014 (hereinafter, Vidar interview).

[28] Personal interview with Naderev "Yeb" Saño, Philippine Climate Change Commissioner, conducted last August 2014 (hereinafter, Saño interview).

> *"The poor bears the burden when it comes to disaster and any other shock that you can identify. Typhoon Yolanda pushed 2 million people more to the poverty line. Disasters prevent us from achieving our development goals. We have committed that disaster risk management will be one of our themes because of the burden it impinges on the poor. Whatever asset they have built over time, because of just one event and all their assets will be depleted."* (Vidar Interview: 2014).

Many of projects discussed with the OCD and the donor institutions, revolve around long-term strategies that are geared towards capacity-building, review of the organizational structures of local government units, planning and implementing agencies.

However, there are elected and appointed officials from within the national government that still view disasters as an event purely brought about by external factors, such as hazards. Take for example, all of President Benigno Aquino's state of the nation addresses from 2010 to 2014. He mentioned the need to secure the safety of the Filipinos from 'calamities' or ensure measures are in place to avoid 'catastrophe' (see Annex C1 and C2 for excerpts from the official translated transcript). Even when President Aquino referred to DRRM in his speech, he gave emphasis on government strategies such as having better equipment and personnel training for weather forecasting and predicting where the typhoon, flood or any other hazard that might strike (see Annex C3, C4 and C5). Why is the President consistent with of initiatives that fall under the hazard frame? This is partly because disasters occur in a political space.

Hannigan (2012:98) says that at times of disasters, the visibility of an individual during the relief process greatly affects his or her political interests. He explains further that reputations are fragile during this period of high public pressure (Hannigan 2012:104). Looking at the case of Typhoon Haiyan last November 2013, the most visible person was Secretary Mar Roxas, Head of the Department of Interior and Local Government. Newspaper articles attribute this to the rumors that Secretary Roxas has plans of running for President in 2016, and being a visible leader would greatly help his chances of winning. However, the pre-disaster operations as recounted in television news and news articles were deemed a failure. Thousands of people lost their lives. Major transportation infrastructures such as roads, airports, bridges and ports were leveled. The blame for the disaster was blamed on the 'unpreparedness' of the national government, some would even go further and state that it due to the ineptitude of Secretary Roxas and other members of the Cabinet. News circulated that Secretary Roxas arrived two days before Typhoon Haiyan was scheduled to hit Tacloban, and he had forgotten to ask weather forecaster or a representative of the weather bureau (PAGASA) to join the meeting (Tiglao 2014).

4.2.2 **Disaster Risk Reduction as an Overemphasis of Disaster Preparedness and Disaster Prevention and Mitigation?**

There seems to be two sets of understanding on what disaster risk reduction is. On the one hand, for elected officials, politicians and bureaucrats, led by no less than, President Benigno Aquino III, the idea of disaster risk reduction and management is narrowed to just two identified priority areas: disaster preparedness and disaster prevention and mitigation. While, on the other hand, for DRR practitioners within the national government, disaster risk reduction and management is equivalent to empowering and capacitating local communities.

Three out five of President Benigno Aquino's state of the nation addresses and its technical reports, have emphasized the improvement of forecasting technology and systems, such as heavily investing in Project NOAH (Nationwide Operational Assessment of Hazards); mass distribution of hydro-meteorological devices (i.e. rain gages); the completion of geohazard maps; the early positioning of relief goods; initiating comprehensive and advance flood network models and ensuring that disaster command and auxiliary command centers nationwide are activated. By reviewing these measures, it can be concluded that disasters are characterized as extreme events, something that the populace needs to be shielded from. Surprisingly, absent from his speeches is the link between disasters and development - how does this administration hope to address the issue of vulnerability? Has the national government started addressed the structural reasons that keep the vulnerable population vulnerable?

Every now and then, a working DRRM plan is possible. There are pockets of examples in the Philippines, such as the Province of Albay and the municipality of San Francisco, Camotes Island, Cebu, where they made it work[29]. In the municipality of San Francisco, Camotes Island, Mayor Al Arquillano was able to fully evacuate an entire small island into safety prior to the height of Typhoon Haiyan.

Saño shares what he has learned based on his experience working with local communities, he says:

> *"When you have to implement DRR, the trap we always fall into is finding the magic wand or the silver bullet or the single solution. I don't think it exists. For example, we've always been dependent on a charismatic leader, we've been defined by the kind of president we have or the kind of mayor that we have, and that has to stop. Until we address that, it's not sustainable and we're not empowering our institutions. Pinning your hopes in a really, really brilliant President or a good mayor or a good governor is just trying to find the silver bullet.*" (Saño interview).

[29] Both the Province of Albay and the Municipality of San Francisco, Camotes Island, Cebu has been awarded the Sasakawa Award. The Sasakawa Award for Disaster Risk Reduction in Geneva is bestowed by the United Nations to communities that showed excellence in reducing disaster risk.

Chapter 5
Of Policies, Practice and Politics: Conclusion and Moving Forward

There are two competing frames in the field of disaster risk reduction and management in the Philippines: the hazard frame and the vulnerability frame, the former calls for a reactive approach, while the latter, promotes a proactive approach in disaster risk management. These frames were manifested in the policies that were initiated and prioritized, and in what policies were put into action (practices), and were highlighted by the politics between the actors in the domain of disaster governance. Where does the element of politics come in? The politics in this paper is the tug-of-war between the hazard and vulnerability frames, stemming from how actors within the national government perceive disasters, and later, how they negotiate its position in the domain of disaster governance. The frames presented in this paper does not claim to be exhaustive nor comprehensive, since the study only focused on one group of actors, the national government.

The main objective of this paper is to draw out the relationship between the DRRM frames and disaster governance, the following questions were raised: "How far does DRRM frame influence disaster governance in the Philippines? What is the role of the national government in disaster management in the Philippines? How are the disaster management institutional structures set up in the national level? What were the factors that contributed for the Philippines to change its disaster management paradigm? How are disaster risk reduction and management policies and actions framed by the national government?

This paper looks at the DRR government policies, institutions, and practices in the Philippines. I argue that historical and institutional structures created by law mismatch the global policy change promoted by DRR policy entrepreneurs. Because of which, despite establishing a comprehensive national framework that promotes proactive measures in dealing with disasters, the national government fallback to its reactive paradigm roots. This chapter attempts to peal the layers of how deep some of these frames are embedded. The idea behind this is not to criticize the current administration, but to draw attention to what can be improved.

It was earlier established how the institutional structure strongly influences how institutional actors frame the policy problem, solutions and actions (Creed 2002), it is on that note that the findings of chapter 3 be revisited.

Historically, the Philippines have had a very strong top-down, highly centralized approach to dealing with disasters, which is evident in its organizational structure being closely linked with military structures and command, such as the Department of National Defense and Office of Civil Defense. Even when policy advocates for DRRM in the Philippines seized an opening in the policy window, the move to follow the vulnerability frame was premature. The disaster management organization structures that are set up in the national level is bias towards the hazard framing – until today, between preparedness and mitigation practices and rescue and relief operations, it still the latter that dominates. Despite being constantly battered by disasters, the Philippines is just learning more about it, I believe that disasters are still being treated as irregular one off events has kept the country from fully taking it as a serious problem.

The global paradigm shift that was heavily influenced by outside actors, such as the United Nations had introduced the vulnerability frame. This has caused a conflict between how disasters are perceived by traditional actors in the national level.

Hazard vs Vulnerability: Conflicting Frames within the Domain of Disaster Governance

This chapter started by asking these questions: "What were the factors that contributed for the Philippines to change its disaster management paradigm?" and "How are disaster risk reduction and management policies and actions framed by the national government?" The first question refers to how 'knowledge' in the domain of scientific knowledge and disaster management is generated and transferred, while the second question asks what frames are created as a product of the domain of disaster governance.

In the brief discussion on the Domain of Scientific Knowledge and Disaster Management in Chapter 2, it was explained that it has been traditionally dominated by the hazard paradigm (Hilhorst 2004), so measures to control disaster, such as building investing in infrastructure, as well as lining up provisions for a quick-response is made a priority. However, as narrated in section 4.1. 'Global Frames', after a series of global disasters, the United Nations General Assembly started making changes on how disasters should be managed, from rescue and relief to disaster risk reduction.

What can be said about the global paradigm shift to DRR? While it can be lauded that the spirit of being proactive is encouraged, it is important to ask what are the underlying reasons for doing so? First, is the argument that it costs more if both developed and developing countries continued that trajectory of only supporting rescue and relief operations. Not long after, donors, headed by the World Bank, initiated the Global Facility for Disaster Reduction and Recovery (GFDRR). With this, developing countries who tend to lean towards the reactive/ hazard frame, can take loans to implement the resilience/vulnerability agenda. A small group of 'knowledge actors' seized the opportunity of pushing for this. Now that DRR is being promoted as the strategy to follow globally, was the Philippines ready to make that shift? The shift from hazard frame to vulnerability frame?

> "In parallel, policy-makers have given primary attention to the outcomes and suggestions of the hazard paradigm (Gaillard, 2010). *Most national risk reduction policies still rely on command-and-control and top-down frameworks*, which emphasize scientific knowledge and national government intervention at the detriment of local actions (GNDR, 2011; IFRC, 2011). *Only within the international arena have policy-makers considered ideas from the vulnerability paradigm*" (as cited in Gaillard and Mercer 2012:93-94, emphasis supplied).

How did the global paradigm shift of promoting DRR transfer to the Philippines? Foremost, I would like to give emphasis on a common denominator in the process of generating the frames that both the global and local framing share – in both instances, the role of trigger or 'focusing events' (Birkland 1997) played a pivotal role in elevating the DRR as an important agenda. The history of the rise of the UNISDR is replete with stories of disasters being used as trigger events to reflect on the current disaster management systems, a catalyst for change in approaches. In

the Philippines, it was the perfect policy window to get DRR on the table and the bill finally passed.

Now that the policy has been institutionalized, what happens when two groups of actors (DRR practitioners and politicians) in the national government have different perceptions of disaster and disaster risk reduction? The policies and practices become disjointed. There is a dichotomy in the priorities, and emphasis is given to polices and practices that can be easily seen by the population. Therefore, bias is given to funding scientific projects, as well as investing in rescue operations. On paper, the Philippines follow the vulnerability frame, but because of political viability and visibility, practices lean towards the hazard frame/reactive approach.

Reference:

'2nd Bicameral Conference Committee on the Disagreeing Provisions of SBN 3086 and HBN 6985 (Disaster Risk Management)'. (2010) Pasay: Senate of the Philippines.

ADPC (2001) *The Philippine Disaster Management Story: Issues and Challenges*. Pathumthani: Asian Disaster Preparedness Center.

Ahrens, J. and P.M. Rudolph (2006) 'The Importance of Governance in Risk Reduction and Disaster Management'*, Journal of Contingencies and Crisis Management* 14(4): 207-220.

AIPA (2011) 'Philippines Country Report on Disaster Response Management', paper presented on the 3rd AIPA Caucus Report. Manila: ASEAN Inter Parliamentary Assembly, accessed on 12 September 2014 <http://www.aipasecretariat.org/wp-content/uploads/2011/07/3.Disaster-Response-Management.pdf>.

Aquino, B.S. III, First State of the Nation Address (English Translation). Session Hall of the House of Representatives, Batasang Pambansa Complex, QC. 26 July 2010. Accessed on 26 September 2014 <http://www.abs-cbnnews.com/nation/07/26/10/state-nation-address-pres-benigno-s-aquino-iii-english-translation>.

Aquino, B.S. III, Second State of the Nation Address (English Translation). Session Hall of the House of Representatives, Batasang Pambansa Complex, QC. 25 July 2011. Accessed on 26 September 2014 <http://www.gov.ph/2011/07/25/benigno-s-aquino-iii-second-state-of-the-nation-address-july-25-2011/>.

Aquino, B.S. III, Third State of the Nation Address (English Translation). Session Hall of the House of Representatives, Batasang Pambansa Complex, QC. 23 July 2012. Accessed on 26 September 2014 <http://www.gov.ph/2012/07/23/english-translation-benigno-s-aquino-iii-third-state-of-the-nation-address-july-23-2012/>.

Aquino, B.S. III, Fourth State of the Nation Address (English Translation). Session Hall of the House of Representatives, Batasang Pambansa Complex, QC. 22 July 2012. Accessed on 26 September 2014 <http://www.gov.ph/2013/07/22/english-benigno-s-aquino-iii-fourth-state-of-the-nation-address-july-22-2013/>.

Aquino, B.S. III, Fifth State of the Nation Address (English Translation). Session Hall of the House of Representatives, Batasang Pambansa Complex, QC. 28 July 2012. Accessed on 26 September 2014 <http://www.gov.ph/2014/07/28/english-benigno-s-aquino-iii-fifth-state-of-the-nation-address-july-28-2014/>.

Baas, S., S. Ramasamy, J.D. DePryck and F. Battista (2008) *Disaster Risk Management Systems Analysis: A Guide Book*. Vol. 3. Food and Agriculture Organization of the United Nations.

Balgos, B.C. (2014) 'People's Response to Disasters: Vulnerability, Capacities, and Resilience in Philippine Context'*, Philippine Political Science Journal* 35(1): 127-129.

Bankoff, G. (1999) 'A History of Poverty: The Politics of Natural Disasters in the Philippines, 1985–95'*, The Pacific Review* 12(3): 381-420.

Bankoff, G. (2003a) 'Constructing Vulnerability: The Historical, Natural and Social Generation of Flooding in Metropolitan Manila', *Disasters* 27(3): 224-238.

Bankoff, G. (2003b) *Cultures of Disaster: Society and Natural Hazards in the Philippines.* Psychology Press

Bankoff, G. and D. Hilhorst (2009) 'The Politics of Risk in the Philippines: Comparing State and NGO Perceptions of Disaster Management', *Disasters* 33(4): 686-704.

Beck, M.W., Shepard, C.C., Birkmann, J., Rhyner, J., Welle, T., Witting, M., Wolfertz, J., Martens, J., Maurer, K., Mucke, P. and K. Radtke (2012) 'World Risk Report 2012'. Berlin: Bündnis Entwicklung Hilft.

Benthall, J. (1993) *Disasters, Relief and the Media.* IB Tauris London.

Birkland, T.A. (1997) *After Disaster: Agenda Setting, Public Policy, and Focusing Events.* Georgetown University Press.

Blaikie, P., T. Cannon, I. Davis and B. Wisner (1994) 'At Risk', *Natural hazards, people's vulnerability and disasters.*

Britton, N.R. (2006) 'Getting the foundation right: in pursuit of effective disaster legislation for the Philippines', Manila, paper presented at the 2nd Asian Conference on Earthquake Engineering. Manila.

Cardona, O. (2004) 'The Need for Rethinking the Concepts of Vulnerability and Risk from a Holistic Perspective: A Necessary review and Criticism for Effective Risk Management', in G. Bankoff, G. Frerks and D. Hilhorst (eds) *Mapping Vulnerability: Disasters, Development and People*, pp.37-51. London: Earthscan.

Cohen, C. and E.D. Werker (2008) 'The Political Economy of "natural" Disasters', *Journal of Conflict Resolution* .

Comfort, L., B. Wisner, S. Cutter, R. Pulwarty, K. Hewitt, A. Oliver-Smith et al. (1999) 'Reframing Disaster Policy: The Global Evolution of Vulnerable Communities', *Environmental Hazards* 1(1): 39-44.

Comfort, L.K. (2005) 'Risk, Security, and Disaster Management', *Annu.Rev.Polit.Sci.* 8: 335-356.

Creed, W.D., J.A. Langstraat and M.A. Scully (2002) 'A Picture of the Frame: Frame Analysis as Technique and as Politics', *Organizational Research Methods* 5(1): 34-55.

De Waal, A. (2006) 'Towards a Comparative Political Ethnography of Disaster Prevention', *Journal of International Affairs* 59(2): 129.

Dela Cruz, G. (2014) 'Looking back: The 1968 Casiguran earthquake', *Rappler,* 02 August 2014. Accessed on 15 October 2014 < http://www.rappler.com/move-ph/issues/disasters/65064-casiguran-earthquake>.

Delfin, F.G. and J. Gaillard (2008) 'Extreme Versus Quotidian: Addressing Temporal Dichotomies in Philippine Disaster Management', *Public Administration and Development* 28(3): 190-199.

Entman, R.M. (1993) 'Framing: Toward Clarification of a Fractured Paradigm', *Journal of communication* 43(4): 51-58.

Evangelista, P. (2014) 'Complacency in Disasters 'Morally Unacceptable' - UN' *Rappler,* 26 June. Accessed on 13 October 2014 < http://www.rappler.com/move-ph/issues/disasters/61691-complacency-disasters-morally-unacceptable-united-nations>.

Executive Order No. 337 (1941) *Promulgating Rules and Regulations for the Organization and Trading of Volunteer Guards*. Accessed on 12 October 2014 <http://www.gov.ph/1941/04/16/executive-order-no-337-s-1941/>.

Executive Order No. 355 (1941) *Creating a Civilian Emergency Administration*. Accessed on 12 October 2014 <http://www.gov.ph/1941/07/02/executive-order-no-355-s-1941/>.

Executive Order No. 838 (2009) *Creating a Special National Public Reconstruction Commission to Undertake a Study of the Causes, Costs and Actions to be Taken in the Wake of Typhoons Ondoy, Pepeng, and Frank, to Seek Fresh Aids to Fund Reconstruction and to Enter into a Partnership with Private Sector for the Foregoing Purposes.* Accessed 29 October 2014 <http://www.gov.ph/2009/10/22/executive-order-no-838/>.

Furedi, F. (2007) 'The Changing Meaning of Disaster'*, Area* 39(4): 482-489.

Gaillard, J., C.C. Liamzon and E.A. Maceda (2005) 'Act of Nature Or Act of Man? Tracking the Root Causes of Increasing Disasters in the Philippines'*, Philippine Geographical Journal* 49(1-4): 45-66.

Gaillard, J. (2010) 'Vulnerability, Capacity and Resilience: Perspectives for Climate and Development Policy'*, Journal of International Development* 22(2): 218-232.

Gaillard, J. and J. Mercer (2012) 'From Knowledge to Action Bridging Gaps in Disaster Risk Reduction'*, Progress in Human Geography* 37(1): 93-114.

GFDRR (Last updated n.d.) 'Who we are' (a webpage of Global Facility for Disaster Reduction and Recovery). Accessed 25 October 2014 <https://gfdrr.org/who-we-are>.

Guha-Sapir, D., P. Hoyois and R. Below (2014) *Annual Disaster Statistical Review 2013: The Numbers and Trends.* Brussels: CRED, available on http://www.cred.be/sites/default/files/ADSR_2013.pdf

Hannigan, J. (2012) 'Disasters without Borders'*, The International Politics of Natural Disasters, Cambridge UK* .

Heijmans, A. (2001) *Vulnerability: A Matter of Perception.* Benfield Greig Hazard Research Centre London.

Hilhorst, D. (2013) 'Disaster, Conflict and Society'*, Disaster, Conflict and Society in Crises: Everyday Politics of Crisis Response* 1: 1.

Hilhorst, D. (2004) 'Complexity and Diversity: Unlocking Social Domains of Disaster Response', in Greg Bankoff, G. Frerks and D. Hilhorst (eds) *Mapping Vulnerability: Disasters, Development and People*, pp.52-66. London: Earthscan.

Hoffman, A.J. and M.J. Ventresca (1999) 'The Institutional Framing of Policy Debates Economics Versus the Environment'*, American Behavioral Scientist* 42(8): 1368-1392.

Kellett, J. and K. Peters (2014) *Dare to Prepare: Taking Risk Seriously Compendium of Background Resources.* London: Overseas Development Institute.

Kent, R.C. (1987) *Anatomy of Disaster Relief: The International Network in Action.* Pinter Publishers.

Krane, D. (2007) 'The Unavoidable Politics of Disaster Recovery'*, Public Manager* 36(3): 31.

IFRC and UNDP (2014) *Effective law and regulation for disaster risk reduction: a multi country report.* New York: International Federation of Red Cross.

Lee-Brago, P. (2014) '1.2 M in Asia-Pacific died due to disasters – experts', *The Philippine Star'*, 02 November 2014, accessed on 5 November 2014 < http://www.philstar.com/headlines/2014/11/02/1387169/1.2-m-people-asia-pacific-died-due-disasters-experts>.

Letter of Implementation No. 19 (1972) *Relative to Chapter II, Part XIX on Department of National Defense and Other Pertinent Provisions of the Integrated Reorganization Plan* s.13. Accessed on 23 October 2014 <http://www.gov.ph/1972/12/31/letter-of-implementation-no-19-s-1972/>.

Lewis, J. (1999) *Development in Disaster-Prone Places: Studies of Vulnerability.* Intermediate Technology London.

Levi-Faur, D. (2012) 'From "Big Government" to "Big Governance"?', in David Levi-Faur (ed) *The Oxford Handbook of Governance*, pp. 3-18. Oxford: Oxford University Press.

Linnerooth-Bayer, J., R. Mechler and G. Pflug (2005) 'Refocusing Disaster Aid'*, Science* 309(5737): 1044-1046.

Llosa, S. and I. Zodrow (2011) 'Disaster Risk Reduction Legislation as a Basis for Effective Adaptation'*, Global Assessment Report on Disaster Risk Reduction: Revealing Risk, Redefining Development.*

Manila Observatory (n.d.) 'History'. Accessed October 20 2014 <http://www.observatory.ph/Aboutus/history>.

Manyena, S.B., E. Mavhura, C. Muzenda and E. Mabaso (2013) 'Disaster Risk Reduction Legislations: Is there a Move from Events to Processes?'*, Global Environmental Change* 23(6): 1786-1794.

Mattingly, S. (2002) 'Policy, legal and institutional arrangements', Proceedings of the Regional Workshop on Best Practices in Disaster Mitigation, Bandung Institute of Technology, pp. 24-26.

National Economic Development Authority (2014) 'Philippine Development Plan 2011-2016 Midterm Update With Revalidated Results Matrices'. Pasig: National Economic Development Authority.

O'Brien, G., P. O'Keefe, Z. Gadema and J. Swords (2010) 'Approaching Disaster Management through Social Learning'*, Disaster Prevention and Management* 19(4): 498-508.

Oliver-Smith, A. (1996) 'Anthropological Research on Hazards and Disasters'*, Annual Review of Anthropology* : 303-328.

Oliver-Smith, A. (1999) ' "What is a disaster?":Antropological Perspectives on a Persistent Question', in A. Oliver-Smith and S. Hoffman (eds) *The Angry Earth: Disaster in Anthropological Perspective,* pp. 18-34. London: Routledge.

Ordinario, C. (2014) 'PHL still has a way to go to achieve MDGs', Accessed on 14 September 2014 <http://www.pids.gov.ph/index4.php?pr=866>.

Page, C.M. (2013) 'Why States Prepare for Natural Disasters: Implementation of the Hyogo Framework for Action 2005-2015'.

Park, Y. and J. Miller (2006) 'The Social Ecology of Hurricane Katrina: Re-Writing the Discourse of "natural" Disasters'*, Smith College Studies in Social Work* 76(3): 9-24.

Pelling, M. (2003) 'Paradigms of risk', in Mark Pelling (ed.) *Natural Disaster and Development in a Globalizing World*, pp.3-16. London: Routledge.

Pelling, M. and A. Holloway (2006) 'Legislation for Mainstreaming Disaster Risk Reduction', *Tearfund,* London, UK.

Pelling, M. and K. Dill (2009) 'Disaster politics: tipping points for change in the adaptation of sociopolitical regimes', *Progress in Human Geography,* pp1-17.

Presidential Decree No. 1566 (1978) *Strengthening the Philippines Disaster Control, Capability and Establishing the National Program on Community Disaster Preparedness*. 07 July 2014 <http://www.lawphil.net/statutes/presdecs/pd1978/pd_1566_1978.html>.

Pulhin, J.M., M.A. Tapia and R.T. Perez (2010) 'Integrating Disaster Risk Reduction and Climate Change Adaptation: Initiatives and Challenges in the Philippines', *Community, Environment and Disaster Risk Management* 5: 217-235.

Quarantelli, E.L. (1986) 'Planning and Management for the Prevention and Mitigation of Natural Disasters, especially in a Metropolitan Context: Initial Questions and Issues which Need to be Addressed'.

Quarantelli, E.L. (1998) 'Disaster Planning, Emergency Management, and Civil Protection: The Historical Development and Current Characteristics of Organized Efforts to Prevent and to Respond to Disasters'.

Republic Act No. 1190 (1954) *An Act to Provide for the Civil Defense in Time of War and Other National Emergency, Crating a National Civil Defense Administration, and for Other Purposes.* Accessed on 20 October 2014 <http://www.chanrobles.com/republicacts/republicactno1190.html#.VGJlyPTF-Xo>.

Republic Act No. 10121 (2010) *Philippine Disaster Risk Reduction and Management Act of 2010*. Accessed on 12 June 2014 <http://www.gov.ph/2010/05/27/republic-act-no-10121/>.

Ribera, P., R. García-Herrera and L. Gimeno (2008) 'Historical Deadly Typhoons in the Philippines', *Weather* 63(7): 194-199.

Ribot, J. (2014) 'Cause and response: vulnerability and climate in the Anthropocene', *The Journal of Peasant Studies'* 1-40.

Schipper, L. and M. Pelling (2006) 'Disaster Risk, Climate Change and International Development: Scope for, and Challenges to, Integration', *Disasters* 30(1): 19-38.

Schneider, S. (2008) 'Who's to Blame?(Mis) Perceptions of the Intergovernmental Response to Disasters', *Publius: The Journal of Federalism* 38(4): 715-738.

Stone, D. (2012) 'Agents of Knowledge', in D. Levi-Faur (ed) *The Oxford Handbook on Governance*, pp. 339-352. Oxford: Oxford University Press.

Tierney, K. (2012) 'Disaster Governance: Social, Political, and Economic Dimensions', *Annual Review of Environment and Resources* 37: 341-363.

Tiglao, R. (2014) 'The gov'ts biggest boo-boo on the Yolanda fiasco', *The Manila Times,* 06 November 2014. Accessed on 08 November 2014 <http://www.manilatimes.net/exposed-govts-biggest-boo-boo-yolanda-fiasco/139839/>.

Ubac, M. (2012) 'UN lauds Philippines' climate change laws 'world's best'', *Philippine Daily Inquirer* 04 May 2012. Accessed on 12 October 2014 <http://globalnation.inquirer.net/35695/un-lauds-philippines%E2%80%99-climate-change-laws-%E2%80%98world%E2%80%99s-best%E2%80%99/>.

United Nations (1994) 'Yokohama Strategy and Plan of Action for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation'. paper presented at the World Conference on Natural Disaster Reduction. Yokohama.

United Nations General Assembly (1962) 'Resolution no. 1753 Measures to be Adopted in Connexion with the Earthquake in Iran'. New York: United Nations.

United Nations General Assembly (1963) 'Resolution no. 1882 Measures in Connexion with the Earthquake at Skoplje, Yugoslavia'. New York: United Nations.

United Nations General Assembly (1970) 'Resolution no. 2717 Assistance in Cases of Natural Disaster'. New York: United Nations.

United Nations General Assembly (1971) 'Resolution no. 2816 Assistance in Cases of Natural Disaster and Other Disaster Situation'. New York: United Nations

UNDP (2004) *Reducing Disaster Risk: A Challenge for Development*, New York: United Nations Development Programme.

UNISDR 'History' (a webpage of United Nations International Strategy for Disaster Reduction). Accessed 16 October 2014 <http://www.unisdr.org/who-we-are/history>.

UNISDR (2002) *Natural Disasters and Sustainable Development: Understanding the Links Between Development, Environment and Natural Disasters*. Geneva: United Nations International Strategy for Disaster Reduction.

UNISDR (2004) *Living with Risk: A Global Review of Disaster Reduction Initiatives*. Vol. 1. Geneva: United National International Strategy for Disaster Risk.

UNISDR (2005) 'Hyogo Framework for Action 2005 – 2014: Building Resilience of Nations and Communities to Disasteres'. paper presented at the World Conference on Natural Disaster Reduction. Hyogo.

UNISDR (2011) *Hyogo Framework For Action 2005-2015: Building the Resilience of Nations and Communities to Disasters Mid-Term Review 2010-2011*. Geneva: United Nations International Strategy for Disaster Reduction.

Vila, A. (2014) 'Deadliest typhoons to hit the Philippines', *The Philippine Star* 8 July 2014, accessed on 10 August 2014 <http://www.philstar.com/news-feature/2014/07/08/1343847/deadliest-typhoons-hit-philippines>.

Wisner, B. (2003) 'Sustainable Suffering? Reflections on Development and Disaster Vulnerability in the Post-Johannesburg World', *Regional Development Dialogue* 24(1; SEAS SPR): 135-148.

Wisner, B. (2011) 'Are we there Yet? Reflections on Integrated Disaster Risk Management After Ten Years', *IDRiM Journal* 1(1).

Wisner, B., Blaikie, P., T. Cannon, and I. Davis (2004) *At Risk: Natural Hazards, People's Vulnerability and Disasters*. Routledge.

Wisner, B., Gaillard, JC and I. Kelman (2012) 'Framing Disaster: Theories and stories seeking to understand hazards, vulnerability and risk', in Ben Wisner, JC Gaillard, and I. Kelman (eds) *The Routledge Handbook of Hazards and Disaster Risk Reduction*, pp. 18-33. Oxon: Routledge.

World Bank and NDCC (n.d.) *Natural Disaster Risk Management in the Philippines: Enhancing Poverty Alleviation Through Disaster Reduction*. The World Bank East Asia and Pacific Region Rural Development: Manila.

'World Bank okays $250 million loan for RP's post typhoon reconstruction', *The Philippine Star,* 21 May 2010. Accessed on 16 October 2014 <http://www.philstar.com/breaking-news/576827/world-bank-okays-250-million-loan-rps-post-typhoon-reconstruction>.

Yodmani, S. (2001) *Disaster Risk Management and Vulnerability Reduction: Protecting the Poor*. Bangkok: The Asian Disaster Preparedness Center.

Annex A

Members of the National Disaster Coordinating Council

The NDCC shall be composed of executive members of the President's cabinet, such as:

1. Secretary of National Defense (Chairman)
2. Secretary of Public Works and Highways
3. Secretary of Transportation and Communication
4. Secretary of Science and Technology
5. Secretary of Social Welfare and Development
6. Secretary of Agriculture
7. Secretary of Education, Culture and Sports
8. Secretary of Finance
9. Secretary of Labor and Employment
10. Secretary of Trade and Industry
11. Secretary of Health
12. Secretary of Environment and Natural Resources
13. Secretary of Tourism
14. Secretary of Budget and Management
15. Secretary of Justice
16. Director, Philippine Information Agency
17. Secretary, General, Philippine National Red Cross
18. National Housing Authority
19. Chief-of-Staff, Armed Forces of the Philippines
20. Director-General, National Economic Development Authority
21. Presidential Executive Secretary, and
22. Administrator, OCD

Annex B

Members of the National Disaster Risk Reduction and Management Council

1. Secretary, Department of Health
2. Secretary, Department of Environment and Natural Resources
3. Secretary, Department of Agriculture
4. Secretary, Department of Education
5. Secretary, Department of Energy
6. Secretary, Department of Finance
7. Secretary, Department of Trade and Industry
8. Secretary, Department of Transportation and Communications
9. Secretary, Department of Budget and Management
10. Secretary, Department of Public Works and Highways
11. Secretary, Department of Foreign Affairs
12. Secretary, Department of Justice
13. Secretary, Department of Tourism
14. Executive Secretary
15. Secretary, Office of the Presidential Adviser on the Peace Process
16. Chairman, Commission on Higher Education
17. Chief of Staff, Armed Forces of the Philippines
18. Chief, Philippine National Police

19. The Press Secretary
20. Secretary General, Philippine National Red Cross
21. Commissioner, National Anti-Poverty Commission
22. Chairperson, National Commission on the Role of Filipino Women
23. Chairperson, Housing and Urban Development Coordinating Council
24. Executive Director, Climate Change Commission
25. President, Government Service Insurance System
26. President, Social Security System
27. President, Philippine Health Insurance Corporation
28. President, Union of Local Authorities of the Philippines.
29. President, League of Cities in the Philippines.
30. President, League of Municipalities
31. President, Liga ng mga Barangay
32. Four representatives from the CSOs
33. One representative from the private sector, and
34. Administrator of the Office of Civil Defense

Annex C

Excerpts from the Official English Translation of the State of the Nation Addresses of President Benigno Aquino III on Disasters.

Annex C1
First State of the Nation Address, 26 July 2010
Source:

"*A calamity fund worth Php2 billion was reserved in preparation for anticipated calamities*. Of this already miniscule amount, at a time when the rainy season has yet to set in, *Php1.4 billion or 70% was already spent*" (*emphasis supplied*).

Annex C2
Second State of the Nation Address, 25 July 2011
Source: http://www.gov.ph/2011/07/25/benigno-s-aquino-iii-second-state-of-the-nation-address-july-25-2011-en/

"We aim to give due compensation to the victims of Martial Law; to grant our househelp the salaries and benefits that they deserve; and to improve the system that awards pensions to our retired

soldiers. We likewise support the expansion of the scope of scholarships granted by DOST to outstanding yet underprivileged students; the advancement of universal quality healthcare; the responsible management of the environment; and the *formation of facilities that will ensure the safety of our citizens during times of great need and calamity*…

I thank the priests and bishops who have continued to dialogue with us, like Cardinals Rosales and Vidal. Cardinal Rosales and I may not be the closest of friends, but I believe that he did all that he could to reduce the tensions between the church and the government. The election of Archbishop Palma, defender of human rights and of the environment, as head of the CBCP only bolsters my confidence that the state and the clergy will be able to engage each other in a positive manner. I likewise thank my Cabinet, who have sacrificed their personal comfort to fulfill the national agenda. *I give special mention to PAGASA, who now truly delivers reliable advice and warnings during times of calamity*" (*emphasis supplied*).

Annex C3
Third State of the Nation Address, 23 July 2012
Source: http://www.gov.ph/2012/07/23/english-translation-benigno-s-aquino-iii-third-state-of-the-nation-address-july-23-2012/

"Let us talk about the situation in Disaster Risk Reduction and Management. Once, the government, which is supposed to give aid, was the one asking for aid. Today, *even when the storm is still brewing, we already know how to craft clear plans to avoid catastrophe.*

Talking about disasters reminds me of the time when a typhoon struck Tarlac. The dike collapsed due to the rains; when one of the barangay captains awoke, the floods had already taken his house, as well as his farming equipment. Fortunately, the entire family survived. But the carabao they had left tied to a tree wasn't as lucky; it was strangled to death from the force of the flood.

Many of those affected by typhoons Ondoy, Pepeng, and Sendong were just as defenseless. We lost so many lives to these natural disasters. And now, *through Project NOAH, all our anti-disaster initiatives have been brought inside one boat, and we no longer leave the evacuation of families up to mere luck. We now have the technology to give fair warning to Filipinos in order to prepare for and avoid the worst.*

Our 86 automated rain gauges and 28 water level monitoring sensors in various regions now benefit us directly and in real-time. Our target before the end of 2013: 600 automated rain gauges and 422 water level sensors. We will have them installed in 80 primary river basins around the country.

Yet another change: Before, agencies with shared responsibilities would work separately, with little coordination or cooperation. *Now, the culture of government is bayanihan—a coming together for the sake of the people. This is what we call Convergence*" (*emphasis supplied*).

Annex C4
Fourth State of the Nation Address, 22 July 2013
Source: http://www.gov.ph/2013/07/22/english-benigno-s-aquino-iii-fourth-state-of-the-nation-address-july-22-2013/

"*Regarding disaster preparedness: Our goal to develop mechanisms to protect the Filipino people from natural calamities*. Among these are the effective services brought about by the joint forces of the Geohazard Mapping and Assessment Program and of Project NOAH of the DOST. This past year, we *completed a multihazard mapping* of the 28 most vulnerable locations in the country. A similar endeavor for the Greater Metro Manila Area will be completed by 2014. Geohazard maps for 496 cities and municipalities have also been completed. The remaining 1,138 covering every last corner of the country will be finished before the end of 2015. Not only have these maps increased in number, they are also more detailed and refined, which is why we will be able to more accurately identify high-risk areas.

From the time Project NOAH was launched, a total of 525 automated water level monitoring stations and automated rain gauges have been installed in 18 major river basins throughout the country. *We also continue to modernize our weather detection technology, with Doppler radars, tsunami detectors, and alerting sirens*.

But simply distributing high-tech equipment and new technology is not enough. We also need to train the end-users of this equipment in understanding, using, and disseminating the information gained. When the weather is bad, they no longer rely solely on wind speed for their forecasts; they can also predict the volume of rainfall, and they can provide correct and timely warnings so our communities can prepare accordingly.

We are also remedying the problem of flooding in Metro Manila. Imagine: When Ondoy hit, an estimated 3,600 cubic meters per second of rainfall flowed down from the Sierra Madre. But the capacity of the channels through which these flowed can only support 1,000 cubic meters per second. Where would the difference of 2,600 cubic meters per second go? These are the sudden torrents of water that overflow into low-lying areas and become flash floods.

Haven't we all heard before that "waterways are inalienable?" What this means is that the channels through which water passes should be for that purpose alone. The problem is, in addition to the lack of adequate drainage, certain structures are built, obstructing these drainage systems, a situation compounded by the trash of those living around it. *To solve this problem, we are coordinating with our LGUs to safely and successfully relocate our informal settlers*. In addition, a legal team led by Secretary Leila de Lima is preparing to file cases against those who have closed or obstructed our waterways.

We are not content with simply passing the blame and pointing fingers. Our action: an allocation of 6.2 billion pesos to prevent flooding throughout Metro Manila. This includes the construction of the Blumentritt Interceptor Catchment area. The entire project is 3.3 kilometers in length; and once it is completed, it will be able to catch the equivalent of 14 Olympic-sized swimming pools of water. When the rains hit, the rainwater now has somewhere to go, and will no longer accumulate on our streets. This project was started in March, and we aim to complete it by next year.

Government has been fulfilling its obligation to the people, but let us ask ourselves: How have I contributed to the solution? If someone dumps trash into a river, confront them; if you see a building being built obstructing an estuary, report it to the correct authorities. We will only drown in our problems if we do nothing.

Even after the storms have passed, *our work to restore normalcy to the lives of calamity-struck families does not end*. Through the cooperation of the government, and the private sector, 9,377 houses have been

erected for the victims of typhoon Sendong. An additional 4,374 homes will be built before the end of the following year. We ask for patience and understanding, the process has been delayed because of the complex process of land acquisition; in truth, if discussions on other tracts of land go well, we will be able to construct an additional 2,719 houses.

We also aim to turn over a total of 53,106 homes to our countrymen who were left homeless by the onslaught of typhoon Pablo. We began to hand over houses in May; and we will complete another 17,609 homes by the end of the year. And by the time we finish the 35,447 homes still to be completed by 2014, *all the families who felt nature's wrath will once again find shelter under their own roofs*" (*emphasis supplied*).

Annex C5

Fifth State of the Nation Address, 28 July 2014

Source: http://www.gov.ph/2014/07/28/english-benigno-s-aquino-iii-fifth-state-of-the-nation-address-july-28-2014/

"A few weeks after the crisis in Zamboanga, Central Visayas was rocked by an earthquake, which left Bohol the most devastated. In the midst of a calamity, we witnessed just what could be achieved when our people come together to respond to the challenges brought by a disaster. For instance, just one week after the earthquake, electricity was restored in Tagbilaran and in all the municipalities of Bohol.

Now, each of the 25 critical roads and bridges destroyed by the earthquake are passable. 3.583 billion pesos has already been released for the rehabilitation of Bohol and Cebu.

Part of this is the 2.49 billion pesos that the DILG provided to the local government for the reconstruction of markets, civic centers, bridges, water systems, municipal halls, and other government facilities.

Before the end of 2013, Yolanda made landfall. It was the strongest typhoon in history, affecting 1.47million families and 44 out of our 81 provinces. In Eastern Visayas, where the damage was most severe, so many issues required immediate attention.

The immense strength of the storm paralyzed many LGUs that were hit directly. The relief goods we prepositioned were swept away, which is why relief had to come from areas farther away. The delivery of aid was made all the more difficult by the destruction of infrastructure. There was no electricity, roads were impassable, and almost all of the trucks and heavy equipment that our first responders needed had been destroyed in the areas most affected by Yolanda. There was no gasoline, and there was no communication.

It required an enormous amount of solidarity to assist affected families, take care of the wounded and of those who lost loved ones, and make certain that there would be no outbreak of disease, among many other responsibilities. Let us look at the delivery of food as an example: It was not just a matter of buying rice and canned goods. We needed repacking centers, several trucks, and boats that would bring aid to affected provinces. When the relief goods arrived, we had to be sure that the roads to the affected areas were cleared, and that the trucks had enough gas to return home, and load even more of our food packs.

Your government wasted no time in responding. We immediately cleared the airport, which is why, within 24 hours after the storm, three C130s were able to bring in aid. On that same day, we were also able to set up a communications hub to hasten the flow of information. On the second day, the Department of Health's Rapid Health Assessment teams arrived, as well as additional soldiers, policemen, and BFP personnel from other provinces. Likewise, workers from DSWD lead relief operations—in the distribution centers in Eastern Visayas or in repacking centers all around the country.

In a span of two days, the Leyte water district resumed operations; on the third day, the first gas station opened. The main roads were immediately cleared. *By the 22nd of November, which was two weeks after the storm, the one millionth food pack was distributed to the victims; we had cleared 35,162 cubic meters of debris from these roads through which the relief will be transported; and 3,426 kilometers of National Roads had already been cleared and were passable.* At present, we are repairing the 108.8 kilometers of destroyed roads, bridges, approaches, and landslide prone areas. By Christmas Day of 2013, all municipalities affected by the calamity had been electrified.

We took an emergency room mindset; the state utilized its full strength to stabilize the patient in the soonest possible time. I extend my gratitude to the members of the Cabinet, who led the government response in the affected communities. Secretary Cesar Purisima, along with Secretary Joel Villanueva of the Technical Education and Skills Development Authority, organized the logistics in the repacking center, taking on the role of warehouse operator.

Secretary Greg Domingo of the Department of Trade and Industry became the country's head purchasing agent, while Secretary Linda Baldoz of the Department of Labor and Employment served as a call center operator for all those who wished to help.

I also thank Secretary Jun Abaya of the Department of Transportation and Communications, who dispatched our transportation; Secretary Dinky Soliman, who proved that she was worthy of being the country's chief relief worker; *and Secretaries Mar Roxas of the Department of Interior and Local Government and Secretary Volts Gazmin of the Department of National Defense, who were on the disaster frontline, giving marching orders to our uniformed services*…

Our work did not end there. *We implemented livelihood interventions*, to ensure that those of our countrymen who survived the typhoon could recover at the soonest possible time. This July, 221,897 jobs were created after we turned over boats, fishing and farming equipment, seeds, and livestock to our countrymen. This includes those Filipinos to whom we paid salaries for participating in the cash for work program.

Perhaps everyone can agree that Yolanda left in its wake a massive problem. According to international standards, *whenever a calamity of this scale takes place, it normally takes a country one year before it transitions from relief to rehabilitation*. However, in just a span of eight months, the United Nations declared the Philippines to be in the rehabilitation state. In fact, Mr. Yuri Afanasiev of the United Nations Development Program said, "We have never seen a recovery happen so quickly. And many of us have been in many different disasters."

It will indeed take a long time for any country to recover and rise from massive calamities. In Haiti, two years after the earthquake, there are still many who live in evacuation centers. For our brothers

and sisters in Indonesia, it took eight years before they recovered from the tsunami in Aceh. And even in America, it is said that it took eight years for things to return to normal after the devastation of Hurricane Katrina.

Our work is not done. There are still many houses that need to be constructed; many more of our countrymen need to be assisted in getting back on their own two feet; the work to build back better for all those affected by Yolanda continues.

This is why this July, the LGU Rehabilitation and Recovery Plan for Cebu, Iloilo, Eastern Samar, Leyte, and Tacloban City was submitted to me, and I have signed it.

It passed the scrutiny of our cabinet clusters; according to the holistic post-disaster needs assessment that was conducted, the plan encapsulates the needs of our countrymen. This plan was formulated as a result of the dedication of Secretary Ping Lacson, whom we tasked with focusing on the challenges left by Yolanda.

I am hoping for the cooperation of Congress, because a large sum is necessary in order to help our countrymen make a full recovery.

Let us remember: God proposes, but man disposes. This is likewise the idea behind our efforts for disaster preparedness. *We are strengthening the capabilities of our LGUs, who are the frontliners in times of disasters, through a modern and comprehensive forecasting system.*

Through the DREAM-LiDAR project under Project NOAH, for instance, we can more efficiently pinpoint areas that are prone to flooding. 19 out of our targeted 20 river systems have already been mapped, to determine which areas immediately suffer from the effects of torrential rain.

Because we can more efficiently determine when and where typhoons will affect us, today, we are able to give our LGUs sufficient warning—and thus give them ample time to prepare, and to evacuate their constituents. If we were to add the efficiency of LGUs to our already-efficient forecasting system, then, without a doubt, countless lives can be saved. In Albay, which recently had to endure the wrath of Typhoon Glenda, there were no recorded casualties attributed to the storm, thanks to the effective leadership of Governor Joey Salceda.

And if a province that is considered a highway for storms can achieve this, is there any doubt that any and all other LGUs can achieve the same?" (*emphasis supplied*)