NICE PEOPLE AROUND?

INSURREGENCY EFFECT ON NATURAL DISASTER MANAGEMENT IN THE PHILIPPINES

A STUDY OF NEW PEOPLES’ ARMY - LOCALLY REFERRED TO AS “NICE PEOPLE AROUND”

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Supervisor: Chiara Ruffa
To Jason, Margie, Abigail, and my friends in the Philippines

Salamat po!

Tomorrow is another day
ABSTRACT

This thesis aims to explain how insurgencies affect natural disaster management within local communities, and under what conditions disaster management can remain efficient. Previous research has focused on the effect of natural disasters on conflict, but the effect of conflict on natural disaster management remains under-researched. The existing research claims that conflicts worsen response to natural disasters, hence that conflict-prone countries have lower capabilities to manage natural disasters. This thesis argues the opposite, that the presence of insurgency may increase the efficiency of natural disaster management. The thesis main theoretical argument is that the external threat of insurgents has a unifying effect within communities, which contributes to more efficient cooperation, and hence more efficient natural disaster management. The hypothesis was tested through a comparative field study in the Philippines 2013. Two disaster-prone municipalities were studied whereof one had a presence of insurgency. The empirical analysis shows no variation in disaster management, suggesting that insurgency does not have any effect on natural disaster management. Nonetheless, accounts of unity were found in both municipalities, which indicate that there may exist compensating effects in either community. Variation on the barangay level suggests alternative explanations, and points to interesting paths for future research.
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ABBREVIATIONS AND GLOSSARY

Barangay – Filipino word for local communities, beneath municipality level, above Purok
Bayanihan – Filipino word for community unity
DRR – Disaster Risk Reduction
HFA – Hyogo Framework for Action
IPCC – International Panel on Climate Change
ISDR - International Strategy for Disaster Reduction
LGU – Local Government Unit
MDRRMCO – Municipality Disaster Risk Reduction and Management Council Officer
Purok – Filipino word for “street district” in the Barangays
UNISDR – United Nations International Strategy for Disaster Reduction
1. INTRODUCTION

To avoid increasing costs in lives and livelihoods efforts need to be focused around two types of crisis need to be addressed at the same time. If left unaddressed natural hazards and conflicts can both lead to disastrous events. Can the phenomena of natural hazards and conflicts be addressed in a way that reduces the likelihood of escalation into disasters? Is it possible to prepare for crises and build disaster resilient societies while experiencing conflict? Our climate is changing, and with it our given preconditions for peace and security. The increased frequency and intensity of extreme weather events contribute to more disasters. Conflicts add stress and increase vulnerabilities in communities. Neither extreme weather events, nor conflicts do per se lead to crises. However, if not addressed properly these two phenomena can result in both human and natural disasters. Therefore this study explores how insurgency affect natural disaster management in local communities and under what conditions the disaster management can remain efficient.

Conflicts and disasters both affect communities’ capabilities. In order to build capabilities for future challenges, it is important to understand the causes of these crises, as well as how to prevent them. Studying communities already affected by both conflict and natural hazards can help increase our understanding of these two phenomena and their interaction. A focus on communities can also increase our knowledge of what are important conditions and measures for effective disaster management. Disaster-prone communities usually have long-term experience of the phenomena, which means they probably have developed coping strategies to deal with both conflict and natural hazard events.

Developing countries are currently experiencing the effects of an altering climate, and are among the first countries to be affected by both more frequent and intense disasters. Natural disasters also result in casualties more often in developing than in more industrialized countries, which is related to factors of exposure and vulnerability (Ben Wisner, Blaikie, Cannon, & Davis, 2004). Hence, a community in a developing country serves as an interesting focus for the purpose of the study. Climate change is likely to have a greater effect on food security, livelihoods, health and human settlements in developing countries. This has several reasons, including that tropical countries (of which most are developing countries) have more climate-dependent food and water supply. Most developing countries are also more dependent on natural ecosystems for livelihood, and in addition often lack technological, financial and institutional resources that can ease adaptation to a changing climate (Ravindranath & Sathaye, 2002). Consequently, it should be harder for vulnerable countries to
mobilize during, and recover from disasters. “Supertyphoon” Haiyan (locally know as Yolanda) in the Philippines November 2013 is only the latest example of an extreme weather event and disaster. This was an event with no predecessors in its strength and speed (Mullen, 2014). There is currently increasing interest in the connection between climate change and conflicts. In the latest report from the International Panel on Climate Change (IPCC 2014), for example, an entire chapter has focused on the direct and indirect effects of climate change on armed conflict. Nevertheless, the relationship between conflict and natural hazards remain under-researched. While earlier studies have focused on how countries deal with scarcity and disaster, there is still limited knowledge on how countries work with disaster management in a conflict context, as well as on community resilience to disaster (Boon, Cottrell, King, Stevenson, & Millar, 2012, p. 387). Hence, there is little previous research on the relationship between conflicts and disasters within the field of peace and conflict research. Natural disasters may contribute to creating a “window of opportunity” for diplomatic solutions (Kelman, 2012). The strain on a country or region may gather sympathy from others, and assist in opening a dialogue between disputants. Natural disasters can hence be a positive force for communities and countries in paving additional ground for peace. This has a contesting side, where other researchers question the notion that disasters would contribute to peace, and instead claim that disasters negatively affects, and often worsen conflicts (Billon & Waizenegger, 2007). The correlation between climate-related natural disasters and the risk of civil conflict has been explored by Slettebak. In opposition to common perception, he found that the risk of civil conflict is lower in communities affected by natural disasters. He relates this to the potential unity experienced within communities during external threats, when the population as a whole is facing the same problematic situation regardless of ethnicity or social class (Slettebak, 2012). The notion of unity as a driving force is very central to this study.

While the effect of disasters on ongoing conflict is researched to some extent, the reverse, how conflicts affect natural disasters and the response to them, continues to be under-explored. Ben Wisner is one example of an author who has begun to explore how conflicts affect natural disasters and the response to natural disasters. He claims that conflicts are a destructive force which further worsen disaster response by creating an environment in which it is harder to mobilize (Ben Wisner, 2009). Though Wisner is an acclaimed author within the field of disaster research, his argument fails to recognise how some countries manage to work efficiently with natural hazards despite conflict. In this thesis, I am to further explore the
uniting force that an external threat can constitute for a community. New studies are currently exploring the role of rebels in communities and how they are involved in disaster response (Walch, 2014), which relate to additional findings of this study.

Predominantly building on the work of Wisner and Slettebak, I explore how conflict affects disaster response by researching how the presence of insurgency affects local communities’ ability to prepare for and manage natural hazards. I claim that insurgency affects natural disaster management in a positive way, by contributing to unity within communities, and thereby increasing the ability to cooperate and manage disasters. In doing so I hope to contribute to the academic field by gaining further insight into how conflicts affect response to natural disasters and how the disasters management can remain efficient notwithstanding insurgency presence. Without understanding the relationship between conflicts and disasters we cannot develop the necessary capabilities for a resilient society. It is important to research vulnerable communities already suffering from natural hazards and conflict, and learn from their experiences how to cooperate efficiently in times of disaster. Thus, the research question for this study is the following: How does insurgency affect natural disaster management, and under what conditions can it remain efficient?

This thesis attempts to contribute to the literature on conflicts and disasters in a number of ways. First, by exploring the relationship between insurgency presence and disaster management; second, by furthering the research on unity as an effect of conflict and as a mechanism for efficient crisis cooperation. Third, this thesis adds completely new data and unique material through a field study of affected areas. This also adds to the empirical data on community resilience, which is still limited according to (Boon et al., 2012).

The results show that there is a minimal to no variation in the disaster management between the two municipalities. This suggests that the presence of insurgency has no effect on the communities’ disaster management. The results have two main implications for the field of peace, conflict, and disaster research. First, the finding that insurgency does not have an effect on disaster management is contradicting current literature, which predict that conflict should either impair or improve the disaster management. No current work predicts that conflicts have no effect on disaster management. Second, the study explores additional observations from the field study, and undertakes elements of theory development by suggesting alternative explanations to under what conditions natural disaster management remains efficient notwithstanding an insurgency presence.
The study specifically investigates the local dynamics regarding insurgency and disaster management in the province of Albay in the Philippines. The Philippines are affected by multiple natural hazards per year, and Albay has a vulnerable geographic location on the east coast, where around twenty typhoons make landfall each year. Albay is a province famous for its disaster risk reduction, yet with a historic and to current presence of insurgents (UCDP, 2014) (Reyes Regala Jr, 2013). The data gathering for this thesis was made possible by a field visit during two months in 2013, where I conducted forty interviews with government officials, barangay captains (community leaders), and focus group discussions with the local population. Data and statistics have also been gathered from different government offices, including the Philippine National Police (PNP). I used a structured focus comparison between two disaster-prone municipalities in Albay, and was able to isolate for many contextual factors of insurgency on disaster management. Using a strategic selection on the independent variable, the municipalities are both affected by natural disasters, but only one has a presence of insurgency. This facilitated a clear result whether or not insurgency has an effect on disaster management.

This thesis proceeds in four steps. First, I present the theoretical framework including previous literature, research gap, and my theoretical argument. Second, I describe the method used regarding data gathering in the field, research design, and critical reflections. Third, I present and discuss my results in four parts, starting with the main results. Thereafter follows a presentation of the variation in the independent variable; variation in the dependent variable; and alternative explanations. Finally I discuss conclusions to be drawn from the study, present possible implications of the results, and suggest interesting paths for future research.
2. THEORETICAL FRAMEWORK
The following section will present previous research related to conflicts and disasters and discuss the current theoretical gap within the field. Thereafter my main argument follows, as well as the hypotheses for this study. Lastly in this section, the main theoretical definitions are presented and discussed.

2.1 PREVIOUS RESEARCH
This section discusses previous literature, and how it relates to this study. The section begins by discussing discourses related to the study, under the headlines of Conflicts and Disasters, Sociological Relevance, Environmental Security, the role of disasters in the Development discourse, and finally Alternative explanations.

CONFLICTS AND DISASTERS
This thesis does not research the motivations of insurgents’ or why they may turn to violence. Nor does it explore the reasons behind targeting civilians. Theories exploring insurgencies and violence against civilians usually focus on civil wars, which is a more intense form of violence than explored in this thesis. Despite these theories touching on elements relevant for this study, especially the independent variable, they will be excluded. This, mainly, because they do not address how violence is experienced by the civilians, and what mechanisms regarding crisis coordination it may trigger within a community. The study focuses on the effects of insurgency on the communities which they interact with, and pays particular attention to how these communities are able to respond to natural disasters. Theories discussing conflicts and disasters are relatively limited, although they contribute with useful and interesting arguments for this study. The majority of claims found in the study of previous literature states that conflicts exacerbates the response to natural disasters by adding another complex issue to address while trying to coordinate an approach to dealing with disasters.

Wisner is currently one of the key authors connecting issues of disaster and conflict. Wisner argues that war and other kinds of violence jeopardize an integrated approach to disaster management. Wisner refers to a more encompassing response to disasters, which also includes preventative measures. Hence, the concept of integrated disaster management is very close to what this study refers to as natural disaster management. Complications of violence, and possible future violence, can subsequently be seen in all phases of the disaster management cycle, including mitigation, prevention and preparedness (Wisner, 2009, p. 248). This is because of the uncertainty and difficulties the violence poses to planners who try to
anticipate ‘surprises’ and other kinds of complications and uncertainties that accompany natural hazards.

While the disaster and conflict discourse recognises the importance of the community level, many still do not focus their research on the mechanisms for effective community response. Previous research on communities support the above claim that conflicts are worsening the response to natural disasters: “In situations of underlying instability or conflict, this (namely community-based management) may be difficult to achieve. Moreover, conflict often undermines community resilience, for instance, by breaking down social cohesion, destroying productive assets and local infrastructure, denying access to natural resources such as water sources and grazing areas, and forcing families to flee their homes” (Twigg, 2009, p. 15). This argument is interesting in that it explores the experiences of communities. However, Twigg does not seem to recognise the possibility of conflict having other effects besides being destructive.

Wisner argues that there are three main elements of natural disasters: the natural hazard, the exposure and the vulnerability. Great natural hazards will have a disastrous effect on any community, whilst smaller hazards mainly strike as disasters in exposed and vulnerable communities. The vulnerability approach to integrated disaster management, “tries to balance participatory, or ‘bottom up’ use of local knowledge and capacity for risk reduction with ‘top down’ technical expertise” (Wisner, 2009, p. 247). More vulnerable and exposed communities may be more at risk for conflict. However, there are authors who argue the opposite: that natural disasters in fact improve the conditions for peace and diplomacy (Gaillard 2008, Kelman 2003). This is based on the increased amount of informal networks that arise in the wake of disaster, and the disaster relief and diplomacy occurring at multiple levels at the same time on local, communal and national levels. In addition, the occurrence of disaster can create a “window of opportunity”, bringing conflicting parties to a dialogue on disaster response. The opened dialogue can later be used for addressing disputes. Adding to this, research suggests that countries that are affected by climate-related natural disasters face a lower risk of civil war (Slettebak, 2012). This supports the argument that disasters may create possibilities for peace, or at least decrease the possibility of conflict. Slettebak reached this conclusion after a multivariate analysis on a global sample from 1950 to 2008, looking at the relationship between climate-related natural disasters and civil conflict. This kind of result should of course be scrutinized, but it is interesting in that it indicates that other factors than experience of natural disasters are key regarding the risk of civil war. Slettebak criticises his
opponents and accuses them of overshadowing more important causes of war (Slettebak, 2012, p. 163). While environmental hazards and disasters do increase the experience of hardship and destruction, there is no consensus on how humans should be expected to respond to these challenges. Nor is there an agreement on the effect of disaster on conflict, or the effect of conflict on disaster management. That is why this thesis aims to contribute to the literature on how communities deal with different types of crisis, particularly the combination of insurgency and natural disaster management. By not exploring the possibility of conflict and disasters as external threats with a uniting force, the above-mentioned authors seem to some degree neglect the multidimensional effects that conflicts may have on disaster management to some degree. Consequently, this study set out to try another possible effect of conflicts on natural disaster management, mainly if a presence of insurgency may increase the efficiency of the disaster management.

SOCIOLOGICAL RELEVANCE

To build a comprehensive theoretical framework, this study borrows elements from sociology. This may be particularly useful for finding arguments explaining the causal mechanism for the relationship between the variables explored in this study.

Sociological research on post-disaster behaviour is discussed by Slettebak, and once again he argues against common perceptions. Slettebak finds that the likelihood of anti-social behaviour tends to drop during and after disasters (Slettebak, 2012, p. 164). This indicates that disasters may create some form of social cohesion, which stands in contrast to the claim outlined above. Furthermore, great social disturbances and wars tend to increase social integration, thereby reducing the risk of anti-social behaviour (Durkheim, 1951) in (Slettebak, 2012). Durkheim is one of the most prominent authors within sociology, and her argument implies that crises have the potential to increase unity and cooperation within communities. In line with this, earlier studies in sociology have studied human behaviour when faced with catastrophic events, and found that disasters contributed to increased social cohesion (Prince, 1920) in (Slettebak, 2012, p. 164). It would then be possible to assume that other types of disasters, such as violent conflict and insurgencies may have an effect on cohesion and crisis cooperation under certain circumstances. Additionally, Fritz claims that “the importance of cultural and individual differences diminish in disaster situations, as people are forced to confront similar dilemmas under similar conditions, irrespective of class or ethnicity” (Fritz, 1961, p. 655) in (Slettebak, 2012). Group identities are superseded by a common identity among the disaster victims, a “community of sufferers”, as they are united by an external
threat that is common to all. However, disaster damages which follow ethnic or social divides “may be suspected to increase the likelihood of conflict, while damage – and aid efforts – across such divides may reduce it” (Slettebak, 2012, p. 166). The events following Hurricane Sandy may be the latest example of this, with its impact reinforcing the difference between New York’s “haves and have-not” (Nir, 2012).

ENVIRONMENTAL SECURITY

Environmental security is also a relevant part of this theoretical framework by addressing aspects of the dependent variable. By extending the theoretical framework, the study is enabled to address the processes leading up to natural hazards being considered as a security threat to communities in more ways than just the hazard in itself.

It is no longer questioned that different environmental issues are threats to our security, and the concept of “Environmental Security” first coined by Homer-Dixon (Homer-Dixon, 1994) has been further echoed by many authors and scientists, such as (Nordås & Gleditsch, 2007) and (Allenby, 2000). Within this concept there is a divide between security issues arising from the natural environment (including volcanic eruptions and earthquakes), and arising as result of human activity impacting on the natural environment. Climate change and its connection to conflict have been researched for some time, and an increased relevance of this relationship was evident in the latest IPCC report (IPCC 2014). However, this is still a contested area, where research indicates that the effects of climate change on human security is very much context specific. The effects of a changing climate with more frequent and extreme weather events increases the stress on freshwater availability and extreme soil degradation, which together with population growth and density could create mass migrations which in turn would further effect the ecological systems, and increase the stress on societies; all of which increases the risk of conflicts (Raleigh & Urdal, 2007), (Nordås & Gleditsch, 2007), (Hendrix & Glaser, 2007) (O’Brien et al., 2008). Hence, it is mainly indirect effects of climate change that, today, can be linked to an increased likelihood of conflict. Accordingly, there are indirect effects of disasters that may constitute security threats. Therefore a more comprehensive approach to natural disaster management is needed. This approach should incorporate underlying factors that are determinant for the ability of communities to better manage natural hazards.

Looking at climate change, rainfall and social conflict in Africa, Hendrix and Salehyan have been able to establish a relationship between environmental shocks and unrest. They suggest that policymakers try to “cushion” shocks by “improving water storage capacity and irrigation
systems, introducing improved varieties of seeds, providing access to insurance markets, and preventing flood damage. It is also important to promote accountable, transparent government institutions to better meet citizen demands through regular, peaceful means” (C. Hendrix S. & Salehyan, 2012, p. 47). These kinds of measures (stocking water, irrigation systems, seed provision, and governance) are all included in the operationalisation of the dependent variable in this study. Additionally, the results presented by Hendrix and Salehyan further stress the importance of adaptation and resilience building in order for communities to withstand future disasters. Furthermore, factors ensuring resilience to political instability and violent conflict are necessary in order to ensure that knowledge from differing disciplines is long-lasting and effective (Ben Wisner, 2009, p. 254). The thesis builds on this part of the aforementioned discourse in trying to answer the second part of the research question of this study. Hence, the resilience concept is important when exploring under what conditions natural disaster management remains efficient notwithstanding an insurgency presence.

DISASTERS IN THE DEVELOPMENT DISCOURSE
Disasters are strongly connected to vulnerability and capabilities. However, to a large extent these aspects have been somewhat overlooked in previous development discourse (Bradshaw, 2013, p. 21). Notably this has begun to change; it is now common to hear from the United Nations and other major international organisations and institutes, that disaster “set back development”, and the potential of disasters ruining years of development work or investments is something that has begun to concern multiple international actors. The United Nations International Strategy for Disaster Reduction (UNISDR) outline the total expected annual global loss from earthquakes and cyclone wind damage amounting to 180 billion USD (UNISDR, 2013b). Cost in lives is not included in this calculation, which should further stress the relevance of addressing disasters as a crucial threat to international security. A development of the framing of disasters as something inevitable has taken place during the last years. Viewing disasters as “acts of God” is today less common, however still a practice in parts of the world, including the Philippines. Viewing disasters as a result of a hazard interacting with a vulnerable population is today becoming a more common perception (Bradshaw, 2013, p. 21). Hence, disasters are not beyond human control. This has consequences for the development discourse and agenda. Disasters can no longer be considered to randomly affect the development process, but are instead viewed as a result of the development process. This study may be able to contribute to the development discourse
when exploring under what conditions that the management of natural disasters remains efficient, since this is likely to include factors of development.

ALTERNATIVE EXPLANATIONS
This section will briefly summarize theories that may explain alternative explanations for the outcome of this study. Alternative explanations from this study regarding what makes disaster management efficient include aspects of governance, institutional capacities, education, and remoteness.

Regarding governance it has been emphasised by both policymakers and researchers including (Wisner, Kelman, & Gaillard, 2012), (Hendrix S. & Salehyan, 2012) as a very important factor for successful natural disaster management. In support of this, the necessity of good governance for reduced susceptibility to disasters is emphasised in research by (Ahrens & Rudolph, 2006). These authors also claim that accountability, participation, predictability and transparency are key features of a governance structure that fosters development and supports risk reduction. With good governance a community experience low corruption, and can enjoy more efficient use of its resources. Hence, capacity- and institution building is enhanced. Education being an important factor for efficient disaster management is somewhat self-evident. However, the importance of schools promoting and enabling DRR has also been shown in reviewed literature (Babugura in Wisner, et. al, 2012, Chapter 36) and (Luna in Wisner et. al, 2012, Chapter 62). Furthermore, participation in drills and simulations is an important part of preparedness (Buckle in Wisner et. al, 2012, Chapter 41). The significant role of education in DRR is also strongly emphasised in the Hyogo Framework for Action (HFA), which is the United Nations framework for Disaster Risk Reduction. Remoteness as a factor in efficient natural disaster management has not been thoroughly explored, nor will it be in this thesis. Nonetheless, the results indicate that more remote areas are less prepared for disasters, probably because of these areas having less contact with and within the local government unit (LGU). An assessment of previous literature did not find any theories discussing this result. Remoteness may possibly be related to the relationship centre-periphery. This would perhaps make the “Dependency theory” relevant for analysing the result. The dependency theory claims that the centre develops at the expense of the periphery, and has commonly been used as a critique of the Modernisation theory (See for example (Ghosh, 2001).
The above section regarding previous literature has tried to summarize the current discourse in disciplines relevant for studying the relationship between conflicts and disasters. The different fields of study all address disasters and their effects on societies. All of the disciplines touch upon issues of crises, and human reactions to these crises. The theories come together as a theoretical framework for this study, combining peace and conflict research with disaster research, adding elements of sociology and environmental security. The combination of these disciplines was necessary in order to build an encompassing theoretical framework and enable the study to explore the relationship between insurgency and disaster management more in-depth. This study takes on a different approach to both disasters and conflicts. The thesis questions the understanding that conflicts exacerbating the response to natural hazards, and is an opportunity for conflict resolution. Instead, the study tries to uncover conditions for efficient natural disaster management by exploring insurgencies’ effect on natural disaster management.

2.2 THE GAP
Few researchers have yet to focus on the relationship between conflicts and natural disasters. The more common perception is that conflicts worsen disasters and breaks down social cohesion. While other research explore the relationship between conflicts and disasters, claiming that natural disasters creates an opportunity for peace. Neither of these perspectives recognises the potential of conflicts having additional effects on communities and their ability to cooperate. The thesis acknowledges additional effects of conflict on response to natural disasters, and explores different dimensions of the relationship between conflicts and natural hazards. The study focus on the community level because of the possibilities it provides to more in-depth study the mechanisms for the variables by conducting a field study. Adding further relevance to this study, as Boon et al. implies there is still limited empirical data about community resilience, wherein this study may be able to make a contribution (Boon et al., 2012). Also Wisner underlies additional aspects of resilience-building, and that professionals interested in integrated disaster risk management “should design early warning systems and other programmes for risk reduction in ways that are robust even under the stresses of violent conflict”(Wisner, 2009, p. 254).

Contemporary peace and conflict research today mainly focuses on perpetrators of violence and the motivations for their actions – and is all too often ignoring the role of local communities in maintaining violence or working as instruments for peace. Yet, understanding the mechanisms in communities for handling crisis is crucial in order to build societies
resilient to natural disasters. To uncover these mechanisms, this study has borrowed elements from sociology. In particular, this study uses theory claiming that an external threat, such as conflict, may create unity within a community. This is to explain the causal mechanism for this thesis’s argument: that conflict enhances natural disaster management, making it more efficient. Theories linking conflict as a potential cause for unity within communities has yet to be tested on natural disaster management, and hopefully this study can contribute to developing this theory. Among the research focusing on the local level, Walch explores how insurgents cooperate with the government and help in the disaster management (Walch, 2014). Still, none of the previous research above has explained why natural disaster management sometimes remains efficient even when a community is experiencing other types of crisis. If we understood why and how communities handle different crises and their natural disasters management in particular, we would better understand how to build resilient communities. This thesis explores the causal relationship between insurgencies and natural disaster management in local communities by using a comparative study between two disaster-affected municipalities in the Philippines and applying the claim to them. The cases were selected on the independent variable, where one municipality has a presence of insurgency whilst the other has not. If the argument is proved to be applicable at the local level, it would indicate interesting paths for future studies to test this argument also on a national or multinational level.

2.3 THE ARGUMENT
As previous theories have acknowledged, conflicts may increase unity within communities. The occurrence of natural hazard events does not necessarily increase the likelihood of civil wars, which indicates that there can be a positive and constructive force in developing capabilities for crisis management – a link which this study will explore further. If local communities themselves can be resilient, it would dramatically increase resilience efforts and its results in the entire country.

Although this thesis acknowledges that conflicts can worsen the response to natural disasters in different ways, I argue that it does not have to be the case. The thesis hypothesises that the presence of insurgency may improve natural disaster management. This may transpire by the presence of insurgency, being an external threat, increasing unity and cohesion across social divisions within a community. By increasing the level of unity within a community, its capabilities to respond to crises is also improved. This would occur through the presence of insurgency forcing the community to develop capabilities to manage the insurgency presence.
The community thereby develops networks and systems for cooperation, which are also applicable in other situations and crises, such as during a natural hazard. These systems could for example include communication- and warning systems, and mobilisation of the local police force.

The reverse of this claim would be that insurgency presence worsens natural disaster management. Or, alternatively, that the absence of insurgency worsens natural disaster management. The first reversed claim makes sense, and has already been argued by previous authors. The second one, that the absence of insurgency would worsen disaster management, seems strange at a first glance. However, assuming that unity is the causal mechanism, and that unity is caused by insurgency, the argument remains valid. Still, unity within communities may have many different explanations. Going back to the sociological arguments above, unity and enabling social conditions may arise from external threats, catastrophic events, or great social disturbances (Durkheim, 1951; Fritz, 1961; Prince, 1920; Slettebak, 2012). These conditions may possibly also arise from the phenomena of natural disasters.

In untangling this puzzle it is important to ensure causality. A first step in this is to prove that the dependent variable (Y), and in this case natural disaster management, cannot be the cause for the independent variable (X), insurgency presence. Neither natural disaster management, nor natural disasters can directly be the cause of insurgency. Still, a disaster may worsen the living conditions for people and possibly pushing them towards joining a rebellion, or begin to organise a movement of some sort. Secondly, co-variation between the variables should be explored. It is foremost social phenomena that make incompatibilities escalating into conflict, while meteorological and hydrological events are the cause for extreme weather events and natural hazards. What the phenomena of conflict and natural hazards have in common is that the social systems in which they take place affect how they are received and responded to. The nature of these social systems is explored in this thesis in order to find essential factors for enabling effective management of natural hazards. A third step in untangling the research puzzle is to account for confounding variables. Are there any other factors (Z) related to both insurgency(X) and natural disaster management(Y) that contributes to the observed relationship between the variables being spurious? Previous research on underlying factors for conflicts adhere to many different reasons, such as inequalities, scarcities, geopolitics, etc. However, underlying conditions possibly affecting both the presence of insurgency and
natural disaster management may include certain aspects of governance, institutional capacity, education and distance from municipality centre. These aspects will be explored further in the analysis as alternative explanations. This is done in order to facilitate a more comprehensive study, since nevertheless; social research is still tasked with exploring multivariate phenomena by using hypotheses simplifying the world.

2.4 HYPOTHESIS
The following section will present a clear outline of the hypothesis and variables.

INDEPENDENT VARIABLE:
Presence of insurgency

DEPENDENT VARIABLE:
Natural disaster management

HYPOTHESIS:
Disaster management is more effective in communities which have experienced insurgency, compared to those communities that have not experienced insurgency.

THEORETICAL CLAIM:
Communities which have experienced insurgency are more united due to an experienced common threat. Because they are more united, their crisis cooperation (in the form of natural disaster management) is more efficient.

CAUSAL MECHANISM:
Experience of insurgency → community facing common threat → more united community → better cooperation → more effective natural disaster management

2.5 THEORETICAL DEFINITIONS
This section delves further into and clarifies the central concepts and definitions used in the study. Hereafter, when discussing disasters and disaster management, it is with regards to natural disasters and natural disaster management, if nothing else is stated. Disaster management is in this thesis used as an overarching concept of managing disasters – including risk reduction, preparedness, impact response and recovery. The operationalisation of efficiency of disaster management will be addressed more thoroughly on page 31.

INSURGENCY AND VIOLENCE
With regards to the insurgency variable the study will focus on how violence against civilians affects communities. The thesis maintains the same approach to violence as Wisner. Building
on Wisner’s work on conflict and disasters, I will also use his broad definition of violent conflict. Wisner focuses on different aspects of manifestations of violence which include: organised activity intended to kill or harm others; use of threat of violence to displace or coerce others; structural violence in the form of inequalities reproduced in a system; and historical memory of violence and its post-traumatic consequences. Wisner discusses the effects of violence in these different forms, where organised violence by rebel groups can harm communities, and the threat of violence can make people live in fear, and they “may be forced to forfeit their assets and leave their homes. Even when they remain, their behaviour may be constrained and coerced” (Ben Wisner, 2009, p. 246). The following of Wisner’s defined manifestations of violence are of particular interest in this study: 1) organised activity intended to kill or harm others; 2) use of threat of violence to displace or coerce others; 3) historical memory of violence and its post-traumatic consequences. These are both observed in the researched areas.

THE CONCEPT OF DISASTER

A disaster is not an obligatory consequence of a natural hazard event, but becomes a disaster when human systems fail to prepare and manage its effects. This study relies on acknowledged definitions used among research institutions and international organisations. According to the United Nations International Strategy for Disaster Reduction, disaster is defined as “A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources” (UNISDR, 2009, p. 9). Natural disasters in this study will mainly refer to typhoons and volcanic eruptions, but also landslides, floods, lahar, and earthquakes.

A more concrete definition of disaster is also offered by UNISDR and EMDAT, where an event is entered to their database as “disaster” when at least one of the following criteria is met:

- A report of 10 or more people killed;
- A report of 100 people affected;
- A declaration of a state of emergency by the relevant government;
- A request by the national government for international assistance

Nevertheless, even “disaster” is a contested concept. First of all the concept is rather subjective, as what may be considered by some as a disaster may just be everyday life for
another. This is of course connected to how the event is perceived, and how the issue of managing disasters is a priority for communities. For a community experiencing around twenty typhoons per year, a typhoon in itself does not constitute a disaster ((interviews, AlBay 2013) and (Caballero-Anthony & Cook, 2013, p. 87)). This study applies the definitions above regarding disasters, and has considered these in the development of the indicators for the dependent variable. This has been done in particular regarding how communities can avoid a serious disruption in its functioning, and widespread human, material, economic or environmental losses, which exceeds the ability of the affected community to cope using its own resources.

THE CONCEPT OF RESILIENCE

Resilience is very hard to define, and especially to measure. Since it adheres from a "robustness of systems", it will be different in every particular system. Hence, to facilitate an easy and clear theoretical and operational definition, the entire field of disaster-researchers would have to agree to apply the same definition. However, this is not realistically possible, and so this thesis sets out to measure resilience of disaster management inspired by different studies and what they regard as important factors within the policy framework. Resilience as a concept can include many different sciences. It has been a contested concept in ecology, psychology, social sciences, etc. This has contributed to the many different definitions of “resilience”. Also the level of analysis for the defined resilience differs, as in “community resilience”, “plants resilience”, and “individual resilience” etc. UNISDR’s definition is again very vague, and reads as follows: “The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.” (UNISDR, 2009) (Supported by (Bradshaw, 2013; Twigg, 2009)). This study delves further into the concept of resilience and aims to not only focus on the traditional definition of resilience which pays attention to resources and adaptive capacities, but also to include needs and vulnerabilities as important aspects. Hence, aspects of resilience have been important in developing the indicators for the dependent variable.

NATURAL DISASTER MANAGEMENT

As natural disaster management will be the overarching concept of managing disasters, and include preparedness, risk reduction, response, and rehabilitation – this section outlines important parts for understanding the upcoming operational definition of the dependent
variable. This approach combines different elements of the disaster management cycle: mainly mitigation, prevention and preparedness.

The definition available by the UN on Disaster Risk Reduction is the following: “The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events” (UNISDR, 2009).

The “Pressure and Release model” developed by (Ben Wisner et al., 2004) presents the chain from root causes for a disaster to the hazard. This model is interesting, not only for its use in development discourse, but also because of its holistic attempt. While it would be mine, as any researchers wish to engage in a more encompassing study, there are always certain limitations. The model in itself stresses the importance of addressing root causes of inequality in order to build resilience to disasters, which is something that also will be the basis for the operational definitions in this study.

Figure 1. “Risk Drivers and Poverty Outcomes” from (UNISDR, 2013b, p. xiii).
3. RESEARCH DESIGN AND METHODOLOGY

This chapter discusses the research design and methodology of the thesis. First, the different methods used, and the choices behind them are presented. Being transparent in my choices will hopefully facilitate an intersubjective understanding and pave the ground for cumulative research. Second, the method is discussed, including research design and case selection. Thereafter follows more details on the strategy of data collection and operationalisations of the variables of interest. Finally, this section discusses critical reflections, including limitations to the study, potential bias in methodology and the data obtained, and ethical responsibilities.

3.1 COMBINED RESEARCH DESIGN

To explore the plausibility of the above-mentioned hypothesis, two cases are analyzed and compared regarding their presence of insurgency and natural disaster management. The thesis has applied a combined researched design, using qualitative methods with quantitative elements. With the aim to contribute to the research field on conflicts and disasters, the thesis builds on, and tests the theory that conflict worsens disaster response, by claiming that conflict on the contrary can improve disaster management. The thesis also contributes to the field by focusing on how communities are affected and experience disasters, which is an under-researched aspect of disaster and conflict research.

To answer the question: “How does insurgency affect natural disaster management, and under what conditions can it remain efficient?” the thesis uses knowledge and experiences from one of the most affected countries regarding natural disasters – the Philippines. To access this knowledge, a comparative field study with interviews was chosen as the main method.

Qualitative research has several advantages to quantitative research. Though assessing fewer cases, qualitative research can achieve conceptual validity, in that it may better identify and measure the indicators that best represent the theoretical concepts intended to be measured (George & Bennett, 2005, p. 19). Qualitative research also has the advantage of more in-depth knowledge, and being able to account for contextual factors in a more fecund way than quantitative research. This is particularly useful when identifying causal mechanisms, and controlling for confounding factors.

Using interviews brought the perspective of people’s own experiences – which is something very valuable in itself. Additionally interviews provide the opportunity to interpret the meaning of central themes in the world of the respondent, by registering and interpreting the
meaning of what is said as well as how it is said. This is particularly useful when exploring the insurgencies effect on communities, and whether they are a salient threat. Most importantly, interviews facilitate a more in-depth analysis in identifying causal mechanisms. A comprehensive overview of the insurgency situation and natural disaster management in the researched areas was facilitated by combining focus group discussions and key interviews together with provincial and communal records. Following an interview guide, the semi-structured format of the interview was combined with short yes/no questions, and open-ended questions (for a more detailed overview, see “Annex II: Interview guide”). Open-ended questions contribute great value to the interview, especially since they facilitate follow-up questions which often contribute to a further depth in the answers. Gaining knowledge through conversations accommodates three types of knowledge: logical conceptual knowledge; emotional personal knowledge; and empirical knowledge of the everyday world (Kvale, 1996, p. 21). All of which are of utmost importance in studying instances of conflict and cooperation within communities.

A “structured focus comparison” methodology facilitated a thorough comparison between the two areas of study. Questions reflecting the research objective were asked to all respondents, in order to facilitate a guided and standardized data collection. This method is addressed by George and Bennett, who highlight it as a way of making systematic comparisons and accumulations of case findings, whilst allowing focus around certain aspects of interest (George & Bennett, 2005, p. 67). Although the method’s original purpose was for historical case studies and comparison across cases, it is also suitable as a systematic approach within one single study. The researched areas were compared in a “Most similar systems design”. Hence, the cases selected for comparison were similar in as many aspects as possible in order to account for confounding variables. The case selection was also made with regards to the independent variable, with one area experiencing conflict, and the other one not, in order to facilitate a clear result on the potential effects of insurgency presence. However, with the given result, the comparison is better suited for a “most different systems design”, since the dependent variable has the same outcome in both areas, which is opposing the most similar systems design (more on this in “Critical Reflections”).

### MOST SIMILAR SYSTEMS DESIGN

<table>
<thead>
<tr>
<th>Variable</th>
<th>Area A</th>
<th>Area B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of Insurgency (x)</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
3.2 CASE SELECTION

The Philippines is both geophysical and meteorologically one of the world’s natural “hot spots”. The Centre for Research on the Epidemiology for Disaster (CRED) lists the Philippines as experiencing more of these events than any other country (Bankoff, 2003, p. 31). Thus, it was identified as a suitable location for this study, more specifically the province of Albay. The two cases compared in this study are two municipalities in Albay. Within the municipalities, five local communities (barangays) respectively have been researched. The Albay region inhabits at least 115 threatened barangays (Evasco & Alejandro IV, 2010). Albay in the Bicol region is a very geographically vulnerable site for natural disasters, and are frequently affected by multi-hazards, such as volcanic eruptions, floods, and typhoons. For example, the province of Albay experience around twenty typhoons per year (interviews 2013, (Uy, Takeuchi, & Shaw, 2010, p. 242)). Since the major typhoon Reming in 2006, the people with their governor has launched a “zero-casualty” policy, and are working very actively with natural disaster management, and disaster risk reduction. Because of the frequency of natural disasters in this region, relevant and contemporary information was available.

At the same time the region of Albay has experienced, and to some extent still are experiencing, conflict and violence against civilians. The Communist Party of the Philippines, CPP, was created in the 1960s, and has long used violence against civilians as one of their methods. The heyday of CPP was in the 1980s, but the rebels, or insurgents, are still active today through its military branch ”New People's Army” (NPA). NPA was added to the USA's list of Foreign Terror Organizations in 2001 (UCDP, 2014).

My comparable units are mainly the two municipalities, but also the ten barangays. The municipalities were selected on the basis of being as similar as possible, except for the conflict variable. In summation of the research design, the cases were mainly chosen on the independent variable, and compared using the method of similar systems design. The selection was facilitated through provincial records of poverty level and insurgency, as well as
through interviews with local experts (University professor, priest, social worker, etc). There are fifteen municipalities, and three cities of Albay, divided into three sectors. Out of the three sectors I chose to compare the disaster prone sectors, one and two. The province has an income classification index where they divide municipalities into one of four categories, where the fourth is the poorest one. In these sectors municipalities with poverty index four were chosen, which were only two municipalities. The restriction to one province will help in the comparison among communities, since their geographical closeness, and presumed similar culture, will help in controlling for other factors that can affect disaster management, besides conflict (George and Bennett, 2005: 81). After choosing the municipalities the barangays were selected together with local experts. The selection of barangays aimed to get a geographical spread among the areas by, for example, avoiding to only selecting barangays close to the municipality centres. With this selection, a variation in the dependent variable is to be expected, given that the hypothesis is true.

The study focuses on the insurgency presence and what makes natural disaster management effective today. The ways of implementing natural disaster management and “Disaster Risk Reduction” is developing quickly, and has recently risen on the international agenda. Therefore, I aim to contribute to identifying what makes natural disaster management effective, and especially how insurgency presence may influence it. I am focusing on the present with regards to time period. The present meaning today and ten years back. Using interviews as a means to obtain the necessary information was suitable in this context, as time is a factor that greatly influences how people perceive a phenomenon and their role in it. It is important to take this into consideration in order to avoid “recall bias” (Höglund & Öberg, 2011, pp. 172–173). Expanding the time period, and comparing one area’s natural disaster management over time would be interesting, however this would also increase the risk for bias in the interviews, and would in turn lower the reliability of the results.

Being a case of “communities experiencing insurgency, and frequently hit by disasters”, the findings from a case such as the Philippines can hopefully be applied to other countries experiencing either external threats of rebels or natural hazards, or the two combined. Because of their experience of natural hazards, the Philippines already are a source of inspiration for others. By identifying whether insurgency can explain the efficiency of the natural disaster management in the case study areas, this study aims to increase our knowledge of the causal mechanism for efficient natural disaster management. By also trying to identify under what conditions the disaster management remains efficient, the study will hopefully contribute to
other countries and regions being able to focus their efforts on disaster management around these, yet to be identified, conditions.

3.3 STRATEGY OF DATA COLLECTION AND ANALYSIS
This study was made possible by a Minor Field Study (MFS) in the summer of 2013, when I spent two months collecting data for the thesis. A field study was necessary in this case, not just for gaining first-hand data, and material hard to access through secondary sources, but also in order to study and learn from people’s own experiences. Living in a region frequently hit by disasters probably makes you develop several coping-mechanisms, and acquire specific knowledge that only comes from first-hand experience of a phenomenon. This is especially important when it comes to managing disasters and identifying under what conditions natural disaster management remains efficient within a community.

Wisner et al. discuss this heuristic aspect of a post-structural critique of the disaster discourse, and argue that “notions such as ‘relief’, ‘rehabilitation’ and ‘recovery’ are technical constructs imposed on different cultural, economic, political and gender realities. Such constructs fail to comprehend the lived reality of disaster and, to that extent, can fail to engage the co-operation of local people”(Ben Wisner et al., 2004, p. 20). Hearing from people firsthand about their ways, creates opportunities to finding new explanations as to why Albay has been relatively successful in its disaster management. As is written in Höglund and Öberg (2011), field visits serves two purposes; the collection of both primary and secondary data through various research techniques (interviews, surveys, focus groups or participant observation), and an improved understanding of the case and the context, which will facilitate the analysis of the data. The contextual part of this proved very important, since when in doubt, knowing the contextual factors strongly improves the analysis. The theory and data available on issues of disaster management in conflict-affected communities is relatively limited. Thus, further field research and data collection is essential for developing this theoretical field, as well as for increasing our knowledge of how to build communities resilient to disasters.

The study was conducted with traditional methods in field research, with the main strategies being interviews, focus group discussion, and observation. Today's discourse in field research advocates a more participatory approach where the people you come to interview are treated more as equals and colleagues rather than as study objects. In total, a number of forty interviews were conducted during the field study. The main interviewees were key stakeholders, the municipality Mayors, Chiefs of Police, and officers for disaster management...
in the respective areas, the barangay captains and local inhabitants from different sectors of society. On the municipality level, the Mayor, Chief of Police, and MDRRMCO (Municipality Disaster Risk Reduction and Management Council Officer) were interviewed. In all ten barangays, interviews were held with the barangay captains and one focus group discussion. The interviews were semi-structured following an interview guide and conducted with the interviewer and interpreter present. Sometimes an additional guide would also be present. The focus group discussions evolved around certain topics, though always with the interview-guide at hand, should the discussions stagnate. The captains were tasked with gathering the focus group discussants. This is to some extent problematic, even though they were given clear instructions on what people to bring in order to minimize bias (more on this in “Critical Reflections”). Of course, the captain was not allowed during the FGDs, to avoid the participants feeling pressured to share a certain point of view. Each focus group should consist of six to eight people, of which three should be women, and three men. There should also be two people representing the youth in the community, two people representing the adults, and two the elderly. Among these participants, it was also asked that they come from different sectors in the community, in order to seize different experiences from farmers, fisher folks, crafters, etc.

In order to achieve triangulation, additional interviews were conducted in all the ten barangays. These interviewed showed no discrepancy within the results, but were nonetheless not analysed in detail for this study due to time limitations. A variety of population data was also gathered from provincial and municipal offices. This data included details on insurgency, different types of crime, occupation, population size, etc. Having the opportunity to be “in the field” facilitated many useful first-hand observations. A more wide data gathering was also enabled, collecting information about all aspects of the population, the areas, the natural disaster management, and the insurgency – useful for alternative explanations and further studies.

The collected data were coded thematically according to the independent and dependent variables. The value of each indicator was measured on a scale, however not an interval scale which reduced the possibilities for comparison. The variables and indicators were compared in separate sets of indicators, helping the visualization of variation between cases. The data was structured according to barangay and municipality in order to present a clear overview of the variation. Please see “Annex I: Municipality Comparison” for more detailed information.
3.4 OPERATIONALISATIONS

This section explains how the hypothesis was operationalised for testing. The operational definitions of the concepts used are developed from different sets of indicators. The section aims to transparently show the process by which abstract concepts have been matched with concrete indicators in order to facilitate better intersubjectivity of knowledge. The variables are measured through interviews and focus group discussions. To properly measure the variables, I have used a set of quantitative and qualitative indicators. For all categories of indicators there will be a scale value, but the qualitative assessment will have precedence since the variables are not on the same type of scale, and neither on an interval scale. Hence, the comparison between variables and their level of impact on the dependent variable will need to be assessed through qualitative comparison. When developing the interview guide (Annex II: Interview guide), questions focused around insurgency presence and its saliency, together with the different phases of disasters, and disaster management: impact; preparedness; and underlying factors. Below follow a presentation of indicators for the independent and dependent variables.

INSURGENCY

The operational indicators build on the theoretical definitions of violence in the previous chapter, outlined as: “organised activity intended to kill or harm others; use of threat of violence to displace or coerce others; structural violence in the form of inequalities reproduced in a system; and historical memory of violence and its post-traumatic consequences”. Indicators of interest for the independent variable focused on insurgencies’ presence and salience in the barangays. These indicators were aimed at finding out if there was an insurgency presence in the barangay, if the presence was perceived as a threat, and whether or not it had a direct effect on the natural disaster management. Questions relating to the independent variable hence asked about peace disturbances, casualties, missing people, peace and order councils, the barangay police etc. The indicators regarding casualties, threat of violence, and traumatic memories of violence are of special interest since they relate to the perceived salience of the insurgency. This then also relates to whether or not the insurgency would have had the effect of creating unity within the community, and possibly improving its natural disaster management. Below are the indicators for insurgency outlined:

<table>
<thead>
<tr>
<th>Variable: X Insurgency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police records indicating presence</td>
</tr>
<tr>
<td>Indication of insurgency presence</td>
</tr>
<tr>
<td>Insurgency perceived as salient</td>
</tr>
</tbody>
</table>
NATURAL DISASTER MANAGEMENT

The indicators for natural disaster management are in part based on the different phases of disasters: prevention; mitigation; response; recovery and rehabilitation. The operationalisations fall within a framework which combines these phases with the concepts of resilience, disaster management and disaster risk reduction. The cluster approach to DRR by the Philippine National Disaster Risk Reduction and Management Council (NDRRMC) has also been taken into account, to recognise and value the local knowledge already present in the region (see for example (Fernandez, Uy, & Shaw, 2012, p. 212)). Hence, there are three categories of indicators: disaster impact, disaster preparedness, and underlying causes. In this section I will argue for the categories relevance, as well as for the indicators within them.

The international community has long worked with disasters, although it is during later years it has become a higher priority on the international agenda. The Hyogo Framework of Action (HFA) has part in this, and a coming “HFA 2” is to be agreed on in 2015, surely to further the priority of the issue even more. HFA present five priorities for action, which has also been taken into account when developing the set of categories and indicators.

Priorities for Action (UNISDR, 2013b):

1) Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;
2) Identify, assess and monitor disaster risks and enhance early warning;
3) Use knowledge, innovation and education to build a culture of safety and resilience at all levels;
4) Reduce the underlying risk factors; and
5) Strengthen disaster preparedness for effective response at all levels.

The theoretical definitions of disasters, disaster risk reduction, and resilience are all very vague and broad – and not especially suitable for operationalisation. Huge data sets were not a possibility for this study, nor would interviews be the most suitable method to access and assess this type of large-N study. This study has combined the above concepts in order to measure the efficiency of a more encompassing natural disaster management. The combined effect of the preparedness and underlying factors is what I have come to call efficient natural disaster management. Hereafter follow a discussion on the indicators in their separate categories.
DISASTER IMPACT
The indicators for disaster impact aims to measure how affected the areas were by the extreme weather events. The level of impact is based on factors commonly known as the most basic needs for human societies: access to food, water and shelter. Casualties, injuries, and people missing due to disasters were also included in this. Other important factors for human societies are of course health, income and infrastructure. These indicators are together the basis for later analysis of the disaster impact in the municipalities. In order to measure the effectiveness of disaster management, it is important to also control for how affected the areas were, and what kind of impact they had on communities. To measure the impact of disasters in a comparable manner is a very important part of researching disaster management. A non-impact by natural hazards is very unlikely. However, a low impact on a community in an affected region would indicate a very efficient natural disaster management. Below are the indicators for disaster impact outlined:

<table>
<thead>
<tr>
<th>Variable: Y Disaster Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food shortage</td>
</tr>
<tr>
<td>Water shortage</td>
</tr>
<tr>
<td>Breakdown of shelter</td>
</tr>
<tr>
<td>Breakdown of health</td>
</tr>
<tr>
<td>Breakdown of infrastructure</td>
</tr>
<tr>
<td>Loss if income</td>
</tr>
<tr>
<td>Increase in crime rate</td>
</tr>
<tr>
<td>Casualties</td>
</tr>
<tr>
<td>Injured</td>
</tr>
<tr>
<td>Missing</td>
</tr>
</tbody>
</table>

DISASTER PREPAREDNESS
In order to manage natural hazards, and prevent them from becoming disasters, communities can undertake measures of preparation. “Expect the unexpected” is a widely known term, and in a way summarizes the essence of risk reduction. If the worst is anticipated and prepared for, at least one would have done what one could do. Accordingly, the United Nations International Strategy for Disaster Reduction (UNISDR) is working all over the world with the awareness campaigns and policy implementation of national and international Disaster Risk Reduction (DRR) strategies. Sarah Bradshaw describes the framework for disaster risk reduction, with reference to UNISDR(Bradshaw, 2013, p. 158), in the following way:

- Risk awareness and assessment including hazard analysis and vulnerability/capacity analysis
- Knowledge development including education, training, research and information
• Early warning systems including forecasting, dissemination of warnings, preparedness measures and reaction capacities
• Public commitment and institutional frameworks, including organisational, policy, legislation and community action
• Application of measures including environmental management, land use and urban planning, protection of critical facilities, application of science and technology, partnership and networking, and financial instruments.

For a comprehensive assessment and measurement of disaster preparedness these points are combined with more typical resilience procedures. Factors including the existence of a seed bank have been included as an indicator since the province of Albay, and the municipalities in particular, are mainly agricultural economies. It is within this subcategory that the different phases of disasters are guiding the development of indicators. In addition to the below outlined indicators, an indicator for the people’s own perception of the sufficiency of the DRR in their community has been added. How personal experiences, and how honest one wishes to be about the adequacy of preparedness, can be very interesting since it may say something about a community’s self-image, as well as assessing the fulfilment or lack of an individual’s needs. Below are the indicators related to each phase of disasters outlined:

<table>
<thead>
<tr>
<th>Variable: Y Disaster Preparedness</th>
<th>Disaster Phase</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention</td>
<td>Early warning systems</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evacuation site</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resettlement area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Education about DRR</td>
<td></td>
</tr>
<tr>
<td>Mitigation</td>
<td>Flood control mechanism</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Irrigation systems</td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td>Search and rescue teams</td>
<td></td>
</tr>
<tr>
<td>Recovery and Rehabilitation</td>
<td>Seed bank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water stocking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rebuilding teams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Trauma counselling</td>
<td></td>
</tr>
</tbody>
</table>

Note: The indicators sometimes overlap several categories

UNDERLYING FACTORS FOR EFFICIENT NATURAL DISASTER MANAGEMENT
The final subcategory of natural disaster management in this study is “underlying factors”. In operationalising the theoretical concepts, different indexes served as useful predecessors in attempting to measure preparedness. Communities have prepared and are working with different risk drivers, these have been identified by the “Risk Reduction Index” (“What is the Risk Reduction Index?,” 2014) which analyses the capacities and conditions for disaster risk reduction (DRR) and climate change adaptation (CCA) through the identification of four
drivers of risk: 1) Environment and natural resources; 2) Socioeconomic conditions; 3) Land use and the built environment; 4) Governance. These are examples of what this thesis conceptualise as “underlying factors” for efficient natural disaster management. This study includes aspects of socioeconomic conditions; land use and the built environment; and governance as indicators for this subcategory of natural disaster management. With UNISDR and researchers in the field of disasters and conflict (Wisner, Hewitt, Bradshaw) identifying underlying risk factors as key to the future of disaster risk reduction, I also found these to be a vital part of disaster management. The latest set of indicators used by UNISDR link disaster risk management to the sustainable development and climate change agendas. Future indicators used by UNISDR will be developed in six categories: economic and fiscal structure; poverty and social vulnerability; environmental degradation and climate change; urbanization; coping capacity; and overall governance” (UNISDR, 2013d, pp. 4–5). Additional interesting factors outlined by UNISDR are importance of community-level involvement, including women as leaders, children and youth, political will and leadership. In addition, integrating DRR and CCA measures are important for future disaster management (UNISDR, 2013c). Among the many indicators, I have selected themes and indicators within the scope of this study.

When developing the underlying factors’ indicators, gender equality would need to have a special place. Not only is gender equality part of the disaster discourse, it is also part of peace and conflict studies, and an integrated part in development studies. According to research on gender equality and sustainable peace by Erik Melander, gender equality contributes to more effective post-conflict response and recovery (Melander, 2005). Therefore it would be interesting to explore if the same were true for effective disaster response and recovery. More equal communities would probably value the work of women higher and hence activate more people in natural disaster management. Because more people are activated, along with more aspects of DRR valued higher, more efforts can be done in DRR and DRR will be more effective. Sarah Bradshaw has focused on gender and disaster research, and outlines that more women than men die during disasters due to their culturally prescribed gender roles and vulnerability (Bradshaw, 2013, p. xi). This is echoed by UNISDR, which has a strategy for disaster risk reduction and gender equality, highlighting six points, of which I found one more explicit to this study: “Gender perspective is mainstreamed into the DRR policies and the climate change adaptation processes, increasing community resiliency and considerably reducing the impact of disasters” (UNISDR, 2013a).
Communities with a strong political will for natural disaster management will contribute to institutionalization of its practices, affecting social norms and public awareness around natural disaster management. Because of this institutionalization, it is plausible to believe that the natural disaster management will be more effective. Therefore, whether or not the constituents are positive towards its government is interesting. It indicates a good relationship, and adding a context of natural hazards and disasters, it can also imply that the government has begun to institutionalize natural disaster management. To be “positive towards the government” has been operationalised as clearly stating its support for the government. However, at the same time as support was demonstrated, some reluctance towards government programs could be observed. All interviews discussed how the government is helping barangays during disasters, and accounts of this help are not interpreted as “positive towards government”, but a more clearly stated support has been accounted for. The lack of a supportive statement is neither interpreted as a lack of support – it is merely interesting to see if being strongly in favour of the government would correlate with effective natural disaster management.

Being part of the purpose of this study’s main task to observe the hypothesised causal mechanism, it was interesting to learn that there is Filipino expression for just unity, namely Bayanihan. The concept turned out to be known also for others within the field of disaster research. “The traditional Bayanihan concept has evolved from merely community members carrying a house to a new location to a community’s united effort to achieve a particular goal or resolve an issue” (Uy et al., 2010, p. 250). According to Bankoff, Bayanihan is something that expands beyond the concepts of unity and togetherness, and goes further into a shared identity and common association. “Bayanihan connotes more toiling on another’s behalf and of assuming another’s burdens”(Bankoff, 2003, p. 168). Bankoff also discusses its more operational meaning in saying that it is an attempt to “express a sense of shared community, often defined in operational terms as neighbourhoods, that will guarantee support for its members especially during times of personal travail or common hardship such as in an unfolding disaster situation” ((Jocano, 1975, pp. 166–187) in (Bankoff, 2003, p. 168)).

Given the relevance ascribed to underlying risk factors, I have attempted to use this is in my analysis of natural disaster management, and to adhere it to specific indicators. Once again this was a challenging task. UNISDR discuss more factors than outlined above, however I
have focused on only a few of them. The underlying factors are to a large part socioeconomic, something which would not fit into the scope of this study. This is of course problematic since the aim of the current approach is to make a holistic assessment.

Indicators relating to underlying factors for efficient natural disaster management include:

<table>
<thead>
<tr>
<th>Variable: Y Underlying factors</th>
<th>Based on the factor of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteers</td>
<td>Community participation, unity</td>
</tr>
<tr>
<td>Active community organizations</td>
<td>Community participation, unity</td>
</tr>
<tr>
<td>Women active in disaster management</td>
<td>Gender quality</td>
</tr>
<tr>
<td>Knowledge about gender equality</td>
<td>Gender equality</td>
</tr>
<tr>
<td>Public awareness about DRR</td>
<td>Public awareness, education, governance</td>
</tr>
<tr>
<td>Receives international aid</td>
<td>Governance</td>
</tr>
<tr>
<td>Long-term work with climate change</td>
<td>Climate change adaptation</td>
</tr>
<tr>
<td>Positive towards government</td>
<td>Governance</td>
</tr>
<tr>
<td>Accounts of Bayanihan</td>
<td>Unity, community participation</td>
</tr>
<tr>
<td>Support from private sector</td>
<td>Governance, community participation, awareness</td>
</tr>
</tbody>
</table>

The study gathered additional information on the perception of women regarding their strength, how they would be suitable as leaders, and whether or not women are suitable for being in charge of disaster management. This was done by statements with a negative framing, for example “On a scale from 1-5, would you say that Filipino women should not be in charge of disaster management?”. With the negative framing, I tried to circumvent possible bias towards agreeing with the statements by default or because it would be what was expected. The phrasing also later became interesting when, unfortunately, some women reacted strongly towards it. However, this reaction was a good indicator for more advanced gender equality in the community, indicating that women are aware of their rights, and equal position in society, and in addition also to reject the notion that they would be inferior. For a more comprehensive view of the indicators, please see “Annex II: Municipality comparison”.

3.5 CRITICAL REFLECTIONS
This section contains critical reflections on the thesis, especially with regards to design and potential biases. First I discuss limitations to the study, followed by potential biases, and finally by ethical considerations.

3.5.1 LIMITATIONS
Due to the scope of this study, and the scholarship given for it, my study is limited to the Philippines. It would have been interesting to compare disaster management and the effect of conflict not only within the Philippines, but also between countries. An alternative study
could have compared several cases, and for example done regression analyses on the number of dead due to disaster and areas experiencing conflicts. A larger number of comparable cases would have facilitated better possibilities for generalizations. However, these types of studies would not have been able to go as in-depth into the researched phenomena. Limitations as to the scope of the study were of course an issue also in this case. After some time in the field it became apparent that adding another municipality, not yet experiencing natural disasters, would add very interesting dimensions to the research. Seeing as the already affected municipalities seem to have developed at least some form of institutions for dealing with natural hazards, it would be interesting to see if these institutions are in place in non-affected areas as preventive measures. Due to government budget limitations, this is probably not the case. This then might have made the local mechanisms more visible. Although, of course, a severe natural hazard would have to occur in order to find out how effective their natural disaster management actually is. This dimension of the study would have clarified the concern that it is the experience of natural hazards that are the most important factor in whether or not a community develops systems for natural disaster management. Adding yet another case, with experience of insurgency but not natural hazards, would also facilitate research more specifically on insurgencies role in contributing to unity and crisis cooperation.

I have limited myself not just to the Philippines, but also to the province of Albay. There exist over 700 Barangays in the province of Albay, and therefore a thorough sampling and selection criteria was needed. The Barangays hardest to access, such as in the island district of Rapu-Rapu, have unfortunately been excluded from the sampling and the study. Another limitation was to not include the remote Puroks (street districts) of the Barangays, but to keep to the centrally located Puroks in the Barangays. Unfortunately, there are some missing data in the comparison. This is due to the evolution of the interview process, where questions were added or altered. If possible, this would have been completed later on during the field study, but there was no such opportunity.

3.5.2 BIAS
This part of the critical reflections delves on the bias in the study. Going through a range of different potential bias, they are structured into subcategories of: methodological bias, bias in data obtained, selection bias and the “researcher’s effect”.

METHODOLOGICAL BIAS
The researched areas were compared in a “Most similar systems design”, which turned out to be a problematic choice once assessing the results. The two municipalities were chosen on
their similarities to be able to isolate for factors outside the study’s range. In addition, the municipalities were both affected by disasters, though only one was known for a presence of insurgency. However, the “Most similar systems design” requires different outcome in order to trace what factors that might have played a role in the outcome. Without the difference in outcome, the design becomes problematic. However, changing the design to a “most different systems design is also problematic, although it follows the design criteria with the same outcome in the dependent variable, the municipalities do not show enough variation in the other compared factors.

Interviews as a method are commonly criticized for their subjectivity. Respondents may answer according to what they think the interviewer might expect or want. People may also want to present themselves, or their country, in a favourable way. This type of human behaviour can be minimized by establishing a comfortable interview situation (Kvale, 1996). Establishing trust between the researcher and respondent helps immensely in this. To my aid, I had the right and correct documents verifying who I was and why I was there. I always held a short presentation of the purpose of the study and myself. Another crucial factor in facilitating a comfortable and enabling interview situation was my interpreter and guide. Being part of a team with local knowledge, experience and contacts served many purposes and above all gave legitimacy to the study.

Conducting the study in English, I had to use interpreters during most of the interviews. Though many respondents spoke a little bit of English, few respondents could express themselves freely and unconditionally. I, on the other hand, spoke little to no Tagalog. During the study a total of three interpreters were used due to changing circumstances. The use of interpreters is problematic in itself, since it adds a third layer of interpretation on top of the exchange between the researcher and respondents. Using three interpreters not only lowers the validity of the study, but also the reliability, since the potential faulty interpretations may also differ between the interpreters. Measures were taken to prevent faulty interpretations, through a continuous dialogue with the interpreters. Still, language will always be a factor potentially generating bias, since English was neither mine, nor the respondents’ mother tongue. Specific expressions may be interpreted differently by respondents and interviewer. Most of these issues can be solved through good communication and by being a thorough listener and analyser as the interviewer. The gains received from interpreting in facilitating the study, outweighs the cost.
BIAS IN DATA OBTAINED

Subjectivity by respondents can never be completely avoided. However, it was never the purpose of this study to gain an objective truth of events, but to show how the insurgency has affected the disaster management and in that people’s capabilities for crisis cooperation is the most relevant information. In this, the use of interviews to access the respondents’ subjective interpretation and experience of events and processes served its purpose. Critics may argue that these interviews only generated results regarding the perception of resilient disaster management, rather than actual resilience. Since this is a valid concern, I have tried to prevent different kinds of bias in perceptions by interviewing people from different levels (barangay, municipality, and province) and sectors in the researched area. Meeting with government officials, priests, social workers, policemen, barangay captains and local residents, I have been able to gather a multi-faceted assessment of the natural disaster management.

Cultural factors that might have played a part in creating certain bias include Filipinos generally being a bit shy and polite, never badmouthing anyone in public. Fortunately, the area has not experienced any “research-fatigue” so far, and people were still eager and interested to talk to a researcher. The cultural aspects were also a factor in the data gathering, where I am very thankful to local experts that were able to help me rephrase questions to be appropriate in the local context. This was true especially with regards to the insurgency, where I had to gradually approach the topic, and through detailed questions about the functions of local law enforcement institutions could facilitate a discussion. The New People’s Army has been active in the Philippines since the 1960s, and the Communist Party of which it associates with had at times widespread sympathies. This conflict seems to have contributed to a divide throughout the country. I was told it was not uncommon to have one member of the family in the NPA and one in the Army at the same time. The government has introduced reintegration programs to facilitate defectors from the NPA; however, the common perception is that these programs have failed gravely because of the government’s inability to guarantee the safety of the defectors. Due to this historical background, it was, and still is to some extent, a difficult and problematic issue to discuss in the Philippines.

SELECTION BIAS

In order to avoid selection bias in the samples, the first weeks of the field study was devoted to gathering information about the municipalities in the province, and discuss with key informants appropriate cases for comparison. The local experts’ accounts were cross-referenced and compared to population data to avoid bias. When selecting the respondents for
the focus group discussion, the captains were given clear directives about the compilation of the group, again trying to avoid bias. However, letting the captain gather people will create some bias in the selection, since he or she will most likely bring people who are known supporters. In this regard the triangulation of interviews served a great purpose in that they to some extent ensured that the results from the focus groups were not distorted. Also, even though some people might have been supporters, it might have only a small effect on the results because the study did not evolve around the captain’s own persona.

Additional problems with regards to selection arose after the study was finished, when it became known that one of the NGOs providing me with support had been active in four out of the five barangays in Area A. Because of their activity there, those areas might be better prepared since they would have undergone a program in Disaster Risk Reduction (DRR). Yet another selection bias became known when during the interviews I found out that the leading actor in DRR on the provincial level came from one of my researched areas, and hence might have given priority to that area in educating them. While this is problematic, it might further emphasise the importance of education in DRR to enhance capabilities in natural disaster management.

THE RESEARCHER’S EFFECT
People’s view of the researcher always creates some form of bias, although measures are taken to avoid it. Being a young, white woman certainly made people have a certain view my persona, and may have helped facilitate some of the data gathering. Being from a “rich western” country meant that I was treated with a degree of respect, and most Filipinos were appreciative of the interest shown in their country. Being a master student earned me additional respect, as well as my comparatively young age in this regard seemed to impress people and make them more inclined to participate in the research.

Being a single researcher further facilitated the focus of the research, with only one “human factor”, contributing with the same personal bias for all interviews. Nevertheless, in many focus groups discussions I experienced a difficulty with getting all participants to engage actively. This adds to the thesis limitations since it decreases the otherwise so brilliant function of focus groups – which the group in itself controls the validity of the arguments made. However, without active participation, their agreement is barely assumed. Usually, it was men, categorized as “youth” or “adult” that showed disinterest, or ignorance. I discuss this in the bias section, since it is my assessment that this was partly due to my own persona in the interview context. However, this was far outweighed by the many engaged and
committed people participating in the study. All of the issues above are in some respect hinders to intersubjectivity, since knowledge obtained from interviews is produced through an interpersonal interaction (Kvale, 1996, p. 29ff), in which the interviewer’s persona always will have some kind of effect.

3.5.3 ETHICS
Research always contains some ethical responsibilities, whether it is towards your predecessors work, or the people you interview – it is always important to be aware of how your research may influence others. Doing a field study challenges your ability to view yourself from another’s point of view, and be aware of the social structures within which you function. This is not always an easy task, but fortunately I had wonderful support from contact persons in the Philippines, and later also wonderful guides and interpreters from whom I learned valuable lessons. This study has tried to minimize ethical issues by not naming respondents, or the actual municipalities, because the insurgency is still a delicate issue. Even though all respondents and informants agreed to be quoted, it is my assessment not to mention anyone directly by name. The interviews were all carried out with the aim to make it a positive and enriching experience for the interviewee. Therefore I did not delve too much into topics which the interviewee did not want to discuss, and instead focused on interpreting their unwillingness to discuss the topic.
4. EMPIRICAL ANALYSIS

The empirical analysis begins with a presentation of the main results. Thereafter, to facilitate comparison, the variables are analysed in the same order as they were presented in “Operationalisations”. Second, the variation between the municipalities in insurgency is presented and discussed, including whether or not the insurgency is salient and its connection to natural disaster management. Third, the variation in the depended variable is discussed. This section also analyses the similarity in the outcome. Fourth, alternative explanations for the similarity in the outcome are discussed focusing on unity caused by other factors than insurgency.

4.1 MAIN RESULTS

There has been a long contestation over the possible effect of conflict on disaster management. Claims differ in that conflict is a unifying or disruptive force in communities, either contributing to more efficient natural disaster management, or worsening the cooperation. However, this study indicates that insurgency has no effect on natural disaster management. The researched communities show only minor differences in their natural disaster management, despite one community having a presence of insurgency. This implies that other factors than insurgency is more important in creating efficient natural disaster management. Hence, theories claiming that conflict-prone societies have a less efficient natural disaster management, and that conflicts distort social cohesion (for example (Wisner 2012, Chapter 7) and (Twigg, 2009)), may need to be developed in order to account for other factors and mechanisms. The causal mechanism, unity, was found in both municipalities. The result question how and if unity affects the natural disaster management. The function of unity for effective natural disaster management may still be active, though not necessarily caused by insurgency. While the results may exhibit internal validity, the small sample of cases cannot guarantee external validity across all cases of communities’ experiences conflict and disasters.

Below are the results according to category:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Area A</th>
<th>Area B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presence of Insurgency (x)</td>
<td>Yes, 15</td>
<td>No, 0</td>
</tr>
<tr>
<td>Disaster Impact (a)</td>
<td>62</td>
<td>69</td>
</tr>
<tr>
<td>Disaster Preparedness (b)</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td>Underlying factors (c)</td>
<td>55</td>
<td>66</td>
</tr>
<tr>
<td>Total (y) (b+c-a)</td>
<td>34</td>
<td>37</td>
</tr>
</tbody>
</table>
4.2 VARIATION IN INSURGENCY

This section discusses the presence of insurgency, and how it varies between the municipalities. The section first presents empirical findings regarding the variation in the insurgency variable. Second, support for the outcome in natural disaster management is discussed, hence how insurgency seem to have no effect on the natural disaster management in the communities. Thirdly, this section discusses and analyse the results.

EMPIRICAL FINDINGS

There were several accounts of insurgency presence in the barangays in Area A, though none in Area B. The following paragraphs first discuss the presence in Area A, followed by an analysis of the contrasting results to Area B. Sometimes the presence was perceived as salient, sometimes not. There were accounts of violence in the forms of 1) organised activity intended to kill or harm others; 2) use of threat of violence to displace or coerce others; 3) historical memory of violence and its post-traumatic consequences. The interview-quotes below are some examples of these accounts.

According to the Albay Police Provincial Office (PPO) documents, there were 46 rebel members present in Albay during the 1st quarter of 2013. “Of the seven hundred twenty (720) barangays in the province, three (3) barangays fall under the category of INFLUENCED, nine (9) LESS INFLUENCED and no barangays considered as THREATENED, while the seven hundred and eight (708) barangays are not affected” (Reyes Regala Jr, 2013). Police records further note that “From January to May 2013, the CTs (Counter-Terrorists) perpetrated a total of ten (10) violent-activities in Albay, broken down into three (3) harassments, one (1) ambuscade, two (2) liquidation and four (4) encounters”. The researched areas are not affected by these actions. However, according to the PPO, there had been sightings in three of the researched areas.

According to Mayor A, there were two assassinations three years ago, in barangay B, and X.

Mayor(M): But according to them (the people), the presence is also there, but only, only very minimal. Minimal numbers. And they are not even permanent here. Because of the dwindling force, it has been their operation to transfer from one place to another. From one municipality to another. In a very short span of time. They don’t remain long any place anymore.

Jennifer Unelius(JU): Mm. Because the army is after them?
M: Yeah, yeah. There is always that conflict, there is always that danger of being apprehended. So they have to avoid. Because there are, but I can tell you there is no serious, serious war here in Area A.

The police in Area A deal with the insurgencies by monitoring, and reporting their movements to the Philippine National Police and the Philippine Army, since the municipality police is not equipped to engage with the communists in its own capacity. While the Mayor and Chief of Police in Area A did not admit to any fear of the insurgents, the Chief of Police spoke about the fear experienced among the people: “They constitute fear to the people. They… ah, they are engaged in extortion, stopping money, stopping foods, they are stopping other… from the constituents”2. He added that there had been some killings previous years, perpetrated by the insurgents. Though the Chief of Police gave these accounts, he also added that he had no knowledge of any incidents since he moved to the area ten months ago. However, the police continue defending their failure to act against the insurgents by saying that people are afraid to report extortion because of fear they might be “murdered, abducted or killed”. The historical memory of violence was also a recurring experience where for example Captain C, Area A answered a question about peace disturbances with: “In terms of these conflicts, after conflicts, I do not want to recall these things. I want to forget. Because I want to have peaceful life, tranquillity”3.

Furthermore, Captain C (Area A) was very reluctant to answer questions about peace disturbances. After repetitive questions about how one should not intervene, it became clear that he did not want to answer questions about this to avoid trouble for himself, and that there was a current perceived threat4. The focus group in Barangay B (Area A) discussed the NPA, and said that there had been an encounter between the NPA and the military two years ago, with a few casualties. People were then scared of going to their farms because the NPA might rob them. One person said they were not afraid anymore, while another person was afraid also today. Regarding the NPAs current influence, they had tried to recruit some residents of the barangay. Yet another person in the barangay joked about the presence and fear, saying it was normal, and that as long as you don’t do anything wrong, you will not get any problems or get into trouble5.

1 Interview 35: Mayor Area A 24-07-2013
2 Interview 9: Chief of Police Area A 02-07-2013
3 Interview 6: Captain C Area A 01-07-2013
4 Interview 6: Captain C Area A 01-07-2013
5 Interview 16: FGD B Area A 04-07-2013
There are some interesting additional observations related to insurgencies, with regards to their role in the communities. According to the Mayor in Area A, the insurgents believe themselves to be the ones that are instilling discipline. Clearly, the insurgents are also a threat to those that might sympathize with the government.

*M: There are missing people here. But they left the place. Because they’re indebted to the society. Especially to the NPA. They are not killed immediately, they are warned, just to leave the place. (...) Yeah, regard to rustler (animal thief), or you are a bad element. Or you are suspected by the NPA to be a government asset. They will not kill you immediately, you will just be... requested to leave the place.*

The experience of insurgencies in Area B was quite contrasting. The Mayor of Area B expressed candidly that there were no insurgents in the municipality, and that the last time there was any insurgency was thirty years ago. The Chief of Police, reinforced this, and said there were no NPA in Area B. The residents and captains of the barangays in Area B also gave no accounts of insurgency, and mainly outlined simple theft, traffic accidents, and public drunkenness as the main peace disturbances. When discussing fears and worries in Area B, the main threat was the Mayon Volcano and the possibility of another eruption.

From the results, it is clear that insurgents are present in one of the municipalities, but not in the other. There are no accounts at all in Municipality B, while there are several mentions of NPA, “Mountain people”, and “Revolutionary tax” in Municipality A. Given that the Philippines has a culture of not discussing sensitive issues, I was told it would be difficult to get any accounts of insurgencies and difficulties as these are considered sensitive issues. That some accounts still were given, though sometimes reluctantly, indicates that there was in fact an insurgency presence – however not always perceived as salient any more. In barangays where people and barangay officials were more reluctant to discuss insurgencies, the threat was probably perceived as more salient than in areas where people could joke about the NPA. Though joking about an issue is also a form of a psychological coping mechanism.

An additional observation somewhat related to the insurgency was the many unfinished infrastructure projects (mainly roads) throughout the province. The explanation is said to be that the grant for the projects is less than promised due to corruption. However, these projects may also be hindered by insurgency black mail or “revolutionary tax”. Hence, presence of

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6 Interview 35: Mayor Area A 24-07-2013
7 Interview 31: Mayor Area B 22-07-2013
8 Interview 4: Key interview 19-06-2013
insurgency could affect disaster management by impeding development projects. This would be an indirect effect on disaster management, since it then would have a negative impact on for example infrastructure, making it thus harder for communities to cooperate without proper transportation. Also it would hinder evacuation, transport of food and rescue supplies, and other disaster response measures. This finding would be in support of Wisner’s argument, especially when he writes that “Violent conflict diverts national and international financial and human resources that could be used for development and for mitigation of natural hazard risk” (Wisner in Wisner, Kelman, & Gaillard, 2012, p. 75).

EMPIRICAL SUPPORT FOR THE OUTCOME
The following subsection is a presentation of some of the respondents’ accounts which support the result, that the insurgency did not have an effect on natural disaster management in the communities.

When it came to the Mayor of Area A, he immediately related “peace disturbances” to armed conflict and the NPA. The occurrence of disturbances by NPA was “very isolated” according to the Mayor. He said that people had been talking about a presence but that he had not seen them and “they are not creating disturbance”⁹. One captain¹⁰ said that people from the mountain help with the barangay security and that they have a good relationship. In FGD B, Area A, an interviewee referred to the insurgency presence as normal, in response to a question if they felt scared by the presence. One captain in Area A talked very openly about the people from the mountain and said that the police are afraid of these people, but not the local residents.

_JU:_ But are the people afraid?

_C:_ They are not afraid, because these people from the mountain will not harm any civilian, if you have no problems with these people.¹¹

Collectively, these are indications of an insurgency that may be perceived as salient, though still not influencing people’s daily lives. The presence, and for some also fear, may have become something ordinary, which people have gotten used to, and adopted to. If that is the case it is also likely that the disaster management is not affected by the insurgency, adding further support for this thesis’s results.

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⁹ Interview 35: Mayor Area A 2-07-2013
¹⁰ Interview 11: Captain A 03-07-2013
¹¹ Interview 11: Captain A 03-07-2013
DISCUSSION ON INSURGENCY
Contemporary literature seems to connect conflict with a degenerated ability to respond to natural hazards. This thesis presents a result going against this claim, where no effect due to the conflict was shown. While one municipality experienced an insurgency presence and the other one did not, their natural disaster management was found equally efficient. Not any single evidence was found to support the claim that insurgency has an effect on disaster management. Nor are there any accounts of the insurgency making any difference, positive or negative. This does not only go against contemporary literature, but also this thesis’s hypothesis which stated that communities experiencing insurgency will be more efficient in their disaster management.

While scrutinizing the results, the obvious question is if the insurgency presence was too exiguous, or if there were other factors in the municipality without insurgency that brought about unity in another way? The NPA has been active since the 1960s, and it seems the conflict is minor today. Reintegration programs have been undertaken for the ex-insurgents, however not always successful. Some argue that for insurgency to be considered salient there has to be concrete acts of violence or threat. However, saliency will always be a subjective perception, and hence will the perception of saliency by the captains and local population in these cases also be a valid assessment of insurgency. Admittedly, insurgency ought to affect communities in a variety of ways – however it is not certain whether its effect is predominantly negative or positive influence on disaster management. Research from this study highlights the complexity in issues of conflict and cooperation, and so highlights the necessity of further research.

4.3 VARIATION IN NATURAL DISASTER MANAGEMENT
This section presents the results for variation in natural disaster management. Again, the results of the dependent variable in this study are presented according to the categories of disaster impact, disaster preparedness, and underlying factors.

4.3.1 DISASTER IMPACT
The municipalities have many similarities in how they are impacted by disasters. Food and water shortages are very common, as is breakdown in shelter. Many houses are made of “local materials”, which often are too weak to withstand typhoons (though there are also indications of their resiliency (Bankoff, 2003, p. 164)). Breakdowns in infrastructure are also one of the most frequent effects. This usually includes flooded roads, or debris cutting off transportation,
or damaging vehicles. The breakdowns in infrastructure often worsen the strains on communities since it affects food transport, hospital access or evacuation routes.

Crime rate is another indicator of impact giving the exact same result, with three captains and two FGDs in the respective barangays indicating and increase in crime rate during disaster. This is an interesting variable since it is a common perception that crime rate always increases during disasters, and that people directly turn to looting during this kind of stress. However, the results indicate that this is not always the case, opposing earlier notions by other authors, and popular media. In summation, the municipalities got the results of (62) and (69), showing no significant difference, especially due to the few missing indicators in the first municipality.

4.3.2 DISASTER PREPAREDNESS
The disaster preparedness gave the results of (40) and (41) respectively, indicating no relevant difference in the measures in place for this variable. However, the results show variations between the barangays.

When discussing networks and disaster management personnel, the same people are active both in law enforcement and in disaster management. This is probably common in many countries, as it is more efficient to use the networks already in place. The Chief of Police in Area B discussed and emphasised the cooperation between the PNP, the Local government unit (LGU), the religious sector, civil society and volunteers. The barangay council members are usually part of the rescue- and rebuilding teams. The barangay police have the responsibility to go house to house informing residents when there is a disaster. They often manage the search and rescue teams, and are in charge of executing evacuations during disasters. The barangay health workers help prepare food, water, clothes and first aid to bring to the evacuation centre. The purok presidents were involved in the disaster management in at least one barangay (Barangay 3 Area B). Area B seems to have routines for calamities, calling meetings at the Mayor’s office as soon as there is a warning. The Chief of Police emphasized the importance of mobilization during disasters and the close cooperation between the LGU and the police.

All barangay officials are trained by the municipality or province in Disaster Risk Reduction (DRR). The key difference between the barangays seemed to be how this acquired knowledge is disseminated to the people. The people should be trained by the officials but this is not always the case with the degree of training within the barangays differing. Regarding education, Area B seemed to have a more systematic approach to teaching DRR, especially
with regards to targeting students who conducted several drills. By targeting students the parents were also reached and information pamphlets got a wider spread\textsuperscript{12}. Nevertheless, in the municipality comparison, Area A has more indications from interviews with captains to have education about DRR.

When discussing the perceived sufficiency of DRR efforts in the municipalities, it was particularly interesting to hear the two MDRRMC officers. Neither of them said the efforts were sufficient. In Area B the officer wanted the measures for disaster mitigation to be more strictly implemented, in particular with regards rules prohibiting the construction of buildings along the riverbank\textsuperscript{13}. More training and drills were requested by most interviewees including officials, captains and focus group discussants.

4.3.3 UNDERLYING FACTORS
Within this section the results of the category for underlying factors for efficient natural disaster management are presented. Because of our social world being multivariate, I have tried to come up with a more encompassing variable for disaster management, and included “underlying factors” in order to facilitate a more integrated and holistic approach. Nevertheless, it is important to keep in mind that these indicators are far more complex than described in this thesis.

Accounts of unity within the community, or “Bayanihan”, were sometimes given in itself, a mere mentioning of Bayanihan. Sometimes, discussion about helping one another within the community was very central. The Chief of Police and MDRRMCO in Area B discuss the very close family ties within Filipino families One captain in Area B said that the way of living is affected positively during disasters, since people come together and help each other\textsuperscript{14}. One barangay also talked about Bayanihan and how they are sharing the water resources through irrigation systems, and help each other rebuild their houses after a calamity\textsuperscript{15}. An active community life is important in creating unity and enable mobilisation. There are many local groups within the barangays, such as farmers’ and fishermen’s’ groups, women’s organisations, youth organisations etc. The number of people involved in such organisations differs between the areas. The MDRRMCO of Area B estimated that about twenty percent of

\textsuperscript{12} Interview 31: Mayor Area B 22-07-2013
\textsuperscript{13} Interview 17: MDRRMC Area B 05-07-2013
\textsuperscript{14} Interview 23: Captain Barangay 1, Area B 11-07-2013
\textsuperscript{15} Interview 28: FGD 3 Area B 13-07-2013
the population is a member of a local group\textsuperscript{16}. In the majority of interviews it was perceived to be common to be part of an organisation. That unity was present in both municipalities suggest that something else is causing it, in addition or instead of the presence of insurgency. This will be explored further in alternative explanations.

All officials and all captains were men, except for one woman. Women are in principle able to adopt any role in the society; however it was less common to find women in political positions. In cases where women are Captains, it is common that their husband was the captain before them, and will be again afterwards. As in the case of the Mayor in Area A, he had been the Mayor since 1988, though that is not possible according to the law. His wife became Mayor when his mandates were due to terminate, and during one of our conversations he mentioned that his son may become Mayor in the future. It did not seem uncommon in the province that political positions stay within the same families for many years. This would suggest both less gender equality and possibly corruption. Men were in all interviews and FGDs considered as “Head of the family”, and in almost all cases the men were in charge of disaster management on a household level. When discussing gender equality, the statements about Filipino women were sometimes perceived as provocative and received strong reactions from women participating in the FGD. Though, in some barangays the same statements did not receive the same reactions. This could be explained by women being more empowered and gender equal in those barangays in which the statements received strong reactions. On the other hand, those situations where no reaction was made could also be attributed to a greater respect for the interview situation and my ascribed authority as a researcher. Women usually gave lower numbers than men answering the statements, hence they did not agree to the same extent that women are weak/cannot be good leaders/should not be in charge of disaster management. Though women are active in disaster management throughout the barangays, men are still the majority. The delegated responsibilities within disaster management also seem to differ in responsibilities between men and women. Men tend to be part of the rescue teams, while women are “First-aiders” (COP Area B) and are usually tasked with preparing for evacuation (food, clothes etc). The Barangay Health Workers are female volunteers and often work with health-related issues during disasters. They are often the ones giving first aid, and are later debriefing and providing counselling.

\textsuperscript{16} Interview 17: MDRRMC Area B 05-07-2013
The Mayor (B) is aware of the importance of communication and coordination, which of course helps tremendously to facilitate efficient natural disaster management. Without this kind of political will, the work would probably take longer and be less efficient. In certain situations, political decisions may impede rather than facilitate progress. The governor was commonly praised for offering assistance during disasters by “sending his people”, and contributing with food packs and medicines. Most captains were positive towards the government, though some were sceptical. In Barangay A, for example, the captain was critical towards the Mayor’s office because that is where all the food supplies for calamities would be sent if the evacuated people of his barangay did not stay in the evacuation centre for at least two days. During interviews with captains some first praised the government for their efforts. However, when asked how they felt about the government, the captains’ responses were more hesitant and they did not want to discuss the matter the further. Below is one captain’s response illustrated:

**JU:** Yeah, yeah. Mm. So... what is your, or how do you feel about government? Your personal feelings?

**C:** ...

**JU:** It’s OK, it’s...

**C:** (Laugh) Could we...

**Interpreter:** Serious, you know.

**C:** Could we not, could we... eh, escape for that. Ah, no. For that question? (Laugh).

**JU:** If you don’t want to answer it’s ok. But I can remind you that you still have the option of being anonymous so that your name is not shown here.

**C:** (Laughing). It’s very difficult.

**JU:** It’s up to you. Yeah. Ok, so we...

**C:** I could say, very helpful also. That’s all.

**JU:** Very helpful.

**C:** (Laugh).

However, during one FGD the people said they received less support from the government because of their location. The more distance to the municipality centre, the less support and aid do you receive as a barangay in during calamities. The most remote barangay of Area B did not talk about a supportive government, but rather a lack of support for the projects and

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17 Interview 5: Captain A Area A 03-07-2013
18 Interview 19: Captain 4 Area B 10-07-2013
19 Interview 21: FGD 5 Area B 10-07-2013
needs of the barangay\textsuperscript{20}. These points to networking being an important aspect, and also that you have fewer connections inside the government the further you are from the centre. While there was no variation between the municipalities with regards to government support, there were variations between the barangays, especially with regards to remoteness. More reflections on remoteness follow in Alternative Explanations.

4.4 ALTERNATIVE EXPLANATIONS
This section discusses alternative explanations for the similarity in the outcome of the natural disaster management and possible explanations for the variation between the barangays. First, this section discusses remoteness as an explanation for the variation in disaster management between the barangays. Second, possible reasons for unity still being the causal mechanism is presented. Third, this section discusses alternative explanations related to the possible effect of governance, in particular aspects of education and institutional capacity.

REMTENESS
Building on the results from underlying factors of natural disaster management, remoteness from the municipality centre seems to correlate with how the barangay is prioritised in relief efforts and support. Additional observations related to the role of the NPA also support a variation among the barangays being due to distance from the municipality centre. Also for the preparedness category of the dependent variable the barangay level shows a more significant variation. It is observable that the more remote areas have been given a lower result for “disaster preparedness”. A collected assessment of these indicators suggests that there is a correlation between being closer to the municipality centre, and implementing more effective disaster management. The section below analyses possible explanations for this.

According to statements by the Mayor in Area A, the NPA has sometimes functioned as a local “police”, exercising a self-ascribed right to force “bad elements” out of the area. This is in line with research on insurgents and rebel groups, by Kalyvas, Metelits, and Walch. According to Metelits, groups “can adopt a contractual relationship with local populations. With regard to establishing order, such a relationship means greater legitimacy because order through compliance and acceptance is cheaper and more effective than simple domination by force, though a contractual relationship also entails providing an administration that supplies public goods” (Metelits, 2009, p. 26). This observation is also in line with theories on how other groups will fill the void of an absent state (see for example (Kalyvas, 2006),(Metelits,

\textsuperscript{20} Interview 23: Captain 1 Area B 11-07-2013

53
2009) and (Walch 2014). How this relates to the disaster management is not clear, though to my knowledge, the insurgents were not helping in any barangay in this study. However, there was one account of the NPA being involved in the disaster management in other barangays.

**JU:** OK. I'm wondering a little bit about the disaster management. Are these people also helping you with the disaster management? Are they involved at all?

**C:** In our place, we cannot felt this help, because actually they came here often, not all the time, but maybe in the Barangays, especially near the mountains, they always extend help to the people in these Barangays.\(^{21}\)

The contested role of the insurgents points to the depth of the issue. The thesis cannot provide a clear answer on the exact role of the insurgents, more than that they do not influence the natural disaster management directly. However, given that there are communities where insurgents seem to have a somewhat accepted role; their influence on unity cannot be generalized. Without having researched this any further I would link the areas with presence of insurgency to the insurgents’ agenda, which in this case is a communist agenda. Not surprisingly the barangays which indicated an insurgency presence “safeguarding” them, also tended to be the smaller and poorer barangays.

**UNITY**

Indications for unity were found in both municipalities, indicating that insurgency presence may not be the cause for what was thought to be the causal mechanism between insurgency and natural disaster management. Unity may still be the mechanism for successful disaster management, although the evidence from this study suggests that insurgency is not the only cause for it. There are of course many different factors in a community that can contribute to unity. These effects may have been compensating for the non-presence of insurgents in Area B. Alternatively, if insurgency did not have any effect on the unity, the disaster management might have became more efficient due to a high level of organisation, more education, or clear structures and chain of command within a community.

Another potential cause for a compensating unity-factor may be experience of disaster. As Slettebak has included in his discussion on unity, it may also arise from the disaster experience. It can be assumed to have the same mechanisms as a conflict, being an external threat to communities. It is worth mentioning again that the argument of unity only suffice if everyone are affected and treated equally by the hazard and the response that follows. However, this would make a tautological argument, and not serve a great purpose, since it is

\(^{21}\) Interview 11: Captain A 03-07-2013
self-evident that the experience of disasters makes communities more effective in their response to them.

EDUCATION
There may be more additional factors contributing to unity within communities, one of them is education. Being educated for the same crucial purpose may in itself create unity. This is in line with research by Wisner and Luna (in Wisner et al., 2012) who claims that education on DRR significantly reduces disaster risk. Furthermore, participation in drills and simulations is an important part of preparedness (Buckle in Wisner et. al, 2012, Chapter 41). Training and participating in drills may create unity, and in addition make communities more prepared and efficient in disaster management.

There were particular issues with gathering people for a focus group in one barangay. The FGD later lifted issues about education about DRR, and how only the barangay officials are trained, and how they fail to disseminate this education and drills to the barangay residents. Accordingly, as already outlined by previous research in Albay, there are issues in disaster management regarding the implementation efforts in rural communities. Such an example is the local communities’ unwillingness to evacuate (Evasco & Alejandro IV, 2010). Local ownership is important when following national guidelines on disaster management. Accordingly, when discussing how the disaster management could be improved in the communities, all interviews emphasised a need for additional training and consultation sessions for the people. As the Mayor in Area B said:

_We have to do research, also training, research, and of course, and the secret also is we have to be equipped with qualified and effective people around. That will do the job, because, because even if we’re trained, we’re full of training, but if the people aren’t working (mm) so the training will be useless. So, it’s combination. Good training, good people, good implementation._

INSTITUTIONAL CAPACITY
If assuming that the effect from conflict on unity and natural disaster management still exists, institutional capacity may be a compensating mechanism in the area without insurgents. As described earlier in the theory, Hendrix and Salehyan stress that “It is also important to promote accountable, transparent government institutions to better meet citizen demands

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22 Interview 29: FGD 4 Area B 13-07-2013
23 Interview 31: Mayor Area B 22-07-2013
through regular, peaceful means” (C. Hendrix S. & Salehyan, 2012, p. 47). Also (Ahrens & Rudolph, 2006) stress the role of good governance, including accountability, participation, predictability and transparency as fostering development and supporting risk reduction. Hence, governance, including institutional capacities, is important factors in natural disaster management.

The institutional capacity in Area B was higher than in Area A, where the MDDRMC officer discussed how the institutionalisation of his office has yet to come. All municipalities should have an institutionalised DRR council according to the Republic Act, but due to the “budgetary issues”, such a council has not yet been established in Area A. Area B may have had an institutionalised office; however the office was very dependent on one single person, making the continuity challenging. This might be one of the effects compensating for the unity effect due to external threat in Area A (should the causal mechanism be true). Also in my own observation the differences between the actual offices were problematic. Area B had hazard maps of all barangays and showed different at-risk areas and houses, which was lacking in Area A. Adding to this, because of the poverty level in the communities, the municipalities both being classed as “poverty level 4” (on a scale of 1-4), had little money to go to the DRR fund, since the fund is based on a percentage of the barangay income. This is an observation that perhaps may shed some light on areas in which disaster management can be improved and may explain the non-variation between the municipalities.

Still, disaster risk reduction has had a key role on the Philippine national agenda for some time, due to the magnitude and frequency of natural hazards and the cost in human lives and property. In 1954, a governmental organisation was established to render basic assistance in times of national emergency, the National Civil Defense Administration. The Philippines institutional capacity and political prioritization of natural disaster management has then progressed over the years. The office of the president, and its inter-departmental planning group were created in 1970, PAGASA (Philippine Atmospheric, Geophysical and Astronomical Services Administration) in 1972, which detect, monitor and forecast tropical cyclones and floods. In 1978 a national disaster coordinating council was established, and in 1984 PHIVOLCS (Philippine Institute of Volcanology and Seismology) became an institution (Bankoff, 2003, p. 84 ff).

24 Interview 5: MDRRMC Area A 27-06-2013
25 Interview 5: MDRRMC Area A 27-06-2013
The effects of the alternative explanations on natural disaster management cannot be stated in this thesis due to its scope and research design. However, the effects of the alternative explanations are suggesting interesting paths for future research. The above-mentioned explanations are all intertwined with, for example, governance being a factor that affects the connections to remote barangays; determines political will for building institutional capacities; and increases education in DRR.
5. CONCLUSION

The purpose of this study was to increase our knowledge of which factors that can contribute to a more disaster-resilient society, and to explore whether it is possible to prepare for crises and build resilience while experiencing conflict. This was attempted with research question: **How does insurgency affect natural disaster management, and under what conditions it can remain efficient?** The study finds that it was possible to have equally efficient natural disaster management while experiencing conflict. Contrary to conventional wisdom, the study found that presence of insurgency did not have any effect on natural disaster management in the studied cases. The findings indicate that rebel presence does not necessarily have an effect on natural disaster management. Insurgency presence may have a positive effect in that it may have trained the community in mobilisation and fast communication of potential dangers, which may be useful for disaster management strategies, however these effects where then compensated by other factors in the community without insurgencies. The study also shows that the role of rebels in the communities vary, where they may constitute a threat to some communities, and fill a government-like role in others. This further point to the relevance of current studies focusing of the role of rebels within communities, since the insurgents incompatibilities with the government does not necessary have to reflect negatively on the local community.

The findings in this study warn against generalising previous theories claiming that conflict-prone countries have a more inefficient natural disaster management. Though the argument regarding unity as a causal mechanism for more efficient natural disaster management might still be true, the findings in this study cannot generalise about this function for other cases of disaster-prone communities. The occurrence of unity in both municipalities makes for an interesting result, though its applicability requires further research.

The thesis contributes to the field of peace and conflict, as well the disaster discourse, in providing a new challenging result and empirical data from a field study. The study also focuses on the community level, a research area which has previously been under-researched. In addition, the thesis has given a plausible reason to question whether conflict has any effect on natural disaster management, and implies that other factors are more important when it comes to crisis management.

The alternative explanations suggest that elements from the larger research field of peace and conflict research may be able to make interesting contributions. The theoretical framework of this
study highlight the relevance of including theories originating from sociology and development studies in order to find relevant causal mechanism and support for alternative explanations. This was true especially with regards to remoteness, governance, institutional capacity and education, which may be factors of high relevance for efficient natural disaster management. Due to the nature of this study, it is however unattainable to conclude whether these factors had a significant effect on the natural disaster management. Given the variation among barangays, these factors suggest paths for future research, for example exploring how a local community’s relationship with the municipality centre may affect the distribution of resources and received training.

This study gives further support to policymakers already working with enhancing education on DRR and governance around the world. From my own observations, I would recommend that governments introduce more insurance policies, incorporate DRR in school curriculums as it is an efficient way to spread awareness, and to make swimming-courses obligatory in elementary school. With a greater interest in the issue, policymakers and researchers alike can begin to address the even more grave and critical issue – of how to plan human settlements for the future. This is a question of priority when it comes to building resilience, or preparing for disasters and the possible displacement of people. Ultimately it is a moral issue, and not one that public planners would like to address. The political consequences can be severe if stating what may or may not be necessary precautions of how to secure human lives. Should one continue to build houses from local materials that are more easily destroyed, but also easier to rebuild? Or should one build more stable houses in the same areas, where the danger might be too great within a couple of years? Or, lastly, should one build on other locations, advising people in risk areas to move before the crisis has arrived? I have no answers to these questions, but I believe it is time we start to address them. What this thesis may contribute to this coming debate is to allow for the notion that communities experiencing conflict have the ability to be efficient in their disaster management. Hence, these communities should also be included in efforts towards disaster-resiliency. Because no matter where you are from, in the end, as one of my friends in the Philippines said:

For sure, there is no place like home

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26 Barangay Tanud, Area B 13-07-2013
6. REFERENCES


APPENDICES

APPENDIX I: TABLE OF MUNICIPALITY COMPARISON

The indicators are structured according to each category of indicators. It is stated whether or not the answer was given during an interview or during a focus group discussion (Cap/C, or FGD/F).

<table>
<thead>
<tr>
<th>Variable: Insurgency (X)</th>
<th>Area A</th>
<th>Area B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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<td>Police records of insurgency</td>
<td>1 1 0 1 0</td>
<td>3</td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>Presence indicated by Captain</td>
<td>1 1 1 1 0</td>
<td>4</td>
<td>0 0 0 0 0 0</td>
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<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>Perceived as salient by Captain</td>
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<td>3</td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>Perceived as salient by FGD</td>
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<td>1</td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>Casualties (by insurgency)</td>
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<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>Injured (by insurgency)</td>
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<td>1</td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>Missing (by insurgency)</td>
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<td>0</td>
<td>0 0 0 0 0 0</td>
</tr>
<tr>
<td>TOTAL:</td>
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<td>15</td>
<td>0 0 0 0 0 0</td>
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Municipality total: 15 0

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<th>Area B</th>
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<td>4</td>
<td>1 1 0 1 1 4</td>
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<tr>
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<td>4</td>
<td>1 1 1 1 1 5</td>
</tr>
<tr>
<td>Water shortage (Cap)</td>
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<td>1 1 1 1 0 4</td>
</tr>
<tr>
<td>Water shortage (FGD)</td>
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<td>2</td>
<td>- - 0 1 1 2</td>
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<tr>
<td>Breakdown of shelter (Cap)</td>
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<td>5</td>
<td>1 1 0 0 1 3</td>
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<td>Breakdown of shelter (FGD)</td>
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<td>5</td>
<td>1 1 1 1 1 5</td>
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<tr>
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<td>C</td>
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<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>DRR in Brgy is sufficient (FGD)</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total preparedness:</strong></td>
<td>8</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td><em>Total municipality:</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

65
* Casualties including after Reming

* Barangays were water stocking is not needed, were also given 1

*** Barangays which do not experience flooding is also given 1
APPENDIX II: INTERVIEW GUIDE

The guide below was used for the barangays. When interviewing municipality officials, or special key interviews, the interviews were conducted with slight modifications in the questions.

Barangays in Albay, the Philippines 2013

Interview number:

Date:

Interpreter:

Recording ok?

Quoting ok?

________________________________________

Name:

Name of Barangay:

Background:

Gender: Man Woman

Occupation:

Place of Birth: Philippines Outside of Philippines

Religion:

Highest level of education:

Primary school Secondary school High school University

How Many people are living in your Barangay?

What is the average age in your Barangay?

Mostly children Mostly Adults Mostly Elderly
What’s the most common occupation in your Barangay?

Farmers  Fishermen  Businessmen  Government officials

In the Filipino family, who is responsible for:

<table>
<thead>
<tr>
<th>Task</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>The household</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Children</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Cooking</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Cleaning</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Disaster preparedness</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>Who is the head of the family?</td>
<td>Men</td>
<td>Women</td>
</tr>
</tbody>
</table>

Could you describe the characteristics of a Filipino man?

Could you describe the characteristics of a Filipino woman?

On a scale from 1-5, would you say that Filipino women are weak?

Completely disagree 1  2  3  4  5 Completely agree

On a scale from 1-5, would you say that Filipino women cannot be good leaders?

Completely disagree 1  2  3  4  5 Completely agree
On a scale from 1-5, would you say that Filipino women should not be in charge of disaster management?

Completely disagree 1  2  3  4  5 Completely agree

If I say “Gender Equality”, what do you think about?

Are there any organizations within your Barangay?

   How often do they meet?

How many of your population is part of an organization?

   Majority?  Minority?  50/50?

In your Barangay, are there any volunteers?

If someone gets sick, and cannot afford to pay for the hospital, what happens?

Is Gender Equality something to be:

Moderated  Encouraged  Opposed  It does not matter  Don’t know

How is your Barangay working with Gender Equality?

Example?  How many activities per year? ________

Disaster Management / Disaster risk reduction:

Have you experienced any changes in the weather or climate during the last years?

   In what way?  When did this begin to occur?

How often is your Barangay affected by disaster?

Every year:  Yes  No  Nr of times_______

What kind of calamity?  Man-made?  Natural?
Please Specify?

How often do you experience:

<table>
<thead>
<tr>
<th>Disaster</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floods:</td>
<td></td>
</tr>
<tr>
<td>Landslide:</td>
<td></td>
</tr>
<tr>
<td>Typhoons:</td>
<td></td>
</tr>
<tr>
<td>Lahar:</td>
<td></td>
</tr>
<tr>
<td>Volcanic eruption:</td>
<td></td>
</tr>
<tr>
<td>Storm surge:</td>
<td></td>
</tr>
<tr>
<td>Fire:</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td></td>
</tr>
</tbody>
</table>

What effect does the disaster have in your Barangay?

Is there a breakdown in:

<table>
<thead>
<tr>
<th>Category</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food availability</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Water supply</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Shelter/Housing</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Personal security</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Health</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Other</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Could you please explain more in detail what happens to your Barangay when it is facing different hazards?

Were there casualties in your Barangay when disaster occurred?

- Yes
- No

How many? ____

Were people injured in your Barangay when disaster occurred?

- Yes
- No

How many? ____
Were people missing in your Barangay after the last disaster occurred?

Yes  No  How many? ____

What kind of difficulties do you experience during disasters?

How is the infrastructure, and the accessibility affected?

When a disaster has hit, is the economy affected in your Barangay?

In what way?

- Loss of income  Yes  No
- Rise in income  Yes  No
- Way of living affected negatively  Yes  No
- Way of living affected positively  Yes  No

When a disaster has hit, is there a change in crime rate in your Barangay?

In what way?

- Increase  decrease  nothing happens  Example?

How are you preparing for disasters in your Barangay?

Early warning systems  Yes  No  How?
Evacuation/Resettlement  Yes  No  How?
Search and Rescue teams  Yes  No  How?
Seed bank  Yes  No  How?
Water stocking  Yes  No  How?
Flood control mechanisms  Yes  No  How?
Irrigation systems  
Yes  
No  
How?

Education  
Yes  
No  
How?

Rebuilding teams  
Yes  
No  
How?

Counselling for victims  
Yes  
No  
How?

How do you communicate/coordinate in your Barangay regarding the measures to be taken when a disaster is approaching?

Mouth to mouth  
Cell phones  
Radio  
TV  
Internet

Other________

Who informs you that there is a disaster coming?

Who do you inform about a disaster coming?

   How is this person chosen?  
   By whom?

Who among community members are normally involved in Disaster Risk Management?

   In what way? (Majority men or majority women, or 50/50?)

Are women active in disaster management?

   In what way?

In what way are women’s’ involvement in disaster management different from men’s?

What is the composition of the disaster risk management council?

   Majority men  
   Majority women  
   50/50

What sectors are included?

Who is paying for the disaster Management/disaster risk reduction?

Individuals  
Barangays  
Province  
State

How much of the 5% DDR funds go to the Barangay?

How is it used regarding the different phases of disaster management?
Is there a public awareness in your Barangay regarding the risks and dangers related to disasters?

Yes  No  Example?

Do you get any help from outsiders, or international assistance when a disaster occurs?

Yes  No  How?  Why?

When the relief aid comes, how is it distributed in your Barangay?

Peace disturbances

Can you recall a time when there have been any disturbances to your peaceful living in your Barangay?

Yes  No  In what way?

Where there any casualties?  Yes  No  How many? _____

Where there any injured?  Yes  No  How many? _____

Where there any missing?  Yes  No  How many? _____

Who were the targets/victims?

Have there been any recent disturbances to the peace in your Barangay?

Yes  No  In what way?

Example?

Where there any casualties?  Yes  No  How many? _____

Where there any injured?  Yes  No  How many? _____

Where there any missing?  Yes  No  How many? _____
Do you have any other fears or worries?

Is your peace and order council organized?

Yes Is it active? Why?

No When is it activated? Why?

Are there any peace-disturbers still present in your area, or nearby?

How does this make you feel?

Were your Barangay prepared for this kind of peace disturbances?

Yes No In what way?

Early warning systems? Yes No How?

Evacuation/Resettlement Yes No How?

Education? Yes No How?

Counselling for victims? Yes No How?

Mediation? Yes No How?

Is there a public awareness in your Barangay regarding the risks and dangers of peace disturbances?

Yes No In what way? Example?

How do/ did you communicate/coordinate in your Barangay when there are peace disturbances?

Mouth to mouth Cell phones Radio TV Internet

Other________

Do/Did you have a team working against potential disturbances to the peace in your Barangay?

Yes No
When was it activated?

How?   Why?

Who was involved in this team in your Barangay?

Majority men   Majority women
50/50

What do these people do today?

Are the people who were involved in these teams, involved in disaster management today?

Yes   No   Do not know

In what way?

People who earlier might have disturbed the peace, how are they living now?

Are they also involved in disaster management today?

Yes   No   Do not know

In what way?

When there are/were peace disturbances, is/was the economy affected in your Barangay?

*In what way?*

- Loss of income  Yes   No
- Rise in income  Yes   No
- Way of living affected negatively  Yes   No
- Way of living affected positively  Yes   No

When disturbances to the peace is/was occurring, is/was there a change in crime rate in your Barangay?

Increase   Decrease

Did you ever experience a disaster and peace disturbances at the same time?

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Yes  No

How did you deal with that?

Do you have any long-term work for dealing with changes in climate?

In your opinion, have the measures for disaster risk reduction in your Barangay been sufficient?

Yes  No  Why?

How do you think you can improve your disaster preparedness?

What do you think will happen in the future to your Barangay, and your family?

What are your hopes for the future?