

**Accountability in Responses to Natural Disasters:  
A Case study of Flooding in Garut, West Java, Indonesia**

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## **Abstract**

This study assesses how accountability is practiced and justified in collaboration of cross-sector organisations and community. It addresses three main questions: firstly, what are the roles of actors in collaborative working setting of repeated flooding, where government organisations and non-government organisations, civil society groups, and individuals all work together in dealing with this recurring issue; secondly, what is working relationship between different actors in four phases of disaster management; and thirdly, how does accountability arrangement affect actions in every disaster phase.

These three questions are addressed through case study approach conducted between 2015-2019. The research involves qualitative analysis of collected data from field work and semi-structured interviews with actors who involve in disaster management. This data is complemented by document analysis.

There is a contrast in the response to disaster management between the state and some communities and local NGOs. The communities and local NGOs respond to natural disaster according to their ancestral beliefs and knowledge about their relationship with nature. In contrast, local government institutions often execute transactional projects which are measured by results of short-term activities. Local communities use their knowledge from generation to generation in preserving and treating nature as part of their life but this does not inform government activities in the development of the natural environment (e.g, farming and tourism sectors).

This study finds that accountability concept is recognised differently by the state (local government of Garut officers) and people, including NGOs and donors. The state defines accountability as a hierarchical mechanism which is manifested in the form of reports to higher authority within state system. However, accountability in disaster management has different aspects including the natural environment as an actor. Nature has a significant influence in understandings of the concept of accountability in disaster responses. There are two types of accountability within this context. Accountability between actors which is influenced by nature and between actors with nature. The first accountability type is a negotiable accountability and the second accountability type is non-negotiable type of accountability.

Understandings of accountability in developing countries needs to engage with the idea of the prismatic society and recognize the experience of colonization.

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## Prologue

*“[T]he most deadly killer in any humanitarian emergency is not dehydration, measles, malnutrition or the weather, it is bad management . . .”* (John Telford, former senior emergency preparedness and response officer, United Nations High Commissioner for Refugees as cited by Hulm (1994))

Located in one of the most southernmost locations of West Java (Indonesia), Garut is highly vulnerable to many kinds of natural disasters (Kurniawan, Yunus, Robi Amri, & Pramudiarta, 2011). Garut has a population of 2,585,000 and an area of 3.065,19 km<sup>2</sup> (Statistics of Garut Regency, 2017). It is located in the geographical area of volcanic activity known as the "Ring of Fire" where the majority of the world's active volcanoes are found. Garut is surrounded by six mountains, of which two are active volcanoes. Its position makes Garut vulnerable to natural disasters such as volcanic eruptions and floods. Garut has previously experienced different types of natural hazards including; volcanic eruptions, tsunami, earthquake, landslides, drought, bushfire and flooding. However, flooding is the most frequent disaster to occur in this area. The majority of people who live in the city, especially near the river Cimanuk, experience regular flooding every rainy season. This is caused by poor planning and infrastructure development, as well as high levels of precipitation.

Local disaster response can often be chaotic, a good example of this is when a flash flood swept through Garut on 20<sup>th</sup> - 21<sup>st</sup> September 2016. The flash flood killed 34 people with a further 19 missing and still unaccounted for (BNPB, 2016). At least a thousand houses as well as numerous schools, bridges, a public hospital, and office buildings were all destroyed. This kind of flooding was not a unique situation for Garut, a city which faces similar issues every year. Local disaster response issues are numerous and varied and include: slow response times, poor coordination, poor communication, poor collaboration, logistical ineptitude, as well as a general lack of capability and skills. One big question is why authorities do not learn from previous disaster experiences (especially flooding). The authorities always seem to ‘muddle’ when tackling disasters.

The National Board of Disaster Management (*Badan Nasional Penanggulangan Bencana/ BNPB*) is the primary national organisation mandated to help with dealing with natural disasters in

Indonesia. At the more local level there are local boards of disaster management (*Badan Penanggulangan Bencana Daerah/BPBD*). However, these organisations often fail to execute their disaster management duties. For example, Garut BPBD was overwhelmed by the flooding of September 2016. Its function as a coordinator, a command, and a manager for disaster management can be clearly surmised as having failed as there was so many victims caused by this flooding.

The management response of this flash flood can be simply classed as *chaotic*. While considerable help came from different organisations, volunteers, and communities, this help can be characterised here as *working to help victims without any direction and instruction*. Some victims were evacuated to safer places but more victims were left abandoned on the roofs of their houses as no help came to their area. Many victims and properties affected by the flash flood condemned the incapability of local government in tackling this natural disaster. The local government was deemed to have failed to learn from multiple previous experiences of flooding in the city.

On the 21<sup>st</sup> September 2016, the head of the local government in Garut (*Bupati*), Rudy Gunawan, instructed the military to take over by issuing a decree that the BPBD was regarded as incapable of coping with this disaster. The military created a task force team for tackling the flooding. This was more successful but did not solve all the problems or deal with all the needs of victims. Victims in certain area such as *Cimacan* and *Lapang Paris* received many donations for their needs whereas in some other areas such as *Rengganis* and *Sanding*, people were not so fortunate. It was caused by a lack of information about affected areas. Some NGOs and volunteers joined the team, but others preferred to work on their own. This made the whole situation more complex in terms of coordination and communication amongst disaster relief agencies and participants. The BPBD is expected to be an organisation that can play a central role in disaster management. The failure of response during the 2016 Garut flash flood is here deemed to have been caused by a failure of preparedness, with further failings in the mitigation phase of the disaster management.

The local government of Garut's disaster management failed in the mitigation phase because development and spatial plans ignored the individual geographical characteristics of the area and local wisdom to preserve nature. This failure led to incapability in preparation to face flooding. There was very little local education and training about awareness to flooding, insufficient development of early warning systems, and insufficient preparation of evacuation and logistics for flooding events. The fact that many people died and lost their properties is here cited as a prime

example of bad disaster management. This bad disaster response management continued into the recovery phase. People who lived near the river refused to be moved to alternative living locations. Afforestation and river embankment programmes also did not solve the problem.

Beside the BPBD, there are several government institutions which are expected to contribute to mitigate and respond to flooding such as the military, Local Development Plan, Natural Resource Conservation Board, etc. But, these government institutions seemingly cannot cope with repeated flooding in Garut. This then reduces the levels of trust society has in government institutions, which are now blamed when flooding occurs. As a result, many NGOs, donors and volunteers prefer to work by themselves without involving government institutions. In 2016 many people neglected orders from government officers to move their belongings and families to alternative locations (provided by local government). Although many actors were involved, the flooding was deemed by local people as 'far from having been prevented or its effect on communities having been minimised'. A large budget of 14 billion rupiah (USD 983.843,00) was allocated by government for response and recovery in 2016. However local government and communities failed to work collaboratively since they had different perspectives about the flooding.

Some communities and local NGOs try and live according to their ancestral knowledge and beliefs about their relationship with nature. For example, they stick to zoning of forest which was created by their ancestors to guide them in cultivating land. This decision-making can often be in conflict with planners and disaster relief organisations. Local government institutions often use transactional project-based collaborations whose responsibility is measured by the results of short-term project. In contrast to this, local communities use their knowledge from generation to generation of preserving and treating nature as part of their life, but this has not balanced government activities in development of area which have deteriorated nature (e.g. the farming and tourism sectors).

Government institutions, NGOs, and enterprises in Indonesia often work based on the demands of higher authorities. It seems that in Indonesia many people in this field regard their duties as successful if their higher authority (or an entity who gave them their jobs) is happy with their reports. The valuation of many roles and jobs is seemingly based on institutional output and not

the mitigation and response to natural disasters. Accountability measurement is seemingly based on hierarchical procedure or vertical accountability.

Every organisation that works collaboratively comes with their own objectives and goals apart from humanitarian purposes. Government institutions intend to prove to their citizen that they fulfil their duty to serve society as the taxpayers. Hierarchically, they want to demonstrate their capability to accomplish their responsibilities. On the other hand, NGOs want to demonstrate to their donors or funders the impact of the financial help they have received. To some extent, these conditions create ‘conflicts of interest’ because this type of collaboration consists of institutions with discretion of activities between them which is non-contractual.

My research shows that responding to repeated flooding facilitates cross-sector collaboration among different organisations, enterprises and individuals. However, working collaboratively in every phase of a disaster response could not solve all the problems of flooding. It is obvious that the local government of Garut, with its different agencies that contribute to disaster management, (particularly flooding), has failed to learn the lessons from previous flooding in order to prevent future flooding. They work based on a system which is adapted from a mish-mash of imported administration systems from the western world without sufficient less adoption of the local context of environmental characteristic. This issue is mirrored within to non-government organisations, enterprises and individuals that are involved in flood responses.

One significant challenge is ‘accountability setting’. Accountability is understood as a social interaction among agencies, whether formal or informal. In Indonesia this often neglects to take sufficient account of environmental factors (nature and its society); or what Riggs calls the ‘prismatic society’ which is an environment and its social system they work together could significantly determine outcomes of their collaboration (Riggs, 1960b). In order to create better performance, which in turn could prevent the loss of life and property, there is a significant need to better understand the nature of collaboration in disaster response.



# **Chapter 1**

## **Introduction**

### **1.1 Introduction**

The main objective of this thesis is to assess accountability in disaster management collaborative working contexts where dynamic relationships exist among actors in cross-sector organisations. This study assesses how accountability is practiced and justified in cross-sector organisations. This chapter starts by introducing the issues. The first section of this chapter shows the background to my research, which includes the workings of Indonesian public administration in the context of this research, and the potential of collaborative working by the (hoped for) evolution of public administration in Indonesia. The second section of this chapter explains my reasons for conducting this study. This is followed by: i) the aims and objectives of this study; ii) the wider significance of this study; and iii) its contribution to this field. The final section of this chapter outlines the structure of the overall thesis.

### **1.2 Research Problem**

Garut is one of a local government in Indonesia in regency level. Its area has 306.519 Ha (3.065,19 km<sup>2</sup>) with the population is 2.718.330. Figure 1 shows location of Garut within West Java province. It is located in the south of West Java province. Garut is claimed as the second most vulnerable city for natural disaster in Indonesia (Kurniawan et al, 2014). As a consequence, local government of Garut created a local government regulation No. 7 Year 2011 about establishment and organisational structure of Badan Penanggulangan Bencana Daerah/ BPBD (Local Board Disaster Management) in Garut. There are other regulations which are not specifically designed for responding disasters directly, but they might relate to disaster management since disaster management consists of mitigation, preparedness, response and rehabilitation. The regulations and policies are manifested in spatial plan, conservation, agriculture, forestry, education, investment, exploration, etc.

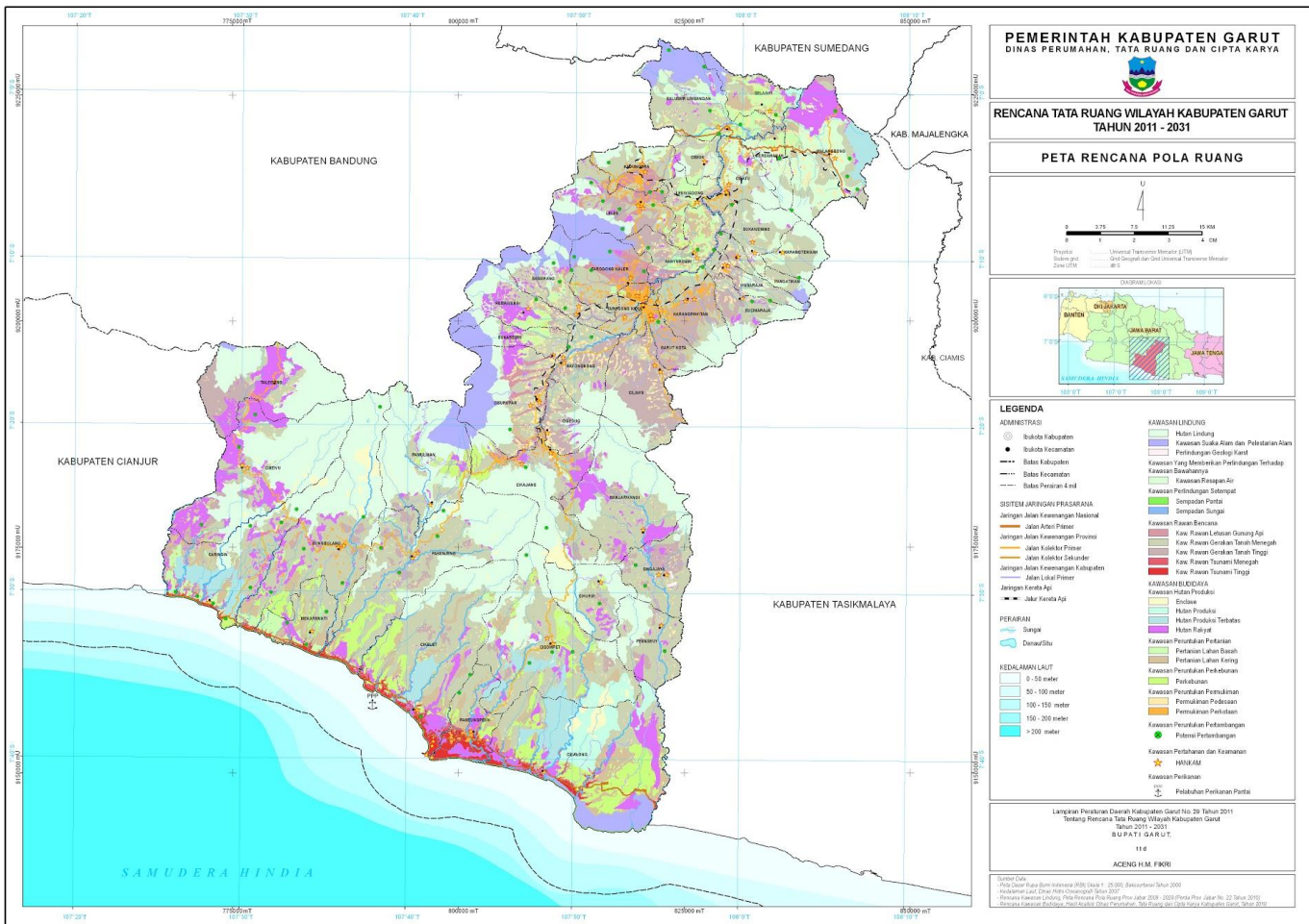


Figure 1 : Map of Garut

Source: The Local Government of Garut archive

Repeated flooding to the city occurs every year during the rainy season in Garut. The areas covered by flooding differ in size and intensity thus causing differing impacts on the socio-economic lives of citizens (see table 1). The different actors who are involved in responses to these disasters also suffer impacts. If the flooding affects a small area with minimum damage only a few numbers of actors are involved. This research focuses on the flooding response during the devastating flooding that occurred on 20th-21st September 2016 in Garut. This killed 34 citizens, 20 are still missing, 6,361 citizens fled from their houses, 1,784 houses were destroyed as well as four educational buildings, fifteen religion facilities, and two hospitals. The responses include four phases of



disaster management, where each phase influences subsequent phases. Flooding occurs in some of this area every year, but this study focuses on the 2016 case and its disruption.

The flash flood traversed six *kecamatan* (sub-districts) in Garut (Garut Kota, Bayongbong, Karangpawitan, Tarogong Kidul, Tarogong Kaler, and Banyuresmi). It continued to neighbour *kabupaten* (district) Sumedang before crossing Cirebon district and discharging into the Java Sea. It is suggested here that this example is an excellent case to use to try to understand the accountability concept of collaborative work among Indonesian participants during the sudden onset of a disaster response phase.

Year	Events	Victims (person)			House (unit)				Public Facility Damage (unit)		
		Died and Missing	Injured	Evacuated	Severely damaged	Moderate damaged	Lightly damaged	submerged	Health facility	Religious Facility	Education facility
2018	2	0	0	0	0	0	0	0	0	0	2
2017	5	2	0	2,438	24	3	248	524	1	2	3
2016	14	54	9	9,387	806	433	1,094	1,271	2	17	50
2015	5	0	0	1,200	11	0	0	397	0	0	0
2014	11	1	0	5,906	63	1	109	1,136	0	2	0
2013	4	0	0	3,887	0	0	0	197	0	0	0
2012	4	0	0	7,499	3	3	7	547	0	0	0
2011	2	13	7	1,405	638	1,264	1,336	0	2	40	8
2010	12	1	8	0	105	0	213	421	0	4	0
2009	3	0	0	320	2	0	0	66	0	1	1

Table 1: Flooding and its consequences in the last 10 years in Garut

Source: National Board of Disaster Management Indonesia (BNPB, 2018) Retrieved from <http://dibi.bnpb.go.id/>

The impetus to conduct this research started when issues of collaboration among government institutions and with non-government organisations received significant attention from Indonesian authorities subsequent to the collapse of the dictator model of centralistic government (i.e. the Soeharto era) marked by the *Reformasi* movement in the late 1990's. A decentralisation model of public administration emerged where every local government would manage its region based on its own characteristic and needs. Local government was envisaged to involve cross-sector collaboration involving private enterprises and/or non-governmental institutions. With respect to

disaster management, the strong concern from the central government of Indonesia for collaboration is exemplified by the issuance of Law No 24 (2007) about Disaster Countermeasure (Government of Indonesia, 2007c) and presidential decree No 8 (2008) about *Badan Nasional Penanggulangan Bencana/ National Board Disaster Management*.

In this study empirical investigation is carried out to study actors' accountability in the collaborative working of disaster management in Garut where repeated flood occurs every year. Actors are from government institutions, civil society organisations, enterprises and individuals. This research looks at: i) why collaborative working failed to reach better performance which then lead to worse situations; and ii) how actors create accountability in this context. This research focuses on the actors involved in tackling flood response in the four recognised phases of disaster management (mitigation, preparedness, response, recovery).

An area of particular focus of this study regards how actors perform their accountability to other actors within collaborations as well as relationships with externals (such as other organisations, citizens, individual, media, donors, victims/ beneficiaries, etc.). In particular, this thesis scrutinises the extent to which collaborative working in disaster response might be informed and improved through accountability process of involved actors which in turn can create better performance for beneficiaries and citizens as a whole. Much of this new research focuses on the actors who are in charge of collaborations. They are leaders of the organisations or representing organisations, policy makers, community leaders, parliament member, and media. Their understanding of collaboration process is important to analyse how accountability is experienced and passed.

It is asserted here that this research is of particular interest since it explores accountability in a system of disaster management in a comprehensive holistic manner. It is the belief of the author of this study that accountability does not only work within a single event of interaction. One related event might affect the following event in a process of cycle such in disaster management. Moreover, a collaborator in disaster response may have very different motives although they have the same goals for victims or citizens as a whole. Financial traffic in disaster responses come from different resources such as public fund, international and local donation, corporate social responsibility, as well as private individuals.

### **1.3 Personal Rationale**

There are two main reasons why I wanted to conduct a research study on collaborative working accountability in natural disaster response in Garut. Firstly, I have lived in this area for my entire life prior to commencing this Ph.D. The flooding affects so many of my fellow citizens and our local public infrastructure every year. I am very committed to safety and specifically the better life of my fellow citizens who live in a city which experiences annual flooding. Moreover, the flooding hit Garut again with a great impact to community and infrastructures during my study in University of Liverpool in 2016. Some of my neighbours died my family members lost their properties which were swept by the flooding. This strengthen my motivation to study this case with my expectation could contribute for better disaster management by understanding accountability model.

Secondly, this is appealing to me since I am a member of a local NGO, FK3I (*Forum Komunikasi Kader Konservasi Communication Forum of Indonesia/ Indonesia Conservation Cadre*) whose concern is to protect nature in Garut. Since joining the FK3I, I have worked with different organisations from government and non-governmental sectors to address the issue of environmental deterioration.

I hold the viewpoint that if repeated flooding can be prevented, or at least can be mitigated by proper management in each disaster management phase with roles from government and involved actors including local communities, it can create good governance in facing other natural disaster issues. In turn, local government would be trusted and respected by its citizens and the levels of appreciation given to local government institutions from NGOs, donors, and private enterprises would be stronger. I postulate here that the impacts and effects of collaboration would improve significantly if better governance can be pursued and achieved.

### **1.4 Aims and Objectives**

After discussing the current situation of accountability in collaborative working in an Indonesian disaster management context and after reviewing some key literature, this study will then focus on analysing and assessing the collaborative working accountability in the tackling of repeated flooding which happens in Garut District, West Java, Indonesia.

This study is focused on how the practices of accountability in the collaborative working setting of repeated flooding, where government organisations and non-government organisations, civil

society groups, and individuals all work together in dealing with this recurring issue. Disaster management issues not only involve government agencies, other agencies, non-government organisations and citizens are also involved. Flooding is different from unpredicted sudden onset disasters such as earthquake which occurs without prior notifications and on unpredictable timelines. Flooding is a predictable disaster that can happen because of nature, such as weather (heavy rain), or human involvement, such as deforestation and poor planning. Responding to flooding is multi-faceted; flood responses can occur pre-disaster, during disaster, and post-disaster. Indonesian responses may involve two or more agencies or organisations in every phase. Collaboration between agencies or organisations can be executed with or without prior agreement. For example, a government institution can invite enterprises to build river embankments, reforestation, housing for victims, and other infrastructure development. This normally occurs during mitigation and recovery phases of disaster. However, during response phase collaboration can also incidentally occur because of the turbulence and chaotic nature of the disaster that attracts many organisations to be involved in helping people.

Accountability is viewed here as a tool to create a good order in every aspect of life (as per Romzek, 2014). However, repeated flooding to the city questions the existence of sufficient accountability of involved actors. There is a budget allocated regularly to cope with disaster issues; however seemingly the large number of organisations, donors and volunteers involved can't solve Garut's flooding problems.

To address this topic a number of key research questions are posed. These are:

1. What are the roles of actors in this disaster management?
2. What are the working relationships between the different actors?
3. How does accountability arrangement affect actions in every disaster phase?

A main aim of this research is to provide a valid theoretical and conceptual framework to analyse and assess accountability within a collaborative mechanism when the context setting is a repetitive natural disaster in a developing country. This research approaches this subject from the viewpoint of the cultural and social setting of the developing country, which, it is argued in this study, may have a very different perspective of accountability. This thesis seeks to understand actors' accountability to different kind of forums within collaborative systems and/or to external forum. This research explores how accountability is practiced and experienced by actors in a collaboration

setting. This research examines whether accountability deficits exist in collaborative working within disaster responses.

Another aim of this research is to extend our knowledge of the mechanics of social groups within Indonesia; a country which has experienced very distinct recent shifting political and administrative systems of government. This recent evolution has helped contribute to massive changes in social interactions within a society which has shifted from a very predominantly agrarian society to one which is being markedly transformed due to: i) the integration with global industries; ii) the marked acceleration of widespread technological development throughout the country; and iii) the dissemination of new technologies, which in Indonesia can be seen to all have come hand-in-hand. Within this report I provide a new framework of collaborative working accountability that can strengthen the performance of disaster management, which in turn has implications, if implemented, for future better governance.

### **1.5 Significant of Study**

Findings from this study could potentially be of significant use for the community of Garut. Local government institution actors could develop greater trust from peer institutions, communities and non-government actors. It is hoped that this study provides clear evidence of how actors involved in natural disasters (especially repeated flooding) face differing accountability mechanisms; evidence of how actors perceive and practice their accountability in every phase of disaster response; evidence of how actors react to consequences which they face caused by their performance during disaster responses; and evidence of how actors respond to accountability arrangement in disaster management.

In the field of accountability, this research may contribute to the development of an improved framework of accountability in cross sector collaboration in disaster management cyclic responses. It is argued in this study that one phase of disaster response contributes to the next phase. There is also considerable influence due to the unpredictability of nature. Previous scholars such as Romzek and Dubnick (1987), Bovens (2007) and Schillemans (2013) have claimed that accountability is a relational context between actors, and to whom this accountability is rendered; however this research shows that nature also significantly influences this relationship.

## **1.6 Structure of the thesis**

This thesis is structured into nine chapters with Chapter 1 the introduction. Chapter 2 is the main chapter. Chapter 2 reviews the theoretical literature used to frame this research. This thesis classes itself as interdisciplinary research as it intersects public administration study and sociological study. Chapter 2 focuses on research aimed at analysing and assessing accountability in the collaborative working of disaster management; within Chapter 2 some key literature in accountability, collaborative working and disaster management are reviewed. Chapter 2 starts by reviewing the broader concepts of accountability and evolution of accountability in three different public administration process with the purpose of illuminating, through the analysis of case studies, our understanding of accountability experienced by actors. This analysis is followed by a review of the current theory of collaboration concept. In addition to these fundamental theories, the context of disaster management is provided. The main reason for this literature review is to highlight relevant concepts from, and the limitations of, previous research. By understanding current theories and literatures about accountability, this literature review then leads to the design of an innovative new theoretical framework that forms the guidance concept of this research.

Chapter 3 introduces the research methodology applied in this research. This research applied qualitative case study techniques. The reason to apply a case study research strategy is based on the phenomenon of accountability in natural disaster responses contexts, particularly within collaborative working, which requires a clear definition based on specific context. A case study is selected since it has the ability to understand context-setting which leads to theory development and thus will expand the current limits of existing theory (as per Flyvberg, 2011). In this study existing theory is used as a skeleton; a structure which requires empirical richness to help achieve the best understanding from a range of different contexts.

Chapter 4, 5, 6, and 7, are analysis of data from the different phases of disaster management; mitigation, preparedness, response, and recovery respectively. These chapters assess and analyse actors' accountability; actors' who work collaboratively in each phase by using a sociological accountability framework which has been integrated with a prismatic society concept. Chapter 4 focuses on mitigation phase which consists of planning mechanisms and processes for designing and implementing development in local government of Garut that could have mitigation impacts. Chapter 5 analyses the preparedness phase and explores contributions of the previous mitigation

phase (chapter 4) to a process of preparation conducted by government institutions and communities facing flooding. Chapter 6 investigates activities during the response phase. This is followed by chapter 8 which focuses on the recovery phase.

In all the data analysis chapters the dynamic process of accountability mechanisms is identified which inform the nature of accountability. This study aims to provide analysis of the roles of each involved actors, their performance and their contributions to each disaster management phase. Accountability types are identified which are based on the nature of the *golden concept questions to accountability; to whom, who, what, and why* from Bovens (2007). Analytical discussion of each chapter is presented in the final section of each of these four chapters. Results are evaluated using learning perspectives that identify the types of accountability practiced by every actor in all these phases.

The final chapter is Chapter 8, which highlights the main discussion points from each chapter and then draws conclusions about this research. The conclusions of this study aim to directly address this studies key research questions. Existing theory about accountability and its context to collaboration is revisited and some potential future studies within this field are offered. This is followed by a brief discussion of the contribution of this research to the field of accountability literature. Finally, a discussion of the limitations of this study are presented and explored.

## **Chapter 2**

### **Literature Review**

#### **2.1. Introduction**

“I love talking about accountability and responsiveness because these are the values in which I believe. Why? Because accountability is based on fairness, integrity, doing what is right, and regard for others” (Barbara Romzek, 2014, p. 27)

Accountability promises a good order in every aspect of life. It has been described as a ‘golden’ concept (Bovens, 2007), a ‘magic’ concept (Pollitt & Hupe, 2011), a ‘feel good’ concept (Bovens, Schillemans, & Hart, 2008) which is “ever-expanding” (Mulgan, 2000) and measures professionalism (Friedrich, 1940); it has also been recognised as a manifest of democracy (Flyvbjerg, 1998). However, accountability can connote in a negative sense. It can be used as “a rhetorical weapon” (Barbara Romzek, 2014) in political arenas and public administration. Anyone might use it as a tool to attack a certain person or group whom is regarded as below expectations.

Within this chapter, the theoretical backgrounds which are relevant to this study are identified and evaluated. This explores current concepts of accountability in cross-sector collaboration, particularly in disaster contexts. Analysis starts with a discussion of the current understanding of disaster management and the context of accountability within disaster management. Collaboration concept and disaster management are worth it to be explored since they are contexts of accountability which will be analysed and assessed in this study. This then is followed by a section of disaster management focussed on Indonesia. Section 2.3 discusses accountability concepts within public administration and accountability issues arising from these concepts. Section 2.3.1 discusses the principal theory of accountability. It is followed by section 2.3.2 which explores the different types of accountability that exist. At the Section 2.3.3, accountability valuation is discussed. Regarding how this theory is developed and practised within public administrations is discussed in Section 2.3.4. The Section 2.3.5 identifies accountability in public administration then it is followed by Section 2.3.6 which discusses accountability within three different models of public administration; accountability in traditional public administration, in New Public Management Era, and in New Public Service. The fourth section, Section 2.4, focuses on accountability in collaborative contexts. This section specifically explores current studies about



accountability in collaborative settings. Section 2.5 explores characteristic of society in developing country by adopting prismatic society theory. This is followed by Section 2.6 which discusses contextual information of public administration in Indonesia. The final section, Section 2.7, is a theoretical framework of collaborative working accountability. This framework will be used as a foundation to recognise accountability issues of actors in collaborative settings which is then used to analyse data of this research; particularly the accountability which relates to a public-sector organisation when they work within a collaborative context with other organisations, communities and individuals. The nature of this research focuses specifically on the collaborative accountability of those actors involved in phases of disaster management.

## **2.2. Disaster Management**

Defining disaster is more difficult than recognising what disaster is (Quarantelli, 1985). Disaster can mean many things to many people (Perry, 2007). Quarantelli (1985) listed seven ideal-type terms of disaster; Disaster as physical agents, disaster as physical impacts, disaster as assessment of physical impacts, disaster as social disruption from physical impact, disaster as social constructions of reality, disaster as political definitions, and disaster as imbalance in the demand-capability ratio in a crisis.

Implicitly, disaster is defined as any event that create negative consequences such as an event in the natural environment, technological failures/ incidents, and war (Perry, 2007). Negative consequences can be highly disruptive to people. Disruptions, which often occur suddenly, can be caused by nature or by human activity, and can damage lives, livelihoods, property and environments; this event often takes place beyond the capacity of the community with all its resources. The cause of disruption can be from the agent that causes disruption or from aspects of social structures such as values, norms, and protection (Perry, 2007).

Modern disaster management is based on four distinct components: mitigation, preparedness, response, and recovery (Coppola, 2007). These four components are phases in disaster management. Figure 2 shows the four phases are a cyclical process. One phase of disaster management contributes to the nature of subsequent phases. Take mitigation phase as an example; activities during this phase (e.g. creating tsunami or volcanic eruption evacuation zones) might be followed by a simulation of evacuation, and further training, to face those disasters.



Figure 2 : Disaster management phases (adopted from Coppola [2007])

### 2.2.1. Mitigation

Mitigation is a cornerstone of disaster management (FEMA, 2010). Mitigation can be summarised as ‘activities to prevent an emergency, to reduce or to eliminate consequences of a hazard’. Ha (2017) described mitigation as ‘disaster risks reduction’. Mitigation aims to make hazards less likely to occur or to reduce the negative effect of hazard (Ha, 2017). There are several ways to mitigate hazards including: public education, hazard assessments and infrastructure improvements. The mitigation process depends on capabilities and available resources since every hazard needs different treatments. In order to treat the hazard risks, there are several goals as the outcomes of mitigation. They are risk avoidance, risk acceptance, risk likelihood reduction, risk consequences reduction, and risk transfer, sharing, or spreading (Coppola 2011; Simonovic, 2011; FEMA, 2010).

Mitigation is used to face natural or man-made hazards. Humans (normally) learn from knowledge and/or their experiences to mitigate hazards. For instance, Japan has experienced repeated earthquake and tsunami that has led to its people and government being aware of, and preparing for, potential future hazards by developing infrastructure which can reduce vulnerability and the chances of losing their lives or possessions. Nowadays government actions in disaster mitigation

are expected to help citizens in facing or avoiding hazards. This can be implemented in the form of infrastructure development and urban planning (Hamada, 2014), policy and strategy (Davis and Davidson, 2018), and creating the required framework to mitigate coming disasters (Ha, 2017).

### **2.2.2. Preparedness**

Preparedness in disaster means that to know what to do when a disaster occurs. The main purpose of disaster preparedness is preparing to handle an emergency. This includes a plan to save life, to help responses and rescue operations. Good preparedness requires a lot of time to achieve a satisfactory level as responses to disasters cannot be accurately predicted (Coppola 2011; Simonovic, 2011; FEMA, 2010). Coppola (2011) divided preparedness into government preparedness and public preparedness. Government preparedness includes internal governmental preparation such as creating planning, conducting exercises and training among government officers, providing equipment, and developing statutory authority. Public preparedness is focused on public education about natural or man-made hazards, awareness, and public behavioural change (Coppola, 2015c). Burling and Hyle (1997) simplified preparedness into three categories: information dissemination, education and practice. Due to the unpredictability of disasters, and their size and effects, these three categories cannot be prepared appropriately in advance (Burling & Hyle, 1997). Perhaps in some cases common sense and quick actions are a better way of responding to disasters than detailed plans?

### **2.2.3. Response**

Disaster response is an activity that starts when a hazard event occurs until it is declared over (Coppola, 2015f). Disaster response occurs when a hazard creates an emergency situation. Coppola (2015) divided emergency into three stages: pre-hazard, hazard effects ongoing, and hazard effects have ceased.

The pre-hazard phase occurs when a potential hazard event approaches. However, this might not be recognized since some hazards have identifiable characteristic and some others do not. For instant, volcanic eruption, flooding, tsunami, and hurricanes can be pre-identified but earthquakes cannot yet be accurately predicted. Recognition of hazards may come from natural signs or specific technology. Each hazard has specific indicators. Some hazards have signs which allow humans to prepare or avoid them with lead time in hours, days, weeks or months.

Ongoing hazard effects can happen in seconds or last longer than a month. Flooding can exist for a day or a week before it ceases but earthquake and lightning may strike very swiftly. During the

disaster response phase, government and citizens respond to victims and property needs. This can be in the action of evacuation, mobilization of emergency team to locations, and addressing affected communities. Analysis of multiple disasters has shown that hazard effects can be exacerbated by decision makers being in situations of incomplete or inconsistent information (Valcik & Tracy, 2017).

When hazards effects have ceased, responders start conducting search and rescue, distribution of logistics, sheltering victims, measuring damage, caring for injuries, managing fatalities and so on. The emergency may still exist, and while responders attempt to manage or tackle the emergency the situation may worsen. Sometimes social media can enhance capabilities in response and community service (Xie & Yang, 2018). This can only happen where information technology infrastructure is available.

The response phase should be integrated with previous phases; mitigation and preparedness. The successfulness of the response phase depends on how much the mitigation and preparedness phases can increase resilience (Coppola, 2015f). Communities, government, and individuals all have the capacity to reduce the effects and impacts of hazards to them.

#### **2.2.4. Recovery**

Recovery is the post-disaster phase. Other terms used are (often these can be interchangeable): rehabilitation, reconstruction, and post-disaster development. The Recovery phase incorporates activities aimed to bring affected communities or victims back to their normal situations that they experienced pre-disaster. Despite mitigation and preparedness phases, disasters often lead to destruction of physical buildings that then require rebuilding or renovation during the recovery phase. However, the Recovery phase not only focuses on physical infrastructure and housing but also on the long-term future of the community (e.g. economic growth) (Simonovic, 2011; FEMA, 2010). It is hoped that to some extent, the psychological damage to affected citizens might be given the chance to recover from their traumatic experiences.

The Recovery phase has been identified to be the most diverse action of all disaster management functions (Coppola, 2015b). The nature of the Recovery phase depends on the size of the disaster and its effects on people's lives, economics and social conditions. The Recovery phase attracts attention from countries and communities who want to help those people affected. The Recovery phase is expected to reduce the effects of disasters and to create physical buildings, and social

development, which it is hoped, will mitigate and prepare for future disasters. Technological devices for planning may be used in the Recovery phase (Ganji & Miles, 2018) or even a community based recovery model (Casagrande, Mcilvaine-newsad, & Jones, 2015; Marin, Bodin, Gelcich, & Crona, 2015; Williamson & Bond, 2014). Many more actors from individuals and organisations are involved in the recovery phase compared to the other three phases of disaster management; but they are often very loosely affiliated since activities are diverse (Coppola, 2015b; Passarella, 1993). Governments usually renovate or rebuild public infrastructure, housing, and other disruptions to social and economic matters. Related departments within government are often involved in the reconstruction of different networks (Koliba, et al., 2011).

These four phases of disaster management consist of activities that involve two or more organisations, agencies, and individuals. In this study they are called 'actors in disaster management'. Some of them work only in one phase such as a Search and Rescue team works during the Response phase to evacuate and to search victims. However, some of them work in two phases or in all phases. Their interaction with other organisations or individuals could be based on motive of similar goals (e.g. to save and help people). However, it is clearly stated here that it is the responsibility of government to protect its citizens; this involves multiple government agencies.

Disaster management is designed to prevent or reduce the effects of catastrophic events to citizens. With its cyclic process, activities start from mitigation (e.g. identifying and implementing preventive actions to minimise the effects of hazards), it continues into preparing, planning, and action when disaster occurs. When a disaster strikes, the Response phase starts and it continues to recovery post-disaster such as clearance of debris, trauma healing, and logistics for victims. Following this, reconstruction starts to rebuild infrastructure and buildings. Reconstruction planners have to consider mitigation awareness since it should prevent future disaster. For example the rebuilding of housing should consider the characteristics of the disaster so that it can withstand future issues. However in practice this is often not done appropriately. Such a case is highlighted in this study where flooding repeatedly occurs every year in Garut and it sometimes costs citizen their lives and properties. This raises questions about government agencies and non-government organisations roles and activities in every phase of disaster management. These questions include how their coordination works, and the most important factor, how is accountability applied or created in this cycle of repeated disaster. The concept of accountability requires to be clearly understood so as to be able to analyse and assess it within different contexts.

## **2.3. Accountability**

### **2.3.1. Accountability Concept**

It is very difficult to dispute the importance of accountability in public administration. Accountability is regarded as a manifestation of democracy (Przeworski, Stokes, & Manin, 1999) and very important for democracy (Jacobs & Schillemans, 2016). However the concept of accountability in public administration is highly complex (Mulgan, 2000; Radin & Romzek, 1996). The concept of accountability is contestable (Rowe, 1999) as it can mean different thing for different people (Blagescu et al., 2005; Bovens, 2007; Romzek et al., 2014; Romzek & Dubnick, 1987a; Schillemans & Busuioc, 2014), is context dependent (Bovens, 2006; Williams & Taylor, 2013a), and is an ever expanding shape-shifting concept (Mulgan, 2000); previously some researchers who forensically examined accountability found that accountability can be overloaded (Bovens, et al., 2008), a trap (Van Thiel & Leeuw, 2002) and a complex paradox (Dubnick, 2005).

Researchers in the field of accountability offer a vast of broad conceptual schemata ranging from positive impact such as good governance (Brinkerhoff, 2006) to negative views such as deficits (Mulgan, 2014) and shadows (Schillemans, 2008), pathologies (Koppell, 2005) dilemmas (Kilby, 2006) and promises (Dubnick & Frederickson, 2010).

One way of assessing accountability using a very narrow framing suggests that accountability is a social interaction (or a sociological relationship) between two sides, an actor and a forum (Bovens, 2006). One actor is obliged to render an account to the forums; on the other side forums can demand account from actors. The consequences of this interaction is that actors may gain rewards (e.g. awards, bonuses, trust, election victories, and donations) but can also face sanctions or punishment if their performance is below the standards of forums' expectations. This narrow concept of accountability is best suited to understand interactions between actors and forums

Romzek and Dubnick (1987) stated that there are four different types of accountability system . The four types of accountability system are based on the nature of forum such as bureaucratic accountability - which is shaped by bureaucratic hierarchy (upward and downward), legal accountability - which relates to legal obedience, political accountability - which means meeting political demands, and professional accountability - that should meet professional normative values. In addition to these types, Bovens (2007) added social accountability - which is aimed to

facilitate accountability to interest groups and other stakeholders such as media. Koliba et al (2011) simplified this model into three accountability frames; democratic, market, and administrative (Koliba, et al., 2011). The framework from Koliba et al (2011) is more comprehensive since this includes accountability systems which cross boundaries such as ‘market frame’. A ‘Market frame’ might work as an accountability model for a state owned company. Another framework for understanding accountability is based on social relationships (Bovens, 2007). There are three variables for this framework; relationship between actor and forum, analytical of involvement, and assessment of accountability relations. This framework from Bovens (2007) is the most comprehensive concept as it comprehensively tries to understand from basic of relationship to evaluation of result from activities.

Bovens (2007) proposed three questions to analyse and assess accountability (conceptual, analytical, evaluative). Bovens (2007) starts with asking the meaning of accountability based on a relationship between an actor and a forum in a conceptual question (Figure 3). This question is crucial to understanding accountability since not every relationship can be categorised purely in terms of accountability (e.g. responsiveness and participation) (Mulgan, 2003). Responsiveness is an important aspect for accountability but securing responsiveness is not the only means of accountability (Thomas, 1988). For example, a government responsive to the need for economic development of a city develops a factory within a city. This could harm citizens and environment health without considering space allocation in the city. The second question is analytical, concerns the analysis of what accountability types that are involved in this relationship. This is explained fully in the next section. The last question is an evaluation of accountability, how should we assess accountability? using three perspectives; democratic, constitutional and learning perspectives. These perspectives assess accountability based on the results from relational processes between actors and forums (see Section 2.3.3).

This assessment (evaluation of accountability) will work in any kind of accountability arrangements or mechanisms. Accountability arrangements can be vertical-horizontal (Ryan & Walsh, 2004) and formal-informal mechanisms (Romzek & LeRoux, 2012). Accountability mechanisms can be internal or external to the organisations and formal or informal. Vertical-horizontal arrangements are based on the position of the actors and forums. When the actors report their duties to superiors, it creates a vertical accountability mechanism. However, if reports or

information sharing are informed to partners or peers, this is a horizontal accountability mechanism. Within a vertical mechanism, there is an upward-downward hierarchical order. Both formal and informal accountability is structured on relationships between actors and forums. Formal and informal mechanisms exist in both vertical and horizontal relationships. Within the fundamental concept of accountability, this is the answer of ‘how’ accountability manifests (Mulgan, 2003).

Generally relationships within an accountability mechanism consists of four elements (Davies, 2013). The first element is standard setting. Setting standards acts to set certain measurement as the basis for judgment. The second element is information collection. Performance information is collected by forum after duties have been executed by the actor. The third element is the judgement of performance against the standards that have been agreed. The fourth element is applying consequences. If the performance meets the forum expectations, the actor will get incentives. However, if the performance is below the standard, the actor should face sanctions. These four elements might fit with formal accountability mechanisms but not with informal accountability mechanisms; which are thus more complicated since no standards of performance are pre-agreed between actors and forums.

### **2.3.2. The Type of Accountability**

It has previously been proposed (e.g. Romzek 2014) that the specific nature of accountability can be identified using four principal questions concerning the “answerability for performance” between actor and forum. The questions are: (Adapted from - Bovens, 2007; Mulgan, 2000; Romzek & Dubnick, 1987b)

- i) To whom is the account given?
- ii) Who should render the account?
- iii) About what?
- iv) Why that account is rendered?

Figure 3 shows a process of interaction in accountability between actor and forum. An actor, as an account holder, has a responsibility to inform its conduct to the account receiver (forum) for its performance. The actor may face multiple receivers of its conduct internally or externally and formally or informally. There might also be a process of processing and debating the information



provided by the actor. The forum judges the actor performances and the actor may face consequences.

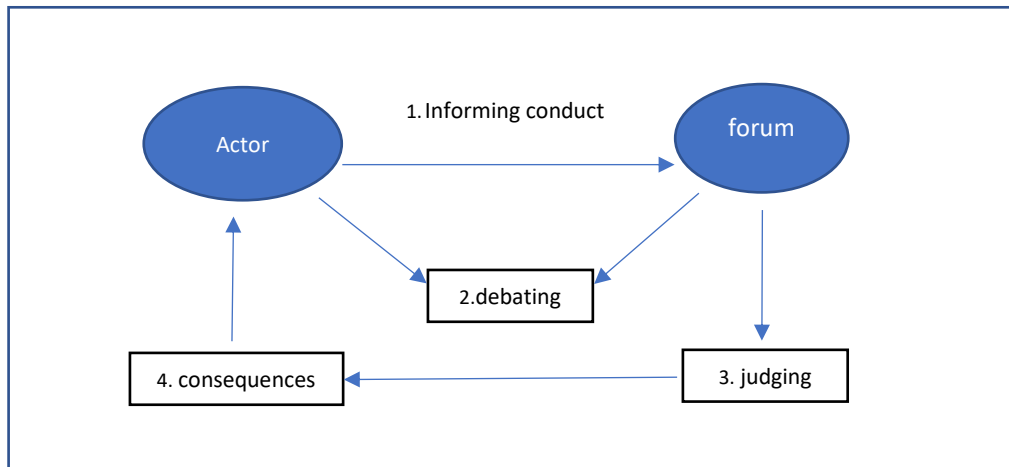


Figure 3: A process of interaction in accountability

Notwithstanding, the essential definition of accountability is giving an account and being held to account but the four questions above can specify accountability types. Defining accountability is based on which question is proposed. Figure 3 shows specific accountability types which are based on each of these questions. Question (i) is related to the receiver of accountability - *to whom* it is provided. Answering this question is not as simple as identifying certain groups/ bodies or individuals as account holders or account receivers. Some account holders may have many facets with different obligations (e.g. vertical, horizontal, and diagonal). Account receivers may also face many different actors with different aspect of conduct such as financial, procedural, or product.

Question (i) can result in several accountability loci. They are political accountability (Lederman et al., 2005; Pollitt, 2000), legal accountability (RACHED, 2016), administrative accountability (Finer, 1941; Hodges, 2012; Ikeanyibe, 2017), professional accountability (Radin & Romzek, 1996), social accountability (Grandvoinet, Raha, Kumagai, & Joshi, 2015), moral accountability (Franklin, 2018) and holistic accountability (Williams & Taylor, 2013b). Each of these loci has its own forums. For example, political accountability may consist of forums such as elected representatives, political parties, voters and media. These forums may demand different aspect of accountability.

Question (ii) asks: Who should render the account? Question (i) asks about the recipient of accountability but Question (ii) is the other way round in that the forum ask about the actors. It has similar complexity within public administration since there is potential for numerous actors. For example, a regulation will pass over a number of stages involving different processes and people. It starts with suggestions, ideas, demands, or pressure from certain groups within a legalisation process. Asking the *who* question cannot simply point to a single actor to be blamed or punished for misconduct. Corporate accountability (Baines, Lightfoot, Benedettini, & Kay, 2008) is a clear example of the nature of the who question; corporate accountability does not point to specific members who must be responsible for conduct, instead tasking the entire corporation with responsibility.

Question (iii) concerns *for what*. Question (iii) regards the subject matter of conduct about which the actor must provide information to the forum. The subject of this classification can be in the form of financial, procedural, programme, or product. In practice these are not discrete classifications. Question (i) asks about the account receiver or forum. At the same time, it also relates to conduct. Take a doctor as an example; the legality of the doctor's conduct will be within the domain of professional accountability. If the doctor conducts a malpractice, the doctor can face several consequences. As a professional, the doctor can be punished by their professional board. On the other hand, they may face a consequence from the law courts which may lead to sanctions (e.g. imprisonment), which will be in addition to a loss of reputation. Day & Klein (1987) concluded that the decision to classify a type of accountability should be based on its dominant aspect.

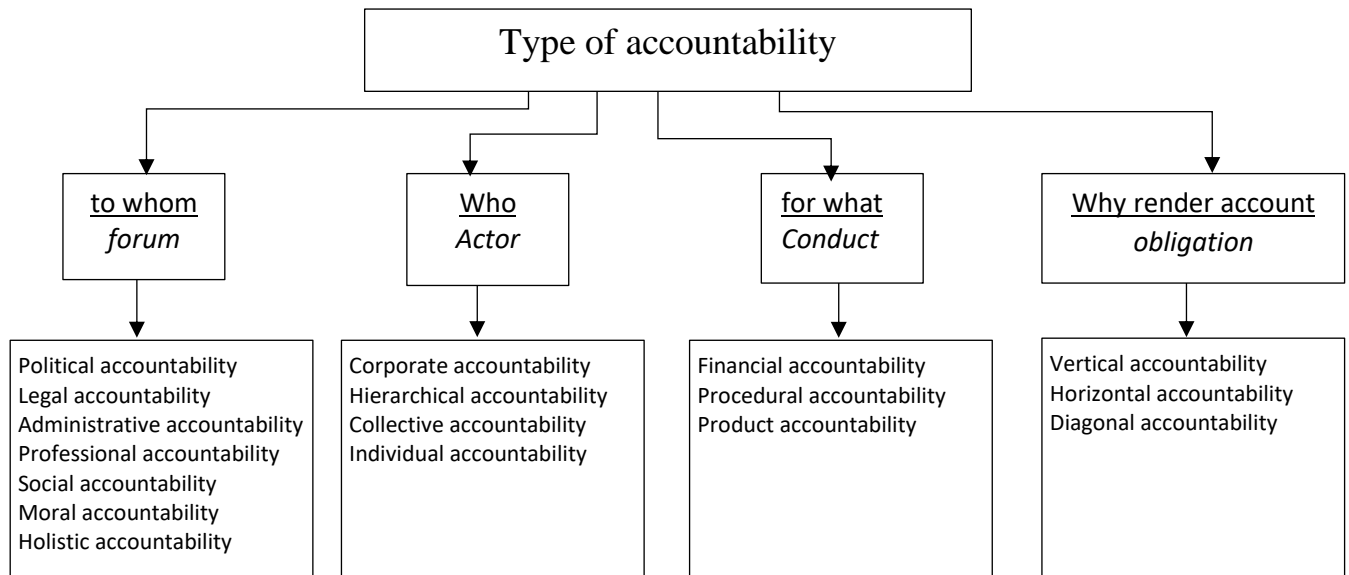


Figure 4 : Types of accountability based on answerability for performance

Question (iv), the *why* question, aims to classify accountability type. Question (iv) demands reasons for actor to render the account, irrespective of whether the actor is voluntarily or being forced to render its account; often accountability is obligatory. The reasons to oblige rendering an account are based on relationships between the account holder and the account receiver. This relationship is decided by the flow of conduct. Romzek (2014) prefers to use a “how” question for this rather than “why” question. Both questions (why and how) are aimed at understanding the direction of accountability. Romzek (2014) added formal and informal accountability to these accountability relationships. In this study I prefer to use a *why* question because it provides a clear reason/s for an obligated actor to render their account. For example, a request that asks the reason for a government agency to report its expenditure in a previous period may be answered that the agency is obliged to explain its performance to a higher authority (e.g. a parliament). On the other side, the “how” question is more to process the delivery of accountability, whether formal or informal.

Figure 4 depicts various dimensions of accountability that are based on the four questions posited earlier to understand the nature of relationships between actors and forums. For instance, someone can categorise city mayoral accountability to a local house of representative *either* as political accountability (since the house of representative is a political forum) *or* as vertical accountability (because parliaments are generally populated by elected officials who are voted in by citizens). The mayor can be subject to hierarchical accountability to their higher position in the government administration system because of their position as a government officer. The mayor may be subjected to financial accountability as they may have been given authority to manage the city budget (this is the case in Indonesia). What's more, the mayor is accountable to voters as a form of downward accountability. Again, these different types of accountability are dependent on context setting.

Analysis of accountability types might provide answers to the four proposed questions of *to whom, for who, for what, and why*. However there is a further need to understand how these accountability types should be assessed; subjects to be assessed can be financial, procedural, or product performance. As a concept of social relationship, this assessment aims to identify outcomes and outputs from accountability arrangement.

### **2.3.3. Assessing accountability**

Assessing accountability within this narrower concept can be executed by using a specific tool to evaluate public administration organisations. According to Bovens (2007) and Romzek (2014) the tools of accountability are democracy perspectives, constitutional perspectives, and learning perspectives. Democracy perspectives mean that accountability is a tool to monitor and control the conduct of actors or organisations. A constitutional perspective focuses on how regulations, laws, and policies are implemented to prevent the abuse of power and corruption from actors; control bodies are auditors, parliament/s and independent judicial power (public institutions). Learning perspectives aims to enhance the capacity and effectiveness of actors or organisations. For example, an actor may learn from previous action for a better future performance.

Assessing accountability of actors by account receivers (forums) can in practice be an issue for a forum. There may be a dilemma for the forum if they have to evaluate someone they know. They may be uncomfortable to give performance reviews, especially poor performance reviews. This situation can even happen in well-designed accountability arrangements since it involves human

behaviour and its possible prejudice on decision-making. This leads to the conclusion reached by Romzek (2014) that, in practice, accountability is sometimes uneven.

In real life, even in well-designed systems with good documentation, a failure of accountability can occur. Hence there appears to be no perfect system for accountability. A new standard system of accountability might be created, but it can also lead to new issues of accountability. Moreover, a well-designed system may only have been practiced in a certain situation or country. It might not be suitable if it is implemented in different situations with different social setting and environment, or in a different country with different ecological systems.

Bovens (2006) offers three perspectives (democracy perspective, constitutional perspective, and learning perspective) to assess the effect of accountability arrangement for different practices. These perspectives are aimed at measuring outcomes of various types of accountability aimed at improving performance. Assessments of each accountability arrangement aim to evaluate and judge the effects of accountability.

Figure 5 shows a process of assessing accountability. Type of accountability is identified by four questions; “To whom”, “Who”, “For What”, “Why” (See Section 2.3.2). This type of accountability is then assessed by three evaluative perspectives (democracy, constitutional, learning). This assessment leads to outcomes. The outcomes are consequences whether an actor receives reward or punishment. If outcomes are not as expected, this is a case that accountability is deficit or overload. Each of these evaluative perspectives will be discussed in further section.

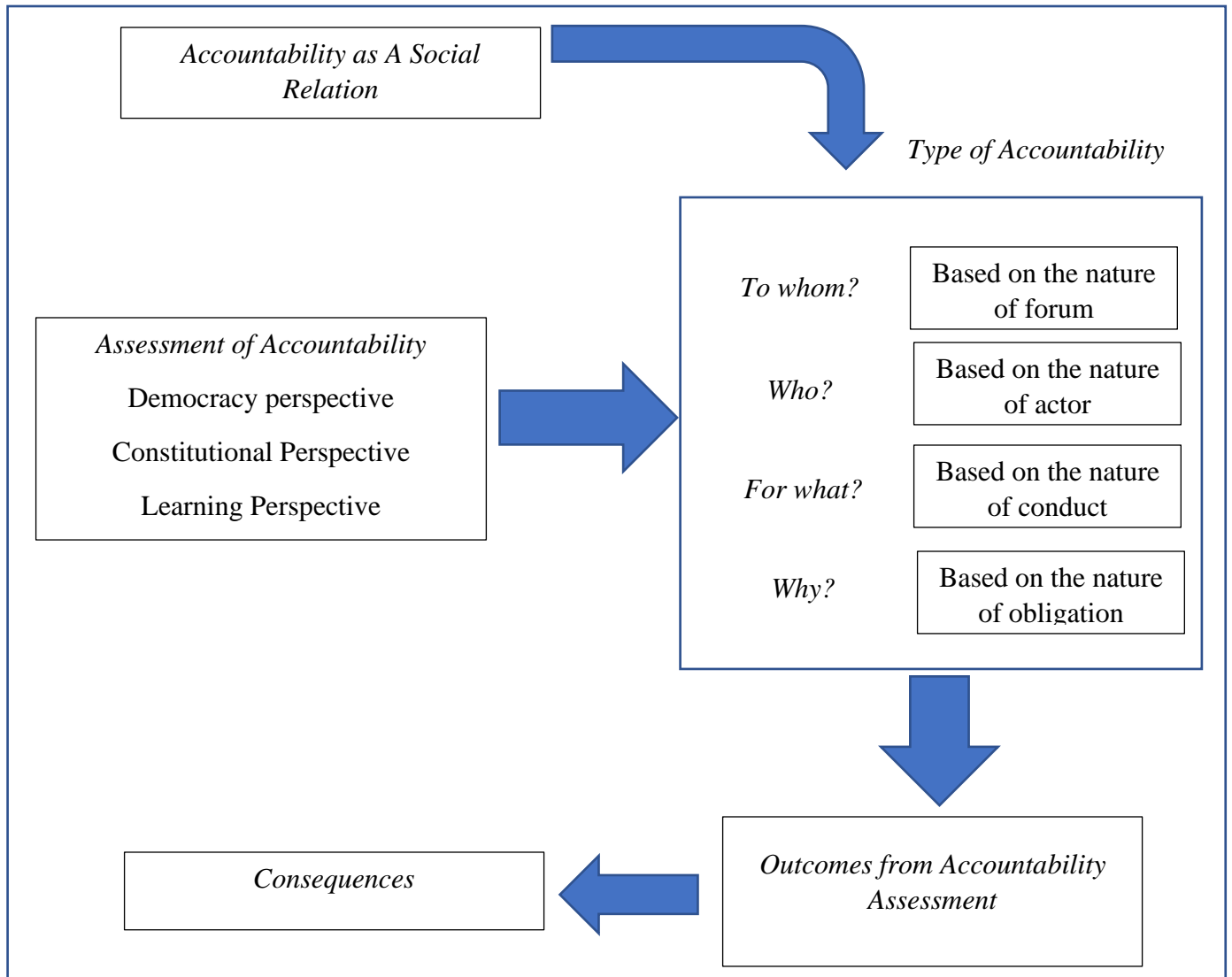


Figure 5: A process of assessing accountability

### *Democracy perspective*

When using this perspective, the most important role of accountability is its importance for democratic arrangements. Accountability should be a tool that is able to monitor and control the conduct of actors and forums (Bovens, 2006). Monitoring, evaluation and control mean that all involved parties (actors and forums) in conducts are entitled to take part in decision-making. Generally the concept of democracy implies that every human has equal respect and consideration, such as in the exchange and interchange of ideas (Milligan, 1943). In the world of public accountability, it is related to principal-agent relationships (Strøm, Bergman, & Müller, 2003). The electorates, as the primary principal in the world of democracy, have power over government

agencies since they delegate their power to them through election. As agents, government officers should work on behalf of people, although in practice this is far too often not the case. Officials must, in theory, be accountable to the citizens who give them their mandate. This control from principal is expected to provide good governance which is an indicator of being accountable (Brinkerhoff, 2006). On the other hand, democracy can mean equality in society where people can make readjustment through interactions in decision making (Milligan, 1943). Assessment of accountability should result in equality power among involved actors in a system.

### *Constitutional perspective*

The success of accountability can be assessed from power context. Government is required to run activities without abusing their power and corruption. The accountability effect within government administrative processes can prevent corruption by providing checks and balances (Bovens, 2006). Practically, government activities are guided by laws, regulations, and policies. These rules are methods for countervailing power (such as courts, ombudsmen, or parliaments) to check and balance government activities in order to prevent misconduct such as corruption and other abuses of power. The balance of power between executives and other agents with power or control is a result of good governance (Fisher, 2004)

### *Learning Perspective*

The results of accountability practices are rewards and punishment to actors. It means that actors are subject to consequences, whether results are negative or positive. Previous studies in accountability found that accountability has a negative connotation where forums tend to assess the failure of current government with objectives to provide punishment (Bovens, 2007; Romzek, 2014). It creates pressures for government to avoid that consequences by creating rationalisation of conduct (Flyvbjerg, 1998); however, others regard that accountability as a tool to induce government to learn (Aucoin & Heintzman, 2000). This view sees accountability from a positive perspective. Punishment or sanction of errors is aimed to motivate executives to learn and improve their performance by searching for alternative solutions or better ways to make their conduct acceptable to their stakeholders. Evaluations and reviews of government performance are expected to identify what worked and what failed. The concepts of openness and inward looking has existed within the tradition of public administration and political sciences for a long time (Barnes, 1965; Deutsch, 1966). The existence of reward and punishment in accountability are incentives to

encourage intelligence and learning in the process of policy making through adjustment (Lindbloom & Braybrooke, 1965). Within the context of learning perspective, accountability offers government executives feedback from their performances and the opportunity to reflect on the successes and failures of the past to hopefully provide better performance in the future. Failures occur where a lack of accountability affects the behaviour of an actor; this is called an accountability deficit.

### *Accountability Failures*

The introduction of New Public Management (NPM) in public administration has given opportunity for government organisations to manage their organisations in an autonomous way (Pollitt et al., 2004; Thatcher & Sweet, 2002). The NPM is a model of public administration arrangement which implements public choice theory (this will be discussed further in Section 2.3.6) Local governments can create agencies and departments in order to provide effective public services to citizens or by shifting responsibilities to the private sector. However, this phenomena has resulted in a lack of accountability or an “accountability deficit” (Flinders, 2017; Mulgan, 2014; Schillemans & Busuioc, 2014). Conversely, the creation of complex administrative conduct, laws, regulations, and policies from central government or local government may hinder the effectiveness of organisations. Government agencies face many different types of scrutiny and assessment from different institutions that can be time consuming for them to report or explain about their conducts. This is an “accountability overload” situation for government agencies (Bovens, et al., 2008; Linaweaver, 2009).

On one hand, accountability deficits occur not within the domain of public sector organisations; it happens in non-government organisation too. For example, the work of Crack (2013), Dhanani & Connolly (2015), and Andrew (2014) shows that it occurs to International Non-government Organisations (Andrews, 2014; Crack, 2013; Dhanani & Connolly, 2015).

Accountability deficits exist when an account receiver fails to demand an account holder delivers its responsibility of conduct. This can also happen in the situation when a forum neglects the accountability of its account holder (Schillemans & Busuioc, 2014). A lack of accountability occurs in the absence of law, regulation and accountability mechanisms; this can be both when accountability is vertical and horizontal (Schillemans, 2008). However, this does not happen in



Indonesia because, despite the existence of law, regulation, and accountability mechanism, there could still exist accountability deficits.

On the other hand, accountability overload occurs when an actor can face different demands of accountability from different forums; such as from a higher hierarchical position, auditor, parliament, and media. Public administrators may spend a large amount of their time responding (and explaining) to these demands. Sometimes this might provide a positive effect on their performance, but some might use this as a political motive to underrate their performance.

Public administrators are subject to scrutiny from auditors that can publicly report findings. Audit officer duties are to identify ineffectiveness and inefficiency. As a demand of public transparency, audit offices often provide reports to journalists and parliaments. Journalistic framing could damage bureaucrat's reputations although often what it is being said by media is not the complete performance of administrative activities. Theoretically, accountability aims to stimulate better performance by conducting evaluations of administrators, but these might become a burden for delivering their duties to citizens in practices.

#### **2.3.4. Rhetoric and Practice of Accountability**

Accountability is an attractive word often used by politicians or public management officials seeking to score political points (Barbara Romzek, 2014). They often focus on the failures made by their political rivals. This makes accountability a weapon with which to attack political rivals in pursuit of their personal or group interest. In doing so, they make their own perspective and narratives and also rationalise situations in ways which match their purpose. Media can be used to inflate a story. For example, people can hear, read or watch in media many politicians of opposition parties and members of the public using these media platforms to attack other actors by ostensibly by 'seeking accountability'. Accountability, when used as a weapon therefore takes on a negative connotation

Within rhetorical arenas, accountability often focuses on the failure of actors. Good examples exist of this accountability rhetoric; one famous case in Indonesia occurred in 2009 when the chairman of the feared Indonesian Corruption Eradication Commission went to prison (KOMPAS, 2009) accused of murder. Many people argued that this was a scenario created to expel him from his position since he had pursued and arrested many big corruptors.

There has been much discussion about the theory of accountability and benefits for democracy; for example, research conducted by Herron & Boyko (2015), Koop (2014) and Trihartono (2014) to name a few. They state that accountability can create successfulness for democratisation. Accountability has become a cornerstone of political systems and public administration in many developed countries. The rhetoric of accountability is aimed to create good governance within organisations. The theory and rhetoric of accountability requires media and people to practice it.

Accountability, if imposed effectively, can help create good governance; but failures in practice can occur. Irregularity in practice might come from good people but lack of good design and proper implementation. It might come also as a result of incompetence, poor management, or sufficient political will to impose sanctions. A failure of accountability because of poor performance or misconduct might not be realised by the actors, or they might realise it but not suffer any consequences. Besides, inadequacies might happen because of accountability excesses where the actors face multi accountability mechanisms, an accountability overload (see section 2.3.3). There should be an analytical process to assess these inadequacies in practices of accountability.

### **2.3.5. Accountability in Public Administration**

Accountability models in public administration literature use principal-agent models (Dubnick & Frederickson, 2010; Randa & Tangke, 2015; Schillemans & Busuioc, 2014) particularly in bureaucratic and political contexts. A principal-agent concept is a manifestation of agency theory which exists within different academic fields such as accounting, finance, economics, political science, sociology, organisational behaviour, and marketing (Eisenhardt, 1989; Panda & Leepsa, 2017). The concept is that a separation exists between owner and manager. In a business context, shareholders are principals who delegate their authority to managers (agents). The agents have responsibility to run a business on behalf of shareholders or owners (principals). But account holders can be different from principals. For example, auditors are paid by a company to execute their duties. However the company could not be their principals because their report is a valuation of company performance. This may have negative consequences for company managers because, in this case, they are not principals for auditors. Company managers (agencies) may face consequences for the conduct, whether reward or punishment for misconduct, from owners (shareholders) based on audit reports from auditors they have paid. Auditors have another accountability demand from professional organisations, from which they may also face

consequences if they attempt to manipulate reports for their own personal interests. The professional organisation is not their principal too. Therefore, the appropriate terminology used for this context is actor and forum (Bovens, 2007). The model of accountability has myriad relationships within bureaucracies.

In bureaucracy chains, citizen (principals) as voters delegate their power to representatives in parliaments (agents). The next stage is that representatives become their principals who then delegate authority to government as their agents. This principal-agent approach is claimed as a suitable approach to analyse accountability gaps within democratic systems (Schillemans & Busuioc, 2014). In fact, government and public organisations should not only be accountable to parliaments as their agent but they should be accountable also to citizens (voters), political parties, media, and horizontally to other organisations which may have no direct agent-principal relationship. That becomes the reason in accountability contexts that the relationship is actor and forum (Bovens, 2006; Schillemans & Busuioc, 2014). Actors can be agents and forums can be principals. For instance, government should render its accountability to electorate representatives as principal-agents, however government is also accountable to political parties as an actor-forum accountability relationship.

### **2.3.6. Accountability in Three Models of Public Administration**

The debate of accountability in modern public administration can be classified into three contested concepts: i) traditional accountability which can be understood from a debate between Friedrich and Finer in 1940 related to balancing capacity and control (Lynn, 2001); ii) market and contractual accountability (Gilmour & Jensen, 1998; Christopher Pollitt, 2000) which relates to New Public Service Era (NPM); and, iii) accountability of citizenship and democratic value as a concept of post-NPM (Denhardt & Denhardt, 2015; Hodges, 2012; Rowe, 1999). This debate shows that accountability is a disputed concept and when implementing accountability in practices of public administration it can become highly complex. This complexity is crucial to understand each claim about accountability so as to be able to explore deeper what accountability means in the real world of government and public-sector organisations.

The theory of accountability from a public administration standpoint is different from political science theories that focus on accountability in relationships with democratic elections, due to the context of answerability to authority (Romzek, 2014); authority is 'to whom the account is

rendered'. Answerability to the authority is only a part of other standard questions of the fundamental characteristics of accountability. The other questions are asking the actors who are accountable, the context of accountability for, and the way the actors answer to accountability demands (Bovens, 2007; Mulgan, 2000) This can be within a formal (Radin & Romzek, 1996) or informal mechanism (Chen, 2012).

The following section will discourse accountability within three public administration concepts. It is aimed to enrich our understanding of accountability of those three concepts. By examining these different perspectives of accountability, it is hoped that the reader will be able to comprehensively perceive the concept of accountability

#### *Accountability in Traditional Public Administration*

Accountability in traditional public administration might be best illustrated through the famous debate between Finer and Friedrich in the 1930s and 1940s (Jackson, 2009). Finer and Friedrich were debating about accountability in the context of a Weberian concept of bureaucracy versus a federal model of the bureaucracy (e.g. the USA). The central issues of debate were the different manifestations of accountability and responsibility. Friedrich (1935) said that responsible persons give an account but Finer (1936) insisted that responsibility involved obedience to external controlling authorities. Friedrich claimed that the job of supervision by elected representative and chief executives to public administrators did not succeed in controlling detailed jobs since the jobs were highly technical and might be understood by expert specialists (Friedrich et.al, 1935). Finer disagreed since Finer argued that Friedrich was talking about 'a sense of duty' that he viewed as 'a fact of responsibility' (Finer, 1936). The sense of duty is abstract since it is about one's consciences, profession, or public interest. Finer stated that the manifestation of responsibility is obedience; obedience to a specific direction which is directed by politician or chief executives.

The Finer-Friedrich debate comes from different political perspectives. Finer sees the relationship between minister and administrator as a one-way street. A minister or chief executive was elected by people, so he therefore works on behalf of his constituents. A minister creates the policies and defines how policies are implemented with explicit directions to a bureaucracy which is structured with strict rules, strict procedures and detailed supervision (Yeboah-Assiamah, Asamoah, & Adams, 2018). Administrators are expected to execute their duties as best they can, and they must obey the direction provided. The minister must supervise the administrators; which is the reason

that they were elected. Administrators will face punishment if they fail to complete the jobs effectively.

Friedrich (1940) however believed that politics and administrations are a reciprocal relationship. Politicians create policies but may not be experts; administrators are expected to be expert in their specific fields and thus able to give high quality feedback. Friedrich posited that ministers cannot be expert in everything or all fields, so they cannot give the best advice in a specific field. To Friedrich, a minister or elected representative cannot work effectively to create responsible administrators by providing close supervision. He saw that forcing administrators to obey is in fact a negative way to prevent corruption. The better way is by education and motivation to act responsibly by increasing professionalism. Finer argued that within Friedrich's view public administration and inward responsibility is anti-democracy (Finer, 1941). Finer claimed that if administrators manage themselves without control from ministers, it might result in a dictatorial system. The essence of democracy is the primacy of people over administrators (Finer, 1941)

In a democratic system a government (and public services) exercise their power through legislatures elected by citizens, meaning that the state must give account to citizens directly and indirectly through parliament. Theoretically, the power belongs to the citizenry, however in practice many democracies have been infiltrated by corporate models so that legislatures act primarily in the interests of businesses and not the citizenry; however as this is beyond the remit of this study, in this study we will pretend this is not the case. Citizen power is proven in the election arena where they decide to give reward or punishment to the current government by re-elect or drop them from authority and power. However in practice the accountability mechanisms in bureaucracy are not that simple. Government agencies face internal expectation from hierarchical bureaucracy, they are tasked with preparing how to be accountable externally to both the elected politicians and the complexity of society (Mulgan, 2000). The government and public service must deal with diverse expectations internally and externally (Blagescu et al., 2005; Romzek & Dubnick, 1987a).

An internal accountability mechanism in bureaucracy has clear lines from street level workers through a hierarchical process to the head of a government agency or organisation; this is upward accountability or, in the reverse order, downward accountability (Baker, 2014; Ebrahim, 2003). It often works within government agencies. Agents are accountable to those who delegate the tasks within a hierarchical order of organisation. It is argued that this mechanism has had positive

impacts (Davies, 2001) since it has well-defined the domain, rights and obligations, and rewards and punishment forms (Bovens, 2006). The principal demands the agent to be accountable for the duties. The agent has authority to execute the duties. The accomplished duties are assessed, and the agents will face consequences for the jobs done. This is a process of control and is designed to avoid agency drift. Thus, in theory the mechanism looks perfect for creating better accountability which in turn will create good governance (Bovens, 2006). In reality, hierarchical system of accountability might be flawed by principal drift problems (Schillemans & Busuioc, 2014) or conflict of interests inherent within internal organisations. Moreover, this traditional accountability model focuses on reporting and disclosure requirements to higher bureaucratic positions or creating upward accountability but this model lacks downward accountability to citizens (Ebrahim, 2003). Heads of departments, supervisors and managers pay little attention to creating accountability for their downline organisation staffs. They assume that their downline might not threaten their position since they have the greater power.

External accountability mechanisms in principal-agency theory operate so that agents record and disclose their activities and behaviour to the external addressees. Theoretically, the citizens have a direct line of command (power) within the policy process to the agents who execute the public policy (Strøm, et al., 2003). Agents inform their activities to a higher bureaucratic line which ends at a departmental minister. The minister must render accountability to a parliament at a house of representatives. The elected representatives render their account to the citizenry as their principal. The citizenry assesses the performance and behaviour of parliament before choosing to re-elect their party or remove them from power. In reality however the fact is that elected officials have their own interests which impact decisions made when assessing governmental behaviour and performance. This is worsened by what are often 'dirty political systems' during elections, such as money politics and fraud. Therefore, citizens have only a weak power to judge agencies within this representative mechanism. Elected representatives might drift their duty to the citizenry (Schillemans & Busuioc, 2014). In a constitutional democracy, public-sector organisations should meet the expectations not only of principals but also of forums. However as there are at least five different type of forums (Bovens, 2007), this results in many different types of accountability since every forum has different criteria of accountability (Bovens, 2007). Government and public service agencies should render accounts to forums within political, legal, administrative, social and professional arenas. A clear example of this is the political accountability forum which is regarded

as an essential aspect of accountability within democracy (e.g. elected representatives, political parties, voters, and media).

External accountability is more complex than internal accountability due to the ‘problem of many eyes’ (Bovens, 2007). Rendering an account to a certain forum may conflict with the expectations of other forums especially within intergovernmental contexts (Radin & Romzek, 1996). Some accountability types are legal binding, such as rendering accounts to parliaments and audit boards. However, accounts should also be rendered to other large forums such as political parties, media, and NGOs. Take oil subsidies for in Indonesia as an example; the intention may be to create better accountability to citizens as voters by lowering prices. On the other hand, political parties or opposition parliaments question the decision that is a financial burden for the country (Pikiran Rakyat 2013).

Debates of accountability within public administration keep taking place in line with the development of theory in this area. With the world recession in the 1970s traditional public administration was viewed as out of date since it could not cope. This changed global economic and social conditions , New Public Management (NPM) was introduced to address the situation which had greater emphasis on performance and the transparency of administrations.

#### *Accountability in New Public Management*

New Public Management (NPM) is driven by public choice theory (Denhardt & Denhardt, 2015; Gruening, 2001; Hodges, 2012; Osborne & Gaebler, 1992; Rowe, 1999). Public choice theory is popular in political science which uses economic tools for tackling traditional problems of political science. The theory was developed by Buchanan & Tullock in 1962 as part of an attempt to describe how decisions involving voters, politicians, and bureaucracy are made (Buchanan & Tullock, 1962). The development of NPM theory continued in the late 1970s and 1980s under Prime Minister Margaret Thatcher. This development then spread in other countries such as the United State of America, New Zealand and Australia. This movement was triggered by economic recession tax revolutions (Gruening, 2001). NPM was claimed as a solution for better public services by introducing private sector ideas such as contracts and competitions (Davies, 2013) which it was argued would improve accountability. Better accountability in New Public Management is reasoned by two main points: clearer duties and public choice (Davies, 2013).

Clear duties are the forms of assigned duties to government organisations concerning the services

they provide to the public, and the budget allocation for the duties. Government organisations have their own purposes in implementing fragmented systems (Ferlie, Ashburner, Fitzgerald, & Pettigrew, 1996; Stewart, 1992). This makes it easier to measure the performance of government organisations based on the output of the duties. Elected representatives would easily be able to judge the performance and give rewards or sanctions based on the completed duties. In turn, elected representatives are accountable to electorates since they have conducted their tasks.

Public choice theory states that every individual behaves based on preference (Gruening, 2001). The individual acts to pursue his or her wishes based on his or her valuation of the service provided. Public choice means citizens have the right to choose certain services that are provided by governments. The mechanism is similar to private sector organisations where the citizen is regarded as a consumer (Davies, 2013). The mechanism is based on market principals. Citizens can choose the services provided. Take choice in education as an example; the citizen chooses the school based on their own preference. Market mechanisms give freedom to citizens to decide their preference based on the quality of services provided by governments and public organisations. The market mechanism cannot be claimed to be a perfect model for improving government accountability since individuals do not have total freedom to choose the services provided. Citizens have only partial or limited choices provided by government (Ranson & Stewart, 1994; Stewart, 1992).

However it can be viewed that NPM has failed to fulfil accountability to citizens and civil society (Denhardt & Denhardt, 2015; Eikenberry & Kluver, 2004). Take education as an example, where parents can choose the school, but they cannot choose the curriculum. In addition, within internal markets, citizens regarded as a customer cannot choose the products directly, but is instead represented by a purchaser on the behalf of the citizenry.

Other mechanisms within this context are contractual mechanisms. Government organisations can create contracts or pseudo-contracts with other organisations. This is claimed to create more effective mechanisms of accountability (Davies, 2013). There will be standards of agreement within the contract (this is a starting point to measure accountability). A contract should include the agreed price or budget for the services to be delivered, the target of performance to be achieved, and the consequences of results. Based on the contract, different aspects of information regarding the execution of duties might be collected and analysed. Government will then judge results before



providing rewards or sanctions.

Contractual mechanisms within public service delivery may create problems from accountability perspectives (Davies, 2013; Gilmour & Jensen, 1998). It appears that contractual mechanisms seem to create uncertainty within accountability. Often it is not clear who is responsible for the services, whether government as a client (purchaser) of the service, or contractors. This model is more worrying from an accountability perspective because it calls into question the very role of the government (Schillemans & Busuioc, 2014). When problems occur each organisation tends to blame each other (Davies, 2013; Stewart, 1992).

In several areas of public service, governments execute compulsory competitive tendering (CCT). The contract is made between governments as a client and contractors as a service provider. The aim is to create efficiency and effectivity by using professional providers, who then try to find the best way to maximize profits without ignoring the contract. The accountability perspective here is that the provider would render accountability to the purchaser. However, citizens as the user of the service might be ignored. Accountability issue lies here since a service provider would focus on creating accountability to the direct purchaser. To some extent, if the provider is a private company this may result in an information transparency problem. Citizens or members of the public interested in this service may find it difficult to access the required information.

New public Management has excluded authority and democratic accountability (Ferlie, et al., 1996) due to the marketization of public bodies. Parts of the public sector organisation are transferred to private organizations for efficiency, effectivity and economic reasons (Hodges, 2012). NPM has created issues in accountability and democratic deficits (Ferlie, et al., 1996; Stewart, 1992). The removal of local authority and democratic accountability can be seen in UK health service reform where Local authorities are elected by local citizens (to whom they are accountable), but when non-elected body such as NHS trusts took on certain roles the accountability became unclear. The NHS has no new form of accountability to the users of services (Ferlie, et al., 1996). In turn, this left some UK public services under the control of unelected boards who appear only to be accountable to the ministers that appointed them the funds.

In the early 2000s the public administration theories of NPM were questioned in the context of democratic values and citizenship (Denhardt & Denhardt, 2000; Rowe, 1999). It was viewed that public administrators had become entrepreneurs through the prevalence of increasing privatization. Governments no longer focused on serving the public and controlling bureaucracy, but instead

were steering privatized governmental organizations. Denhardt and Denhardt (2000) illustrated that government function in NPM as “steering the boat”. Osborne and Gaebler (1992) that ‘steering the boat’ means that those who steer the boat have greater power than those who row the boat. The debate continued, Denhardt and Denhardt (2000) replied by asking a question “who owns the boat? King et al., (1999) made the point (perhaps rather naively...) that the real power lies in the citizenry since the government belongs to its people; the main duties of public administrators are to serve and empower citizens. This means that they have to manage public administration and implement policies for the benefit of citizens. Citizens become the main objectives. Within this model of public service, the emphasis is placed on democracy and citizenship as the basis for public administration theory and practice.

### *Accountability in New Public Service*

Some scholars who realised that accountability issues exist within public administrations offered new concepts that focus on citizens and democracy. Some call it Joined-Up Government (Christensen, Fimreite, & Lægreid, 2014; Hodges, 2012; Hyde, 2008; Kavanagh & Richards, 2001; Rowe, 1999; Wilkins, 2002), other Holistic Government (Perri, 1997) and as New Public Service which was proposed by Denhardt and Denhardt in 2000. They identified some issues in New Public Management concepts such as the main function of public administrators.

Although the name differs between scholars, the focus and concepts are similar. To simplify this section, I have chosen to use the term New Public Service from Denhardt & Denhardt (2000). The focus and the foundations of The New Public Service concept is based on the theories of democratic citizenship, models of community and civil society, and organizational humanism and discourse theory (Denhardt & Denhardt, 2000). Democratic citizenship means that citizens engage in governance. The state should see citizens as citizens not as voters, customers, or clients. The state should share authority and reduce control. The state should involve citizens in collaboration. This terminology is suited to the context of giving service to citizens as the main concern of public administrators.

New Public Service has a different approach to accountability from its two former concepts (the Traditional Public Administration and the New Public Administration). The Traditional Public Administration accountability approach used a hierarchical model where administrators are responsible to ministers or to elected representatives who are voted by citizens; the New Public

Administration used a market-driven approach. Citizens are regarded as customers of government services. However, The New Public Service concept of accountability approach is multifaceted (Denhardt & Denhardt, 2000). Public administrators' role is serving to society not "rowing" (like in a Traditional Public Administration model) or "steering" (like in a New Public Administration model).

Elected representatives and executives should work together with citizens to reach the goals and objectives, then they work collaboratively with citizens to achieve them. Government becomes a player (the most important player) in the process of reaching goals and objectives not just creating policies, regulations, and decree. Government is not a controller, but it should become the player who can facilitate, negotiate, or broker solutions to society's' problems. Through serving society, public administrators must include many aspects such as legal compliance, community values, political norms, professional standards, and citizens interests (Denhardt & Denhardt, 2000) This holistic approach to accountability does not focus on specific accountability to a certain forum instead focusing on all the beneficiaries of services. Thus, it is not only internal hierarchical accountability mechanisms (within organization), but it also involves external organisations, and all beneficiaries of accountability.

Accountability in these three models of public administration shows that its existence is important, but the concept is highly complex as accountability means different things to different people. This could be made even more complex in the public administration of Indonesia since the country adopts a western design for its public administration system which may not suit its environment. This could be even more complicated in disaster response situations which involve different government agencies, non-governmental organisations, and individuals working within cross-sector collaboration. Intimately knowing and understanding the context is crucial to appreciating the collaboration concept, and thus being able to accurately analyse and appraise existing systems of accountability; this in turn will impact on the design of future accountability frameworks.

#### **2.4. Collaborative Working**

Collaboration occurs when two or more organizations combine their energies and perhaps funds to reach the same purposes (Bardach & Lesser, 1996). An organization that enters a programme which is hosted by another organization has to understand its role. An organisation which works collaboratively with other organisations will achieve benefits if the organization develops effective

working relationships within its collaboration (Lank, 2006). There may be many different reasons for an organization to work collaboratively. This depends on the goals and objectives of the collaboration. According to Miles & Trot (2011), the main focus of collaborative working in publicly funded organisations is to aid service users. The model of collaborative working from Miles & Trot (2011) which focuses on service user's perspective consists of three main concepts:

- i) to create a common purpose;
- ii) to insist on a whole system approach; and
- iii) effective power sharing that utilizes the internal strength of an organisation.

Creating a common purpose is about how organisations that work collaboratively have the same purpose to achieve the same thing (Miles & Trot, 2011). In the context of disaster management, organisations should have the same purpose to save and help the lives of people who are the victims. Insisting on a whole system approach means that every organization involved in the collaboration inspects the entire system and not just the role of their own organization. Power sharing is articulated as the effective distribution of leadership, including to those who work closely to service users. Effectively incorporating these three main concepts is crucial for organisations to work collaboratively. However, working collaboratively is not as simple as adopting these three main concepts. Every organization has its own objectives and goals which must be achieved. This might create turf battles and other competitive challenges (Barbara Romzek, et al., 2014). To some extent, accountability becomes crucial in this type of work. A strong backbone of accountability will help produce effective collaborative working (Dewar, 2000)

The collaborative working concept proposed by Miles and Trott (2011) seems to be relevant for collaborations that operate with formal mechanisms. Funded organizations or institutions (government agencies, NGOs, or private enterprises) will seek to undertake services which benefit themselves; the distribution of roles might be decided during a negotiation process. Different situations of collaboration context will produce different scenarios. Bryson et. al (2006) claimed that there are three initial conditions for organizations/ institutions to collaborate; environment, sector failure, direct antecedents. These conditions decide the type of process, structure and governance, and also outcomes and accountability (Figure 6).

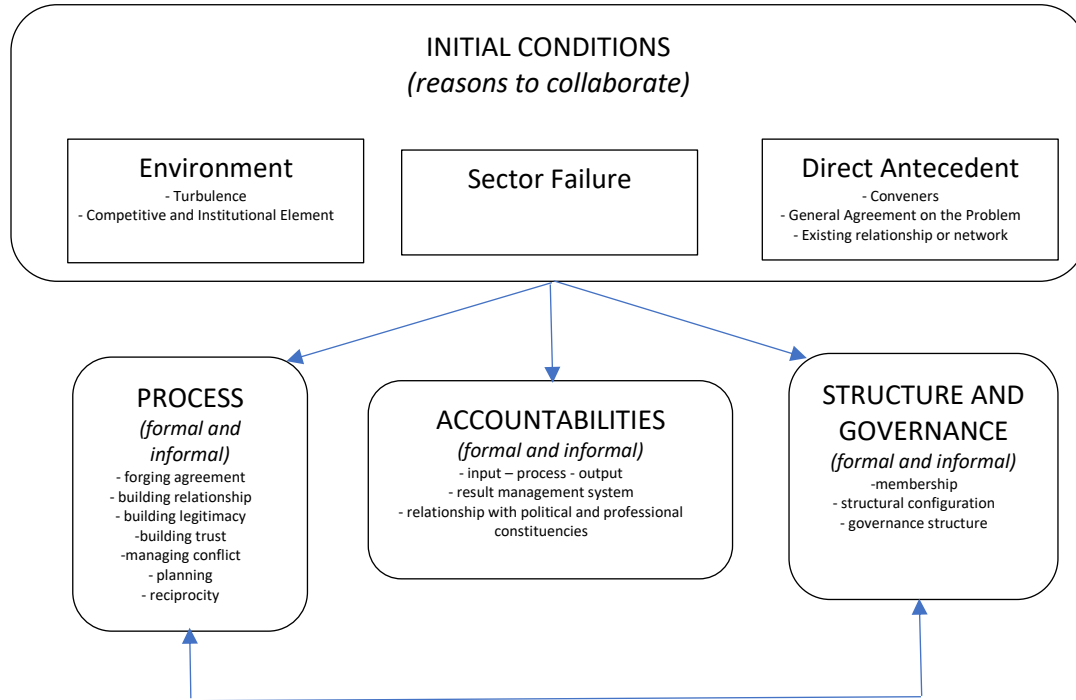


Figure 6: Framework of cross-sector collaboration (adapted from Bryson et. al, 2006)

The first reason organizations or actors collaborate is simply general dynamics of the environment. This can push organizations to work with others since it might be too difficult if they work separately. Turbulent environmental conditions can force organizations to work with each other in order to cope with uncertainty and to increase the stability of organizations (Bryson, Crosby, & Stone, 2006); e.g the environmental condition of resource dependency where one organization requires others to fulfil its needs. In the business world a company may work collaboratively for reasons of economisation or effectivity. For example, a company decides to use another existing company for certain services (e.g. security services or gardening) rather than hiring new employees which may increase their expenses. Collaboration with another company can reduce costs in terms of employees’ training, holiday pay, etc. Competitive situations can trigger organizations to work with others to increase the mutual strength among them. Institutions can be forced to collaborate by turbulent environmental conditions. These high-demand conditions may override competitive forces.

Although dynamic environmental factors can induce organizations to collaborate, collaboration from within one single sector can fail. This is another clear reason for organizations to work

collaboratively in the form of cross-sector collaboration. In many Indonesian examples within the education, transportation and housing sectors the government relies on voluntary works first in accomplishing public services since Indonesia has very strong social solidarity. If philanthropic work fails, the government will engage to work and support the voluntary organizations.

In addition to environmental dynamic and sector failures, the last reason for organizations to collaborate is direct antecedent conditions or linking mechanisms such as conveners, general agreements on how to tackle problems, and existing relationship or networks. Conveners mean brokering actors which make collaboration happen. This can be in the form of powerful individuals such as heads of local government, mayors, and community leaders, or it can be publicly recognized and respected organization such as Greenpeace, International Red Cross etc. One common linking mechanism is by initial agreement. Initial agreements can identify purposes of collaboration and acknowledge interdependence among them. Existing networks is another linking mechanism since if there is a previous positive record of organizational collaboration this should have built trustworthiness, legitimacy and confidence.

These three initial conditions can create different kinds of collaborative processes, accountabilities, structures and governance. Collaboration process can be triggered by initial conditions and structures. For instance, collaboration is made after an agreement of collaborative purposes is reached between organizations. This may consist of a formal or informal structure. Structure concerns the components of an organization and can be built vertically or horizontally. Collaborative structures will be influenced by, amongst other things, the initial conditions also negotiational processes. For example, collaboration membership might be designed to be formal or informal. The structure may change over time based on changes to conditions and processes. Accountabilities are the most complex issues within collaboration (Bryson, et al., 2006). Complexity is triggered by a lack of agreement or understanding about who is accountable to whom and for what (Bovens, 2006). Moreover, every collaborator may define results and outcomes differently. Accountability is a product of process and structure. The initial conditions will result in different types of accountability. There is a need to understand the types of accountability that is constructed by collaborative setting.

### **2.4.1. Accountability in Collaboration Settings**

The previous section discussed the collaboration framework of Bryson et al (2006) who insisted that collaboration is built by three initial conditions that may create different models of collaboration based on each condition. Each of these initial conditions may result in different processes, governance and accountability. Accountability exists to make sure that everything works as expected (Page, 2004).

Accountability within collaborative settings has attracted significant amounts of research. In the arena of public administration some researchers have attempted to analyse this concept in-depth. Different views and approaches to the study of accountability exist; such as viewing accountability as a challenge arising from collaboration (Hodges, 2012); as dynamic and complex expectations from different stakeholders (Radin, Romzek, & Radin, 2016); and as collaborative capacities of agencies with expectation from forums (Page, 2004). However, limited research exists on accountability within collaborative settings in disaster management. There are some scholars who have attempted to study this area but mostly in one event post disaster such as; the Challenger tragedy (Romzek & Dubnick, 1987c); hurricane (Koliba et al., 2011a) the Mount Merapi eruption (Bakkour, et al., 2015); and the devastation caused by the 2004 Aceh tsunami (Dixon & McGregor, 2011). These studies have only a limited capacity to aid the understanding of collaborative accountability in repeated disaster such as flooding which occurs repeatedly every rainy season in the same locality.

Most disaster response collaboration is driven by environmental turbulence. Incapability of government agencies in responding to disaster triggers non-government organisations and individuals to offer their help to aid vulnerable citizens for reasons of humanity. Some collaborations might have been built before disaster occurs but most of them without prior agreement. There might be clear measurable standard setting of collaboration for organisations/institutions that have prior agreement. In turn, assessing accountability will be based on its agreement for consequences (reward or punishment) (Newberry, 2015). However, many organisations will offer help without any prior commitment.

If a disaster affects a large area and a country cannot cope with it help will be offered by international institutions such as the Red Crescent. The failure of Government in tackling the effects of disaster creates the need to receive help from the non-government sector. Disaster risks contain an element of uncertainty (van der Keur, et al., 2016). Disruptions from disasters are

unpredictable and may be difficult to measure. Indonesia realizes is located at the confluence of three tectonic mega-plates, which makes the country prone to large earthquakes. However the specific size and location of the earthquakes are unpredictable and therefore so is the impact on the social and economic lives of Indonesians. The type of collaboration triggered by government failure to cope with disaster creates issues in vertical and horizontal accountability. Chaotic situations demand agility from involved organisations which sometimes ignores administrative process. Bureaucracy is often regarded as a process which makes responses slow. For instance during the 2004 Aceh Tsunami logistics were stuck in customs for several days to pass clearance due to a requirement to provide evidence of recipients of donations which confused international donors (TEMPO, 2005).

Accountability might be identified based on a 'for what' question when collaboration is driven by previous poor performance. Collaborators can measure the activities of other involved organisations. This horizontal accountability can be in informal setting and it can be classed as a weak accountability type as it is based on trust and reciprocity (Koliba, et al., 2011). To some extent, a more formal accountability mechanism can be created if "for what" is mandated to other organisations in the form of reports.

Another collaboration setting is created by direct antecedent. In this type of collaboration very clear relationships exist where higher authorities command 'lower' agencies or staff to work with others. This normally occurs within governmental institutions although there are some cases where government and non-governmental institutions have made prior agreement between themselves. For example, government agency collaborates with private company through contractual agreement. The most relevant question to understand accountability in this setting is the 'to whom' question.

Governing collaborative working creates challenges for accountability (Koliba, et al., 2011b). Cross-sector and cross-jurisdictional collaboration creates complexity in accountability. The challenge of accountability for public service collaboration results from 'many hands' (Bovens, 2007; Romzek et al., 2014). This challenge might be greater in a developing country with what Riggs termed a prismatic society (Riggs, 2006); where an administrative system coexists alongside complex society influences. The prismatic society concept requires further academic exploration since this concept offers in-depth understanding of culturally different society, like Indonesia, where a government has attempted to adopt a western system which has the capacity to forcefully



collide with endemic cultural and ecological factors.

## **2.5. Prismatic Society**

The previous sections discuss accountability and collaborative setting based on an understanding of current theories and concepts implemented in the 'developed world'. Developing countries have started to adopt this concept into their public administrations such as government of Indonesia through its president created presidential decree No. 7 Year 1999. However, this concept might not necessarily work effectively in these countries. For instance, citizens in developing countries (such as in India, Indonesia, Malaysia, and Africa) still have a culture of caste. Collaboration in these types of countries is very complex since there are many factors which can affect the process of creating and sustaining collaborations. Moreover, researchers who are attempting to analyse and assess accountability in these countries need to comprehensively understand these types of society. The history of colonisation is claimed to affect a country's characteristics and its people (Ahmad, 1970; Ch & Ramulu, 2008; Riggs, 1980, 2006; Weidner, 1965), this includes public administration systems (Riggs, 1961). However, no clear measurement has been identified as to how strong this influence has been to a previously colonised country. In this study this is viewed as being particularly true within a country that has experienced many phases like Indonesia, which has experienced several different colonial masters and periods of colonisation. Patterns and models of accountability and collaboration might be different in a prismatic society. Further, western models of accountability may not work effectively in developing countries which have experienced colonisation.

Riggs described post-colonial countries, or the third world, as prismatic societies (Riggs, 1960a). Riggs (1960) stated that the transformation of society from fused to prismatic has major consequences within the realms of economics, social, politics and culture. Society is very dynamic, with the social transformation not occurring at a constant speed.. Society can adapt to a change quickly or it can respond slowly to an influence. Influences might come from outside or inside the society. Riggs believed that the biggest influence comes from external, or exogenetic factors. Riggs theory of prismatic society was developed to model developing countries, particularly post-colonial states (Adams, et al., 2011), and to provide a framework to understand the evidence of tension (Riggs, 1964). Riggs attempted to conceptualise developing countries as situations where

the existence of societies with old and traditional characteristics blends with a modern model of society.

Riggs' prismatic society concept has been referenced by many scholars studying developing countries influencing their work (Peng, 2008). The influence of Riggs' concept is in understanding organisational behaviour and the administrative systems of developing countries. However, Peng (2008) criticised some aspects, such as the degree of differentiation of 'fused-prismatic-diffracted' model - where a spectrum exists with modern society being attributed as highly differentiated, a fused society as undifferentiated, and social systems within a prismatic society as 'in between'. The degree of differentiation is different in every country.

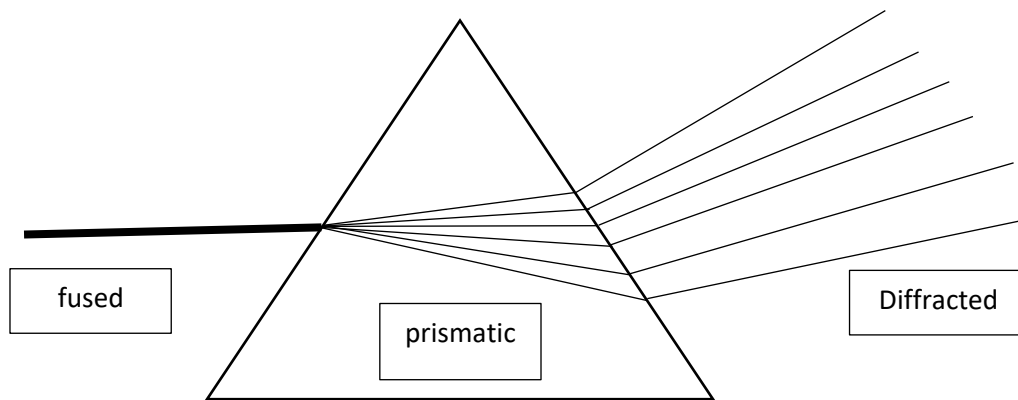


Figure 7: Riggs' fused-prismatic-diffracted model

Figure 7 shows a model of "fused-prismatic-diffracted" is illustrated by the principle of light through a prism. Light passing through the prism is divided into three groups. The first group is the white light which enters the prism. This is termed fused - which represents traditional or agricultural society. Fused society is functionally diffused where a single structure executes all functions. The society depends highly on agriculture, and economic systems are based on barter. There is a lack of labour division within a fused society. This can be found in a kingdom country such as the previous imperial China and pre-revolutionary Siamese Thailand which Riggs termed as fused societies. These societies have only a single structure which executes many functions. King and officials appointed by kings carry out all functions in society such as administrative, economic and other activities. Ascriptive values are very dominant in this society where status is

based on factors of race, ethnicity, and class of birth rather than achievement. The degree of development in these societies is very low since the way of life is still togetherness that control behaviour.

In contrast, diffracted light produces a rainbow with different colours; in Riggs' model this illustrates that each structure executes its own functions. This diffracted light represents modern or industrialisation societies. Economic systems in these societies is based on market mechanism (demand and supply). These societies have high divisions of labour. Riggs uses the USA as a sample of diffracted society. This society is opposite to a fused society. In term of government, diffracted societies have responsive governments. Government protects human rights and are responsive to the needs of the citizenry. People have a general consensus about the basic aspects of social life which must be fulfilled by government. They can give pressure to government. The law is widely respected, and the enforcement of the laws proceeds without any significant difficulty.

A diffracted society appears to be the perfect type of society. It is characterised by an ideal government which is responsive, attainment values exist in society, each structure performs its own function, the economic system is based on market mechanisms, and general consensus exists among people on all basic aspects of social life. However, this ideal model is too good to be true. This idealised type of society is difficult to find in the real world even in the most highly developed democratic countries.

Between the fused and diffracted societies there is a prismatic society. Explicitly, Riggs realised that the scale from fused to diffracted is not predetermined by specific sequences of evolutionary stages that a society will go through. The prismatic society was Riggs' attempt to explain public administration in post-colonial countries. It should be viewed as a transitional stage of society. In this society, there is a mix of characteristics of fused and diffracted societies. A certain degree of differentiation and specialisation of roles exists. However, coexistence of roles creates friction.

Riggs tends to value a prismatic society as a negative society whose complexity is messy. However, in this study it is considered that human nature is similar everywhere (good and bad sides exist). Indonesia should not be viewed as a 'Hobbesian<sup>1</sup> jungle' as many good people still work to build a better country, people still love working cooperatively and sharing, and some

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<sup>1</sup>. Thomas Hobbes was an English philosopher in as a founder of modern political philosophy. Hobbes is famous for his book Leviathan (1651) which discusses social contract

Indonesians have a strong intention to help each other; particularly indigenous people who still live in communal societies. In this study being in a prismatic society is viewed as not always negative. This is just a different type of society to a 'developed world model'. However problems occur where the people (citizens and/or government) and their ecological system harm each other.

An indigenous fused society should not be assumed to be a negative societal situation as societies have their own choice of lifestyle. They may be no less happy than diffracted society; or they may even be more content with life as they rarely face scarcity of their daily needs. An indigenous fused society can conserve natural resources far better than modern systems of technology that are implemented by the majority of centralised governments. This does not mean that modern technology is useless, but within a bureaucratic system political situation can manipulate the use of this technology to exploit natural resources for personal interest. In this study the strong view exists that we can learn from indigenous peoples' ways of life. If human goals and objectives are to reach happiness, harmony, and welfare, these can be found in indigenous peoples' ways of life as they live in greater harmony with nature mostly treating nature as part of their life cycle.

It is viewed here that Riggs' concept of "Fused-Prismatic-Diffracted" society is quite vague. All societies can be assumed as prismatic societies with different degree of 'old' administrative concepts (agrarian/fused society) and modern administration concepts (modern/diffracted society). There will always be complexity in every social system since humans are very social and creative.

### **2.5.1. Indonesia as a Prismatic Society**

Although Riggs' idea of prismatic society was developed post World War II, it still attracts some scholars either to adopt his concept in their work (such as Adam et al. 2011 and van den Bersselaar & Decker 2011) or to criticize it (e.g. Bent, 1967 and Peng 2008). Here it is viewed that comprehensive analysis of this concept is required in the public administration of current developing countries systems. It particularly seems that, the variables of historical background, post-colonial political structures, social ideology, the role of the military, a territory's size, and the status of social power are all, in some cases, ignored in Riggs concept of "fused-prismatic-diffracted model" (Peng, 2008). To address this criticism directly (and assess its validity) this study aims to analyse the public administrative practices of Indonesia, a developing country that has experienced many colonial phases. This study is focused on accountability in the administration of disaster management in Indonesia.

Firstly, Indonesia, in pre-colonial era, was only thousand islands in a territory which consisted of multiple sultanates and kingdoms. There was no one country as Indonesia today. At the beginning was dominated by Hindu and Buddhist Kingdoms but Islam started to come to territory in 7<sup>th</sup> century which was brought by trader from mid-east. Islam dominated kingdoms in this territory in the late of 14<sup>th</sup> century and early 15<sup>th</sup> century. Since its richness of natural resources, the territory attracted Chinese and European traders such as from Portugal, Netherland, and Britain. These European countries started their colonisation to the territory. It was Netherland which dominated trading in the territory with its *Vereenigde Oost Indische Compagnie* (VOC). The Dutch controlled trading by monopolistic system. Dutch called the territory as *Nederlandsch Indie* (Dutch East Indies). Some areas was occupied by British (today is Malaysia) but than it was declared as a separate country. Indonesia is claimed that had been colonised by the Dutch for 3.5 decades and there was 4.5 years colonised by Japanese during World War II. Secondly, the transition era was started from 1945 when Indonesia proclaimed its independent from colonisation. During this era, Indonesia experienced different systems of state such as federal and republic system. There was a revolution movement in 1965 which overthrew the President Soekarno since Indonesia faced economic and political problems. Thirdly, the country was led by a dictator of second president when in a new order era. Within these two periods of presidencies, Indonesia was Javanese centric which the country was ruled by most of Javanese. Lastly, under reformation era from 1998 to current country situation where democratic values have been introduced and implemented within Indonesian government system.

These changes have created both positive and negative impacts on the public administration of the country. In the early stage of the Independent Indonesia the public administration system was dominated by Dutch influences, some of which still exist today; for example, the majority of Indonesian laws use a Dutch model (Sholihin, 2008). In order to more fully comprehend and understand the real practice of public administration in this study a case of disaster management in a local government is presented and analysed. Disaster management is a unique example of public administration complexity. This complexity includes many aspects such as state, social system, environmental, political and economic.

Riggs' attempted to compare public administrations and identified some problems that occur in one country and then suggests this might occur in other countries as well. Riggs developed three

analytical tools to explain his theory: i) an ecological approach; ii) a structural-functional approach; and, iii) “*sala*” models. To some extent, these tools are used as a methodology to understand public administration in developing countries.

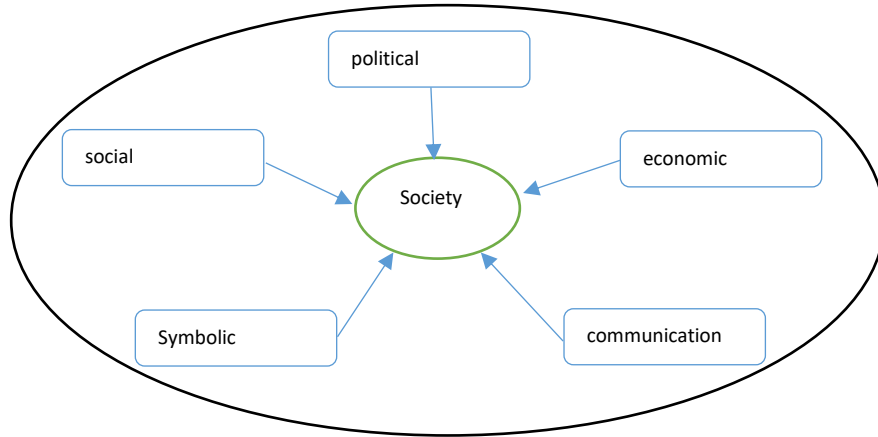
### **2.5.2. Ecological approach**

An ecological approach to public administration means that the public administration has a clear relationship with its environment. This approach was developed because public administration clearly has to interact with environmental factors such as people, places, physical technology, social technology, wishes and ideas, catastrophe, and personality (Gaus, 1947). This is a two-way process as environmental factors influence administration, and administration impacts on environmental factors. These environmental factors somewhat shape the social system of a country and administration, and therefore is part and parcel of the social system. Every environmental change can affect public administration (Gaus, 1947). Riggs identified five simple functional requisites of society: social, political, economic, symbolic and communication.

Clear reasons exist to use an ecological perspective to understand a public administration system, as the same type of administration system might not best suit countries with clearly different environments. An administration system is like a species of plant that has evolved to grow in a certain environment. It might not grow in another place if the place has a different soil type, climate, weather, humidity, and physical and social technology within its environment.

### 2.5.3. Structural-functional approach

A structural-functional approach in public administration study acknowledges that every society has different structures, with each structure completing different functions within society.



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Figure 8: Riggs' five functional requisites of society

Using a systematic approach in his analysis Riggs categorised the functions of society into five structures; social, economic, political, communication and symbolic (Figure 8); all functions work in society as a system. Riggs claimed that in order to understand public administration in a society, it is crucial to take a full-system perspective since public administration is part and parcel of the wider social system. The linkage between society and administrative system is that what exists in society would exist within the administrative system. They should not be entirely different. For example, if a caste system exists in society so there should be a caste system in administration. Riggs defines structures as patterns of behaviour. Based on this, Riggs attempted to explain within his 'fused-prismatic-diffracted' model that the functions in society are carried out by a number of structures with specific implementation methods.

In a political context, a prismatic society is either influenced by predominantly endogenetic forces **or** is under the influence of exogenetic forces, which means that the change can come from inside or outside of society. Development within third world countries is considerably influenced by exogenetic forces. The prismatic society will respond to external forces, especially from diffracted societies. If the society is strong to the forces from outside, the society will transform its structure

to maintain its independence. However, if the society fails or its endogenetic forces are weak, the society will be colonialised by a foreign elite that will change the structure of society.

Prismatic society is characterised by heterogeneity, formalism, and overlapping. *Heterogeneity* means that in the society there simultaneously exists different kinds of system and viewpoints; for example urban and rural, or modern hospitals with high technology executing allopathic approaches but there also exists homeopathic treatment. Politicians and government staffs are spoiled by having massive influence; the degree of *formalism* is very high in a prismatic society where the laws, rules and regulations are prescribed but the implementation of them consists of wide deviations. Discrepancies exist between formally prescribed norms and practised norms. There is a gap between stated principles and practices. Functional overlapping occurs when similar functions are executed by different institutions. Both differentiated structures of diffracted society and undifferentiated structures of fused society exist in a prismatic society, which potentially makes social change in society inconsistent, incomplete and irresponsive. New and modern institutional structures may be created but in practice traditional social structures keep dominating. A parliament, judicial system or government exists but behaviour is governed by certain caste, family, religion, ethnicity, gender, etc.

#### **2.5.4. Sala Model**

The characteristics of a prismatic society consist of various economic, political, social, technological, and administrative sub-systems. The administrative sub-system has been termed a 'sala' model by Riggs. The 'sala' model is characterised by certain 'bureau' features which co-exist with certain features of chamber. 'Bureau' is a characteristic of diffracted societies whereas chamber is a characteristic of fused society. However, the 'bureau' characteristics of administrative efficiency and rationality do not exist in the 'sala' model. In a prismatic society appointed administrative positions, which discharge certain administration functions, are often distributed based on nepotism and favouritism, practices which are kept out of diffracted societies (fused societies are patrimonial where kinship is paramount).

The administrative characteristics of both diffracted and fused societies can be found in prismatic society. The administration of prismatic society is characterised by the existence of patrimony, but this is not officially subscribed - rather it is simply wildly practiced. The people close to, or that



have connections to government, will get more benefits from government programmes whereas general people might be ignored. Government staffs can prioritise programmes to their own benefit in order to increase their wealth and power rather than wider social well-being. Government staffs can easily rationalise situations to the public to claim and judge their decision since they have the power to do it. This is where power defines reality (Flyvbjerg, 1998). Universal laws cannot be applied in this society since there exists heterogeneity of community groups. Government staff tend to work more loyally to their own community than to the government. Many government policies or decisions lead to dissatisfaction and hostility among communities.

In the 'sala' model clects exist. The definition of clect is '*a group of people who use modern systems and methods of administration but retain traditional/ fused characteristics*', such as maintaining a close link to a specific group because there is an interest in that group. In the 'sala' model the recruitment of government staff is through educational qualification or examination processes, but the process of promotion and career depend on ascriptive ties. Staff are unresponsive to people who do not have any direct relationship with them. There is unbalance in a state in which bureaucracy dominates its existence. Corruption, nepotism and inefficiency occur widely in 'sala' public administration systems.

## **2.6. Public Administration in Indonesia: Contextual Information**

Indonesia is a country which is constructed upon cultural diversity. There are 633 large ethnic groups, a total which reaches 1331 when sub-ethnics are included (Statistics Indonesia, 2018). Each culture has its own way social system, language, and way of life. They live in different territories with different environments. Some live in lowlands, hills, forests, jungle, coastal, urban and the Bajau (sometimes called sea-gypsies) live entirely upon the ocean. Their lifestyles are different from one place to another. The place where they live can identify the type of job they do. For example, most people who live near the beach fish for a living, and those who live around the hills and forests are generally farmers. Cultural characteristics are influenced by peoples interactions with their environments (Riggs, 1980), both physical and non-physical; such as climate, social life, religion, technology, etc.

Defining environmental concepts is tricky as environments differ. For example, the environment of a school is quite different from the environment of a house. The concept of environment is

identifiable from the entities that built this environment. This is similar to the concept of a state environment. In order to fully understand the Indonesian environment, its unique range of environmental factors must be identified (as per Gaus 1947). Environment is a dynamic space where each system interacts with others and creates new atmospheres and situations. Environmental changes can affect public administration (Gaus, 1947). Society has recently become much more complicated. This is caused by many factors such as improved communication technologies that have changed the way people communicate, bank and shop (e.g. the Internet and mobile phones) Economic motives have become greater than conservation consideration for the natural resources; this is a trend that can be traced to the dawn of agriculture more than 10,000 years ago (Zohary, Hopf, & Weiss, 2012) As a consequence, governments need to increase both its gross number of functions and also the ways in which they engage with individuals and societies as a whole. This becomes even more complex in Indonesia due to the vast and broad range of environments.

Indonesia has central laws whose principles are laid out under *Pancasila*<sup>2</sup> and *Constitution 1945*. Every local government must rule the territory under these constitutions. Local governments can create local regulations, but these cannot contradict the state constitutions. As every local government has different environmental characteristics, local governments may create departments required for their bureaucracy and services to citizens. Indonesian citizens, as a society, are very dynamic. The influences of information technology, foreign culture, and modernisation force citizens to adapt to rapidly changing current situations. Government systems everywhere in the world appear to always be one step behind the progress of change (laws evolve much more slowly than technology and culture), this is also true in Indonesia. To cope with societal changes governments attempts to execute legal changes. In Indonesia the process of legal change is carried out by discussion among government entities such as executives, legislatives, and judiciaries.

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<sup>2</sup> Pancasila is the state ideology of Indonesia which consists of five basic principles. The Pancasila was announced by Indonesian first President (Soekarno). Mr. Soekarno gave these principles to the Independence Preparatory Committee on 1<sup>st</sup> June, 1945. The Pancasila Principles are; 1) Belief in one supreme God, 2) Just and civilized Humanitarianism. 3) The unified Indonesia, 4) Democracy, led by the wisdom of the representatives of the People. 5) Social justice for all Indonesians.

Legal changes are not always designed for the needs of Indonesians; some may be driven by political interests. For instance, the House of Representatives has revised a law No 17 Year 2014 (Government of Indonesia, 2014b) about parliamentary immunity which became controversial (Kompas, 2018; Detik, 2018). Firstly, the process was not transparent as the process of creating the draft was not accessible by society. Secondly, Article 245 states that if parliamentarians are involved in breaking a law (e.g. corruption or any other crime), they could not be prosecuted before there is a consent from both the President of Indonesia and the Honorary council (*Mahkamah Kehormatan Dewan*).

State transformation requires comprehensive understanding. The foundation of this study is that great academic value can be created by attempting to analyse how the transformation from a fused/traditional society, to a diffracted society, occurs. In this study this analysis uses the example of disaster management in Indonesia. Garut was chosen, a place which experiences repeated natural disasters that has been marked as one of the most vulnerable area in Indonesia (Kurniawan, et al., 2011).

### **2.6.1. The history of public administration in Indonesia**

Public administration was introduced to many kingdoms in the territory of what is now Indonesia by Dutch colonialists in the 16<sup>th</sup> century (Resink, 2013). Dutch East Indies or Netherland-East Indies (Dutch: Nederlandsch-Indie) was the name given to this colonial territory (Indonesia as a country did not exist at that time). This administration was created for the commercial purposes of the Dutch East India Company (Verenigde Oost-Indische Compagnie, or VOC). The VOC, was involved in the spice trade. In the Nederlandsch-Indie the VOC violently monopolised this trade so other countries could not make transactions directly with local people.

At the beginning of colonisation, the VOC occupied only several territories in Indonesia; over time their territory increased. Some territories were occupied for 300 to 400 years before Indonesian independence in 1945 (Resink, 2013). The Dutch applied a centralised administration to strengthen its power. Different governmental levels such provinces and regencies were created, but the central government controlled everything. Dutch power over Indonesian territory ended in 1942 when Japan invaded. No change in public administration occurred when Japan took over. Even after Independence in 1945, a centralistic system was maintained for decades.

This centralistic administrative model survived in Indonesia up to 1998. All policies, regulations, financial decisions and development depended on the central government. The power of central government was very strong; it was dominant characteristic in the country. Change was started in 1999 during the *Reformasi*, or reformation era, when decentralisation and greatly increased local autonomy was introduced. This was the era when New Public Management structures were introduced to public administration in Indonesia. These concepts are still adopted today.

### **2.6.2. Administrative System**

Indonesia is a republic led by an elected president. Indonesia adheres to a *trias politica* system. *Trias politica* is a state system where the power lies within three separate divided groups; executives, legislative, and judicative (Ott, 2014). Today Indonesia is claimed as a democratic country where the possession of power is with voters. People have independence to elect their leaders, with elections being held every five years for president, mayors or head of local government, governor, and parliaments. Citizens vote within a one-person one-vote system. In practice the president has the strongest power within the state; ministers are accountable to a president, who in turn is formally controlled by parliament.

### **2.6.3. Post colonisation**

#### *The Old Order Era*

The history of Indonesian colonization continued to influence subsequent public administration systems. The Dutch administration system, including the Dutch legal system, was then adopted by state leaders. Many physical and mental legacies of the Dutch are still in existence in the Indonesian state system. However, there has been some small evolution within administration systems as Indonesia tried to escape from its colonial characteristics; although this has not been easy. In the 1950s characteristics of the United States administration system were adopted by Indonesian co-founders since they believed that the US administration system was modern, practical and efficient (Ahdiyana, 2010). These administrative reforms took place under the first president of Indonesia, Mr. Soekarno. This reformation was triggered by changes in national strategy as well as global geo-politics (Thoha, 2014).

Soekarno ruled the country with a monocratic bureaucratic system. This administration system was aimed to develop unity of the state based on '*guided democracy*'. His policy was to '*retool*'

cabinets if he found the officers were not loyal to him. In his presidential decree of 5<sup>th</sup> July 1959, Soekarno reshuffled the local government system, which was focused on efficiency, and increased the capacity of central government to control local governments (Nurcholish, 2005). Soekarno then subsequently proclaimed himself as 'president for life' based on law No II/MPRS/1963 (Budiharsono, 2003). However, Soekarno was ousted from his presidency by the 1965 revolution; the state had become economically and politically unstable. During the turmoil a pogrom occurred against communists and the communist party. Perhaps millions of people were killed who were suspected as communist by the military and armed civilians (Adam, 2009). The Communist party's existence was prohibited in Indonesia and Mr. Soeharto (an army general) took control as the second president of Indonesia. His presidency brought Indonesia to the New Order Era.

### *The New Order Era*

The overthrow of Soekarno led to the birth of the New Order Era. The new regime was under the second president of Indonesia, Soeharto. Some small changes were made to the public administration system although the bureaucratic system was still monocratic. Soeharto ruled Indonesia for 32 years from 1966 to 1998. During this period even though Indonesia was stated to be a democratic country whose president was voted by parliaments, in practice the presidential power was absolute. The house of representatives was just a rubber stamp. The members of parliament came from three parties; Partai Persatuan Pembangunan/*United Development Party*, Golongan Karya/*Functional Group*, and Partai Demokrasi Indonesia/*Indonesian Democratic Party*. Government staffs had to vote for the government party (Golongan Karya or GOLKAR).

Soeharto created two rules that were crucial for the administrative system. Firstly, he created presidential decrees No 44 and 45 in 1974 which together (classed here as one rule) arranged the basic tasks and functions of government departments and non-departments (Government of Indonesia, 1974a). These decrees regulated department organisation standardisation and became the principles guiding the construction of vertical institutional establishment within local government.

The second was Law no 5 Year 1974 about local government (Government of Indonesia, 1974b). This law was then revised multiple times during the reformation era to become Law No 22 Year 1999, Law No 32 Year 2004, and Law no 23 Year 2014. The law regulated local government to

become two levels: provincial level and regional level. The provincial level is led by a governor, and the regional level is led by a mayor (cities) and a head of regency (regencies). Every local government has two statuses; i) autonomous; and ii) as part of central government. As a consequence, the head of local government has double functions in his position. It is as the head of autonomous local government and as a representative of central government. This law was made to create efficiency and to control local government. In practice, even though local government has autonomy, the power of central government is still strong. It has been previously identified that to strengthen both the political situation and the economy significant public administration reform is required (Ahdiyana, 2010).

Soeharto's era was ended by a powerful movement of university students in 1998, asking for better democracy and economic leadership of the country as there was political and economic crisis in the country. Soeharto was regarded as a dictator since many activists were prosecuted by the military without trial. A climax occurred when the Asian economic crisis happened and the Rupiah nose-dived devaluing to 18% of its previous value in less than one year (Tarmidi, 2017).

### *The Reformation Era*

With the Reformasi at the end of the 1990's, which followed the collapse of dictatorial president Soeharto's regime, Indonesia experienced a big shift in government administration when the previously adopted centralized government became decentralized. It was created by a new Law in Local Autonomy (No 22 Year 1999). Indonesia's public administration system has adopted *Reinventing Government* concepts from Osborne and Gaebler (1992). The paradigm of reinventing government is that government should be catalytic, community-owned, competitive mission driven, result oriented, customer-driven, supports entrepreneurship, anticipatory, decentralised, and market oriented (Osborne & Gaebler, 1992). This paradigm is well-known also as a *New Public Management* paradigm.

The new order government had been regarded as a government with no sense of accountability and a lack of transparency to citizens; this despite being voted by local citizens (Haris, 2005). It can be seen clearly that local government simply acted as a representative of central government. For instance, the head of local governments did not have any political responsibility to local

parliaments for their regional level policies. Within this system the local houses of representatives were just the media used to legitimise all central government decisions.

The Reformation era offered changes in politics, democracy, and public administration. A president was voted directly by citizens not through a parliamentary vote (who at the time were regarded as people representatives). Political parties were not limited to just three parties; now every citizen could initiate to create a party and join in the election process to become citizen representatives. In public administration there was now real local autonomy and decentralisation. Every local government at the provincial level, city level and regency level has the power to manage the majority of local development and administration although some of the most important matters are still dealt with nationally. This is widely seen within Indonesia as a better solution for the development of effective regional and local government. Theoretically, each local government knows the problems and needs of its territory intimately. Practically however, this decentralisation created the opportunity for gross abuses of power from executive officers since they now had the power to manage their area without interfere from central government; this led to massive corruption in local governments (Setiyono, 2017). The current era of reformation in Indonesia can be characterised by both new dynamic advantages, but also significant drawbacks.

#### **2.6.4. Local Government of Indonesia from Constitutional Perspectives**

The principal Law of Local government in Indonesia is stated in Article 18 of the 1945 Constitution of the Republic of Indonesia (Government of Indonesia, 1945). This Article has inspired other laws and regulations which regulate local governments. These include; Law No 1 Year 1945, Law No 22 Year 1948, Law No 1 Year 1957, Law No 18 Year 1965, Law No 5 Year 1974, Law No 22 Year 1999, Law No 32 Year 2004, Law No 23 Year 2014 and Law No 9 Year 2015. These laws were created and revised in order to follow the development of local government. The laws of local government regulate the relationship between central and local government in financial, general services, natural resources management, and other resources (Sunarno, 2006).

Law No. 22 Year 1999 regulates to give as much as authority to local government except in the areas of finance and monetary, foreign affairs, justice, defense, religion, and several government policies for national strategical issues (Government of Indonesia, 1999). Citizens have a new hope with this law, to have a transparent, accountable and responsible government. However, the law

experienced two-time replacements. In 2004 Law No 32 was introduced (Government of Indonesia, 2004) which after a decade was replaced again by Law No 23 Year 2014; as it was viewed as having become unfit to the development of good state administration, and the correct spirit of local autonomy (Government of Indonesia, 2014a).

While the laws, regulations and policies have improved over time, however many characteristics of the country remain the same. There is no significant change to the general prosperity of people, there is still weak law enforcement, corruption occurs at every government level, multiple abuses of power exist, and so on. While the latest laws of local government focus on local autonomy and decentralisation, implementation encounters problems. From the author of this study's perspective, the biggest problem appears to be effective power separation between local government and central government. Other significant problems are that local autonomy in practice creates primordialism, oligarchic regimes, and clientelism politic (Jati, 2012). The problems contradict the Indonesian ideal of a republic country that aims to unify the many different areas and islands into one country. While formally, local autonomy is intended to enhance local development, democracy, society participation (Government of Indonesia, 1945, 1999a, 2004, 2014a) however in actuality, autonomy has given big opportunities for local political elites such elites to hold and abuse the power for their personal and group benefit (Jati, 2012). The spirit of decentralisation is for better local development based on local characteristic and needs, but this cannot be seen in the real life of society.

Large discrepancies now exist between the implementation of law (application in society) and the written law; the presence of which can significantly weaken a state (Aspinall & van Klinken, 2011). The law is very sharp to below (implementation to ordinary citizens) but dull to above (people with certain power and positions). For instance, a white-collar criminal who has corrupted the state of billions may escape to other countries, or if they get caught, they might live in a prison with special facilities since they can use their money to bribe officials (Tempo, 2018). However, many street criminals who commit a crime driven by hunger can be badly beaten and sometimes die before being convicted (detik, 2017).



## 2.7. Theoretical Framework of Collaborative Working Accountability

A theoretical framework is a tool for a researcher to make a sensible frame of the phenomena under study that attempts to explain how and why an actor acts in the way it does (Llewelyn, 2003). In this study I use theoretical framework as a conceptual tool to understand the concept and theory in my research area of accountability. This theoretical framework both supports and challenges extent current theory in accountability.

By analysing the accountability of involved actors in collaborative working in Indonesia with aims to improve performance in disaster responses, this thesis integrates theories from different fields including an accountability concept from political and administration theory. In analysing accountability, this thesis uses four fundamental question to analyse accountability; i) *who*; ii) *to whom*; iii) *for what*; and, iv) *why*. The accountability concept uses three perspectives to evaluate accountability to understand whether accountability is sufficient, in deficit, or overload; democratic, constitutional and learning perspectives. A narrow concept of accountability is possible, which analyses and assesses accountability as a social relation (Bovens, 2007), however when a broader concept of accountability is mobilised, then it can mean different things to different people (as per Bovens, 2006; Radin et al., 2016 and Romzek, 2014).

In this study, accountability is used to study the interaction of actors in collaborative settings during every response phase of disaster management (mitigation, preparedness. response, and recovery) in repeated flooding in Garut (one of the most vulnerable area for disaster in Indonesia). In addition to traditional ways of analysing and assessing accountability, I also include an ecological perspective as a way to study and measure accountability. The reason to include ecological perspective is that Indonesia, as a country with recent experience of colonisation, would be identified by Riggs (1964) as a prismatic society.

This study uses prismatic society theory (Riggs 1964) as a structural foundation. Prismatic society theory is used to understand the social interactions of society in countries whose systems might differ from the western world, from where the concepts of accountability derive (Riggs, 1964). Riggs theory of prismatic society is modelled for developing country particularly the post-colonialism state (Adams, et al., 2011). Riggs attempted to conceptualise developing country as the situation where the existence of old and traditional characteristic of society which blends with modern model of society (Figure 7). Riggs models on prismatic society has been referenced by

many scholars studying developing countries; Riggs' work has had great influence (Peng, 2008). One significant influence of Riggs' concept is in understanding the organisational behaviour and administration of state within developing countries. In this study the concept of prismatic society is adopted to understand the social interaction of society in Indonesia.

The reason for including prismatic theory in this research is that accountability might be perceived differently a country which has experienced colonisation. Accountability concepts have come from western thinkers and were then adopted by Indonesia. This does not mean that accountability concepts were absent from the Indonesian psyche, but they may have been in different forms or with different understanding. Formal accountability in the public administration system of Indonesia is a new concept introduced in 1999, however the concepts of democracy, transparency, equity, efficiency, responsiveness, responsibility and equity have been practiced for a long time (Mulgan, 2000). A form of accountability traditionally has been practiced by Indonesians although without naming it as accountability. Communities who live in rural areas are common to depend their live to nature. They have a strong belief that their life is mutual symbiosis with nature. This has been taught by their ancestors from generation to generation. They are aware of responsibility to protect and conserve nature. Failure to do these responsibility, they understand a consequence from overlooking nature which can harm their life in a form of natural disaster. Protecting and conserving nature are their integral part of life. Beside their relationship with nature, the communities have their own way in responding to disasters. They will help others without any instruction or demand.

The practice of accountability is even more complicated when implemented in collaborative working settings (Bardach & Lesser, 1996); this is because in a collaborative context, actors have to deal with competing demands (Ebrahim, 2003). The nature of collaborative working arrangements (whether formal agreements exist between organisations or informal collaboration without any prior agreement) must be identified prior to, or during, analysis. New models of accountability which consider wider relationships, not only a one-to-one hierarchical model, have emerged (Wilkins, 2002). Public agencies have not escaped from this demand for new accountability forms; this has been particularly true once we entered the 'age of social media'. The promotion of accountability to different forums is an urgent task globally for public sector organisations. It appears crucial for a model of accountability to ideally meet all forums

expectations. With the authority that they have, government agencies are expected to fulfil the needs of citizenry. Added to which they have formal accountability demands to their higher authorities. Agencies will be evaluated based on their performance. Measuring performance should consider both outputs and outcomes; which are the perhaps the most essential criteria. Performance measurement can only be as a direct result of agencies relationship with the forums; therefore agencies need to clearly communicate their tasks to forums.

A plethora of studies on accountability in collaborative working within disaster contexts focus on a single event such as Hurricane Katrina (Koliba, Mills, et al., 2011b), the Challenger tragedy (B. S. Romzek & Dubnick, 1987a) and Australian bush fires (Taylor, Tharapos, & Sidaway, 2014). In disaster response, most studies specifically focus on the post-disaster response phase. However, it is stated here that in the context of accountability related to repetitive natural disasters doubt may be created if only an analysis and assessment of each singular event happens. Moreover, we know that disaster management consists of four distinct phases, with one phase affecting subsequent phases. Understanding accountability in this context needs a more complete in-depth understanding. Furthermore, it is stated here that ecological factors such as people, place, physical technology, social technology, wishes and ideas, catastrophe, and personality are environmental influences as to how people define accountability. This is a new concept identified within this study and is something entirely new in this field as it does not exist within previous publications. There is a need to understand this accountability model in a developing country which might be characterized as a prismatic society.

Previous research in accountability within collaborative settings encountered different obstacles. Some critics have claimed that a failure of accountability in collaborative working is caused by the lack of good communication (Baker, 2014; Dass-Brailsford, 2009). Others (e.g. Lai et al., 2014; Sargiacomo et al., 2014; Taylor et al., 2014) have stated that accountability cannot meet set criteria in multiple directions; such as both vertical and horizontal accountability and downward accountability to the victims and also to civil society organisations. Specifically, Taylor et al, (2014) stated that most accountability is for satisfying upward accountability (donors and higher-level authority) but not for downward accountability (society and victims).

Accountability is about social relationships and interactions (Bovens, 2007; Mulgan, 2000), where comprehensively understanding accountability requires clear knowledge of the context setting

(O'Dwyer & Unerman, 2008). This research presents accountability in a specific collaboration setting in disaster management related to repetitive flooding. This research uses accountability as a media to capture social phenomena of responsibility, responsiveness, democracy, transparency, equity, efficiency, and integrity (as per M. J. Dubnick, 2002) in the Indonesian local government of Garut. Specifically, this research investigates, by using a sociological accountability framework adapted from Bovens (2006), how the practices of collaborative working accountability are implemented in repetitive disaster responses where government organisations and non-government actors work together in dealing with flooding.

Sociological accountability is practised to analyse the performance of an actor (Bovens, 2006). Analysis to this accountability concept allows questions related to whether accountability exists or is absent (potential accountability deficits [Mulgan, 2014]) to be addressed. In political and administrative contexts, accountability deficits are a category of democratic deficits (Arugay, 2005). Democratic deficits exist in the realm between ideals and practices in the real world of democracy (Bastian & Luckham, 2003)

This collaboration model is used since the public administration process of the current governmental system in Indonesia seems to use New Public Management which enforces government agencies to work with other agencies or to involve non-governmental organisation or individual in their services. However vestiges of traditional concepts still exist, particularly with regard to the strong control residual with central government. Dominance of New Public Management can be seen in the activities of government agencies and their programmes across multiple different sectors. However, New Public Service concepts are also found in certain practices, such as in disaster management, where government acts as the main actor delivering public service which cannot be delegated to other groups (Denhardt & Denhardt, 2000).

This research seeks to understand the accountability of actors in collaborative working context using the case of disaster management. This assessment of accountability is a narrow concept not a broad concept. A broad concept of accountability consists of various concepts such as transparency, liability, controllability, responsibility, and responsiveness (Koppell, 2005). However, within this narrow concept of accountability as a social relationship, I take collaborative working as a context of accountability practice with disaster management as a case.

Each question asked in connection with accountability will result in different nature of entities, and each nature has different accountability types (and subordinates). The nature of a ‘to whom’ question will result in groups of different forums to whom the account is rendered. Public sector organisations have many eyes resulting in at least five different kinds of accountability (Day & Klein, 1987); political accountability, legal accountability, administrative accountability, professional accountability and social accountability. Each accountability type has its own entities. For example, political accountability covers elected representatives, political parties, voters, and media.

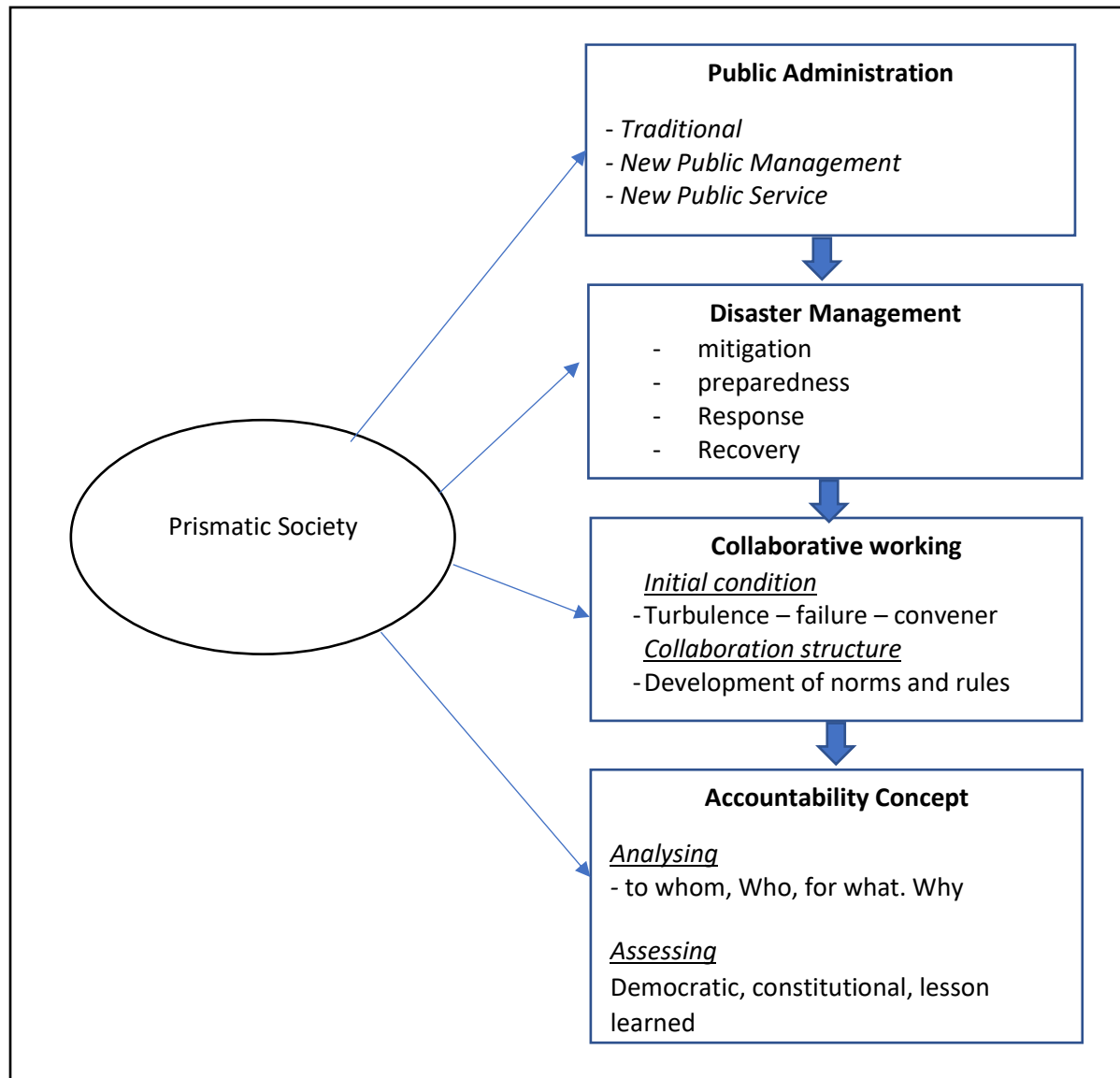


Figure 9 : Theoretical framework of collaborative working accountability

Figure 9 depicts a framework to understand Indonesian accountability in the case of repeated disaster. As a concept, accountability is disputable, as it can mean different things to different people. Accountability concepts may be more complex in Indonesia, a developing country that adopts western concepts for its public administration; concepts which might not suit its environmental situation. Also, as Riggs claimed, a developing country is different from a developed country. This impacts on not only the governmental system but also wider society. Our current understanding of accountability uses western perspectives of accountability which differ from developing countries such as Indonesia. It also seems pertinent to state again clearly here that accountability is a disputable concept that will have different meanings in different cultures and contexts including in Indonesian disaster response. It is also reiterated here that not all social relations can be categorized as accountability since they cannot fulfil the conditions of accountability such as participation, responsiveness, efficiency and transparency (Bovens, 2006).

## **2.8. Summary**

This chapter discusses the theoretical background of accountability and collaborative working in the context of repeated disaster in the most vulnerable area in Indonesia. The use of accountability concept as a social relation in this research places the emphasis firmly upon a sociological framework and not on a more broad evaluative sense of accountability which can mean different thing to different people. This chapter argues for the use of sociological sense of accountability as the theoretical framework explaining the research, i.e. the way collaborative working is executed in repeated disaster.

Collaboration is one way that apes, and particularly humans, obtain their goals and objectives. Over the past few decades changes within the public administration of Indonesia has provided opportunities for local governments to manage their territory based on their interests, which in turn has provided opportunities for local government to create collaborations within their public sector organisations. In addition collaborations can now exist with NGOs or private enterprises. If conducted in a systematic robust fashion an assessment of accountability should identify whether failure of accountability in collaborative working is caused by accountability deficits or accountability excess. This is based on assessments of democratic, constitutional, and learning perspectives. This thesis uses the concept of accountability to analyse actors' experiences in rendering their account and also to assess accountability in collaborative setting within a

developing country which experienced colonisation. This research explores the way actors involved in collaborative working in disaster management manage their accountability and the reasons for accountability deficits or accountability excesses. The next chapter of this thesis explains clearly and in-depth the research methodology used in this study.

## **Chapter 3**

### **Research Methodology**

#### **3.1. Introduction**

This chapter explains in full the methodology applied in this study to research the phenomenon laid out in chapter 1 about accountability issues, involving many actors, in an Indonesian repeated flooding context. Repeated disaster responses consist of complex problems since they include four separate phases and involve many agencies from government, non-governmental institutions and individuals. Some actors join are involved with two or more phases, whilst others are just in one disaster management phase. Current theories on accountability insist that accountability is a disputable concept that means different things to different people. Moreover there is increased complexity of accountability within a range of different collaborative settings during repetitive four-phase disaster management. Seemingly the best way to understand accountability within this setting is by adopting a case study research technique.

This research aims to study accountability in different contexts and collaborative settings that have perhaps been less explored in previous research; repeated disaster responses. The research questions for this research are as follows:

4. To understand roles of actors that played vigorous roles in this disaster management
5. To understand the working relationships between the different actors
6. To analyse accountability arrangement which affects actions in every disaster phase

In order to address these research questions, a case study methodology is applied due to its ability to understand knowledge of human affair based on context (as per Flyvberg, 2011). Other reasons to apply a case study research include the fact that accountability has multiple interpretations (Blagescu et al, 2005; Bovens, 2007; Romzek et al, 2014; Romzek & Dubnick, 1987; Schillemans & Busuioc, 2014), a the fact that a case study is suitable to study a context-dependent research. A case study aims to produce knowledge based on this context. The subjectivity around the act of defining accountability leads to the adoption of a case study strategy, since the case study research is expected to depict social phenomenon in real-life contexts (Flyvberg, 2011). The naturalistic style of case study is the reason that the case study approach is suitable to study the natural setting of the world without any modification or interference (Gillham, 2000).



The main components of research design when conducting a case study research are as follows (from Yin, 2014):

- i) The type of data to be collected which is based on research questions
- ii) Propositions related to the study
- iii) Unit of analysis
- iv) The logic linking the data to the propositions
- v) The criteria for interpreting findings

Due to the phenomenon of accountability being specific to its context (in this case collaborative working within and Indonesian repetitive natural disaster responses context), this research is not aiming to prove anything specific that can be rolled out into other multiple different contexts, but is instead looking at the very fundamental nature of accountability itself and how environmental factors should impact on its design wherever it is needed to be implemented. The author hopes to expand our knowledge of how accountability within, and between, social groups in Indonesia is created; a country, as was shown in Chapter 2, that has experienced shifting social, political and administration system of government.

At the beginning of the chapter in section 3.2, the methodology selection of this research is described, as well as an exploration of the ontological and epistemological assumptions of this research. The second section of this chapter (section 3.3) explores my case study research. This involves general terms and meaning of case study, how it is applied in this study, and how it helps to answer the questions I proposed. This is followed by a reflection on the specificities of disaster management as a research field. Chapter 3.4 contains the data collection methods that were applied in this study (material includes fieldwork notes, interviews, photographs, maps, and content analysis from national and regional mass media). Chapter 3.4 includes a constructive critique of my data collection and analysing methodologies, including potentially problematic issues. Additionally this section includes data collection procedures . Chapter 3.5 discusses the data analysis process. Chapter 3.6 discusses the ethical issues encountered in this study. Finally, there is a summary of this chapter.

### **3.2. Research methodology**

Applying the right methodology is crucial when undertaking robust scientific research science. Ontologically, it is about what is reality? Is it external to an individual? Is it created or objective

in nature (Chua, 1986)? Ontology lies at the heart of the investigation (Burrell & Morgan, 2017). In this respect, it covers a phenomenon that can be observed, measured (so that the data can be processed), interpreted, verified, and then conclusions can be drawn. According to Burrell & Morgan (2017), ontological assumption is divided becomes two extreme sides, subjective and objective dimensions. Epistemology is also important. Epistemology includes normative aspects of achieving scientific validity of knowledge acquisition., This is about how the world can be understood and communicated to others (Burrell & Morgan, 2017). Ontology leads to epistemological and methodological assumptions.

There are some basic questions that require scrutiny related to qualitative research and scientific knowledge within social science; there has long been an arguments that social science lacks objectivity because of its subjectivity (Castle, 1968). It seems that the question about the meaning of scientific knowledge diminishes the possibility of robust social scientific knowledge. Furthermore, the question of the researchers own ontological and epistemological assumptions have significant influence on research quality (Gialdino, 2009).

This research attempts to understand accountability, which is about human affairs and its relationship to others and structure (Llewelyn, 2003). This research is not about absolute nature, such as the theory of gravity (which has only one truth). What is real can be context-dependent (Flyvberg, 2011); therefore knowledge is produced based on context. Understanding accountability by analysing and assessing its process among actors who collaborate will inform the nature of its relationship. Furthermore, as accountability is produced for good governance in practice, this study may inform and improve collaboration in Indonesian disaster management.

There is a real need to create extensive description of accountability within this setting. However it should be clearly understood that this research will probably not modify how social interaction manifests amongst government agencies, NGOs, volunteers, donors, and communities in Indonesia (although the sincere hope exists that it will!). When conducting interviews a semi-structured interview technique was applied, which is more flexibly adapted to context so that knowledge can be produced based on interaction (as per Wiles & Crow, 2015). Semi structured interviewing enables participants to express their understandings and experiences (King & Horrocks, 2010). Interview questions were developed based on the previous answers of participants. Participants answered questions based on their own perceptions and experiences. By

deploying this strategy, thick descriptions of the situation in the field can be obtained. This might come from the actors' experiences in response to repeated natural disasters, the documents related to this setting, and actors' interactions with each other. All data can then be triangulated and subsequently justified.

During this research several locations were visited to view current existence of situation (Figure 1.1 in Chapter 1). In addition to conducting 33 semi-structured interviews with key actors, government documents maps newspapers, and visual/ artefacts were collected. The key actors are from middle to top position of local government officers in Garut, NGOs, and community leaders. As this research is not aimed at proving existing theories of accountability (which often take a more positivist paradigm), quantitative data collection methods such as surveys with close-ended questions and questionnaires were not employed in this study. Qualitative research methods aim to capture real life situations and peoples' behaviour that cannot be quantified by numbers (e.g. human feelings and emotions).

This study does not aim to confirm or falsify current theories of accountability, which utilise positivist paradigms. As Flyvberg (2011) found, a case study helps researchers to understand the edge of current theories, and it has the ability to develop new concepts, variables, and theories which have yet to be fully explored. Prior to the start of this study it was the preconception of the author that accountability might be translated differently by actors who work collaboratively in disaster responses. It was also thought that ecological factors might be the dominant influence within these accountability relationships.

### **3.3. Case Study Approach**

A case study research methodology is currently trending in qualitative research; it is particularly popular in disciplines such as psychology, medicine, law, and political science (Creswell, 2013) since it has flexibility in different paradigmatic position (within both qualitative and quantitative research), study designs, and methods (Hyett et al, 2014). It also has the ability to work with different kinds of data such as interviews, observations, artefacts and documents (Yin, 2014). Additionally a case study brings a researcher closer to real life situations in which human behaviour can be understood directly; it is now well recognised that not all human behaviour can be understood simply through existing theory (Flyvberg, 2011)

However, defining a 'case' is not necessarily a simple thing, it can be quite challenging (Gillham, 2000). According to Gillham (2000), a case can be an individual, a group, an institution or a community; defining a case is based on what questions need to be answered. A case is bound by a system, a time and a place (Creswell, 2013). The case study uses systemic inquiry to explore a real-life situation in-depth; this inquiry is aimed at describing the phenomenon being studied. This naturalistic style of case study makes it different from positivist study (which places the emphasis on experimental methods, hypothesis testing of quantitative data to determine the significance of result, a deductive approach from existing theory and/or isolation of behavioural elements for investigation and constructing evidence [Gillham, 2000] ).

The limit for this research is an assessment and analysis of the accountability of involved actors in Indonesian repetitive natural disasters. This includes government policy makers , donors, citizens (from affected communities), and other direct actors (from every phase of disaster management - pre-disaster, during disaster, post-disaster) who respond to flooding in collaborative working contexts. To some extent, I am trying to find the existence of accountability mechanisms among the actors in the case of natural disasters responses. Since the main research question is trying to understand perceptions, experiences, opinions, and understanding (as per Yin, 2014), it appears the right choice to use a case study.

The existing situation about the current nature of accountability within Indonesian collaborative working, when tackling natural disasters, is still unclear. Public sector organisations, NGOs, donors, community leaders and so on claim that they have done their jobs properly, and that money and resources have been used expediently. However according to two community leaders from two locations stated that they have not received treatments and services as they expected. Examples like this of two distinctly different perceptions make the situation more interesting for study since they have obviously had very different perceptions about accountability. There should be clear accountability for this situation due to its financial aspect (e.g. public money from taxes, donors, charity, or companies). However, the literature discussing this accountability is still massively under-developed. I would like to understand what really happens on the ground in Indonesia, and the context to accountability. As was laid out in detail in Chapter 2 literature exists which specifically explores accountability in collaborative governance (Koliba, Mills, et al., 2011b), but it focuses only a single phase of disaster management, the response phase. What's more, that

research studies accountability in governance research, where a stable pattern of coordination exists amongst collaborators.

Exchange of resources and actions are discussed and negotiated. As discussed in Chapter 2, other previous researches in accountability with the context of natural disaster setting claim that even when natural disaster happens repeatedly but the progress to make better accountability does not seem to be better (Baker, 2014; A. Lai, et al., 2014; Sargiacomo, et al., 2014; Taylor, et al., 2014). But, those researches do not focus on collaborative setting.

There is no perfect method for conducting research; every method has its strengths and weaknesses. This is also true of case study methods. There are some issues which might appear in this method. Case study research focuses on a specific case within a context. Results may not be relevant to apply to other cases with different contexts; but this viewpoint is rejected by Flyvberg (2011) who thinks that a case study creates concrete knowledge which is more valuable than predictive theory since human affairs can be different based on context (Flyvberg, 2011). Another scholar thinks that the most crucial aspect to conduct a case study is getting access to the research object (Yin, 2014); BUT if a researcher CAN get access then a case study can be the best option. Getting access to certain situations can be challenging however in this case my knowledge of the locale and my mastery of the local language and dialects proved immensely useful.

There are two options when conducting a case study to understand phenomenon; a single case study, or a multiple case study. A multiple case study can aim to study differences and similarities between cases (Stake, 2005), it can be used also to identify similar or contrasting results (Yin, 2014). A ‘multiple case study’ has the advantage to perhaps create a more convincing theory because it is grounded in more than one empirical evidence (Gustafsson, 2017). However, a ‘multiple case study’ is time consuming and expensive (Baxter & Jack, 2008). A single case study has the ability to make a deeper understanding of the subject and thus a high quality theory (Gustafsson, 2017). A single case study can richly describe the existence of phenomenon (Sigglekow, 2007). In a single case study, it is plausible for a researcher to examine old theoretical relationships AND explore/create new theory (Yin, 2014). This study employs a single case study because it aims to understand accountability of particular area in facing repeated disaster. The single case study gives opportunity to understand phenomenon deeper with limited time. The

single case study is appropriate for deployment here since this research is about a certain group of people.

Chapter 3.4 explains the chosen methodological stance of this research which is suitable for the research questions introduced in Chapter 1. This research is studying empirical data with a qualitative approach; therefore my theories are employed as a lens to understand accountability. It is also clear that choosing disaster responses as potential value to understand accountability in collaborative working since disaster responses will involve more than one actor who work collaboratively (Koliba et al., 2011; Lai, 2011; B. S. Romzek & Dubnick, 1987b).

### **3.4. Data collection methods**

My research focuses on public administration processes in Garut council, West Java, a part of Indonesia repeatedly hit by annual floods (see Table 1 in Chapter 1). A devastating flood occurred in 2016 that killed 34 citizens, and thousands lost their houses. Data was collected from the areas that experience repeated flooding. This covers three locations; the city of Garut, and two villages near the city. As part of my data collection I observed different sections (upper-stream and down-stream) of the River *Cimanuk*, as well as forests, hills, sand mining, and farming areas. Garut is one of the most vulnerable city in Indonesia (BNPB, 2013). Data was collected from various methods such as: location visits, semi-structured interviews, government documents, maps, newspapers, government websites, and visual/ artefact.

#### **3.4.1. Fieldwork notes**

The first activity of my fieldwork was visiting areas that had experienced repeated flooding in the city of Garut. Note taking (executed for qualitative descriptions) was conducted in the real setting of natural disaster responses. Firstly, I identified repeated flooding areas around the city to gain information about locations, actors, activities, objects and events. Note taking was aimed at providing a comprehensive picture of the case and the reality of flooding to the city to understand the behaviour of communities, local government, NGOs, businessmen, and other related actors.

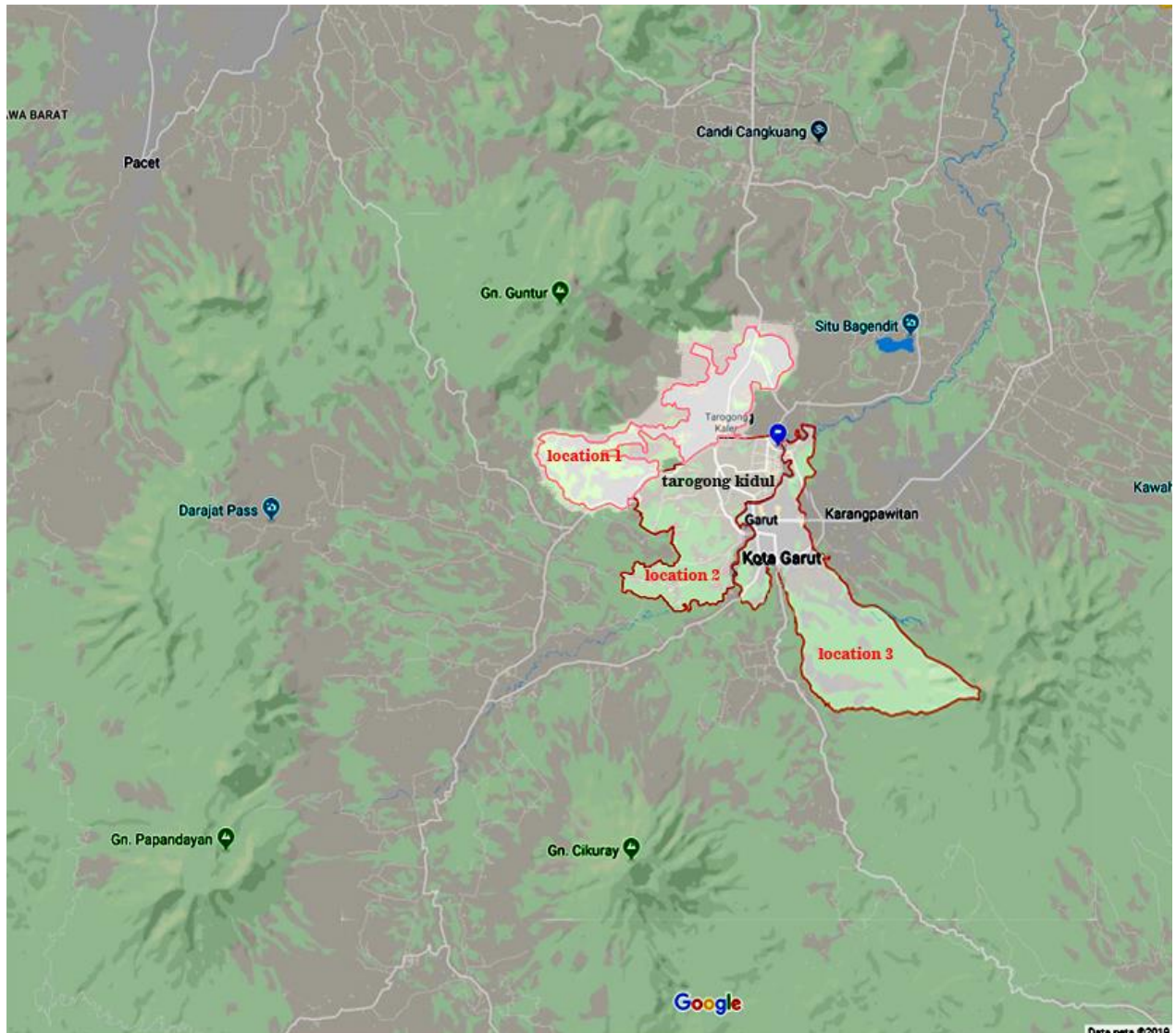


Figure 10: Map of three locations which experience repeated flooding

*Source: modified google map*

Between May 2017 to August 2017 I visited three specific locations (Figure 10) which experience flooding almost every year, and other areas which I assumed to contribute to flooding such as the upper-stream of the River *Cimanuk*, sand mining location, *Darajat* Pass tourism location, a forest, an upper hill farming area, and a dairy farm. During this exploratory fieldwork phase, I noticed community behaviour and the attitude to nature and local government activities related to disaster prevention, preparedness and/or rehabilitation. I discovered the interactions of citizens with local government and other “outsiders” from their community such as NGOs and businessmen. I read

government regulations (which contributed to disaster management), I listened to radio in the city, and I read newspapers voraciously.

This initial process of data generation was to familiarise myself with the environment of disaster management (particularly flooding) in *Garut*. The initial note taking process was instigated to overview the activities of participants in the areas experiencing repeated flooding. I sought to understand how the daily life of local people contributes to mitigation, preparedness, response and post-flooding recovery. Basically I wanted to find out what the everyday activities were of the people who have connections to the flooding. Mostly the people who live in the city are urban workers such as civil servants, private business employees, entrepreneurs, etc. (like most other cities). Most of the villagers are farmers, dependent on farming their land.

Understanding participants was a crucial activity in gaining knowledge of the interactions amongst the citizenry and between them and their government. It can significantly improve the quality of research if a clear understanding is obtained of how people interrelate and their culture; it also facilitates the researcher with nature of which questions need to be addressed (Kawulich, 2005). This process allowed me to understand how citizens who lived in villages cultivated their lands for farming, their attitudes and behaviour towards nature, and how they interacted amongst themselves and with other neighbouring communities and citizens in the city. Additionally, I could learn how citizens interact with government and other outsiders to their social system (such as NGOs and businessmen). The process allowed me also to understand citizens' activities in the contexts of formal and informal accountability mechanisms that occur in their daily life.

Formal accountability in both type of communities - villages and city - is manifested in a formal administrative process. At the lowest level, there is *Rukun Tetangga (RT)* (a neighbourhood association) and *Rukun Warga (RW)* (a citizen association), which hierarchically is above RT. RT and RW are built by community initiative but its legality is confirmed by government administration at *kelurahan/ desa* (village administrative office) since their existence is expected to assist government administrative process at lower level.

There are at least 30 families in one RT; an RW consists of a minimum of three RTs (dependent on a locations' population density). This might be a bigger number of families if the area has high population density. According to the Indonesian Minister of Home Affairs Regulation no. 5/2007 (Government of Indonesia, 2007a), RTs and RWs are institutions formed through local community



consultations which aim both to serve the community and assist government duties. They contribute actively to support local government development visions and missions. They become a bridge of aspiration between citizens' participation and local government for better government services, development, and citizen empowerment. They have the function of coordinating among citizens and being mediators for the solution of community problems. Their tasks include assisting to deliver services to the community (that are the responsibility of the local government). Other tasks are maintaining harmony within the life of citizens, designing neighbourhood plans and implementing community-based development. RTs and RWs are expected to contribute in environmental management, to become facilitators who maintain communication and alignment of programs from government to citizens, and *vice versa* to provide input to government.

The second process of fieldwork within this research was capturing physical evidence. I visited ten sites that I had been informed were contributors to flooding. I visited the *Darajat* tourism site which is located on the upper stream of the *Cimanuk* River as well as the PT. Raffles Pacific Harvest Dairy Farm, a farming area next to the upper stream of the *Cimanuk* River, a sand mining location, a water dam, a riverbank development project, farming areas and several housing blocks in the city.

These visits were executed to enrich my understanding of the case; this action helped me to familiarise the case. Field notes helped me to develop assumptions and knowledge of the current situation in the city; information collected was used when conducting interviews with related actors such as high-level officers of local government, NGOs, community leaders, and other actors involved in disaster management.

### **3.4.2. Semi-structured interviews**

Following visitation activities to several sites, I conducted thirty-three semi structured interviews with key disaster management actors, especially those related to repetitive flooding (see table 3.1). Interviews were aimed to identify the 'life-world' of the interviewee in order to capture and interpret described phenomena (as per Cassell & Symon, 2013) . Participants were actors' who contributed to at least one phase of the disaster management cycle. Research participants can be grouped into three big groups (see table 3.1). The first group was a government group (N=16). This consisted of government administrative officers at middle or high-level positions in their governmental organizations. They came from local government department offices, village

officers, military, government owned corporations, and parliament. The second group was a non-government group (N=14); participants were not bounded to the government system or they had their own autonomy in activities that were not hierarchically within government system - this included NGOs, corporations, academician and technocratic. The last group are community leaders (N=3), respected people in certain communities but their position has no direct relationship with government system. These people are religious leaders and/or indigenous community leaders. This group is different from non-formal village leaders such as head of *Rukun Tetangga* (Neighbourhood Association) and *Rukun Warga* (Community Association).

Participants	Government group	Non-Government Group	Community Group	Number of Participants
Head of local Government (Regent)	√			1
Head of Local Disaster Management Board	√			1
Local District Military Commando	√			1
Local Forestry Corporation	√			1
Board of Local Development Planning	√			1
Local Parliament Member of Garut	√			1
Nature Conservation Agency Region 5 Garut	√			1
Fire Fighter Department	√			1
Resort Police Department	√			1
Local Communication and Information Agency	√			1
Local Politics and Public Administration Agency	√			1
Regional Water Utility Company	√			1
Head of Local Political Party	√			1
Head of Village (RW/RT)	√			3
Jenggala outdoor activities organisation		√		1
consultant company		√		1
Academician		√		1
Town Planer		√		1
Communication Forum of Conservation Cadre Indonesia Region Garut		√		1
Local Head of Disaster Risk Reduction Forum		√		1
Red Cross		√		2
Local Education Centre		√		1
Corporation		√		3
School Headmaster		√		2
Local Community Leader			√	3

Table 2: Interview participant occupation and grouping

Table 2 shows three groups of participants from government, non-government and community involve direct or indirectly with disaster management. Local Government participants came from

different roles, such as policy makers, supervisors, and executors. Two governmental corporations are included within the government group. Non-governments groups are actors who contribute to disaster management. They are from formal organisations, informal organisations, and concerned individuals. The third group is local community leaders who live in the area.

Those actors mentioned above are the most appropriate participants for providing information to answer the research question of this thesis, since they are involved (directly or indirectly) in disaster management. They have experience with working with each other, and the majority of them were the heads of their organisations/ institutions. They were picked based on the reason of their involvement in repeated flooding.

Nine high-ranking (heads of institutions or in charge of disaster responses) local government officers were selected from institutions involved with disaster response. They were:

- 1) The head of regency - a regional leader with responsibility for development, safety, comfort, and harmony
- 2) The chief executive of the local board of disaster management – tasked with coordinating and executing disaster management phases in the region
- 3) A military official secretary involved during disaster response
- 4) The head of the conservation department of Garut with responsibility for nature protection
- 5) The head of the board of local planning and development for Garut
- 6) The head of the fire department that helps during the response phase
- 7) An official from the police department with involvement during recovery
- 8) An official from the Local Communication and Information Agency of Garut with responsibility for collecting and broadcasting formal information from government
- 9) An official from the Local Politics and Administration Agency which registers and builds government relationship with non-government organisations

Interviews were also conducted with representatives from five NGOs involved in disaster response in the study area. The selection of these NGOs was based on their frequent experience with disaster responses in Garut. Also two high school headmasters were selected from urban areas that had

experienced repeated flooding; this was to understand their activities in every phase of disaster management and their collaboration with other actors. Some experts in public administration related to flooding were also interviewed.

Representatives from the corporate world were also interviewed. Companies were picked which were considered to be contributing to flooding issues. These companies had multiple contributions. Their activities might be triggering or exacerbating flooding but also these companies were routinely distributed some of their income for NGOs activities; e.g. for reforestation through their Corporate Social Responsibility programmes or they donated for logistics during flooding events.

Community leaders are categorised in two different groups; a government group and a community group. I categorised one group as the government group since they function as informal representatives of government at the lowest level. It is stated in ministry of Home Affair regulation No 5 Year 2007. Although, they are elected by citizens who live in that area. The second group consists of unelected community leaders (no democratic process but these people are respected by their communities); this group of community leaders are explained in detail in section 3.4.3. By interviewing these participants for this research, and generating data from different sources, I could capture what was going on within collaborative working processes and observe how government and people worked together in facing repeated flood disasters. By doing this, I believe I obtained a thick and solid understanding of accountability within Garut's disaster response sector.

Interviews were aimed at gaining information about the following main themes:

- i) Actors' perception about accountability
- ii) Actors' relationship with other actors
- iii) Actors' activities and contributions to each disaster management phase
- iv) Actors' experience in collaboration with other actors
- v) Actor's communication mechanisms with each other
- vi) Discussion and decision-making processes amongst actors, including power sharing
- vii) Whether or not actors valued other actors

The interviews were also intended to illuminate relationships amongst actors and their attitudes toward nature.

All interviews were conducted face-to-face with semi-structured questions. An interview guide was pre-prepared. The interview guide did not consist of word-for-word questions, but instead it consisted of topics which came from a mixture of existing literature, the interviewers' personal experience and knowledge and informal preliminary work (as per King & Horrocks, 2010). The most important factor to be successful in interviewing is flexibility of questions (Cassell & Symon, 2013). King & Horrocks (2010) suggested that the interviewer start with a question that the interviewee can easily answer and without potential embarrassment or distress. First of all, I visited participants (whether to their offices or their houses) to make an appointment. It was a big challenge to have some appointments, particularly with local government officers. There were many reasons that made making appointments challenging. One characteristic of government officers in the area is seemingly a lack of desire to share information outside of the government system, even for research purposes. Another reason was that they had tight time schedule for their activities. The appointment for interviewing local government officers was much easier after I had made an appointment with the head of local government Garut and he provided me with a recommendation letter to interview other government department officers (Appendice). This letter was then used when I revisited local government department offices and it definitely 'opened doors' that were previously shut. There was a very different welcome from local government officers and the other participants (from non-government and community groups) in this research. Representatives from non-government and community groups were much friendlier and very enthusiastic to be involved in this research. Furthermore, some NGO leaders accompanied me to visit some locations considered as the sources of repeated flooding.

The selection of the participants to be interviewed was informed by national and regional media, government regulation of organisations involved in disaster management, and local citizens who lived in the area. I interviewed them based on their own convenient time and place; either their office or house. I applied a strategy to interview in a natural interactive way with two-way dialogue and not just questions and answers. From this strategy I obtained lots of informative data such as the personal attitude of participants. Any enthusiasm or irony during the interview could be seen from their facial expressions, language and/or their tone of voice.

### **3.4.3. Population and Participants**

This research was undertaken in Garut Regency. As was mentioned in Chapter 1, Garut is one of the most vulnerable places in Indonesia for natural disasters ranging from earthquakes, volcanic

eruptions, tsunamis, landslides, bushfires, and floods; however flooding is the most frequent. It happens every year with different levels of intensity. The biggest recent flood occurred in 2016 killed 34 with thousands more made homeless. This attracted attention from the national mass media. Many donors became involved, and even the President of the Republic of Indonesia visited Garut a few day after the flooding.

The majority of people who live in Garut are ethnically Sundanese; as in many other regencies in West Java. Sundanese culture still exists in their way of life although there is significant difference between the culture of urban and rural communities. This significant difference has occurred since the development of information technology in the regency that coincided with the Internet becoming popular; which helps people communicate and access the latest news and information.

Three populated locations were chosen in this research to represent all communities. I used to live in these areas so I am familiar with the local communities, their habits, daily activities and interaction with other communities and nature. I interviewed six their representative leaders as participants of this research. As was explained in the previous section there were two groups of community leaders in this research; informal leaders whose position was respected based on their position as a customary leader or religious leader, and the second group made up of the lowest level of local government administrative system. These community leaders were looked to as the representative of communities if there was any collaboration or partnership required with other organisations such as government, NGOs, donors, and other voluntary groups. Community leaders were responsible for community safety and harmony. They were decision makers in the community and they worked on behalf of the community. Their function as community leaders were not their main job since there was not any remuneration for their duties. Both groups worked based on moral responsibility to their society. Even those who held a formal position, as government officers at community level, were not formally remunerated.

Beside those community leaders, I picked heads of local government department offices in Garut and other decision makers in relevant areas of local government. The other group of participants were people who were involved with, understood or influenced at least one phase of disaster management (such as local NGOs, academicians, town planner, and corporations). Collaborative working in this research does not mean that they work all together at the same time; it may involve

only a few actors, but it must have contributed to, or be expected to contribute to, disaster management.

I also interviewed three participants who were not directly involved in disaster responses, however their knowledge and analysis were crucial to enrich the findings of this research. The first actor was an academic. Another actor was a local expert in public administration and development study. This actor was involved in several consultations with local government for making development policy. Another actor was a town planner. Information from the town planner was important for understanding spatial plans and regency development.

#### **3.4.4. Procedure**

Data was generated by visiting several different sites related to flooding within the study area. I talked to the people and I saw their daily activities and routines. I made notes and I took pictures. During these activities some people informed me about actors involved with different disaster response phases (mitigation, preparedness, response and rehabilitation). They told me the contact details of people that I should talk with to gain information.

As soon as I got this information, I started to visit their offices and I provided my invitation letter to participate in my research. At the onset of my fieldwork I wanted to complete a total of 55 interviews. Due to logistical considerations this number was reduced to 33; I consider this number to be sufficient for this research. Each semi-structured interview with participants took around an hour. Interviews were conducted in two different languages, Bahasa Indonesia and Sundanese, both of which I am 100% fluent in. The majority people in Indonesia do not have sufficient capability in English. Bahasa Indonesia is the national language and it is a formal communication media for government officers, corporations, and non-government organisations. Sundanese is a local language used by local communities to interact amongst themselves. The majority of communities in this area understand the national language but some terminologies of Sundanese do not exist in the national language (Bahasa Indonesia) and *vice versa*. For example, accountability is “akuntabilitas” in national language but the “akuntabilitas” term does not exist in Sundanese. I created close meaning of every terminology to fit local contexts. For example the term “akuntabilitas” is understood by most Indonesians as ‘responsibility which is implemented through formal reporting mechanisms’ (Muhamad, et al., 2000); this is translatable into Sundanese.

I simplified language based on the understanding of interviewees – trying to pitch each interview to the appropriate level.

The interviews started by providing or reading the participant information sheet (Appendices II) to inform interviewees about the research objectives and goals. This was followed by handing the participant consent form (Appendices III) for signing (if they agreed to take part in the research). With permission from participants I recorded interviews and I also made ] notes during interviews just in case there were technical issues with the recording. During these interviews I garnered information about other actors and sources, which enriched my data. After completing my data collection from multiple different sources, I then analysed my data.

### **3.4.5. Document analysis**

Documents are available texts and images without researcher intervention (Bowen, 2009). Document analysis was employed to analyse government policies, regulations, news, laws, and other written documents, whether in virtual or paper format. This included visual artefacts such as pictures/ images, maps, charts, and so on. Data from documents can then be combined with other data sources. Data processing in document analysis is conducted by thematic analysis where patterns are recognised within data with the emerging theme becoming categories for analysis (Fereday & Muir-Cochrane, 2006). Coding for document analysis is executed through re-reading and reviewing data; this can then be added to predefined code, such as interviews, if document analysis is supplementary to other research methods (Bowen, 2009)

I analysed government documents (laws, regulations, and policies related to disaster management phases and administration processes. Documents included Indonesian constitutional laws and regulations, which are applied to all Indonesian territory, and local government regulations, which have only a localised context. I compared and analysed each document to understand interconnections and relationships. One purpose of these activities was to identify connections or contradictions. Legal government documents can be used to identify legal accountability. Conformity to current laws, policies or regulations can then be measured. I also aimed to illuminate and identify current accountability understanding within the public administration of the study area.



News was selected from different source of media, online and offline. Mass media was selected from 'reputable' sources; reputability was identified by their company profile, reputation and credibility.

### **3.5. Data Analysis**

Data analysis was executed by conducting coding from various sources. According to Saldana (2009) the coding process consists of three steps. The first step is making code from sentences, paragraphs, images, etc. The second step is categorising the produced codes, and the third step is generating theory from categorisation. The 'first cycle' coding process can be analysing single words to full sentences and it is followed by the 'second cycle' which has a greater range; such as longer passages which enable primary content and essence to be captured (as per Saldana, 2009)

Different data types were analysed in two steps. The first step was manually analysing the data. Images were given themes and context. Interview recordings were transcribed and analysed. Analysis was started by reading through all transcriptions to identify key points and issues. After this, all transcriptions were reread and coded by cutting and grouping code manually (see Figure 3.2).

However it was soon obvious that this strategy created confusion, since one passage can be in two or more categories or themes. Therefore I needed to find another more effective and efficient way to code interview transcribes. After attending training provided by the University of Liverpool about coding using Nvivo version 11. I started to use Nvivo. It does not work to create themes or categories automatically by itself but it does aid with the grouping process. The software can recognise Bahasa Indonesian words, which helps to search certain words and their relationship to other words and phrases.

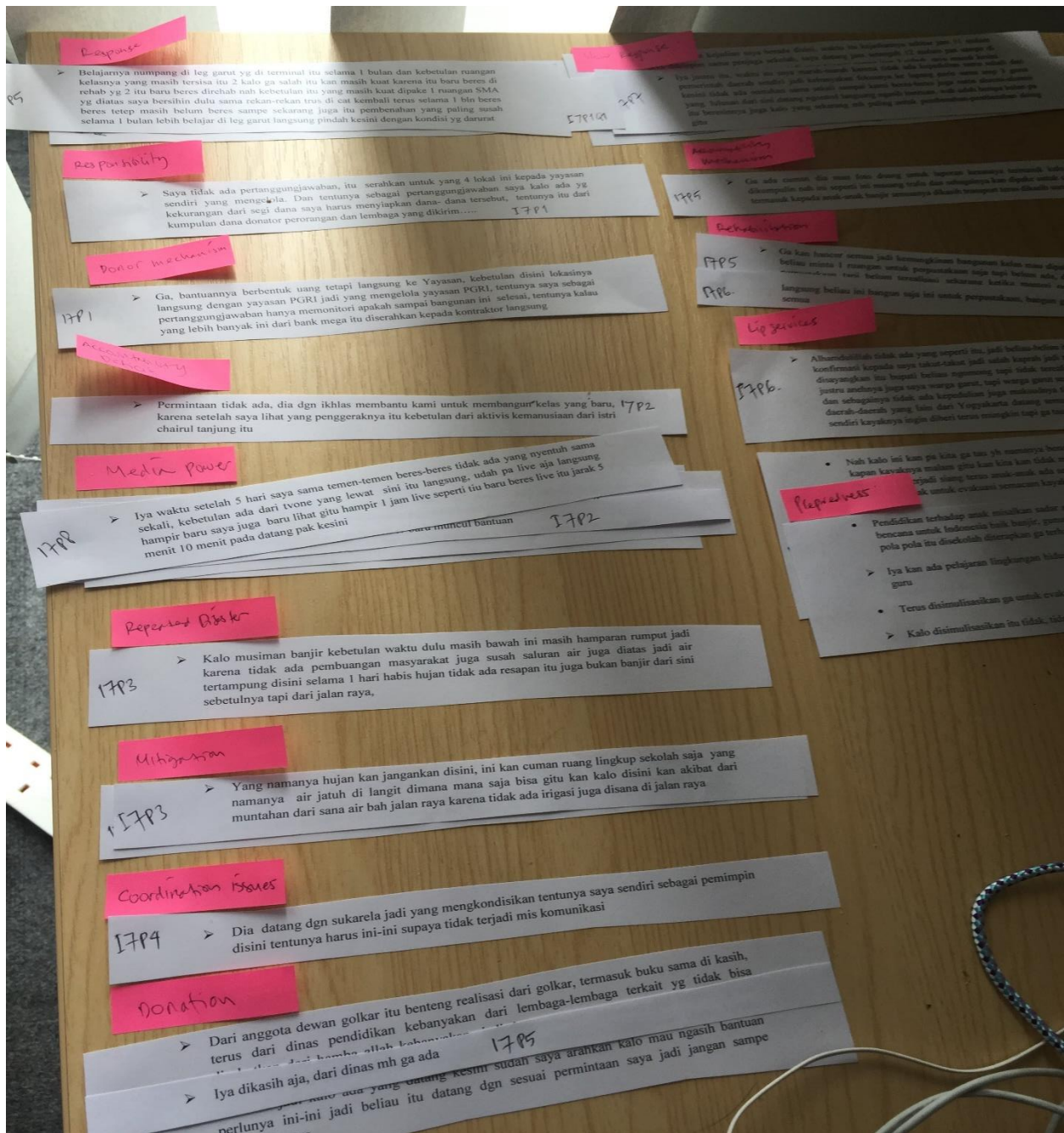


Figure 11: Manual coding process

The second step was to upload all interview transcriptions, images, news, government policy and other supported data to Nvivo application software, which then combined and analysed the data. Nvivo was used just to make the work more efficient since the coding process was executed manually. Nvivo has the power to analyse different kind of data at the same time. For example, it

can analyse data from interview recording transcriptions, photographs, and other documents. Nvivo may help to triangulate data at the same time from different sources. 219 codes were generated from all data. These codes were then grouped into categories. and a map was produced (Figure 11).

Categories and codes were placed into a graphic in order to understand the relationships among those categories or themes (see figure 3.2); four groups were created. The first group is disaster management, which includes four phases. This group depicts the dynamic process of the activities of actors’ that worked in each repetitive flooding disaster management phase. It shows the level of each actors’ contributions to every disaster phase that was placed in a table (see table 3). Group two is models of collaboration among actors. Mechanisms, processes, issues, and models of collaboration were revealed. Different relationship models among involved actors were created based on this map (see Table 4). The third group is accountability models using results from relationship between the previous two groups (disaster management phases and collaboration). This resulted in different models of accountability and how accountability works within this process. Group four is a result from analysing the findings of the first three groups.

Actors	Disaster Phases			
	Mitigation	Preparedness	Response	Rehabilitation
Government Agencies	Low	Low	High	Low to Medium
NGOs	Low	low to Medium	High	Low to Medium
Military	Low	Low	High	Low
Media	Low	Low	High	Low
Politicians	Low	Low	High	Low
Community Leaders	low to Medium	Low	High	Medium to High
Volunteer	Low	Low	High	Low

Table 3: Actors' contributions to disaster management

Table 3 depicts the degree of contributions from involved actors to every disaster phase. Each actors’ contribution to every phase (mitigation, preparedness, response, rehabilitation) will be discussed later chapters. Actors’ contributions to different disaster phases includes their process of interaction with other actors (See Table 4).



Figure 12: Mapping codes and categories relationship

Table 4 reflects models of interactions among involved actors through all disaster phases, the data for which was generated by analysing relational processes in Figure 12. This relationship among actors can describe models of formal accountability - discussed in later chapters.

Actors	Government Agencies	NGOs	Military	Media	Politicians	Community Leaders	Volunteer
Government Agencies	peers/ principal	peers/ principal	peers	Peers	peers	principal-agent	peers
NGOs	peers/ principal	peers	peers	peers	peers	Peers	peers
Military	Peers	peers	principal-agent	peers	peers	Peers	peers
Media	Peers	peers	peers	peers	peers	Peers	peers
Politicians	Peers	peers	peers	peers	peers	Peers	peers
Community Leaders	principal-agent	peers	peers	peers	peers	Peers	peers
Volunteer	Peers	peers	peers	peers	peers	Peers	peers

Table 4: Type of relationship among actors

The key findings of this research are presented in four chapters of analysis; one for each different phase of disaster management. The first of which analyses collaborative working accountability during the mitigation phase. This includes the relationships between people, government and nature. During Chapter 4 two alternative approaches of disaster mitigation are presented and discussed. Chapter 5 focuses on the preparedness phase. Chapter 6 is very related to Chapter 4 (about mitigation) and Chapter 5 (about preparedness) because both of them are pre-disaster activities. Chapter 5 discusses finding of accountability process during preparation to face flooding by actors and citizens. The response phase chapter, Chapter 6 is specifically focused on the devastated flooding event of 2016. The last chapter of analysis, Chapter 7, discusses post-disaster findings . Within each analysis chapter direct quotes are provided from every interview (translated into English). The translation process was executed carefully by conducting cross-check translations with my colleagues by sending my translation without mentioning interviewee's names to maintain anonymity.

### **3.6. Ethical Issues**

As this research involved humans ethical consideration was required. Maintaining confidentiality and the anonymity of participants in this research is crucial. A loss of confidentiality and/or anonymity may affect participants' safety or jobs. In order to avoid any upcoming ethical issues caused by this research, research ethics was applied for and granted with application number 0538 on 18<sup>th</sup> January 2017 prior to fieldwork data collection (see Appendix I). Issues which might require ethical justification were: i) data protection; ii) anonymity of participants; iii) sensitive questions; and, iv) the risks and benefits which may occur to participants involved in this research.

Regarding ensuring data protection, all interview recordings, images, notes, and other documents were saved in my University of Liverpool M drive . The file in M drive could only be accessed by me and my supervisors. All physical documents were destroyed. The data was fully protected by personal password.

The anonymity of participants in interviews was explained in participant information sheet (Appendix II) which was handed to participants to be signed ; all participants were voluntarily involved in this research. Their name or initial would not be stated in this research but their organisations might appear in this research; however, their identity could not be identified. I

informed to participants that when the thesis has been completed it will be available for them to access.

This research took place in Garut regency and involved government officers with high positions, chiefs of NGOs, local political leaders and other important public figures. I come from this place and I am familiar with the characteristic of high profile officers in the area and the people who surround them. Access was not easy, and neither was persuading them to participate in this research. Most Indonesian government officers avoid sharing information which may cause trouble to their positions or institutions although public transparency is regulated in Indonesia; people have rights to access public information from government - but in practice it rarely happens. Secondly, public figures in Garut are busy people who may prioritise their time for their jobs and personal activities. They might regard spending time for my interview as unimportant. However, once I had a letter of recommendation from the head of local government in Garut it became easy, as the majority of people in Indonesia, and particularly in Garut, will oblige if their higher authority recommends them.

By doing this, I realise that there is bias in this research. I come from this area and I have experienced repeated flooding since I was child. There might be subjective judgement to this work. However, this repeated failure in tackling flooding which causes disruption to people who live in the city needs robust academic research. Many people face this issue during rainy season and attendant threats to their health. Over the years flooding has affected thousands of people, causing them to flee their homes, and killing many. Conducting this research might provide an opportunity to reveal what is happening to the city. I hope that this research will offer genuine and practical solutions.

### **3.7. Summary**

Case study as a strategy in this research, consisting complex of methods, seems to be the best strategy to answer the research questions of this thesis. The idea of using case study strategy in this research was inspired by a book “Rationality and Power: Democracy in Practice” from Flyvberg (Flyvbjerg, 1998). The case in this book was a development in a city of Aalborg, Denmark. The book uses a narrative approach in presenting data and information from research findings.

Philosophically, I use a constructivist paradigm in this research since the meaning of reality is constructed by one's mind (L'Abate, 2014); accountability can have different meanings for different people. It depends on who defines accountability or where accountability is being used. For example, the famous debate about accountability between Friedrich and Finer (see Chapter 2) proves how different people in different system of public administration interpret accountability in different ways. Conducting case study research allows me to understand social phenomena in comprehensive way by involving different sources of data.

The next four chapters (Chapter 4,5,6, and 7), are the detailed discussions and analysis of this research by using the methods explained earlier.

## **Chapter 4**

### **Mitigation**

#### **4.1. Introduction**

This chapter is the first analysis chapter of this study. This chapter focuses on the mitigation phase, often regarded as a cornerstone of cyclic disaster management (Coppola, 2007; Ha, 2017; LeDuc, 2006). It is more specific in this chapter to discuss how government, non-government and citizens in Garut contribute to preventing and reducing disaster risk, especially (but not limited to) repeated flooding. The roles of actors involved who are contributory to, or are involved with mitigation of, repeated flooding is also explored in detail in this chapter. It is stated clearly in this chapter that when looking at the nature of catastrophic events, it is possible to identify causative failures in mitigation plans and structures that led to, or are significantly contributory to, those hazardous events.

There are several sections in this chapter. It is started by discussing local government of Garut efforts to mitigate flooding. This section 4.2 explores the development of laws, regulations and policies at local government level which relate to greater scale plans. It is followed by section 4.3 discusses mitigation of the spatial plan context in Garut. These two sections explore the dynamic of plan design and modification which involve many different actors (both active and/or passive) during the process. Actors come from different backgrounds and often have different motives. Motives range from economic motives, political motives, and existence motives. The third section discusses the failure of planning processes which leads to catastrophic flooding to Garut. The section 4.4 analyses structural mitigation which includes construction of physical building. This section is followed by section 4.5 which analyses relationship between plans and disaster mitigation. Section 4.6 specifically analyses each actor contribution on disaster mitigation. The contribution from government and non-government actors and community based mitigation which is practiced based on their understanding and knowledge of prevention disaster from generation to generation. The last section is a conclusion of disaster prevention efforts from actors and its related accountability context. In addition, it offers some recommendation for improvement which might lead to accountability.



#### 4.2. Local Government Development Plans

In Garut the spirit of local autonomy provides opportunity for local government to manage its territory quite independently in many areas. The local government is allowed by constitution to design its own regulations and policies which are adapted to local needs, as stated in Article 42 of Law No 32 Year 2004 and Law No 10 Year 2004 (Government of Indonesia, 2004a, 2004b). Article 42 states that parliament has the duty and authority to make regulations which are discussed with head of local government for establishment.

The local regulation No. 7 Year 2011 clearly states basic tasks and functions of the BPBD. The BPBD is led by local secretary as *ex officio* leader, but the main responsibility is in the head of local government (*Regent*). There is a chief executive of BPBD which is appointed by *Regent* who runs the organisation. The chief responsible to *Regent* through local secretary.

Other regulations which are relevant to prevention or mitigation is development plans and spatial plan. The facts that flooding has occurred to the city repeatedly every year does not mean that the local government ignores disaster issues in its planning for city development and its spatial plan. The plans include environmental issues and conservation concerns. Development plans cascades up from general to more specific plans. The different levels are:

- 1) *Rencana Pembangunan Jangka Panjang Daerah/RPJPD* (a long-term local development plan),
- 2) *Rencana Pembangunan Jangka Menengah Daerah/ RPJMD* (a medium-term local development plan), and
- 3) *Rencana Kerja Pembangunan Daerah/ RKPD* (a working plan/short-term plan).

Conceptually, local governmental planning needs to be in line with upper levels of government institutions such as provincial and national levels. However, many conflicts of interest exist during designing and implementation of plans.

The RPJMD, RPJPD, and RKPD are frameworks which guide local government's decision making and planning. These will be manifest within programs that must be fitted to specific areas of development. Spatial planning requires mapping areas for development. Different planning needs (e.g. planning for industrial areas, housing, farming, conservation, forestry, etc) have different requirements and points to consider. For instance, the Garut RKPD for 2017 focused on the

development of agritourism. This program will require development areas, which are specifically suitable for this need. This development ideal appears theoretically simple, however, the process of designing, implementing and modifying plans is in reality very complex. This issue also permeates RPJPD, RPJMD, and RKPD which often do not follow their own guidelines or regulations.

### **4.3. Development Plans Case in Garut**

Three local development plans above (RPJPD, RPJMD and RKPD) plus spatial plan contribute to disaster mitigation. This section will analyse how these contributions from each of this plan to disaster mitigation in this study. This analysis is executed by comparing between development plans concept and practices.

#### **4.3.1. Long Term, Medium-term and Short-term Development Plans**

As was mentioned in Chapter 2 the local government RPJPD has a twenty year span (2005-2025) which refers to national and provincial level long-term development plans (Local Government of Garut, 2011b). This long-term development plan is followed by RPJMD (a medium-term plan of five years); the latest medium-term plan is 2014-2019 (Local Government of Garut, 2014). The RKPD is a more concrete plan which is a short-term annual working plan.

#### ***Development Plans Concept***

Plans are prepared and organized by local government independently with consideration to national development plans as stated in Law No 25 (2004) and Law No 32 (2004). There is a guideline in local governmental planning called the 'Regulation of Home Affairs Ministry of the Republic of Indonesia No 86 Year 2017' that, in theory, must be adhered to. This regulation explains the planning, controlling and evaluation mechanisms of local development, mechanisms for designing the evaluation of local regulation for long-term plans, middle term plans, and mechanism of modification for long-term plans, middle-term plans, and local government working plans.

Figure 13 depicts the design development process behind a local government plan. Local government development plans have to refer to national and provincial development plans. National and provincial level of RPJP, RPJMD and RKPD can be translated differently by one

local government to others. The translation depends on the characteristic of every local government that can support to its national and provincial level of government. For instance, development plans in national production will focus on intensifying farming and its supporting infrastructure in agricultural area. However, the development plan can be translated differently in tourism area. The lowest level of development plan is a working plan from every local government agency. The working plan normally designed through *Musyawarah Rencana Pembangunan/MUSRENBANG* (Development Planning Multi-Stakeholders Consultation Meeting).

The mechanism of designing RPJPD starts from suggestions of many different stakeholders such as from NGOs, local community leaders, local government departments, and enterprises. They put forward their ideas, opinions, and wishes through *Badan Perencanaan Pembangunan Daerah/BAPPEDA* (Board of Local Development Planning). Then, ideas and opinions for this long-term development are brought to the local house of representative to be discussed with parliaments. After a decision is made, the plan is stated as local regulation.

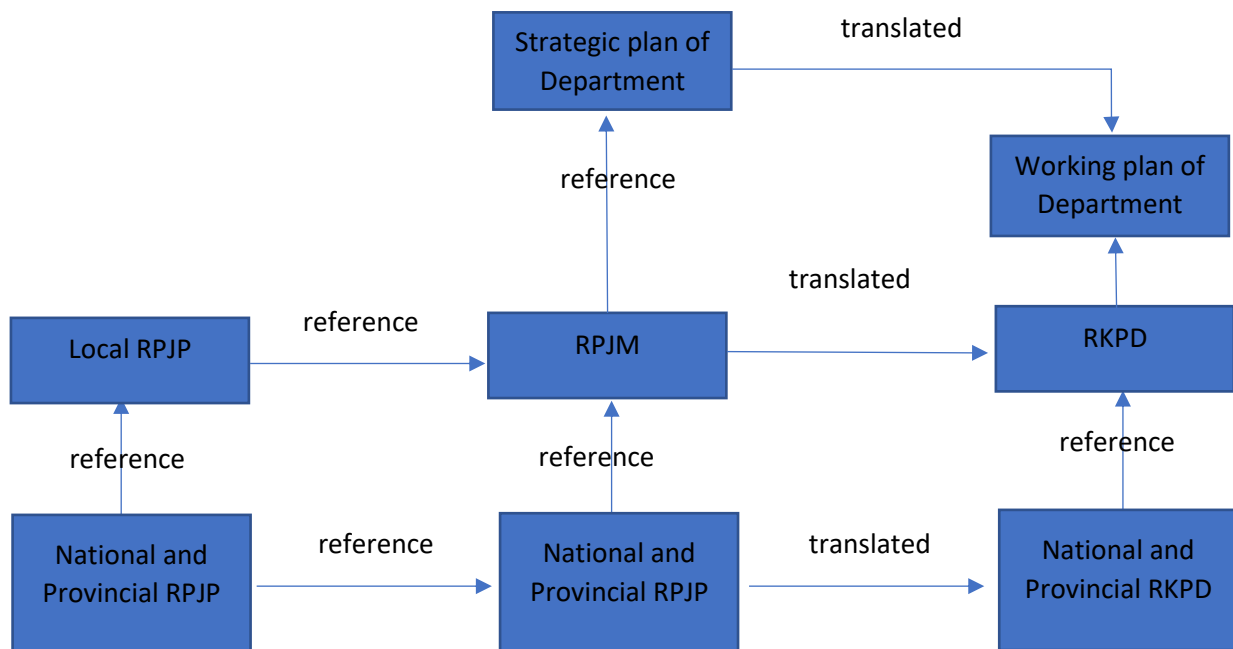


Figure 13: Flow of local development plan (adopted from Indonesian Law No 25 Year 2004)

The planning process appears rational and bureaucratic which is ideal for guiding the local

government to better performance since everything has been regulated (ranging from the design process, to controlling processes and evaluation mechanisms. There is a designed standard for every plan that enables control and measures achievement. Theoretically, the process of designing RPJPD is without interference from the current *Regent* (head of local government). The *Regent* has only 5 years in his position, based on the election process, whereas the RPJPD is for 20 years. This means that current RPJPD (2005-2025) was created a long time before the current leadership period:

*The RPJPD is created by referring to Rencana Pembangunan Jangka Panjang Nasional/RPJPN (long-term national development plan) and has no relation with the leadership of local government (local government officer of Board of Local Development Planning Garut).*

### ***Development Plan in Practices***

The RPJPD process and mechanism of planning process is different from the other two development plans (RPJMD and RKPD). The RPJPD is designed with reference to Provincial and National RPJP (see Figure 13). This is very rational and deliberately bureaucratic so as to create good governance practices. There is a process where accountability mechanisms are created hierarchically from long-term development plans up to yearly development plans. In practice, there are strong influences of executives and legislative for designing and modifying the RPJMD and RKPD plans. Current executives (power holders) translate RPJPD to five-year development plans (RPJMD) based on their own motives, which are often significantly influenced by political process such as political promises to constituents during campaign:

*There is ambiguity actually, when RPJPD is broken down to five-year context of RPJMD. This must refer to RPJPD but designing the RPJMD is influenced by direct election at local level which consists of political promise from elected leader. So, RPJMD is not fully a broken down from RPJPD. (Head Executive of Pusat Informasi dan Studi Pembangunan (PISP)/Centre of Information and Development Study)*

This situation also is confirmed by an executive of local government officer in the Garut Board of Local Development Planning;

*RPJMD is a five yearly plan which is a derivative of RPJPD but it is somewhat*

*different in depth because the RPJMD is more characterized by regional leadership. Yes, as well as in the national level, it is heavily influenced by the president. In fact, this is a bit ambiguous actually. uh..uh.. when RPJPD is cascaded to the five-year context of RPJMD should be the RPJPD is a main peg but because RPJMD is nuanced by a direct election process in which there is political promise of the chosen leader so that sometimes RPJMD is not completely as a reflection of RPJPD (Chief Executive Officer of Board of Local Development Planning Garut)”*

This is highly related to the accountability process that is created by the *Regent* to convince voters that the *Regent* keeps its political promises during campaign to its constituents. Failure to fulfill the promises may create distrust from constituents that can contribute to electoral losses.

There are several motives that trigger the *Regent* to put its interests in RPJMD. Firstly, the direct election process is costly; every candidate has invested a great amount of capital in their campaign. Candidates use ‘money politic’ by bribing community leaders or handing out money directly to citizens (Aspinall & van Klinken, 2011). Some candidates are backed by businessmen. They support the candidates during the campaign while in turn the candidates must pay in return in the form of projects or changing/modifying regulations which benefit the businessmen involved (Trihartono, 2014a). Secondly, *the Regent* mostly makes promises to citizens during the campaign. *The Regent* could make a social contract with citizens to convince that the promises will be kept (Sanit, 2004). This is a democratic process in which citizens could depose the *Regent* if he/ she fails to keep the promises. In turn, *the Regent* can abuse its power as an executive to design and modify the RPJMD to keep its promises. This was admitted by BAPPEDA of Garut:

*Here, there is a little missed or confusion because the long-term of 20 years, 2005-2025, yes for twenty years, although requirement of designing RPJMD has to consider RPJPD but actually this elected candidate creates programs in such a way that can attract voters so that many programs that are not in line with RPJPD (local government officer of Board of Local Development Planning Garut).*

The social contract in voting system of Indonesian politic is aimed to improve elected government’s performance. The social contract is made since human in the state of nature has fears

(as Hobbes stated in *Leviathan*). The contract consists of agreement between candidates of government leaders with voters. There is nothing wrong with the social contract and keeping campaign promises. However, this becomes a trade-off between keeping promises and following long-term plans. *The Regent* tends to ignore blue print of development to satisfy its certain voters. Fulfilment of promises during campaign is one of the ways to keep power being held since the promises will be used as a weapon for political rivals to attack or impeach *the Regent*

This can be clearly seen in the development strategy of every different leader, which tends to differ from that of the previous leadership. The elected candidate will implement their programs in line with their vision, mission, goals, and objectives. The RPJPD is translated differently to RPJMD. Strategies and approaches are different. This does not only occur in local level but in national level happens similar situation. For example, the previous president of Indonesia for the period of 2004-2014 programs focused on stabilizing citizen welfare by subsidizing petrol and *Bantuan Langsung Tunai/BLT* (Unconditional Cash Transfer) (world bank, 2012). This was aimed to stabilise the purchasing power of citizens. However, the current president (Jokowi) with his *Nawa Cita* vision focuses on maritime management, infrastructure development, food sovereignty, and sufficiency of energy as stated in RPJMD 2015-2019 (Government of Indonesia, 2015).

### ***Democracy and development plans***

From this evidence can be seen that there is a tension between bureaucratic and democratic process. On one side, the bureaucratic process is aimed at creating good governance which local government implements its policies and practices based on procedures and mechanism of development plan process. On the other side, the democratic process requires elected *Regent* to fulfill campaign promises. These two processes (bureaucratic and democratic) creates different accountability concepts. Bureaucratic accountability is created among government system without direct involvement from citizens. Although, there may be scrutiny from legislatives but this is more a political process that consists of bargaining between elected representatives and executives. Democratic accountability is more to direct performance measurement from citizens to executive. The head of local government (the *Regent*) is the one who will have direct impact from citizens for their performance because *the Regent* is in a political position, whereas departments in local government are administrative positions (directed by the Regent).

Currently Indonesia adopts direct elections where each person votes to elect a president, governor,

mayor, or *Regent*. Within this system, candidates must have significant capital investment to campaign. Some candidates come from business backgrounds, others are backed up by businessmen in a 'shadow bureaucracy' (LIPI, 2006). The candidates can use two legitimate pathways whether through political party support or independent pathway (*jalur independent*) (Government of Indonesia, 2004). Through political party support, they need to give some amount of capital in order to have support from political party elites (termed a political dowry or *mahar politik*) since they need a political vehicle to ride. They pay to party elites for approval as well as campaign costs (Trihartono, 2014b):

*A big amount of [money] as a condition to support makes "price" of each chair becomes expensive. Here, 'mahar politik' plays in candidacy. It mustn't be small money to get supported, although in a certain case the support is given for free* (BBC Indonesia, 2018)

This new paradigm of democratic process in Indonesia has had a significant impact on the development of local government planning processes, particularly in relation to budgeting. There are many interests from different parties such as businessmen, political parties, parliaments, law enforcers, civil societies, and NGOs to involve during the process:

*They are trapped in that patterns (planning). They are grouped in different sections with the system of equality in sharing the budget not to be based on functions of each department since they need to have projects in every section. Then, they will depend his programs in parliamentary session. There will be bargaining with members of DPRD (local house of representatives) to be approved. In turn, some amount of percentage from the program is given to the member of DPRD" (a chief executive of consultant company).*

If this budgeting game is identified by law enforcers, there will be another game played between law enforcers such as police or judiciary and suspect. There will be a negotiation between them.

*The hardship is not completed in that stage (planning), if the head officers are identified have problems, there will come from judiciary or law enforcers such as policemen and so on. This can be compensated by a project. For example, Mr. A\*\*\* is indicated involvement in corruption. He will be interrogated. During interrogation, there will be negotiation. Law enforcers would say: "rather than I investigate your case, I will save you but just give me a project"*

(a chief executive of consultant company).

Different roles are taken by NGOs. They play as successor teams of parliament members which in return they will ask for projects to the members if they are elected. These types of NGOs are normally social and political NGOs (Aspinall & van Klinken, 2011).

Interests among involved actors in designing and implementing development plans are very dominant. Actors may claim that their contributions in development plans are aimed for better services to citizens, but there is more to fulfill their interests and advantages for their groups or for individuals within their circle.

The three development plans (RPJPD, RPJMD, RKPD) are constructed very rationally. They are ideal for developing local government. They involve many different stakeholders including low level government organisation such as *kecamatan* (sub district) level and *desa* (village). Mechanism of plans are executed whether top-down or bottom up:

*The processes are still the same (long-term plan, medium-term plan, short-term plan) involving stakeholders. These are executed by participative, technocratic, top-down and bottom up approaches. These approaches are applied to design plans which are started from initial design then publishing to citizens then public hearing then public consultancy, there is MUSRENBANG (Development Planning Multi-Stakeholders Consultation Meeting) before it is stated as local regulation". (local government officer of Board of Local Development Planning Garut).*

Development plans are then manifested in programs. The programs will be suited to plans, however they do not always run as expected. Since the plans state general guidelines only, but the programs can be specified to be certain projects, there are opportunities for fraud because local government departments have freedom to execute budgets allocated to them. Here this is explained by a businessman involved in this vicious circle:

*There is a stealing or a hiding (from project). For example, there is a training project which needs equipment and accommodation. Accommodation can be marked up and equipment can be marked up too such as for t-shirt. Plans are faced to reality of budget allocation. The allocated budget of five billion can be for building or official travels or it can be for training. So, what a freedom for them (to allocate the budget). For example, a project title might be freely*



*decided such as in educational improvement program, the project detail will be decided based on to interest of department. The department will decide the project which benefiting to its member personal income. It decides to have book procurement project. So, it locks project specification such as the type, thickness, contents, etc. As a result, other companies cannot join procurement process since deadline has been stated when procurement is published (a chief executive of consultant company).*

Implementation of the development plans will need locations for its execution if they relate to physical development. For instance, a city plan provides housing for low-middle income citizens. The city will search for a suitable location for the plan. There will be many considerations before deciding the location such as accessibility, land price, and the most important part is allotment of land. The consideration of land utilization can be found in spatial plan regulation. The three development plans should refer to the city spatial plan.

Collaboration within local government system in three development plans has little contribution to creating better performance in creating good public services to citizens as a whole. This is caused by personal or group interest within government departments, executives, and elected representative. Involvement of non-government actors is more triggered by transactional motives. There are several types of accountability within this process. They are democratic accountability, administrative accountability, and political accountability. Democratic accountability exists between the *Regent* and its constituents. This is very personal to the Regent although its process crosses departments and agencies. Administrative accountability is manifested in the bureaucratic process of development plans that involves different level of local government executives. Accountability is judged based on fulfillment of requirements from predetermined policies. Administrative accountability is measured by higher position in hierarchical order. There is very little public involvement in this type of accountability. Lastly, political accountability is between executives and elected representatives. The ability of elected representatives to control executives is heavily influenced by economic motives. A lot of money is spent by elected representative to lure citizens into voting for them. This has triggered more corruption among elected representatives and executives. This can be seen from significant increase of corruption cases identified every year since 1997 based on publication of *Komisi Pemberantasan Korupsi Indonesia/KPK-RI* (Indonesian Corruption Eradication Commission) in 2018 (Indonesian

Corruption Eradication Commission, 2018).

Following these three development plans, there is another plan that is focused on implementing these three development plans. Those three plans will be executed in practice based on location and allocation of spatial in local government. This is called a spatial plan.

#### **4.3.2. Spatial Plan**

A spatial plan in the Republic of Indonesia is stated in constitution article 33 paragraph 3 Year 1945. This is followed by Law No. 26 Year 2007 about spatial plan (*Undang-Undang Penataan Ruang/UUPR*) (Government of Indonesia, 2007). The law exists to execute mandate for creating national territory space which is safe, comfortable, productive and sustainable based on the national insight and resilience.

Spatial plan is designed to control spatial utilization by systematic zoning system through zoning, permitting, incentive and disincentive, also sanctions. The sanction in this law can be in the form of administrative and criminal sanctions. The sanctions in this law are given not only to executors who violate the law but also to government officers who issue permissions.

This has been more than a decade since the spatial plan law was published, in which the law is expected to resolve spatial issues effectively. However, there are many spatial plan violation cases in the past which some of them have not been solved up to now such as in Aceh (Walidin, 2017), 2017), Surabaya (Aminah, 2017) and Jakarta (Surharyo, 2017). Problems are related to law enforcement issues and corruption (Jazuli, 2017). The law is expected to bring changes in spatial plan aspects. However, implementation of spatial utilization control faces many issues.

Local government administration is guided by Law No 23 Year 2014. Based on to this law, every local government in provincial level and regency/ city has authority and autonomy to manage its territory. In accordance to this, spatial plan serves as guideline for designing spatial usage based on its function and for issuing spatial utilisation permit. The law of spatial plan is intended to achieve development plans. It controls spatial utilisation and it urges government to work in integrated manner across all departments in accordance with every department duties and functions in the spatial field.

However, the lack of coordination in the control of space utilization creates a low degree of integration in spatial plan since spatial arrangement is cross-cutting, cross-regional, and cross-stakeholder. Sectoral ego among government agencies often becomes a trigger for ‘controlling

issues' in spatial utilisation. Different interests and motives of each institution and department become main factor causing sectoral conflict. The sectoral conflict across institutions occurs because of this sectoral ego. For instance, the spatial plan law No 26 Year 2007 and Forestry Law No 41 Year 1999 conflict in local government arena. On one hand, the spatial utilisation permit for the forest exists in the forestry law Article 1 paragraph 3 : *“The forest area is designated and or set by the government to maintain its existence as a permanent forest”* (Government of Indonesia, 1999b). If land conversion for any other business such as mining, industry, and so on in forest area, it needs permit from ministry of forestry. On the other hand, land utilisation permit can be issued by local government. Spatial plan Law 26 Year 2007 article 26 paragraph 3 states *“Spatial plan in local government is a foundation for issuing permit”* (Government of Indonesia, 2007d). These two laws may cause jurisdiction conflict which in turn will resist law enforcement for spatial plan in Indonesia.

Cross sectoral conflict can be reduced by analysing and understanding definition of space and spatial. This might refer to spatial plan law article 1 point 1: *“Spatial is a place that includes land, sea, and air, including space on the land as a single territory, the place for mankind and other living beings perform activities and maintain their living”* (Government of Indonesia, 2007d). From this definition can be understood that sectoral regulations or laws must be in line with the spatial plan law. Having said that, any violation in spatial utilisation should be sanctioned using spatial plan law since spatial plan is a spearhead for development.

Spatial plan in local government level refers to the spatial plan Law No 26 Year 2007. In local government, the spatial plan is called *Rencana Tata Ruang Wilayah/ RTRW* (Spatial Plan). The spatial plan becomes *peraturan daerah/PERDA* (local government regulation) in local level. The regulation of spatial plan is crucial for development in local level since all three development plans will need spaces if the plans relate to physical development:

*RTRW is actually a macro policy which is a masterplan. If RPJP relates to programs and RTRW is more focused on spatial context. So, RTRW is a space for activities. For example, there is a program of economic development in farming, it will search location for the farming. When we talk about RTRW, it is about space and it is about container (for the program), RPJPD talks about content. So, there are two equal sides, RTRW talk about space, about*

*container for activities and RPJPD talks about activities (local government officer of Board of Local Development Planning Garut).*

Development plans and spatial plan are mutually dependent. Development plans describe policies and programs, the policies and programs need spatial which is accommodated by spatial plan. Local government spatial plan might not be as an independent development planning. It should refer to higher level of spatial plan. Regency/municipalities spatial plan must refer to province's spatial plan, province's spatial plan must refer to national spatial plan (Figure 14).

Figure 4.2 depicts relationship between the levels of spatial plan and its entities. National spatial plan covers all territory in Indonesia. This is as the highest level of spatial plan which consists of all islands in Indonesia and national strategic territory spatial plan. One island spatial plan covers all provinces in the island. For example, Java island covers six provinces such as Capital of Jakarta, Banten, West Java, Central Java, East Java, and Special region of Yogyakarta. The national spatial plan becomes reference for national strategic territory plan and province spatial plan. National strategic territory spatial plan refers to island spatial plan since the location of this spatial plan will be one certain island. This hierarchical spatial plan goes downwardly to regency/ city level. Spatial plan detail of regency/city is spatial plan at district level, which is the lowest spatial plan. It usually covers several villages/cities. However, local strategic territory spatial plan is plotting certain area for development within a regency.

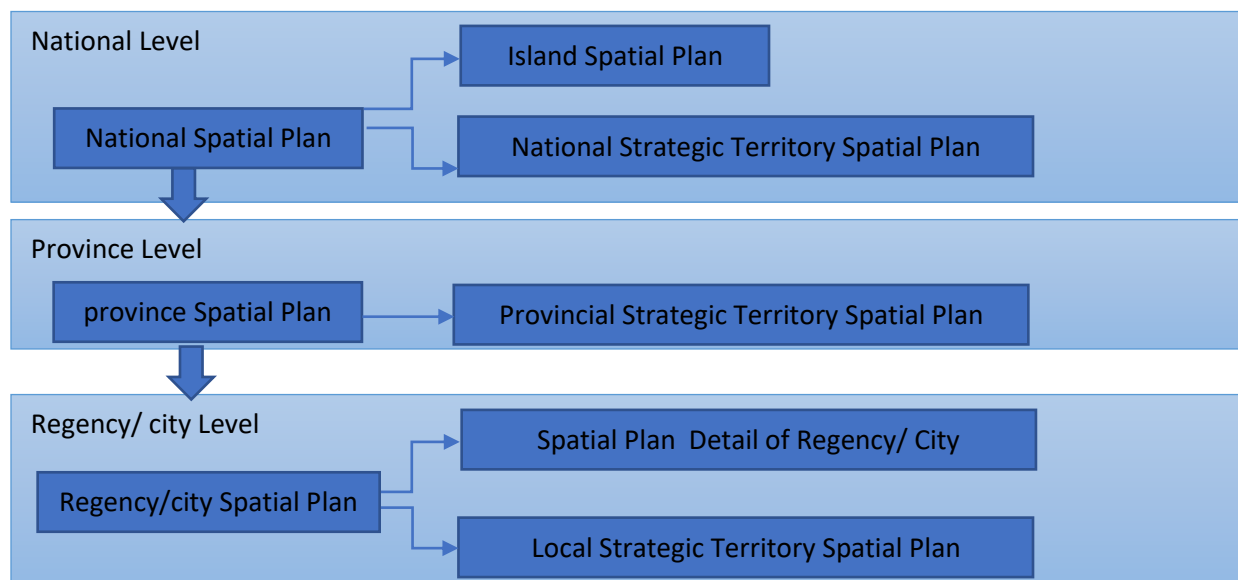


Figure 14: Spatial Plan Hierarchy (Adopted from Spatial Plan Law No 26 Year 2007)

The spatial plan hierarchy above (figure 14) seems rational and ideal for implementation of the three development plans described earlier (section 4.2.2). This is aimed to contribute to good development. In a disaster management context this spatial plan is expected to mitigate or prevent harmful effects to citizens from many kind of disasters. However, the spatial plan has not been practiced as it is stated in Law No 26 Year 2007. There is extractive economic motives from local government for its development with little concern to disaster mitigation (see section 4.3).

#### **4.3.3. Government, Citizens, and Stakeholders in the Plans**

As explained in the previous section, development plans and spatial plan are inter-related and mutually dependent. In addition, both plans are mandated to be integrated by National Development Plan System Law No. 25 Year 2004 (*Undang-Undang Sistem Perencanaan Pembangunan Nasional*) as well as Spatial Plan Law No 26 Year 2007. Spatial plan must refer to long-term development plan and spatial plan also must become a guideline for long-term development plan (Rudiyanto et.al, 2015). However, Rudiyanto et.al (2015) claims that the plans sometimes conflict and contradict one another. It occurs since there are conflict of interests among sectors and actors and there is no clear technical guidelines for synchronising at local level.

The design processes for temporally different development plans (long-term plan, medium-term plan, and short-term plan) differ. In local government contexts, the design process of development plan will be led by *Badan Perencanaan Pembangunan Daerah/Bappeda* (Board of Local Development Planning) but it works collaboratively; involving local government bodies, citizens and private businesses (Bappenas, 2016). The RPJPD consists of local government vision, mission, objectives and goals which refers to *Rencana Pembangunan Jangka Panjang Nasional/ RPJPN* (national long-term development plan). The RPJPD must be renewed a minimum of one year before it expires. *Bappeda* prepares draft of RPJPD before conducting *Musyawarah Rencana Pembangunan/ Musrenbang* (Development Planning Multi-Stakeholders Consultation Meeting) which refers to RPJPN and the current RPJPD. The draft of RPJPD is discussed during *Musrenbang* with multi-stakeholders such as professionals, bureaucrats, military, police, lawyers, academicians, community leaders, politicians, NGOs, business enterprises, and so on. Based on this result, *Bappeda* will make final draft of RPJPD before it is stated as regulation by regional representative council. The process is cyclical since the current RPJPD, which is close to expire,

will be used as a reference for the next upcoming RPJPD (see Figure 15).

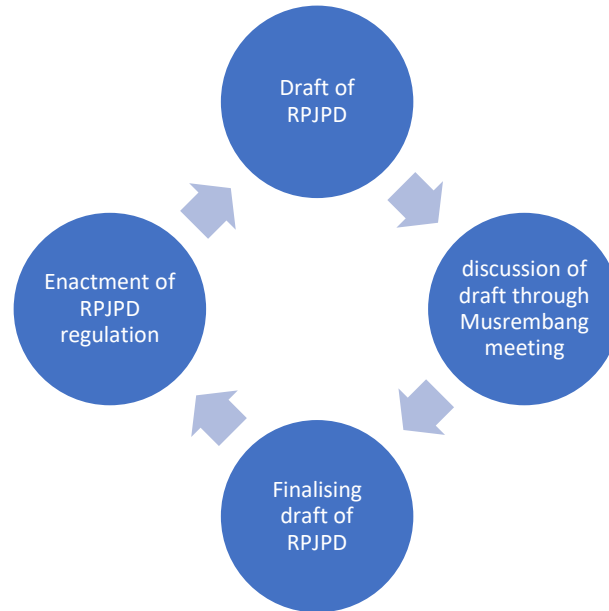


Figure 15: The process of designing RPJPD

*(Source: adopted from National Development Plan System Law No. 25 Year 2004)*

The design process of two other plans (RPJMD and RKPD) also have similarity. They are prepared by government entities and discussed through *Musrenbang* before they are enacted as local regulations. However, this is different from the design of spatial plans. The spatial plan is outsourced to consultant. The consultant can be a professional in development or an academic. The similarity with development planning is involvement of multi-stakeholders during the process. The process is rationally prepared to accommodate all stakeholders' needs since they are involved in process. They can put forward their ideas, opinions, strategies, expectations and objections to the draft during *Musrenbang*. It is a model of planning which adopts a bottom-up participative approach (Suherman & Muluk, 2008). Local government might know hopes and expectations of stakeholders and citizens in general:

*It involves every element of society. It starts from sub-district level. When the public hearing taken place, we start public consultation from beginning of musrenbang in district level and then it goes to regency. So it is different with the annual planning of musrenbang starting from the village level...so we consult the public starting from the sub-district level then enter the district*

*including other element of stakeholders* (local government officer of Board of Local Development Planning Garut).

Nevertheless, mostly it does not run as stated. In practice, development plans designers will refer to spatial plans. The spatial plan is designed by consultant who normally does not have enough knowledge about an area. Most of them come from a big city, and are not local consultants. They learn and analyse area based on literature and documents, but they know little about what is happening and the real situation. This creates somewhat dodgy development plans:

*Normally, it starts referring to spatial plan, sir. But it is a little bit unique because RTRW is often revised. I had an experience when I made masterplan for fishery area. So, I had to refer to RTRW. Data in RTRW showed that region with abundance of fish was in Bayongbong, eh.. Sukawening but this data from RTRW did not suit to fact. So, if we use RTRW as reference is not possible technically but if I use factual data it does not fit to RTRW. We face two choices, we chose violate (RTRW) but we are right or we follow RTRW but we lie? he..he..he...dilemma* (a chief executive of consultant company).

In addition, bottom up participative approach seems to be just lip service. Government shows that it accommodates people's voices, but their decisions sometimes are according to what have been voiced by citizens.

As stated in the law of spatial plan, violation of RTRW will face consequences. Consultants have no choice in their job. It becomes pragmatic for consultants since they must refer to RTRW otherwise it is violation of law. According to Spatial Plan Law No 26 Year 2007 Article 69 paragraph 1:

*Criminal sanctions for people who do not adhere to a predetermined spatial plan which results in a change in spatial function is a maximum of 3 (three) years imprisonment and a maximum fine of Rp. 500 million''*(Government of Indonesia, 2007b).

The consultants will ignore their conscience to avoid consequences. As a result, some development plans are useless and cannot be adopted for programs. If the plans are implemented, they might not create good result for an area.

Consultants come from professional group such as academicians and Consultant Company, but are government funded. As a result, they will follow orders from funders. They will show to

government and citizens that they are professional and capable to do the jobs. They know that they report to laypeople but the reason for consultants to use scientific terms is that the consultants want to show their professionalism:

*That is difficult for citizens to criticise...yes, there is an exposure. Local people are invited to attend the exposure then they come and there will be discussion to put forward questions and they will be answered and finish. When they want to go home they will be given envelop (money). So, it rarely gets to detail such as FGD (focus Group Discussion) or until the issues are identified or until issues in society identified. Participants (stakeholders) are only listeners. Listening which is without asking and criticising. So, it is one way. For example, such a lay person faces table graph, colourful maps on the design of a cool presentation. How can they criticize? (a chief executive of consultant company)*

Some citizens attend invitation with a feeling of pride since the invitation is sent only to specific group of citizens or stakeholders. They feel that they are important group of people because they are invited to discuss the future of the local area. Furthermore, they will get incentives for their attendance. Citizens come from different education backgrounds and occupations. Some of them will find difficulties to understand the plans. In the worst cases, their attendance is just a formality and only a tool to legitimise a development plan.

The main purpose of *Musrenbang* is to create local development, welfare and community autonomy based on citizens interests. This is a mechanism to show that government is transparent, open, responsible and democratic (Suherman & Muluk, 2008). The spirit of *Musrenbang* is a dialogic forum which is participative with bottom up and top down approach. Practically, this is not always easy since capacity and capability of citizens are different from one region to others. For instance, the citizens who live in the city with better education and more information might have better capacity. However, citizens who come from low income with low education and live in villages and rural areas might have less initiative during discussion:

*...bottom up or top down process depends on capacities of citizens. If citizens are low capacity and less initiative so top down approach must be executed by bureaucracy but if citizens are smart with full of innovation and inspiration so bottom up can be important, indeed, it is more applicative, and it can lead*



*for better. Ideally, both should exist. (academician)*

There are many conflicts of interest, political motives and other obstacles too. The draft of plan is designed by *Bappeda*. Although it refers to other higher-level plans and previous plan, *Bappeda* can put its interests in this draft. The consultant could direct stakeholders and citizens to follow what it has been formulated:

*It is normally formulated by Bappeda, what we call involvement is attending during exposure since all consultant works must have exposure...in preliminary report, we talk about methodology, talking about how the steps are. For instance, Mr. M attend the preliminary report. A consultant discusses about regional development using local equation approach. The consultant convinces that approach will result a good thing. (a chief executive of consultant company).*

The conflict of interests is usually in designing programs. The programs are created based on different sources. Program design is created in RKPD (short-term plan) process. This includes budgeting for the programs. The program design sources are from different inputs:

*...there is an approach based on project from consultant, there is input from the Regent vision and mission, there is input from Bappeda, one more thing is input from bottom that is from musbangdes (village development multi-stakeholders consultation meeting), musrenbang of sub-district, musrenbang of council. The fifth input is from department. The sixth is from aspiration from parliament (a chief executive of consultant company).*

Parliaments have budget rights in the form of aspiration budget. The budget rights may result in longer process of local budgeting plan because of negotiation between the parliaments and executives. Executives may use strategy by offering flexibility of aspiration budget to parliaments since they have that budget rights.

Intervention from parliaments is strong because parliament has budget rights. Parliaments sometimes propose programs that are not in line with development plans and *musrenbang*. They might have political motives to share projects to their constituents and attract voters. Another motive is financial motive for personal purposes:

*...the problem is political situation where politically legislators design budget aspiration with their function as institution is different between central and local government. Normatively, executives are stronger power with their regulations but, practically pressures from legislators by intimidation, hard ways and other ways... in local government, groups and negotiations are in secrets. Politicians close to executives in secret which in turn they can intervene policies (academician)*

The executive of local government is headed by the *Regent*, who attains their political position through democratic elections. There is another power in local government as the leader of civil servants which is called the Local Secretary. In disaster management, The Local Secretary is *ex officio* of the head of BPBD Garut. The head of BPBD is a policy maker for disaster management in local government and a coordinator for the integrated disaster management systems. The position of Local Secretary as the head of BPBD has advantages and drawbacks. As the head of all local government agencies and departments, it enables the Local Secretary to command and coordinate across a range of local government agencies. The Local Secretary has a power to create policies such as budgeting allocation for disaster management programmes. However, the Local Secretary has limitation in capability and capacity of disaster management. The Local Secretary has failed to accommodate disaster management programmes in development plans (see section 4.2.1)

The Local Secretary, as the head of BPBD Garut, is assisted by a chief executive. Based on local regulation of Garut number 7 Year 2011 article 12, the chief executive of BPBD's job duties and functions are as coordinator, commander and executor (Local Government of Garut, 2011a). These functions do not happen or they are limited to be practiced:

*...this is our weakness; our weakness is limited in coordination whereas one of BPBD functions is coordination function. For example, if there is a collapsed bridge, I can't order head executive of PUPR/ Pekerjaan Umum dan Perumahan Rakyat (Public Works and Public Housing) to fix it because we are at the same level in government hierarchy. (Chief Executive of BPBD)*

The Chief Executive of BPBD could easily avoid its responsibility as a coordinator and a commander by a reason that it has a limited power in executing duties. These functions are relevant for the Head of BPBD (Local Secretary) although the functions are too technical for a police maker

such a Local Secretary. Ideally, there should be clear coordination between the Head of BPBD and the Chief Executive of BPBD. Based on my finding, Head of BPBD is incapable of transferring its power to Chief Executive of BPBD because the Chief Executive position in local government hierarchy is at same level as other agencies.

All in all, local development plans and spatial plan are a rationally good opportunity for local government to mitigate disaster because they have clear phases from long-term of 25 years to annual development plan. These plans could anticipate unexpected disruption from flooding. But it does not work well since there are many conflicts of interest from political positions such as member of parliaments, the Regent, and agencies.

There are some practical issues which needs consideration regarding development plans and disaster management in Garut. These issues are explored in the next section.

#### **4.4. The Plans and Natural Disasters**

As discussed in the previous section, the planning process of local development plans and spatial plans face many conflicts of interests, interventions, and abuses of power. As a result, planning might become formalistic routines for fulfilling laws and regulatory demands. In a narrow context, mismanagement in spatial plans tends to create natural and environmental damage. Repeated flooding hitting a city is one of the consequences from mismanagement in development plans and spatial plan. The most significant contribution of mismanagement in the plans is land conversion. Land conversions occur in areas near the city of Garut, rural areas, and forested areas near the upper stream of rivers in different forms of conversion such as farming, tourism, and factory.

##### **4.4.1. Land Conversion from Farming to Housing**

There have been many developments of new housing around Garut. Since the city of Garut has limited space for development of new housing, the developments are executed in nearby areas, which are mostly farming areas. Land conversions from farming to housing surrounding Garut contribute to resistance of water absorbance by soil since the surface is blocked by concrete. Water run-off flow directly to drains and some of the drains go directly to brook but others go to drainage system on the side of street. Again, there is another problem of drainage system on the city. If the drains are not too narrow and shallow, the drain is blocked by litter from street. It is described by Head of FK3I/ *Forum Komunikasi Kader Konservasi Indonesia* (Communication Forum of Indonesian Conservation Cadre) :

*There might be intolerance of development itself where there should be more water absorption area, but the fact is that growing housing development. What I mean by this is water from raining is not absorbed by soil because a lot of concrete floor, the water goes to narrow drain and the drain is blocked by litter from human activities. Because of high density of water, the water goes to surface and return to housing and becoming flood. (Head of FK3I).*

Local government has regulation for housing. There are terms and conditions before issuing permit; such as environmental impact assessments. However, most implementation is not like what housing developers propose on paper to government. There is an issue of control since developers (can) use their money for bribery. Local NGOs insist that most new housing developments ignore their own environmental impact assessments:

*developers should provide housing which is environmentally friendly where there should have many water absorption area. It can be engineering water absorption or more ideal drainage system (Head of FK3I)*

Housing demands are very high in a developing region like Garut. Some housing areas are prepared for local citizens settlement, but some of them might buy more than one house for investment. There are many properties owned by people from neighbour cities such as Bandung, Jakarta, Bekasi, and Tangerang. Travel time is about 4.5 hours from the farthest city to Garut. There has been increasing numbers of tourist visiting Garut - up 50% since 2010 (faisal R, Darsiharjo, & Miftah Wirakusuma, 2016) – due to its natural tourist attractions. This makes people from other cities invest in property in Garut:

*housing is a basic need but when investor comes, sometimes it is not a need for society but need which is created by investor (town planner)*

Land conversion can be easily executed if it does not violate current spatial plan regulations. Executives and legislatives play their game; they will revise spatial plans before issuing permits for land conversion. Most of land conversions occur in farming area. The executives will issue permit for housing, mining, tourism or industrial plants. There can be a crime during a process of permit. Business owners can bribe executive or legislatives for the permit:

*This housing area is close to city. It was a farming area. At the beginning I proposed for land conversion to BPMPT (Badan Penanaman Modal dan Pelayanan Terpadu/ Board of Investment and Integrated Services). My*

*proposal was not approved. I asked my colleague to sort this out. He told me that I need to provide three hundred fifty million rupiahs in cash and send the money to Mr.X. A few days later I was called by them to expose my housing project plan in front of several related institutions such as agricultural department, BPMPT, local secretary, water resource and mining department, and Bappeda. There were several questions and answers, but I think it was just formality (housing businessman).*

The case of this land conversion from farming area to housing is caused by inconsistency of data from two departments; *Bappeda* (Local Spatial Plan Department) and *Dinas Pertanian dan Hortikultura* (Crops and Horticulture Department). Based on information from a housing businessman that his experience in proposing housing permit was blocked by different data being used by different department:

*He (head of local spatial plan department) said that was fine with the area since based on RTRW the location was not green but yellow area. However, Crops and Horticulture Department stated that the area cannot be converted to housing (housing businessman).*

Though, he could get the permit after giving money to a government officer close to the *Regent*. Probably, this is just a trick to get money from the developer. During my field work, the case could not be verified whether the money was handed to *Regent* but the result was his housing permit was issued. As a town planner stated:

*RTRW, which should be a guideline in development process, but it is sometimes violated and any violation of RTRW has never been firmly dealt and it is processed to a court. It is quite rare for us to hear violators of the RTRW imprisoned or tried through legal mechanisms. The consequence is generally only in the form of fines and that too may be negotiable (town planner).*

The land conversions have occurred in forest areas and on hills which near to the city of Garut. The city of Garut is surrounded by mountains and there are several hills in the area. One location on the top of Mount Putri was a forest which was converted to dairy farming.

#### **4.4.2. Land Conversion from Forest to Farming**

This is another government policy of land conversion claimed by local environmentalists to

significantly contribute to urban flooding. Garut local government issued a permit for dairy farm PT. Raffles Pacific Harvest. The farm is located on the top of mount Putri (Figure 16). The area was claimed as customary forest by *Dinas Lingkungan Hidup Kebersihan dan Pertamanan/ DLHKP* (Environment and Gardening Agency); the 72 Hectares covers 5 villages (Lovita, 2017). Based on my own observations, the farm used to be a forest that slowed the pace of water run-off upstream of Garut. One local government officers stated that *“that is what on the top of valley is owned by perhutani and some parts owned by citizens. Of course, there will be an environmental impact assessment and so on before issuing permit”* (government officer). However, it can be observed clearly the environmental destruction caused by this dairy farm. The dairy farm area is on the top of the mountain covering 72 hectares; the clearing of the forestry has reduced the capacity of the soil to absorb water during precipitation. Thus large amounts of water flow directly to lower levels (i.e. Garut). Additionally, opening a new road to the farm has produced increased deforestation by opening new horticulture around the mount (see two figures of Figure 16)

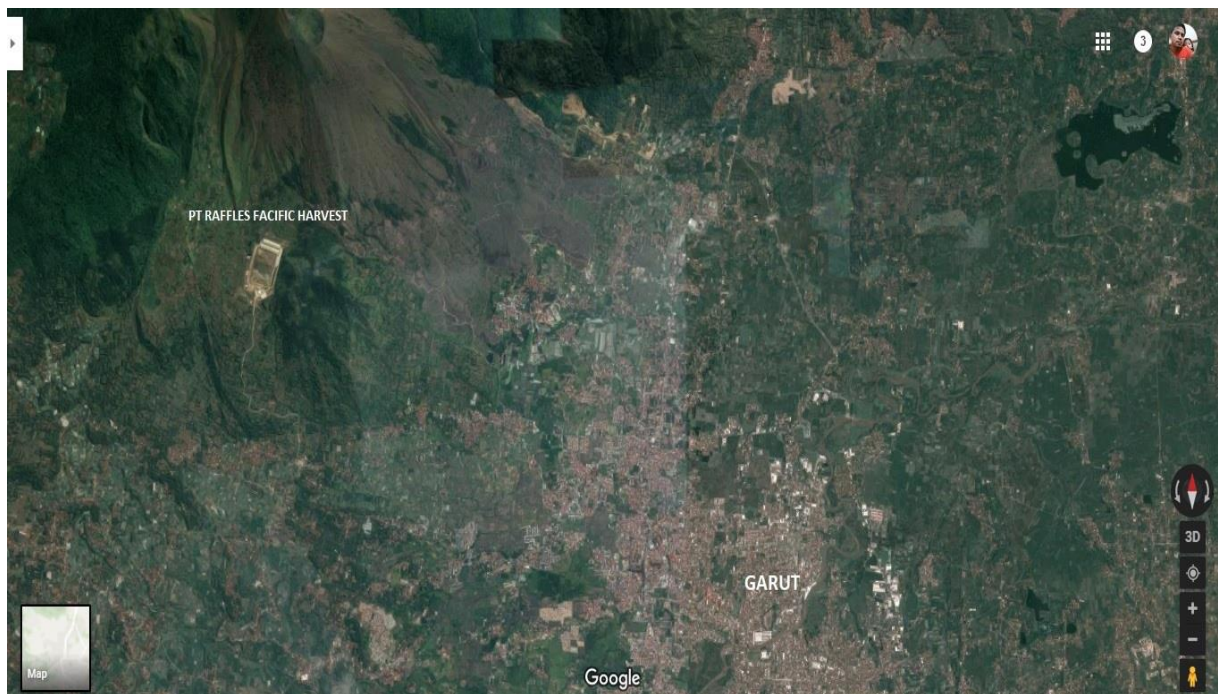






Figure 16: Dairy Farm location (PT Raffles Pacific Harvest) on the top of Mount Putri just above city of Garut. The top image is a map of location from above and the bottom image is a closer image which shows the environmental damage caused by the farm

(image source: *google map, accessed 4<sup>th</sup> August 2018*)

There is a sectoral ego in Garut local government departments. Each department has its own technical map data, and little willingness to share this information with other departments. Moreover, when I tried to access some data, one officer said that the map is not for public perusal. Basically, technical maps refer to spatial plans. There is no policy to integrate this technical map from all departments. This information should be open access and citizens who need should be able to access this information. The current situation is that there is a problem with data transparency at the local level although there is a law for public information transparency No 14 Year 2008. In practice, many local government departments still classify some information. Citizens who need to access the data should go through bureaucratic process. Some data and information are published on local government websites but most data and information are out of date and only certain data gets published on this website (Government of Garut, 2018). This has become a ‘public secret’ that there is classified data:

*What I know is that technical map is precious and becomes privacy if it relates to valuable location. This is controlled by certain officers in government (academician).*

Thirdly, land conversion occurs in rural area or in the forestry area. Firdian et.al (2010) found that

land utilization in several areas of Garut does not fit to spatial plans. Land utilization in upper stream will have effect to lower stream of the area (Firdian et al, 2010). Land conversions are not all illegal when conducted by local governments. The roles and conduct of citizens and businessmen in land conversions are also important. Several citizens who live in rural area open new farming area because of economical motives. Most of them are low income families and they open new farming area to survive. They have opportunity to solve their financial problem by joining government program in community-based forestry program. However, most of their farming process is different from what has been agreed mostly. They prioritise personal motives beyond environmental protection.

Indonesian government created the Law No. 41 about Forestry in 1999 (Government of Indonesia, 1999c) The law was followed by ministry of forestry released regulation of community forestry program in 2007 (Ministry of Forestry, 2007). The regulation then became foundation for *Perum Perhutani* (state owned forest enterprise) to create *Pengelolaan Sumberdaya Hutan Bersama Masyarakat/ PHBM* (Community Based Forest Management) program. Land is owned by *perhutani* but community can utilize the land with profit sharing mechanism. The program is ideal to help community and protect forest around villages. *Perhutani* creates terms and conditions to join the program. The program aims to cultivate the forest with *tumpang sari* (agroforestry). *Tumpang sari* method obliges community to plant trees around crops. Practically, it does not work as stated in the terms and conditions:

*Actually there is agreement between community and Perhutani, but when there is misappropriation Perhutani does not do anything.* (Head of NGO).





Figure 17: Forest degradation by farming in upper stream of Cimanuk River

Local government can revise the spatial plan if it is needed. This depends on current situations and conditions. For instance, the 2016 Garut flash flood made *Bappeda* initiate revisions to spatial plans:

*...the revision of RTRW to control spatial utilization along the river and upper stream land rehabilitation is included in the planning content. (local government officer of Board of Local Development Planning Garut).*

This revision opportunity might create opportunities for businessmen/ corporations to force local government to revise the plans in line with their interests by using their money:

*Since local government power to manage is only for 5 years period, based on election model, there might be negotiation with investors. (town planner)*

Investor could have a license for development of housing or building in an area which is not allocated for such development. This occurred on riverside land in Garut. This led to worse flooding. The development of the riverside which cross the city did not follow the regulation of Ministry Public Works and Public Housing No 28 Year 2015 which stated that building must be 10 meters from river point but there are building which is built just above river (See Figure 18). The local government of Garut clearly issued the permit for development of building without concern to national level regulation.



Figure 18: Top image shows development of shopping centre in town which seems to violate regulation. Two bottom images show a protest executed by a local NGO (FK3I) about development of shopping centre.

*(image source: documents of FK3I)*

There were several efforts conducted by local NGOs about the development of a shopping centre, They petitioned *Dinas Lingkungan Hidup, Kebersihan dan Pertamanan/DLHKP* (Environment, Hygiene, and Lanscaping Agency) for a public hearing. They protested by conducting strike and putting a banner ‘SALAMETKEUN CIMANUK’ (SAVE CIMANUK) next to the shopping centre. However, their efforts seemed useless since there was no change to the development of the shopping centre. There was a local group of bodyguards which protected this development and subsequent operation. The shopping centre now operates although it still leaves many issues. Local NGOs seemingly did not have the power to fight this violation. Environmental issues of Cimanuk

River occurred in its conservation too.

#### **4.4.3. The River Conservation**

There is an issue of coordination among local government agencies for river Cimanuk conservation; the River Cimanuk crosses many different areas. At the head of the river, it is mostly a forest conservation zone. This is mostly followed by ‘production forest zone’ which is managed by *Perhutani*. Following these two forest zones, there will be a farming area and then urban settlement. Each zone is handled by different agencies.

River Cimanuk conservation is under provincial level authority. It is managed by *Balai Besar Wilayah Sungai Cimanuk-Cisanggarung /BBWS* (Cimanuk-Cisanggarung River Basin). The BBWS *Cimanuk-Cisanggarung* organisation has the responsibility to preserve, utilise and protect the river. In doing its functions, the BBWS have to facilitate coordination among agencies at local levels. The BBWS aims to empower community also in managing water resources such as river. However, there are many issues in practice. BBWS is a government organisation at the provincial level, however some of its policies are created at provincial level but with minimum involvement from local organisations and community. For example, the reconstruction of parts of the river embankment was executed by a national company with only the very minimum of local government and community involvement in the process:

*their location [office] is in Bandung and Jakarta. They didn't know situation about locations. We facilitate them to coordinate with head of district and sub district. We become a guide to show them locations* (Head of BPBD)

In turn, this resulted in ineffective and inefficient programs. Provincial and national government mostly execute programs with only a minimum understanding of local characteristics. Additionally government agencies often execute programs through private enterprises by tendering mechanism; which provides ample opportunity for corruption. This is borne out with statistics, 80% of corruption cases in Indonesia is in procurement of goods and services (Movanita, 2017).

A large amount of budget has been allocated for Cimanuk River conservation every year. For instance, there was allocated 138 billion rupiah in 2018 for maintenance only (Ministry of Finance, 2017). There is lots of money distributed for river maintenance and conservation to other institutions such as *Dinas Lingkungan Hidup, Kebersihan dan Pertamanan/DLHKP* (Environment, Hygiene, and Landscaping Agency) for the reforestation of riverside. Reforestation

program in conservation zone is distributed through *Balai Konservasi Sumber daya Alam/BKSDA* (Natural Resources Conservation Agency) from Ministry of Forestry:

*We are an organisation which is directly under ministry of forestry. Our operations are funded by the ministry.* (Head of BKSDA)

Implementation of this mitigation or prevention program for flooding seems to be partially visible in every organisation in government. Firstly, there are three different level of government with responsibility for different functions (national, provincial and local level). BKSDA works under the authority of the national level ministry of forestry. BBWS is responsible for maintenance of river such as embankment programs, irrigation, and water flow normalization. BBWS works on behalf of provincial levels of government. At local level, DLHKP works under authority of the *Regent*. Secondly, there is a BPBD but it does not get involved in river conservation although mitigation is a part of BPBD duties. Although there is a great amount of budget allocated for river *Cimanuk* conservation, it could not overcome repeated flooding to city.

The three situations above (two land conversions and river conservation) show that government designing plans related to mitigation might lead to repeated flooding because each government agency worked and had responsibility only for its own activities. Government had created development plans and spatial plans for city but the plans were not executed holistically with all involved actors communicating openly. The plans were aimed for citizen welfare and development but seemed to ignore flood prevention.

#### **4.5. Plans and Disaster Mitigation**

Coherent plans are crucial for disaster prevention and mitigation. Local government has a significant role for implementation. With the power it has, local government can design or revise current regulation. If government officers work professionally and responsibly, a flood can be mitigated. Of course, local government should involve other actors in planning. Communities, professionals, NGOs, and other related actors will have significant contribution if they are facilitated properly.:

*Spatial plan is an instrument of spatial utilization which of course very important to protect environment from potential natural disaster, spatial plan manages conservation space, cultivation space, and development space* (town planner).

Communities have valuable knowledge to preserve their living environment from generation to

generation. Modern spatial plan design that ignores local wisdoms has contributed to natural disaster:

*What I understand from tracing to our ancient, our ancestors responded to natural disasters by marking vulnerable spots. So, when we talk about natural disasters, although in Sundanese culture we do not recognize natural disaster, there has been change in cultivation pattern and housing pattern which are not well-managed, so natural order is influenced. Therefore, we are difficult to detect natural sign since the signs are gone (local community leader).*

A concept of accommodating local values and wisdom has been stated by Riggs (2006) about prismatic society; this is being lost in adopted modern public administration in Indonesia, and specifically in Garut. There is a local government development duty to find win-win solution between short-term economic interests for citizen welfare with long-term environmental management which in turn will create better life and better environment.

*Old period had no RTRW, but communities through their understanding from generation to generation managed their territory locally, for example in Sundanese community in West Java created zoning area for spatial because of generation to generation, the local knowledge has generally been tested and there always be revision from generation to generation (town planner).*

Before government interrupted ancient forest management systems that were implemented by local communities, the community managed the forest with consideration of safety and local welfare. However, since government has started claiming forest possession, there is perturbations and distortion especially when the forest has high economic value. A new concept of forest management may not have been proved for conservation, but it might make sense economically. Professional and NGOs such as academicians and environmentalists understand current conditions. They need to contribute their opinions on how to design and plan to prevent natural disasters. Their contributions should not only be in the form of formalistic invitation to attend *Musrembang* but they should be accommodated throughout the process from conceptualizing plans up to monitoring. Local government can be a leading sector for planning process, but this must involve other related actors holistically for all process. For instance, local government has made conceptual revisions learning from the 2016 flash flood. This must be done by discussing, consulting and engaging other actors during the process of planning:



*We have strategic plan for disaster such as spatial plan revision for controlling spatial utilization along the river, rehabilitation area in upper-stream also included in the content (local government officer of Board of Local Development Planning Garut).*

Businessmen and their investments are good for region development and economic acceleration if they are regulated and controlled during implementation. Local government has central position to execute this. Local government has its power and authority on behalf of citizen:

*Investors propose permits to local government or central government. Here, although local community refuse them, if government gives them permit so spatial plan can be negotiated for economic benefit (town planner).*

Investors are profit oriented in general and they sometimes ignore the negative externalities of their business in generating more profit. On the other side, executives and legislatives are easily lured by financial offer from businessmen. There are many cases of corruption in Indonesia which involve businessmen and government officers or parliament members:

*Komisi Pemberantasan Korupsi/KPK (Corruption Eradication Commission) states that about 90% corruption cases occur because of collaboration between businessmen and power holders (CNN Indonesia, 2016).*

This fact is insisted by the town planner:

*Negotiation potentiality is open widely since permits are issued by government, meanwhile public participation does not work effectively (town planner).*

This might occur because of minimum of public control. Legislatives who are expected as a control body seemed to fail to play their roles. Most of them are still trapped by the vicious circle of election processes which requires a great amount of financial capital (Rumesten RS, 2014).

Clearly, plans which rationally could prevent flooding have failed their primary functions. From a government perspective a trade-off exists between economic development and disaster prevention; this is further discussed in the next section.

## **4.6. Actors Contribution for Mitigation**

### **4.6.1. Government and Non-Government Contributions for Mitigation**

Mitigation processes manifest in different forms whether they are executed by government or citizens. The local government of Garut is expected to include disaster risks reduction in their

development plans as mandated in the Indonesian Constitution No 24 Year 2007. Mitigation based development plans can be executed in the forms of spatial plan, infrastructure development, building regulation and control, education, and training.

Repeated flooding to the city of Garut could be mitigated if development plans and spatial plan are prepared to face water discharge during raining season. There might be some efforts which are practiced by government in Garut such as upper stream river embankments, reforestation, and development of irrigation. However, these efforts have failed to tackle flooding every year and thus cause disruptions to citizens which cost their wealth or/and life.

Very minimal effort seems to have been exerted by the local government of Garut for non-physical mitigation. This is admitted by the Head of Local Board Disaster Management:

*Mitigation has not been optimum so far. Why is that so? The reason is our limited human resources [in BPBD]. For example, we had introduced several locations about what is mitigation but I think introduction society to mitigation is not sufficient. We need to prevent society from disaster. (Head of BPBD Garut)*

Mitigation processes tend to be practiced less by government and more by citizens. For example, the local government of Garut are careless about household waste. Trash bins are not located in all areas in the CBD or in residential areas. This makes citizens put their household waste on sidewalks or in abandoned spaces (Figure 19).



Figure 19: Bad waste management is one problem which contributes to flooding

(image source: <http://garut-express.com/warga-garut-keluhkan-baunya-tumpukan-sampah-di-sejumlah-jalan-protokol/>)

The local government of Garut faces issues in waste management. *Dinas Lingkungan Hidup Kebersihan dan Pertamanan/ DLHKP* (Environment and Gardening Agency) fails to collect and dump waste regularly (Ghani, 2019). Waste can be abandoned for up to a month. This waste can easily block water drainage if rain comes. Also some citizens throw their household waste to directly into the river. There are minimal facilities for citizens to put their waste to be collected and there is no regular schedule by DLHKP to collect the waste from housing. Furthermore, there is very low education about waste, even in schools.

FK3I, as an organisation whose mission is environmental conservation, takes action to provide awareness about waste and flooding to society, although only at a very small scale; the organisation does not have sufficient funds to support its activities. FK3I funds come from voluntary donations (members, individual donors and corporations), which are scarce. FK3I activities are unstructured and not regular. Its members are voluntary and they work in their spare time.

There are also some efforts from local non-government organisations such as Forum Pengurangan Resiko Bencana/ FPRB (Disaster Risk Reduction Forum). The FPRB is involved in informal



education to society or formally involved in conducting research; they propose their ideas to local government of Garut to be included in development plans:

*We have conducted research and analysis since 2012 for disaster mitigation.*

*We have analysed 24 sub-district problems and we have proposed solutions for mitigation to related agencies in Garut. But, there is no real action from government agencies about our proposal or disaster mitigation to society.*

(Head of Local FPRB)

Another failure of government agencies in prevention of flooding is in natural protection. Government agencies that take responsibility for this duty are BKSDA and *Perhutani*. BKSDA, as a conservation agency receives their budget from central government directly without any intervention from local government. However, there is a lack of transparency about its budget and distribution. Citizens (including NGOs) do not have access to its budget. The head of BKSDA claimed that its agency succeeded to protect conservation zone and the head of BKSDA blames nature:

*We proved about factual condition in the field [during public hearing], our forest is still in a good condition. What has become our responsibility and duties, we executed properly. The flooding is not only caused by forest degradation on the upper stream but high intensity of rainfall and absorption area can cause problems* (Head of BKSDA)

Government agencies claimed that they have contributed to disaster mitigation although they were not optimum. There are many factors that cause this problem such as lack of coordination among agencies, as well as the lack of volume and quality of human resources. Contributions from non-government organisations and individuals occur but contributions might not be communicated to other non-government groups and governments agencies. This makes their contributions less significant in preventing flooding. Besides, most non-government organisations and individuals work voluntarily, which limits their investment. There is also another group that contributes directly to prevent flooding. This group is the community who live near the Cimanuk river or who live up-stream. This group consists of community leaders and their communities. They are close to nature since they live in this specific area.

#### 4.6.2. State versus Local Wisdoms in Mitigation

Humans normally have the basic instinct to survive and adapt to their environment. It happens everywhere in every territory. People who live in a jungle, mountain or lowland environment have adapted their ways to nature. They learn from generation to generation. People and nature intertwine to become an inseparable system. Nature can force people to adapt; nature is a significant force stimulating societal behavioural change.

This happens in Garut disaster mitigation too. In historical times, indigenous people regarded nature as God (animism belief) before they converted to Islam. Some of these indigenous communities still exist in Garut today but they live in very rural areas. For the people who live in city or suburb area, this belief is still inherited to some people or at least it influences their relationships with nature. This belief is very strong to old people. In a disaster context, old people respond differently to every natural hazard. They analyse nature changes to understand the possibility of natural hazards.

Indigenous people in Garut never experienced such catastrophic flood previously:

*What I understand from tracing back to our ancestors, their attitude [ancestors] to face hazard by marking potential hazards. If we talk about disaster, we do not recognize disaster because it does not exist in our terminology. The marking of potential hazards could not be executed again because there is a change in land cultivation, unorganized housing which in turn natural balance is affected. This makes us difficult to detect natural sign anymore because the signs disappear (head of local community)*

Elders state that there is no disaster concept in local beliefs. Preventive action is beyond simply a response to a natural hazard. They create zoning systems for area they live. Take forest management as an example, three zones of the forest are created. The first zone is *leuweung tutupan* (closed jungle), which is the most sacred zone; no one is allowed to enter this zone. They believe that if we enter this type of forest perpetrators will be cursed. The second zone is *leuweung titipan* (protected jungle). This type of forest is almost similar to closed forest, but people can enter as long as they have permission from *sesepuh* (head of tribe). People cannot use any resources from these two types of forests. The last zone is *leuweung garapan* (cultivation forest). People can

use resources from this zone for farming, shepherding, and logging. Cultivation forest is located surrounding community settlement. They live communally, working and sharing together. They still use local wisdoms in managing their life and place, led by *sesepuh*. People respect their *sesepuh* totally. *Sesepuh* have absolute power to manage their people and territory.

Their ways in connection with nature and how to prevent disasters such as flooding to their area are very effective:

*Because this is generation to generation, local knowledge generally has been tested and it will be improved by generation to generation [if there is a new thing]. This is different with a new idea about managing environment although it makes sense economically but there is unknown for the effect to surrounding environment. (Town Planner)*

People who live outside of indigenous communities, such as in city and suburbs, are administratively managed by local government. They must follow government system in disaster management. A specific organisation for disaster management is quite new since it was established in 2007 at the national level. It can be traced from the establishment of disaster management organisation as manifested in government constitution number 24 year 2007. In local level, local disaster management boards was created in 2011 by issuance of local regulation number 7 year 2011. Before the existence of the disaster management board, there existed *Satuan Kordinator Pelaksana Penanggulangan Bencana dan Pengungsi/ SATKORLAK PBP* (Coordinator Unit of Disaster Response and Evacuation), which only focused on during disaster and post disaster responses. There was a little attention to mitigation, preparedness, and rehabilitation phases (See Table 3.1). Since the regulation was created, local government of Garut should have adapted its regulations and policies to disaster issues because this board exists in Garut. This is expected to contribute to regional spatial plan especially to town planning, farming, housing, mining, forestry, conservation, and tourism; which could prevent or mitigate disasters.



Figure 20: Tourism object in conservation area of Papandayan

Government created forestry zoning systems for spatial plans that adopted local community wisdom. However, approach and implementation are very different. Government prioritise the development of economical contribution for local income and community welfare. The first zone is conservation area, similar to closed forest. The different is that the forest can be entered by people. People can have activities in this area such as tourism, but natural resources cannot be exploited for logging or farming (see Figure 20). In practice, some conservation areas have been exploited by individual citizen or even large corporations. Illegal logging, mining, farming and tourism are examples of the exploitation. People illegally exploit natural resources for their own benefit. However, corporations have some legal standing since they receive recommendations and permits from government. Environmentalists believe that permit processes involve corruption in government (e.g. bribery):

*Based on the fact, there is no permit for excavation of sand. That is illegal and cases like this is common because there is money game in this business.” (Local Head of Disaster Risk Reduction Forum)*

Old and modern conservation systems results in different scales of natural hazards. Indigenous people keep the forest untouched, which can reserve spring water, biodiversity, and forest ecosystem stability. People are only allowed to use cultivation forest zone for their needs. They do not exploit nature for their living. They have beliefs that nature is not an object to be exploited, rather as a subject that will influence human life. They live a simple life. However, the modern system of conservation uses science and technology. It is believed that conservation area and forest can be utilised for human needs as long as it does not create disasters. Government rationality for disaster management might be true to some extent. Their programs may overcome short time economic issues while they try to manage and prevent natural disasters by implementation of science and technology. In practices, there are many frauds and misconducts.

It is argued that the modern system of spatial plan might solve people's problems. The local government of Garut adopts the system to supposedly accommodate the needs of the people. It has engineered nature with science and technology under the belief that the forest could be productive as well as protected. However, deforestation occurs massively everywhere around Garut (and elsewhere in Indonesia). Land conversion is unstoppable since individual farmers and corporation can do business in forest areas. Law enforcement is very low, bribery and corruption are endemic at every bureaucratic level . As stated by Aspinall and van Klinken (2011), corruption and illegal activities are entrenched in Indonesian society. However, Indonesia is not a complete Hobbesian jungle. There are many good people within bureaucratic systems and wider society, but they are a minority. Within bureaucratic system their position is usually low. Most of them are not decision-makers.

There is a different view between local government and non-government organisations in disaster management. Government argues that if disasters can be prevented, land can be utilised. Government needs to fulfil people needs. Government regards that land utilisation can help local income which in turn may increase people welfare. However, environmentalist NGOs claim that the citizens are happy with their simple life as long as there is no natural disaster. They prefer to protect their land without massive exploitation. They argue that land utilisation for their benefit is just justification from government. The fact is that it will benefit certain groups or individuals in government position.

*Badan Penanggulangan Bencana Daerah* (Local Board Disaster Management) organisation is filled up by officers from different government organisational structures. There is no specific skill in disaster management of its staffs up to now since they mostly come from different governmental departments. This occurs in all departments or agencies because of job rotation. The head of local government has the power to rotate the position of his officers. Job rotations sometimes are subjective decision from heads of local government. The head of local government can easily move anyone who is regarded as not good in performance to new places. This might exist bribery from officers who want to have better position. Also in the higher echelons of Indonesian bureaucracy ineffective practitioners are more often 'promoted away' rather than sacked.

It appears that, with respect to disaster responses, there has been no significant effect from the existence of Local Board Disaster Management. Take the mitigation phase as an example; government tends to prioritise economic development over disaster mitigation. Some hills and forests are set for farming and industrial locations and farming area is set for housing. This is one reason why the city repeatedly floods .

The organisation structure of Local Board Disaster Management exists with clear functions, but it seems not to work properly. The functions sometimes overlap with other agencies in activities. The character of officers is still influenced by traditional views in their duties and jobs. They often prioritise services to citizens based on citizens' social status and kin.

The people who live in the city are heterogenic, although the majority are natives. They have different types of jobs, education backgrounds, beliefs, wealth and so on. Some of them have modern influence in way of life and others are still traditional. There are mixed in society. For example, some people respect to others by their social status, educational backgrounds or wealth. However, some of them value others are based on their achievement and performance.

Some people respect to government officers because of their position as government officers. They obey government officers by executing their polices and instructions. However, others tend to neglect and criticise officers if they cannot work properly. This critique will be analysed in the next section about accountability of involved actors.

#### **4.7. Summary**

According to my analysis in this chapter, development plans have big impacts on disaster

mitigation. Actors from different groups contribute to this whether positive or negative contributions. Their contributions in collaborative working pattern define type of their relationship each others. There are two categories of relationship, as principal-agent or peers. Some actors can bridge both categories. They are government agencies and NGOs. From these relationships can be identified accountability types among actors.

There are a few actors which contribute to the mitigation phase. They are from government agencies, NGOs, and communities. Some of their contributions during mitigation phase are executed without collaboration with other actors. They are obliged to be accountable within their organisation hierarchy. This can be vertical accountability to their superior or it can be downwardly to their staffs, members or indirectly to community.

Government agencies have failed to fulfill their crucial functions in disaster prevention. Theoretically, they have designed different development plans (long-term, middle-term, short-term and spatial plans). These plans are blueprints for local government development that can include disaster management within the plans. Practically, government agencies tend to prioritise economic development by extracting natural resources and ignoring disaster mitigation. This can be seen in land conversions. Local government of Garut rationalises its development as efforts to accelerate community welfare development . However, this study found that some developments are suspected to have been influenced by fraudulence behaviour, such as bribery.

Plans are designed by government agencies. The process includes inviting non-government organisations and community leaders but this seems only a formality, since local government officers decide the members of planning processes. In turn, accountability is regarded as a formal reporting process among them.

Affected communities regard government as having minimum contributions to prevent repeated flooding. Government agencies claimed that they have followed process for creating good governance. However, their administrative focus of accountability has failed to prevent repeated flooding. However they believe that they have fulfilled their duties of accountability through the design of plans involving different stakeholders and community.

Government agencies focus on formal process of accountability such as reporting. They pay less attention to community and environmental change in Garut such as rainfall discharge. In turn, their efforts to mitigate flooding such as development of river embankment, reforestation, and development of irrigation seems to have failed. Collaboration in mitigation can be categorized in

two types. Direct collaboration and indirect collaboration. Indirect collaboration is caused by the same goals, but actors don't work directly together but independently contribute to goals. Accountability for this type of collaboration is not to co-collaborators, but it does create accountability for actors with specific forums.

The three development plans (long-term plan, medium-term plan, short-term plan) are expected to be in accordance to one another. Theoretically, the shorter plan should refer to longer plan. However in practice that is often not the case. There are many conflicts of interest among actors. The plans have been created just for a fulfillment of administrative requirements. Election system which gives executive power for 5 year has led to environmental destruction. The politicians have invested a lot of money for campaign. Therefore, it might lead to economic motive for returning their campaign investments . Furthermore, these development plans must refer to spatial plan as a guideline to implement the plan if the plans relate to spatial utilities. The problem is that spatial plans experience many revisions based on the needs and political will of power holders. Development becomes unclear in direction. This can impact to natural preservation and environmental stability, which in turn can lead to natural disasters such as flood, landslides, and drought.

Nature is needed by humans for their life. However, human should not become a predator of nature. Economic development should not entail the cannibalism of existing nature by land conversion and deforestation. Human and nature must be considered as a mutual symbiosis. This becomes a reason that local wisdom must be explored to understand how humans can live in harmony with nature or co-dwelling with nature. Nature is not an object that can be exploited without any consequence. Natural exploitation will not only affect humans but all other existing organisms as well.

Development, if it is well managed, should not always cause environment degradation. Human existence and nature should be in balance. The balance will be created if human needs are fulfilled and nature preserved. Human and nature are not two separated entities, but they are bounded in symbiotic mutualism. Local community beliefs of human and nature are a bonding system (inherited from generation to generation) in Garut. Government, as a legitimate body to manage the region seems to fail by creating development plans that contribute to natural disaster creation. Economic motives and political pressures still dominate consideration of development beyond disaster prevention.



Based on these facts, government entities (such as executive, legislative, and judicative) seem not to work as expected. There are very clear job functions and descriptions for each of them as stated in laws, regulations and policies. Government entities are an interconnected system. Executive is an entity to do the jobs, legislative is an entity to control what executive does since it is representative of citizens, and judicative role is to uphold constitution. However, those entities might not fully work based on what they should do. On surface, it seems that they work based on job descriptions and functions, but according many conflicts of interest exist. This is like a game. Government is the owner and the creator of a game. It makes a rule, it decides the players, and it appoints the referee; all of whom come from government circles. Citizens are merely spectators. They watch the game, but they cannot change results. Citizens may voice their hope, expectations, and needs as spectators and supporters, BUT decisions belong to government.

Legislative, which is expected as citizens' representative does not work on behalf of citizens. As a member of parliament, legislative prioritizes its constituent above all citizens. This might be as a part of its commitment to being accountable to its constituent since election mechanism is based on region. The Regent as an executive leader which is voted by all citizens fails to act responsibly in planning process. Especially in long term development, the Regent may regard short-term plan and medium-term plan during its authority. Accountability of Regent more in formal form which is manifested in regular reports to the house of representatives. If it follows the game which has been agreed among all players, everything will be fine. Citizens are in a powerless state since their power has been transferred to legislative. They are just spectators.

There is an ombudsman process if there is something wrong with the government violation to the plans, but it can be executed by certain group of people who understand how to do it. This is sometimes not easy to follow.

Government accountability in the development plans and spatial plan is being questioned by people (citizens, NGOs, professionals, academicians, etc.). Government contributions to prevent natural disaster are minimal; this allows repeated flooding to the city. Citizens who live in the city blame the government without knowing that the plans had input from citizens (that is what government claims).

The big issue in this case is a communication and coordination mechanism among actors during designing, revising and publishing the plans. Accountability has three processes. Starting from communicating information and continuing to discussion or debate; the final process is ratification

(Bovens, 2006; Bovens, Schillemans, & Hart, 2008). Transparency of data and information, a vital part of accountability (Romzek, LeRoux, Johnston, Kempf, & Piatak, 2014), simply does not happen. People fail to discuss since they do not have enough information from government.

Departments in government must work together and act as one. Sectoral ego must be limited, and this is the job of the executive leader (the Regent) to execute. If government can work as one, it should be possible to create integrated data and information for the public. This can be done by publishing on the Internet, the written press, or dissemination through community leaders. This is one of the ways for controlling and facilitating ideas from citizens.

Theoretically, local government public administration system has adopted western concepts. It can be traced to government system in Indonesia from national to local level. It is manifested in laws, regulations, and policies. This includes accountability system and mechanism. Adopted democratic system in development plans appears to be rational and ideal on paper. In practice, this system has resulted in an excess of corruption within government, which can abuse its power for individual interests. Repeated flooding is only one product of this failure to govern Indonesia effectively.

## **Chapter 5**

### **Preparedness**

“Forewarned; Forearmed. To be prepared is half the victory.” (Miguel De Cervantes Saavedra<sup>3</sup>)

#### **5.1. Introduction**

This chapter continues the previous analysis chapter. Previous chapter focuses on dynamic activities involving different actors to mitigate possible future occurrence of natural hazard. This chapter focuses on activities during the preparedness phase. Both mitigation and preparedness are pre-disaster activities. While mitigation is activities related to pre-disaster planning which involves structural and non-structural development to eliminate or reduce future risks, preparedness is how people prepare to face future disaster. This study investigates preparedness failure which leads to catastrophic flooding.

This chapter is delivered in a number of sections. Section 5.2 discusses actions and activities of preparedness in government agencies including *BPBD*, education department, social department, public health, fire fighter, police department, and other service agencies within government circle. They act as a group of actors from local government. There is another kind of group involved in disaster preparedness, which includes non-government organisations, businesses, and individuals. Apart from those two groups that contribute to the preparedness phase, section 5.3 analyses public preparedness in facing hazardous events, specifically flooding.

#### **5.2. Government’s Preparedness**

##### **5.2.1 Emergency Operation Plan**

As mandated by Indonesian Constitutions, all citizens are protected by the country. This means the country is responsible to protect and to save citizens including during events of disaster. These actions can be started by designing contingency plan, Emergency Operation Plan (EOP), preparing government staff through trainings and exercises, and providing tools and equipment to assist in disaster responses. Chief of *BNPB* has issued regulation No. 24 of 2010 on Guidance of Designing

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<sup>3</sup> Miguel De Cervantes Saavedra is a Spanish writer (1547-1616). He is the author of Don Quixote (1605-1615).

Emergency Operation Plan (EOP) for Disaster. This regulation clearly defines the step by step of how to design EOP and describes who will be involved when disaster strikes. EOP document is designed by each local government based on the probability of future occurrence of disaster. The regulation No. 24 of 2010 also mandates each local government to create contingency plan based on its area and society characteristic.

Existence of this regulation seems to be a golden key for success in disaster preparedness (Coppola, 2015a). It, however, gives little help to prepare local government agencies and their staff in Garut. Although flooding occurs almost every year, based on a participant information, there is no contingency plan to face flooding in Garut:

*Why was there chaos? [during response of flooding]. Because there was no contingency plan. In response to flooding there is no contingency plan yet which should be made by BPBD as a leading sector for disaster management. If there is a contingency plan in BPBD, we can examine that plan involving all related agencies or stakeholders in the plan. This contingency plan should be introduced to all related agencies and when flooding happens, we just open the plan and we will know what to do. (Secretary of Local Military District)*

This occurs because of the incapability of *BPBD* of Garut to design contingency plan. Most staff in this agency has limited capability in disaster management. This is caused by the irrelevant background of staff in *BPBD* of Garut. The majority of *BPBD* of Garut staff are deployed from different agencies and they do not have the knowledge or experience in disaster management:

*One of our expectations is that our human resources can be filled by staff who are capable in the future. To be honest, we do not have expert in disaster. This is very important [to have experts in disaster] to strengthen our team in BPBD. (Chief Executive of BPBD of Garut)*

Moreover, even the Chief Executive of *BPBD* has limited capability in disaster management, since he was the head of sub-district of South Garut. The deployment of staff from different department is caused by job rotation policy adopted by the administration system in Indonesia as regulated in government regulation No. 11 of 2017 on Civil Servant's Management. The regulation is aimed to rotate civil servants to better position based on their competencies, career development, and performance. However, this job rotation causes a situation where staff are not capable for their

new positions since they lack in experience. Furthermore, the number of staff who work in *BPBD* is limited. There are only 29 staff in *BPBD* of Garut who must work in all area of Garut (Statistics of Garut Regency, 2017).

These 29 staff are working as supervisors responsible under Chief Executive of *BPBD* of Garut. Their status are as civil servants whose jobs can be rotated to other agencies based on performance measurement from the Chief Executive of *BPBD* of Garut. This creates a situation where the Chief Executive becomes ‘a king’ served by their staff. It becomes ironic when they are called civil servants, but they work to please their Chief Executive and otherwise can be rotated to other departments.

*BPBD* of Garut is an agency responsible to design and implement EOP as mandated by regulation No. 24 of 2010. EOP must include other agencies and involve other potential actors in its document. Theoretically, EOP is a document that covers who will be involved if a disaster event occurs, and the responsibility and actions of involved actors (individuals or organisations) include when and where they are involved, and how to save citizens from their vulnerability. EOP may include lists of equipment and facilities within and outside its organisation (Coppola, 2015d).

*BPBD* of Garut has failed to create EOP which costed victim vulnerability and chaotic situation during disaster responses (see Chapter 6). Involved agencies from different department faced confusion in their activities during a response to disaster:

*We did not have any guidance that informs us when a flooding occurs what we need to do, this or that. The agency [BPBD Garut] has not designed this yet [EOP] up to now. What I know is that there is no coordination in detail about job description from BPBD if disaster strikes.* (Head of BKSDA of Garut)

This is insisted by a local NGO that *BPBD* of Garut does not have an emergency response plan and know how to accommodate involved actors during disaster response:

*I do not know which one a procedure from government is. This means that when disaster happens, we race with government to collect updated information. In every disaster, we go directly to locations whether there is a victim or not. If there are victims, we will save them first and we will coordinate with government after the victims are saved.* (Head of FK3I)

EOP as a document which provides guidance to face potential disaster in the future is a plan for government agencies and other involved individuals or organisations to do their activities during disaster response. This includes their responsibility. Failure to design this EOP has resulted in chaos in many activities during disaster response such as logistics, evacuations, and debris clearance (See Chapter 6).

Although there is a *BPBD* agency responsible for disaster management, there is no emergency plan or EOP created by this agency. If there is a disaster, there will be a Regent who gives instructions to every government agencies or administrative staff from the regency level to village level:

*..., The Regent, in every occasion such as when the rain occurs in a long period, he will instruct all functional agencies such as BPBD and Social Department to be well prepared and they should be in alert. This is not only for functional position [BPBD and Social Department] but related head of sub-district and head of village have to follow instructions from the Regent. (Head of Communication and Information Agency of Garut)*

The statement from Head of Communication and Information Agency of Garut reflected that BPBD waited instructions from the Regent when disaster occurs. This is insisted by Secretary of Local District military which said “They [BPBD staff] don’t have any contingency plan”.

### **5.2.2. Response Exercise and Training**

The response practice among actors has not been executed by local government of Garut in preparation of facing any disaster. Chief Executive of *BPBD* of Garut admitted that asking other agencies to execute an activity such as response practice is problematic because *BPBD* is at the same level with other agencies:

*“Our function is as a coordinator for disaster management, but this is not enough for disaster response. There must be a command system because disaster response requires quick response. My position as Chief Executive of BPBD is equal to other agencies. I do not have the power to give instructions to other agencies. It must be the Regent or Local Secretary who gives instructions ...our function in disaster response is weak.” (Chief Executive of BPBD of Garut)*

*BPBD* as a coordinator is incapable to organise other agencies' activities relating to disaster preparedness. Major problems of this incapability are lack of skills and knowledge from *BPBD* staff. It has been stated earlier that *BPBD* staff come from different backgrounds with little experience in disaster management including its Chief Executive

It does not mean that local government of Garut does not hold any practice. There are several practices which have been executed by *BPBD* of Garut, but the practices are for citizens' preparedness, such as evacuation simulation when volcanic eruption occurs (see Section 5.3). There has not been any opportunity where government agencies involved in flooding (e.g. *BPBD*, Search and Rescues, Social Department, Public Works, and Spatial Plan Department) create practice or training among themselves.

### **5.2.3. Equipment**

Equipment is crucial for any kind of disaster response to reduce number of injuries and deaths also number of property damage caused by disaster (Coppola, 2015d). There should be sufficient in kinds and numbers of equipment.

*BPBD* of Garut has its standard emergency equipment although it is limited in numbers (Local Government of Garut, 2015). There are rafting boat, first aids, power generator, tents, and so on (Figure 5.1). *BPBD* may borrow from other agencies or private enterprises if they need some equipment they do not have. For example, *BPBD* may borrow a backhoe or excavator from Public Works and Spatial Planning Agency if there is a landslide blocking the road.

*We usually borrow equipment from other department or other local NGOs if we do not have them. For example, I may borrow heavy equipment such as excavator from Public Works and Spatial Planning Agency and we will have to pay for it.*

(Head Executive of *BPBD* of Garut)

However, there is no guarantee that the tools are available in the other agencies and whether those tools can be lent to *BPBD*, since there is no prior agreement between them as stated in EOP (section 5.2.1).

During a response phase, several equipment are normally available in NGOs and voluntary organisations. These organisations have their own equipment for their activities. They usually use

their own equipment to save people or they help government agencies' activities. They rarely lend their equipment to other organisations.

*BPBD* of Garut mostly depends on other agencies or private enterprises for tools and equipment. Figure 21 shows that *BPBD* has limited number of equipment and it is not well-organised. The equipment is stored inside office without proper location. This can create trouble in emergency situation when *BPBD* staff need equipment. They may not be able to easily acquire the equipment because of this unorganised placement.



Figure 21: Tools and other equipment in BPBD of Garut office

There are a lot of equipment available in governmental agencies and NGOs which can provide support during disaster responses. However, they have not been inventoried by *BPBD* of Garut. This might result in slow response, since they do not know who the owner of certain equipment is and will not be easy to retrieve them:



*As an institution which has responsibility for disaster response, BPBD should have their full equipment for emergency situation. But, BPBD of Garut often waits for our involvement for evacuation. I think BPBD has limited equipment. They often borrow our boats or our camping equipment. They sometimes [request to] borrow something that we do not have such as caving equipment. You know, BPBD never know what our activities are and they do not know what kind of equipment we have.*  
(Head of Jenggala Outdoor Activity Organisation)

Collaboration in equipment usage occurs only spontaneously during disaster responses. There is no specific agreement created to prepare for disaster response during preparedness phase. This type of collaboration, as Bryson, Crosby, & Stone (2015) stated, is a collaboration caused by environmental turbulence.

Failure in disaster preparedness by government agencies is caused by many factors. Government staff who work in *BPBD* of Garut mostly lack the knowledge of disaster preparedness:

*To be honest, we do not have any expert in disaster management or graduates from disaster management education background. I think this is important to strengthen our existence and staff in BPBD.* (Head Executive of *BPBD* of Garut)

The Regent of Garut, as an administrative leader with the highest position in the administrative hierarchy of local government level, fails to organise and direct their agencies to prepare for coming potential disaster. While flooding occurs repeatedly every year, there is no specific preparation from local government agencies led by The Regent (see Section 5.2.1).

Beside government preparedness, there are several efforts executed by community leaders in upper stream of Cimanuk River to prepare citizens in facing hazardous events:

*We know that we face flooding every raining season. I ask my community to provide kohkol [bamboo alarm] in their house to alarm others if there is flooding, although the efforts are not specifically to prepare citizen for facing flooding. Citizens in general, prepare themselves to face flooding based on their experiences and knowledge from generation to generation.* (Community Leader 3)

### 5.3. Public Preparedness

Local Government of Garut have attempted to train their citizens to face potential disaster in order to prepare them. The local government of Garut usually works based on budget allocated for their activities. This happens also in disaster preparedness for citizens.

*BPBD* of Garut has executed several programmes funded by local or central government although there is no specific programme for flooding preparedness. For example, there was a drill programme of volcanic eruption evacuation for communities who live near a volcano. This sometimes involves several government agencies, communities, and NGOs. There was also a programme of general preparedness training for communities such as introductory of disaster preparedness:

*There is an introductory programme which is executed by BPBD to citizens. There was education about disaster. For emergency responses, we create TAGANA/ Taruna Siaga Bencana (Cadets on Disaster Alert). Creation of TAGANA is part of our education [programme] to citizens through TAGANA, because TAGANA is created in communities and its member are local communities. (Secretary of BAPPEDA)*

Several communities were drilled based on planned programme from *BPBD* of Garut and their team from other agencies and NGOs. They had to follow the programme including attending and executing instructions from *BPBD*. This is a one-way simulation training programme where communities only have to follow instructions (Local Government of Garut, 2015).

However, this programme did not cover all sectors. The education sector is not covered by this programme. There is less formal and informal education about disaster preparedness especially flooding to students at school or society as a whole:

*No, there is no such programme from local government [training]. They [government agencies] never come to our place and explain about flooding. For example, there is no explanation from government if there is a flooding, we just*

*use our own instinct or how to prevent flooding coming to our area.* (Headmaster of PGRI High School)

Moreover, schools facing repeated flooding never have any training about preparedness for facing flooding. Figure 22 shows how rooms in school such as office and classrooms do not have evacuation exit doors, alarm, and sufficient signs for evacuation (top figure). Classrooms have only one main door without emergency exit. This may cause a problem if the door is blocked. Pupils could be in danger if they could not escape from their rooms. The headmaster of PGRI High School admitted that students do not have sufficient information about disaster preparedness particularly about flooding.



Figure 22: All classrooms in one of schools facing repeated flooding do not have evacuation exit doors and alarm installed (top image). There is no evacuation sign in school yard (bottom image).

The headmaster informed the researcher during interview that school curriculum does not include disaster information or training for pupils to face flooding:

*There is no program from local government for school such as if flooding occurs, we must do this or that. There is no socialization on how to face and prevent flooding. There is a curriculum about environment in Pendidikan Lingkungan Hidup/ PLH) (Environmental Education Module). But, it does not give detail on disaster and prevention. (Headmaster of PGRI High School)*

Regarding flooding, communities have very minimum understanding and knowledge of facing this disaster because there is lack of training and education programmes from government. There was only one programme for a certain area from a local NGO:

*Long time ago, there was an NGO that gave us understanding about flooding in RT 04. They told us how to survive from flooding. (Community Leader 2)*

This local NGO worked individually without any coordination with the local government authority such as *BPBD*. This programme also occurred only once without any follow up programme or unclear for its continuity.

Communities that are repeatedly affected by flooding have their own strategies and efforts in facing disaster. They have very strong bound among them. They can identify their community members who live in their areas. If there is someone missing, they can be identified easier by them particularly by their leaders:

*We are very close with each other within our neighbourhood. I know all members of our community. We usually have meeting once a week on Friday morning to clean our area or sometimes we have a meeting in my house if there is any information from government which I need to share to my community. (Community Leader 3)*

Every house of the community near Cimanuk River in rural area has *kohkol* (instrument from bamboo to alert citizens from hazardous events) (Figure 23). Community uses certain way to sound the *kohkol*, such as by hitting it rapidly to create loud sound if there is emergency situation which

requires people to evacuate to a safer place such as when flooding starts to come to their area. They will hit it in a slower tempo to alert people to prepare that there might come a hazardous event. Beside this *kohkol*, the community normally uses loudspeaker from mosques. The loudspeaker is put on the top of roof of a mosque. Muslims use this for prayers' calls.



Figure 23: Tools and Media Used by the Local Community for Early Warning

(left) *Kohkol* is a traditional alarm system used by a community living in the rural area. (right) Loudspeaker from a mosque normally used to call people to pray can be used by the people to inform any important information.

#### 5.4. Summary

Local government of Garut has limited capacities and efforts in disaster preparedness. Theoretically, the local government has a regulation No. 24 of 2010 about Guidance of Designing Emergency Operation Plan for Disaster. This regulation, however, is not practiced by the local government of Garut, particularly by *BPBD* of Garut, during flooding response. There is no EOP guidance for every involved actor from government agencies, NGOs or volunteers, and individuals.

Based on the analysis in this chapter and the explanation from involved actors, there is markedly little contribution from all actors for disaster preparedness. *BPBD* of Garut has a TAGANA

programme aimed to educate citizens at lowest level of community group in villages. However, this programme is aimed to young citizens:

*One of the examples is that we empower community in village by creating Desa Tangguh Bencana/ Resilience Village to Disaster (TAGANA Village). We change people's mindset on disaster by recruiting young generation there. We give them training about disaster. But this programme depends on availability of budget.*  
(Head Executive of BPBD of Garut)

This cannot effectively spread knowledge about disaster preparedness to all citizens in village, since there is a hierarchy system in the community where elders may not listen to youths because they feel that youths lack in experiences.

Coordination among government agencies and NGOs is still a big issue during disaster preparedness phase. No coordination activities exist among them. Every government agency including BPBD of Garut may execute any programme without any notification to other agencies or NGOs.

Apart from that, several programmes executed by governmental agencies or NGOs seem to give little contribution to disaster preparedness. Their efforts to educate people or to prepare themselves to face disaster are without knowledge of what would happen in the future, since disaster consists of uncertainty in size and effect to community. This can diminish community trust to them, since what they deliver to community, such as knowledge and information, has no guarantee to work for disaster responses.

Without proper disaster preparedness, every government agency and other actors work without clear contingency plan. There is lack of practice and training among government agencies, NGOs, and volunteers. This can be seen during previous disaster response phase which was very chaotic. This chaotic situation is discussed in the next chapter about disaster response phase.

## Chapter 6

### Responses

#### 6.1. Introduction

The mitigation and preparedness processes, analysed in the previous two chapters, have a consequence in the response phase that is discussed in this chapter. This chapter aims to understand how actors, from different backgrounds, with different capacities and motives, work collaboratively in the response phase of a sudden onset of repeated flood disaster. Then, it proposes to identify and understand the concept of accountability in the context of collaborative working, specifically during such a chaotic situation.

Repeated flooding of the city of Garut occurs most often in the rainy season each year. The areas covered by flooding can be in different sizes from time to time and in different intensity, which result in different effects on the socio-economic condition of the citizens (see Table 1 in Chapter 1). This includes different actors who are involved in response. If the flooding affects certain community areas with minimum damage, then only a few numbers of actors will be involved. This chapter focuses on the flooding response during devastated flooding that occurred on 20<sup>th</sup> – 21<sup>st</sup> September 2016. The case is a good example to understand accountability concepts in the context of collaborative work among actors during a sudden onset disaster response phase, particularly collaborations without prior agreement or by accident.

Government agencies and groups of communities worked during the flooding to evacuate citizens and to distribute logistics. Some of them worked collaboratively under the coordination of the Local Board of Disaster Management (*BPBD*) because *BPBD* is the appointed organization responsible for disaster responses. Theoretically, this seems to be ideal in responding to a disaster where there is a certain government organization to work as a coordinator (*BPBD*) and other actors that support the response, such as the Red Cross, Police, Search and Rescue, fire-fighters, the army, NGOs, communities, media, and volunteers. Practically, there are many issues regarding coordination, communication, instructions, and job descriptions. Some of the actors are those who are frequently involved in any disaster situation, but some others work voluntarily and their involvement is based on their willingness and availability. Some actors have previous experience of responding to flooding, but many are working without any prior experience and their

involvement is only triggered by moral standards and a sense of common humanity. Collaboration is expected to work more effectively during a response phase, since every second is meaningful for the life of citizens. This could happen if there is good governance of activities. However, the reality in Garut seems far from this ideal situation. Each actor may face accountability, whether internally or externally and morally as well. They may need to be accountable within their internal organisations, to their collaborators, and to society. If accountability exists, to whom are they being accountable and how does the mechanism of this accountability work? How is accountability created among actors in a chaotic situation where there is no prior commitment or agreement? For what activities do they become accountable if the activities overlap during the response?

The first section of the chapter discusses the collaboration process during an emergency response. It explains the emergence of uncertainty during the response to a flash flood in 2016 that involved local government institutions or agencies and non-government actors, which includes NGOs, community leaders, volunteers, and mass media. The second section describes the events when the flash flood had ended, and immediately the process of saving lives and evacuation started after the hazard. The last section draws some conclusions. It explains the findings on accountability in collaborative working during the response phase of disaster management which may contribute to new understanding of accountability within collaborations in sudden onset disasters.

## **6.2. Collaboration during emergency response**

The City of Garut was cloudy and there was a little rain pouring in the evening on Wednesday, 20th September 2016. Most people normally go to bed around 7 or 8pm because they wake up early, at 4 or 5am, for prayer and to start their activities, preparing to go to work as farmers or as office staff, who start at work 7am. There was no sign that flooding was going to happen that evening, since there will usually be heavy rain before flooding in the swamp areas. Citizens who live near Cimanuk river are used to having floods, but not as devastating as that night. The water from the river started to flow into their houses, but they did not really put any great store by this. However, before a sudden flash flood started at 10 pm from the upper stream of the river and flowed down to the city, the people on the upper stream, who live not far from Garut city in the *Sanding* area, noticed signs of flooding because they are familiar with the river. From generation to generation, they learn about the river's characteristics, because the River Cimanuk is a part of their life. They wash their clothes, take a bath and fish in the river. In the afternoon, they noticed



that the water level of the river had risen. They started to communicate among their neighbours about the situation. They double-checked the river in the evening and they noticed that the river characteristic was unusual:

*...we know if the flood is about to come to our area since we recognise signs of flooding. [interviewer: How?] Our people have a standard if the flood will come. They recognise the change from the increasing level, whirlpool and colour change in the water. If the water colour is like that [brown], it will become a bigger flood, so we evacuate ourselves. That is why there were no victims in our area because we had known before the flash flood. Only our properties could not be saved. It was about half an hour before the flash flood came that we knew and informed our neighbours to evacuate. So, we prevented ourselves before it happened. (Head of Local NGO).*

Before the flash flood came, people who live in the *Sanding* area had saved themselves to a safer location. All people were safe, but not their houses. Most of the houses were damaged by the flood, including furniture and other valuable things. They were evacuated by a command from the community leader in their area and were also helped by neighbour communities. They were evacuated to the community hall, mosques, and their neighbours' houses.

The flash flood continued to sweep through the city after crossing several sub-districts in the upper stream. At the city, the *Lapang Paris* area was the first area hit by the flood. The flash flood continued to the lower stream in the city and swept through several areas of housing near the river, such as *Rengganis*, *Leuwidaun*, *Bojong Sudika* and the last was *Cimacan*. Cimacan was the area most devastated by the flash flood which killed more citizens here than in all other places.

The flash flood that hit the first location in the city at *Lapang Paris* affected many public facilities. It swept through the army dormitory, the Red Cross blood bank, primary schools, a secondary school, *Tarogong Kidul* sub-district office building, the police station, and a general hospital *Dr. Selamet*. The aftermath of the disaster attracted many people to come to help or just to satisfy their curiosity. People who lived in the army dormitory woke up from their sleep after hearing people were shouting about flooding from the loud speakers of the mosque, before the power line was shut down. However, people continued alerting others by using traditional alarms made from bamboo (*kohkol*) and shouting (Figure 23).

There was no official emergency alert before the flooding from the local government. It came suddenly without any notice and people started to evacuate by themselves and helped neighbouring citizens before the military, the police and some volunteer organisations' members came. It was only for a few minutes that this area was soaked by flood. Some people from this area could not save their lives and they were swept away by the flash flood. Hospital patients and their families, doctors, nurses and staff panicked in the rush to evacuate themselves. Electricity was suddenly shut down, creating a more dramatic situation. People ran amok in different directions as they tried to find a safe place and some of them tried to find their families. That was a chaotic situation. They did not know what to do and how to save their lives. There were no evacuation procedures in almost all buildings, such as the hospital, the dormitory and other government buildings. This was admitted by the head of the local disaster management board:

*So far, there is a mitigation process, but it is not optimum. The reason is that we lack human resources in this part. For example, we have introduced about how to respond to when flooding comes, but only in few places. Moreover, this is not enough for only a socialisation. There is a need to prevent flooding. (Head Executive of BPBD)*

### **6.2.1. Leadership Issues During Emergency Response**

Less than an hour after the flash flood, other first responder officers arrived from local government institutions, such as the army, the police, search and rescue, BPBD, and fire fighters, . Before they arrived, victims evacuated themselves and were helped by their neighbouring communities and some local outdoor activity organisations, such as from the rafting adventure team and from nature-lover/outdoor organisations. They tried to save the citizens' life:

*The situation was uncontrolled and chaotic. Communities from the army dormitory tried to save their life by swimming to the road [Jalan Pembangunan] and some of them climbed to roofs because they could not swim. I came to the location after I read information from a Whatsapp Group and my house is not far from there. There were some of my colleagues from other organisations who had already been there to help. (Head of NGO).*

The process started by evacuating their own families to safer places before any help come. The head of RW contacted its RTs to check their neighbours who were trapped by the flood. The head of RTs knew each of their neighbours. They talked to the head of RW about neighbours who might be left behind because they were incapable of evacuating themselves, such as children, old people and the disabled.

RTs got a lot of information from their people who had evacuated about missing family members. Each RT returned to the location with some of their people who voluntarily offered help and with the help of neighbouring communities who live near the location. They used minimum tools for evacuation, such as rope, flashlights and inflated inner tubes. A few minutes later, military officers came, followed by police officers and other voluntary organisations.

Although there were some government staff from different institutions, there was no one taking control of the situation and being in charge of responses. Actually, Garut has its structural administration system in place, since this was not the first time that flooding occurred in Garut (see table 1.1 in chapter 1). Moreover, Garut experiences many different types of natural disasters. The hierarchy for the administration consists of a command and control mechanism which is headed by *Sekretaris Daerah* (Local Secretary) as the Head of *BPBD*. The Local Secretary is not a political position since a chief is a public servant. This is the highest position of in the civil service in local government. The position is below the Regent (head of regency) and its function is to assist the Regent in administering local government. The Local Secretary answers to the Regent (Government of Indonesia, 2003).

The Local Secretary is *ex officio* head of *BPBD* Garut. In addition, there is a mechanism of job specification during emergency responses. For instance, the Search and Rescue team is led by the National Search and Rescue Board. Members of the team come from different institutions, such as the military, the police, firefighters and volunteers. Another example is in the health team. The health department is in charge to help injury victims physically and mentally. Members of this group also come from different institutions and backgrounds such as the military, the Red Cross, volunteers and other local government agencies that relate to health issues. This has been clearly stated in regulation of head of national disaster management board No. 14 of 2010 about guidelines of emergency response command post establishment (BNPB, 2010).

Practically, this administrative system and mechanism did not work well during the flooding. The command of the disaster response was led by a military commander. The military commander was appointed by the Regent to lead the disaster emergency response since the Regent realised that the Chief Executive of *BPBD* was incapable of responding effectively to the flooding on the second day: “...vice of the task force is the chief executive of *BPBD* and head of the task force is the commander of the district military commando.” (Secretary of District Military Commando)

This made things more complicated. A military style of management, with rigid command system, made decision making slow because it needed to wait instructions from the top. It is admitted that military has the agility in responding to instructions. Soldiers will listen and follow commands from their commander without arguing and asking questions. However, this may create disharmony among members of teams who come from different institutions with different organisational cultures. Furthermore, the military focuses on agility and effectiveness of responses without considering the situational, cultural or physiological condition of the victims. For instance, the military ordered the evacuation of all victims to provide shelter, to ease identification and donation distribution. This resulted in a more chaotic situation, since family or relatives of victims wanted them to stay in their houses. Victims had no option to decide where they could stay temporarily because the military forced them to live in a shelter. Living in a shelter was not a good idea since there were many limitations, such as sanitation. It might be different if they could live with their relatives because they could be treated better by their relatives.

Military and police officers were the first government elements who arrived in the location. They worked without any commands and instructions from anybody. They used their instinct and skills to help victims. Some of them swam against the current since they have the skills. Others only waited on the side of the road to evacuate the victims to places of safety.

*It was clearly shown that structurally it didn't work 100 per cent. When it happened, who was the first who came to the location? Of course, we were and several police officers. We brought our military equipment... there was a little chaotic situation in location since it was not clear who was in charge.* (Secretary of District Military Commando).

The military was very responsive to help victims. They were really dominant during the disaster response. The Secretary of district military commando claimed that the military organisation

structure was the most prepared organisation. They had a clear hierarchical command in a certain territory. They had a picket system which was always on standby in their base. When the flood started to sweep through the city of Garut, the military was very fast to evacuate and to help victims. Their commander instructed the soldiers to help the victims and they were very fast to respond to their commander. The military has a certain degree of respect from the citizens. There are also a majority of people who are fearful of the military in Indonesia (van Klinken, 2008). This was useful in the emergency:

*If BPBD was in charge, there is less of a command line. However, if the commando from KODIM [district military commando] was in charge, people will fear them. We need military soldiers, since there are many NGOs in Garut [which normally use threat to scare people]. So, if KODIM were in charge, they will fear. We need a disciplined and decisive leader. If BPBD led with its condition, the leader was new and didn't know about disaster response, he will be struggling to cope with the members of the team and the natural disaster itself. (Chief of Regional Red Cross West Java, Indonesia).*

This chaotic situation does not mean that they worked individually for their own goals and objectives. They had the same objective, to save people's life. However, the way they worked was uncoordinated, improvised and with verbal and informal communication. Military officers were in the front line to order evacuation processes.

### **6.2.2. Role of Community in Emergency**

In another location, *Cimacan*, the flash flood swept through approximately an hour after *Lapang Paris* location but there was no warning to community who lived in this area. There was minimum help from local government elements and voluntary organisations, since they concentrated in *Lapang Paris*, although *Cimacan* was the most devastated place hit by the flood. Another reason was that they had limited officers available that night. Therefore, people saved their life by their own efforts and some help from neighbouring communities.

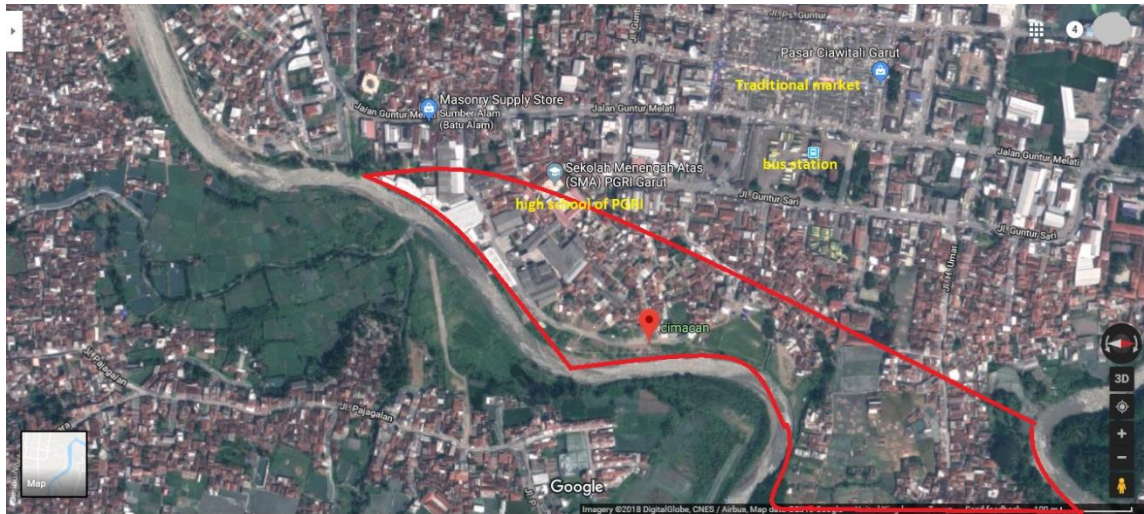


Figure 24: Map of flood swept Cimacan area (Source: Modified Google map)

*Cimacan* is located in a cul-de-sac and consists of densely populated urban housing near the river (Figure 24). Inside the red lined area is the location affected by the flash flood which swept through the housing, killing many people, and thousands of citizens were evacuated. The area is not plotted for housing by the local government. It is illegal to live and build houses alongside the river, but the people can pay to buy land there and build houses illegally. Poverty is another problem in Garut. Unfortunately, most victims in *Cimacan* were poor citizens. That was one of the reasons they chose to live near the river Cimanuk because land price was cheaper than other places. As stated by one citizen, *Cimacan*, people live there because they have no choice to live in a better place, since land and housing prices in the city are expensive. Besides, most of them have poor educational backgrounds and they did not know whether it was illegal for them to live near a river, since they claimed that they paid to buy the land or houses in *Cimacan*. Although they lived there illegally, there was no action from the local government to clear the land:

*Yes, citizens here are unaware of the law. They do not understand about legal proceedings. If the people are aware of it, it is impossible to live there because they will not get any paper for the land and housing. Their reason to live there is because if they rent a small house it will be more expensive each year. They chose to buy land there, they said to me that they did not know if the area is forbidden. That is what they said to me. (Head of Village 2).*

Ironically, there were administrative systems of citizenship such as *RT/Rukun Tetangga* (neighbourhood group) and *RW/Rukun Warga* (community association). However, RT and RW are not a part of the formal administrative system of local government, since the lowest level of administrative system is a village institution or indigenous village (Government of Indonesia, 2018; The Republic of Indonesia, 2014). The RTs and RWs are part of *Lembaga Kemasyarakatan Desa* (village community institutions). In addition, there are other institutions, such as *Karang Taruna* (youth organisation), *Pemberdayaan Kesejahteraan Keluarga/PKK* (empowerment of family welfare organisation), *Posyandu/Pos Pelayanan Terpadu* (Integrated Service Post), and *Lembaga Pemberdayaan Masyarakat* (Community Empowerment Institution) (Government of Indonesia, 2018). Their function is crucial to bridging between government and citizens.

These village community institutions and indigenous villages provide facilities to accommodate citizen aspirations, to be a partner of the village administration, to get involved in village planning, execute, and control development, and to improve village community services. Working in these organisations is voluntary. They are not paid to work, but they are happy to be part of one of these organisations. These village community institutions exist in illegal area.

In a normal situation, every head of RT is connected by its RW. They communicate using social media groups, such as Whatsapp. For instance, the Head of RW needs to hold a meeting to carry out a particular program from the local government. The RW will post the information about the program and schedule a meeting on the social media group. If the program needs to be informed to citizens, each RT will publicise it to its citizen in the neighbourhood.

However, in an emergency such as the flash flood, coordination using social media application did not work as expected. Most of them were sleeping when the first signal to alert them was the loud speaker from the mosque before the electricity shut down.

By using social media such as Whatsapp and Facebook, citizens publicised to the wider public about the situation in *Cimacan*. The information spread out fast, since most of the citizens in Garut city had social media accounts. They responded to the situation in *Cimacan* by informing officers and other actors who had concentrated to help in *Lapang Paris*. Military officers, the police, the SAR team and voluntary organisation members who were helping people in *Lapang Paris* split their team to go to *Cimacan*.

The information through the social media spread very fast. People from other parts of Indonesia were informed about the situation, in particular, to people who had connections and relatives in Garut such as family, friends, or colleagues. Moreover, this was blown up by the news media. Firstly, information was collected by local news media that were involved in those locations (*Lapang Paris and Cimacan*). They came from local printed newspapers and local online journalists. The news was spread out in the following morning locally and nationally through the Internet.

During an emergency response situation, there were different types of collaboration. Citizens who lived in certain area have their strong bonds and relationships among them. Their leaders are informally connected to each other and they will help the affected community without any instructions. Local government agencies, military, NGOs and volunteers came to help victims. Collaboration among them is caused by a turbulence (Bryson, Crosby, & Stone, 2015). There was no prior commitment among them to work together, since there was no contingency plan in place. *BPBD* as a disaster management agency failed to execute its duty as a coordinator for disaster responses. This created a chaotic situation for citizen who live in the affected areas.

### **6.3. Collaboration in Immediate Response after the Flood**

The widespread information had negative and positive consequences. On the one hand, it attracted a lot of people to see what was happening. They flocked to the location to see the damage and took photographs to be uploaded on their social media status. Many of them were ordinary people, political elites and artists. They had different motives and interests. Some of them only wanted to share the situation and condition. Others had motives for image branding such as artists and politicians that wanted to be regarded as good people who cared for the victims.

The situation at the location and on the road access to the location was chaotic. As a result, their visits interfered with people who were working to search for other victims or clean houses of mud. On the road, traffic jams were everywhere. Humanitarian teams were blocked by traffic jams which hindered their access to the location. There was no one responsible for driving the visitors away from the locations or to manage traffic to ease access for the humanitarian aid.

On the other hand, the spread of information helped other people be aware that there was a humanitarian call for assistance. They helped victims in the forms of material, immaterial, and moral support. A lot of voluntary organisations came to help. They were not only from local



organisations but some of them were also from national organisations. They came from different types of organisations and different background of skills. There were specific organisations capable of disaster responses, such as Red Cross Indonesia and the Search and Rescue team. However, the majority of them did not have specific skills in disaster response. They were from political parties, youth organisations, religious organisations, and other non-government organisations.

There were several organisations, often voluntary organisations, that worked in their own ways without any coordination or communication with existing disaster emergency response teams. These types of organisation had their own missions and objectives. They wanted to use their own organisation's identity, such as flags and uniforms. Their purposes were showing to the public that they cared for and helped people. They might expect to gain public attention and pride to their organisations:

*They didn't join the search process with the military. There were many volunteers who claimed that they had skills in search and rescue or they had experiences to do the jobs. They did it by themselves. Of course, there were volunteers who joined the team, such as boy scouts. They were grouped to three zone teams. These teams consisted of official SAR team, police, military, and BPBD. These teams were commanded directly by the head of task force [military]. The volunteers who didn't join came from sympathisers of PKS [Welfare Justice Party], or from PKB [National Awakening Party] or known as Banser[Barisan Ansor Serbaguna/ Multipurpose Ansor Front]. They didn't coordinate that they would search for victims because they wanted to show their flag [organisation identity]. They did search for victims here and they did community service there to be popular. (chief of local journalist)*

This situation was much like a similar statement from the Regent: *"They did humanitarian programs individually. They wanted to exist, and their existence is highlighted"*.

They might think that by doing their work individually, they could be popular. Popularity is very important for certain purposes. This can be different from one institution to another. Political parties need popularity to increase voter numbers. This humanitarian work may increase citizen's trust that the party pays attention to citizens. A company might need it for branding. This

humanitarian mission is expected to promote its company brand. Different missions could motivate NGOs. Their organisation branding may increase trust from their donors. Again, this was also the effect from media attention. Since almost all mainstream media from national, regional, and local levels reported the event, they got free publicity and promotion indirectly.

*There was an interesting situation during the emergency response. Everybody concentrated in certain points. Actually, there were a few locations that had been affected by flooding on the upper stream. It happened at a small rural area such as Cibodas in Samarang. The locations were undetected by the Task Force. They reported to PMI [Red Cross] and it became our additional duty, but it was good for us which became our opportunity to have more attention from donors. (Chief of Local Red Cross Garut).*

However, most organisations and volunteers worked together to help communities in evacuation and searching for missing people. Although they worked together and they had the same mission, to help victims, there was no clear job function and task division:

*As far as I know, I haven't found any legal document which regulates our communication scheme. We are usually spontaneous. When disaster happens, we gather in the disaster location or Local Board Disaster Management Office and we have an initiative to share jobs and duties. (Chief of Nature Conservation Agency Region V Garut, West Java).*

#### **6.4. Logistics Management and Supply Chains**

*BPBD* Garut, as a local government organisation in charge of disaster management, has an emergency and logistic department. It is responsible for accepting aid from donors and distributing the aid to the victims. However, the *BPBD* has no specific storage for its logistics (see Figure 5.1 in Chapter 5). The canned foods are only put in a warehouse in the backyard of their office without considering temperature and air circulation of the building:

*To be honest, we, in BPBD Garut, do not have a storage yet, but we provide a temporary place for logistics storage from central and provincial governments*

*which are given to us. They are put inside a warehouse on the backyard.* (Chief Executive of Local Disaster Management Board Garut).

Other logistics are put inside the office without proper management systems (see Figure 5.1 in Chapter 5). The logistics are not well-managed by the organisation.

The food buffer stock is prepared for hundreds of families. This number is only enough for handling two RTs (neighbourhood communities). It is far from enough since every year the flooding affects more than a thousand citizens who are evacuated (see table 1.1 in Chapter 1). The Head of *BPBD* Garut claimed that this number is decided since they can get supply from national or provincial level if there is an emergency situation. However, the flash flood that occurred in 2016 proved that *BPBD* Garut could not handle the logistics supply to victims, since it was tackled by military logistics:

*Actually, there is a regulation in the military if I am not mistaken which stated that within one to two days, administrative mechanism can follow after distribution. This is regulated in our internal instructions in a non-war military operation. It is stated in Indonesian National Military regulations that the military must give supporting assistance to local government if needed. Logistics can be distributed ahead, and an administrative letter can be sent to military base within 2x24 hours.* (Secretary of District Military Commando)

Military logistics helped a lot to overcome the critical situation, since *BPBD* logistics were insufficient. Immediate responses after flooding identified there were 2,525 victims. The first response for logistics supply to victims was taken from Military Ready to Eat. Military has better management system of logistics. It stores were enough (MRE). It normally uses MREs for military rations for supplying soldiers.

Logistics management in the military can be integrated with the disaster emergency operation of *BPBD*. The military had sufficient stock of MREs for its soldiers for a certain period of time. MREs are periodically supplied to district military base to maintain its stock. However, *BPBD* Garut experiences expired stock if there is no disaster response. There will be waste, since the stocks must be destroyed and replaced by new stock. There will not be any waste if logistics of *BPBD* is integrated with military logistics since military uses its logistics for its soldiers on a

regular basis. It is stated in the regulation of Head of National Disaster Management Board No. 13 of 2008 about logistics management and equipment for disaster responses system, that it needs to be executed at the right time, right place, right amount, right quality, right target, and right needs based on priority scale and standards (BNPB, 2008). Logistics during emergency responses can be supplied from military stocks if the logistics system between *BPBD* and military is integrated.

System integration of logistics is prospective since the Law No. 34 of 2004 about Indonesian Military Forces states that one of duties of the Indonesian Military Forces is supporting disaster responses (Sekretaris Negara Republik Indonesia, 2004). The law is supported by another Law No. 24 of 2007 about Disaster Responses which explains that the Indonesian Armed Forces' involvement in disaster responses is a military involvement for civil mission (Government of Indonesia, 2007c).

This integrated system of logistics might overcome issues during the critical time of disaster responses before humanitarian aid comes from donors, NGOs or other institutions. This is normally within the first week after a disaster. There should exist also logistics management from donors or other aid agencies. The amount and specification of the aid sometimes, however, cannot be predicted. There was a mess in logistics management from donors. A number of donors were confused as to where to drop their donation:

*There was all in mess when aid came. Instructions asked them to drop logistics in the district military base or resort military based. Victims wanted it to be distributed directly to them since some of them had received logistics directly from donors. They received it directly from a political party, although the logistics was not what victims needed. The political party wanted to distribute directly to a location where it has its mass basis. The party collected used clothes or food to be donated to its supporters without understanding their needs. The party focused on certain affected communities to distribute logistics although the logistics were not what they needed. Actually..., the victims needed medicines but, since there was no coordination, victims received unwanted logistics. For example, certain communities received a lot of used clothes and they threw them away or used them for moping or cleaning their houses. Citizens from Leuwidaun village protested because citizens in Paminggir village received better donations directly from*

*donors. They said it was not fair distribution by KODIM. That was what happening in the field.* (chief of local journalist).

This view is added by one of the leaders of *Forum Pengurangan Resiko Bencana/FPRB* (Disaster Risk Mitigation Forum). The Forum is an organisation that is concerned with disaster responses. Members of the forum come from different institutions, communities, youth groups, artist groups, and corporations. Its activities involve all disaster phases (mitigation, preparedness, response, and rehabilitation), although its focus is on mitigation:

*Complaints from recipients of donation triggered conflict among victims. It was caused by the donations not coming to the post first, but donors distributed donations directly to victims. This automatically created uneven distribution. Some groups could get more donations where others got nothing.* (leaders of Disaster Risk Mitigation Forum).

Victims who were affected in locations that were more exposed by media would get more donations. Media coverage was massive in local, regional, and national levels. This was one of the reasons for the uneven distribution. There were many reasons that some donors preferred to distribute their own aid directly to victims. This might be caused by a lack of trust in government institutions, due to the high index of corruption in Indonesia including in disaster responses, such as in response to the devastating tsunami in 2004 in Aceh (Brooks, Klau, Orr, & Stanford, 2010). Another reason is discussed in the previous section — political campaign or branding image of donors' popularity.

Logistics distributed from local government accounts must follow its mechanisms and procedures. This must be preceded by disaster statement from *the Regent*. The statement is created based on a report from hierarchically lower levels of government (village). From the village, the information will be passed to *kecamatan* (the sub-district) level and it ends in *the Regent*. This statement becomes a reference for *BPKAD/Badan Pengelolaan Keuangan dan Aset Daerah* (Board of Financial Management and Local Asset) to transfer the account from the contingency fund to certain accounts or departments which are needed for disaster responses. The contingency fund budget is allocated based on previous experience of expenses in disaster response. The amount of money allocated is only an estimation:

*For flooding, if there is no certain government sector directly tackling this, it can be tackled by BPBD. If it relates to evacuees, money will be transferred to the social department. If it relates to damaged school buildings, money will be transferred to the education department. (Secretary of Planning and Development of Garut).*

This financial distribution from the local government to victims is a long process, since calculations of needs by every involved local government department had to be done. This is normally led by *BPBD* for calculation of damage, number of victims, and amount of logistics needed to be distributed to victims. This calculation measures disaster impact on physical infrastructure and housing. A total number from the calculation will be used for transferring funds from the contingency budget to certain local government agencies. Money goes to the social department for a quick response after the disaster. This can be in the form of logistics or cash to be distributed to victims. If the budget is insufficient, particularly for big costs such as public infrastructure rebuilding, it will be allocated for the following period of budgeting mechanism.

There is a complicated logistics and financial calculation and distribution to victims. Firstly, *BPBD* is responsible for calculating the impact of the disaster, but its staff have limited skills and knowledge of the calculation of physical damage from a disaster. Most of the staff come from different education backgrounds and experiences (See Chapter 5.2.1).

The calculation is only based on the estimation of the number of victims and damaged buildings. It takes a long time to calculate the number of victims who are safe and who require quick response. Besides, financial sources are not only from unexpected budget allocation. There will be financial incomes for disaster response such as from the regional government, national government, and donors. These donations may overlap with the local government's money from the contingency budget allocation. Data gathering is another problem in the local government. It can be imagined how it is complicated in disaster response, since it is already difficult to gather data in a normal situation. There is no integrated system of financial administration for disaster responses.

Based on the last flash flood, the flooding task force team announced that the team accept donations from donors. This was based on a policy from the *Regent*. The donations were physical materials, such as clothes or instant food, and money. The team stored materials in military warehouses and money was transferred to the Task Force team's account. The account was created

at day 2 of the disaster response. The account was designed to receive money from individuals, private companies, or other non-government organisations. However, donations from central, regional or other local governments were transferred to the *Dinas Pendapatan, Pengelolaan Keuangan dan Aset Daerah/DPPKA* (Department of Local Revenue, Finance, and Asset Management) account. There was no integration of these two accounts for the response. The Task Force team tackled some clothes, food, drink, other emergency materials and money which were typically incidental expenses and some money was transferred to other related departments from DPPKA account.

This double account meant each account had its own cashflow. The problem was in control and audit. The Task Force's account received a lot of money. This account was signed by persons in charge from two institutions. They were the head of Task Force from the military and the chief executive of *BPBD*. Cash disbursement had to be signed by these two institutions. Two institutions' approval was aimed to control financial disbursement. However, there was no public report made from these two institutions about the cash inflow and outflow. They made the report only to *the Regent* as the head of the local government.

The DPPKA received billions of money from the central government, regional government, other local governments, and foundations. The account from DPPKA will be transferred to different departments based on assessment of *BPBD* related to the needs for disaster response. For example, the account in DPPKA transferred funds to the local social department account for victims' daily allowance. This cash disbursement was not communicated to cash disbursement from the Task Force team's expenses. Although the emergency responses Task Force spent financial incidental expenses, the victims received double donations from two different accounts. Moreover, certain groups of victims received direct donations from individuals, corporations or other donors apart from the government.

Secondly, logistics were distributed by emergency response Task Force team immediately after the flash flood. The team had meetings frequently every evening involving all actors to evaluate what they had done and discuss the planning for the following day. The team gathered information from all involved actors from different locations. It included logistical needs and supporting facilities of affected communities. Logistics handling was very complex, since it included direct

distribution from individual or corporate donors to communities without coordination and donated to the team with no experience in logistics handling such as the Armed Forces:

*In a panic condition, donations came from everywhere. Persons who received logistics could be anybody, they were stored anywhere because they did not have skills and knowledge about logistics management, and it was the same in distribution. There was confusion, I just left like that because I could not argue with DANDIM [military]. Logistics was piled up outside buildings and he made an estimation of the logistical needs in each location without any assessment. He distributed stuff that had been received, and what happened? There was a mess, used clothes from donations were piled everywhere in every location, since the community did not need them. Instant foods such as noodle could not be cooked since victims lost their cooking equipment or it wasn't working. That was stupid, right? (Chief of Local Red Cross Garut)*

Since logistics distribution to victims was uneven, some of the victims initiated to get the aid directly from the commando post. Citizen asked for logistics for their life and family, but it was refused by one of the *BPBD* staff, since the individual did not bring a recommendation letter from RT, RW, and village officers which stated that the individual was a victim of the flood. The staff acted to prevent misuse of logistics ending up with the wrong recipient. It cannot be judged that the staff's action was wrong. The staff acted to prevent people taking advantage for personal benefit to receive free logistics from government. However, the action cost a lot for *BPBD*.

Victims could not be blamed for not following the procedures. Firstly, they had never been told about the administrative procedure. Most of them were uneducated and came from a poor family. They felt inferior to meet government officers. Secondly, it was in an emergency situation. They came to the post to receive aid and food for their family because they were starving. They returned to their temporary location with empty hands, without any food for their family. These types of victims were uncoordinated victims, since they did not coordinate with their community leader (RT or RW), and they took shelter in their family or relatives' house.



## 6.5. Collaboration Model

As can be clearly seen in the previous section, collaboration was created unintentionally. During the flash flood, representatives of local government departments, the military and volunteers initiated assistance by themselves without any instructions from the Regent. The Regent made instructions for an immediate response after the flood. It took two days for the Regent to make a decree and disaster status statement. This was one of the reasons that made the response chaotic, since there was no contingency plan for the response. The Red Cross is one of the experienced organisations in an emergency situation, but it had no power to run it since the authority was in the military's hands.

*BPBD* is expected to act as a coordinator for every disaster phase, as mandated by Law no 24 of 2007 about disaster management and the local regulation No. 7 of 2011 about the establishment and organisational structure of Local Disaster Management Board (Government of Indonesia, 2007c; Local Government of Garut, 2011a). As a responsible organisation for disaster management, *BPBD* should be a coordinator, a commando, and an executor. It is supported by other actors in executing its duties. This is admitted by its chief executive:

*Disaster management is depicted in our logo which is a blue equilateral triangle. On my uniform, there is this blue equilateral triangle symbol. The symbol means that BPBD cannot work alone, there must be a synergy among government, communities and enterprises. Disaster is an unexpected even; the responses can run smoothly if this blue equilateral triangle is executed properly. It means that there must be the roles of government, community, and enterprises. (Chief Executive of BPBD Garut).*

Based on previous experiences in tackling flooding, there is a gap between laws or regulations and practice. Every time flooding occurs, there is always a lack of coordination, misalignment, overlaps and miscommunication. Leadership and organizational structure become crucial problems. The chief executive of *BPBD* Garut has minimum skills and knowledge in disaster management, since the official has no formal education backgrounds and experiences in disaster management. In local government affair, the official has little power to manage coordination with other agencies:

*Yes, I have an obstacle with local government agencies. The coordination function is not working, although disaster responses require agility and it must be in a command system. Meanwhile, the chief executive of BPBD is equal to other leaders of SKPDs. The fact is that a command system started from the Regent to local secretary as ex officio of BPBD to coordinate in disaster responses. From the local secretary it continues to all SKPDs including our department. So, in this coordination function, we are weak. For example, when a bridge collapsed in the flood, I can't ask the chief executive of public work and housing directly. (Chief executive of BPBD)*

He claimed that he had no power to command and control. However, a requirement of command system may be effective during or immediately after a disaster, since there should be one leader to be followed for instructions. Volunteers and other actors might not be confused during disaster responses if there is a leader. The chief executive of *BPBD* was at the location during the flash flood, but he could not command actors from different institutions and communities, since he did not have any idea on how to cope with the flash flood. This incapability of responding to a disaster event led the Regent to decide the military should lead the emergency responses on the following day.

The chief executive of *BPBD* has a minimum understanding of coordination. He believes that coordination is the role of command and control where he has the power to command other institutions. Although there is a routine meeting among head of local government agencies which is facilitated by the Regent, it does not create a comprehensive collaborative working atmosphere. Practically, they work together during disaster or after emergency responses. However, this collaboration is without planning or any guidelines. This occurs repeatedly every time a natural disaster hits Garut:

*So, our coordination in the field was just simple coordination without any designed coordination mechanism. Our agencies communicate verbally in the field. (The Regent of Garut)*

Although it was spontaneous, there was massive assistance from many different actors from local government, communities, and enterprises. They worked all night to evacuate affected

communities with minimum facility and equipment. This social capital which exists in Garut communities can help in emergency response.

Military involvement during the flooding was equal to other actors. It was not as a leader. However, citizens do not dare to face the military, since historically Indonesia was led by a dictator with a military background for 32 years. Citizens have traumatic experiences with the military, so most of them will follow what the military commands. It was not only for citizens but other voluntary organisations felt inferior in front of the military. The military, much like other voluntary organisations or community, got involved to help victims without any request from any institution:

*I think it was emergency, we must help citizens. However, if KODIM had been involved for 24 hours but then there was no administrative process, we could retreat our troops and await further instructions from our higher commander. However, based on my experience, it has never happened. We, as military, have a moral obligation to help victims. (Secretary of Military District Commando Garut)*

It is clearly stated in the law and regulation of disaster management that the leader is *BPBD* for the local level and *BNPB* for national level. However, there is always appointed military to lead a disaster response. According to chief executive of Regional Red Cross West Java, the reason for the appointment of the military a leader for the disaster response is that the military has a clear command system. Therefore, it makes it easier for instructional process. Another reason is that military instructions will be followed by other actors.

On the one hand, the military is good for agility. It has one command system which must be followed by the lower line. It will be faster to execute duties. On the other hand, there is no chance for members under this command to argue or disagree with instructions. This system does not always suit all occasions, for example in a collaborative system involving organisations with different characteristics and cultures:

*My leadership was challenged in that situation. If I were young, that would be a fight between me and military. They [soldiers] have no experience in governance. One more thing, their style is military style, that is different for disaster response style. That was not nice, I was offended, I experienced bad*

*things that time. I am more experienced in disaster response than them.* (Head of Local Red Cross Garut)

This proved chaotic in practice. Quick responses of a military style to flash flooding could not work in line with the needs of victims and readiness of other actors. Military coverage for such a large affected area was limited. The military command system might not be suitable for all different locations. Instructions from the commander of the Task Force did not cover some areas such as PGRI secondary and high schools. There were many actors involved and they worked collaboratively:

*The problem in the field was not always easy to overcome. Many people were involved but it was not effective. There were the national SAR team, police, BPBD and volunteers during the flash flood without anybody providing them with instructions [leader]. This kind of situation happened for three days. People who were involved in the emergency response changed almost every day. There were different personnel from organisations [SAR, police, BPBD and volunteers] from one day to another. It was very slow since they had long conversations before start to work every single day of the emergency response.*  
(Headmaster of PGRI Secondary School)

There was a collaboration between two institutions in distributing water. Clean water was one of the most crucial aspects for victims, since they could not get clean water from their wells and water distribution from the water company was cut off. A donor company wanted to distribute water containers to the affected community, but it did not know about the needs, locations, and how to distribute the aid. The company contacted the Red Cross for distribution. The Red Cross distributed the water containers to communities without any coordination with the Task Force team. The Red Cross admitted that they had activities and they were happy because they could help donors and help victims alike.

## **6.6. Accountability Deficit**

Failures of collaboration during the disaster response phase results in questions about accountability. Questions of accountability from the highest level in the hierarchy of local government to its citizens (The Regent), the chief of emergency response Task Force team, the chief executive of

*BPBD*, and all involved actors. The accountability is not only for financial management, but also performance. The data reveals that there are accountability deficits from forums who have the right to ask for accountability from the actors involved, especially the victims who are powerless. They accepted what they received from the government without arguing. Victims received donations from their government without asking for detail of the source and amount of donation from government. There was no transparency to victims. Although there was media which informed society about financial flow during the emergency, the media faced limited access to information.

The Regent, as the head of local government, is obliged to protect and save citizens. He has a responsibility during a disaster response to provide better services to affected communities. Theoretically, he must be held accountable to the citizens. Failure in fulfilling this obligation may cost distrust from the citizens to the Regent. As a result, citizens might not vote for the incumbent in forthcoming elections. In contrast, repeated flooding to the city which affect certain communities had no negative consequences for the Regent. The current Regent could be re-elected for a second period (he has since been officially confirmed as the Regent for the second time for the period 2018-2023). This might be because of the relatively small number of victims who are affected by repeated flooding or other reasons which are not explored in this research. Some affected communities stated that they still believe that flooding is a natural cycle which is not the government's fault. They believe that the government still help them by helping them with logistics during flooding.

Hierarchically, the Regent is in the highest position. All reports of disaster responses end up on his desk. The Regent does not have any obligation or formal responsibility to report about tackling disaster response. The team is the only one that must report vertically, horizontally, internally, and externally. The team is a temporary organisation which is created only during the response. It has limited capacities and resources for complex reporting mechanisms because it focuses on victims. This is not an ideal situation since there were many donations to the local government of Garut from other local governments, province governments, national government, enterprises, foundations, and individuals.

*During disaster response, the Regent has full authority without any responsibility requirement to anybody. The fact is that all activities during the*

*response are under my control. Parties that are involved in disaster responses are controlled by the team that is created by me. (The Regent of Garut)*

Morally, responsibility for disaster responses is on the Regent. Responsibility for failure will be pinned not only on *BPBD* or other local government agencies but also the Regent. This moral responsibility is difficult to measure which results in less direct consequences to local government agencies or the Regent. A significant consequence may be in the form of trust from the people to the local government. This can be seen from a fact that many donors prefer to distribute logistics or financial aid by themselves, or that some volunteers collect donations and distribute them without coordination.

These situations repeat in every disaster response. One of the major issues is transparency among actors. Local government agencies lacked transparency for total financial distributions to other actors and citizens. They might make a final report of their activities to higher authorities hierarchically, but this does not happen horizontally to other involved actors and generally to citizens. The Task Force team is claimed as a collective group which consists of involved organisations. The Task Force makes reports of its activities every day verbally in a meeting:

*There is no formal report of received donations. Sometimes, there is explanation from the person in charge person [Task Force team leader] if there is a question from the media. When donations arrived in the command post, there would be announcements about that daily. The responsible person is still the Regent. In the general system of governance, there will be external audit from BPK [supreme audit institution] but reports for disaster are only verbally daily during emergency responses. (Head of Local Planning and Development Garut)*

Furthermore, there were two bank accounts which were being used for collection from donors. The first account was specifically used for collecting donations from other government institutions (other local governments, provincial government, and national government) and foundations. The donor foundations were big organisations such as Qatar Foundation, Pikiran Rakyat, and Djarum Foundation. The second account was used for the collection from enterprises, individuals, and other donors. These two accounts were handled by two different persons. Donations to government were managed by *DPPKA/Dinas Pendapatan dan Pengelolaan Keuangan Daerah* (Local

Revenue, Finance and Asset Management). Another account was used by the Task Force emergency team to collect financial aid during the response.

The team announced every evening during emergency response meeting to all involved actors about the receipt of donations. The secretary of the team, as the person in charge, reported financial and non-financial receipts and distribution locations to all actors, including the media. The secretary reported to the Regent on behalf of the chief of the team about all of the emergency response when the disaster status of emergency response ended. A carbon copy of report is sent to Local Board Disaster Management at the province level. This copy of the report continues to the National Board of Disaster Management, and then it will reach the President of Indonesia as the highest-level authority.

The report is normally only an administrative procedure which must be followed by the team. There is a lack of follow-up action from the higher authorities about the report. There is no audit or inspection of the performance of the team. There are several reasons why the audit or inspection is not executed. Firstly, the team is a voluntary group from different types of institutions from government or civil society. They work based on a humanitarian sense. The audit process may offend the team, since they are voluntary. Secondly, some donors prefer to classify their donation as confidential. Their reason is a part of their belief that a donation must be kept confidential. Thirdly, logistics is not only collected in the Task Force team. Each organisation has its own financial and human resources. For instance, the social department has its own budget for emergency donations to disaster victims. It is usually communicated verbally during the meeting if they prefer to inform.

Relationship of each actor in the team is more concerned with technical activities. The chief of team led a meeting daily during responses which discussed current status of situation, problems, challenges, and needs. The meeting would invite actors to be involved based on their availability, readiness, and capability in several locations. The meeting normally only reports each actor's activities on that day and planning for the following day. Every actor wants to be heard and their ideas and opinions be accommodated. However, the military as a leader is not used to being democratic in a decision making situation. The meeting only became a session of reporting and delegating tasks for the next day.

There occurred turf battles among them since each of them brought its organisation's missions and objectives, beside the collective task. For instance, they prefer to work in the most popular locations because there will be a lot of media and they will have an opportunity to be broadcast by television or their organisation logo may be captured by newspaper images. Most of them were organisations which have an interest to benefit from publicity, such as political parties, NGOs, and corporations. The turf battle did not affect directly how they worked. However, they did the assigned tasks in the meeting instructions and they worked in a good relationship and communication among them.

The relevant concept of accountability among actors is professional accountability. They were expected to do duties delegated during the meeting to the best of their ability. Professional accountability requires certain standards to measure the performance of actors. This is not as simple since it was difficult to value better performance if there is no agreed standard. Furthermore, in the voluntary work, it is complicated to give "punishment" to actors from civil society. The only thing where accountability may be applied is to government institutions. There was a demand for better performance from non-government actors to government officers since they are paid professionally and their institutions have resources. However, non-government actors could not have any significant power to apply consequences to government officers formally.

## **6.7. Summary**

Collaborative working during the response phase was executed incidentally. Actors came to locations without any instructions. Neighbouring communities, the military, police, local government, and volunteers came voluntarily. There was no command and instruction during the disaster, but they could work together and help each other. This situation happened since people in Garut have strong solidarity and respect for others. Social capital is an asset of majority society in Indonesia particularly in Garut. It helps government during disaster response. Without asking, they will voluntary help others in need.

The following day, after the flash flood, a commander of KODIM (military district commando) was appointed a chief of the Task Force by the Regent. The situation was chaotic in almost every section such as evacuation, logistics, search and rescue, medic, and debris management. Military command system in disaster response had positive and negative impacts. Positively, the military



is good for agility. Troops are ready to work in any situation and condition. They were assigned to work with other organisations in many different locations. Their physical strength could help other involved actors in doing physically challenging work such as cleaning up debris around locations. Negatively, the troops only listened to their commander. They force other actors to follow their instructions. This was not a good relationship in voluntary work. Other actors came to help voluntarily. They felt underestimated and threatened by the military system of response. Furthermore, responding to natural disaster will face uncertainty. One disaster may have different characteristic to another location or even one location may be different to other locations at the same time and event of a disaster such as the flash flood.

There was a lack of leadership from the chief executive of *BPBD* during disaster response which resulted in the appointment of the military as the chief of emergency response Task Force. This leads to a lack of accountability of *BPBD* as the institution in charge for disaster management. Some actors and donors preferred to distribute logistics by their own way or helping victims individually without joining the Task Force team. Some of them had personal motives such as promotion of their activities. This can be for campaign purposes for politicians, branding image for companies, or showing off by voluntary organisations to attract donors.

Formally, the team made reports to the Regent for their activities. This was a form of responsibility from the team to the top of local government leader. The military is not under a direct structure of the local government's hierarchy. The Regent had little power to give consequences if there was something wrong with their duties, since the military was only a partner that worked voluntarily. There is an accountability deficit within this context between account holders (The Regent) and accountant (commander of KODIM).

## Chapter 7

### The Recovery

#### 7.1. Introduction

Previous three analysis chapters discussed the dynamics of disaster management during the mitigation, preparedness and response phases. They tell how failures in coordination, communication and trust may lead to accountability issues. As a result, lack of accountability creates vulnerability for people facing flooding. This chapter discusses collaboration during the aftermath of flooding, the recovery stage of disaster management. This analysis includes short-term recovery and long-term recovery. Short-term recovery is a relief stage after the flooding. This includes temporary housing, food and drink distribution, clearance of debris, and trauma healing. This stage is part of the activities to prepare for long-term recovery stage. Short-term recovery usually begins while emergency responses are running. On the other hand, long-term recovery starts after the emergency response ends. The long-term phase includes rebuilding and rehabilitation. It takes a longer period for a major natural disaster. These two periods of recovery consist of many components such as planning, coordination, donations, funds, logistics, and personnel (Coppola, 2015e).

This chapter focuses on recovery phase in a collaborative setting to analyse concepts of accountability which in turn may affect mitigation phase. There are two different groups of actors who contribute to the recovery phase. They are from government agencies and non-government actors (organisations or individuals). Several national and local government institutions are involved in this phase, such as BPBD, BNPB, BAPPEDA, social department, public work and housing department, state forest enterprise, nature conservation agency, and *Balai Besar Wilayah Sungai/BBWS* (River Basin Organisation). Non-government institutions involved in this phase are enterprises, NGOs, volunteers, and communities.

Involvement of actors from government and non-government in these two types of recovery phase can consist of the same actors, or it can be different actors in the short-term and long-term recovery phases. Some of them work on specific events because of their availability, capability, and capacity in that event. However, government as a whole has responsibility to provide better recovery phase,

as mandated by the law that government must protect its people from any kind of vulnerability (The Republic of Indonesia, 1999).

The first section of this chapter analyses collaboration in short-term recovery after the immediate disaster responses. The section depicts each actor's roles and their way of working in the relief process, such as in the provision of temporary shelter and housing, the process of mud and debris clearance, and providing food and drink for affected citizens. It includes discussion of the dynamics of coordination and of communication processes between those involved. The second section discusses long-term recovery (housing, public infrastructure, river rehabilitation, afforestation programmes, and economic recovery). This analyses assessments of property lost and of affected citizens, and of resources required for rehabilitation. This section includes processes of physical infrastructure restoration, rebuilding and creating new housing to relocate citizens. The programmes were dominated by local and national government institutions. The third section of the chapter discusses collaboration during the recovery phase. Collaboration occurs in both the short-term and in the long-term recovery phases. Short-term recovery collaboration occurs during evacuation of victims to temporary locations in a chaotic situation, and the assessment process of damage from flooding and the needs of victims. Long-term recovery is mostly concerned with physical development (infrastructure). The fifth section is conclusion.

## **7.2. Short-term recovery**

As explained in the previous chapter, the 2016 flash flood left many issues, physically and mentally. It swept hundreds of houses, bridges, farming areas, public facilities, and roads. Victims were left in shock caused by the traumatic event. Some people felt sorrow and distress because they lost their family members or relatives. The majority of the 2,525 affected people came from poor communities who lived near the Cimanuk River. They were struggling to get their life back to normal. There were several activities during the short-term recovery process which included shelter and housing provision, assessment, investigation of land conversion, creation of recovery plans which included the resources for recovery.

### **7.2.1. Provision of temporary shelter and housing**

Short-term recovery starts while the emergency response is ongoing (Coppola, 2015f). Most actors involved in the response phase continue their activities into this stage in helping affected communities. As discussed in the previous chapter, there was no appointed team leader during the

response to the flooding. The actors involved in evacuation faced confusion while relocating victims to temporary shelters. Neighbouring communities invited them to stay in their mosques, community halls and other public facilities. There was no clear instruction to locate victims in certain areas since, during the preparedness phase, those responsible had failed to make such plans (see Chapter 5):

*In the affected site it was chaotic and mess. Why did that happen? Yes, it was caused by no contingency plan which should be made by BPBD as a leading actor.*

(Secretary of District Military Command).

Actors who helped with evacuation were informed by community leaders or neighbouring communities to direct victims to possible areas and some of their neighbours opened their doors as temporary places for victims. Decisions to locate victims were based on availability and distance to locations in Cimacan since it was an ongoing emergency and victims needed places to stay. The victims were scattered in many different places. For instance, the victims in Cimacan were evacuated to different places such as to the Local Education Centre, a sports hall in a neighbouring village, mosques, neighbouring communities and citizens' houses. This could only solve the problem temporarily since every temporary location had different capability and capacity to handle victims. Some locations had limited toilets, water, and food. Furthermore, these locations were not recorded and known by local government authorities and donors, which in turn created problems in the distribution of food, drink and other assistance.

The Regent called a meeting of FORKOPIMDA/*Forum Koordinasi Pemerintah Daerah* (Local Government Coordination Forum) ofn which the Regent was the head, as mandated by Law No. 23 of 2014 (Government of Indonesia, 2014a) in the following morning, the 21<sup>st</sup> September 2016. The meeting was attended by FORKOPIMDA members, such as a chairman of parliament, a judge, the Chief of the Military from KODIM, and head officers of related local government agencies. This meeting agreed to appoint the commander of KODIM as Head of the Task Force and the Chief Executive of BPBD as the Deputy of Task Force, as stated in Regent decree (see Chapter 6).

The following day, after issuance of the Regent's decree officially declaring the floods a disaster, some actors worked collaboratively under the appointed Task Force team, especially government agencies, but others preferred to work individually. There was no obligation for actors to join the

Task Force team from local government authority. The Regent did not act to direct, suggest, recommend, or invite them to join:

*...We let them do their activities [helping victims] by themselves. For example, there were political party organisations [and] enterprises. They went to citizens directly and there was no report to me. (Regent of Garut)*

This made for a lack of clarity in the immediate recovery phase. The Task Force team received minimum information about the areas or communities which were helped by individual actors since the affected areas covered from the upper stream to the lower stream of Cimanuk River. Local government seemed to be powerless. In particular, the Regent, as the head of local government, could not use his authority and power in this particular situation.

Actors from different groups of local and national organisations, such as NGOs, government agencies, community, and individual volunteers, arrived on these sites in the morning, having received information from the mass media and social media since the previous night. While the meeting of FORKOPIMDA was running, these actors were busy helping in the aftermath of the flooding. The situation was as chaotic as described in the response phase (see Chapter 6). They worked without any instruction and coordination. They managed to do whatever they could to help victims. Although there was no appointed leader or Task Force team yet, they could undertake various tasks, such as helping victims in mud and debris clearance, and in the collection and distribution of food and drink to affected communities. They were very quick to help affected area although there was no leader. However, they came to locations which had been reported through the media, since it was the only information they had and in the absence of official statements from local government about the affected locations.

As a result, help was concentrated in the areas which were reported by media, such as the affected community in Cimacan and Lapang Paris (see Chapter 5). It created issues because help was concentrated in these two sites. Only 650 meters from Cimacan, there were two PGRI (*Persatuan Guru Republik Indonesia/Republic of Indonesia Teacher Association*) schools which were destroyed by the flash flood. Actors involved in Cimacan did not notice it, and no one direct them to help the schools. The schools were suffering without help for a couple of days:

*There was no help from anybody for two days [after flooding]. On day three, there were many helpers coming from many different groups. They cleaned mud and debris because many buildings had collapsed. (Headmaster of PGRI High School).*

The headmaster and teachers had cleaned mud and debris by themselves for two days before help came. The help came to the location based on information spreading through national television broadcasts which reported live from the schools on day three. One national TV reporter interviewed the headmaster about the current situation at the schools:

*As soon as I was interviewed by TVONE [one of the biggest national television channels in Indonesia], there was a great deal of assistance arriving in the form of donations, manpower for cleaning, food and drink, and other materials. (Headmaster of PGRI High School)*

Although they could work without any central command and formal coordination during clearance of mud and debris and food collection and distribution in the affected areas, there were several issues regarding these activities. Firstly, as has already been noted, there was no one in charge and actors just worked where they wanted to, largely directed by media attention.



Figure 25: Organisations from civil society organisations and enterprises opened booths and command posts on the streets or in houses near the location of the flooding (Source: from local and national news media in Indonesia and NGOs documentations)

Secondly, the collection of donations could be done by anyone. Many actors opened booths on the sidewalk of the main road or in houses near the sites (Cimacan and Lapang Paris). The actors were from community groups, political parties, enterprises, state-owned enterprises and individuals (Figure 25). They collected and distributed food, drink, clothes and other types of donation. Some booths were branches of certain organisations (political organisations, enterprises, NGOs) which were aimed to facilitate the distribution of donations from other parts of the country, while others were just local voluntary groups:

*...at that time, beside from government [national and other local governments], there were great donations from people [individuals and organisations]. They set up booths from BUMN [Badan Usaha Milik Negara/state-owned enterprises], political parties, and so on. There were hundreds of booths everywhere near the flooding locations. They collected and distributed donations directly to victims without going through local government. (Regent of Garut)*

After the decision was made to appoint the military as head of the Task Force, there was no significant change in the management of logistics. They kept collecting and distributing food, drink, clothes and other materials directly to victims. Since there was no coordination among them, it made donation distribution uneven and it created another problem among victims:

*It happened in temporary shelters, although we tried to avoid that, such social envy among victims in temporary shelters triggered fighting for donations and so on. (Secretary of Task Force Team)*

Furthermore, there were several booths claiming as group of victims and collected donations near affected areas. There was no record of how many booths and posts. Majority of them used these booths for their personal purposes not for victims. The Task Force team did not manage these booths and posts' activities in the collection and distribution of donations. This could create opportunities for them to take benefit from the situation:

*We did not know what they have collected and distributed to my community. I did not have authority to ask. You know, they were from different groups of people and mostly they were local groups. I know their members and some of them are not good people. (Head of Local Community 3).*

The Task Force team led the search and rescue process from within a team and directed the movement of evacuees from different places to specific locations considered as proper for temporary shelters. The evacuees were mostly citizens who lost their houses to the flash flood. The victims from Cimacan were moved to the Local Education Centre and to flats at Musaddadiyah. Victims from Lapang Paris were moved to the military barracks of KODIM, and victims from Sanding were moved to Inten Dewata Hall in the city centre. Not all of the victims were moved to



these appointed locations because some of them were already staying with their relatives or at neighbour communities. Some of them returned to their houses to clear debris and mud.

The idea of moving victims to new centralisation places had positive and negative consequences. Firstly, it was good since it eased the distribution of food, drink, blankets and other donations. Individual donors could give their donations directly to these appointed locations since information about these locations were spread through media. Secondly, local government officers from the social department could record the numbers of victims and their related information, such as their addresses, family, and properties. Thirdly, their family and relatives could find them easily by asking the Task Force commando base. However, they might feel depressed when they are gathered with other victims who were desperate and stressed because of loss of family members or property:

*During the days, there were many visitors who came and gave them donations.*

*They were happy, but they were in sorrow talking about their loss at night.*

(Chief of Community Association in Cimacan)

The victims who were moved to a flat in Musaddadiyah had issues adapting in the new environment. Most victims felt lonely since they are not used to living in high-rise housing. The flat housing system limited their time to gather together, such as for coffee time and for children to play. For example, they found difficulties visit their neighbours in the same block of flats because all doors look similar and there was no communal space in the flats for them to gather. They needed time to adapt to this environment.

By the time they could cope to the new environment of flats in Musaddadiyah, they were obligated to move to another place since the flats are privately owned property and it was going to be used by its owner. They had lived there for several months and they got used to living there but they suddenly had to vacate the place:

*The victims of the disaster [flooding] who lived in Musaddadiyah suddenly had to vacate the flats because the flats would be used by Musaddadiyah Foundation. Moving them to another location was not as simple as turning our palm. We understood clearly that they had lived there for several months and they started to find comfort there. (Chief Executive of Local Board Disaster Management)*

It was a different case for victims who stayed in the military barracks, city hall, and the local education centre. Privacy was a big problem because all of them stayed in the same space without any barrier among them. This might not have become a problem if it was temporary, for a week or two. But they still were living in these shelters a year after the flooding when I was visiting for data collection. They had to live in the shelters before they could be moved to their permanent houses which are provided by the government or by their own efforts.

With all the dynamic situations of providing shelter for victims, there are several things that I could point out. Firstly, community support was great. They provided shelters in their houses or halls for victims and they helped to clean debris and mud for victims who wanted to return to their houses. It was executed without any instructions from local government officers (the Task Force team). Secondly, the evacuation procedures which were ordered by the chief of the Task Force team to centralise victims in specific location were not totally effective. Communities in particular area such as in Garut have very strong bonds with their neighbours. This can help during the recovery process, since victims would be looked after better by close neighbours or relatives rather than by the Task Force team in shelters. However, this mechanism has drawbacks by causing the distribution of food, drink, blanket and other materials to become complex since there was no record of and assessment system for victims who stayed with their neighbours. Work during the preparedness phase might have overcome the drawbacks by educating the community to face flooding by creating systems to identify and to record the mobilisation of the affected community.

### **7.2.2. Assessment**

During the evacuation of victims to safer places, there was assessment of victims' needs and of the effect of the flooding to sites. Short-term recovery was focused on victims' needs and all activities urgently needed (Coppola, 2015b). The needs assessment was not executed properly during post flooding by the Task Force team:

*During the chaotic situation, donations came from everywhere. They were received by anybody [in command post]. They were stored and distributed by people who were not capable and lacking experience. There was confusion because there was no direction from the head of Task Force team. The stuffs were piled outside the command post and they [Task Force team*

*members] made an estimation of victims' needs without prior assessment.*

(Chief of Local Red Cross of Garut)

Some food, drink, blankets, clothes, money and other goods from donations came to the Task Force team, but a large amount of donations was received by non-government organisations to be distributed to victims. Some of these donations also were directly distributed by donors to victims. The Task Force team did not take any action on these issues. As a result, donations were distributed unevenly and some of these goods, such as clothes, were excessive for certain communities and they threw them away (see Chapter 6).

*Yes, we [the Task Force team] felt disappointed when volunteers from NGOs or enterprises or whoever they were directly distributed donations without coordination with the command post in the military base... There were a lot distributions [from them] on the field that became overlapping, such as clothes which were not needed by victims and they ignored them. [The clothes] became rubbish. (Chief of FPRB/Forum Pengurangan Resiko Bencana (Disaster Risk Reduction Forum))*

Assessment of victims' needs was executed neither by the Task Force team nor individual donors. The total number of victims in all areas, the needs of victims, and which victims had received donations from uncoordinated organisations or enterprises were not known. However, the local Red Cross of Garut, as one of the Task Force members, initiated the conduct of assessments after a few days. It conducted its organisation's standard operation procedures for post disaster. One procedure was assessment. There was a reason why the local Red Cross of Garut did not offer their assessment process to the Task Force team:

*We [local Red Cross of Garut members] were forced to comply [to Task Force team]. We followed their rules at the beginning but when we realised that we had strength [experience in tackling victims] compared to them, we did assessments for the areas where our members were...we communicated our assessment results and they finally listened to us. (Chief of local Red Cross of Garut)*

The military style in the Task Force team was a reason why the Red Cross had to comply. But the Red Cross did assessments and distributed donations received by its base camp. Although The Red Cross joined the Task Force team, they continued to receive donations to their organisations and they could distribute them by themselves. They just needed to report their activities in daily meetings (see Chapter 6). The Red Cross explained its assessment activities before distributing food, drink, clothes, or any other goods. Historically, the local Red Cross of Garut has more experience in disaster management than any other local organisations. The Local Board Disaster Management existed in 2011 (see Chapter 4) and military has little understanding of disaster managements, while the Red Cross of Garut has served the community for decades. Consequently, the Task Force team listened and followed the Red Cross activities in assessment.

The social department in Garut did not conduct assessment of victims' needs but it did count the number of victims. It was based on Government Regulation No. 22 of 2008 and Social Ministry Regulation No. 04 of 2015. These regulations state that each victim has rights to receive an amount of money daily and the money is to be distributed per family. Theoretically, based on the regulations, all victims will receive allowances for up to three months. However, it was not what happened:

*The amount of the allowance for victims had been notified to us [community leaders]. I proposed to them [social department officers] as required. I proposed from RW 10 [chief of community association of region 10]. There were 632 victims in my area and I proposed that number, but I received only for 99 victims. I did not know what I should do...I initiated to call all neighbourhood groups in my area and discussed it. Based on our agreement, we received the money and divided equally to all families. (Chief of Community Association)*

The Chief of Community Association sought reasons from the sub-district of the formal government institution. According to an officer in this office, they were urged to report the number of victims on day three after the disaster by social department when not all victims had been recorded. The social department was pushed by its ministry of social services to provide data because the President of the Republic of Indonesia was going to visit Garut.

Victims were sacrificed by this process. The social department of Garut provided incomplete reports of victim numbers from the sub-district level of local government since the report had to be handed to the ministry of social services. Data of victims were not collected and recorded simultaneously in all areas. Some involved actors in certain areas had taken the initiative to record the total number of victims, but other places did not. In turn, when social services department asked for data on victims, some community associations could easily provide it where others needed to process it. There was a problem in providing victims' documents since these documents were lost to flooding. There was an administrative requirement which required victims to provide documents such as citizenship ID, house certificate, and birth certificate, or evidence of family card. The victims had to undergo the process of making new documentation by going through to the department of population and civil registration. They had to follow bureaucratic processes which is from the lowest level of neighbourhood association, community association, village institution, sub-district institution, and the last is to department of population and civil registration to acquire new evidence of personal documentation. It consumes a lot of time and the victims could not prioritise the process since they were still shocked by flooding or they were focused on cleaning their houses.

Social services department did not propose data that came after the first report. It was because the Regent had made the decree during first week of flooding: *"I made a decree very quick. Before 7 days the decree had been made which stated that the victims were 2525."* The decree that stated the number of victims made the social service department not able to process the proposal from community association. The Regent stated the number of victims was informed by the Task Force team where social department was part of the team.

There was no integrated data and information for victims' needs. Although they acted as a team in the Task Force, there was an organisational ego to show that they could do better. For instance, the Red Cross, which had more experiences in facing disaster, decided to conduct assessment by themselves since the team had a military style of disaster management. Requests for the total number of victims by ministry of social services, which had to be provided before the President of Indonesia came, made the local social service department submit limited data on victims since they needed to include victims' identification, such as citizenship evidence. Victims received only a small amount of money because they did not have any other option. There was no action from

parliament members or other representative organisations about this issue since victims did not protest.

### **7.3. Long-term recovery**

The recovery phase continues to the long-term recovery, which includes the development of permanent housing, the restoration of public infrastructure, afforestation programmes, and economic recovery. This phase requires a lot of effort and financial investment. In the case of Garut flooding, financially it was dominated by government programmes and there was a donation from the Qatar Foundation and from private enterprises. However, there was a large amount of individual donations which were directly distributed to victims and their environment.

This long-term recovery process was preceded by an assessment of environmental damage. It included the effect of flooding on housing, farming, rivers, bridges, roads, and other public facilities. This assessment was not easy since there is no standard for the calculation of the environmental effect from disasters in exact numbers (Madjid, 2018). The Task Force team just recorded global damage, such as the number of houses, hectares of farming area and forest, or metres of road. The calculation did not depict the whole picture of destruction from flooding. Taking the housing calculation as an example, citizens who lived in different sub-districts had different types of houses. The citizens who lived on the upper stream built their houses mostly from wood, which cost less than people who lived in town areas, who mostly built their houses from concrete. Moreover, their houses have different size, furniture, and quality.

The team assessed damage of public facilities which was going to be used for budgeting purposes. This assessment was conducted on public infrastructure and state owned or local government owned public facilities such as the general hospital, public schools and government office buildings. Private schools and factories were excluded from the assessment:

*I, as a headmaster, looked for donations for the rebuilding of our classes which were all collapsed by flooding. And, thank God, with all the donations we could rebuild a better building than before... There were four classrooms built by donations from the PGRI foundation of East Jakarta and the rest of the six classrooms, yard, toilets, and others were donated from the Bank Mega. (Headmaster of PGRI Junior High School)*

The assessment of public infrastructure physical damage was focused on local government facilities. The reason might be for budgeting purposes. Local government could propose to province or central government for renovation or rebuilding these facilities. On the other hand, private schools and enterprises were struggling to rebuild their places because they did not have any insurance for their buildings.

Assessment data from the Task Force team were submitted to the Regent as the head of local government through BAPPEDA which would then be used for planning and budgeting mechanisms in the short-term and long-term development plans of the local government (see Chapter 5). For long-term recovery, the Task Force team made a report of infrastructure and environmental damage which was made based on their members' daily meeting.

Recovery planning for long-term recovery consisted of what to do during the aftermath of flooding. Information came from the report of Task Force team's finding during their evacuation, logistics distribution, search and rescues, and other immediate activities. The planning was made by local government of Garut which was led by the Regent. The recovery planning included the development of a housing programme for victims who were not allowed to return to their houses, renovation of affected public infrastructures, river rehabilitation, an afforestation programme, and economic recovery. This planning is an ongoing process and it continues on to the mitigation phase (see Chapter 4). Housing development was planned to build 1200 houses, of which 800 houses would be built by government and the other 400 houses were planned to be funded by private donations.

### **7.3.1. Housing sector**

There was identified a number of victims who lost their houses and who lived in prohibited areas illegally. Although the total of victims stated in the Regent decree did not describe the real numbers of victims, the development of housing was based on this decree for local government programme. Some victims renovated their houses from individual and small private donors which gave material or financial donations directly to them. Most of these victims live in the Cimacan area which was prohibited for rebuilding by local government, but they did not have another choice since they were not listed as recipients of the local government programme. There was another view from the chief of local reporter in Garut which stated that local government seemed to ignore their activities

in renovating and rebuilding their houses in the prohibited area. The Regent warned them against rebuilding or renovating their houses but they ignored it:

*That is a dangerous area and nobody is allowed to settle there but they refuse. It is difficult in practice [to resettle]. Although the state aims to protect its citizens, they are vulnerable living there. I said 'Ladies and gentlemen do not settle here again and the state will move you [to a safer place]'. But they replied 'I am okay to live here and the new house [from government programme] is for my child.' It is difficult to face citizens who do not understand. (Regent of Garut)*

The donors might not have information about the land status of victims since there was no information of land status during and after the flooding. Their intention to help victims facilitated them to rebuild their houses in the prohibited zone. There was no formal announcement from local government about land status. There was a statement from the community association leader in Cimacan that some of their people have deed of sale and had purchased their land.

Another reason which made victims return to their houses, although they were prohibited, was that they had stayed too long in shelters and they felt inconvenienced. Local government kept them in temporary shelters because they did not have another option to move them to and they decided to return. The local government of Garut had limited capacity to provide housing for all of citizens in Cimacan if they had to be relocated. They faced a dilemma. On the one hand, they had to enforce the law about land status for green space, but on the other, they did not have an option to move them:

*We do not have any alternative [place] to relocate them because we do not have places [housing] for them. We could not force them by doing evictions since there is no alternative place to move them. We could do eviction, but we must have a prepared place [housing] for them. (Head of Communication and Information Department of Garut)*

The local government of Garut received different models of donations for the building of new housing. Some of them gave financial donation directly to local government for housing development but others decided to build by themselves. They needed 1,200 houses for 2,525



victims (interview with Regent Garut). The number of houses has gone through a verification process by local government:

*We verified [the information]. The verification process was conducted by asking the community leader, head of the neighbourhood association, or their neighbours. So, I am sure that our data is convincing.* (Chief Executive of BPBD)

Some enterprises, such as the Qatar Charity, *Dompét Dhuafa*, and *Pikiran Rakyat*, would provide physical development of housing and they asked local government to provide land such. The Regent was promised 140 billion Rupiah from central government for a housing development programme. The Local Government of Garut had started to search for locations to execute the programme. The victims could not be relocated to one location because there were different sources of donation with different mechanisms. For example, *Dompét Dhuafa* did crowdfunding and they collected 1.5 billion, of which 500 million was used during the response phase and the rest could build only 11 houses. Local government of Garut helped to provide land, but the process of development was managed by *Dompét Dhuafa*:

*Some of them through Regent [financial distribution], I think most of them through Regent. We needed to provide land and they would build the houses.* (Head of Chief Executive of BPBD)

Finding locations for development of 1200 houses could not be found in one area near the town since the City of Garut is small. Local government decided to find land in the suburbs. Besides having many options for locations, the land price is cheaper in the suburbs than in the town. It was concentrated in three locations: Kopi Lombong, Cigadog, and Lenggong Jaya. Providing land for development of housing needed many efforts for local government of Garut. There are many aspects which were considered:

*From the beginning, the consideration of housing location must be in a safe area which is far from future natural disasters. The second is land availability. The land availability should be in line with the local government budget. For instance, they [victims] want to move to a strategic location. There is no area near that place [flooding locations] but we give them stimulus [money] for*

*victims for alternative business.* (Local Government Officer of Board of Local Development Planning of Garut)

Local government of Garut communicated to other departments in national government before starting development. For example, they contacted PVMB/*Pusat Vulkanologi dan Mitigasi Bencana Geologi* (Center for Volcanology and Geological Hazard Mitigation) before deciding to use the land for development of housing. The reason was to assure that the location is safe.

However, decision of location for housing development programme could not only consider safety reason, there are many aspects which should be considered. The victims had lived in the area from generation to generation. Their accessibility to go to work and other activities, for their children to go schools, and their other mobilities became problems. Local government did not consider this and there was no communication with the victims:

*Decisions on location is without the involvement [of the victims]. For example, children who live in Leuwidaun, Cimacan, and Lapang Paris, they went to school in town. But, when they were relocated to Copong there was no public transport for their access to schools. If they had to pay “ojeg” [ride-hailing], they could not afford it because most of them were poor families. They used to have motorcycles which they bought by instalment but their motorcycles were swept away by the flood and they still had to pay instalment although they had lost their motorcycle.* (Chief of Local Reporter in Garut)



Figure 26: Governor of West Java handed over finished house to one of the flooding victims in Garut. (Source: <https://news.detik.com/berita-jawa-barat/d-3652911/ridwan-kamil-serahkan-bantuan-rumah-bagi-korban-banjir-dari-netizen>)

As I stated earlier, the development process of the housing programme was slow. There were 140 families waiting for two years in shelters before they were relocated to flats in Margawati (Liputan 6 News, 2018). They started to be relocated gradually after a minimum of a year in temporary shelters. This depended on finishing the process of development. The long timespan of the process was claimed to be affected by the process of acquiring land, which should be financed by local government:

*They [victims] do not understand mechanisms and procedures about budgeting [in government]. They complained that houses have not been finished yet. As matter of a fact, we have difficulties to provide land through*

*procurement.* (Local Government Officer of Board of Local Development Planning of Garut)

Local government had to follow mechanisms and procedures carefully otherwise it might become a problem during the audit process. They could not easily allocate budgets and use them to buy land. The budgeting process had to follow government schedules, starting from the budget proposal conducted in the beginning of year (February is final acceptance of proposal). The budget will be processed in parliament for approval or refusal. If the budget is approved, government could process the budget in the coming year. It takes a year before budget can be allocated. Following that, there is a procurement process which takes some time.

Relocation was prioritised for victims who stayed in shelters since they had more complete documents, such as members of the family and previous address. This became a problem when people who lived with their relatives or spent their money to rent small houses close to their workplaces protested this policy. They asked for justice to local government about their rights to have houses or compensation money as promised by government. They demonstrated to the Regent's office one and a half years after the flooding (Tribun Jabar, 2018). The local government of Garut made promises to victims about their housing issue:

*I heard that government promised to provide houses for them. A government officer told them that citizens whose houses were swept [by flooding] would get new houses but I have not heard anything after a while.* (Chief of Community Association in Cimacan)

Housing procurement is the responsibility of local PUPR/*Pekerjaan Umum dan Perumahan Rakyat* (Public Works and Public Housing Department). The department coordinates with its related institutions/organisations such as BPBD, Local Land Board, and Local Board of Planning and Development of Garut. The coordination was not optimal in this case. There were no clear guidelines for coordination. For instance, the location of housing was decided by the Regent based on input about availability of land and the price from their staff. The Regent's decision was not based on consultation with community representatives, such as community leaders or parliament members, but only from their staff. Moreover, government project based housing was developed by a private company that won the bidding. The private company which got the project sometimes

had minimum control from government officers where they might be easily bribed by the company:

*If it is a government project based development, we usually have to give an amount of money to the survey team [government officers] in order to have minimum control and there will not be a lot of questions from them during the survey. We prepare money in an envelope and give it to them. This will guarantee that the project will not be questioned.* (Housing Developer Owner)

When some houses' development had finished, the distribution was not easy. Theoretically, all victims would get the houses. However, the distribution mechanism was another issue. Most victims lost their house documents. Some of them did not have any documents, since they built houses in restricted areas. There was a mechanism for checking on victims by asking people who lived in the area, such as the chief of neighbour association, chief of community association, and village officers, to confirm the victims' information about property possession. There were two types of victims, as tenants and house owners. The victims who lived there as tenants, they would get the same position in new houses. But, if they were the owners of houses, they would get new houses for free.

*The mechanism is like this, if [they are] the owners [of the houses], it means that asset is replaced by asset. If they are tenants, they will get rights to a building but some of them will be as tenants [who pay rent monthly]. That all depends on appraisal.* (Local Government Officer of Board of Local Development Planning of Garut)

However, whether or not they had ownership document for their house, such as land certificates and building permit certificate, all of them paid taxes. Victims who lived in restricted area paid house tax and the people who possessed land certificates paid both taxes, house and land. They had the same rights for protection from the state, which local government of Garut failed to do.

### **7.3.2. Public infrastructure**

Reconstruction programmes of public infrastructure included the general hospital, public schools, and bridges. Financing for the programmes uses governmental budgeting mechanism (see Chapter 5). They used local government and national government budget allocations. Each programme was

executed by different departments. Building construction, such as the hospital and public schools, was under the responsibility of the local Public Works and Public Housing Department of Garut and bridges were the responsibility of the provincial government.

Local government focused on public infrastructure reconstruction, but ignored the buildings of private organisations which were aimed at social purposes, such as a private school. The Senior High School and Secondary School of PGRI had many classrooms, yard, toilets, and offices that were collapsed. There was not any budget allocated by government for the schools:

*That is a fact. I was furious because there was no concern at all from local government. They focused on Lapang Paris and Secondary School 3 of Garut. There was no attention to this place [PGRI Secondary School]. We cleaned up debris and mud ourselves and were helped by our alumni. They came to help and donated some amount of money.*  
(Headmaster of PGRI Secondary School of Garut)

The reconstruction of schools in PGRI was without attention and control from local government over the standard of classrooms and their facilities. The development was executed by a private developer and directly under the supervision of a donor. The school has become better in physical appearance, such as clean toilets, tidy classrooms and office, and a school yard covered by concrete floor.

However, the rebuilding of the school did not consider safety factors for pupils. There was only one door in every room with no emergency exit. The school has experienced repeated flooding almost every year with different volume of water coming to the area. There was no solution provided by the developer for facing future flooding, while the school location is near Cimanuk River. For example, there was no wall built around the school which could block water from flooding into the area.

There were many donations for the development of public facilities in the prohibited area (Cimacan) from private enterprises or NGOs. There were many victims who returned to the area although they were prohibited. They needed public facilities such as mosques, a community hall, and public toilets. There was no action from local government to prohibit these developments. This may happen because Cimacan area is registered as part of a local government administrative area. There exists community organisations (RT and RW) which have functions as informal

administrative tiers of local government. These community organisations are acknowledged by local government, since they are regulated in Ministry of Internal Affairs Regulation No. 5 of 2007 (Government of Indonesia, 2007a).

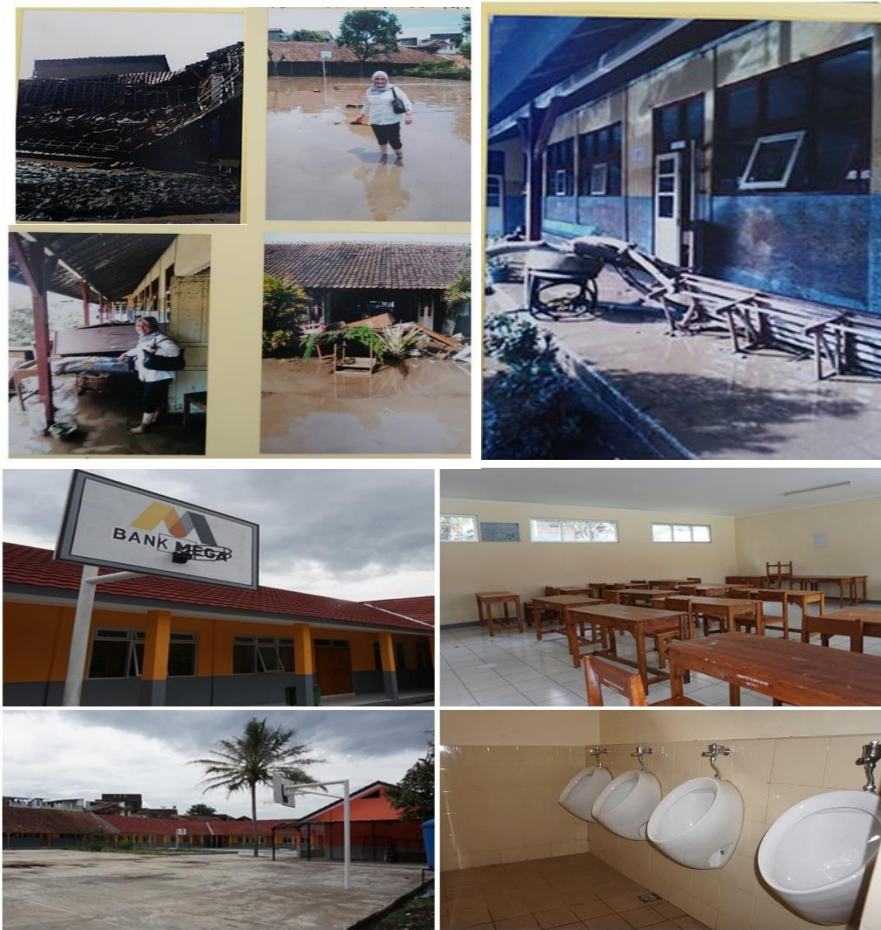


Figure 27: School after the flash flood and as rebuilt by private donors

*Sources: upper images from participant documentation and lower images from fieldwork documentation.*

The Cimacan and Lapang Paris sites were planned for urban green spaces. Local government decided to build areas for park and green open space. Citizens who used to live in Lapang Paris vacated the site, since most of their houses had collapsed from flooding. The location is still abandoned up to now. There is no latest information from local government about the progress. In contrast, citizens from Cimacan mostly returned to their houses. They rebuilt or renovated their

houses. Some of them received houses from the local government programme of relocation but they gave the houses to their family members such as to their children who did not have a house.

The abandoned location was criticised by community leaders. They had a concept for revitalising the area of riverside. Their knowledge came from generation to generation of maintaining the river. Modernisation and government systems had ignored their existence. In their beliefs there is no disaster. Flooding occurred because of human negligence towards nature. One community leader stated that Lapang Paris could be designed for green space with minimum financing. He had offered his concept to local government, but he could not agree with government regulations for the programme.

*I and my colleagues tried to offer traditional concept [river treatment]. The concept is gradually accepted and understood [by government officers] but the problem is that it collides with government regulations. Since our concept collides with government regulation, we finally made a statement that we could not follow them [government] and they cannot possibly be forced to [follow] our concept because they [government officers] had to make reports and all those stuffs. (Community Leader)*

### **7.3.3. River rehabilitation**

The President of Republic of Indonesia visited to survey the Cimanuk River and he proposed to revitalise the river. He asked Ministry of Public Works and Public Housing to provide financing for this. The project was executed by central government without the involvement of local government. Central government assigned BBWS/*Balai Besar Wilayah Sungai Cimanuk and Cisanggarung* (Cimanuk and Cisanggarung River Basin Organisation) as the institution that would handle the duty since Cimanuk River is under the authority and responsibility of BBWS (see Chapter 5). It was insisted by a staff of BBWS who supervised the project:

*That is our project [developing river embankment]. There is no business with local government. We just informed local government of Garut that we are going to build the embankment. (Staff of BBWS)*

It was admitted by the Regent of Garut that BBWS was central government business and it had its own programmes and activities. There was a coordination with local public works and public



housing department, but it just needed assistance for technical issues such as accessibility of vehicles to locations or dealing with local people:

*Their office is in Bandung [Province of West Java] and Jakarta [headquarter]. They did not know how the situation in Talegong [a village] is. And we facilitated them to coordinate with sub-district and head of village.*

(Chief Executive of BPBD Garut)

Cimanuk River rehabilitation consisted of two main projects. They were the development of the river embankment in the town (Figure 28) and the forest rehabilitation of the upper-stream of Cimanuk River (the forest rehabilitation is discussed in the next section). Development of the riverside embankment across the city of Garut was executed in the year following the flash flooding of 20<sup>th</sup> September 2016. It was aimed to channel water away from housing by building embankments which were higher than the ground level of community housing. The project was planned at national level without the involvement of local entities such as local government institutions, local NGOs, and communities.



Figure 28: Development of Riverside Embankment Across the City of Garut

*Source: Fieldwork documentation*

The project was regarded as problem solving for flooding disaster, but it might trigger other disasters. Firstly, it was admitted that citizens in town area might be made safer by the high embankment since the water could be blocked, but this could give worse flooding to the downstream of Cimanuk River:

*They [government institutions] use embankments, but it does not give solution. It just moves disaster around the town of Garut. The water may not reach community housing [in town] because the embankment is higher. But, do they consider downstream? Can you imagine that water flows without any resistance? There should be a process for water flowing, such as rocks in the rivers, to break the flow in order to slow down the current. It [the project] seems like we give a tunnel or pipe for the water to flow and the water will run fast. Citizens in the town might be safe but what about the ones downstream? I think that it is [merely] instant solution. (Community Leader 2)*

Secondly, the development of embankment used local materials, mainly rocks and sand. The project was executed by a private company that won the procurement mechanism in central government. As a business, the company would seek minimum cost for the project. They could lower the cost for materials if they purchase it from the nearest area since transportation would be cheaper. Although excavation in Mount Guntur is illegal for majority of locations, they could get materials by bribing some officers in government or the police.

*To the top [government officer] was managed by money from the company [in excavation]. Such as in Cilopang, the excavation area belongs to Mr. XXX. He will manage it [bribing to government officer]. He is the boss in that area since he has large area of land there and he got licence to exploit sand and rocks there. (Owner of rocks and sand mining in Garut)*

Cimanuk embankment construction was as long as 3.2 kilometres and took place in four different areas alongside the river across the city of Garut (Ministry of Public Works and Public Housing, 2017). The project needed a lot of rocks and sand. This has caused massive excavation of Mount Guntur (see Figure 29).



Figure 29: The Damage of Mount Guntur, that is Close to the City of Garut, by excavation for Project of Riverside Embankment of Cimanuk

*Source: Fieldwork documentation*

The project of riverside embankment of Cimanuk was complained about by local community group PATANJALA who still hold their belief about relationship between their community and nature. In their beliefs, development of the riverside embankment is not the right solution for overcoming flooding. Nature engineering should adapt to the natural situation:

*If engineering does not adapt to nature, it will create disaster. Logically is like this, when you destroy forests it will create disaster. If you are against nature, the nature will go against you. For example, you are as a human similar to nature [a living creature]. When someone muzzles your mouth and your nose, you will fight against them. If you cannot fight, you will die. This is similar to nature, if the nature is degraded, the nature will defend itself.*  
(Community Leader 1)

The group believes that river reengineering is not the best solution for overcoming flooding. Members of the group stated that humans have to follow nature's characteristics, not the other way around. They showed examples of a group of indigenous people who live in the restricted area of Banten and manage their life without interference from government. They never have experienced any flooding to their area since they protect and preserve their nature. Nature will react to the change created by humans. The change will return to humans themselves. Nature will give un-negotiable consequences for any change created by human.

#### **7.3.4. Afforestation programmes**

Local government of Garut received a great number of donations for recovery programmes, as stated earlier, allocated for housing. There was also big money received by local government from central government for afforestation programmes.

*We actually received money about 80 billion for recovery programmes from Ministry of Forestry. The programme was aimed for afforestation. But, it has not been executed up to now [late 2017], even though there was a warning from national directorate general of the spatial plan to the Regent regarding help [financial] for the recovery phase. This money was aimed to treat [nature] in order to avoid coming disasters by reforestation by re-planting trees. (Chief of Local Communication and Information of Garut)*

The afforestation programmes are divided into several programmes. There are seedling and tree planting. These programmes were executed by the Department of Plantation and Forestry of local government of Garut. There was a seedling project by local government using aeroplanes. Thousand of seeds were spread over the mountain and forest of Cimanuk River's upper-stream.

The seedling project was criticised by local environmentalist groups who joined in FK3I/*Forum Komunikasi Kader Konservasi Indonesia* (Communication Forum of Conservation Cadre of Indonesia) of Garut branch and local communities. They have the belief that seedlings is wasting money, since it costs a lot to rent aeroplanes. Besides, they argued that planting trees is not as simple as seedlings. The trees need regular treatment to make them grow. This opinion was supported by local communities who live near upper-stream of river. Some people who live there know more about characteristic and types of plantations which would grow in the area and how to treat them.

The seedling project ignored the situation in the area of mountains and forests. Most forest degradation is caused by land conversion for farming and tourism (see Chapter 4). More than 60 percent of deforestation is caused by land conversion according to Chief of Board of Environmental Management (*Badan Pengelolaan Lingkungan Hidup Daerah/BPLHD*) for West Java region (Kompas, 2016). Land conversions are conducted by individual farmers and investors who funded local farmers to grow certain crop commodities such as potato, chilli, and tomato. They converted PERHUTANI (State Forest Company) area. They had the opportunity to convert the area since they joined *Program Hutan Berbasis Masyarakat/PHBM* (Programme of Community Based Forestry). The programme aims to help farmers near PERHUTANI area economically and protect the forest.

However, the programme was out of control. PHBM programme obliges farmers to conduct agroforestry. Practically, farmers plant crops without any tree surrounding the farming area or only a small number of trees (Figure 30). PERHUTANI refused to be blamed as the cause of flooding from area of Cimanuk watershed since PERHUTANI covers only 10.16 percent of the upper-stream watershed of Cimanuk and from that percentage only 3.5 percent is land in critical condition (Republika, 2016). According to its corporate secretary, PERHUTANI owns only 14,282 hectares from the total of 140,553 hectares of the upper-stream watershed of Cimanuk. The officer of PERHUTANI blamed local people who conduct land conversion as the cause of sedimentation. The corporate secretary of PERHUTANI also responded to accusations from the local government of Garut who blamed PERHUTANI and BKSDA (Natural Resources Conservation Agency). The secretary insisted that other departments are responsible for the other 90 percent of the area in critical condition (TEMPO, 2016). Local Forestry department, as another department blamed by NGOs, claimed that it had limited numbers of staff and the coverage area of its responsibility (KBK News, 2016).





Figure 30: Deforestation in upper-stream watershed of Cimanuk

*Source: documentation of FK3I of Garut branch (Communication Forum of Conservation Cadre of Indonesia)*

### **7.3.5. Economic recovery**

Besides the infrastructure reconstruction and afforestation programmes, there were rehabilitation and economic recovery programmes. Rehabilitation was conducted voluntarily by a number of NGOs such as FPRB/*Forum Pengurangan Resiko Bencana* (Forum of Disaster Risk Reductions) and WAPALAM (Student Association of Outdoor Activities). They visited victims in temporary shelters and they conducted trauma healing. There was not any effort executed by local government agencies and central government for trauma healing. the government rather focused on economic recovery.

Local government of Garut received financing from central government for economic recovery by offering victims new economic activities, such as by providing sidewalk carts for victims. The programme was claimed to be a failure. Most victims worked in traditional markets as porters, rickshaw drivers, *ojek* (motorbike taxi) riders, street hawkers, and shopkeepers in markets. Local government trained them to be self-employed as sidewalk cart owners who sell food in the street market. They received capital from local government to start their business. It worked only for a few months. Most of them returned to their previous jobs and they sold the cart. They did not have skills in the business although they had been trained by local government:

*It wasted money and created more problem regarding traffic. People [victims] got money for capital and carts for selling the things such as food and phone accessories. They had no passion in business and they could not run it. The majority of them returned to their previous activities [jobs] and they got money from selling the carts. Some people from outside the city bought the carts and continued the business. You know, the traffic in city is worse than before now. (Community Leader 1)*



Figure 31: Sidewalk carts were complained about by citizens because it created traffic jams in the city. The cart narrowed the size of streets and some people parked their vehicles in random places.

*Source: fieldwork documentation*

Local government tended to focus on economic recovery for victims. They did not have any clue in distributing money from donors. This was executed without any prior research to help victims for their daily needs. This effort failed to help victims but it created another problem because it narrowed width of street.

#### **7.4. Collaboration Practices during Recovery Phase**

Collaboration during the recovery phase can be divided into two stages, during the short-term recovery and the long-term recovery. Short-term recovery was dominated by a chaotic situation where collaboration was made with the same goal, to help victims. There was no prior agreement or communication among them. They shared their skills and resources. Although they had their own organisation missions, most of them were voluntarily involved in the Task Force team. There was an administrative mechanism to record organisations or volunteers in the command post of the Task Force team, but some of them preferred to conduct activities by themselves. They inform the Task Force team if the team asks them to report, but it was not obligatory for them.

Government could not handle all donations with the Task Force team when many organisations or individuals and volunteers created their own command posts near the location. There were 300 posts spread in different locations. Most of them were in Cimacan area, since the area was the most exposed by media because many victims died in the area. They received donations from many sources without any control from local government. Local government could not force them to join the Task Force team since they were volunteers and they wanted to distribute donations by themselves:

*During Saturday and Sunday it was very crowded and there were 50 post commands [independent] in Cimacan. They managed their own donation and we could not control them. Donations came from private companies and were managed by them, PERSIS [Muslim Association] office was full of donations, Muhammadiyah [Muslim Organisation] and other organisations could not be controlled for their activities. (Regent of Garut)*

They inform the team about their activities, such as distribution, only if the team asks them. The reason the team asked them was motivated by the unequal distribution of donations to victims. Although it was not easy to reach this ideal situation. Some victims who were lucky could get good



stuff and money, but others were in hunger. This created social conflict in the community. They scrambled to get donations which sometimes ended in fighting.

Many victims had been evacuated to temporary shelters but distribution of donations, such as food, clothes, drink, blanket and money was still going on. It was not clear whether the recipients were victims or just people who claimed to be victims to get donations. Some volunteers who opened command posts could not be verified for their motives. Communities around the area informed me that some volunteers were criminals who took advantage from the situation for personal benefit.

In long-term recovery, collaboration occurred in several programmes. They were housing, afforestation, reconstruction of embankment, and rebuilding the bridge programmes. The programmes were conducted by government (local and national). Government did not execute those programmes with their agencies but transferred the duty to private companies. The government's role was to control the programmes. The programmes were not organised in one stop recovery and rehabilitation system. Central government programmes were executed by companies that won project bidding without involving local government. It was the same for local government programmes who were without synchronisation with central government. The main issues were coordination.

#### **7.4.1. Coordination**

There is a tradition of pass the buck (blame to other institutions) in the local government of Garut if there is a problem with a policy and programme. Every institution tries to avoid their responsibility by pointing to other institutions. It happens among local government agencies or local government agencies with central government agencies. If there is a question from citizens about the failure of a programme, they will try to avoid responsibility by pointing to other institutions. It occurred in the recovery programme of river rehabilitation:

*Oh, no way, you know that river is the authority of central government through the Ministry of Public Works and under them is the BBWS (River Basin Organisation). Because it is the authority of central government, so it did not come to local government [the budget]. All [river rehabilitation programmes] were from central government. (Local Government Officer of Board of Local Development Planning of Garut)*

Recovery and rehabilitation of Cimanuk River did not only involve treatment of the river stream by building up the embankment. It included the afforestation programme. The afforestation programme was under the authority of the forestry department. The department is from provincial government not local government as mandated by Law No. 32 of 2014 (Government of Indonesia, 2014a). There is a sub-department of the forestry department, but it has the responsibility over the provincial level and is not responsible to local government at municipal level. The relationship between forestry department and local government is only one of coordination and communication during the programmes. However, their coordination and communication were not optimum:

*Because some areas belong to PERHUTANI (State Forest Company), local government has little authority for utilisation and control of its space because some of the areas are not under local government authority. Moreover, local government does not have authority for forest management [based on Law 32 of 2014]. (Local Government Officer of Board of Local Development Planning of Garut)*

This was confirmed by the Chief Executive of BKSDA (Natural Resources Conservation Agency) that central government representative institutions had to follow tasks, instructions, and policies from central government:

*Yes, we are part of central government department from Ministry of Forestry. Our daily operations are from central government [instructions]. But, if there is a programme for rehabilitation of forest from local government and the programme is in our area, local government might ask our organisation for execution. (Chief Executive of Natural Resources Conservation Agency)*

Local government faced difficulties to control and manage spatial plans in areas where they were under central government authorities such as PERHUTANI, Forestry Department, and Natural Resources Conservation Agency. There were a lot of deforestation cases occurring in PERHUTANI area because PERHUTANI had a programme called PHBM/*Pengelolaan Hutan Berbasis Masyarakat* (Programme of Community Based Forestry). The programme was aimed to include communities' participation in protecting forests and the community would get benefit from the activities by allowing them to farm in the area. In practice, the programme had created more problems for the forest. Farmers were informed that they were not allowed to plant crops, but they

had to plant trees which fruits they could harvest annually or in several months, such as coffee, mango, jackfruit, and so on. The farmers ignored the instruction and they planted crops such as vegetables. There was no real action from PERHUTANI to solve the problem. Farmers did not receive any consequence for misconduct in PHBM programme.

Coordination issues in the recovery phase occurred in relationship between government institutions and citizens (including non-government organisations and community associations). Government institutions such as BBWS, PERHUTANI, and Department of Public Works and Housing executed the programmes with minimum participation from communities. They worked based on allocated budget and it might be regarded as a success if all budgets were implemented. This was what they called accountability. One of the local NGOs (FPRB) admitted that they found difficulties in putting forward their ideas or opinions. The afforestation programme is an example of this. The Forestry department did not listen to the advice of those familiar with the area, such as FPRB, that simply seeding the ground was not enough.

### **7.5. Summary**

The recovery phase follows the activity of the response phase in disaster management. The aftermath of previous flooding created many programmes from central and local government. The programmes involved participation from communities, private companies and NGOs. However, most of the government programmes were organised and executed by government. Government invited private companies to run programmes through bidding mechanism. This mechanism was not clean from corruption, collusion, and nepotism in their implementation. Central government programmes are normally executed by big companies in Indonesia. Their motives are pure for business purposes for taking profit. As the result, the programmes gave minimum effect of prevention for overcoming flooding problem. In the worst case, this might create another natural disaster such as landslides caused by excavation in Mount Guntur.

On the other hand, the local people have offered a different approach in the recovery phase. They believe that nature is not a subject which can be manipulated by humans. Cimanuk River embankment was claimed as the wrong solution according to them. They stated that flooding will still happen to the City of Garut if humans ignore the characteristics of the river itself. River embankment just moved flooding from certain places to other places. The local people believe that

nature is their responsibility to protect it. The failure in protection of nature will have consequences for them or for other people around the area.

Two different concepts of recovery from both modern and local wisdom approaches have insisted on a different context of accountability. The state's understanding of accountability is more to human relationships. The failure of execution of activities may result in a consequence from other actors such as a penalty or punishment. The consequence is a negotiable process which sometimes can be manipulated by rationalisation. Accountability is understood as formal mechanisms of reporting to higher position.

The local people's concept of accountability in facing flooding is more to their obligations to the laws of nature. They believe that flooding will not happen if humankind follows these laws. The consequences faced by humans are the result of the failure to follow the characteristics of the natural environment.

This condition explains that there are two types of accountability within this context. There is a relational accountability among humans (government agencies, volunteers, Donors NGOs). This accountability type is negotiable. The accountability is created on demand from account holders. The second accountability is between human and nature. This accountability is non-negotiable. Nature gives consequences based on what humans do to nature. and important to prevent flooding.

## **Chapter 8**

### **Conclusion**

#### **8.1.Introduction**

In this chapter, I review findings of the thesis and I reflect on the theoretical framework. This chapter consists of six sections. The first section depicts and summarises the conclusions from each chapter of the thesis. The second section outlines the main conclusions and answers the research questions. The third section discusses the contribution of this research to our knowledge on collaborative working and accountability in response to repeated disasters. The fourth section reflects on the limitations of the research and possible areas for further research. The fifth section reflects on the theoretical framework and the final section offers a closing comment.

#### **8.2.1 Summary of Chapters**

This study has sought to understand accountability relationships in collaborative work in response to repeated disaster and, specifically, to repeated flooding in the city of Garut. There were three objectives for this study: the first, to examine the role of each actor that played roles in response to repeated flooding; the second, to examine working relationship between different actors; and the last, to understand the effect of accountability arrangements in each disaster management phase.

Chapter 2 reviewed the literature relevant to this study. Much of this literature, in particular that on accountability, develops concepts that have been developed in a Western European and North American context. Even here, the meaning of accountability is contested (Rowe, 1999) because it can mean different things for different people (Blagescu, et al., 2005; Bovens, 2007; B. S. Romzek & Dubnick, 1987a; Schillemans & Busuioc, 2014). In thinking about accountability relationships in the context of collaborations, such as those we see in disaster responses, the literature suggests that accountabilities become a challenge (Koliba, Mills, et al., 2011b) because many hands are involved in this setting. And in response to disasters, research has focused on a single disaster event, such as the Challenger tragedy (B. S. Romzek & Dubnick, 1987c) or hurricane Katrina (Baker, 2014; Koliba, Zia, et al., 2011; United States Government Accountability Office, 2006). The literature then indicates a significant absence of studies that consider collaboration and accountability relationships in the context of repeated disasters and in a developing society, a prismatic society (Riggs, 1960), such as Indonesia.

Chapter 3 explained the research methodology which is employed in this study. This research uses a case study as a strategy to answer the proposed research questions. A case study is the best suited to understanding social phenomena (Yin, 2014). A constructivist paradigm is used, reflecting the fact that accountability can mean different things to different people (Bovens, 2006; Bovens, et al., 2008; Barbara Romzek, 2014). The meaning is interpreted by human experiences which may differ from one to another. This chapter also outlined the data collection methods in this study. This study conducted semi-structured interviews with actors involved in the disaster management cycle in Garut. In addition, it has drawn upon documents, media and observations at the scene. Although this is a study of repeated flooding, it took participants who were involved in the response to the flooding that occurred in late of 2016. However, the other three phases (mitigation, preparedness and recovery) are explored through the same participants, most of whom have been involved in repeated flooding.

Chapter 4, 5, 6 and 7 presented the analysis of the case study. Chapter 4 analysed accountability for mitigation and Chapter 5 discussed accountability for the preparedness phase. These two phases were dominated by three government development plans (long-term, plan, medium-term plan, short-term plan). Local government involved people (citizens, NGOs, professionals, academicians, etc.) during the planning process. However, this participation was largely fictional. Local government failed to distribute information openly to people in general about its plans for prevention and preparedness in the case of flooding. Instead, plans were dominated by economic development objectives. They took no account of local wisdom with regard to the management of the natural resources of the Cimanuk river. The state regarded people as spectators. They could protest and criticise the state but they could not change the game and the result. Not only did the plans not mitigate against flooding, they aggravated the conditions that would ensure flooding recurred regularly. Preparations for those foreseeable floods were minimal and largely tokenistic.

Chapter 6 focused on the response phase, taking the flooding of 20<sup>th</sup>-21<sup>st</sup> September 2016 as an example. The collaboration necessary for an effective response quickly became uncoordinated. BPBD, as the main actor in disaster management in the local context, failed in its function. There was a chaotic and uncoordinated response which cost 34 lives, 20 missing, dozens injured and thousands evacuated. Their duties were taken by the local military force, a decision that had positive and negative consequences. Military was admired for its agility during the response, but

they showed less understanding of how to work with other actors and with victims. Confusion, duplication in some areas, neglect in others and competing accountabilities arose during the response phase.

These problems then continued to affect efforts to recover after the disaster, efforts discussed in Chapter 7. There were two major phases, the short-term and long-term recovery phases. Both were hampered by a rushed assessment of the scale of the disaster. Furthermore, the longer-term recovery failed to learn from previous programmes and from local knowledge. Some programmes aggravated the problems that had caused the flooding. The building up of the river embankment and bridge redevelopment caused the illegal and uncontrolled sand and rock excavation on the top of mount Guntur, causing landslides in a community who live in the nearby area. Moreover, the raised river embankment did not solve the problem. Flooding has occurred again on 5 June 2017, 22 February 2018, 19 January 2019 in the same locations, forcing people to flee to save their life.

These four chapters present a detailed case. They identify failures in each phase of the disaster management cycle. It might be argued that it would be unreasonable to expect to find a faultless process, particularly in Indonesia. But this is in the context of repeated flooding. Table 1 detailed a number of recent incidents, yet, in the case analysed here, it was as if it had never happened before. More than that, failures at each phase aggravated the problems faced in the next. The absence of appropriate plans and the failure to enforce restrictions on land use ensure that flooding will recur. Lack of preparation ensures that the response phase will be chaotic. This in turn means that the recovery phase is hampered by confusion and a lack of resources. And the plans are ones that take no account of their longer-term impact. Reporting and accountability relationships broke down at every phase, not least because of the multiplicity of conflicting interests and relationships at play. At the heart of all these problems was the absence of any sense of responsibility as actors sought to take credit for their actions and pass any blame elsewhere. And because it affected only relatively small numbers of people, democratic mechanisms, which are weak and diffuse, will not function to correct this situation.

The case study has also revealed a further accountability relationship which has not been considered fully to date. The state uses formal accountability mechanisms between its agencies and from local to provincial and national tiers. The focus is on formal accountabilities which was manifested in plans and reports. The community was formally part of these relationships, but in a

largely passive role. However, the communities in and around Garut might have offered a valuable input to these plans and reports. They live close to the river and, drawing upon long held animistic beliefs, regarded nature as part of their daily life. They believed that disasters occurred because of human negligence towards nature. They protected nature as they protected themselves. The failure to protect nature is believed to lead to disaster for them. The obligation to protect nature came from themselves. They have learnt how to treat nature from generation to generation, offering better solutions in facing flooding. The state and the people treated nature differently. They could not meet to solve repeated flooding problem since they had different perspectives in seeing nature. As a result, people regarded the state (local government) as an administrative office which did not help people with their problems. Local government had little power to command and instruct the people since people did not feel that local government helped them. There was no learning from local government since it did not threaten their position. They kept with their programmes of recovery which were budget based programmes and applying formal process of accountability.

## **8.2. The Conclusion of This research**

### **8.2.1. Reflection on questions**

The objectives of this research is to answer following questions:

1. What are the roles of the different actors in disaster management?
2. What are the working relationships between the different actors?
3. How do accountability arrangements affect actions in every disaster phase?

To the first question, almost all actors make their most significant contribution during the response phase. They pay much less attention to the other three phases. There are significant roles from community leaders in all phases of disaster management. This is caused by their involvement with citizens and they have learnt from previous flooding disasters. Government contributes to disaster management with a project-based approach. Actors from government institutions will execute any disaster management phase if there is an allocated budget from national, regional or local government.

To the second question, there are two main working relationships among actors. They are formal and informal. Government agencies have formal and informal mechanisms in collaboration with other agencies. Formal mechanisms are usually instructed by their higher authority. Informal mechanisms are normally voluntary work between agencies to help the Local Disaster



Management Board. Some NGOs have formal collaboration with government. This formal collaboration is normally in executing pre-disaster projects, such as afforestation.

To the last question, there are two accountability concepts. The first is relational accountability among humans. This accountability is basically negotiable. The accountability within this concept can be negotiated among them. They can manage accountability based on demand from account holders. The second is accountability between human and nature. This accountability is non-negotiable. Nature gives consequences based on what humans do to nature. In the case of this research, government agencies may claim that they have fulfilled their duties based on their plans. The plans can be managed and rationalised by them, that their activities are crucial and important to prevent flooding. However, their claims could not prevent repeated flooding. Some communities who live in rural areas practised this type of accountability. But, these communities are small in number. They still have strong relationship with nature.

Local government systems in Garut were designed by central government and implemented by local government with some additional modifications to accommodate the different type of community who live in the area. The views of disaster management based on the state lens, with its rationalities, and the people's view of natural disaster gave a dynamic aspect to the process of disaster response. There were very complex characteristics of people who live in the city responding to repeated flooding. Some people believe that their life is as an integral part of nature and preserving nature is as a part of their accountability. The repeated flooding is believed as punishment from God for their negligence. It was used by government officers to claim that repeated flooding was not their failure, but uncontrollable nature. Local government officers may retain trust from this type of people who keep paying taxes. Moreover, local government officers convinced them of the value and importance of the state during the response phase by providing them with food, drink, blankets etc. Other people believe that government failed to understand natural characteristics and how to manage them.

### **8.2.2 Contribution**

This research adopts the concept of the prismatic society to understand accountability in disaster management context. Disaster management involves different actors who contribute to its phases. These actors may face different types of accountability. Some scholars give a narrow concept of

accountability as a social interaction among humans. This research has sought to develop a more detailed understanding of these interactions by analysing accountability in collaborative settings in four phases of disaster management (mitigation, preparedness, response, and recovery). In addition to traditional ways of analysing and assessing accountability, I also include an ecological perspective as a way to study and measure accountability.

The accountability concept which is adopted by the Indonesian government, and particularly in local government of Garut, is a western concept of accountability. This focuses on transactional accountability between government and its people, and also among people. This western concept is adopted in Indonesia's public administration, but it is a concept that does not suit its environmental situation. As Riggs claimed, a developing country is different from a developed country. This impacts on not only the governmental system but also wider society. Local government of Garut values accountability with western perspectives of accountability. There is no specific consideration of an understanding accountability which includes nature. Flooding is not a pure natural disaster. There are some human factors which affect the natural environment. This interference brings consequences for humanity. This is a new concept of accountability which includes nature as part of the accountability system.

Theories of accountability are dominated by the interactions of humans. This can be seen in assessment of accountability by using the three perspectives of social interaction (democratic, constitutional, and learning perspectives). Nature plays no part in these models. This research found that there is another accountability concept that embraces nature in interaction among humans. This accountability is non-negotiable type of accountability. Nature will give consequences if people fail to protect and preserve it. This is also an older understanding of relationships, one drawing on older traditions and beliefs, including animism. It lingers on during the current prismatic phase of Indonesia's development. We might consider whether it should play a more prominent role as Indonesia develops. Accountability should include nature as a part of the accountability system

This understanding of accountability casts some of the findings of this case study in a fresh perspective. In the mitigation phase, understanding the accountabilities between citizens and the state has failed to engage with the non-negotiable relationship with nature. All plans, and in particular their enforcement, must take these into account if repeated disasters are to be avoided or

managed more effectively. In thinking then also about preparation, the same local knowledge, of the behavior of the river's waters, represents a more effective warning system than any other. Working with the local knowledge of the land and the rivers in developing emergency plans, delivering preparatory education and conducting rehearsals, would represent a significant development on the current situation. Taking that same attitude into the response phase, recognizing the capacity and resources of the community, of families and neighbours would enable other resources to focus on those unable to help themselves. Working with local institutions, and drawing on the disaster response expertise of voluntary agencies and NGOs, would allow other agencies to manage and coordinate the influx of visitors, donations and volunteers. Finally, closing the loop, the recovery phase must take account of lessons from the past in managing the investment in infrastructure, in rebuilding and in prevention through afforestation and other initiatives.

Western models of accountability are proven wanting in the context of repeated disasters in Indonesia. That these disasters repeat is testimony to that. Accountability models adopted from the west fail to prevent repeated flooding. The state sees accountability as a formal process to report its activities and it neglects the more essential purposes of accountability.

Indonesia is a country with a relatively recent experience of both feudalism and of colonisation. It struggles to practice western understandings of accountability that requires more transparency, democracy and engagement of citizens in its processes and in its public administration system. Indonesian citizens are passive in demanding accountability from their state. Local government dominates economic development, such as in the exploitation of natural resources, unlike those states from which the accountability concept is adopted. At the same time, the neoliberal economic model in developed countries does not suit Indonesia because of those same characteristics of society. The exploitation of natural resources could worsen existing potential for natural disasters because the community has a very limited involvement in economic development, allowing corporations could to dominate decision-making. Corruption, already a major problem in a prismatic society such as Indonesia, could then further exacerbate this.

Local government uses accountability as a rhetorical device to justify its activities. Local government institutions may claim that they have fulfilled their duty of accountability to communities by accelerating economic development, such as tourism and dairy farming in this research case. But this has consequences in terms of the deterioration of the natural environment.

Local government development plans fail to prevent flooding which costs human life and wealth. This further exacerbated by failure of disaster management. Local government needs instead to create mechanisms for the transfer of knowledge and experiences from previous leaders of agency to the new one. By doing this, they can maintain plans and programmes of disaster management.

Western concept of accountability which focuses on a social interaction has largely ignored the duty of accountability to nature because local government focuses on convincing communities that its development plans will accelerate the development of the area. In disaster responses, local government is concerned to allocate budgets to prevent and mitigate disaster. However, the economic motives have neglected local community wisdom and knowledge in preserving nature which might contribute to long term community prosperity and safety.

Local government agencies can blame each other when disaster happens. Citizens may regard this catastrophe as beyond the capacity or responsibility of local government. But this is to obscure their responsibility deforestation, mining and land conversion that have aggravated, or arguably caused, flooding in the city.

To sum up, there are three relational accountability models in this research. There is a model of accountability between community (citizens) and nature, the state and community, and between the state and nature. Communities have their sense of responsibility to preserve nature as part of their living environment. They depend on nature in undertaking their life. They have strong beliefs that their failure to protect and preserve nature will affect them, as is evident in disasters. Disasters are a consequence of a failure to conserve and protect nature in the course of their activities. They regard nature not as an object to be exploited but as part of their life which they must be responsible for. A legacy of animist beliefs, in which nature is regarded as God, is manifested in their respect to nature. They believe that nature will punish them with disasters if they fail to protect it. In contrast, they will have prosperity such as a good harvest and sufficient water during the dry season if they treat nature accordingly. Their accountability to nature is without any coercion. This is an integral part of their life

A model of accountability between the state and community is a transactional interaction. There is no clear accountability mechanism from the state to its citizens. The state could negotiate its accountability to citizens by conducting rationalisation of its activities. Local government officers could claim that they are accountable if they have reported their activities to members of

parliament, as representatives of the citizens. There is no direct accountability mechanism from the state to communities. The communities have a weak power to request accountability from local government officers because they are unable to have a significant consequence if the state fails to fulfil its accountability.

The last model of accountability is from the state to nature. Local government has failed to recognise its accountability to nature. This is manifested by repeated flooding in the city of Garut. While the state is formally responsible for the exploitation and conservation of natural resources, this is not a symbiotic relationship such as the one between the community and the natural environment. Instead, it is an economic relationship. On paper, plans seek to rationally balance different land use needs. But the extractive demands of commercial exploitation, aided by corruption, dominate the implementation of these plans at a local level. However, the state's accountability to nature is not so easily avoided. Nature does not negotiate and disasters result, exposing the failures of the democratic relationship between the state and the communities affected, and specifically the failures of disaster management.

### **8.3.Limitation**

Understanding the prismatic society in one local government district of Indonesia cannot simply be generalised to other local governments, to other regions, or to the central government of Indonesia, although the state characteristics are similar from one place to the next. Moreover, this research attempts to analyse the response of public administration to repeated disasters in one local government district of Indonesia. There are 416 local government units in Indonesia which might be different in the ways they manage disasters. There is a need to understand the governing systems and their relationship to their natural environment of the indigenous peoples, of which there are many hundred different peoples across the many islands of Indonesia, in order to enlighten our understanding of this prismatic society. Further research, with an historical perspective, might enrich the finding from this research. However, the majority of tribe cultures in Indonesia have a spoken culture. They distribute their knowledge and experience mouth to mouth from one generation to the next generations. The concept of accountability as a relationship between the state, the community and nature in this research is limited to repeat flooding in an area in which many local people still have a strong belief in the power of nature. The conclusions might be very different if this research were conducted in a metropolitan district, such as Jakarta, which faces similar problems of repeated flooding.



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## Appendices

### Appendix I: Research Ethics Approval



Research Ethics Subcommittee for Physical Interventions

18 January 2017

Dear Dr Rowe,

We are pleased to inform you that your application for research ethics approval has been approved. Details and conditions of the approval can be found below:

Reference:	0538
Project Title:	Collaborative Working Accountability in Responses to Natural Disasters: A Case Study in Garut, West Java, Indonesia
Principal Investigator/Supervisor:	Dr Mike Rowe
Co-Investigator(s):	Mr Yaman Suryaman
Lead Student Investigator:	-
Department:	Organisation and Management
Reviewers:	Dr Mas Chaponda
Approval Date:	18/01/2017
Approval Expiry Date:	Five years from the approval date listed above

The application was **APPROVED** subject to the following conditions:

#### **Conditions**

- All serious adverse events must be reported via the Research Integrity and Ethics Team ([ethics@liverpool.ac.uk](mailto:ethics@liverpool.ac.uk)) within 24 hours of their occurrence.
- If you wish to extend the duration of the study beyond the research ethics approval expiry date listed above, a new application should be submitted.
- If you wish to make an amendment to the research, please create and submit an amendment form using the research ethics system.
- If the named Principal Investigator or Supervisor leaves the employment of the University during the course of this approval, the approval will lapse. Therefore it will be necessary to create and submit an amendment form using the research ethics system.
- It is the responsibility of the Principal Investigator/Supervisor to inform all the investigators of the terms of the approval.

Kind regards,

Research Ethics Subcommittee for Physical Interventions  
[ethics@liverpool.ac.uk](mailto:ethics@liverpool.ac.uk)



## Appendix II: Participant Information Sheet



### Participant Information Sheet Collaborative Working Accountability in Responses to Natural Disasters

**You are being invited to participate in a research study led by the University of Liverpool. Before you decide whether to participate, please ensure that you understand the purpose of the research and what it will involve. Please read the following information carefully and feel free to request any further information or clarification. Please also take time to discuss it with your fellow officers. We would like to stress that you do not have to accept this invitation and should only agree to take part if you want to. Thank you for reading this.**

**Research Purpose:** This research will examine forms of accountability in the context of responses to natural disasters. This research will be focused on how agencies, of different kinds, respond to natural disasters (mitigation; prevention; response; rehabilitation). It will be concerned with the forms of accountability that operate and how these are perceived by communities affected by repeated natural disasters. In particular, it will be concerned with the problem of coordination across agencies and over time.

**Research Participants:** We wish to interview the key actors about their roles in the four phases of disaster management (mitigation, prevention; response; rehabilitation) in Garut, West Java, Indonesia. We wish to understand their experience of working in a collaborative context, with other agencies and organisations and with local communities.

**Do I have to take part?** Participation in this research is voluntary. Should you agree to participate, you can, at a later stage, withdraw at any time without explanation. If you request, any data gathered up to that point will be destroyed.

**What will happen if I take part?** : This research is conducted by a PhD student of the University of Liverpool Management School as part of his PhD programme. The researcher will interview you about your roles in disaster management processes which relate to his research. The interviews will last about one hour and, with your consent, will be recorded as a part of the data collection process.

**How will participants benefit from participation?** This research will seek to understand the problems of coordination and of accountability in order to inform thinking about the way governments and NGOs respond. You will also have the opportunity, as part of the interview process, to think and reflect on the ways in which you work with others in response to natural disasters. Your contribution to this research will inform the development of more effective responses to disaster management in Garut in future.

**Confidentiality:** Research participants will not have their names recorded next to direct quotes or other data. Instead, your role/position will be recorded, but not your agency/NGO/department or any other identifying information. All data will be stored securely on password-locked University servers and will be destroyed five years after the completion of this study. Where material you provide is used in subsequent reports or publications, a pseudonym will be used. Should you wish, you may have a copy of the transcript of your interview.

**What will happen to the results of the study?** The results of the study will be published in the form of a PhD at the University of Liverpool and in academic papers. Reports will also be submitted to relevant agencies to inform the development of responses to natural disasters. If you would like to see these publications, you may be informed and given access to them.

**Who can I contact if I have further questions?**

Should you have any queries or require further information, contact the Student Investigator at the University of Liverpool, Yaman Suryaman ([y4m4n@liv.ac.uk](mailto:y4m4n@liv.ac.uk); 07522932729). Should you wish, you may also contact the Supervisor, Dr Mike Rowe ([mikerowe@liv.ac.uk](mailto:mikerowe@liv.ac.uk); ++44 151 795 3613).

**What if I am unhappy or if there is a problem?** : If you are unhappy, or if there is a problem, please feel free to let us know by contacting Dr Mike Rowe ([mikerowe@liv.ac.uk](mailto:mikerowe@liv.ac.uk); ++44 151 795 3613) and we will try to help. If you remain unhappy or have a complaint which you feel you cannot come to us with then you should contact the University of Liverpool's Research Governance Officer on 0151 794 8290 ([ethics@liv.ac.uk](mailto:ethics@liv.ac.uk)). When contacting the Research Governance Officer, please provide details of the name or description of the study (so that it can be identified), the researcher(s) involved, and the details of the complaint you wish to make.

## Appendix III: Participant Consent Form



### Committee on Research Ethics

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#### PARTICIPANT CONSENT FORM

**Title of Research Project:** Collaborative Working Accountability in Responses to Natural Disasters

**Researcher(s):** Yaman Suryaman

**Please  
initial box**

1. I confirm that I have read and have understood the information sheet dated October 2016 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my rights being affected. In addition, should I not wish to answer any particular question or questions, I am free to decline.
3. I agree to take part in the above study.
4. I understand that confidentiality and anonymity will be maintained and it will not be possible to identify me in any publications.
5. I understand and agree that my participation will be recorded and I am aware of and consent to your use of these recordings for the research purposes
6. I understand that my responses will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.

#### Appendix IV: Glossary of Terms

Abbreviation	Organisation/ Phrases	English Translation
BAPPEDA	Badan Perencanaan Pembangunan Daerah	Local Government Officer of Board of Local Development Planning of Garut
BBWS	Balai Besar Wilayah Sungai Cimanuk-= Cisanggarung	<i>Cimanuk-Cisanggarung River Basin</i>
BKSDA	Balai Konservasi Sumber Daya Alam	<i>Natural Resources Conservation Agency</i>
BPMPT	Badan Penanaman Modal dan Pelayanan Terpadu	<i>Board of Investment and Integrated Services</i>
BPKAD	Badan Pengelolaan Keuangan dan Aset Daerah	<i>Board of Financial Management and Local Asset</i>
BPBD	Badan Penanggulangan Bencana Daerah	<i>Local Board Disaster Management</i>
BNPB	Badan Nasional Penanggulangan Bencana	<i>National Board Disaster Management</i>
DLHKP	Dinas Lingkungan Hidup Kebersihan dan Pertamanan	<i>Environment and Gardening Agency</i>
DPPKA	Dinas Pendapatan, Pengelolaan Keuangan dan Aset Daerah	<i>Department of Local Revenue, Finance, and Asset Management</i>
FK3I	Forum Komunikasi Kader Konservasi Indonesia	<i>Communication Forum of Indonesian Conservation Cadre</i>
FPRB	Forum Pengurangan Resiko Bencana	<i>Disaster Risk Mitigation Forum</i>
FORKOPIMDA	Forum Komunikasi Pimpinan Daerah	<i>Communication Forum of Local Government Leader</i>
Karang Taruna		<i>youth organisation</i>
KODIM	Komando Distrik Militer	<i>Military District Command</i>
KPK	Komisi Pemberantasan Korupsi	<i>Corruption Eradication Commission</i>
LKD	Lembaga Kemasyarakatan Desa	<i>village community institutions</i>
Musrenbang	Musyawaharah Rencana Pembangunan	<i>Development Planning Multi-Stakeholders Consultation Meeting</i>
Muhammadiyah		<i>Muslim Organisation)</i>
PERSIS	Persatuan Islam	<i>Muslim Association</i>
PGRI	Persatuan Guru Republik Indonesia	<i>Republic of Indonesia Teacher Association</i>
PERHUTANI	Perusahaan Perhutanan Indonesia	<i>State Forest Company</i>
PHBM	Pengelolaan Sumberdaya Hutan Bersama Masyarakat	<i>Community Based Forest Management</i>
PKK	Pemberdayaan Kesejahteraan Keluarga	<i>Empowerment of Family Welfare Organisation</i>
Posyandu	Pos Pelayanan Terpadu	<i>Integrated Service Post</i>

PUPR	Pekerjaan Umum dan Perumahan Rakyat	<i>Public Works and Public Housing</i>
PVMB	Pusat Vulkanologi dan Mitigasi Bencana Geologi	<i>Center for Volcanology and Geological Hazard Mitigation</i>
RPJPD	Rencana Pembangunan Jangka Panjang Daerah	<i>a long-term local development plan</i>
RPJMD	Rencana Pembangunan Jangka Menengah Daerah	<i>a medium-term local development plan</i>
RKPD	Rencana Kerja Pembangunan Daerah	<i>a working plan/short-term plan</i>
RT	Rukun Tetangga	<i>neighbourhood group</i>
RW	Rukun Warga	<i>community association</i>
RTRW	Rencana Tata Ruang Wilayah	<i>Spatial Plan</i>
Sekda	Sekretaris Daerah	<i>Local Secretary</i>
TAGANA	Taruna Siaga Bencana	<i>Cadets on Disaster Alert</i>
UUPR	Undang-Undang Penataan Ruang	<i>Law of Spatial Plan</i>
WAPALAM	Wahana Mahasiswa Pecinta Alam	<i>Student Association of Outdoor Activities</i>

## **Appendix V: Semi-Structured Interview Questions Guide**

### **Sub Topic: Collaborative working**

1. What do you know about working collaboratively?
2. Would you rather to work alone or to work with other institution in every phase of disaster management you involve?
3. Do you trust to other institution where you work together?
4. Is there any conflict when working with other organisations/ institutions?
5. Why do you want/don't want to work collaboratively in responses to disaster management?
6. Do you find difficult to work with other institutions/organisations? What is the problem to work with other organisation?
7. What would you do if you found other organisations did not work well? Would you give them any sanction?
8. Is there any commitment among organisation involved in disaster management?
9. What do you share with other organisation? Do you find easy to get information from other organisations?
10. Have you ever invited for a meeting by Local Board of Disaster Management?
11. How often do you interact with other organisations? And how do you communicate?
12. How to coordinate with other organisation?
13. Who does evaluate your duty?

### **Sub Topic: Accountability**

1. What is your role when flood hit the city?
2. To whom do you responsible for your job?
3. From where do you get financial support?
4. How do you report your jobs? Internally or externally?
5. What is your organisation objectives and goals?
6. Is there any report do you prepare for community/ victims?
7. Do you think media influence your organisation reputation?
8. Who does control your job?
9. Do you find that you have done the job as community expected?
10. What do you know about accountability?
11. Do you care about your accountability?
12. Which one is your priority, saving people life or you follow the procedure and slow in responses?
- ~~13. Do you report your activities to other organisations and media?~~
14. Is there anyone blaming to you or to others for the problem in the field?
15. If there is any complain to you, what have you done?

### **Sub topic: Natural disaster responses**

1. How often do you involve in responses to natural disasters?
2. Why do you involve in this job?
- ~~3. In what type of natural disasters do you involve?~~
4. When natural disaster occurs, what is the first thing you do?
5. Is there any technology do you use in response to natural disasters?
6. What kind of preparation do you do to face natural disasters? Any short-term or long term planning? If so, do you find this useful?
7. What kind of problems do you find in logistics distribution to the victims?
8. How to get information about current situation in the site of natural disaster?
9. How do you mobilise your logistics?