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**THE IMPACT OF UK AID IN SUPPORT OF DISASTER RISK  
REDUCTION PROGRAM IN INDONESIA**

**MUHAMMAD SYATHIRI ARMIA**

**A thesis submitted to the University of Huddersfield  
in partial fulfilment of the requirements for  
the degree of Doctor of Philosophy**

**July 2017**

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## List of Abbreviations

Bappeda	Provincial/Regency of Development Planning Agency
Bappenas	Ministry of Development Planning Agency
BNPB	National Disaster Management Agency
BPBD	Provincial/Regency Disaster Management Agency
DFID	Departement for International Development
DRR	Disaster Risk Reduction
EDA	Effective Development Assistance
HFI	Humanitarian Forum Indonesia
IDNDR	International Decade for Natural Disaster Reduction
Kemendes PDT	Ministry of Village, Development of Disadvantaged Regions
MoF	Ministry of Finance
MoHA	Ministry of Home Affair
NAP-DRR	National Action Plan for Disaster Risk Reduction
ODA	Official Development Assistance
RPJMN	National Medium-Term Government Plans
SCDRR	Safer Community through Disaster Risk Reduction
UKCCU	United Kingdom Climate Change Unit Indonesia
UNDP	United Nation Development Program
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNISDR	United Nation Office for Disaster Risk Reduction

## Abstract

The end of 2006 was a milestone for the Government of Indonesia in the initiation of the disaster risk reduction program. The aftermath of the earthquake and tsunami that hit the Aceh Province and Nias Island in the North Sumatra Province, in December 2004, had taken 2 years to deal with. From the start of 2005 until mid-2006 was a period of emergency, rehabilitation and reconstruction. Therefore, the government began publishing a national action plan for disaster risk reduction (2006-2009). It later became the beginning of the shifting paradigm of emergency, rehabilitation and reconstruction, to become the paradigm of disaster mitigation (disaster risk reduction). The initiative was also taken by the Indonesian government as part of integrating the international commitments of the United Nations and the Hyogo Framework for Action (HFA 2005 -2015) about Building the Resilience of Nations and Communities to Disasters. The Indonesian government then opened support from donors to support the implementation of the NAP-DRR program, while supporting the creation of instrument-instrument for disaster management activities for the government. Various support was received by the government to support the DRR program in Indonesia. Such support gave assistance, institutional strengthening, and also grant aid. A grant of 4.3 million pounds from DFID (the UK government) is the largest received by the Indonesian government to support the implementation of DRR in Indonesia. In the implementation of grant aid, the UK government has given an enormous influence on the governance of disaster management in Indonesia.

The aim of this research is to explore and investigate the impact of the UKAid project in support of the DRR programme implemented by the Indonesian Government. The research objectives is : to explore and understand the context of UKAid in support of SCDRR project; to explore the SCDRR project as part of humanitarian aid; to analyse the obstacles affecting the impact of UKAid at governmental level and in optimising foreign assistance fund for DRR activities; and identify and assess the lessons and good practice learnt after DRR project in maintaining post project sustainability incorporating the lessons learnt into the government regulatory framework.

This study needed to look at the long-standing problem of financial constraints of developing countries in the allocation of funding for disaster risk reduction, which has not been a top priority. The research gap identified with study through SCDRR performance as a government project, it indirectly gave a lot of feedback, initiatives and encouragement for the formation of institutions in the system of management of disaster, including the birth of various regulations related to disaster management in general and supporting disaster risk reduction programs as the impact of the DFID / UK Aid projects in Indonesia.

This study adopts methodology a single case study of the SC-DRR project activities, which was implemented in seven provinces and one city in Indonesia. The strategy of the research is conducted by observing the effects produced after the implementation of the DRR project was implemented and categorized at the national and regional levels. A number of interviews with experts from government and non-government have been conducted in order to complement findings outcomes in seven scopes of impact: (1) Strengthening Aid influence in government institutions; (2) Challenges and lessons learnt post SCDRR activities; (3) Effect of humanitarian assistance for DRR in Indonesia; (4) Existence of Indonesian Disaster Data and information (DIBI); (5) Existence of DFID and UK Aid in Indonesia; (6) Optimizing of DFID grant through Project SCDRR; and (7) The influence of the SCDRR Project. The contribution to knowledge and practice through this



study was demonstrate the models framework of impact analysis as a research tool for foreign aid to Indonesia (developing country), which was integrated with another framework analysis impact for humanitarian aid developed by Hoffman for detailed analysis. The integrating of aspect national and regional level into the models framework will useful analysis for the policy maker in particular at developing country.

# CHAPTER 1 - Introduction

## 1.1. Background and Rationale

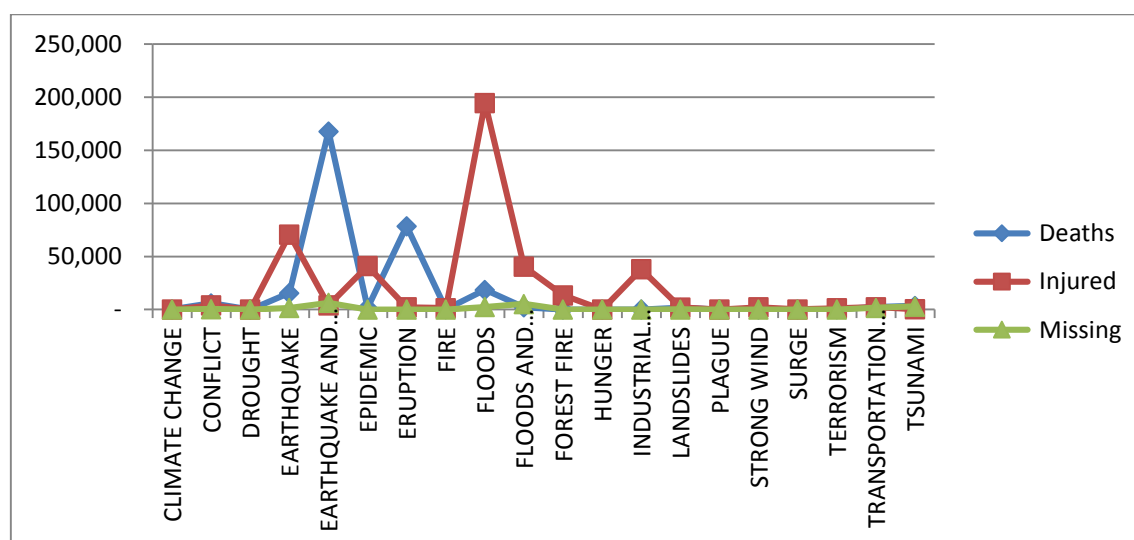
The Asian tsunami and earthquake at the end of 2004 / early 2005, was the biggest natural disaster in the last twenty years and directly affected more than 200 million people in South Asia (CONCERN, 2005). DFID (2005) estimated that the number of people dead and missing was 300,000 and approximately 1.5 million people were affected on a large scale from different hazards and risks (DFID, 2005; Dunno, 2011). According to Gaillard, Clavé, & Kelman (2008) victims of conflict also account for a large number of affected people, based on a note by the (Gaillard, Clavé, & Kelman, 2008) due to the intensification of the armed conflict since 2003, and its lingering effect on the population of Aceh.

Indonesia is a hazard prone country, Desinventar (2012) cited in UNESCAP and UNISDR (2012), identified it as the region with the most frequent hazards, which also affect the most people (UNESCAP & UNISDR, 2012). Indonesia has suffered death, damage and losses. The following Table 1.1 and Figure 1.1 show the number of deaths, injured and missing persons in the various disasters that occur in Indonesia.

**Table 1.1 Disaster in Indonesia (Desinventar, 2012)**

No	Events	Deaths	Injured	Missing
1	CLIMATE CHANGE	137	55	-
2	CONFLICT	5.995	3.986	476
3	DROUGHT	2	-	-
4	EARTHQUAKE	5.568	70.743	1.513
5	EARTHQUAKE AND TSUNAMI	167.768	3.979	6.333
6	EPIDEMIC	1.515	41.080	-
7	ERUPTION	78.598	2.171	7
8	FIRE	312	1.347	6
9	FLOODS	18.606	194.623	2.498
10	FLOODS AND LANDSLIDES	2.211	40.366	5.356
11	FOREST FIRE	8	13.483	-
12	HUNGER	55	112	-
13	INDUSTRIAL ACCIDENT	73	38.005	2
14	LANDSLIDES	1.749	1.975	142
15	PLAGUE	40	-	-
16	STRONG WIND	243	2.205	8
17	SURGE	148	217	46

No	Events	Deaths	Injured	Missing
18	TERRORISM	324	1.233	-
19	TRANSPORTATION ACCIDENT	2.234	2.285	1.687
20	TSUNAMI	3.519	273	2.957
	<b>TOTAL</b>	<b>29.105</b>	<b>418.138</b>	<b>21.031</b>



**Figure 1.1 Graph of Disasters in Indonesia (*Desinventar*, 2012)**

The Table 1.1 and Figure 1.1 show the trends of the high level of deaths caused by earthquake and tsunami, while also showing the high level of those injured in natural disasters such as floods and landslides. Kulatunga (2010) *cited in* (Haigh and Amaratunga, 2010) noted that natural disasters have increased stress and vulnerability of people and disempowered individuals and society hampering individuals and communities' development, even in the long run. However, the degree to which these so called natural hazards are considered as "natural" is being questioned (Kulatunga, 2010).

According to UNISDR (2013) the role of government is to liaise with international and local agencies concerned with disaster risk reduction (DRR) programs with the aim to reduce the cost that is caused by disasters to humans, as well as the economic and environmental sectors. Government, together with scientists, must identify and find the solution, and uncovering new ways to prevent, prepare for and preparing action through traditional ways and determining which technologies are effective in reducing disaster risk (UNISDR, 2013).

The Government of Indonesia have integrated DRR into the national working plan and development design. Bappenas and BNPB (2006) noted that the mandate from the UN Economic and Social Council's Resolution Number: 63/1999 calls for world governments to

formulate and implement a National Action Plan for Disaster Risk Reduction (NAP-DRR), to include support and ensure the attainment of the objectives as targets of sustainable development. The Hyogo Framework for Action's overarching goal is a substantial reduction in disaster losses in lives and in many sectors of the social, economic and environmental assets of countries and communities (Bappenas & BNPB, 2006).

According to UNESCAP and UNISDR (2012) investment by the Government of Indonesia in DRR is actually increasing, but the trends in the continuous growth of exposure and vulnerabilities to disasters indicate that more needs to be done. There have been some positive efforts to reconsider previous approaches with good effect, from less than 0.6% of the Government's total budget in 2006 to more than 1% by 2012 (UNESCAP & UNISDR, 2012). The results of this impact are formulated in the first three-year NAP-DRR 2006-2009.

The birth of NAP-DRR elicited a positive response from the British Government through the Department for International Development (DFID) and was known as United Kingdom Government Aid (UK Aid). DFID (2011) integrated a general program in the support and development of developing countries, in particular for *"investing in infrastructure; developing skills to diversify income sources; improving systems that provide an early warning of shocks and stresses; and using insurance providers to minimise the impact of a disaster and transfer risk away from vulnerable governments and communities"* (DFID, 2011b). There was a commitment by the British Government in allocating a grant of around £ 4.312.500 for assisting Indonesia under the programme Safer Communities through Disaster Risk Reduction (SC-DRR) from 2007-2010 (Appendice 0). According to the UKAid database, this project is designed exclusively for the mainstreaming of disaster. The British foreign aid for Indonesia was to bring a great impact for promoting risk reduction as a component of development for the benefit of communities that deal with natural disasters. In this context, the aim of the research is to explore and investigate the impact of the UK Aid project in support of DRR programs which were implemented by the Indonesian Government.

## **1.2. Justification of this research**

The role of government efforts to reduce disaster risks through integrated systems in policies, plans and programs for sustainable development and poverty reduction is extremely important. Foreign aid support through bilateral, regional and international cooperation, including partnerships will affect any development program and DRR, these have mutually supportive objectives, and in order to meet the challenges ahead, accelerated efforts must be made to build the necessary capacities at the regional and national levels to manage and reduce the risk (Armia & Amaratunga, 2013; UNISDR,

2005a). The DFID (2011b) report mentioned intervention based on humanitarian aid from another country is needed in particular to a developing country such as Indonesia, which has been attacked by natural disaster (DFID, 2011b). Initiatives and collaborations between a donor country and recipient state in solving problems through giving aid with or without intervention programs boost the economic sector with potential growth and this is followed with good fiscal, monetary and trade policies, and foreign policy (Angeles & Neanidis, 2009).

UK Aid, through the DFID intervention, provides the DRR issue with a bridge over the gap between development and humanitarian programs with the goals of strengthening livelihood security, to protect assets, and to reduce communities' vulnerability and increase their opportunities of pursuing sustainable livelihoods (CONCERN, 2005). Project Safer Community through Disaster Risk Reduction (SCDRR) become the ultimate large scale project with the largest support budget, and it was integrated into the national government work plan, particularly in mainstreaming of the DRR programs in the annual work plan, and answering the challenges in post-disaster reconstruction in the medium-term development plan. The SCDRR program initiative was implemented in the 7 provinces and 1 city in Indonesia, and it became the main contribution and presented the existing role of government in supporting and assisting guides in disaster preparation, planning and response (Hofmann, Roberts, Shoham, & Harvey, 2004).

Therefore, it is important to explore and identify the scope of the impact to government at regional and national level from the UK aid program through the DFID. This may lead to the identification of improvements towards preparation in the post-disaster area, and in the strengthening, including the impact of implementing measures on DRR on integration planning, capacity building, and public awareness. Hence, there is a need to undertake research on the impact from the implementation of foreign aid in support of the DRR program.

The justification of this research is in highlighting and indicating the importance of finding the impact of UK aid, through the DFID. Having identified the scope of impact of the British government aid through the DFID, this will be conducted at the national level and regional level (chapter 6). It is worth looking at the SC-DRR as the mandate for implementing the way in which the United Kingdom Government Aid should be used, to contribute towards the handling of coordination issues between central and local government.

In order to clarify the research, the research aims and objectives are presented in the next section.

### **1.3. Aim and Objectives**

#### **1.3.1. Research Aim**

The aim of this research is to explore and investigate the impact of the UKAid project in support of the DRR program implemented by the Indonesian Government.

#### **1.3.2. Research Objectives**

1. To explore and understand the context of UKAid in support of the DRR project (post-disaster) in Indonesia.
2. To explore the SC-DRR project as a part of humanitarian aid implemented in UKaid in Indonesia.
3. To analyse the obstacles affecting the impact of UKAid at governmental level and in optimising foreign assistance funds for DRR activities.
4. To identify and assess the lessons and good practices learnt after the DRR project in maintaining post project sustainability by incorporating the lessons learnt into the government regulatory framework.

### **1.4. Research Focus**

The research focus in analysing the development of DRR in Indonesia is largely determined by the perspective adopted. The perspective used by the author here is to assess the impact of the utilization of grant aid in integrating the DRR program in Indonesia. The focus of the study, therefore, is looking at the impacts and sustainability of programs that have been implemented. It is strongly related to Miles and Huberman (1994) who described the unit of analysis as the "*phenomenon of some sort occurring in a bounded context*" (Miles & Huberman, 1994). This study takes a case study of a project set up by the government after receiving a grant from the British government for the DRR program. As mentioned in the background section, the aid grant is the largest and first of its kind for DRR activities in Indonesia. In accordance with the aim and objectives of this study, the author seeks to focus the study on the influence of social and institutional aspects, including by examining the implementation of the theory of Hofmann (2004) related to the effect of humanitarian aid.

According to Hoffman et.al (2004) this analysis focused on the impact on the government institution at the 'national level and regional' level covering four areas:

*"(1) Aid agencies, in order to improve their work, demonstrate impact and make choices between projects; (2) Donors, to choose what to fund and to develop policy; (3) Agencies and donors, to assess the impact of new approaches and innovations in programming; and (4) National governments, to guide disaster preparation, planning and response"* (Hofmann et al., 2004).

The fourth level about "*National governments, to guide disaster preparation, planning and response*", is the main focus of this research, however, other levels are used to obtain additional information in support of this study. Yin (2009) noted that one important practice during the analysis phase of any case study is the return to an attempt to provide an alternate explanation of a phenomenon (Yin, 2009).

### **1.5. Research Methodology**

The methodological framework of this study adopts the 'research onion' model proposed by Saunders et al. (2009). This comprises the research philosophy, research approach, research strategies, choice of methods, time horizons and techniques and procedures (Saunders, Lewis, & Thornhill, 2009). Chapter 3 presents the detailed methodology adopted to conduct this study. As explained in section 1.3, the aim of this research is to explore and investigate the impact of the UKAid project in support of DRR programs implemented by the Indonesian Government.

The philosophical assumption of the research is the pragmatism paradigm and a single case study is selected as the research strategy. In achieving the aim and objectives, this research implements a qualitative approach. The main objective of the data collection method (semi-structured interviews) is to identify the impact of funds during the implementation of the SC-DRR approach, and content analysis is conducted for the qualitative analysis. Baxter & Jack (2008) noted that a qualitative case study is an approach to research that facilitates exploration of a phenomenon within its context using a variety of data sources. This ensures that the issue is not explored through one lens, but rather a variety of lenses which allows for multiple facets of the phenomenon to be revealed and understood (Baxter & Jack, 2008).

The qualitative data were analysed based on the explanation of analysing qualitative data as indicated by Saunderson et al. (2009), which involves summarising the data, categorising and structuring the data using narrative to recognise relationships, developing and testing propositions and conclusions. NVivo (version 10) software was used at the data analysis stage to manage, organise and analyse qualitative data. Bazeley (2007) This software has many features that help the process of qualitative analysis that is effective when dealing with large numbers of interview transcripts (Bazeley, 2007).

The complete explanation about the detailed mechanism of research methodology will be explained in Chapter 3, on research methodology; the next section will briefly describe the expected contribution to knowledge.

## **1.6. Contribution to Knowledge**

This study aims to explore and investigate the impact of UKAid through DFID in support of the DRR programs implemented by the Indonesian Government. The government implemented the DRR program through the SC-DRR project. The contribution of the SC-DRR project was to establish the DRR program into the national development program, which in line with the Hyogo Framework for Action and the Sendai Framework for Action as a continuation after the Hyogo framework, is about the responsibility of countries in the world for integration of DRR programs.

The research is designed to contribute to other countries which are supported by foreign aid in mainstreaming DRR programs. In particular, for strengthening central government and local government in Indonesia that are to build other sectors post-SC-DRR projects, in particular to benefit from good practice and lessons learnt for sustainability and strengthening of several programs for DRR into the national and local government work plan.

Therefore, the study aims to fill the gaps in terms of measuring the impact of aid in the government at the national level and regional level, strengthening and increasing sustainability of DRR programs. The impact of the research on policy implication and good practice is expected to be identified in the research results in the findings in Chapter 6. The effect of this is also expected to change the nature of vulnerability assessments in the districts and provinces in Indonesia and beyond. Decision makers in local and central government will have a tool for making evidence-based decisions regarding hazard preparedness, planning, response, and reduction at the central, provincial and district levels.

## **1.7. Structure of the Report**

### **1.7.1. Chapter 1: Introduction**

Chapter 1 introduces the research discussed in the thesis. It provides a brief summary of the background to the research, research justification, aim and objectives of the research, research focus, methodology adopted, contribution to knowledge and the organisation of the thesis.

### **1.7.2. Chapter 2: Literature Review**

Chapter 2 presents the detailed literature review of the key theories affecting the study. Accordingly, Chapter 2 provides detailed literature that addresses the issues relating to



disaster risk and associated risk, foreign aid and DRR, UK aid and DRR, and impact of foreign aid for a developing country.

### **1.7.3. Chapter 3: Research Methodology**

Chapter 3 uses the Research Onion model proposed by Saunders et al. (2009) as a guideline to show the research methodological design and the process adopted for conducting the research. The chapter first discusses the process of establishing the research problem and then presents, in detail, the research philosophy, research approaches, research strategies, choices of methods, time horizons and techniques and procedures.

### **1.7.4. Chapter 4: Conceptual Framework**

Chapter 4 presents the conceptual framework of the research while highlighting the key concepts identified from literature and primary data: their relationships and boundaries.

### **1.7.5. Chapter 5: Data Analysis**

Chapter 5 includes the analyses of the observed evidence assembled from the primary data interviews. The chapter provides the background information, the procedure adopted to conduct the interviews and is followed by a detailed analysis.

### **1.7.6. Chapter 6: Research Findings**

Chapter 6 provides an overview of the main research findings while comparing and contrasting the findings from the expert interviews and the literature findings.

### **1.7.7. Chapter 7: Conclusions**

Chapter 8 concludes the research based on the empirical investigation. The chapter also provides the implications of the research to theory and practice, research limitations, list of research results and future research areas.

## **1.8. Summary and link**

This chapter has provided an introduction to the research discussed in this thesis by introducing the background of the research, justifying the research area, highlighting the aim, objectives and focus of the research, summarising the methodology adopted in the study, highlighting the contribution to knowledge and presenting the structure of the thesis. The next chapter presents the literature review for the study.

## **CHAPTER 2 - Literature Review**

### **2.1. Introduction**

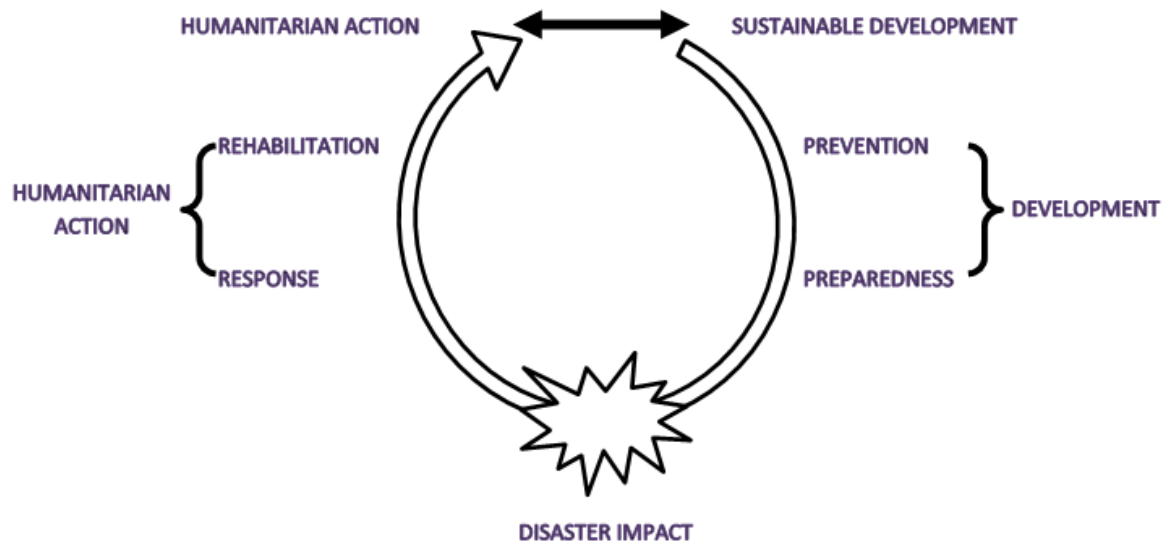
The previous chapter provided a detailed introduction of the research presented in this thesis. This chapter intends to provide a detailed literature review of the key research areas pertaining to this study. Accordingly, the chapter is structured as follows:

- Firstly, the chapter provides an overview of disasters and disaster management cycles including the definition and scope of DRR.
- Secondly, DRR and the role of government from various perspectives.
- Thirdly, an update of the DRR situation in Indonesia.
- Fourthly, a review of foreign and humanitarian aid that supports the DRR program
- A review of foreign aid in support of governments in particular for governments in developing countries
- Sustainability of SCDRR projects that are supported by other Australian projects.
- UK Aid and the DRR situation in Indonesia
- Next a review related to DFID/ UK Aid and DRR funding support, including the profile and existence of UK Aid which supports mainstream DRR promoting good government and public service. It also includes the humanitarian emergency response review.
- Finally, a detailed literature review of SCDRR with profiles and coverage project, project board, support government and local government, including community support and the role of SCDRR in support of the government regulatory framework.

### **2.2. Disaster and Disaster Management Cycle**

In the previous chapter, Figure 1.1 showed the graph of disasters in Indonesia and Table 1.1 showed the number of deaths, injured and missing people during disasters. According to Geale (2012) the disaster has a strong effect on people and their community groups. Risk groups that are already vulnerable, in particular for children, women, and poor societies, became more susceptible to exploitation and abuse (Geale, 2012). Response to the disaster came from national, regional and international bodies who initiated the support of the disaster risk reduction program. That was also related with the international response and focussed on the distribution of foreign aid after the disaster (Lindell, 2013; Moe, Gehbauer, Senitz, & Mueller, 2006).

A suitable disaster management cycle for this research related to program intervention recommended by Wisner & Adams (2002) cited in white et.al (2004) is described in Figure 2.1 below.



**Figure 2.1 The Disaster Management Cycle in program intervention (White et al., 2004)**

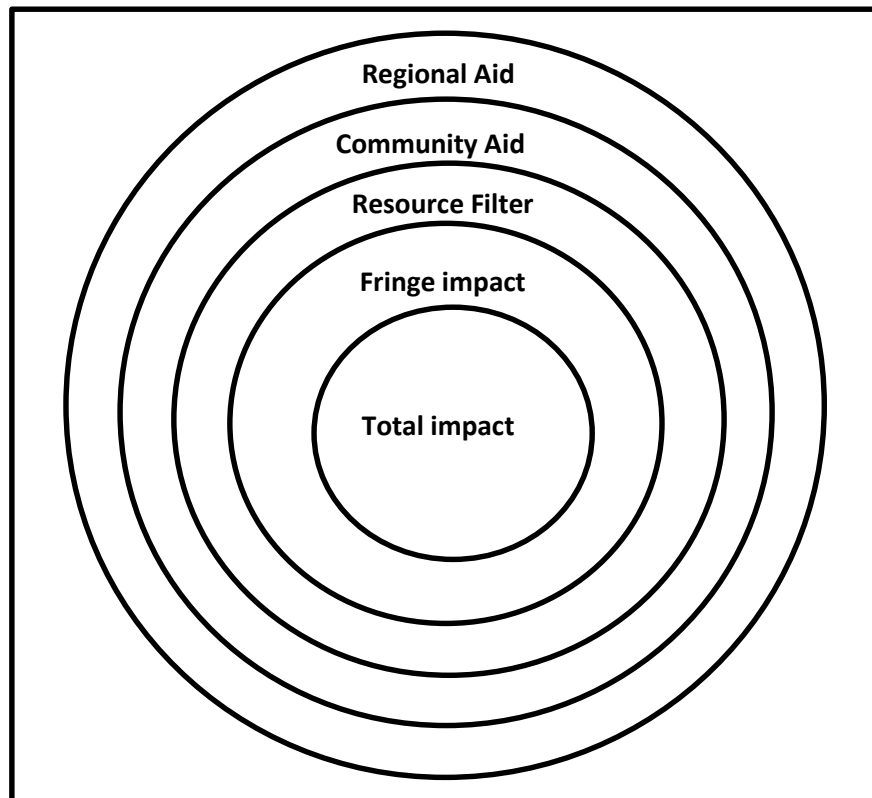
In Figure 2.1 'disaster management cycle in program intervention' shows the above model as a normative model of appropriate programming interventions at sequential stages in the unfolding of a disaster event. Program intervention through humanitarian action and grant aid that will support disasters and its impact can be lessened by prior prevention and preparedness measures which are essentially directed towards sustainable development activities, while humanitarian responses in the wake of a disaster are normally followed by rehabilitation activities aimed at easing the transition back into development (White et al., 2004). Another connection in Figure 2.1 is that sustainable development in particular for prevention and preparedness, needs to be integrated with other processes which started with planning, organizing, coordinating and implementing measures between government and related stakeholders for the effectiveness of the program intervention. According to Rahman (2001) cited in Khan (2008) based on experiences in Bangladesh, people are better prepared for the next disaster providing preparation of a counter-disaster plan, predicting and cautioning of the disaster, maintenance of resources needed during and after disaster are all adopted together with the strengthening of capacity in the training of the related personnel (Khan, 2008). Coppola (2011a) categorizes preparedness and prevention as the new disaster management, in terms of the emergence of global standards and systematized efforts to address preparedness, mitigation, and response activities for a wide range of disasters. The government played an increasing role in preventing and responding to disasters (Coppola, 2011a). The following section will explore the relationship between disaster risk reduction and the role of government.

### 2.3. Disaster Risk Reduction and Role of Government

Alexander (2000) cited in Dunno (2011) that identified risk is associated when vulnerability and hazards combine and include components at risk including populations, communities, the built environment, the natural environment, economic activities and services (Dunno, 2011). White et al. (2004) cited in DFID (2002) in the Tools for Development handbook a category of risk labelled as 'Act of God' (White et al., 2004). CONCERN (2005) and Dunno (2011) noted that the effects from natural hazards and damaging physical events can cause any or all the following: the loss of life, injury, physical harm, corruption in environment, and social and monetary disturbance (CONCERN, 2005; Dunno, 2011).

Various definitions of disaster risk reduction and associated risk was presented by many scholars. CONCERN (2005) and Coppola (2011b) classified disaster risk reduction into two main subjects; mitigation and preparedness. *"Mitigation is decreasing the incidence, measure, concentration and influence of hazards. Preparedness in establishment the capability of communities to live, respond to and recover from risks, and of government, implementing partners and concerns to establish speedy and appropriate interventions when the community's capacities are overwhelmed"* (CONCERN, 2005; Coppola, 2011b). Shaluf (2007) noted that the region in Asia and the Pacific in the period 1973-1997 accounts for only 30 percent of the world's land mass but suffers unreasonably complex disaster effects (Shaluf, 2007). White et.al (2004) categorized three areas besides the impact that would require support policies and involve interventions, they are : (1) hazard minimisation (where possible); (2) reducing exposure and susceptibility; and (3) enhancing coping and adaptive capacity (White et al., 2004).

The complex disaster effects by Shaluf (2007) and the three areas from White et al. (2004), and by Dyne (1970) and cited in Lindell (2013) are all expressed in Figure 2.2 in the form of a disaster impact zone resource filter that was classified in layers relative to the level of people who will be affected and support required.



**Figure 2.2 Disaster impact zones (Lindell, 2013)**

These impact zones in Figure 2.2 are difficult to identify in practice because they do not fit neatly into the circles. For example, a building which is damaged by the impact of an earthquake depends on its structural resilience and the intensity of earthquake shaking – neither of which is uniformly distributed – so the boundary of the total impact zone can be extremely irregular. Moreover, the infrastructure impacts and social impacts of the fringe impact zone can be equally irregular and extend beyond the boundaries of the resource filter or community aid zones. (Lindell, 2013).

Figure 2.2 clearly shows the role of government related to regional aid and community aid. The role of government in the layer regional aid, Fakhruddin & Chivakidakarn (2014) and UNISDR (2009) recommended through systemic efforts to analyse and manage the causes of disasters, including through the avoidance of hazards, reduced social and economic vulnerability to hazards, and improved preparedness for adverse events for the institution and community to implement disaster risk reduction (DRR) as action taken to reduce the risk of disasters and the adverse impacts of natural hazards, (Fakhruddin & Chivakidakarn, 2014; UNISDR, 2009). In addition, as the executor in the disbursement of aid by managing aid assistance or humanitarian aid and as the agent in distributing grants through an implementation program for the disaster impact area.

Indonesia, which is a developing country, is located in a disaster prone area. It is currently a soft target for natural disasters. Government, through its registration in the International

Decade for Natural Disaster Reduction (IDNDR), took action on 11 December 1987 through United Nations General Assembly which declared the 1990s as the "International Decade for Natural Disaster Reduction" (IDNDR). Coppola (2011a) noted, this action was taken to sponsor internationally synchronized efforts to reduce material losses and social and economic disruption affected by natural disasters, particularly in developing countries. The stated mission of the IDNDR was to improve each United Nations (UN) member country's capacity to prevent or diminish adverse effects from natural disasters and to establish guidelines for applying existing science and technology to reduce the impact of natural disasters (Coppola, 2011a). Aid (2011) noted based on the UN resolution in 1990s, the role of government in a developing country was to strengthen capacity for stronger institutions. That influenced government staff to explore the main components of disaster resilience through education and training in order to identify areas of training and support that would provide long-term sustainability and productivity (Aid, 2011). Coppola (2011c) in the chapter on preparedness, elaborated that the role of the government would be effective in strengthening capacity, especially when solving issues of administration, emergency management, public health, and other services agencies. This is defined as the first group. *Individuals and businesses* are the second group. Awareness of the first group is normally defined and conducted through the creation and application of an EOP and bolstered by training and exercises (Coppola, 2011c).

## **2.4. Disaster Risk Reduction in Indonesia**

After the tsunami and earthquake of December 2004, the Government of Indonesia were supported by various countries who contributed by way of donation in both the emergency period and during the rehabilitation and reconstruction period. Telford and Cosgrave (2007) cited in Regnier et al., (2008) explained that the biggest event had the tagline "build back better" for humanitarian aid intervention. It was recorded as the largest ever coverage of a tsunami impact and also as the largest international response ever for a disaster in the history of humanitarian aid mission (Régnier, Neri, Scuteri, & Miniati, 2008).

According to Gillard et al., (2008) after the tsunami and earthquake in the Aceh province and Nias Island in North Sumatera in 2004, there was another disaster on the other island of Indonesia. In May 2006, in Merapi, there was a volcano eruption and an earthquake in Central Java. In July 2006 there was a tsunami disaster on West Java Island, and the January 2007 flood attacked the capital city of Indonesia, Jakarta (Figure 2.3). Participation of the international institutions, NGOs and local government agencies acknowledge that they re-dispatched some of their staff to Java Island, thus reducing the support given to Aceh province (Gaillard et al., 2008).

The Government of Indonesia continues to shift the paradigm from emergency response to prevention response. In prevention response, the government's main concern was to mainstream disaster risk reduction. As a part of an international mandate from Hyogo Framework for Action (HFA), the government took further action by establishing the first National Action Plan for Disaster Risk Reduction (NAP-DRR 2006-2009).

According to Fargher et al., (2012) Evaluation of the NAP-DRR 2006-2009 that was prepared by BAPPENAS and BNPB highlighted on-going capacity constraints and the lack of specific DRR budget lines in regional agency budgets. As the first document trying to deliver DRR into Indonesia, the evaluation required 5 priority recommendations that form the core of HFA to be adhered to (Fargher, Ferdiwijaya, Arlianti, Horsfall, & Panjaitan, 2012).

UNISDR (2005) the next NAP-DRR 2010-2012 was already adhering to the five main priorities of the Hyogo Framework for Action (HFA) FY 2005-2015, UNISDR (2005), which consists of: " (1) *Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;* (2) *Identify, assess and monitor disaster risks and enhance early warning;*(3) *Use knowledge, innovation and education to build a culture of safety and resilience at all levels;* (4) *Reduce the underlying risk factors;* and (5) *Strengthen disaster preparedness for effective response at all levels*" (UNISDR, 2005b).

In response to the five main priorities of the HFA 2005-2015, the HFA was implemented by government through NAP-DRR 2006-2009 and continued to NAP-DRR 2010-2012 and integrated (Figure 2.8) into the annual government working plan (called RKP), the 5 year National Medium-Term Government Plans (called RPJMN), in order to provide government with consistent and regular information which attempted to increase the anticipation of disaster paradigm through various efforts of disaster risk reduction as stated in the NAP-DRR.

The Government of whilst delivering DRR in Indonesia, was in line with the typology of disaster risk reduction measures as required by DFID. According to DFID (2015) noted DRR measures consisted of policy and planning as well as physical components. Policy and planning measures are implemented at national or regional level and help to integrate DRR into the policy framework. Physical measures that have been implemented by government of Indonesia are in line with DFID (2005) research and are designed to reduce the vulnerability and exposure of infrastructure to natural hazards (prevention) as well as to provide coping and adaptive infrastructure in case of a disaster event (coping / adaptive). Increasing importance is given to measures that are designed and implemented at community level, particularly the strengthening of communities to better respond and cope to a disaster event through training and capacity building (DFID, 2005).

Besides supporting the infrastructure for public assistance and targeting aid missions designed to decrease poverty post disaster (for example after earthquake and tsunami in Aceh). It was also highlighted by DFID (2006) that disasters increase the vulnerability of the poor, increasing their poverty and preventing them from taking advantage of economic opportunities. In Aceh, Indonesia, the 2004 Tsunami was estimated to have increased the proportion of people living below the poverty line from 30% to 50% (DFID, 2006).

The British Government through DFID (2007) committed over £5 million for emergency assistance relief supplies after the Indonesian earthquake which is a large sum for humanitarian action. DFID has provided significant humanitarian and reconstruction assistance in response to natural disasters such as the 2004 tsunami and the May 2006 earthquake in Yogyakarta and Central Java. DFID has also helped implement the government's Disaster Risk Reduction policy of reducing the vulnerability of marginalised and poor people through education, prevention, early warning, mitigation, emergency response and training, allocated through the SCDRR project. (DFID, 2007a).

Barnett et al., (2007) noted the Government of Indonesia committed to the donor countries that the budget was allocated for disaster impact areas. Government through the BAPPENAS has designed a process for the national budget in which all requests for a grant or loan will be driven through the "pipeline (Blue book)" , and then the budget will be "approved in the (Green book)" All projects either ready to be implemented or at the end of implementation will be noted in "completed projects (Red book)" (Barnett, Bennet, Khan, Kluyskens, & Vickery, 2007).

This system of budget allocation was supported by many regulations from new laws, government regulation, ministry regulation and local regulation. In the following section will explore the funding of DRR activities.

## **2.5. Foreign Aid Support of Disaster Risk Reduction**

Foreign aid is something which can provide impact to the country and aid the public interest. Foreign aid is mostly used in bilateral cooperation, multilateral cooperation, and humanitarian action. Humanitarian aid is vital in developing countries with the objective to rebuild post disaster.

According to Lords (2012) throughout The Economic Impact and Effectiveness of Development Aid Report, "aid" is characterized as net official development assistance (ODA) from part nations of the OECD Development Assistance Committee (DAC) to qualified beneficiaries. Net ODA consists of grants and concessional loans provided by authority offices in donor countries that are dispensed with the goal of advancing monetary



improvement. Under this definition, aid includes technical assistance, debt relief, and transfers to multilateral agencies. It excludes military and direct peacekeeping assistance but includes some 'peace and development' activities such as those financed by DFID's contribution to the Conflict Pool (Lords, 2012).

Aid for development is commonly known as Official Development Assistance (ODA) and Effective Development Assistance (EDA). Djankov et al., (2006) demonstrates the impact of utilizing ODA and EDA, the literature that analyses the influence of aid on expansion has used the ODA measure. ODA streams incorporate awards and concessional loans that is, credits whose funding element is at least 25%. Burnside and Dollar (2000) use as a quantity of aid flows the mass of the EDA initially created by Chang, Fernandez Arias, and Serven (1999). There is one essential contrast amongst ODA and EDA. ODA provides a stream of assets to the beneficiary nation in a specific year, whilst EDA replicates the portion of ODA with a pure transfer of resources from donors to the beneficiary state. The sponsored loan fee of ODA is viewed EDA (Djankov, Montalco, & Reynal-Querol, 2006).

The Government of Indonesia uses foreign aid based on two criteria: first as a *grant*, which commonly integrates into the national budget. A disaster/ emergency response grant would be distributed to local government in the location of disaster, and will be registered only by central government through the Ministry of Finance (MoF). Second as *loan*, the budget will be automatically integrated within the national budget to synchronize with short, medium and long terms of the national work plan. Bhavan (2011) cited in McGillivray (2009) about the importance of overseas support in terms of economic and infrastructure development aspects. He defined aid as a voluntary transfer of resources by individuals, private organizations and governments to support the recipients' economic development. The role of foreign aid can be an essential role in releasing saving gaps, allowing the accumulation of physical and human capital stock and the development of infrastructure (Bhavan, Xu, & Zhong, 2011). Similarly, with Bhavan and Bermeo (2011) described foreign aid as coming from a third party with its individual objective function. Donors allocate relief to play a role in determining the values of aid for any area as demand by beneficiary countries (Bermeo, 2011). UNDP (2008) as the project board of SCDRR, distribution of humanitarian assistance for another developing country, and UNDP's establishment of the role in helping countries recover after crisis. UNDP's work on preventing and recovering from crises is one of its four core practice areas. In 2006 UNDP 2 was established to support countries in the immediate recovery phase. The UNDP has deployed Early Recovery coordinators to Indonesia, Lebanon, Liberia, Mozambique, Pakistan, the Philippines, Somalia and Uganda. (DFID, 2008).

The next section will describe some cases related to foreign aid support of the government in developing countries.

## **2.6. Foreign Aid Support of Governments in Developing Countries**

Participation of governance in the foreign aid activities can be effective during implementation, also in some cases can influence economic evolution. It was equally stated by Djankov et.al (2006) that foreign aid may affect economic growth through indirect networks that cannot be captured by analysing the individual direct effect of aid on growth. Aid may modify the investment share of GDP, which indirectly affects economic growth, or may also affect government consumption, which is recognised to have a negative consequence on economic progress (Djankov et al., 2006).

Other effects described by Rogerson et.al (2004) and Lyons (2009) are overlapping in planning and applying programs, and only limited coordination. Overseas aid development is increasingly dominated by a relatively small number of large bilateral agencies, NGOs, and multilateral agencies with little or unstable core funding. Thus, large aid agencies' approach to post-disaster reconstruction is often at odds with their day-to-day work in developing countries, which has increasingly involved grass-roots contribution, partnerships with local CBOs and NGOs, and a stress on integrating livelihoods, health, and education with physical planning. Additionally, heavy commitments are sometimes made which agencies cannot meet, host communities cannot absorb, and which may lead to poor accountability and costing (Lyons, 2009; Rogerson, Hewitt, & Waldenberg, 2004).

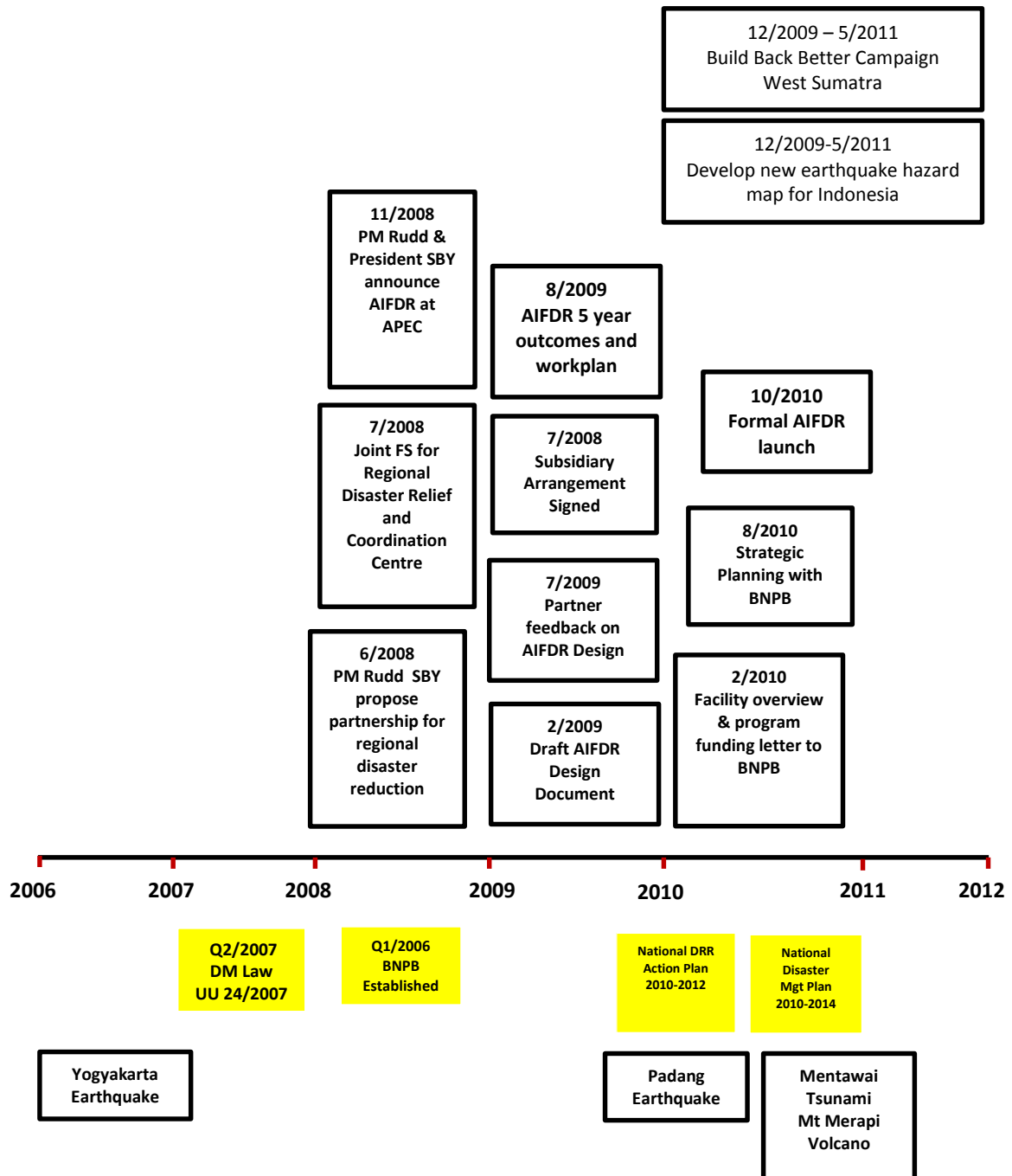
Highlighting the influence of aid to the government, the next section will explore Australian Aid, identified by some of the donor agencies that support the DRR program and activities in Indonesia.

## **2.7. Australian Aid in Support of Sustainable SCDRR Project**

Australian aid is donor were allocated funds for rehabilitation and reconstruction in Indonesia. In particular, for the earthquake and tsunami areas. Quite a few donors also have program specific DRR, mostly concerned with rehabilitation and reconstruction projects.

Australia and Indonesia governments have a long history in cooperation in development. Australia also committed to support humanitarian aid and humanitarian intervention during the earthquake and tsunami. The support fund is still committed to support development in Indonesia. The Australia Indonesia Facility for Disaster Reduction (AIFDR) represents Australia's largest bilateral commitment to disaster management and DRR and is a key part of Australia's development program in Indonesia. The AIFDR is co-managed by AusAID and BNPB (AIFDR & BNPB, 2012). It focuses on enhancing Indonesia's capacity to identify, mitigate and respond to natural disaster risks.

The goal of AIFDR is to "strengthen national and local capacity in disaster management in Indonesia, and promotion of a more disaster resilient region". Three work streams and one modality form the basis of the AIFDR: Training & Outreach, Risk & Vulnerability, Partnerships and AIFDR Grants.



**Figure 2.3 Timeline for the evolution of AIFDR (Fargher et al., 2012)**

In the timeline in the Figure 2.3, AIFDR also works in line with the DFID in support of SCDRR period activities. AIFDR also supports SCDRR in another coverage area.

AIFDR funded a multi-agency team of Indonesia's leading earthquake hazard scientists (Team-9) to produce a new earthquake hazard map for Indonesia. This support was

requested by the Ministry for Public Works in January 2010. The resultant map was endorsed by the Minister for Public Works and will be used to regulate national building codes in the next revision of Indonesia's national standard for earthquake resistant design (SNI 03-1726-2002). It will also serve as a benchmark for future refinement of national and provincial hazard maps (Fargher et al., 2012).

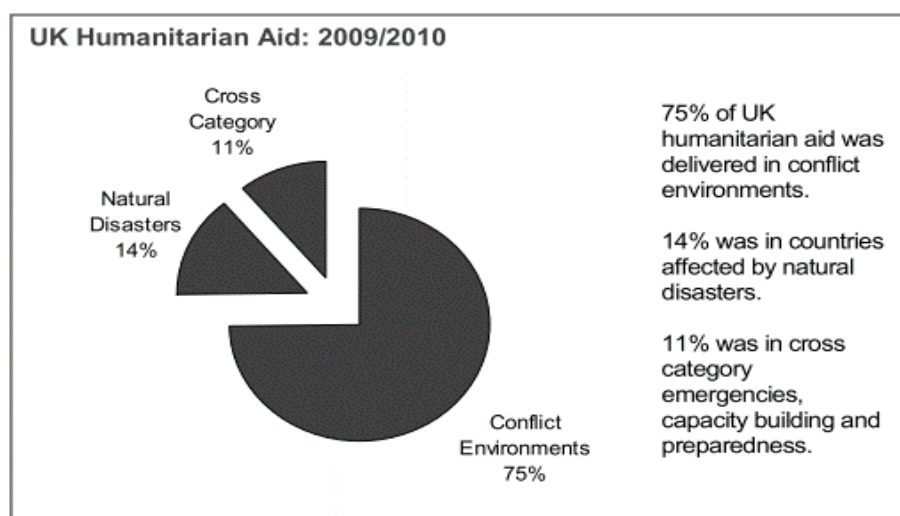
The next section will explore details about the DFID performance through UK Aid flag and DRR situation in Indonesia.

## 2.8. United Kingdom Aid and Disaster Risk Reduction in Indonesia

The British Government have a commitment to the government of Indonesia in support for the poor in Indonesia. It includes a commitment to spend up to 10% of the response to natural disasters on measures to prepare for and mitigate the influence of future disasters. Funding allocated for Disaster Risk Reduction (DRR) following the Indian Ocean tsunami is being invested in suitable national and regional initiatives. These include a £4.5 million commitment to a four-year programme with the United Nations Development Programme (UNDP) and the Government of Indonesia to reduce the vulnerability of poor communities to natural disasters through more effective early warning systems and strengthening the ability of the government to prepare for future disasters (DFID, 2007a).

In Indonesia, DFID (2008) a £38 million contribution to the Multi-Donor Fund for tsunami-affected Aceh and Nias has enabled the rebuilding of social and economic infrastructure such as the building or repair of over 3,000 houses, with a further 8,000 under construction or repair; 2,200 km of roads; 1,100 bridges; and the transportation of 98,000 metric tonnes of reconstruction materials (DFID, 2008).

UK Humanitarian Aid as a proportion of humanitarian action is shown in Figure 2.4 below:



**Figure 2.4 UK Humanitarian Aid : 2009/2010 (DFID, 2011c).**

DFID (2011c) has meant that there is almost a double increase of humanitarian workers between 1997 and 2008. 75% of the humanitarian assistance goes to conflict-affected areas. There is a clear need for increased protection and security as part of the humanitarian response, particularly in fragile and conflict-affected states. The UK will promote respect for humanitarian principles to support greater acceptance of humanitarian actors and improved humanitarian access (DFID, 2011c).

There is presently convincing evidence that the effect of disasters can be altogether moderated by building the strength of countries and individuals, and addressing the root causes of vulnerability. The right blend of compassionate, improvement and political activity can lessen superfluous death toll and enduring, in the long-term decreasing the requirement for humanitarian aid.

In the goal of UK Aid (2011c) number 5 as Policy sets out seven goals for improving the effectiveness of UK humanitarian support “*support improvements in accountability, impact and professionalism of humanitarian action*” from the UK Aid that was gave positive advantage for the government of Indonesia starting from national level (central government and alone ministries) until the regional level (province, cities, local NGO, and local community). (DFID, 2011c).

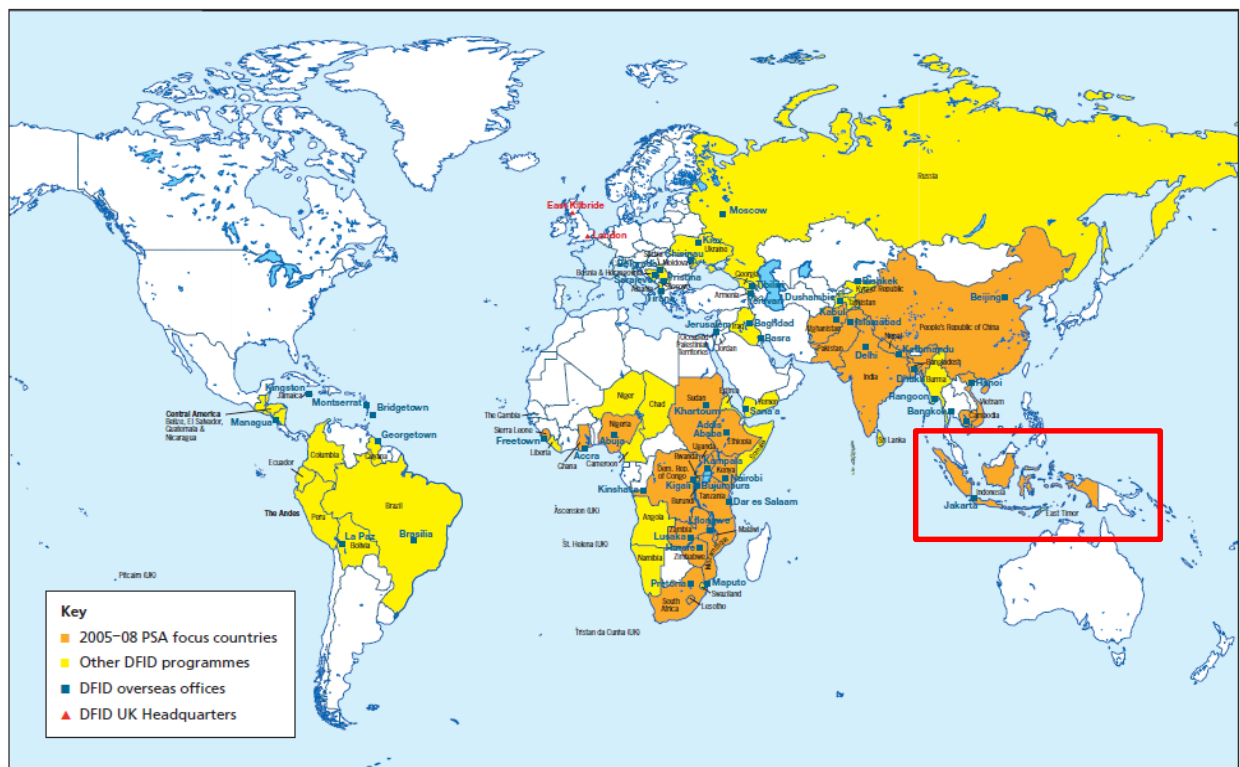
## **2.9. DFID/ UK Aid and DRR Funding Support**

DFID, the Department for International Development (2013), since being set up in 1997, has lead the UK’s work to end extreme poverty, build a safer, healthier, more prosperous world for all of us which is firmly in the UK’s national interest. DFID claim to be ending the need for aid by creating jobs, unlocking the potential of girls and women and helping to save lives when humanitarian emergencies hit (DFID, 2013). DFID was provided to the government of Indonesia in all sectors of development around 2000-2004 and has since activated the official support for rehabilitation and reconstruction for the Aceh Province and the district of Nias in North Sumatera Province.

Spencer and Wood (2005) noted that the role of DFID must eliminate poverty as its central objective. DFID can and should draw on the plans and priorities set by others in each country. DFID acts globally for two main reasons. First, some problems can be addressed only at this level, of which the most obvious example is improving the international financial architecture. The second, which applies even to issues which do not integrally require international solutions, is that it is often more effective for DFID to join up with other donors, bilateral and multilateral (SPENCER & WOOD, 2005).

The UK aid logo is used widely in the countries where UK Aid works, such as health clinics, school books and emergency food supplies, to publicly acknowledge development programmes funded by the UK taxpayer. DFID is a ministerial department, supported by

2 agencies and public bodies (Commonwealth Scholarship Commission in the UK and Independent Commission for Aid Impact). DFID works with the international system and multilateral organisations and emerging economies to ensure coordinated worldwide action to deliver international development goals. The coverage of working area of DFID is shown in the Figure 2.5 below.



**Figure 2.5 DFID's work around the world (2007/08) Source : (DFID, 2008)**

DFID (2011c, 2013) works from two UK headquarters (HQ) in London and East Kilbride and from offices in 36 countries overseas. DFID employs around 2,700 staff who work in offices in London, East Kilbride and globally, almost half of whom work in developing countries (DFID, 2011c, 2013).

DFID in the document of Government (2013) is stated in the implementation of the mission related to the Millennium Development Goals and DFID's Key Objectives. DFID's methods are framed by the Millennium Declaration adopted by the UN in 2000 and the associated Millennium Development Goals (MDGs). These areas focus international action on a range of areas including hunger, health, education, gender equality, and the environment, and require progress on related issues such as the reduction of conflict and the creation of wealth. (Government, 2013).

DFID (2011c) mentioned the important of building disaster resilience in working with nations and people to maintain or convert living standards in the face of shocks and

stresses. The stronger a nation, the less lasting damage disasters will cause, and the quicker it can recover. Building resilience is central to achieving the Millennium Development Goals (DFID, 2011c). Building resilience is a concern of DFID for Indonesia. Through the performance of SCDRR the pilot project location was a positive lesson learnt by government of Indonesia.

In 2006, DFID was the largest funding support implementation of DRR activities in Indonesia. As stated in the section 2.8 this was around £4.5 million commitment over four years. However, the integrity of country will affect the performance in increasing the multilateral or bilateral cooperation of spending for humanitarian aid it. Because of this the research focuses on the evaluation of the impact of foreign aid from British Government as this will affect to majority of the funding focus on performance of UK Aid via DFID in funded DRR activities in Indonesia.

Based on records from DFID (2006) DFID has a good track record of providing prompt and appropriate humanitarian assistance in developing countries. DFID has also supported the activities of a number of international organisations tackling disaster risk reduction through core funding and institutional partnership agreements, including UN agencies and the International Federation of the Red Cross/Red Crescent. However, as recognised in a speech by the Secretary of State in 2004, both the international community and DFID should do more to invest in disaster risk reduction and link it with development programming (DFID, 2006). Disaster Risk Reduction in the Secretary of State's Humanitarian Reform Agenda (2004) Committed to: *(i) increase the funding provided by DFID to international efforts to reduce disaster risk; and (ii) allocate 10% of the funding provided by DFID in response to each natural disaster to prepare for and mitigate the impact of future disasters, where this can be done effectively* (DFID, 2006).

According to SC-DRR project, funding by UK Aid through DFID monitored and evaluated directly by UNDP Indonesia regularly in the pilot project locations.

However, Spencer and Wood (2005) noted DFID also uses financial instruments of various kinds. Grants can be appropriated for experiments or pilot activities, the initial development of a new approach or a new institution (SPENCER & WOOD, 2005). Based on the result of monitoring and evaluation, it can be the bases for increasing, reducing, and or switching the budget allocation.

Optimization of budget allocation provides the right track to success for many pilot projects. The following section will explore the connection between foreign aid and DRR.

### 2.9.1. Profile and Existence UK Aid in Indonesia

Since the implementation of SCDRR project in 2007, DFID performs without the UK Aid and is more flexible in its cooperation with the government of Indonesia in the delivery of grant support for DRR activities. Since 2012, DFID have used UK aid logo widely in the countries where UK Aid work, such as health clinics, school books and emergency food supplies, to publicly acknowledge development programmes funded by the UK taxpayer (section 2.9). DFID in Indonesia is part of United Kingdom Climate Change Unit (UKCCU) in the UK embassy.

Around 2010 DFID provided an effective response to all quick onset humanitarian crises. In 2009-10, based on DFID report in 2010, DFID responded to major humanitarian crises in Padang, Indonesia and Haiti and also to smaller disasters in the Philippines and the South Pacific. DFID also provided support to the humanitarian situation in Sri Lanka. Approximately 10% further funding for Disaster Risk Reduction was provided after humanitarian crises to which DFID has provided over £500,000. At baseline (2007), 0% was allocated. In 2009-10, £300,000 of a total of £3 million for the crisis in Padang, Indonesia and £2 million of a total £20 million to Haiti were committed to Disaster Risk Reduction. (DFID, 2010a).

The existence of DFID was proof of support for disaster risk reduction in Indonesia. The actual support can be found from in Table 2.1 and Table 2.2 below.

**Table 2.1 Net Bilateral ODA, Humanitarian Assistance by recipient country in the Asia and Middle East (DFID, 2012)**

		£ thousand				
Asia and Middle East		2007	2008	2009	2010	2011
Indonesia	UK Net Bilateral ODA	35.719	55.651	44.020	17.385	15,838
	Of which Humanitarian Assistance	8.585	14.315	16.338	2.551	-
	Percentage of Total Net Bilateral ODA	1.28	1.37	0.90	0.33	0.32

**Table 2.2 Imputed UK Share of Multilateral Net ODA by Country (DFID, 2012)**

Imputed UK Share of Multilateral Net ODA by Country	2006	2007	2008	2009	2010
Indonesia	42.974	21.778	26.011	23.989	17.359



Table 2.1 and Table 2.2 shows the total UK net ODA in 2011 was £15.83m. Humanitarian assistance by recipient country (Indonesia) in the Asia and Middle East. The table also shows the support in thousand-pound sterling during period 2006 until 2010. The period is in line with the implementation of SCDRR project.

### 2.9.2. UK Aid Support Mainstreaming DRR into Government

UK Aid through DFID supported mainstream DRR before the existence of UK Aid in Indonesia. The commitment of the British government can be seen through the DFID in the UK Aid flag mission. Specifically according to DFID (2006) committed to mainstream DRR as stated with commitment: *Integrating DRR into development as regular program; Promoting DRR as part of sustainable development efforts; Strengthening the international system's capacity in DRR; Facilitating funding to disaster risk reduction; Contributing to international efforts to adapt to climate change impacts; Contributing to reducing the impacts by ensuring that community level knowledge and experience effectively; and Moving away from relief for predictable chronic hunger through national governments; Support the strengthening of EWS and more systematic approach to disaster management in the future* (DFID, 2006). The DFID (2008) reported the total of humanitarian assistance the number support of overall as stated at the Table 2.3. In 2006-2007 around £18.64m. DRR in 08/09 was around £10.53m. (DFID, 2008).

**Table 2.3 Total DFID and GPEX bilateral aid by recipient country (Asia)**

£ thousand					
		<b>Total DFID Bilateral Programme</b>	<b>Of Which Humanitaria n Assistance</b>	<b>Total Bilateral Gross Public Expenditure</b>	<b>Percentag e of Total Bilateral</b>
<b>Indonesia</b>	2002/2003	19.868	1.500	42.613	1.73
	2003/2004	17.449	-	17.449	0.68
	2004/2005	33.979	11.123	34.526	1.11
	2005/2006	58.077	20.791	58.553	1.33
	<b>2006/2007</b>	60.634	<b>18.640</b>	62.290	1.27

**Table 2.4 Allocation of DFID for Indonesia (DFID, 2008)**

<b>Indonesia</b>	<b>2003-04 Outturn</b>	<b>2004-05 Outturn</b>	<b>2005-06 Outturn</b>	<b>2006-07 Outturn</b>	<b>2007-08 Outturn</b>	<b>2008-09 Outturn</b>	<b>2009-10 Outturn</b>	<b>2009-10 Plans</b>
UN Peacebuilding	-	-	-	6.421	20.530	20.704	7.940	20.000
<b>Disaster Risk Reduction</b>	-	-	-	<b>7.580</b>	<b>10.530</b>	<b>11.620</b>	<b>10.444</b>	<b>9.400</b>
Central Emergency Response Fund	-	-	40.000	43.770	36.083	-	59.028	40.000

Table 2.4 shows the allocation of DFID for Indonesia by the year with specific allocations for UN peace building mission; Disaster Risk Reduction Mission and Central Emergency Response Fund mission.

In Indonesia, DFID (2008) stated that around £38 million was contributed from DFID to the Multi-Donor Fund for tsunami-affected Aceh Province and Nias, North Sumatera Province. This enabled the rebuilding of social and economic infrastructure such as the building or repair of over 3,000 houses, with a further 8,000 under construction or repair; 2,200 km of roads; 1,100 bridges; and the transportation of 98,000 metric tonnes of reconstruction materials (DFID, 2008).

### **2.9.3. Promoting Good Governance and Public Service**

In relation to the promotion of good governance in public service programs, Indonesia was supported by DFID in working on strengthening forest governance, including support to NGOs on investment in timber legality systems, strengthening civil society watchdogs and policy analysis to support legal and judicial reforms. Reduce poverty in Asia 3.9 the Public Service Agreement (PSA) sets out milestones by which DFID can measure how well it is doing to reduce poverty and help achieve the MDGs. When the PSA was agreed in 2005, a target for Asia was formulated measuring progress in nine focus PSA countries across the region. They were selected to give a good representation and coverage of our work. These are Afghanistan, Bangladesh, Cambodia, China, India, Indonesia, Nepal, Pakistan and Vietnam (DFID, 2008).

### **2.9.4. The Humanitarian Emergency Response Review**

The Humanitarian Emergency Response Review (HERR) was chaired by Lord Paddy Ashdown and presented its independent DFID report in March 2011. The HERR made recommendations as to how the UK could better deliver a response fit to deal with the challenges of the 21st century, based around seven key themes (DFID, 2011c):

*Anticipation; Resilience; Leadership; Innovation; Accountability; Partnership; and Humanitarian space.* The next section will elaborate on the safer community for disaster risk reduction (SCDRR).

## **2.10. Safer Community for Disaster Risk Reduction (SC-DRR)**

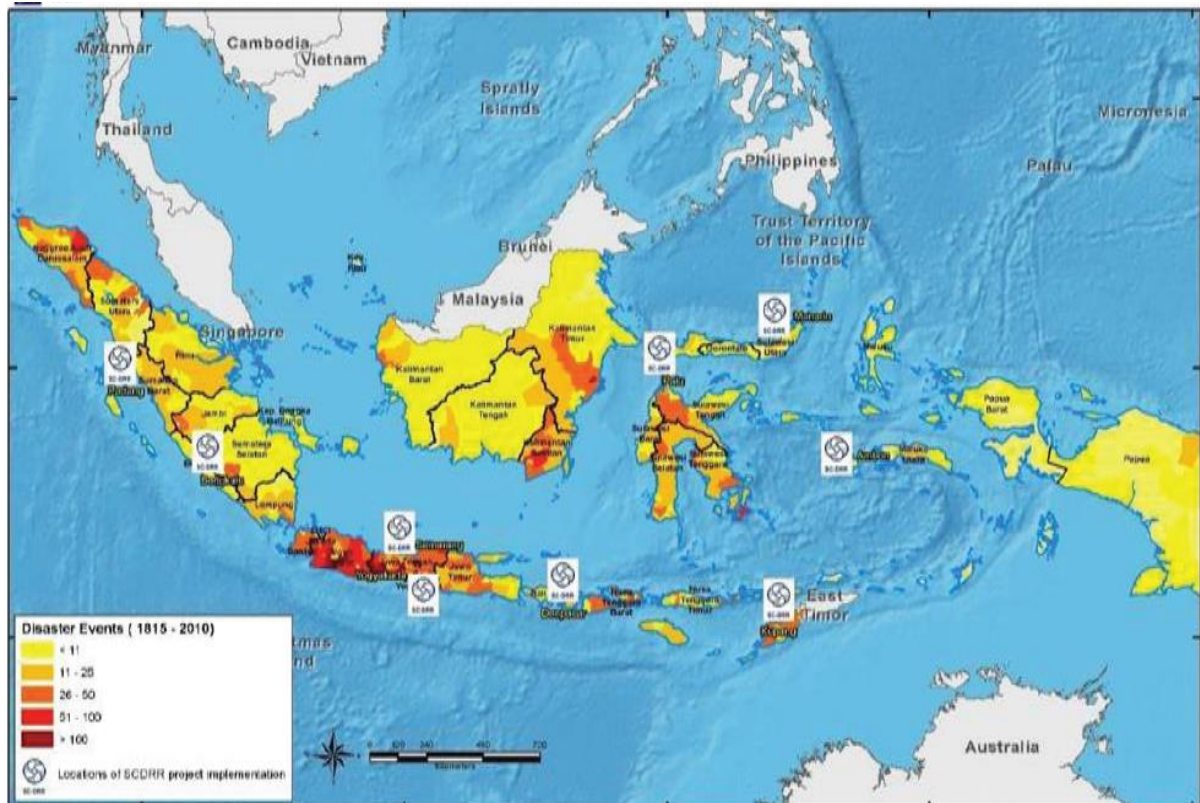
Since 2004, the GOI and the Indonesian public have recognized the need to address disasters differently by placing more emphasis on disaster risk reduction. This has resulted in (i) the Indonesian Government's adoption of the *UN Hyogo Framework for Action on DRR (HFA-DRR)* (see Figure 2.9)—a 10-year plan designed to make the world safer from natural hazards and adopted by the 168 members of the United Nations, (ii) the enactment of a new law on Disaster Management (Law No 24/2007) which highlights the importance of DRR, (iii) the creation of a new Ministerial level agency responsible for disaster management, and (iv) DRR becoming a national development priority. These changes represent what some have called a paradigm shift in disaster management—i.e. from disaster 'response' to disaster 'risk reduction'.

### **2.10.1. The Role of SC-DRR project and coverage project Area**

The project "Safer Communities through Disaster Risk Reduction in Development" (SC-DRR) was designed to help Indonesia implement this paradigm shift by mainstreaming DRR principles into the development process. The ultimate aim of SC-DRR was to ensure that a culture of safety becomes the norm in Indonesia, both within government and within communities vulnerable to disasters. The program was designed to provide support to the following four areas (Project, 2009):

- 1) the establishment of a disaster risk reduction policy, legal and regulatory framework;*
- 2) the establishment and strengthening of institutional systems that support decentralized disaster risk reduction integrated with local level development;*
- 3) the strengthening of education and awareness programs established and strengthened to make development/disaster linkages understood; and*
- 4) the demonstration of disaster risks reduction initiatives that make communities safer.*

In order to develop linkages between local practices and the emerging policy and regulatory framework for DRR, SCDRR has piloted activities (Figure 2.6) in eight provinces: West Sumatera, Bengkulu, Central Java, DI Yogyakarta, Bali, East Nusa Tenggara, North Sulawesi, and Maluku. The project has also piloted activities in partnership with the City of Palu in Sulawesi.



**Figure 2.6 Location of SCDRR Project Implementation and number events in Indonesia (1815-2010) (Hillman & Sagala, 2011).**

SCDRR activities are aligned with the UNDP Country Program and the United Nations Development Partnership Framework (UNPDF), which was developed in consultation with the Government of Indonesia. The program relates to UNPDF Outcome No. 3, "Protecting the vulnerable and reducing vulnerabilities. SCDRR was also designed to contribute to one of the targets in the UNDP Indonesia Country Program: *"Capacities of Government and communities for disaster preparedness and reduction have been developed"* (Country Program Action Plan 2005-2010)—an outcome which was further refined in the most recent Country Program Action Plan (2011-2015) as *"The GOI and communities throughout the country have minimized the risk of adverse impacts of disasters, through the application of DRR policies, regulations and practices "* (S. P. Bappenas, 2010; Hillman & Sagala, 2011).

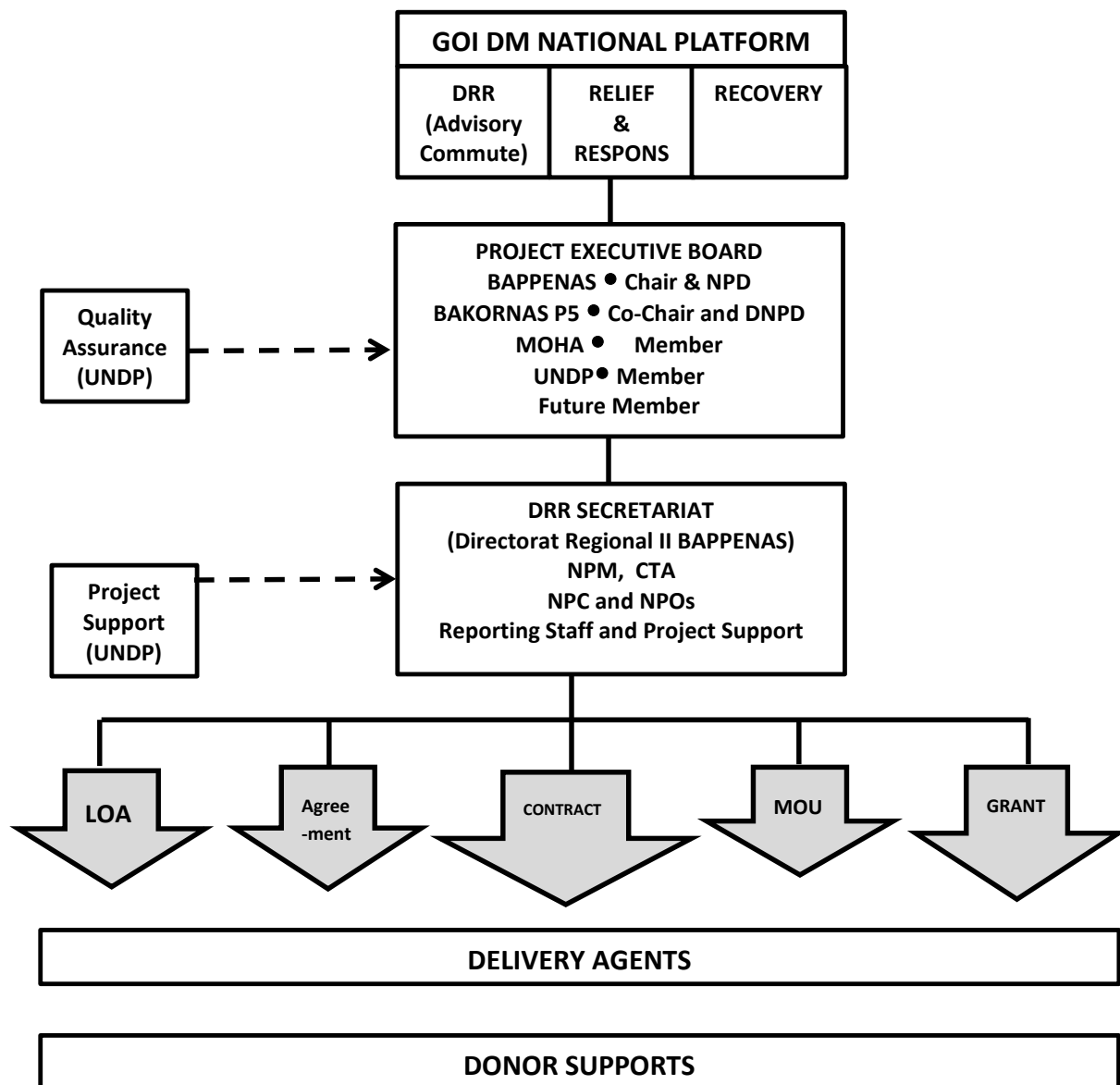
Within the education sector, Coppola (2011c) cited that concern about public education also called risk communication, preparedness education, social marketing, and disaster education is the backbone of any effective public preparedness effort (Coppola, 2011c).

According to risk communication experts Morgan et al.,(2002) cited in Coppola (2011c) argue that public education is "communication intended to supply laypeople with the information they need to make informed, independent judgments about risks to health,

safety, and the environment” (Coppola, 2011c). Creating messages that satisfy these high ideals requires extensive time, experience, and planning. Coppola also explore public education have three main goals: *(1) Awareness of the hazard risk; (2) Behavior change, related with Pre disaster risk reduction behavior; Pre disaster preparedness behavior; Post disaster response behavior; and Post disaster recovery behavior; and (3) Warning* (Coppola, 2011c). The next section will discuss the SCDRR project board committee.

#### **2.10.2. SC-DRR Project Board Committee**

The SC-DRR project is a Government of Indonesia initiative led by the National Development and Planning Agency (Bappenas) in collaboration with the Ministry of Home Affairs (MoHA) and the National Agency for Disaster Management (BNPB). Bappenas was selected as the implementing agency at the national level because the BNPB was newly established and not yet ready to take the lead in DRR work. Local government was led by MoHA. UNDP provided support for project implementation. This project has been funded by various international donors including DFID, AusAID, and others. The official project boards of the SCDRR project are Bapenas, MoHA, BNPB, and UNDP.



**Figure 2.7 SCDRR Program implementation framework (SCDRR, 2008)**

DFID is the dominant donor with an amount of grant support and the detail number summary of budget, commitment and expenditure of SCDRR project from development tracker in [www.gov.co.uk](http://www.gov.co.uk) as shown in the Table 2.5,

Table 2.6 and Table 2.7 below:

**Table 2.5 Summary of Budget SCDRR project in development tracker (www.gov.co.uk)**

(Current Approved Budget)	<b>£4,312,500</b>
Financial Year	Value
FY07/08	<b>£ 1,312,500</b>
FY08/09	<b>£ 1,250,000</b>
FY09/010	<b>£ 1,750,000</b>

**Table 2.6 Summary of Commitment SCDRR Project in development tracker**  
(www.gov.co.uk)

Activity Description	Activity ID	Date	Value
HUMANITASSISTANCE and P0061 for Disaster Community through Disaster Risk Reduction (SC-DRR)	GB-1-107160-101	01 May 2017	<b>£4,312,500</b>

**Table 2.7 Summary of Expenditure SCDRR Project in development tracker**  
(www.gov.co.uk)

Description	Receiver Org	Activity ID	Date	Value
Aggregated spend data-Financial Year 2009 Quarter 4		GB-1-107160-101	31 May 2010	<b>£ 687,500</b>
Aggregated spend data-Financial Year 2009 Quarter 3		GB-1-107160-101	31 Dec 2009	<b>£ 437,500</b>
Aggregated spend data-Financial Year 2009 Quarter 2		GB-1-107160-101	30 Sep 2009	<b>£ 437,500</b>
Aggregated spend data-Financial Year 2008 Quarter 4		GB-1-107160-101	31 Mar 2009	<b>£ 562,500</b>
Aggregated spend data-Financial Year 2008 Quarter 3		GB-1-107160-101	31 Dec 2008	<b>£ 437,500</b>
Aggregated spend data-Financial Year 2008 Quarter 2		GB-1-107160-101	30 Sep 2008	<b>£ 437,500</b>
Aggregated spend data-Financial Year 2007 Quarter 4		GB-1-107160-101	31 Mar 2008	<b>£ 437,500</b>
Aggregated spend data-Financial Year 2007 Quarter 2		GB-1-107160-101	30 Sep 2007	<b>£ 875,500</b>

The the Table 2.5,

Table **2.6** and Table 2.7 above show the expenditure including the amount of grant, description of activity; status of completion and financial year update. The next section will discuss SCDRR in support of government.

### **2.10.3. SC-DRR Support Governance and Local Government**

Generally, the initial idea in the design of the SCDRR project was to support the central government at the national level and to support the local government including the provinces, districts and local institutions. Khan (2008) in relation to disaster preparedness,

connected education and awareness as fundamentals for preparedness. The disaster readiness education is provided through formal and non-formal means by both government and NGO programs (Khan, 2008).

SCDRR was designed as partner of government, through the development planning agency in local government. However, the project exists to support the establishment of disaster management institutions in local government at the pilot project location. Coppola (2011) states that disaster preparedness is taking actions in advance of a disaster to ensure adequate response to its impacts, and the relief and recovery removing the need for any final actions (Coppola, 2011c). Coppola also added that preparedness must arise at both the government and individual levels in order to reduce risk and vulnerability. Through the efforts of governments, NGOs, and the media, preparedness levels throughout the world are steadily increasing, despite the many difficulties that exist (Coppola, 2011c).

The existence of SCDRR projects since 2006 until 2012 created the guidelines (for primary until high school) and regulatory framework for mainstreaming DRR in locations untouched by the SCDRR project. Implementation of SCDRR with the support and performance by local government improves when the community is involved in the program. Fargher et al. (2012) argue that an effective DRR program and its activities is delivered by local government-community partnerships. (Fargher et al., 2012). Fargher et al., (2012) also added that the training and outreach program supports BNPB and its local government and civil society stakeholders to successfully engage with communities. Early activities focus on linking communities and local governments for DRR as well as building capacity. They include:

- 1. an assessment of disaster management capacity development needs in 8 provinces;*
- 2. the Rumah Aman Gempa ("Build Back Better") campaign to raise awareness and encourage people affected by the Padang earthquake to build back safe houses to reduce vulnerability to future earthquakes;*
- 3. evaluation of the Rumah Aman Gempa campaign and identifying the importance of cultural diversity in selecting communication methods and theories of behaviour change for DRR in Indonesia;*
- 4. supporting dissemination of early science results to disaster managers and civil society – for example the earthquake hazard information for West Sumatra;*
- 5. scoping disaster management training and learning centres in selected provinces;*
- 6. designing a Disaster Management Training Centre for Padang;*
- 7. development of curricula and modules to train local government disaster managers; and*
- 8. continuation of the "Building Resilience" Program with Oxfam in eastern Indonesia which supports emergency operations centres and increased disaster response and*



*preparedness in eastern Indonesia by linking local government with local Indonesian Red Cross.*

Most of the eight existing programs above are already sustainable, especially disaster training centres and other local program with the support of local government budget allocation. Together with the performance of local government institutions, support from community with collaboration with National and local NGO is prevalent in some project locations. These will be discussed in the next section.

#### **2.10.4. SC-DRR Support towards Community Based Organisations and NGOs**

Ophiyandri noted according to Abarquez and Murshed (2004), a community in the context of disaster management is (Ophiyandri, Amaratunga, Pathirage, & Keraminiyage, 2013):

*[...] a group that may share one or more things in common, such as living in the same environment, having similar disaster risk exposure, or having been affected by a disaster. A similar definition, though more closely related to the built environment, is proposed by Ginige and Amaratunga (2011). They define community as:*

*[...] individuals and groups sharing a natural and built environment that is vulnerable to hazards. In other words, community is the general public; the users and occupants of the built environment and the beneficiaries of post-disaster reconstruction.*

The foundation and ultimate result of the SCDRR programme is to build a culture of safety in the areas where it works. When the SCDRR programme was designed, key to its success was the need to link the legal framework and DRR policy at the national level into the development planning processes at the national, provincial and district levels of government. With the Disaster Management Law 24/2007 came the rights and responsibilities for the community to be active participants; as it is only through knowledge, education, and information that communities can learn how to protect themselves, and, in particular, learn about how to reduce the risk of disasters.

According to Arbon (2011) noted the character of resilience community is capacity to absorb stress or destructive forces through resistance or adaptation; capacity to manage, or maintain certain basic functions and structures, during disastrous events; capacity to recover or 'bounce back' after an event (Arbon, 2011).

In line with the Arbon (2011), Coppola (2011b) analysed Impact of Risk Mitigation Options on Community Risk Reduction as the most serious issue in evaluating a risk mitigation option is defining its impact on decreasing the identified risk or vulnerability in the community. Numerous factors must be measured when assessing the risk reduction to be accomplished through individual mitigation options or groups of mitigation options. These

factors are: Reduced number of deaths and injuries; Reduced property damage; and Reduced economic loss (Coppola, 2011b).

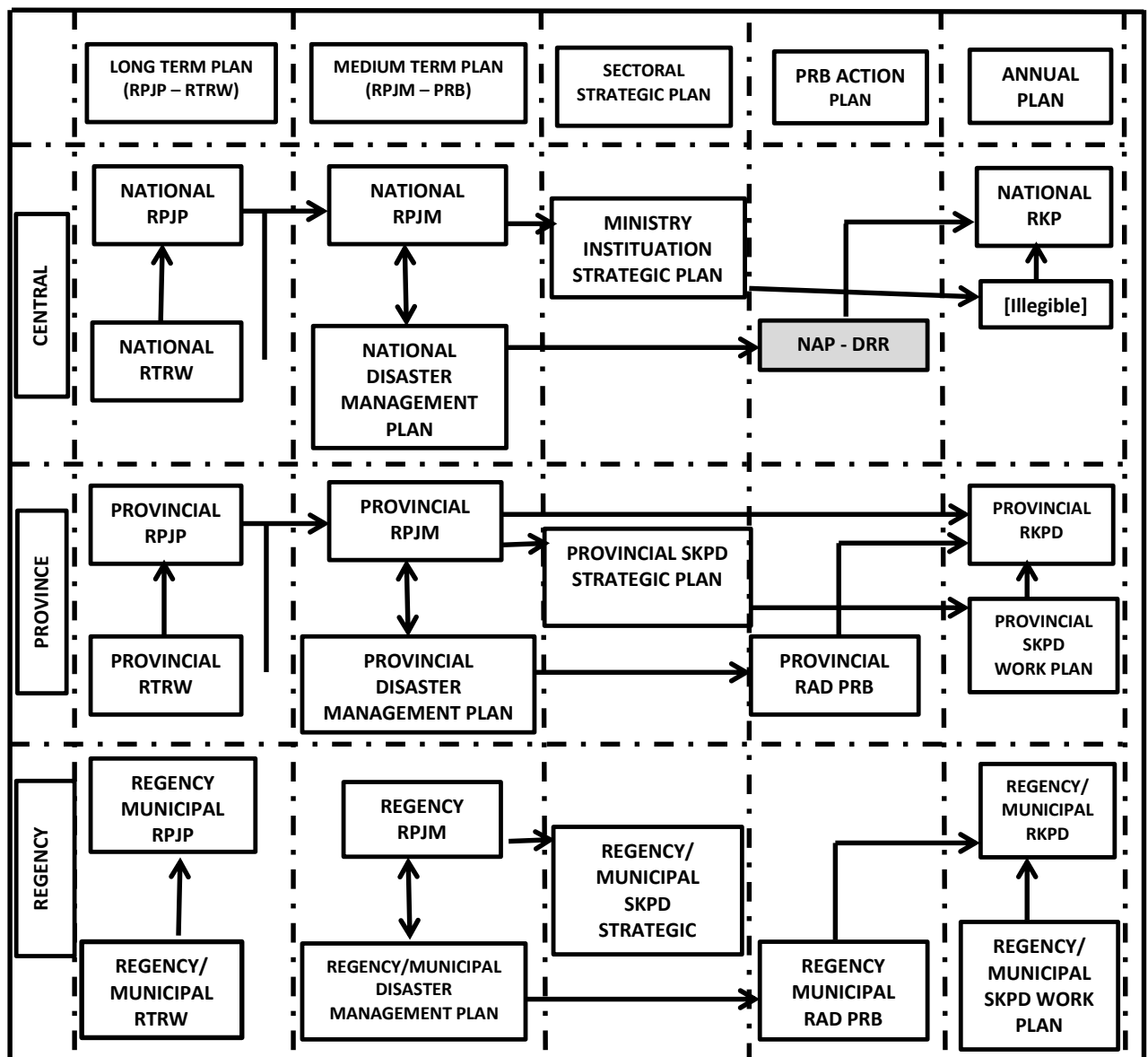
#### **2.10.5. The Role of SCDRR in Support Government Regulatory Framework**

SC-DRR was designed to support the Government of Indonesia develop new approaches and capabilities for disaster management by focusing on risk reduction and not just response. The general objective of the project was to promote a culture of safety in Indonesia by making disaster risk reduction “a normal part of the development process” (Hillman & Sagala, 2011). SC-DRR was the first systematic program to support the paradigm shift in disaster management agenda in Indonesia (Hillman & Sagala, 2011).

Since the SCDRR project was implemented in 2007, the government have two main national working plans for guidelines to every project activity and this has influence on the performance of the project. The two documents of work plan are: (1) the National Long Term Development Plan (RPJPN 2005-2025) and (2) The National Medium Term Development Plan (RPJMN, 2010 - 2014).

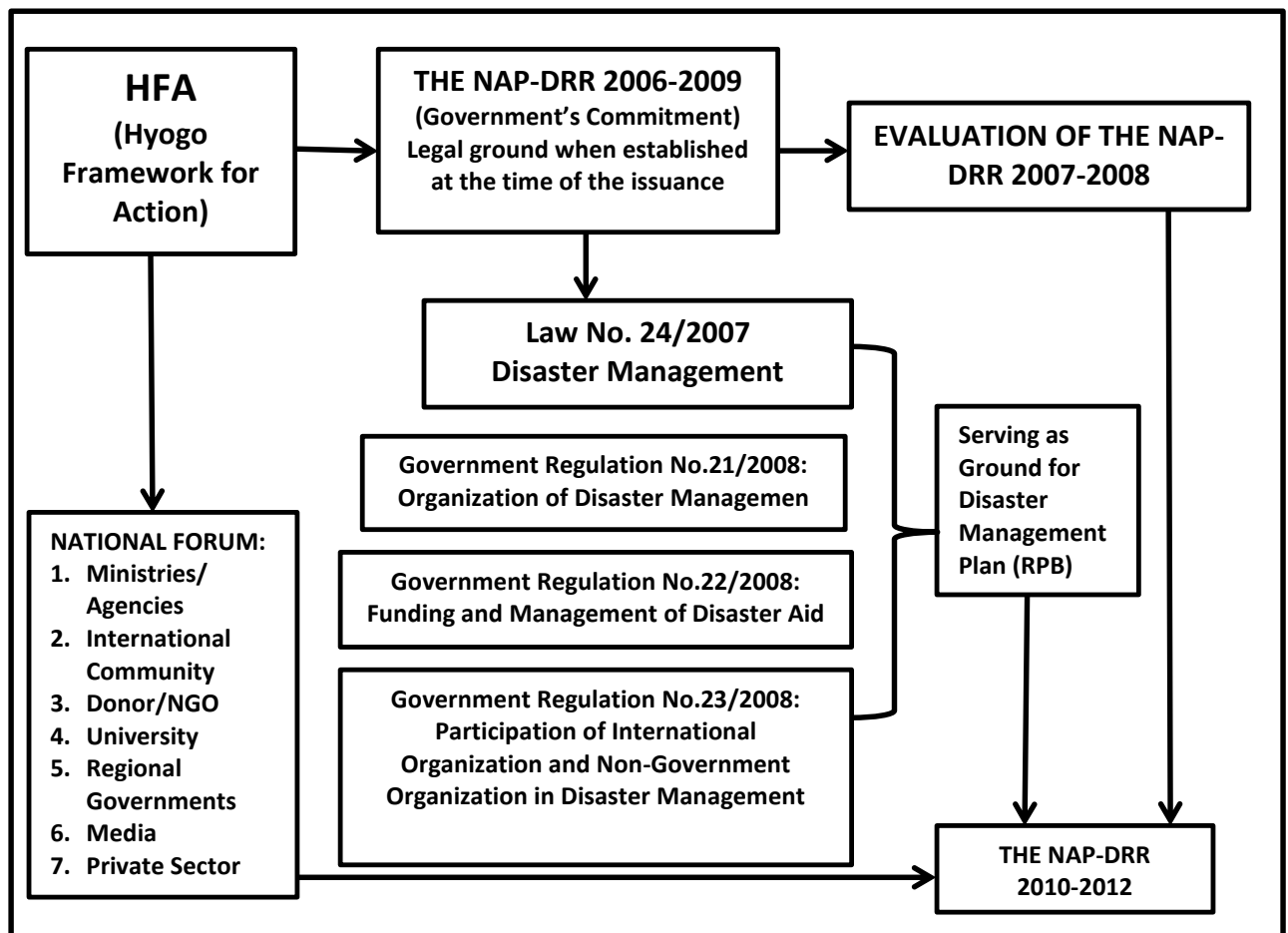
In the Annual Work plan for 2007, which was passed into law through Presidential Regulation No. 19/2006, Disaster Mitigation and Management constitute is one of the nine development priorities. Two key targets for Disaster Mitigation and Management for 2007 include: (1) continued rehabilitation and reconstruction of Aceh and Nias Islands (North Sumatra), completion of post-disaster rehabilitation and reconstruction in Alor District (East Nusa Tenggara) and Nabire (Papua); and (2) completion of emergency response, rehabilitation and reconstruction in other regions affected by disasters in 2005 and 2006. Another important target is the strengthening of the preparedness of institutions and the community in preventing and mitigating the risks of future natural disasters. Disaster Risk Reduction programmes are presently implemented by relevant departments/agencies using a sectoral approach and incorporated into their regular programmes. The action plan will try to facilitate the identification of all these disaster risk reduction-related activities of each department/agency (Bappenas & BNPB, 2006).

In relation to RPJPN, RPJMN, and RTRWN documents, the position of RPB and NAP-DRR can be described in a framework as illustrated in Figure 2.8. In this framework, the RPB and NAP-DRR are positioned as a form of the operational implementation of the RPJMN.



**Figure 2.8 Disaster Management Planning Coordination Framework (Bappenas and BNPB, 2010)**

Figure 2.8 above shows the importance of NAP-DRR in the disaster management planning coordination framework. Government Regulations Number 21, 22, and 23/2008 constituting a follow up of Law Number 24/2007 serve as a legal platform for NAP-DRR formulation. At the same time, Government Regulation Number 21/2008 clearly mandates that the National Agency for Disaster Management (BNPB) has the obligation to ensure that a national forum for DRR (national platform) formulates a cross-sectoral and cross-regional NAP-DRR. The substance of NAP-DRR will refer to two points: first, programs in Law Number 24/2007; and second, priority groups of Hyogo Framework for Action (HFA) as shows in the Figure 2.9 (Bappenas, 2010).



**Figure 2.9 The Position of NAP-DRR against Law No. 24/2007 and the National Platform (Bappenas and BNPB, 2010)**

Based on Article 4 of Law Number 25 2004 of National Development Planning, the National Long Term Development Plan (RPJPN 2005-2025) has been drawn up as a continuation and renewal of earlier stages of development planning in Indonesia. The RPJPN, a development plan which spans twenty years, aims to achieve the development goals as mandated in the Preamble to the Constitution of 1945. This long term plan involves conducting institutional restructuring while simultaneously keeping the nation in pace with other nations (Bappenas, 2010).

The National Medium Term Development Plan (RPJMN, 2010 - 2014) is the second phase of implementation of Indonesia's National Long Term Development Plan (RPJPN 2005 - 2025) described in Law 17/2007. The RPJMN 2010 - 2014 forms the basis for ministries and government agencies when formulating their respective Strategic Plans (Renstra - KL). Regional governments must also take this medium term plan into account when formulating or adjusting their respective regional development plans (Bappenas, 2010).

For the implementation of the National Long Term Development Plan, the RPJMN is to be further expanded into the Annual Government Work Plan (RKP) that will then become the basis for formulating the Draft Government Budget (RAPBN). RAPBN is developed every year with all line ministry and local government.

### **2.11. Summary and link**

The overview of disaster effects and the disaster management cycle brings perspective related to the influence and response to people preparedness. It provides the various models of a simple disaster management cycle. Every country has a different model when addressing a disaster event. Disaster risk reduction is the solution in preparedness before a disaster event. The role of government is strongly needed in particular for managing the planning and supervising the ongoing progress. Foreign aid and humanitarian aid becomes the extra support especially for developing countries in disaster prone areas.

Sustainability of the disaster risk reduction program is the responsibility of the government at national level and regional level. Literature reveals that foreign aid support can help the government in resolving the problem during a disaster. UK aid through DFID became the DRR program solution through SCDRR by mainstreaming DRR in Indonesia. In order to guarantee the humanitarian aid mission to progress smoothly the government needed the regulatory framework to ensure the use of DRR was captured in the NAP DRR position in the regulatory coordination framework and influence the medium and long term government work plan. SCDRR, as the largest DRR project, became the positive influence for other provinces outside the pilot project.

This chapter highlights the need for government at regional and national level to replicate the program locally whilst optimising the local budget. Having conducted the literature review for the study the next chapter explains the research methodology and the process adopted to carry out this research.

## **CHAPTER 3 - Research Methodology**

### **3.1. Introduction**

The literature review detailed the related area of research presented in the previous chapter. The aim of this chapter is to present the research methodological design for the study from the start of the research to the thesis write-up. The research methodology has varied allowing the research problems to be investigated, as identification of the most appropriate research methodology is essential to achieve the aims and objectives of the research and to establish the standing of the research findings. Therefore, the selection of an appropriate research methodology is one of the fundamental aspects of any doctoral research in order to ensure the reliability of the research findings. Accordingly, this chapter is structured as below:

- Firstly, the process adopted to establish the research problem and the aim and objectives of the study are explained.
- Secondly, the process involving the selection of the research philosophy, research approaches, research strategies, choices of methods, time horizons and techniques and procedures are discussed while adopting Saunders et al., (2007) research 'onion' as a guideline.
- Thirdly, the validity and reliability of the research design is presented.
- Finally, the research methodological design is summarised.

### **3.2. Establishment of the Research Problem**

Implementing a research study, according to Collis and Hussey (2009), should be done in a planned and orderly way with investigation techniques and the deepening of the investigation in order to enhance the value of knowledge (Collis & Hussey, 2009). This is supported by the opinion of Easterby-Smith et al. (2008) with an emphasis on the importance of research directions that can be received on an ongoing basis and in need of serious attention (M. Easterby-Smith, Thorpe, Jackson, & Lowe, 2008). This study was therefore directed by the researcher to examine the impact of the research problem that was formed based on a review of related literature and expert opinion. The following steps are conducted as listed below:

#### **3.2.1. Researcher's Area of Interest**

The importance of choosing an area of study can determine the strength of the research results, as agreed by Saunders (2009) and Remenyi et al (1998). Determining an area of research is important to have in order to achieve an investigation and research interests (Remenyi, Williams, Money, & Swartz, 1998; Saunders et al., 2009). In line with this, Rowley (2002) added that the importance of determining a subject in an effort to promote

the goals of his research interests is usually limited by the difficulty of the resources, the time required, and the available data for a study area (Rowley, 2002).

In the end, it became part of a research interest and this interest is based on the interest of the researcher. Thus, the area to which the interests of the research is focused is to illustrate the impact of foreign aid to a developing country. The presence of foreign aid and humanitarian assistance was also a positive influence in making an independent country, mainly from programs that support the government's work program. This area is of personal interest to the researcher. A thorough literature review has been carried out in favour of the setting of the problem in the implementation of this study.

### **3.2.2. Reviewing Relevant Literature**

Support from a review of the literature is required for support in mapping out problems in the study. Thus, Collis and Hussey (2009) support the importance of a literature review in a study, especially to identify a framework for knowledge in a particular study (Collis & Hussey, 2009). Meanwhile, according to Saunders et.al. (2009), there is a need for a review of the literature to develop an understanding and insight to the problem in a study in a particular field that is being conducted (Saunders et al., 2009). The study incorporates results of a study of literature at the stage of identifying the differences that may arise. According to the scholars Eisenhardt and Graebner (2007) identifying and assessing the success of a difference in a study is the result of support from a study of great literature (Eisenhardt and Graebner, 2007).

Saunders et.al (2009) also add the important of relevant literature as the preliminary study as a part of the procedure by which a research idea is refined in order to turn it into a research project (Saunders et al., 2009). Relevant literature that was used by the researcher became part of the research strength and interest. It was stated in section 3.2.1 about the related interests of the research about illustrating the impact of foreign aid to a developing country. The presence of foreign aid and humanitarian assistance was also a positive influence in making an independent country, mainly from programs that support the government's work program. Related to the preliminary assumptions, a literature review has been conducted by studying books, journal articles, conference proceedings, reports and websites published by various institutions. It supports the understanding about illustrating the impact of foreign aid to a developing country. The preliminary analysis of the literature review assisted the researcher to direct the area of research to the disaster risk reduction context which is directly connected with the researcher's strengths and attention.

Therefore, the researcher was able to classify preliminary gaps in the selected focus area. Through the initial review of literature, it was acknowledged that local government (district and provincial government) is known as regional, and central government (line ministry

and agency) is known as national. The preliminary literature review identified several impacts of foreign aid in the support of the disaster risk reduction in a developing country.

Bell (2005) cited in Saunders et.al (2009) mentioned the importance of using key words. The identification of key words or 'search' terms is the most important part of planning the search for relevant literature (Saunders et al., 2009).

Having recognized the key writing ideas and gaps in the current group of information through the underlying survey of writing, the next step was to plan a particular audit of writing on the accompanying ideas.

- Foreign aid and disaster risk reduction
- DFID and SCDRR in mainstreaming DRR into the government program
- Impact of foreign aid for a developing country

Having completed a basic survey of writing, the researcher could build up the exploration issue, the point and the goals of the study and could build up the underlying applied structure. Expert opinion was explored and is described in the next section to support the research method.

### **3.2.3. Expert Opinion**

Expert opinion is needed in the establishment of the research problem, aim, objective and initial conceptual framework for the study. Several resources of expert opinion coming from several institutions, from government and non-government, was taken to support the identified impact through the literature review. The scholar Saunders (2009) stated that it is essential for researchers to comprehend the explanations behind the choices made, or to comprehend the purposes behind their states of attitudes and opinions, researchers are likely to need to conduct a qualitative interview (Saunders et al., 2009). Qualitative unstructured interviews were carried out with resource persons who are involved and know the SCDRR project implementation in Indonesia and, based on their opinions, the research problem was refined and the aim, objectives and conceptual framework were further refined to reflect the refined research problem. Section 1.1 and Section 1.2 highlight the research problem which has been established and refined through this process.

### **3.2.4. Research Problem**

The research problem highlighted and indicated the importance of finding the impact of UK Aid through DFID, particularly in support of the DRR initiative programs in the national annual work plan, and the challenges in post-disaster reconstruction. The effectiveness of the impact is assessed in this study, through a qualitative method. OECD (2013) called effectiveness as a measure of the level to which an assistance action attains its objectives (OECD, 2013). Assistance actions attain these objectives to varying degrees, depending on whether it is on the national level or regional level. Having identified the several issues



for the research problem of the impact of UK aid, there are issues related to the influence of aid for government institutions, various lessons learnt post aid implementation, the effect of humanitarian assistance, the Indonesia Data and Disaster Information (DIBI) in support of the government in the disaster event, the performance of DFID and UK Aid, optimizing the DFID grant, and influence of the SCDRR Project.

Therefore, the research aims, objectives and research questions of this study will be explored in the next section.

### **3.2.5. Research Aim, Objectives and Research Questions**

As introduced in Chapter 1, the aim of this research is to explore and investigate the impact of UK Aid through the DFID project in support of disaster risk reduction programs implemented by the Indonesian Government. In order to achieve this aim, four (4) research objectives have been formulated and were presented in Section 1.3.

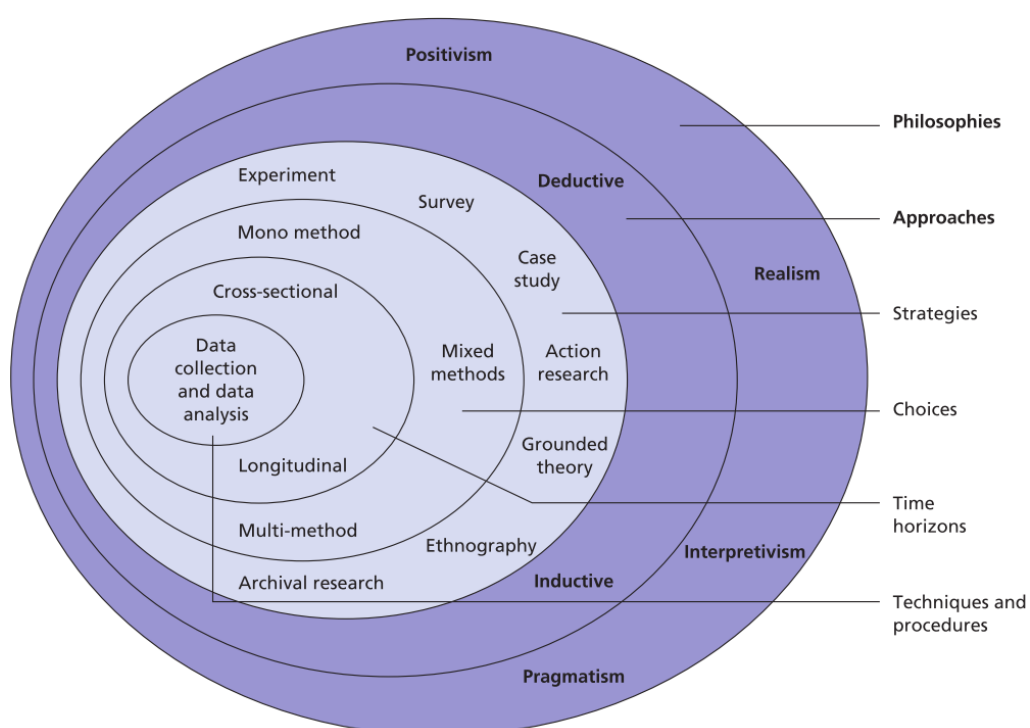
The research questions are the key issues that will be addressed through the research process. Hence, in achieving a greater focus, the researcher has established a number of research questions. Key questions are listed below:

1. What is the role of UK Aid through DFID in the DRR program for strengthening government institutions in Indonesia?
2. What are the challenges of SCDRR through DRR project in supporting the national government work plan on mainstreaming DRR?
3. How can the DFID program gave influence to improve knowledge and good practice based on the lessons learnt post SCDRR for sustainability of DRR into a regular planning program?
4. What is the effect of the optimization of the utilization of humanitarian aid assistance funds in DRR activities?
5. How can stakeholders understand the importance of the existence of a system for disaster database in support of the DRR program in Indonesia?
6. How can the optimizing of the implementation of the DFID grant be identified that affected the government institution in the National level (including the agency and line ministry) and Regional level (including the government provinces and district government) in Indonesia?
7. What is the role of the government through the long term of national government work plan in the integration of DRR activities?
8. What is the influence of the SCDRR project in the implementation of the DRR program in Indonesia?

Having identified the process of establishing the research problem, aim and objectives the next section explains how the research methodology framework was designed to achieve the set aim and objectives.

### 3.3. Methodological Design

Before starting the research, the design methodology is needed, Rowley (2002) defined the research design as the system of collecting data and designing the analysis that can be used as a basis to generalize the question in the field of research (Rowley, 2002). The researcher chose the research methodology for this study following the "onion model" by Saunders et.al (2009). It can be found in the Figure 3.1 below and shows how the research is taken slice-by-slice like an onion.



**Figure 3.1 The research 'onion'** (Saunders et al., 2009).

In the research onion model above it shows the details in layers of the steps in the research. Each step of every layer indicates an important part that the researcher needs to consider in particular reference to the related methodology chosen. Saunders (2009) introduces the six main layers as philosophies, approaches, strategies, choices, time horizons and techniques and procedures (Saunders et al., 2009).

In this study, the researcher will explore the layers from the Saunders "onion" and present details in the next sections.

### 3.4. Research Philosophy

The first layer of the research onion is research philosophy, the important layer about the assumption as the way the researcher translates the pathway of the research strategy and

method. Saunders et al. (2009) introduced the idea that relates to the development of knowledge and the nature of that knowledge (Saunders et al., 2009). It was also noted that the adopted research philosophy contains important assumptions about the step in which the world is viewed (Saunders et al., 2009). Easterby-Smith et al., (2002) are of the same opinion as Saunders et al., (2009) in understanding that philosophical research is very important. Primarily it can help to clarify the research design, and to recognise which research design will work and which will not. Furthermore, it can also help researchers to identify and even create designs that they may not have yet experienced (M Easterby-Smith, Thorpe, & Lowe, 2002).

Additionally, research philosophy is classified by Saunders et.al (2009) into three categories: *ontology* (assumptions that we make about the nature of reality), *epistemology* (the acceptable knowledge in the field of study) and *axiology* (the nature of values) (Saunders et al., 2009). A brief description of the three categories is provided in the next sub-sections.

#### **3.4.1. Ontology**

The first aspect of research philosophy is ontology. M. Easterby-Smith et al. (2008) and Saunders et al. (2009) have a similar opinion for the ontology which concerns the nature of reality or being, and assumptions (M. Easterby-Smith et al., 2008; Saunders et al., 2009). Slightly different is that Colin and Hussey (2009) mention that the world is objective and external to the researcher, or it is that the world is subjective and only understood by examining the perceptions of human actors (Collis & Hussey, 2009). Additional to determining the nature of reality, aspect ontology is divided into two sub-categories as argued by Johnson and Duberly (2000) and Saunders et.al. (2009): the first, which is called 'realism'/'objectivism', is that social entities exist in an external reality to the social actors concerned with their existence (Johnson & Duberly, 2000; Saunders et al., 2009) and the second being : 'subjectivism'/'idealism', which holds that social phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence (Saunders et al., 2009).

Based on the ontological position, this research was designed to investigate the impact of UK Aid through DFID for support of the DRR program in Indonesia. In addressing this research, the researcher preferred to be subjective in elaborating and investigating the influence in the national level and regional level. The experience of the resource person in the various places of the SCDRR project implemented showed the nature of the influence that was felt by the resource persons in drawing their experience into the various feelings and results.

Epistimology is explained in the next section that will identify the focus of the research that was acceptable knowledge from this research experience.

### **3.4.2. Epistemology**

Saunders et al. (2009) define epistemology as the acceptable knowledge within a field of study (Saunders et al., 2009). In line with this research aim to explore and investigate the impact of British Government Aid in support of disaster risk reduction, it relates to support of the national government in the main program activities in the annual government working plan. The lessons learnt from the impact of this research was classed as interpretivism as the part of philosophy. Similarly, Collis and Hussey (2003) mention that epistemology is concerned with the study of knowledge and what we accept as being valid knowledge, involving the examination of the relationship between the researcher and that which is being researched (Collis & Hussey, 2009). Saunders et al. also noted that within epistemology the reality is represented by objects that are considered to be 'real', such as computers, trucks and machines. These objects have a separate existence to that of the researcher and for that reason, this researcher would argue that the data collected is less vulnerable to bias and therefore more 'objective' (Saunders et al., 2009).

Many scholars' definitions of the spectrum of epistemology differ, but their points are the same. For example, Saunders et al. elicit that research using a positivism philosophy is likely to represent a natural scientific approach where only observable phenomena can lead to credible data, the defined spectrum of epistemology as positivism and interpretivism, while Easterby-Smith uses the word positivism and social constructivism, and Collis and Hussey et al. positivists and phenomenologist.

It ought to be explained in terms of elaborating the impact of foreign aid in support of the disaster risk reduction program in Indonesia that within interpretivism as stated by Saunders et al. (2009) there is a difference between the role of humans as social actors and this approach encourages researchers to understand these differences, and to understand the social world of the national level and regional level from this point of view is a great challenge for the researcher (Saunders et al., 2009).

### **3.4.3. Axiology**

The final part of the research philosophy is axiology. Saunders et al. (2009) noted that axiology is a branch of philosophy that studies judgements about value. Although this may include values we possess in the fields of aesthetics and ethics, it is the process of social enquiry with which we are concerned here. The role that your own values play in all stages of the research process is important if you wish the research results to be credible (Saunders et al., 2009). Collis and Hussey argue that the assumptions about the value in the axiology are those that the researcher attaches to the knowledge (Collis & Hussey, 2009). It is expressed as value free or value-laden. Value-laden takes an extremely different view as research choice is determined by human beliefs and experience (M Easterby-Smith et al., 2002), and value free means that the choice of what to study and

how to study, can be determined by objective criteria. In other words, in value-free research, positivists believe that the objects they are studying are unaffected by their research activities (Collis & Hussey, 2009).

The focus of this research is to explore and investigate the impact of British government aid through DFID in support of Disaster Risk Reduction in Indonesia. Related to Saunders et al. (2009), in getting the results to be credible so that the results will be present in the recommendation / policy including lessons learnt to be continued in the national government work plan (Saunders et al., 2009), the theoretical perspective of the result as value laden, as mentioned by Easterby-Smith et al (2002) is more appropriate as the adapted value from the SCDRR experience to be a part of government national work plan (M Easterby-Smith et al., 2002).

In summary, the philosophical positioning of the research is important in relation to epistemology, ontology, and axiology, and the positioning of this research will be elaborated in the next section.

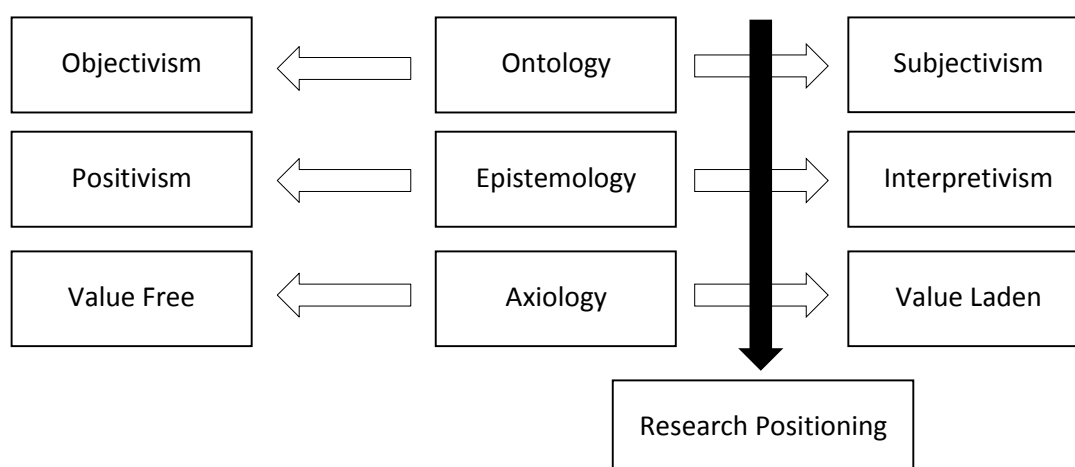
#### **3.4.4. Philosophical Positioning of the Research**

This research aims to explore and investigate the impact of the British government aid through DFID in supporting the Disaster Risk Reduction programs implemented by the Indonesian Government. The process to identify the impact of integrating DRR activities into development could be researched various ways, related to optimising the foreign aid process, also related to many stakeholders from government in the national and regional level, donor agencies, and private sectors. Their 'subjective' perceptions and collective decisions 'socially construct' what is happening in their view of the impact aid 'phenomena'. The ontological stance of this research will automatically continue into the subjectivism continuum. It will elaborate challenges and lessons learned; aid influence in the strengthening the government institution; effect of humanitarian assistance; the Indonesian Disaster Data Information (DIBI); and influence of the SCDRR project as the phenomena in mainstreaming DRR programs in the government work plan. All of this perception and experience will be analysed and shows the impact of foreign aid in DRR activities post disaster. Each institution as the implementer and or stakeholders have various interpretations in DRR activities due to the varying levels of roles, level of experience and capacity. This study recognizes and values these differences and will utilize in-depth interviews with the institutions that are related to the SC-DRR project and experts from government, private sectors and donor agencies to understand these differing perceptions. An interpretivism approach will therefore be adopted as the epistemological stance of this study.

To support this study, the data collected will engage different sources of the subjective perception of experts and practitioners in DRR in government institutions, particularly

experts or institutions that are involved in implementing the SC-DRR project. Researchers strongly believe that personal interaction can be valuable during interviews in creating a perception and opinion of the phenomena, and to help understand it. Therefore, the subjectivism stance with a value-laden approach is likely to be more appropriate in terms of axiological assumptions, theoretical perspective in this research could be described as shown in Figure 3.2 below.

**Figure 3.2 Philosophical Positioning of this Research**

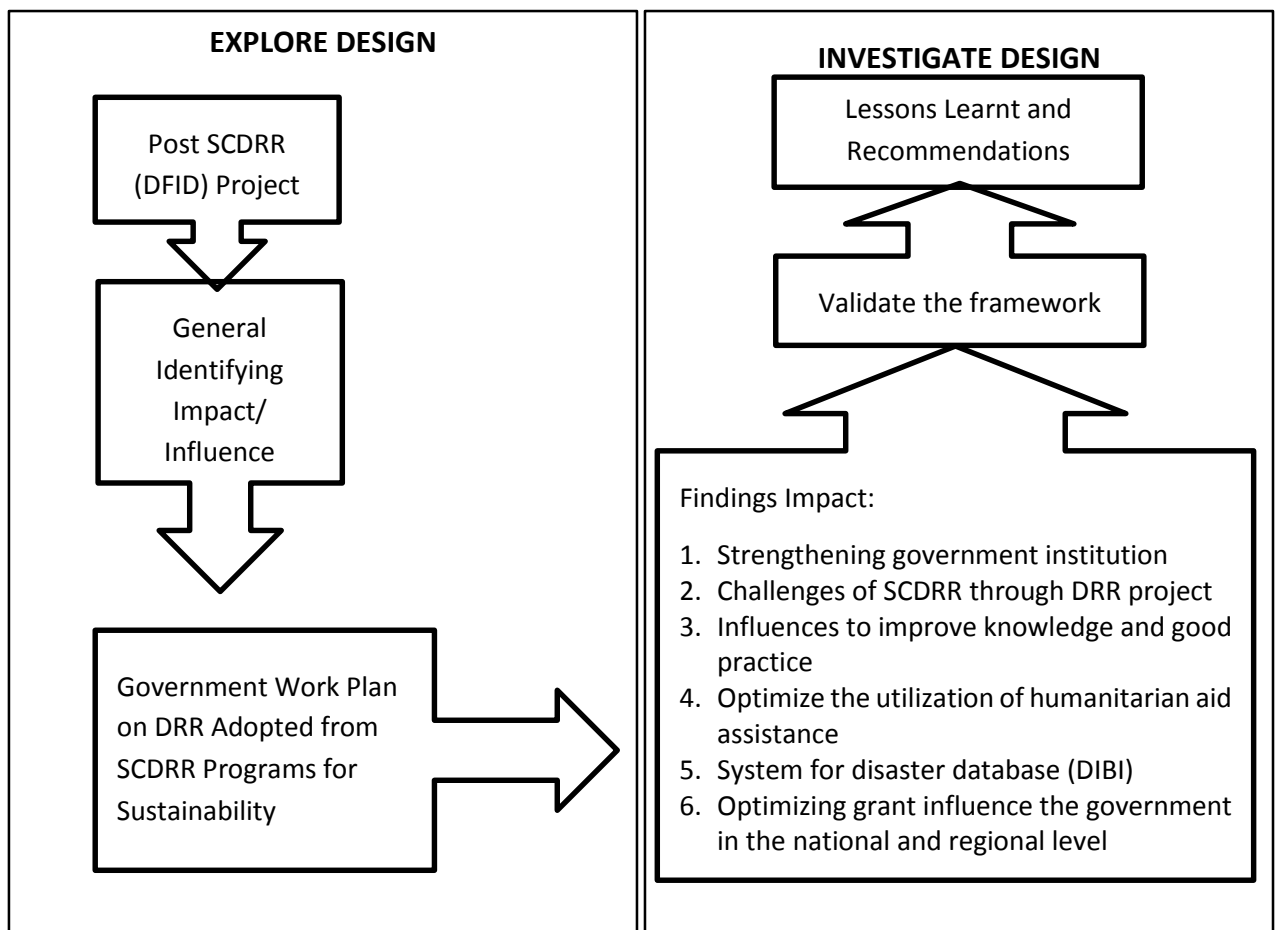


In Figure 3.2 above, the research positioning of this study is shown. In summary, this research leans towards subjectivism as the ontological stance, interpretivism as the epistemological stance and value laden as the axiological stance. The next section will explain the research approach.

### **3.5. Research Approach**

Saunders et al. (2009) noted that in research approaches, deduction owes more to positivism, and induction to interpretivism (Saunders et al., 2009). Collis and Hussey cited in Saunders et.al (2009), elicited that it involves the development of a theory that is subjected to a rigorous test. As such, it is the dominant research approach in the natural sciences, where laws present the basis of explanation, allow the anticipation of phenomena, predict their occurrence and therefore permit them to be controlled. An inductive approach is one in which data is collected, and a theory developed as a result of data analysis (Saunders et al., 2009) .

In this research approach, as presented in Figure 3.3, the researcher is exploring and investigating the impact of UK aid.



**Figure 3.3 Research process for data collection and analysis**

In this study, as shown in Figure 3.3 above, two main philosophies of research are involved. Specifically (as shown in the boxes) the research is about exploring the design and investigating the design. The first box explores design on the left, the researcher looked at the framework about the post SCDRR project implemented that was supported by DFID. The next process followed the general identifying of the impact/ influence. The general plan identified was adopted into the government national work plan about DRR. The next three phases of the research process, the investigating of the design, where the core mission is to develop valid lessons learnt and recommendation as the contribution to knowledge to understand the social world or to describe the phenomenon.

Inductive research was part of the research approach used to support the objective and find the impact of UK aid through DFID in support DRR program/ activities that are implemented by the government of Indonesia through the SC-DRR project, as well as being used to understand the phenomena in government institutions and also in managing the grant from UKaid, and the reason behind sustainability program into regular development. This is conducted through literature and document reviews, and a conclusion will be made at a later stage after completing interviews and document analysis.

The next part of Saunders' 'onion' is the research strategy. The various strategies suitable for this study are explained briefly in the section below.

### **3.6. Research Strategies**

Researchers have various strategies that are implied into their study. The scholar Yin (2009) identified that each strategy can be used for exploratory, descriptive and explanatory research (Yin, 2009). Saunders et al. (2009) also defined the research strategy as the strategy in which a researcher will answer the question. It will either be epistemological, ontological and axiological (Saunders et al., 2009).

### **3.7. Types of Research Strategy**

According to Saunders et.al (2009), the seven main strategies used to guide the research questions and objectives are: the extent of existing knowledge, the amount of time and other resources available, as well as philosophical underpinnings. Saunders also presents the seven strategies as: experiment, survey, case study, action research, grounded theory, ethnography, and archival research (Saunders et al., 2009). In line with the work of Saunders, Creswell (2013) also outlined five types of strategies for enquiry in relation to qualitative research. They are ethnography, grounded theory, case studies, phenomenological research and narrative research (Creswell, 2013).

Based on the aim of the current research being to explore and investigate the impact of foreign aid in support of the disaster risk reduction program for sustainability into government development program, the study will influence developing institutional capacities and governance structures at the national and regional level. Related to this aim and perspective, the main strategies suitable for this study is case studies , "*where the researcher explores, in depth, a programme, event, activity or a process of one or more individuals*" (Creswell, 2013). Other main strategies including ethnography, grounded theory, phenomenological research and narrative research considered would not be relevant for this research study.

Similarly with Saunders, Creswell, and Yin (2009) divided research strategy into three conditions, the three conditions are strongly related to: the models of research question; the extent of control an investigator has over actual behavioural events; and the degree of focus on contemporary, in contrast to historical, events. According to Yin (2009) these three conditions show how each is related to the five major research methods being discussed: experiments, surveys, archival analyses, histories, and case studies. The importance of each condition, in distinguishing between the five research strategies, is stated in the Table 3.1 below.



**Table 3.1 Relevant Situations for Different Research Strategies (Yin, 2009)**

Strategy	Form of research questions	Requires control of behavioural events?	Focuses on contemporary events?
Experiment	how, why	Yes	Yes
Survey	who, what, where, how many, how much	No	Yes
Archival analysis	who, what, where, how many, how much	No	yes/no
History	how, why	No	No
Case study	how, why	No	Yes

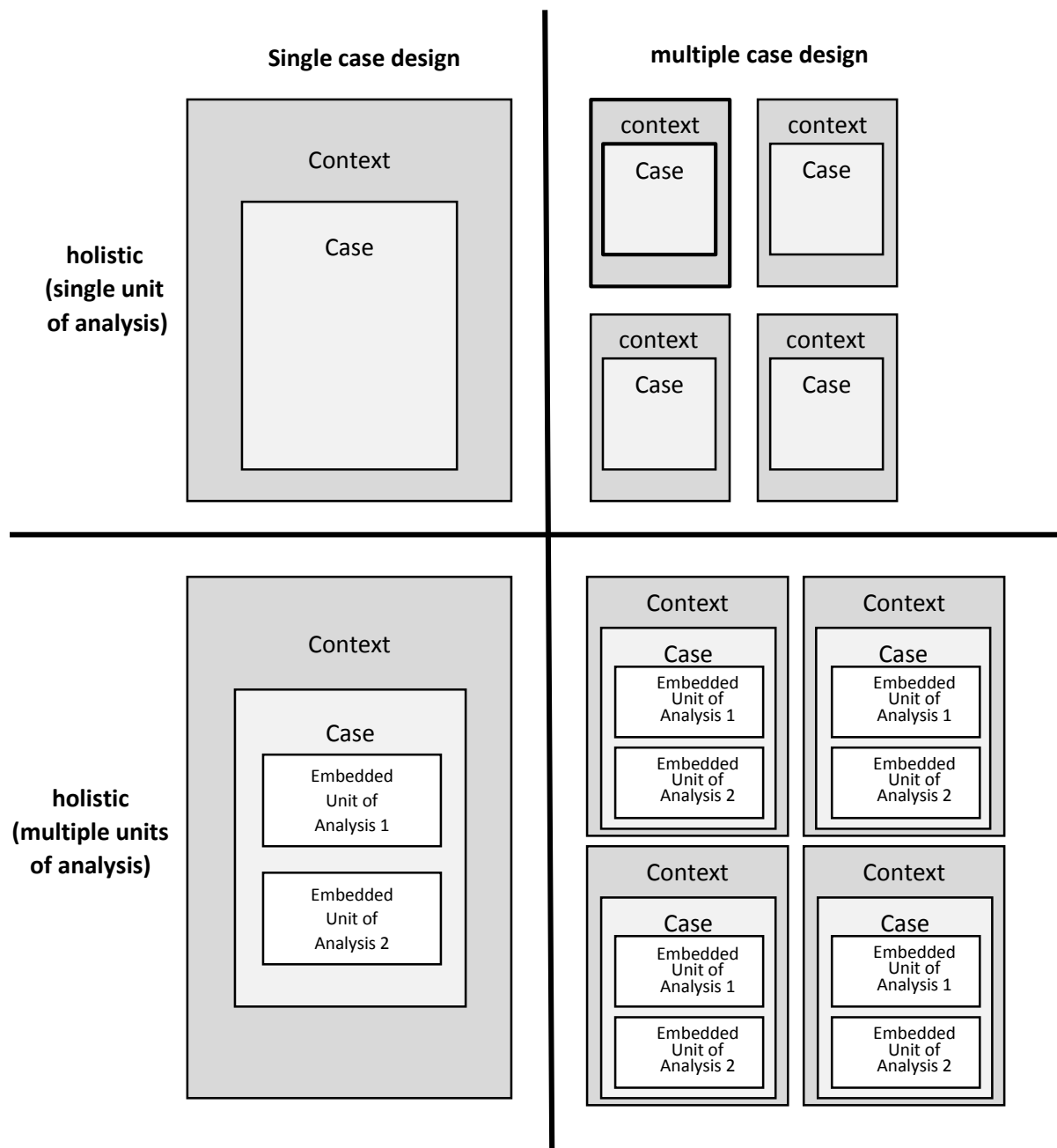
Table 3.1 above, according to Yin (2009), explains that experimental, historical and case study methods are appropriate for how and why types of questions. "How" and "why" type questions are more explanatory and are likely to lead to the use of case studies, historical evidence, and experiments as the preferred methods of research. This is because these styles of questions deal with the operational links that are needed to be traced over time, rather than mere frequencies or incidence (Yin, 2009). Based on recommendations by Yin, historical evidence and case studies can be used to establish influence that comes from the positive and negative.

The next section will further explain the choices made in relation to case study research as a strategy.

### **3.8. Case Study Research Design**

As described from the previous sections the researcher adopted the case study strategy as the main research strategy. Subsequently identifying the case study strategy as the most suitable research strategy the next step was to design the case study. Agreed with Yin (2009) a research design could be identified as the "logic that links the data to be collected (and the conclusions to be drawn) to the initial questions of study"(Yin, 2009). Yin (2009) also was presented about the model of research design famous between four case study designs based upon two dimensions such as, single case vs. multiple case and holistic case (one unit of analysis) vs. embedded case (more than one unit of analysis).

Schramm (1971), cited in Yin (2009) added emphasis saying "*the essence of a case study, the central tendency among all types of case study, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result*" (Yin, 2009). The four types of case study designs shown in Figure 3.4 are single holistic, multiple holistic, single embedded and multiple embedded.



**Figure 3.4 Basic Types of Designs for Case Studies (Yin, 2009)**

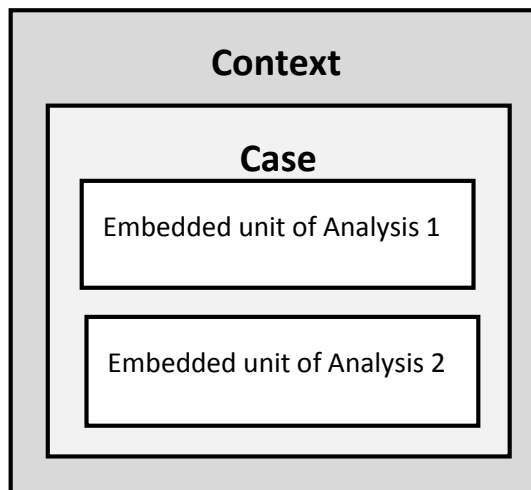
Based on Figure 3.4 above, the researcher was able to analyse the suitable basic type for this study research – a single case design that is embedded (multiple unit of analysis).

### **3.8.1. Single Case Embedded**

In supporting the various research questions, the single case study was chosen to address the study aim and objectives, as it is suitable for the SCDRR project in identifying the impact and lessons learnt with the goal to be effective in policy implication in the national government work plan, in particular for disaster risk reduction issues. Saunders et al. (2009) mentioned, "A single case is often used where it represents a critical case or, alternatively, an extreme or unique case. Conversely, a single case may be selected

*because it is typical or because it provides you with an opportunity to observe and analyse a phenomenon” (Saunders et al., 2009).* The researcher preferred a single case for this research as it is the impact of British government aid in support of DRR in Indonesia that also related to the first and biggest aid donation that was for support for the humanitarian action and SCDRR. The illustration of the model analysis for this research in line with the recommendations from the scholar Yin (2009) are presented in the Figure 3.5 below:

**Figure 3.5 Embedded (multiple units of analysis) (Yin, 2009)**



Based on Figure 3.5 above, Yin (2009), asserted five rationales where the single case study is more appropriate (Yin, 2009). The first rationale is when it represents the critical case in testing a well formulated theory. As explained in Section 3.5 this research is focused on an inductive approach. Therefore, it is more relevant for this piece of research.

The single case embedded was chosen as the section case study analysis and will support the unit of analysis in the next section.

### **3.8.2. Unit of Analysis**

The unit of analysis of this research is present in the sub unit of the level analysis. Easterby-Smith et al. (2008) mentioned that it is important to be clear about the unit of analysis in advance as this is the basis for data collection and analysis (M. Easterby-Smith et al., 2008). It supports the researcher during data collection and the data analysis process.

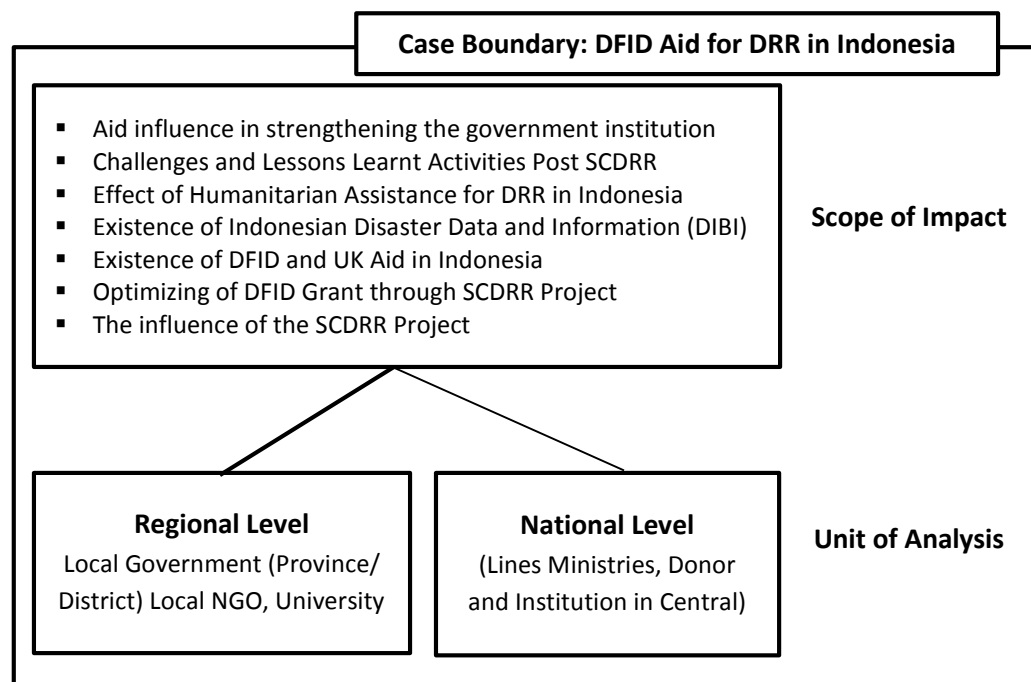
In the context of Yin (2009), an embedded design can *"serve as an important device for focusing a case study inquiry. An embedded design, however, also has its pitfalls"*. A major one occurs when the case study focus elaborates the unit of analysis based on the classification at the national level and regional level, especially focused at the sub unit level and presented by issues from the provinces or district coverage in Indonesia.

In establishing the unit of analysis that created the coverage for the national and regional level, which presented the performance of government and non-government in the provinces and districts.

Before establishing the unit of analysis, it was important to define the case limit. The case limit is also known as the case boundary for this research and identified the coverage for the unit of analysis as DFID aid for DRR in Indonesia). Therefore, in this research, implementation of the SCDRR Project which was funded by DFID is the case boundary, so improving the policy implications through the lessons learnt and good practice as input to the national government work plan.

Local government can then be the unit of analysis at the regional level. Remenyi et al.,(1998) related the unit of analysis as the government by the research questions from the research (Remenyi et al., 1998). Thus, the key research question in this study, the unit of analysis, was the support that identified the various impacts of the implementation of the SCDRR project. Accordingly, one of the SCDRR projects is the government project in implementing the budget, potentially by mainstreaming DRR into the e-government working plan.

Single case embedded studies are potentially suitable in identifying the impact of influence in the case. This single case embedded study (see section 3.8.1), has the unit of analysis split into 2 parts; the first part is the National Level, comprising a mixed analysis from line ministries, donor agencies, and other central institutions. The second part of the unit of analysis is the Regional level, this unit of analysis also consists of local government, local NGOs and institutions which exist in the provinces and districts. The organigram of the unit of analysis is shown in Figure 3.5 and depicts the unit of analysis and the case boundary for the study.



**Figure 3.6 Unit of Analysis of the Study**

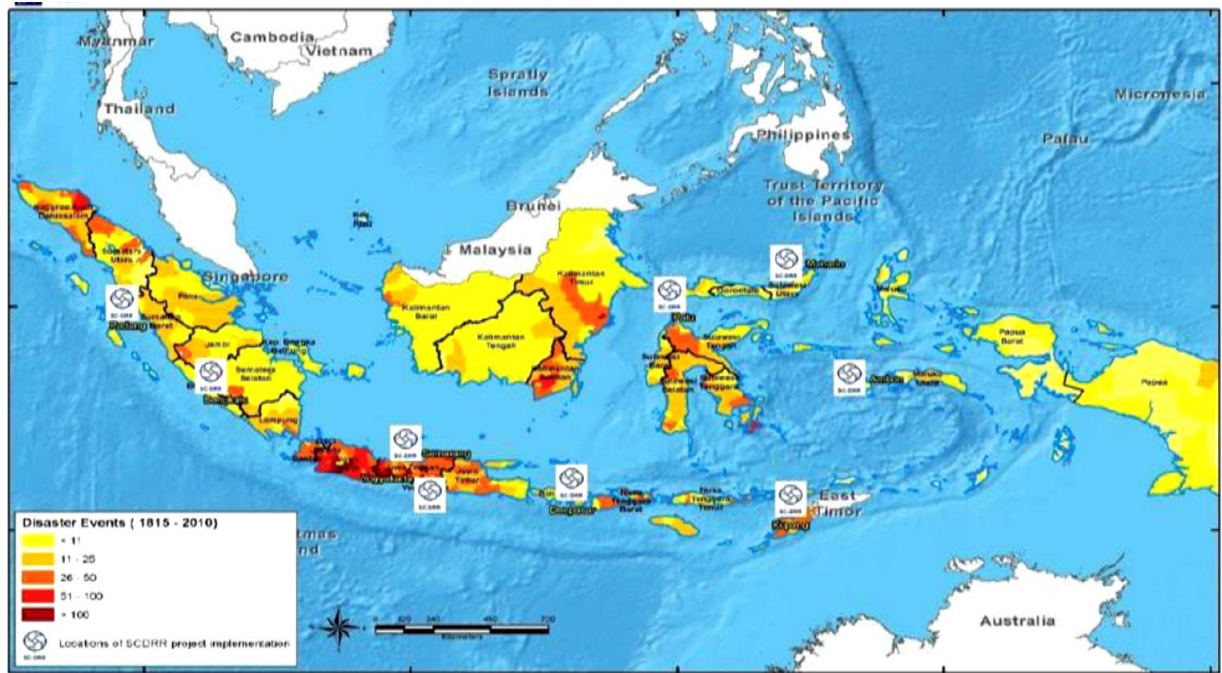
The previous section was the explanation of a single case embedded study design with the two different units of analysis. The next section will elaborate on the reasons for choosing this particular design.

### **3.8.3. Selection of Case Study**

This section is an important aspect in introducing the model of case study that was explored and investigated. Zainal (2007) mentioned that a case study technique allows a researcher to carefully examine the data within a specific context. In most cases, a case study method selects a small environmental area or a very limited number of individuals as the subjects of study. Zainal also added case studies, in their true essence, to explore and investigate a contemporary real-life phenomenon through detailed contextual analysis of a limited number of events or conditions, and their relationships (Zainal, 2007). The UNISDR is trying to capture case studies as the complexity of disaster risk by exploring the detail of a real-life situation. Individually they identify specific lessons for success in risk reduction; together they demonstrate common over-arching principles, which can be seen running through each study (UNISDR, 2013).

This study analyses the disaster risk reduction project that has been implemented by government under the lead of the Ministry of Home Affairs in mainstreaming disaster risk reduction in Indonesia (see section 2.10.2).

The project "Safer Communities through Disaster Risk Reduction in Development" (SC-DRR) was designed to help Indonesia implement this paradigm shift by mainstreaming DRR principles into the development process. The ultimate aim of SC-DRR was to ensure that a culture of safety becomes the norm in Indonesia, both within government and within communities vulnerable to disasters.



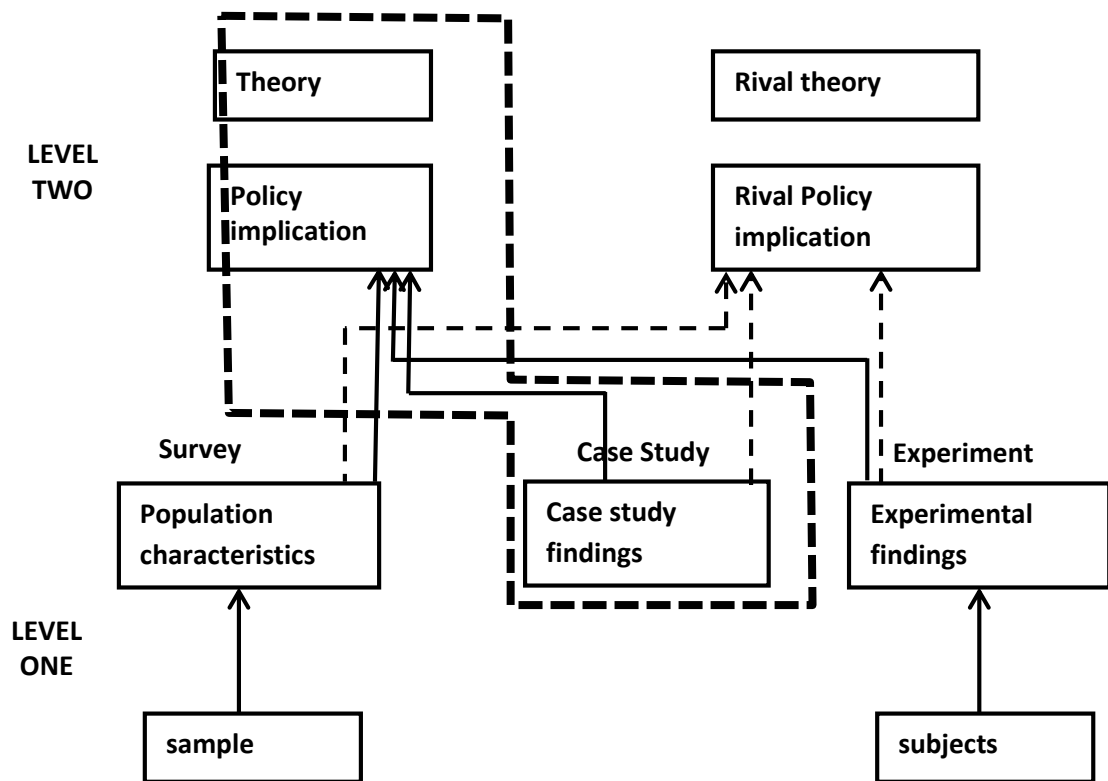
**Figure 3.7 Location of SCDRR Project Implementation and Number of Events in Indonesia (1815-2010)(Hillman & Sagala, 2011).**

Research about the SCDRR as the single case for this thesis is justified because it was the first and is the biggest donation of foreign aid from the DFID to support the DRR program in Indonesia. The cooperation between the British Government and the Indonesian Government effected the policy implication from this project into the national government work plan. The scope of policy implications of this case study will be elaborated in the next section.

#### **3.8.4. Policy Implication**

This research study looks at developing the policy implication into the national government working plan. Based on the aims of this research in exploring and investigating the impact of the UKAid project in support of Disaster Risk Reduction programs which are implemented by the Indonesian Government.

The influence of delivery of the DFID foreign aid affected the policy implication in the development program. The connection in this research was found in the findings that established the scope of impact as a part of the unit of analysis (see section 3.8.2). Yin (2009) mentioned that policy implication is shown in the case study finding analysis and the possibilities will come with the theory, along with survey results, which come from population characteristics. That also comes from experimental findings. This type of generalization reflects as a level two inference in Figure 3.8 below.

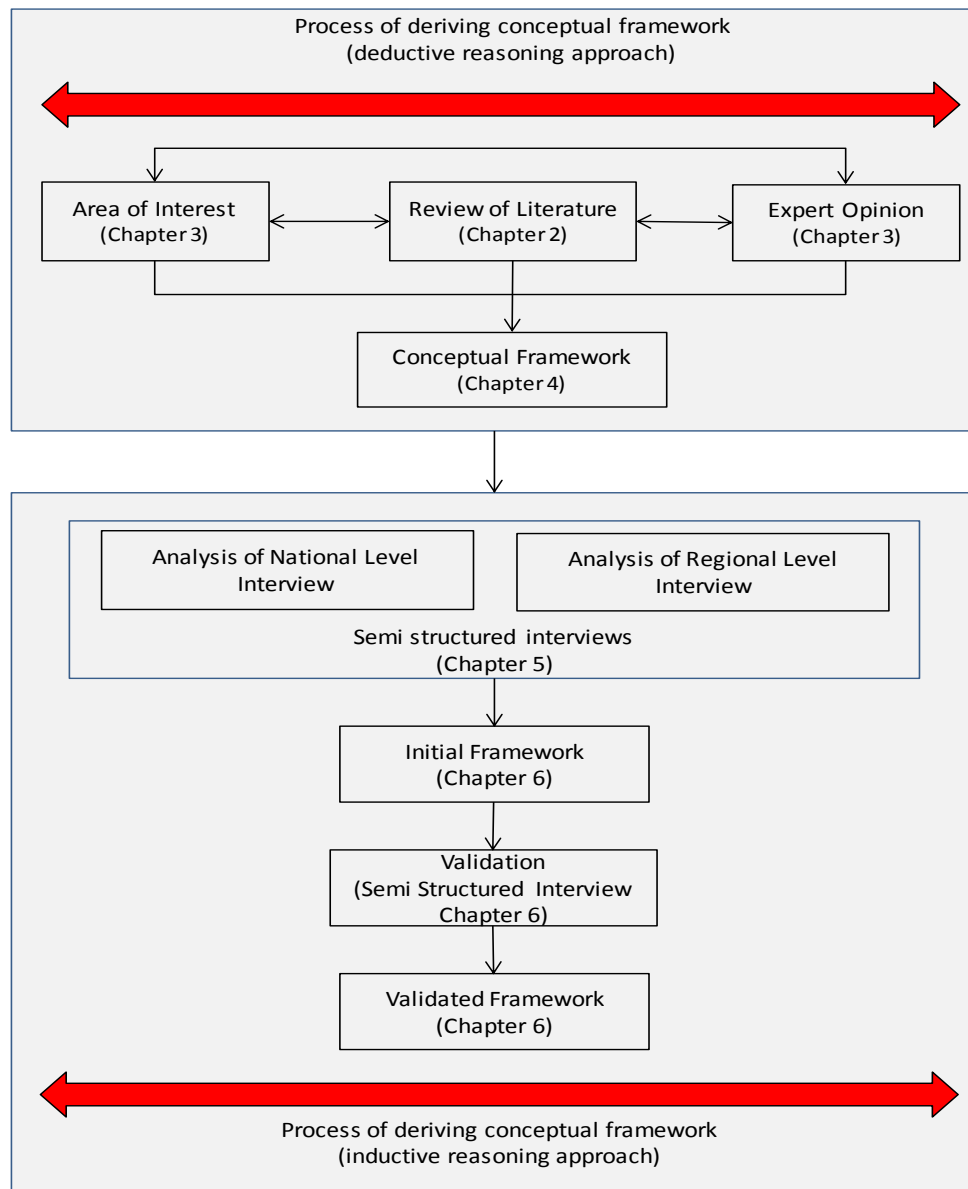


**Figure 3.8 Making Inferences: Two Levels (Yin, 2009)**

However, as explained in Section 3.2 in the establishment of the research problem, this study involves the development of a research problem, research questions and a conceptual framework based on a comprehensive literature review and expert opinions based on data collection.

Related to the relation between local government and local people, the UNDP (2006) and Lyons (2009) relate the policy implication that is a related aspect from the impact of disaster on the wider systems, norms, and procedures governing service provision and relations between local government and local people (UNDP, 2006) (Lyons, 2009). Related to the closing issue of the disaster risk reduction, is mitigation; Coppola (2011) noted the numerous factors that impact the probability that an individual mitigation action or a group of mitigation actions will be implemented. The factors are: *political support, public support, support from the business sector, support from non-profit and interest groups, cost, and long-term versus short-term benefits* (Coppola, 2011b).

In support of the case studies, some expert interviews usually recommend some of the policy regulations related to DRR that can be implemented for sustainability of the program. Researcher was compiled and elaborate with another policy that was born during the implementation of the SCDRR project. Overall, the researcher tried to illustrate the links between the case studies, literature and expert interviews in this study, as shown in Figure 3.9 below.



**Figure 3.9 Summary of Data**

From the Figure 3.9 above, showing the summary of data, it can be seen that there was a reasoned approach in the process of deriving the conceptual framework in chapter 4.

### 3.9. Research Choices

Research choice is an important part of research methodology. Saunders et al.,(2009) called research choice the way in which the researcher chooses to combine quantitative and qualitative techniques and procedures in the research planning (Saunders et al., 2009). Saunders added that the researcher can use a single data collection technique and corresponding analysis procedures (mono method) or use more than one data collection technique and analysis procedure to answer the research questions (multi method). A single case is often used where it represents a critical case or, alternatively, an extreme or



unique case. Conversely, a single case may be selected because it is typical or because it provides an opportunity to observe and analyse a phenomenon (Saunders et al., 2009).

In this research, a purely qualitative technique was chosen, Creswell (2013) said that using a variety of data collection tools such as interview, observation and documents is more thorough than trusting a solo data source (Creswell, 2013). Therefore, following this advice from Saunders and Creswell, the researcher used data sources from documents and interviews (with experts, national sources and regional sources), more details of which will be discussed under the section 'techniques and procedures'. The following section describes the time horizon of this study, as per the next layer of the 'research onion'.

### **3.10. Time Horizons**

The implementation duration of the SCDRR project, from 2007-2012, was initially decided as the time horizon for this research. However, in the research process, it became clear that post the SCDRR project also affected the impact to answer the research problem that was proposed. Several interviewees also indicated that some of the SCDRR program was identified after the SCDRR first period was complete. In the second period, the identified programs were adopted as the government work plan program and activities. Saunders et al. (2009) asserted that the time horizon is the important element in the research project and named two perspectives for time horizon, namely, cross sectional studies and longitudinal studies. Within cross sectional studies, the researcher investigates a particular phenomenon (or phenomena) at a particular time and the research is a 'capture' taken at a particular time (Saunders et al., 2009). In parallel, Collis and Hussey (2009) mention that as an opposite of cross-sectional are the longitudinal studies which focus on investigating variables or group of subjects over a long period of time (Collis & Hussey, 2009). Considering that the study adopts a cross-sectional view in identifying the impact from the British Government aid through the SC-DRR project in support of the DRR program in the Indonesian Government, it is clear that it does not require an investigation over a longer period of time, as in a longitudinal study.

### **3.11. Research Technique**

Research technique is an important aspect in research project activities. Many scholars consider the research technique as the main step in the research process. This research has identified the suggested route by Saunders et al. (2009) about the steps in the research philosophy, research approach, research strategy, research choice and time horizon, that were explained in the previous sections (Saunders et al., 2009). The research technique step, is the next step that was explored in this study, and is described in the next sub section related to data collection, sampling, semi structured interviews, document and archival review, semi structured interviews for validation and connection between data collection technique and research objectives. Discussion for every section of research

technique starts from section 3.11.1 until section 3.11.6. Followed by the data analysis technique in section 3.12. As explained in the previous section, this research conducted an exploratory study with the single case study embedded. The next section provides details on the research techniques used for primary data collection for this study while justifying the selection of the appropriate techniques.

### **3.11.1. Data Collection**

This data collection section explains the research technique in preparing the primary data. Saunders et al. (2009) mentioned the various models of data collection technique that can be done, for example interview (structured, semi structured or unstructured), direct observations and questionnaires (Saunders et al., 2009). Yin (2009) also added participant-observation, documentation, archival records, interviews, and physical artefacts as the part of data collection.

The BNPB (2012) mentioned observation as a collection method: Writer observation for a few things, such as the delivery of content, the discussion in the forum or working group meetings. Secondary data: a) Documentation Studies – the study documentation in question is a document in the form of text, maps and images (photos). b) Assessment of previous reports. Learning from past reports to be used as a reference to support the preparation of this research study (BNPB, 2012).

Based on Saunders and Yin, the process of data collection in this study is found in the list below:

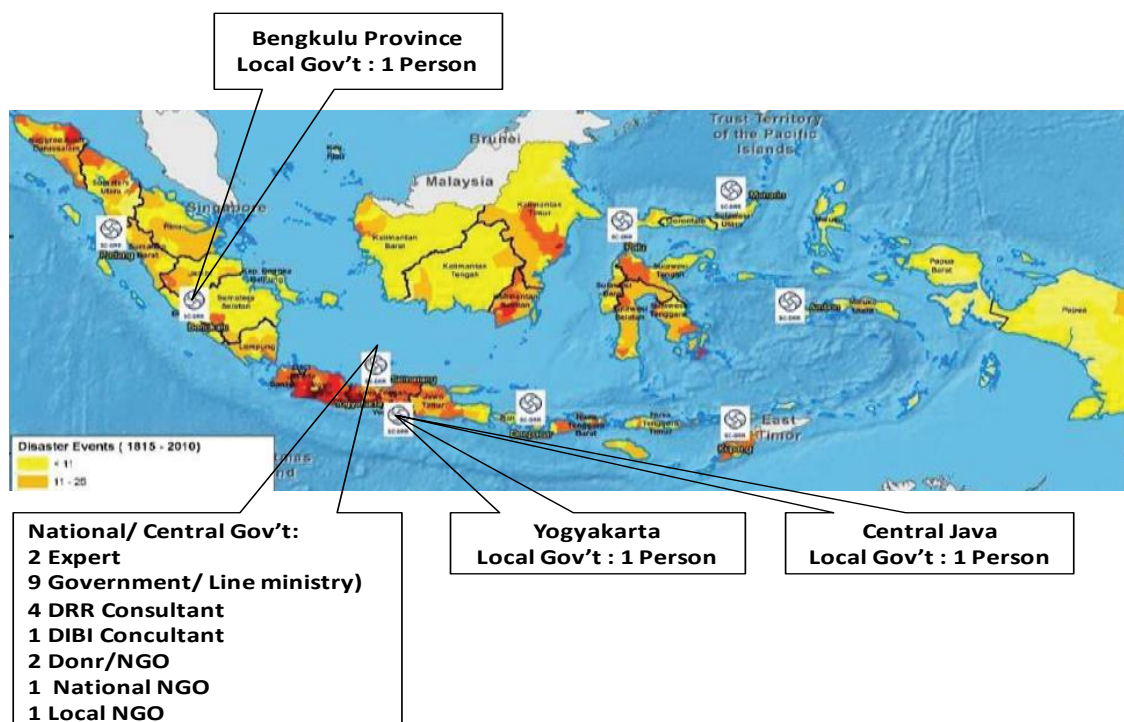
- *Interviews*: semi structured interviews (section 3.11.3) with open questions in one issue related to the British government aid through the DFID. Resource persons can be flexible in answers, and give answers related to the issues in question that have been prepared. Before the interviews started, the resource person received the brief about the research (see Appendix 0) and after the interview the researcher took a photograph of the resource person as the un-published documentation.
- *Documentation*, documentation related to the progress report of the SCDRR project was received from the official office and allowed the researcher to cite and elaborate on it in this study. The official evaluation report was also accepted during the data collection process. All of the reports from the project found it was integrated with the data analysis process as the secondary data and it also was acceptable.
- *Archival record*, was accepted from the Ministry of National Development Planning, and related to the annual government work plan from 2008 after being signed as an implementation of the SCDRR project, some of the copy regulations that have been established from the Ministry of Home Affairs for guidelines to the local government, together with those that are through the official reports by DFID related to the UK Aid policy in Indonesia and Asia in general.

Yin (2009) asserted that the use of documentation and archival records are useful sources of data for researchers using case studies, having strengths such as the ability to review repeatedly, unobtrusively, exactly, and with broad coverage (Yin, 2009).

Scholars in data collection have various interpretations of this being the important stage in the research. Yin argued for the importance of the interview as the most useful technique for data collection. Saunders et al., (2009) separate interviews as structured, semi-structured or unstructured. The various techniques of data collection have their own advantages and disadvantages. In line with this, Saunders et al. (2009) said that in semi-structured interviews the researcher will have a set of themes and questions to be covered but the questions may depend on the context and flow of the interviews. Furthermore, semi-structured interviews offer opportunities for the interviewer to ask additional questions depending on the nature of the discussion and the events within a particular organisation (Saunders et al., 2009).

### 3.11.2. Sampling

Choosing a sampling area is required for this research as collecting data for the entire population is not feasible. The study was conducted in Jakarta as the capital city of Indonesia with resource persons coming from different institutions and having responsibility during implementation of the SC-DRR project. Several staff from local government are representative of local government in the pilot project location. The distribution of sampling is shown in the map of Figure 3.10.



**Figure 3.10 Location of SCDRR Project Implementation and number of events in Indonesia (1815-2010) (Hillman & Sagala, 2011).**

There are two types of sampling techniques, probability sampling and non-probability sampling (M Easterby-Smith et al., 2002; Saunders et al., 2009). Probability sampling is where the probability of every member of the population to be included in the sampling is known, whereas it is not known in non-probability sampling (M Easterby-Smith et al., 2002). The decision on which technique should be implemented depends on the nature of the research.

This research particularly looks at risks involved in community-based post-disaster housing reconstruction projects. It requires research participants that have knowledge and experience in this type of project. As a result, non-probability sampling is the most appropriate way to achieve the research objective. Moreover, Abowitz and Toole (2010) cited in Rodgers and Yee (2014) highlight that in construction research, non-probability sampling methods are very common because approaching individuals can enhance the response rates (Rodgers & Yee, 2014).

The next section will discuss the semi-structured interviews.

### **3.11.3. Semi-Structured Interviews**

Semi-structured interviews were chosen as the technique in the data collection process. Saunders et al. (2009) mentioned that the qualitative interview is a collective term for semi-structured and unstructured interviews aimed at generating qualitative data. Qualitative data are non-numerical data or data that have not been quantified (Saunders et al., 2009). Saunders et al. (2009) added '*semi-structured and in-depth interviews provide you with the opportunity to 'probe' answers, where you want your interviewees to explain, or build on, their responses. This is important if you are adopting an interpretivist epistemology, where you will be concerned to understand the meanings that participants ascribe to various phenomena*' (Saunders et al., 2009).

Twenty-three semi-structured interviews were conducted with experts from the various parts of local government (including local NGOs), from central government (including line ministries, donors, national NGOs). They were selected based on being intensively involved in the SC-DRR project and other disaster management events. In Table 3.2 the list of resource persons' details are shown who participated in the interviews.

**Table 3.2 Profile of Experts**

<b>Resource Person Code</b>	<b>Organisation and their role in the organisation</b>	<b>Type of Organisation</b>
R03	Director for Special and Disadvantaged Area, National Development Planning Agency/ Bappenas	Government/ Policy level

<b>Resource Person Code</b>	<b>Organisation and their role in the organisation</b>	<b>Type of Organisation</b>
R21	Head of Sub.Directorate for Disaster Prone Area, Directorate for Special and Disadvantage Area, National Development Planning Agency/ Bappenas	Government/ Policy level
R21	Senior Program Manager, UNDP Indonesia	Donor/ NGO
R23	Head of Sub. Bilateral Funding Europe, Directorate of Bilateral Foreign Funding, National Development Planning Agency/ Bappenas	Government/ Policy level
R17	Head of Sub.Directorate Multilateral 4 (UN Family) Directorate Multilateral Foreign Funding, National Development Planning Agency/ Bappenas	Government/ Policy level
R08	Director of Regional Planning and Special Autonomy, Ministry of Home Affair (MoHA),	Government/ Policy level
R13	Staff of Directorate of Regional Planning and Special Autonomy, Ministry of Home Affair (MoHA)	Government/ Policy level
R14	Staff of Directorate of Regional Planning and Special Autonomy, Ministry of Home Affair (MoHA)	Government/ Policy level
R22	Deputy Prevention and Preparedness, National Disaster Management Agency/ BNPB	Government/ Policy level
R16	Staff, National Disaster Management Agency/ BNPB	Government/ Policy level
R07	Expert Data Information Disaster Indonesia (DIBI), UNDP Indonesia	Donor/ NGO
R01	IT Specialist, DIBI, SC-DRR	Government Project Consultant
R02	Senior National Project Manager, SC-DRR	Government Project Consultant
R09	National Project Coordinator, SC-DRR	Government Project Consultant

<b>Resource Person Code</b>	<b>Organisation and their role in the organisation</b>	<b>Type of Organisation</b>
R11	National Project Coordinator, SC-DRR	Government Project Consultant
R15	National Project Coordinator, SC-DRR	Government Project Consultant
R10	National Project Coordinator, SC-DRR	Government Project Consultant
R12	Executive Director, Humanitarian Forum Indonesia	International NGO
R04	DRR Expert, Director General for the Development of Special Region, Ministry of Village, Disadvantaged Region, and Transmigration	Government/ Policy level
R20	Program Manager, Australian Aid Project	Donor/ NGO
R06	Head of Regional Disaster Management Agency/ BPBD, Bengkulu Province	Local Government/ Policy level
R18	Head of Regional Development Planning Agency/ Bappenda, Central Java Province	Local Government/ Policy level
R19	Head of Regional Development Planning Agency/ Bappeda, DI Yogyakarta Province	Local Government/ Policy level
R05	Head of Circle Society, CBDRR Specialist	Local NGO

The interview process was completed by the researcher with the resource people focused to explore the aim of this research. The interview guidelines were designed to capture issues related to exploring the impact of UK aid through DFID in support of the disaster risk reduction program in Indonesia, to explore SCDRR as part of the humanitarian aid implemented by the government of Indonesia, to analyse obstacles of foreign grants in affecting the government level and in optimising the foreign assistance fund for DRR activities, and identifying the lessons and good practices learnt after the DRR project maintaining post project sustainability by incorporating the lessons learnt into the government regulatory framework.

The complete interview format guidelines in the Appendix 0 and Appendix 0 , it was prepared to present to the resource person with the research brief (which included the research topic, aims and objectives of research) and that was sent to the resource person before the interview started. Interviewees also have the opportunity to answer the questions with flexibility time and appropriately, besides the question themes were prepared, the interviewer also asked related short questions which connected to the research topic. During the interview, the researcher also asked about secondary data related to the experience from the resource person related to the SCDRR project implementation, such as reports or other publications related to the issue discussed. Usually the duration of interviews lasted around 25-50 minutes and 20 persons were interviewed face-to-face and 3 persons by phone (recorded via skype). The face to face interviews were recorded manually using digital recording that transferred to mp3 format. All of the audio recordings were transcribed manually through the audio mp3 player via computer into Microsoft Word. All of the interviews were conducted and transcribed in Indonesian and manually translated to English based on notes needed in the data analysis while using Nvivo 10 software (see section 3.12.)

Besides the interview data being recorded and transcribed, the researcher also collected other documents and archival records from the resources person and institutions; these will be elaborated in the next section.

#### **3.11.4. Documents and Archival Government Publications**

In the meantime, the researcher also used the government and other publications relating to the establishment of local governments, their structure and other administrative records, related to the grant, aid regulation, or funding arrangements. For example, in differentiation between direct budgets from line ministries to local government (called budget 'tugas pembantuan' and budget deconsentration 'dekonsentrasi') will commonly appear in the chapter on data analysis and chapter findings. Another document report was also accepted and reviewed for analysis from the DRR project related to the central government and local government. In the next section, the semi-structured interviews for validation will be discussed.

#### **3.11.5. Semi-Structured Interviews for Validation**

Semi-structured interviews for validation were conducted with 3 persons chosen from the 23 resources persons. The researcher chose them based on capability and qualifications, and having more knowledge regarding the DRR in Indonesia, in particular, in the central level and government level. The analysed process will be discussed in Section 3.14 for establishing the quality of research and compared with the literature findings to arrive at the initial framework for defining and elaborating the impact of British Government aid in support of disaster risk reduction in Indonesia. Based on the feedback received from the

resource person during the interview process and analysis from the literature review findings, and validated as the framework in Chapter 4, this is then updated in Chapter 6. The next section will discuss the connection between data collection techniques and research objectives.

### 3.11.6. Connection between Data Collection and Objectives

This section is about discussion in connection between the various data collection techniques and research objectives of this study. The connection is shown in the table 3.3 of relationship below:

**Table 3.3 Relationship between data collection tools and research objectives**

Objectives	Literature review	Semi-Structured Interview analysis	
		National Level	Regional Level
to explore and understand the context of UKAid in support of the DRR project post-disaster in Indonesia.	☑	☑	
to explore the SC-DRR project as a part of humanitarian aid implemented in UKaid in Indonesia.	☑		☑
to analyse the obstacles affecting the impact of UKAid at governmental level and in optimising foreign assistance funds for DRR activities.	☑	☑	☑
to identify and assess the lessons and good practices learnt after the DRR project in maintaining post project sustainability by incorporating the lessons learnt into government regulatory framework.	☑	☑	☑

From the table 3.3 above can be seen the relationship between objectives, the literature review and interview analysis in the national and regional level. In the objective to explore and understand the context of UK Aid in support of the DRR project post- disaster in Indonesia that related the literature review and analysis in the national level. This is different from the objective to explore the SC-DRR project as a part of humanitarian aid implemented as UK aid in Indonesia, it can be seen in the chapter on data analysis if the humanitarian aid of DFID through SCDRR with majority implementation are in the provincial and district level, called the regional level, and the literature review also strongly related to using theory and practice that is also discussed in the data analysis in chapter 5.



Objective 3 is to analyse the obstacles affecting the impact of UK Aid at governmental level and in optimising foreign assistance funds for DRR activities. Objective 4 is to identify and assess the lessons and good practices learnt after the DRR project in maintaining post project sustainability by incorporating the lessons learnt into the government regulatory framework. Both 3 and 4 are evidenced in all three areas – the literature review, the regional level and the national level, and this shows the importance of optimising the grant, the lessons and good practice learnt will influence the policy implication and government regulatory framework.

The next section discusses details related to data analysis techniques.

### **3.12. Data Analysis Techniques**

Saunders et al. (2009) discussed analysing qualitative data as including summarising, classifying and organising the data. Also, in using narrative to recognise themes in the analysis of the qualitative data was a challenging task due to the volume of data (Saunders et al., 2009). In agreement with this, Collis and Hussey (2009) state that there are no clear and acknowledged instructions in written literature for the analysis of qualitative data (Collis & Hussey, 2009). Analysis of qualitative data ranges from a short list of responses to additional multipart data such as a transcript from an interview or an entire policy document and in order for it to be useful it is important to analyse all the data and understand the meanings (Saunders et al., 2009).

Following on from Saunders et al. (2009), in the preparation of this research, the researcher initially started with transcribing all the interview data into a document in Microsoft word, which was audio mp3 recorded format. Every document transcribed was given a code for every resource person. All transcribing was done manually and checked by the researcher to ensure accuracy between words. The audio and transcripts are in the Indonesian language. Some paragraphs were identified as notes which were translated into English. All transcripts were then saved using a file name to maintain the confidentiality of the interviewee. All of the resources persons interviewed were identified as 'R' and numbered numerically from 01-23 when saving, plus code 'Ref' and numbered numerically from 1-20 for easy identification of the location during data analysis and the validation process. For example:

According to the commitment of DFID, usually they were concerned in effectiveness of implementation. R04 adding the note *"...regulatory, institutional, educational, and public awareness, the four of them. Regulation in the context of this policy, this continues what it's called, second, organized institutions, third-education, dissemination of many problems. The fourth is the implementation within the context of the effective implementation of DFID..."* (R04/Ref3).

The data were summarised into sections and a summary of key points was analysed and produced. After summarising, categorizations of the issues were made. The next step was to categorise the data and develop categories and attach the categories to meaningful sections of data. The section of data that has been classified in the scope of impact and was followed with the unit of analysis. The categories were identified in line with the research objectives and questions and was guided by the purpose of the study. The next step of the analysis process was combining data where sections of data were attached to categories that emerged from the data. Following recognised relationships and developing classifications and this process continued in the search for key subjects and relationships and classifications matching the rearranged data. The process generated explanations to the research questions and objectives. In assisting this exploration process, two main analytical methods were used: content analysis and cognitive mapping and more details of these two techniques are explained in the next sub section.

### **3.12.1. Content Analysis**

Content analysis was used by the researcher to identify the text from the transcribed interviews and word connection between paragraphs. The researcher also analysed using the concept analysis that was introduced by the resource person, and supported by literature. Collis and Hussey (2009) identified content analysis as a method for counting qualitative data where qualitative data are systematically converted to numeric data (Collis & Hussey, 2009).

Krippendorff (2004) said that in the conceptual content analysis method transcript texts are analysed to check the existence of concepts (Krippendorff, 2004). Accordingly, conceptual content analysis in this study considered all related and important concepts of the word/ phrase count. For the content analysis, the researcher added a direct quotation from interviewer analysis in every section to make it easier for the reader in identifying the issues discussed in every section. In this research, NVivo 10 software was used for this exercise and technique adopted and is discussed in Section 3.12.3.

### **3.12.2. Cognitive Mapping**

The scholars Collis and Hussey (2009) mentioned cognitive mapping as an important instrument in the elaboration of data analysis of qualitative research, saying that it is a "method based on personal construct theory that structures a participant's perceptions in a form of a diagram" (Collis & Hussey, 2009). Cognitive mapping is a useful technique to present data to the readers as it provides a summary of data in a diagrammatic model. A cognitive map is an easy model diagram in presenting overall issues that are exposed in the research. The steps for analysing cognitive maps are conducted manually for each model in every section and sub section.

Cognitive mapping on a large scale involved using NVIVO (version 10) in its preparation, and for the small scale, the researcher used Microsoft power point with insert design/diagram.

The NVivo 10 software was used, since the volume of data was large, to facilitate the cognitive mapping process in the first and middle step. The researcher used Nvivo (version 10) to explore and investigate every single transcript, as explained in the next section.

### **3.12.3. Use of Computer Software for Data Analysis**

As stated in the previous section, using software for analysis was a logical choice because of the volume of data collected. The researcher used NVivo (version 10) and this is discussed in this section. The researcher received training on how to operate Nvivo with the program from the university research service.

Initially, all of the interview transcripts were imported into the NVivo software package. This was in line with Saunders et al. (2009); all interview data was summarised and the principal themes and their relationships with each other were identified. Every single piece of data from interviewees was protected and secure and all important concepts were coded and linked with the themes (nodes) (Saunders et al., 2009). Whenever new concepts were identified, a new node was created. Consequently, the data was coded, NVivo uses two types of nodes: free nodes and tree nodes. Lastly, cognitive maps were developed to identify the relationship between the nodes. The 'model' function in the NVivo software was used to facilitate this process. The relationship between each node was then identified based on the views of the respondents and the researcher.

### **3.13. Thesis Write-up**

Writing up the thesis is the most important aspect in the PhD research. The thesis write-up was initiated during the initial phases of the research with the initial literature review and it was continuously updated to reflect any new findings from the research while the research was progressing. Once the data analysis was complete a comprehensive chapter breakdown was prepared and all the write ups were compiled to arrive at the final thesis.

The research methodological framework for the research explained throughout this chapter used the research onion as described by Saunders et al. (2009). Designing research using an acceptable framework is not necessarily sufficient to ensure the quality of the research. Therefore, the next section explains the steps the researcher has applied to maximise the quality of the research.

### **3.14. Establishing the Quality of Research**

Ensuring the quality of the research is maintained and managed is an important aspect, to identify the procedures undertaken to ensure the accuracy and credibility of the findings (Cresswell, 2009). According to Yin (2009), four tests are commonly used to measure the

quality of the case studies being conducted. These include; construct validity, internal validity, external validity and reliability. Each of these will be presented in the next section.

#### **3.14.1. Construct Validity**

As suggested by Yin (2009), in order to further strengthen the construct validity and ultimately the quality of the overall research, the construct validity is the main types of evidence used within the case studies, being, in this study, documents, archival records and semi-structured interviews (Yin, 2009). Therefore, by using multiple sources of evidence the researcher was able to demonstrate the construct validity of the research. Furthermore, triangulation of key concepts was achieved through reviewing different streams of literature at the initial stage of the research and triangulation of data analysis was achieved by integrating two different types of data analysis approaches namely; content analysis and cognitive mapping. Furthermore, the study has maintained a chain of evidence. In doing so the research provides appropriate citations on the case study database and all the actual audio recorded interviews and transcripts are stored in NVivo (10 series) software where all the information regarding the interviews is accessible. All the interviews were conducted as per the case study protocol, and as a result, all the information regarding the interviews is consistent with the specific procedures and questions in the case study protocol. A chain of evidence was maintained in the study which ultimately helped in achieving the quality of research.

#### **3.14.2. Internal Validity**

This is the second test, in this research the internal validity was achieved by systematically developing the research questions, conceptual framework and by identifying the research philosophy, approach, strategy, choice, time horizon and techniques, while ensuring their compatibility with each other. Yin (2009) stated all these have facilitated a clear direction for the research and enabled comparison of the findings with the research questions and the conceptual framework. Internal validity is a useful measure for ensuring quality at the data analysis phase. Internal validity is about "establishing casual relationships whereby certain conditions are believed to lead to other conditions, as distinguished from spurious relationships" (Yin, 2009).

#### **3.14.3. External Validity**

Yin (2009) argues that the third test, external validity, is about determining whether the study findings are generalizable beyond the analysed cases (Yin, 2009). This study set out to document lessons learnt and good practice in the effective use of aid in disaster risk reduction in Indonesia, and so there is external validity because the impact of a phenomena is being tested.

#### **3.14.4. Reliability**

Yin (2009) stated that the role of reliability is to minimise the errors and biasness in a study. Yin suggested setting up a detailed case study protocol and database and to document the procedures adopted in the case studies (Yin, 2009).

In this exploration, the quality was set up amid the information gathering and investigation stages. At the information gathering stage, quality was accomplished utilizing contextual analysis conventions and by keeping up a contextual analysis database. All materials utilized at the information accumulation stage, and every progression taken after and amid the procedure, were all around reported so as to expand the dependability of the study. Besides, the researcher kept up a contextual investigation database for sorting out and archiving every one of the information pieces gathered as a major aspect of the contextual investigations. NVivo programming was utilized to store all contextual analysis with transcripts.

#### **3.15. Summary and link**

This chapter presented the research methodology for this doctoral research which is aimed at exploring and investigating the impact of British government aid in support of the DRR program in Indonesia. The chapter presents and justifies the research methodology, from the establishment of the research problem, to data collection and analysis. Accordingly, the chapter outlines the inherent components of the methodology, namely; research philosophy, approach, strategy, choice, time horizon and techniques while justifying the suitability of the selected methodology through various research methodology literatures. The study applies interpretivism as its philosophy and theoretical underpinning. The main focus of this research is to identify the impact through the national level (line ministry, international NGOs, and donors) and regional level (provinces and district government, local NGOs and community).

A single case study was selected as the preferred research strategy and the rationale for selecting the case study strategy was presented. The study proposes a single case (embedded) in which the unit of analysis becomes "impact of foreign aid to become theory, policy implication, good practice and lessons learnt". Accordingly, the SCDRR project case study is located in Indonesia. Within the case study, semi-structured interviews were conducted together with document reviews. The main idea behind conducting expert interviews is to reduce the biasness in data sources and to increase the validity and reliability of the research conclusions. The semi-structured interviews were analysed, based on two data analysis techniques, content analysis and cognitive mapping. Finally, the measures taken to ensure the acceptability of the research findings were discussed. The next chapter presents the conceptual framework for the research while explaining the process adopted for preparing the conceptual framework.

## **CHAPTER 4 - Conceptual Framework**

### **4.1. Introduction**

The research methodology has been elaborated and illustrated with detail from the previous chapter. This chapter is an important chapter in elaborating the framework of this study and will explain the historical and logical framework in this study. The researcher structured this chapter as follows:

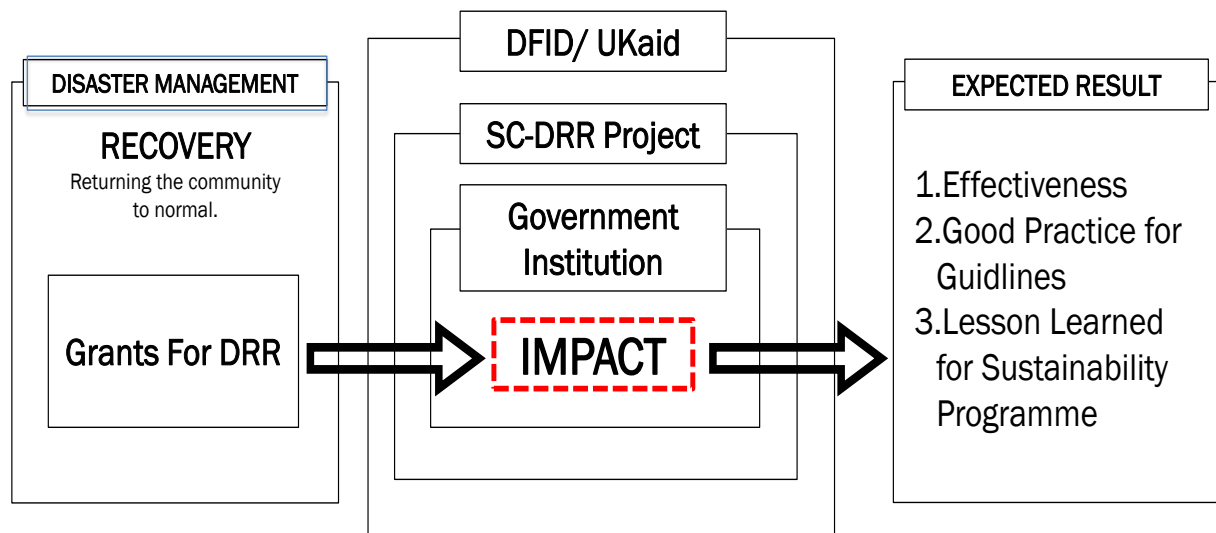
- Firstly, the importance of a conceptual framework is described.
- Secondly, the key issues, identified through literature and semi structured interviews, are discussed.
- Thirdly, the process of developing the conceptual framework is discussed.
- Fourthly, the conceptual framework of the study is presented.
- Finally, the chapter is summarised.

### **4.2. Importance of a Conceptual Framework**

A theoretical framework is an initial illustration prior to becoming the conceptual framework. Saunders et.al (2009) mentioned *"An issue on which there is a wealth of literature to express a theoretical framework and a hypothesis lends itself more readily to deduction. Initial conceptual frameworks can be subsequently reviewed and then finalised as a means to represent and explore key themes and relationships in data"* (Saunders et al., 2009). The conceptual framework is an important part in the research study. In line with Saunders et al. (2009), Miles and Huberman (1994) stated that a conceptual framework aims to explain the main concepts of the research, its key factors, units of analysis, its variables and its relationships, either graphically or in the narrative form (Miles & Huberman, 1994). Miles and Huberman (1994) state in addition that a conceptual framework consists of concepts, assumptions, expectations, beliefs and theories that support and inform the research in the line of research (Miles & Huberman, 1994). Based on notes and recommendation by the scholars above, the researcher, together with his supervisor, carried out discussions related to the design of the framework for this research.

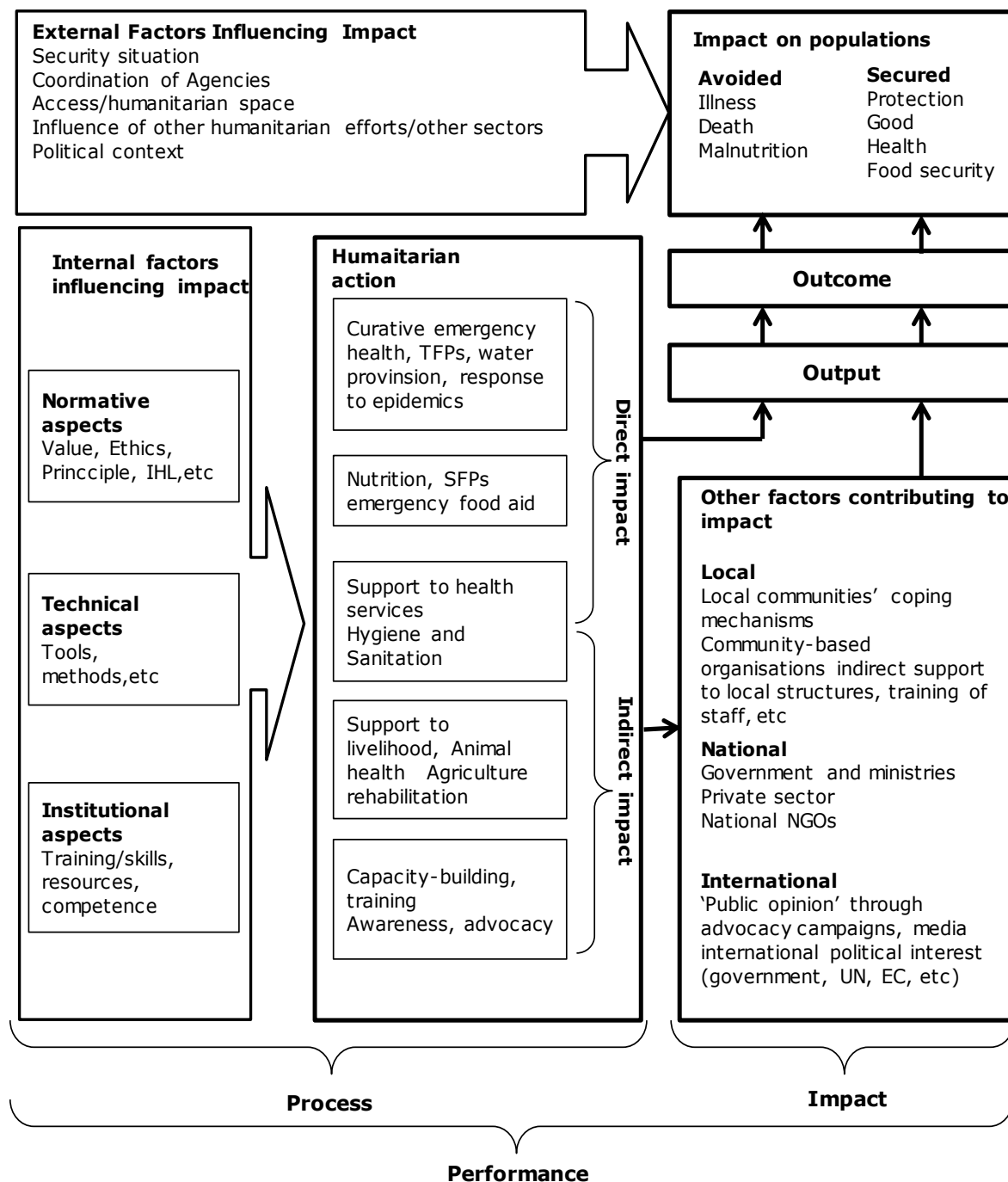
This study aims to explore and investigate the impact of the UKAid project in support of the Disaster Risk Reduction programs implemented by the Indonesian Government. The primary objective (see section 1.3) is to analyse the barriers and obstacles affecting the impact of UKAid at national government level in order to optimise foreign assistance funds for DRR activities, and to identify and asses the lessons and good practices learnt post DRR project in order to implement sustainability programs into regular government programs. In the first year of this research, the researcher was made the initial of conceptual framework for this research trying to focus on connectivity between the disaster

management cycle, in particular the recovery aspect, and especially about the grants for DRR, also the impact of the SCDRR project performance and effected to the government institution. The expected result of the research has been made based on analysis from the research background and complemented based on literature review analysis. The initial concept is presented in Figure 4.1



**Figure 4.1 Initial Conceptual Framework of Research**

Yin (2009) mentioned that when designing a good case study, the researcher is forced to construct preliminary theory (Yin, 2009). The conceptual framework shown in Figure 4.1 above demonstrates the analysis researcher from the the disaster management cycles (see section 2.2), , and the analysis of the impact of humanitarian aid as recommended by Hofmann (2004). The originally framework, suggested by Hofmann et al., (2004) is described in Figure 4.2 below.



**Figure 4.2 The wider dimensions of impact: a framework (Hofmann et al., 2004)**

Figure 4.1 describes how the research problem is embedded within the scope of this research. The unit of analysis of this study; "the impact of DFID/ UKAid grant for DRR at the level of government" is embedded through the SC-DRR project activities. It demonstrates how the impact of grants for DRR projects contribute to sustainable DRR programs in the country. Developing a conceptual framework is an essential phase of the



research procedure and guides the researcher in the data collection and analysis process. This research has, therefore, established a conceptual framework before the primary data collection. The conceptual framework was established based on the literature review and further refined based on interview result. It explains the influence of foreign aid or humanitarian aid in support of DRR programs in the country post disaster in the disaster prone area.

In the next section the key issues identified from literature are described.

### **4.3. Key Issues Identified from Literature Review**

Key issues from the literature review will support the research in developing the conceptual framework in the research method. Chapter 2, the literature review, explored comprehensively literature related to the research study. The researcher has identified several related key issues in support of the aims and objectives in this study, it also supports by result from interview with the resources person. A conceptual structure was then established based on these findings. The significant areas known through literature that have been identified are: Humanitarian aid influencing DRR paradigm (see Section 2.5 and 2.9.2); Effectiveness DRR government mission (see Section 2.2, 2.5, 2.8 and 2.10.3); Integration DRR program into the government work plan (see Section 2.10.5); The role and challenge of government in implementation of aid (Section 2.3 and 2.10.5); The need for lessons learnt and good practice in the government regulatory framework (see Section 2.8 and 2.10.5). The key areas are discussed below:

#### **4.3.1. Humanitarian Aid Influencing DRR Paradigm**

After the earthquake and tsunami in 2004, Indonesia was open to every kind of humanitarian assistance from various countries, in particular, to responses to the emergency and recovery phases of the disaster.

Disaster Risk Reduction in Indonesia has been improving ever since. The government of Indonesia continues to change the paradigm from emergency response to prevention response. In prevention response, the government is concerned about mainstreaming disaster risk reduction. It also, as a part of international mandate from Hyogo Framework for Action (HFA), took action to establish the National Action Plan for Disaster Risk Reduction (NAP-DRR) in 2006-2009). DFID (2006) showed that disasters increase the vulnerability of the poor, augmenting their poverty and preventing them from taking opportunities to improve their economic status. In Aceh, Indonesia, the 2004 Tsunami is estimated to have increased the proportion of people living below the poverty line from 30% to 50% (DFID, 2006).

An interviewee recorded in Chapter 5 stated that the government of Indonesia is commitment to allocating 1% of its budget to the DRR program and related activities. The 1% of state budget allocated for DRR program is a global commitment. The global commitment also included the budget for recovery and climate change. One interviewee noted that, *"...most do not require a global platform in order to dedicated 1% for DRR. There are three global commitments: 1% of the state budget is dedicated to DRR, 10% of the recovery of funds should be dedicated to DRR, and another 30% of funds dedicated to climate change must be dedicated to DRR..."* (R04/Ref2).

BAPPENAS and BNPB identified on-going capacity constraints and the lack of specific DRR budget lines in regional agency budgets. As the first document mainstreaming DRR into development in Indonesia, the evaluation strictly followed the 5 priority recommendations that form the core of HFA and are adapted to match the characteristics of disaster management in Indonesia (Fargher et al., 2012). The 5 priority recommendation are : (1) *Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;* (2) *Identify, assess and monitor disaster risks and enhance early warning;* (3) *Use knowledge, innovation and education to build a culture of safety and resilience at all levels;* (4) *Reduce the underlying risk factors;* and (5) *Strengthen disaster preparedness for effective response at all levels* (Fargher et al., 2012).

UK Aid through DFID joined the Indonesian emergency assistance DRR program, with the biggest allocation from the DFID grant and as noted by interviewee *"...indeed most of DFID, half of the fund, so really the biggest fund, I think eight million or so..."* (R02a/Ref1). The Government of Indonesia was helped by the support of DFID. The allocation of the grant from DFID is officially recorded in the DIPA (state budget). The interviewee added more; *"...DIPA is only a condition for recording but the activity remains in accordance with the programs that we operate..."* (R02b/Ref1).

The commitment of the British government through the DFID is via a UK Aid flag mission. Specifically the DFID is committed to mainstreaming DRR into government and is stated in DFID (2006) as the DFID commitment (DFID, 2006).

In early 2007 the government found difficulty in switching the mind-set from rehabilitation and reconstruction to disaster risk reduction/ mitigation. Since 2013 Indonesia has operated many DRR programs in collaboration with universities and international NGO's. The next section will discuss the effectiveness of the DRR government mission.

#### **4.3.2. Effectiveness of DRR Government Mission**

Safer Communities through Disaster Risk Reduction, called SC-DRR is the Indonesian DRR government mission that distributes British humanitarian aid. This program is designed to

provide support to : (1) the establishment of a disaster risk reduction policy, legal and regulatory framework; (2) the establishment and strengthening of institutional systems that support decentralized disaster risk reduction integrated with local level development; (3) the strengthening of education and awareness programs established and strengthened to make development/disaster linkages understood; and (4) the demonstration of disaster risks reduction initiatives that make communities safer (Project, 2009). During implementation of the SC-DRR, pilot activities in eight provinces were introduced. The eight provinces were: Sumatera Barat, Bengkulu, Central Java, Special Region of Yogyakarta, Bali, East Nusa Tenggara, North Sulawesi, and Maluku. The project has also initiated pilot schemes in partnership with the City of Palu in Sulawesi.

Primary data and analysis is derived from semi-structured interviews in Chapter 5 related to the effectiveness or performance of the £4.3 million from humanitarian aid provided by the British government. Comparing the effectiveness and ideal absorption of how these budgets were disbursed is difficult. One interviewee mentioned that, *"...£4.3 million were to be spent but over how many years? It tried to find a comparative of other funds from other donors and tried to find out ideally how the implementation of the programme funds were absorbed and produce output that is effective? how much in a year?..."* (R10b/Ref1). It can only be investigated on a like for like basis. DFID (2008) is concerned about aid effectiveness and how to achieve maximum poverty reduction for each pound or dollar of aid spent (DFID, 2008).

Another interviewee identified related the effectiveness of disaster resilience village *"...that data is there all nice of it, but it's expensive, so a village of about 700 million if not mistake, and it was accompanied by an NGO being auctioned are appointed directly by SCDRR..."* (R18/Ref1). After SCDRR complete, local government and community was feeling the benefit from the disaster resilience village and local government trying to be allocated based on capacity of local state budget around 300 million for one village.

Differentiation between 700 million rupiahs by SCDRR and 300 million rupiahs by BNPB was allocated as the part of performance and sustainability of program disaster resilience village. In the next section related the integration DRR program into the government work plan.

#### **4.3.3. Integration of DRR into Government Work Plan**

The disaster risk reduction program was integrated into the government work plan by the Government of Indonesia after an earthquake and tsunami attacked the Aceh Province and Nias Island, North Sumatera province around 2005. But the government did not make the DRR their first priority as rehabilitation and reconstruction was more of a priority at that time. It was also prioritising the five points of the Hyogo Framework for Action. In 2006,

government initiated the first National Action Plan for DRR (2006-2009) and continued this with the NAP-DRR FY 2010-2012. It was integrated into the annual government working plan (called RKP), and every 5 years has been incorporated into National Medium-Term Government Plans (called RPJMN) in a consistent and regular attempt to increase the anticipation of disaster paradigm through various efforts of disaster risk reduction and stated in the NAP-DRR.

Integration of the DRR into the government work plan has become important as an instrument to reduce poverty but it has been undermined by worsening public health, damage to infrastructure and conflict caused over diminishing resources. There is a need for mitigation in order to avoid greater impact and to help developing countries react to the unavoidable effects of DRR (DFID, 2007b). SC-DRR was the first systematic program to support the paradigm shift of the disaster management agenda in Indonesia (Hillman & Sagala, 2011).

Based on the key issues in the literature section, the researcher also identified the resources during interview. The majority of the interviews were related to the sustainability of the SCDRR program being integrated into the national program. The interviewee stated that *"...BNPB has adopted a concept derived from this program, now with the name from the village program it is actually from; it originated from the ERA Project then was tested in SCDRR Project and continues to be developed as the Resilient Village BNPB program..."*(R05/Ref1). Disaster resilient villages became one of the national programs at BNPB after the SCDRR project was completed. It also related to DIBI Indonesia. Another interviewee maintains that PODES and SUSENAS data was integrated into DIBI. He's noted, *"...demographic data such as PODES (The Village Potential Statistics), SUSENAS (National Socio-Economic Survey) has been synchronized into the historical DIBI data using demographic data from Bappenas as a baseline ..."*(R07/Ref1). It indicates that DIBI is an application, which is easy to integrate with other systems.

In relation to local government programs such as the sustainability of livelihood and the performance of community for sustainability livelihood in the locations of the pilot project, the interviewee mentioned that, *"...SCDRR is more of a legal framework than activity at the community, then we prepare a community plan, community-based DRR planned for sustainable livelihoods as a legal framework ..."*(R15/Ref1). Sustainability of livelihoods in the community is variable. The role of local government support played a part in the success of better livelihoods.

The related the role and challenge of government in implementing aid will be discussed in the next section.

#### **4.3.4. Role and Challenge to Government in the Implementation of Aid**

Various scholars discussed the performance of grant or humanitarian aid for development programs. Geale (2012) mentioned that humanitarian aid is disseminated by necessities of people, families, and groups. IFRC (2007) discusses concern about the significance of impact from politics and that furthermore that a few nations are still impacted by religion and religious positions in the society (Geale, 2012; IFRC & RCS, 2007). Foreign aid for support of government programs are mostly known as grants, and Djankov et.al (2006) argued these may affect economic growth through indirect networks that cannot be captured during analysis of the direct effect of aid on growth. Aid may modify the investment share of GDP, which indirectly affects economic growth, or may also affect government consumption, which is recognised to have a negative consequence on economic progress (Djankov et al., 2006).

The Government of Indonesia treats trust fund institutions that manage foreign grants differently from those that are granted for disaster management. This was initiated by Bappenas and BNPB. The interviewee mentioned that *"...as for the pattern of grants the Bappenas with BNPB has already established a trust fund in 2010 and 2011 that had originally been an IMDFF special DR, specifically geared to support the recovery. In 2013, it was converted into the Indonesia Disaster Fund which means the trust fund for the entire disaster management..." (R16/Ref4)*. The post IMDFFDR was established and is run with government regulation. During the implementation government made a policy for adjustment so that this institution could cover any fund whether it be from a loan or grant for disaster aid. The institution is called the Indonesia Disaster Fund (IDF).

According to White et.al (2004) related distribution of aid should be protected against the secondary effects and longer-term consequences for the economy, for example levels of household and national indebtedness, fiscal and monetary performance or the effects of relocating or restructuring elements of the economy or workforce or resettling populations (White et al., 2004). The interviewee from BNPB mentioned that grants are allocated to fill the funding gap between state budget allocation. The interviewee maintained that *"...now the quantity of BNPB toward foreign grants is more of a fill funding gap..." (R16/Ref2)*.

#### **4.3.5. Need for Lessons Learnt and Good Practice in the Government Regulatory Framework**

Various lessons learnt have been identified during both implementation and post implementation of British government aid through the DFID in Indonesia. It was found that in establishing the disaster resilience village program, regulation was related to mainstream DRR into development at local level. DFID stated that in CSCF Monitoring that lessons learnt can only succeed when there is time to reflect on practice, identify lessons,

publicise them to others and when others have the chance to absorb and apply the lessons (DFID). Good practice also has been published in the AIFDR report that was in line with DFID program implemented in particular when they support Oxfam and its local partners to implement the Building Resilience Program with Community Organizers and Village Preparedness Teams of 105 villages in 16 districts and 6 Provinces of Eastern Indonesia. AIFDR also support BMKG to improve their systems and processes for producing impact maps. As a result, BMKG currently has produced ShakeMaps and provides these to BNPB. These maps help BNPB to quickly identify communities most likely to be impacted, determine response priorities and provide information to the government and public. (Fargher et al., 2012). Implementation of regulation and policies related to disaster management needed support by political support and public support. Integrated into regulation policy are disaster resilience and climate change as mandated in the international commitment for mainstreaming DRR into development. The regulation support can be seen in the establishment of government regulation no.24 in 2007 relating to disaster management and was followed by ministerial regulation as a guideline for local government in the establishment of the local disaster management agency as the institution at regional level. In relation to the Indonesia disaster database information (DIBI), the existing DIBI still needs to be empowered to produce something that can effect policy in the local government. Some of the other DIBI activities that influence policy for the provinces and also reach out to the district level.

As captured from semi-structured interviews, DFID (UK Aid) aims to be the pioneer in lessons learnt and good practices for both the DRR program in Indonesia and other donors following the model of DFID whilst mainstreaming DRR in Indonesia. DFID also brings a commitment as noted by the interviewee *"...early initiation I remember was about fifteen or eighteen million, therefore, about nearly half of the source of DFID..."* (R04/Ref5). He also added, *"...that is a programme that is arguably the pioneer in Indonesia, in conjunction with disaster risk reduction DRR..."* (R04/Ref4). The SCDRR program is one of the big investments of DFID for DRR in Indonesia, and brings a different perspective for government institutions when handling disaster management issues. Around 2011 when the SCDRR project was implemented, climate change was also an issue that was adopted to DRR.

Another lesson identified, was the effect of DFID on DRR after the Indonesian disasters including the continuity of research sciences on DRR and further cooperation by way of joint research between the universities. The interviewee mentioned *"... need for science or methodology to enhance the introduction of threats, introduction of risk that can be learned from the scientific knowledge exchange is still important ..."*(R21/Ref3). The government regulation support interviewee argued: *"that the central government would form a*

*presidential regulation or government regulation in order to determine the status of the disaster, which entered into new criteria for national coverage, province scope, district and city coverage, so that we (the local government) are not confused whilst categorizing the provincial disaster, district or national disaster. This also concerns budget allocation to such disasters...” (R18/Ref1).*

The next section will discuss the development of the conceptual framework.

#### **4.4. Development of the Conceptual Framework**

The development of the conceptual framework is brought about by exploring the literature review and expanding this from an initial framework (see Figure 4.1) in order to become the conceptual framework for this research. Whilst exploring and investigating the impact of UK aid in Indonesia, the researcher inserted analysis from the framework that was published by Hofmann et al. (2004) about the impact in humanitarian aid. The researcher modified this in order to integrate and link aid performance in the disaster management cycle in connection with the grant for DRR program and its activities. The next section discusses this external factor (Hofmann et al., 2004).

##### **4.4.1. External Factors Influencing Impact**

As explained in section 4.3 the key issues that have been identified by the literature review are supported by interview results and further justified through analysis of the impact on humanitarian aid framework by Hofmann et al. (2004). The scholar Hofmann categorizes external factors influencing impact” in the cluster Security situation as; coordination of agencies; access/ humanitarian space; influence of other humanitarian efforts/ other sectors; and finally, political context (Hofmann et al., 2004).

Based on the key issues in the literature review, interview results, and according to Hofmann et al.,(2004), the researcher categorizes the 3 external factors related to the issue as; (1) coordination of agencies, as an important part of government coordination beginning at district, regency and national levels as stated in the section 2.3, 2.6, and 2.10.3; factor number (2) is categorized as the influence of other humanitarian efforts/other sectors. They are related and effect the country which accepts the humanitarian aid as noted in the section 2.5, 2.6 and 2.8; and (3) related to the political context. Political activity such as policies to develop donor and recipient countries, as highlighted in section 2.8 can reduce unnecessary deaths and in the long-term decrease the requirement for humanitarian aid.

#### **4.4.2. Internal Factors Influencing Impact**

Normative, technical and institutional aspects have a role in influencing the impact. According to Hofmann et al., (2004) the 3 aspects which contribute to the impact of aid are: (1) Normative aspects, which included the value, ethics, principles, IHL, etc.; (2) Technical aspects, which included tools, methods, etc.; (3) Institutional aspects, such as training/ skills, resources, and competence (Hofmann et al., 2004). In relation to the 3 aspects published by Hofmann, the researcher identified 2 aspects that apply to this study, they are normative and institutional aspects. The researcher has identified literature review support in the section related with the literature review in particular in the section 2.2 and section 2.10.1 related to value, ethics and principles in normative aspects. Institutional aspects are identified in particular in the training/skills in section 2.3, 2.4, and section 2.10.3. Resources are related in sections 2.5 and 2.9.2. Another key factor in the development of the conceptual framework comes from humanitarian action and will be discussed in the next section.

#### **4.4.3. Humanitarian Action**

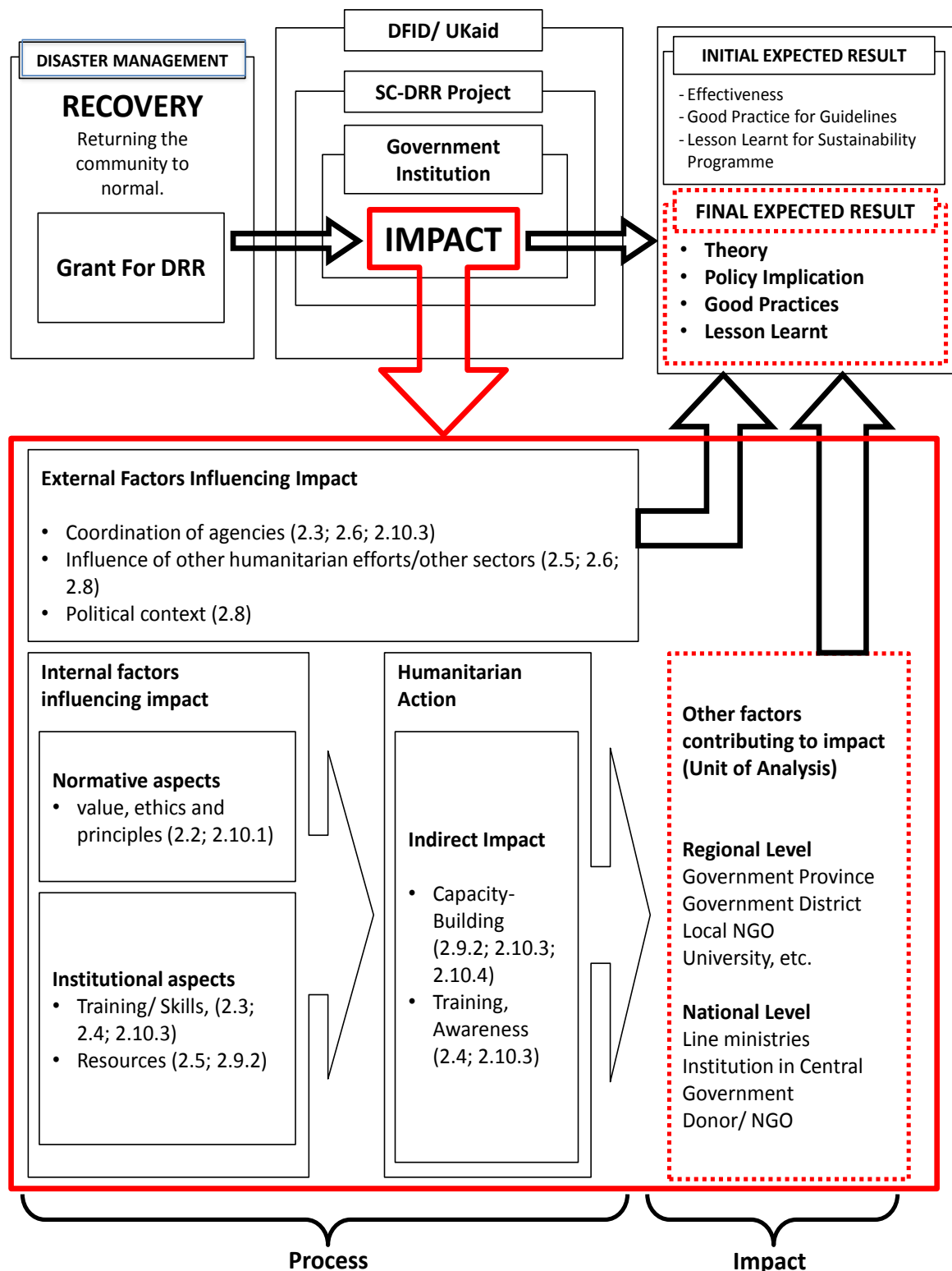
In the case of disaster management, humanitarian action is commonly needed for the initial response to an institution in the country or another country/ international institution. Various models of humanitarian action can be applied to a disaster prone country. Generally, the action will cover health, livelihood and capacity building. According to Hofmann et al., (2004) there are five actions that have been categorized within the category of humanitarian action. These are: (1) Curative emergency health, TFPs, water provision, response to epidemics; (2) Nutrition, SFPs emergency food aid; (3) Support to health services Hygiene and sanitation; (4) Support to livelihood, animal health Agriculture rehabilitation; (5) Capacity-building, training, Awareness, advocacy (Hofmann et al., 2004). Hofmann et al., (2004) also categorized that the five areas can be separated into direct and indirect impact areas. Areas (1), (2) and (3) are direct impact, and (3), (4), (5) indirect. In this study the relevant factors of humanitarian action are related to no.5, and are suitable for a SCDRR case project. In terms of indirect impact, the researcher has identified the key issue from literature as capacity building as in sections 2.9.2, 2.10.3 and section 2.10.4; training, awareness is discussed in section 2.4 and section 2.10.3.

#### **4.5. Conceptual Framework**

The conceptual framework of this study is presented in Figure 4.2. The conceptual framework illustrates the processes that have been expanded from the initial conceptual framework in Figure 4.1 and develops the impacts and related influences from internal and external factors, supporting grant design by Hoffman et al., (2004) relating to the analysis



of impact on humanitarian aid. The expanding of this conceptual framework is strongly supported by the objectives of both level and impact analysis. In particular, in *level of analysis* Hoffman describes 'The impact of a particular humanitarian aid project' as "*who wants to know and why?*", in order to improve their work, *aid agencies* demonstrate impact and make choices between projects; *donors*, choose what to fund and develop policy; *Agencies and donors*, assess the impact of new approaches and innovations in programming; *National governments*, guide disaster preparedness, planning and response (Hofmann et al., 2004). Furthermore, the conceptual framework indicates the unit of analysis for the study, in investigating and exploring the impact of British Government Aid through DFID/ UKAid in support of DRR program in Indonesia. The conceptual framework with the key literature findings is presented in Figure 4.3.



**Figure 4.3 Conceptual Framework of Research with Key Literature Findings**

In the Figure 4.3 it can be seen the highlight with the circle dot at the initial conceptual framework that was modified after literature review process (details in development of conceptual framework in section 4.4), also in the analysis the impact process circle that show the section number in the literature review that was support external factors, internal

factors, humanitarian action. The analysis for regional and national level (circle dot below) exist after analysis interview and following keys finding literature.

#### **4.6. Summary and link**

This chapter explains the process of identifying the key issues from literature relating to humanitarian aid project, role of government, mainstreaming DRR into development, and lessons learned needed for the development of the conceptual framework of this research. The process started with presentation of the initial conceptual framework and includes the identification of the key issues that arise from the literature review. This is followed by the development of the conceptual framework which is expanded from the disaster management framework and the framework for analysis of impact of humanitarian aid. In particular, it is identified through cross sections of the literature review integrated with the conceptual framework in Figure 4.3. It is supported by looking at the external factors influencing impact, internal influencing impact factors and also in humanitarian action factors. Having developed the conceptual framework of the study the next chapter presents the data analysis of primary data from semi-structured interviews.

# **CHAPTER 5 - Data Analysis**

## **5.1. Introduction**

This chapter presents the data analysis of interviews relating to the case study and is focused on the performance of UK Aid through DFID (see details in section 2.9) whilst implementing the SCDRR project (see details in section 2.10). The detailed sub headings for this chapter are:

- Firstly, background information from the interviewees who participated in relation to the case study is provided, and the procedures adopted for analysing the interviews are presented followed by the main stages and key activities of the case study.
- Secondly, the exploratory stage and data analysis are presented based on the results from the semi-structured interviews in the sub heading that has been classified based on the related issue in this research, using Nvivo software and also supported by the literature review.
- Finally, the summary analysis of the interviews is provided.

## **5.2. Background Information and Interviews in Relation to the Case Study**

### **5.2.1. Background Information to the case study**

Investments in DRR are actually increasing, but the trends in the continuous growth of exposure and vulnerabilities to disasters indicate that more needs to be done. There have been some positive efforts to reconsider previous approaches with good effect. UNESCAP and UNISDR (2012) reported the amount of DRR investments by the Government of Indonesia have grown from less than 0.6 % of the Government's total budget in 2006 to more than 1 % by 2012 (UNESCAP & UNISDR, 2012). The results of this impact are formulated in the first three-year National Action Plan for Disaster Risk Reduction (NAP-DRR) (2006-2009). The birth of NAP-DRR elicited a positive response from the British Government through the Department for International Development (DFID), now under UK Government Aid (UK Aid).

According to DFID (2011b) UK Aid through DFID provides ways of improving resilience programs for countries which need assistance for mainstreaming DRR into development programs. DFID is concerned with program development, in particular: investing in infrastructure, developing skills to diversify income sources, improving systems that provide an early warning, and making sure these warnings lead to early action and utilizing

insurance providers to minimise the impact of a disaster (DFID, 2011b). The programs developed by the UK government are implemented after the recipient becomes qualified after assessment of basic needs by each country verified. DFID was implemented in Indonesia through the continuation of the commitment from the British government through a grant of £ 4,312,500 under the programme Safer Communities through Disaster Risk Reduction (SCDRR) between 2007 - 2010. According to DFID (2010) the UKAid database is designed exclusively for the mainstreaming of Disaster Risk Reduction into development, and also to promote risk reduction as a component of development for the benefit of poor communities at risk from natural disasters (DFID, 2010b).

The project "Safer Communities through Disaster Risk Reduction in Development" (SCDRR) was designed to help Indonesia implement this paradigm shift by mainstreaming DRR principles into the development process. The ultimate aim of SCDRR was to ensure that a culture of safety becomes the norm in Indonesia, both within government and within communities vulnerable to disasters. According to the SCDRR program was designed to provide support to the four areas and detailed was stated in the SCDRR project presentation in section 2.10.

The resource comes from different elements of government and non-government. first element from government: central government (line ministry) and local government (agency related planning and disaster management). Second element from non-governmental: representatives of local NGOs, international NGOs, donors, and experts in disaster management. All of the resources are related to the case study. The next section will discuss the stages and key activities involved within the case study.

### **5.2.2. Background Information of Interviews in Relation to the Case Study**

Semi-structured interviews were conducted amongst all levels of representatives of various institutions and of the DRR implementation project in Indonesia. They are all involved in disaster management representing central government, local governments, national consultants, UN members and national NGOs. Please refer to Section 3.12 for background information and procedures adopted to analyse the interviews. The data was collected through interviews and analysed as detailed in Chapter 3. As detailed in section 3.12.1 content analysis was used to identify the key concepts and themes relating to the study. As such, the study considered all relevant and significant concepts irrespective of the word / phrase count. Accordingly, the content analysis adopted in this research was taken in the form of qualitative content analysis and code using NVivo (version 10) software, and cognitive maps were developed. The cognitive maps were developed to capture the impact of implementing the SCDRR project in Indonesia to identify the best practice and lessons learnt when creating a sustainable national program based on DRR (Bazeley, 2007). The

cognitive map figures are shown in **Figure 5.1, Figure 5.2, Figure 5.3, Figure 5.4, Figure 5.5, Figure 5.6, Figure 5.8.**

### **5.3. Stages and Key Activities of the Case Study**

The case study research approach identified the following main issues: understanding of UKAid in support of the DRR in Indonesia; SCDRR project as part of humanitarian aid and as implementer of UKAid in Indonesia; obstacles affecting the impact of UKAid at governmental level when optimising foreign assistance funds for DRR activities. This was conducted to identify and assess the lessons and good practices learnt after the DRR project in maintaining post project sustainability by incorporating the lessons learnt into government regulatory framework.

Throughout the case study, the analysis is based on semi-structured interviews as the primary data source, and secondary data using a performance report from activities of the SCDRR project, donor/ NGO reports and government reports.

### **5.4. Exploratory Stage of Analysis**

This section provides information about the data analysis and separate findings of the exploratory stage based on the data collected through semi-structured interviews. It also categorises the impact analysis related to key literature found from the literature review. The researcher classifies the impact of the analysis into seven areas: (1) Aid influence on government institutions; (2) Challenges and lessons learnt post SCDRR; (3) The effect of humanitarian assistance on DRR in Indonesia; (4) The existence of Indonesia Disaster Data and information (DIBI); (5) The existence of DFID and UK Aid in Indonesia; (6) Optimizing the DFID grant through Project SCDRR; and (7) The influence of the SCDRR Project. The 7 sections will be split into sub sections.

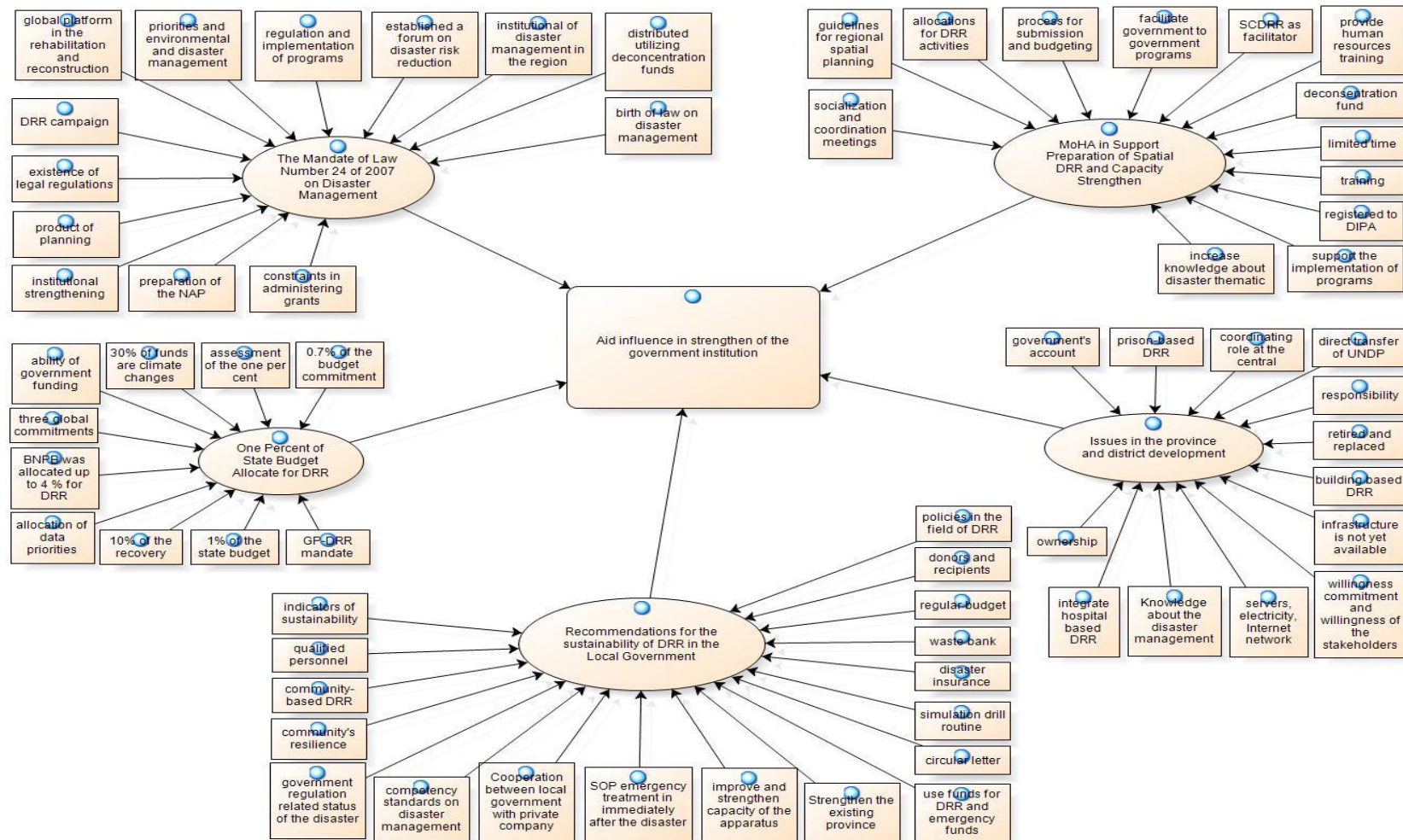
The next section is the analysis of specific issues based on semi-structured interviews supported by the related literature review.

### **5.5. Aid Influence on Government Institutions**

Interviews processed in this research relate to aid contribution and its subsequent influence on government institutions. The researcher identified the issues that are outlined below in their specific sub-sections.

The sub-sections and related issues found during analysis are shown in the cognitive map Figure 5.1.

**Figure 5.1 Cognitive Map of Aid Influence in Strengthening Government Institutions**



### 5.5.1. Issues in the province and district development

Diversity of government at province and district level is a known quantity in the Republic of Indonesia. Foreign aid influences government performance in the provinces and districts, respondent **R10a** stated that *"...the main issues relate to the development within the province..."* (R10a/Ref1), and another stated that *"...the infrastructure is either not yet available, or if available, overused and there is a lack of servers, electricity, Internet network..."* (R10a/Ref2). This will impact negatively *"...customers are disconnected, are without the Internet..."* (R10a/Ref4), this would mean difficulties where *"...it is a large area and has not had its own disaster data..."* (R10a/Ref5). Stated that *"...Local government did not respond well..."* (R10a/Ref6), in particular, R10a noted that the *"...infrastructure is unstable because it is in a newly constructed building, as a result the server was damaged..."* (R10a/Ref7). Knowledge about disaster management is also one of the important factors, specifically for updating the progress during the incidence of disaster.

Another issue relates to the coordination between central government, provinces and districts. Respondent **R02a** related their concern of ministry *"...it is a heavy responsibility, and must use a mechanism to deal with the regions and must be implemented by the Ministry of Home Affairs (MoHA) and Bappenas (Ministry of National Development Planning Agency) in a central coordinating role..."* (R02a/Ref1). Relating to budget policy and specifically the budget transfer process from the SCDDR project in central government to provinces and districts. **R02b** noted *"...implementation of direct transfer of UNDP can still be done, but that must be through the government's account and must be set first..."* (R02b/Ref1). This affects the maintenance of assets after completion of the project. Another challenge that affects all parties is, *"... for example, apparatus used was old and the operator was only few months from retirement but the knowledge went with him when he retired and was replaced with another..."* (R02b/Ref2).

At district level in the province of Bengkulu the authorities are concerned with buildings based on disaster risk management, one of the provincial developments that the planning agency has to look at was the refurbishment of the prison building. A respondent from Government Province of Bengkulu through **R06** said, *"...we thought about prison-based disaster risk management, because of its location at the seaside..."* (R06/Ref1). In particular, in locations of public health services, *"...we have many hospitals and hospital-based experience is needed if there is an earthquake or other disaster. The issue is how to integrate the hospital-based disaster risk reduction..."* (R06/Ref2).



Ownership became the part of issue between central and local government, especially in relation to the commitment and ownership of maintaining the disaster management institution regularly. Resource person **R11** noted, *"...the main challenge is the commitment and willingness of the stakeholders themselves, how do we get them to work together, particularly in the area of establishing ownership."* (R11/Ref1).

The commitment to support regular budget allocation, support capacity and provide maintenance would help strengthen the provinces and districts in dealing with disaster management institutions. It is one of the challenges after the completion of SCDRR for the provinces and regions.

### **5.5.2. MoHA in Support of Preparation of Spatial DRR and Capacity Strengthening**

The Ministry of Home Affairs (MoHA) has the responsibility for managing the local government (provinces and districts), including regulation, institution, budgeting, and capacity building. MoHA was running the program activity using the national budget. **R08a** noted about the performance of MoHA in support of SCDRR program, *"...It has been made the preparation of guidelines for regional spatial planning (RTRW) by MoHA..."* (R08a/Ref1). R08a concern with the role of MoHA in preparation of the guidelines and it mostly affected the original main task of MoHA and was difficult to complete in such limited time for all of the instruments and guidelines, such as the policy regulation for implementing the guidelines.

As is commonly the case, grants or foreign aid is based around regulation in Indonesia, therefore when the budget is to be implemented it has to register with the ministry who will execute the budget, **R13** was concerned about *"...(grant SCDRR) registered to DIPA (specific budget) of MoHA, so the process for submission and budgeting through the state funds of MoHA. So, it was like deconcentration fund from central funds but, which carry out the area. Allocations for DRR activities in eight provinces and one city..."* (R13/Ref1). During implementation of the project and this grant distribution as a new model and affected the implementation process. Government had to revise the regulations about grant optimisation and implementation, they also have to release the new regulation related to this kind of model. R13 noted about the grant registration process as part of the strengthening capacity for government, R13 said, *"...If SCDRR looks like a deconcentration fund, but not the deconcentration fund activities for physical development, just to increase the capacity of the apparatus, so more to socialization, meetings, coordination meetings continue. There are also some*

*simulations, so that no assets were large at handover, unless the asset is stationery, including computer equipment...” (R13/Ref2).*

Another effect in strengthening the capacity apparatus of disaster management institutions in local government is through training-training and various courses.

**R14** expressed *“...the visible effects directly to local governments, among others; a lot of training that we coordinate with the local government especially that we invite. We made a presentation about the effect an increase in the capacity they need, for example, we provide human resources training to increase knowledge about volcanoes...” (R14/Ref1).* **R16** noted *“...SCDRR has more programs to facilitate government to government programs, and it runs and can continue, if you ask me more over there means SCDRR as facilitator very useful at that time. Government in this case Bappenas and the beginning BNPB formed it is helpful to support the implementation of programs that have been launched or planned...” (R16/Ref1).*

### **5.5.3.State Budget Allocation for DRR**

One per cent of state budget is allocated for Disaster Risk Reduction (DRR) program to provide resilient people in the case of disasters. The “1 %” word appears after implementing the SCDRR program in separate locations. The local government was considering the allocation from SCDRR program into their area as sufficient for getting better impact at the community level.

The basis of 1% of state budget being allocated for DRR programs comes from a global commitment. The global commitment also included the budget for recovery and climate change. **R04** noted about this, *“...while most do not require a global platform for dedicated 1% for DRR. So, then there are three global commitments to that: 1% of the state budget dedicated to DRR, 10% of the recovery of funds should be dedicated to DRR, and another 30% of funds are climate changes that must be dedicated to DRR...” (R04/Ref2).*

R04 added about commitment from the government of Indonesia in terms of DRR priority, saying, *“...if nationally we could see in 2012 that nearly 0.7% of the budget commitment that has been allocated for DRR activities...” (R04/Ref3).*

At the matter of fact, about “... 1 % of state budget allocation” still in discussion at MoHA. **R08a** noted the questions from the minister, *“...the minister asked: why we have allocated 1%? How to calculate it? What is it essentially? Well, this statement needed more assessment, research and test dissemination, and here we do not have time...” (R08a/Ref1).* To answer the questions from the minister, MoHA

through SCDRR secretariat in MoHA. The respondent R08a mentioned the many factors to be a part of "1%." R08a was concerned about *"...many factors. It is important for it calculation, assessment of the 1%. We do not have time. Should we have a name with scientific paper in order to put it?" (R08a/Ref2).*

The National Disaster Management Agency (BNPB) was allocated up to 1% of the national budget for DRR, as dealing of international agreement to support DRR, and it is in line with that which **R16** mentioned about progress being allocated *"...on disaster risk reduction, investment was related to crossing my recollection institution until 2012 and the new 2013 to 0.6%, 0.6% of the total national budget..." (R16/Ref1).* Collaboration between BNPB and Bappenas for integration DRR into national development planning Action Plan. *"...Bappenas identification as I recall it was in 2012. Around 2012 to 2013 reached 0.6% to 0.7% of the total..." (R16/Ref2).*

R16 added information about what had to adjust with another sector of DRR, *"...more to the addition to the possible limitation on the ability of government funding, both the distribution pattern of allocation of data priorities. There is also nothing to do with the basic needs that must be met by the government, for example, the obligation 20% of education or whatever percentage, what percentage of the health budget it is set in the legislation. While the disaster itself that was only because of international agreements to allocate 1%, it is not amplified..." (R16/Ref3)* through the strong regulation for backup of the agreement.

In other deputies in the BNPB they were allocated up to 4% for DRR with other lines ministries, **R22** express about this per cent allocation. *"...In section than 1% but we are to make him be 1% of all, there must be the engine of his right to make that drive was, because he was given the law given it as an engine to drive at, the other right cannot drive a means other ministries. He has the main task of this hour, there are 4% of the main duties of 100% is related to the disaster..." (R22/Ref1).*

#### **5.5.4. Recommendations for the sustainability of DRR in the Local Government**

Sustainability for every development project, and in particular for DRR activity, is mostly for local government in Indonesia and is really useful. In the local government, aid or grants will support the apparatus, budget and capacity building. According to the OECD (2013) *"Sustainability is concerned with measuring whether the benefits from an activity are likely to continue after donor funding has been*

*withdrawn. Projects need to be environmentally as well as financially sustainable"* (OECD, 2013).

The limited budget of the local government for implementation of DRR activities became a big challenge for every local government and triggered the local government to get active to build the cooperation with other countries to get the foreign aid. The scheme for this cooperation will be directly via humanitarian aid or through central government to get grants for the disaster management program.

A variety of opinion related to the recommendation for sustainability of the DRR program at the local government level was expressed. Even though locals have accepted the national program related to DRR to be implemented into local government that had to consider the ability of the local government budget for development. In the semi structured interview with R08a about optimisation of performance of MoHA, **R08a** was interested with the all issues related to sustainability and suggested some recommendations: *"...The first, put all the policies in the field of mainstreaming risk reduction into the planning documents. Currently, in the mainstreaming disaster risk reduction there is no clause about disaster risk reduction in RPJM for example, there's nothing stated there! (R08a/Ref1). "...Secondly, the improvement about the use of funds for disaster risk reduction and emerging documents. Thirdly, about how to improve and strengthen a capacity of the apparatus, through "...how the coaching personnel, disaster management it is not able to volunteer, all there must be a professional, and a group leader must be qualified. It must have a standard of competence..." (R08a/Ref3).*

Another standard for every personnel of disaster management institution was noted by R08a, *"...If there are competency standards on disaster management, disaster management personnel means there will be a structured training about disaster management..."(R08a/Ref4).* The limited budget as one of the factors to strengthen the capacity building of the local government. In a separate recording the information **R08b** added some of *"...the ways to ensure sustainability, we should already know the indicators of sustainability into the national and local policies, maintained in legal products, utilized daily, become a necessity. It means that of institutionalisation... institutionalized, not only institutions but also the institutionalisation..." (R08b/Ref1).*

In addition to strengthening the capacity building in disaster management agency, coordination between donors and recipients is one of the recommendations for sustainability of the DRR program in the local government. **R09** *"...hopes that no such donor was indeed there should be sitting together first, between donors and*

*recipients, the donor recipient conveys any kind that the activities to be carried out, while the donor how much ability..." (R09/Ref1).*

A late response from the governor or mayor in the local government, effected a danger for implementation of the highly important letter for schools. **R10a** said about *"...sustainability in the region,...actually more about written awareness, by then it was passed, at least governors, mayors and Regents had information and awareness that it is important to integrate disaster risk reduction in schools also..." (R10a/Ref1).*

Community-based disaster risk reduction (CBDRR) has also become capable to be sustainable, as stated by **R13** *"...more practical, especially for the region, as more interaction with them, for example, community-based disaster risk reduction, they got 1 Billion Rupiah to implement projects in several villages. It could be a stimulus for local governments to create a continuation of the program..." (R13/Ref1).*

Sustainability in the waste bank to be a success program and that was adopted and continued by the district Muko-Muko in the Bengkulu Province. **R15** noted, *"...waste bank, then elsewhere. I forgot it was not in Bengkulu, Bengkulu still, but not at Muko-Muko not that in which precisely that at that time Bengkulu City..." (R15/Ref1).*

**R18** developed recommendations for sustainability of DRR activity, as follows are *government regulations, such as a presidential regulation or government regulation in order to determine the status of the disaster, which entered into how criteria for national coverage, provincial scope, district and city coverage, so we (the local government) are not confused in categorizing: the provincial disaster; district disaster; or national disaster, also about budget allocation to such disasters..."(R18/Ref1).*

#### **5.5.5.The Mandate of Law Number 24 of 2007 on Disaster Management**

Constitution number 24 of 2007 is the first regulation about disaster management in Indonesia, and related the disaster mitigation specific stated in article 35, paragraph e, f in Law No. 24 of 2007. It is also in line with efforts that can be made according to disaster appropriated spatial planning each accompanied disaster risk analysis (BNPB, 2012). **R12** added it the exactly at *"...26 April 2007 as the birth of law on disaster management, although had reserved, but I think that year 2007*

*was the euphoria of the people working for disaster management so included here is the public, including NGOs, government and of course SCDRR..." (R12/Ref1).*

The existence of legal regulations such as Law No. 24 of 2007 on Disaster Management had also been established since April 26, 2007. A mandate in article 18 of Law No. PB 24 of 2007 has been followed up by Regulation No. 10 of 2010 dated 13 November 2010, PB Law No. 23 of 2008 on the Implementation formed Regional Disaster Management Agency (BPBD) of D.I Yogyakarta province, Regulation of Head BNPB No. 2 of 2012 on Disaster Risk Assessment; Regulation of Head BNPB No. 15 Year 2011 on Guidelines for Post-Disaster Assessment (BNPB, 2012). Every regulation has been supported to establish DRR at the national and local level.

The National Action Plan (NAP) for DRR tries to endorse the forum DRR issues, **R02b** noted the two issues are to socialize and be introduce to other countries. "... **First**, the preparation of the NAP (National Action Plan) DRR conducted jointly with the forum, through a forum, **Secondly**, if I saw that this is also its nature general, so with that view when the global platform in the rehabilitation and reconstruction there, including sixty countries with different dynamics..." (R02b/Ref1).

**R02b** also considered the "...priorities and environmental and disaster management, which is now a national priority are the vision and mission of the government cabinet..." (R02b/Ref2). **R03** agreed and said an NAP-DRR "... that is a product of planning in disaster management that is integrated..." (R03/Ref1).

Another mandate of Law No.24 of 2007 was stated by **R06**: "...in addition to institutional strengthening, there are some programs, regulations and implementation of programs to the public good implementation in villages, in schools, and in other institutions..." And we "... have also established a forum on disaster risk reduction, through a forum which is the work with our partners. This forum is composed of journalists, and NGOs, who support our activities..." (R06/Ref1&2).

With regard to implementation, R06 and **R08a** expressed views about the role of MoHA in the

implementation, R08a said, "... MoHA made the modules. We function to move in the disaster risk reduction campaign, and now we are distributed utilizing deconcentration funds..." (R08a/Ref1). **R16** was concerned "...on laws and rules (in disaster management), it has a lot of rules on the level of leaders of ministries, which means being arranged for a guide or technical manual execution of it in disaster..." (R16/Ref2).

In line with R16, **R21** "... highlights the support to BNPB, mainly for applying the law No. 24 of 2007 at the time and also BNPB help in forming institutional of disaster management in the region..." (R21/Ref1), and "...also constraints in administering grants for the project after completion appeared government regulation (called PP) No 10 of 2011 on the management of grants. Then administrating behind mainly asset is still running slow completion..." (R21/Ref2).

Attention should also be paid to the Mandate of Law No 24 of 2007 on disaster management and another related regulation, such as the government regulation no 10 of 2011 about management of grants or foreign aid.

## **5.6. Challenges and Lessons Learnt Activities Post SCDRR**

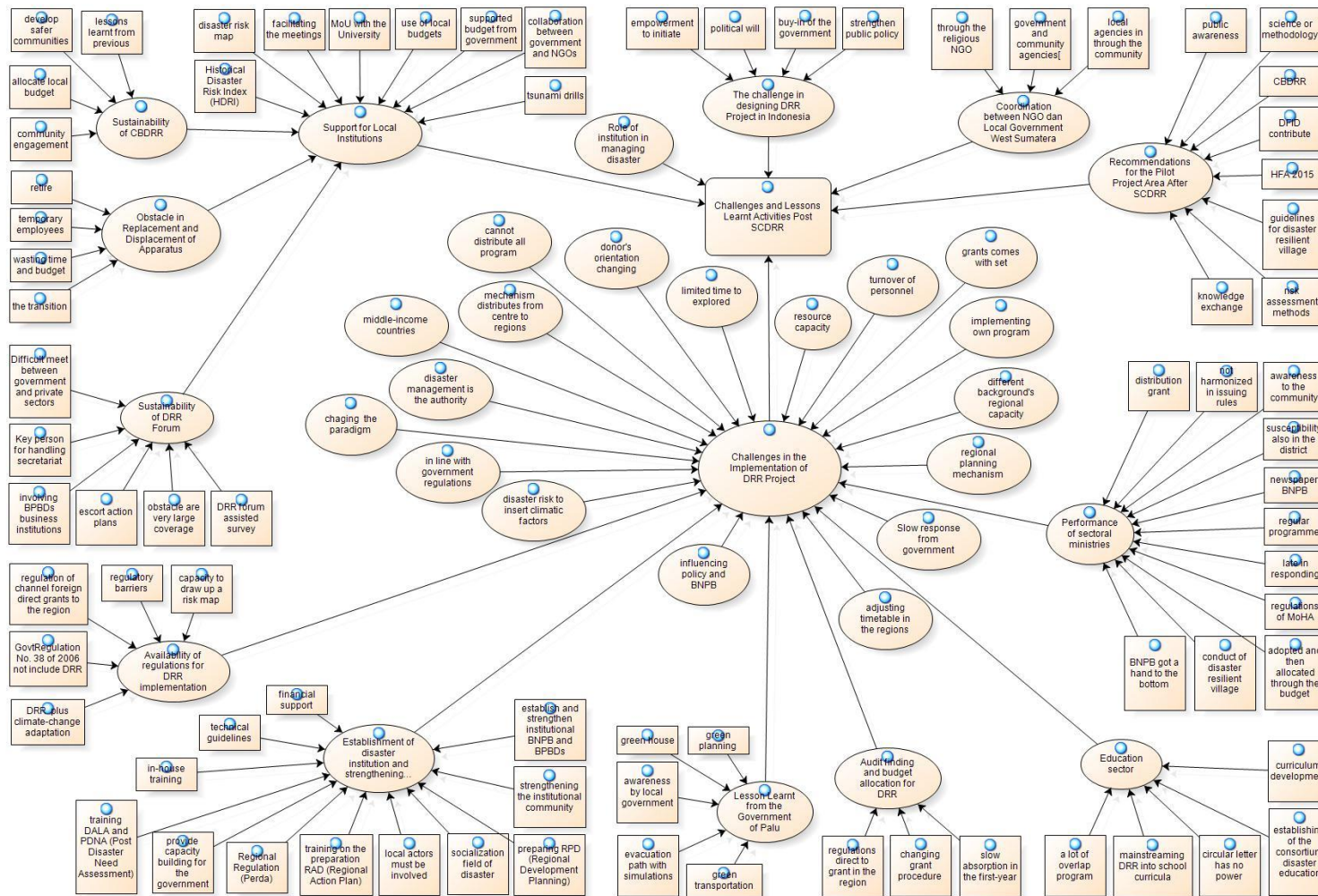
Challenges and lessons learnt in project implementation will be very different in a country. There were challenges, which can directly be handled with ease, but also there is a challenge that requires a way out through the help of many parties.

SCDRR projects in the process of project implementation at location's pilot project encountered many challenges and constraints in implementation. However, some learning can ultimately bring additional knowledge to the local government, local NGOs, and communities at the project site.

In this section, the challenges and obstacles during SCDRR projects will be discussed, and lessons learnt to follow the closure of the project discussed in the sub sections below. Analysis raised is based on interviews with stakeholders and has the capability and engagement during SCDRR project activities.

Before starting to explore the sub sections, related issues that were found during analysis will be displayed in the cognitive map Figure 5.2.

**Figure 5.2 Cognitive Map of Challenges and Lessons Learnt Activities Post SCDRR**





### 5.6.1. Challenges in the Implementation of DRR Project

Challenges encountered during the implementation of project SCDRR were assorted, and they vary in conclusion and depending on the ability of local governments in their handling. While the challenges at the national level or at the ministry level are very varied, each of the ministries that are involved is required to resolve the problem seriously.

**R02a** noted some of the challenges when they observe the implementation of SCDRR project, *"... the first, the challenge of implementing its own program..." (R02a/Ref1). "... second, in the case should be in line with government regulations, and also we cannot distribute everything ..."* (R02a/Ref2/Ref3).

The changing status of the country to be one of the middle-income countries is a challenge, **R03** said, *"...now we have entered a difference with middle-income countries, so that the sources of funding earlier changed the orientation of Indonesia! ..."* (R03/Ref1). The changing status within the country affected the policy of the donors. It was also said by R03 *"... SCDRR phase II may also mobilise its resources, friends like the UNDP are fewer so we search for funding ..."* (R03/Ref2).

Responses have come from government as a part of the challenge, **R06** says *"... they are too slow in government, so between the executive and the legislature. There are some regulations that are not yet in legalisation ..."* (R06/Ref1). It will give an impact through delay in establishing the regulations for DRR implementation.

The limited time to explore implementation of the budget, and being late in integrating into the local government work plan are also challenges. **R08a** mentioned *"...for our own local risk reduction, they have no budget, so they did not allocate it and that did not have time to get explored..."*(R08a/Ref1).

**R09** was concerned about the adjustment to the timetable in the region, it caused problems with the dates of holidays in the regions, R09 expressed *"... about the low capacity..."* of resources in the region. *We cannot equate such as the capacity of such resources at the national level..."* (R09/Ref3).

The replacement of apparatus in the local government is a huge challenge, and it was seriously challenged in the implementation of SCDRR. R09 said, *"... it gave influences, so to have to replace the contact person of personnel before their move to an unknown placement was influential. They then must explain everything to*

*the new person in charge from the start, to continue progress, but it is also one barrier ...” (R09/Ref6).*

The changing paradigm from response to mitigation for the sum of people can be the problem, but the government must do more socialisation activities. **R21** noted, *“... this disaster made the paradigm, we changed the start of the response into a management; disaster management, so there is a chance to develop or socialize even perhaps what is needed to be advanced ...” (R21/Ref1).* In line with R09, R21 also noted about *“... especially in the 4th component of SCDRR about the community base of all kinds; it is slightly more successful because the area is not yet ready ...” (R21/Ref2).*

The influence of the result of SCDRR can affect policy and disaster management institutions, R21 noted about the *“... spatial plan is just basically wrong, but the local government must learn from it and eventually the disaster management plan will be developed, as a result the role of SCDRR is influencing policy and BNPB as well ...” (R21/Ref3).*

The next challenges that are addressed are the availability of regulations for DRR implementation, discussed in the following sub sections.

#### **5.6.1.1. Education Sector**

Education is part of socialization of DRR activities, **R04** said, *“... in the context of education, such as curriculum development at the time of disaster with the Department of Education could include many things...” (R04/Ref1).* The differentiation of area can be challenged for treatment in socialization. R04 and R10a have particular interest in the mainstreaming of DRR into school curricula. **R10a** said, *“... its activity during that time was the output of SCDRR in mainstreaming DRR into school curricula. We really wish a decree or regulation like that was at the national level which is endorsed by the Ministry of National Education but continues then the passage of time, there are a lot of dynamics, finally only managed to a circular letter from the minister for mainstreaming DRR ...” (R10a/Ref1).* This circular letter from schools to the Ministry of Education was a goal of output that has been achieved, even though the circular letter did not have a legal position for schools or government to have to allocate the budget for schools. R10a said, *“... on the national side, a circular letter actually has no power or forces anything, especially in terms of funding, it is usually right if you want to continue the programme implemented so there should be funds ...” (R10a/Ref4).*

R10a added another challenge about DRR being the issue of corruption, gender, etc. during 2006-2009. R10a said *"... at that time disaster risk reduction was not well known, so it was something new, back to 3 or 4 years ago. Linked with education, then and until now, many of the issues that we wanted to be mainstreamed in education, began from corruption, gender, now in addition, disaster risk reduction ..."* (R10a/Ref2). Another is in managing the overlapping issues of DRR in the curriculum, R10a said *"...add the issue to become a burden the student curriculum, although, in fact disaster risk reduction already exists in basic science, a bit more elaborated wrote then serve as disaster risk reduction education, there is also an environmental education like that a lot of overlap. It is actually barriers ..."* (R10a/Ref3).

**R12** remembered concern when establishing the *"... education consortium, which became the consortium disaster education (CDE) that we formed in 2007, I remember that time really only MPBI, PMI then UNESCO ..."* (R12/Ref1).

#### **5.6.1.2. Establishment of Disaster Institution and Strengthening Capacity**

Capacity building and strengthening of capacity are two parts that have to improve in every institution. In particular, in mainstreaming DRR. During implementation of SCDRR project it was noted that many institutions related DRR as being supported and established. **R04** noted *"... SCDRR is actually the ultimate term. Outcomes of this SCDRR are BNPB establishment or strengthening of BNPB, formation of BPBDs all of our funds in the government were not yet ready with the financial support of this very significant support of SCDRR ..."* (R04/Ref1).

Another experience was noted by **R12** in the district to the establishment of the national NGOs based in districts, and *"...in fact, something will merely be successful if he could map the stakeholders at the site, for example, that in districts A, then in districts A's strength in there is the NU, there is the Muhammadiyah, there is the PNI, there is a strong NGO or there is no or there is a scout, so that local actors must be involved, and they must be made to be a smart..."* (R12/Ref1). Another challenge associated with strengthening capacity apparatus, R12 noted, *"... if we provide capacity building for the government only people, we've coached two years, and it turns out he's being moved next year..."* (R12/Ref2). Accordingly capacity building was eventually useless.

In the other case when the disaster management was established at the regional level, regional regulations must be the first step, as **R14** said, *"... if the first time involved is the province of Central Java, he was among the initial BPBDs created*

*Central Java province, they have the primary output is the Regional Regulation (called Perda) on disaster management..." (R14/Ref1). After regional regulation related the disaster management have been implemented in the provincial level that will be affected to governance at the district and local levels following this step.*

Establishment of the strengthening capacity in the central Java province which was said by **R18** *"...especially the most beneficial, there are two activities for strengthening capacities for BPBDs of Central Java province, capacity building, among others conducting in-house training as out bound, there is also training for personnel, afterwards DRR activities such as planning about DRR in Central Java province, then socialization field of disaster, then there is the preparation of such curriculum ..." (R18/Ref1). The in-house training as an outbound gives influence for the government apparatus as the participant, and at the end of training, it was a part of preparation of such curriculum.*

The training capacity was focused on preparation for involvement in the field of disaster and preparing the Regional Development Planning and followed by Regional Action Plan (called RAD) for implementation throughout the region. Preparation training for the RAD also followed the strengthening of the capacity in developing skills in development planning, as stated by R18 in *"... the third, which is most important to me is the capacity of the apparatus must be strong, if the not stronger will useless, it needs to strengthen the capacity of the apparatus DRR both at the central, provincial and district town. Various kinds of training preparation training RPB (disaster plan), and training on the preparation RAD (Regional Action Plan) disaster risk reduction ..." (R18/Ref3).*

For the apparatus which passed the training capacity, R18 adding information if they also have to in charge on the *"... training for the preparation of contingency plans to face any threat of disasters, training operational plan emergency response, preparation of training plans for rehabilitation and reconstruction of each type of disaster, then the training plan of logistics and equipment, and training Damage and loses Assessment (DALA) , and training DALA + Post Disaster Need Assessment (PDNA) ..." (R18/Ref4). DALA is very common in the every single disaster, that assessment was known as the first step to identify the impact of disaster and to calculate the budget allocation to respond to the disaster immediately.*

Between R18 and **R19a** having similar notes in strengthening capacity for the establishment of the disaster management institution through the assistance in preparing the Local Action Plan for DRR. R19a said, *"... then some plan of action or what the term Local Action Plan (RAD) was so it had been followed up by the local government to establish and strengthen institutional BPBDs, ..." (R19a/Ref2). Also*

in the role for the coordination function and it can be made through strengthening the capacity between institutions, and not only action as the executor in implementation of the DRR activity. R19a express this as *"... the challenge, I think it is the function of the budget that we have nowadays. I must further strengthen its capacity to play a role for the coordination function. So it is not the executor, for example, the sub-district villages to strengthening the institutional name for the community to the issue of disaster resilience ..."* (R19a/Ref3).

In managing the existing disaster management building needed skills in programme management, **R20** as the part of donor during implementation of DRR programme in Indonesia, said *"... there are a lot of indicators of achievement that has been reached, for example, that besides the goal is to increase capacity BPBDs and BNPB in doing disaster relief efforts, we talk about how to perform programme management, ranging from preparation of programme design, implementation, monitoring and evaluation ..."* (R20/ Ref1). Monitoring and evaluation for every single activity are extremely important to get the evaluation for the improvement of facilities and programs.

R20 expressed views on the changing paradigm in the emergency and response for the *"... passion for advancing it, and supported also by the absence of the budget allocation and capacity sufficient for it as a paradigm of thinking is that if a disaster occurs that we do is a response to the disaster; like instant noodles! In fact, long before that is the disaster preparedness efforts toward disaster risk reduction ..."* (R20/Ref4).

In line with R20, R18 and R22 agreed with the institutional strengthening. It caused really needed by disaster management institution, R22 express about *"... we support BPBDs with institutional strengthening as well, so we foster an institution that handling of disasters in the region is BPBDs, and our fund through that institution, all the policy may continue technical guidelines but implementer asked in BPBDs..."* (R22/Ref1).

#### **5.6.1.3. Availability of Regulations for DRR Implementation**

Availabilities of regulations for DRR implementation are urgently needed by government, in particular, by local government mostly disaster was happening in the local government area. Before the advent of Law no.24 of 2007 about disaster management. **R04** said, *"...not in the Government Regulation No. 38 in the division of affairs, there have been no disaster affairs, whereas PP No.38 Year 2006 it is a derivative of the local government law with laws No.3 of 2004 ..."* (R04/Ref1). That was to be difficult for the local government.

It is slightly different with government in the Bengkulu Province, they were issued disaster management. **R06** noted, *"... we issued Perda (Local Regulation) on Disaster Management and afterwards proceed with building regulations based disaster mitigation, after that we create an institutional forum on disaster risk reduction and disaster research centre at the university..."* (R06/Ref1).

The limited availability of regulations for implementation of SCDRR project, in particular for distribution of budget from central government to local government. That can be obstacle challenge and difficulty for finance in managing the foreign aid. R08a said, *"... the name is fund channel. There is a channel here, the area constraint region obstacle challenge about fund channel ..."* (R08a/Ref1). R08 in addition it about small problem in the local government, *In 2009, 2010 and 2011, still a bit of regulation of channel foreign direct grants to the region had not a lot, so we were constrained and at that time, there was equally important a letter from MoF and Bappenas that everything should be on budget ..."* (R08a/Ref2).

R13 also showed concern about the barriers in the regulations during the implementation. *"... While (funds) in the central government is also not absorbed, so some of our activities are not carried out, the majority due to regulatory barriers ..."* (R13/Ref1).

R21 stated *"... it does not have any legislation on disaster management, as well (Disaster Management Plan), whereas RPB basically of a risk map, but they have no capacity to draw up a risk map ..."* (R21/Ref1). It is difficult running the program activities at the pilot project, based on that SCDRR also effort to create the output about facilitation in establishing the government regulation. Furthermore it was happening in the other local governments.

#### **5.6.1.4. Lessons Learnt from the Government of Palu**

The Government of Palu was chosen as a part of SCDRR pilot project. The characteristics and geography of this city are located in the "ring of fire" Asia and vulnerable for any major disasters. Government of Palu was aware about disaster management issues. **R19b** express *"... being the awakening of awareness by local governments that disaster management must be supervised through a management which is focused, through programs that provide enough space for all parties, including government, private and public, as well as realise if the area is a disaster-prone area ..."*(R19b/Ref1). The government put the intention for people to change paradigm from response to mitigation (DRR), and it can be seen in integration into policy about the importance of DRR.

Inside that, the government kept moving forward through planning and policy with increasing the cooperation with another city outside of Indonesia. It can be seen by R19b expressing *"... we encourage Palu City into being a green city, in cooperation with the Swedish side into the town Symbio city is a green city, to meet the eight attributes, including green planning, green houses, green transportation, etc. ..."* (R19b/Ref2). Cooperation in the green city is to be the guide for another district in the Sulawesi Island.

Another commitment also was integration *"... between the Palu City with Boros City in utilizing the waste bin at the end of the processing of waste into bio gas and was already functioning, and we can support from the Swedish government for it, then by the city of Stockholm to realise a green city. This is also encouraged by the Ministry of Public Works through Director General of spatial ..."* (R19b/Ref3). R19b describes this commitment that can be a model for another city in Indonesia. After the green city implemented in the Palu City, the government also reminded the entire stakeholders to regularly do the simulation under the local disaster management institution for direction. R19b note about this *"...enlarge the green open spaces and so on, so that people are not horrified while in the city, but feel comfortable, but still with alertness. Available evacuation instructions, evacuation path with simulations as it is often carried out by regional disaster management agencies ..."* (R19b/Ref4).

#### **5.6.1.5. Performance of Sector Ministries**

Sector ministries have the important and strategic role in implementing of policy to provincial and local government. In this section, it will be explained about ministry or institution, which had the role in the disaster management. **R02a** express about the limited of the role of Bappenas in distribution grant to direct to provincial and local government, and asked, *"... how do Bappenas (distribute) because there is no direct hand in the area to give grants of a project? ..."* (R02a/Ref1). Bappenas as the ministry of national development planning doesn't have the technical implementation unit in the local government. During the implemented of SCDRR with MoHA and BNPB as the technical ministry. Similar with R02a, **R15** express *"... so should BNPB get a hand, BPBDs it is not just how to handle a disaster but then raises awareness to the community as well ..."* (R15/Ref1). With help, the BNPB through BPBD will give impact and benefit directly the community.

**R05** added performance of BNPB in support and implementation of the disaster resilient village program. *"... BNPB made the programme even before the disaster*

*resilient village... Central Java has adopted and then allocated through the budget. Based on what I know is Central Java, others have not. Naturally Central Java without the intervention of BNPB, but now as required to all regions ..."* (R05/Ref1). The program was adopted by the Central Java province, there also allocated the budget from state budget for sustainability. In different aspect with R05, **R10a** evaluated *"... (BNPB) as a new institution, the first few people (who know the disaster), although his second they had a paradigm shift, but the fact that (until now) is still (too late in responding) on the issue of DRR ..."* (R10a/Ref4). That can be seen the analysis for the new institution should be controlled by experts and the related resource persons in the institution. It must be made at the first institution establishment.

**R12** also suggests to BNPB to do more activities in the local and district, *"... to play in the national government so far is enough, in my opinion, BNPB was already quite strong, if you want to play please go into the county because actually the source of the newspaper within the district for susceptibility also in the district and its impact of the district ..."* (R12/Ref1). The result of BNPB which was made it can be more benefit directly to the people. It can be seen from support donor to the BNPB, **R22** noted, *"... in January, we announced in the newspaper BNPB in 2016 had a budget for conducting resilient villages, total number, target of 1,000 villages this year, for all NGOs or CSOs must register and overtake a pre-qualified will be conducting this first qualifying step ..."* (R22/Ref2). R22 added, *"... now donors are that we approach for the same goals and language with no difference. Because currently, many donors are interest on that approach and ourselves on budget of BNPB, which began to increase so much, in fact, also not absorbed well ..."* (R22/Ref1). Meanwhile "not absorbed well" is very common condition in the new institution.

At the other side, the performance of MoHA in integrating the policies about setting the budget from central government to local government, **R08a** expresses *"... the policies were made by Ministry of Home Affairs so hopefully effective because if there are two rules that use the same set budget, National Disaster Management Agency (BNPB) and regulations of MoHA then the reference to be to spend money is the Minister of Home Affairs regulations ..."* (R08a/Ref1). The regulation has been made in supporting the MoHA and BNPB in implementing the national budget into provincial and local budget. **R13** also has one about *"... the minister's draught to the regulations regarding the conduct of disaster resilient villages, but stopped because funding is not smooth on phase one activities of SCDRR ..."* (R13/Ref1).



The draught affected implementation of the disaster resilient village program in the earlier SCDRR activity.

Another indicator was by the Ministry of Education in establishing the instruction to all of the schools to endorse the circular letter to integrate DRR into the curriculum.

**R10a** was concerned about *"... communication of UNDP with the Curriculum centre or Disdakmen so that it can continue and be sustainable, so that sustainable central part of the curriculum and its staff have a regular programme from the state budget to continue the programme to teachers and education departments throughout Indonesia ..."* (R10a/Ref2).

In the Ministry of Finance (MoF), **R13** was fined in overlapping the regulation in administrating finance, *"... if we consult with the finance department, then we are confusing two parts, we need to consult the Directorate General Treasury or the Directorate General of the Budget, it seems they are not harmonized in issuing rules ..."* (R13/Ref4).

### **5.6.2. Coordination between NGOs and Local Government of West Sumatera**

Coordination between NGOs and local government from the experience during implementation of SCDRR project has various models. It presented the coordination goes smoothly but may also require intermediaries. **R15** noted his experience *"... our friend at SCDRR entry through the government of his later my friend's local agencies in through the community ..."* (R15/Ref1). It also implied in the Agam district at West Sumatera Province with slightly different results, the local government was more active than NGOs. R15 said that happened in *"... some regions like in Agam area was quite active until they can be every two weeks until the agency calling you to wherever ..."* (R15/Ref2). R15 added more information and acknowledged *"... this learning is most important that they turned out to be working between government and community agencies to continue cooperation turned out to be null ..."* (R15/Ref3).

Another experience by R20 through the religious NGO such as Nahdhatul Ulama (NU) and Muhammadiyah used to support coordination through legislative in Java's island, **R20** noted, *"... during the program running, we also support programs for disaster risk reduction through non-governmental such as Nahdhatul Ulama (NU) and Muhammadiyah ..."* (R20/Ref1). It was demonstrated and really effective to endorse the DRR program through local government.

In terms of different treatment with the optimisation of the local facilitators, **R22** expressed *"... these facilitators, because we cannot sign the institution with NGOs, we are eventually contracting personnel, personal but may be members of the NGO, so we need to ask for recommendations from the leadership of the institution, there may be staff chosen for the task of assisting in the village ..."* (R22/Ref1). The local facilitator was chosen from the village which came from or was near to the area of implementation.

### **5.6.3. Support from Local Institutions**

Many challenges and lesson learnt that can be found during implementation of SCDRR project, in particular, related to the support for local institution. Database information disaster Indonesia (called DIBI), it was created by BNPB for local government in managing disaster data information, example **R01** said, *"... Yogya had his own local disaster data ..."* (R01/Ref1). Managing and update data by local government that give effect to national data and information and government can easily publish an appropriate policy.

Sustainability in Palu city through the National Platform (Planas) still active in support continuity of SCDRR activities. **R02b** noted, *"... it's all up to now activities SCDRR continued ..." though not by SCDRR but Planas's conducting them ..."* (R02b/Ref1). It also in the DIY (Yogyakarta), and local government was support funding to continuity. *"... generally supported by the (funds) from government that I do not know, but not necessarily the same and if I see that there must be collaboration between government and NGOs like DIY ..."* (R02b/Ref).

During implementation it doesn't have any significant barrier in coordination with local institutions. **R06** noted, *"... of the local government, there are no significant barriers, because we support each other, so that in our region there are no constraints meaning, we are open and prepare the room where they work, including facilitating the meetings related to all..."* (R06/Ref2). Prepare space for working room, which can be easily to do coordination and synchronization any program that will be implemented. R06 also express about the cooperation between local government and university. *"... signed MoU with the University those students who carry out the practice on the field with the theme of disaster mitigation. Then the students will be placed in disaster areas, to convey to the public about the importance of disaster resilient villages..."* (R06/Ref3). In the other side, it can be the positive effect for student and environment. Every 26<sup>th</sup> months we had the tsunami drills and *"... turn on the sirens, with the appeal that the trial was in order, so that people are not surprised at every 26<sup>th</sup> sirens. During sirens active the*

*people will be going out and aware about disaster. Escape places also we have prepared evacuation; including signs, especially areas within the city we've also prepared ..."* (R06/Ref4).

In the South of Sumatera, **R07** noted, *"... there are areas that have become a profile book, there is also already a book Historical Disaster Risk Index (HDRI) ..."* (R07/Ref1) and in produce the books, *"... it was... use of local budgets is South Sumatra, Palembang, their own budget ..."* (R07/Ref2). Existed of the HDRI book is a good result of local government in adjust the needed of the disaster mitigation aspects.

**R21** expressed in choosing the pilot project SCDRR used the NGO and community, during *"... the selection of locations for the pilot is including not a problem because we choose must have a high-risk, and believe there we also cooperate with friends NGOs mainly specialized for education in the community ..."* (R21/Ref1). The support for the local institution it was made the local regulation will easily be established. R21 adding about *"... the great benefits in SCDRR also on the regulation; this regulation means that we help the region to make a regulation to set up a disaster risk map ..."* (R21/Ref2).

#### **5.6.3.1. Obstacles in Replacement and Displacement of Apparatus**

Replacement and displacement of the apparatus are an obstacle in implementation the project activity. During implementation of SCDRR project, it can be found throughout the region with new disaster management institution, which was just established.

**R11** found the wasting time and budget following apparatus in getting to improve through the new training on strengthening capacity. *"... It cannot be separated with current local policy regarding SKPDs, that when we train someone, and we already invest them, but three months later they were transferred to other places that are not appropriate for them ..."* (R11/Ref1). Generally, project has specific goals in training capacity, and it would that can be replacement and or displacement with the correct person. And the operational of institution will run smoothly on the right track.

In line with the note from R11, **R15** also found in the national level, *"... then in addition the change of government was passable, especially the central government equally important like BNPB it, first when starting SCDRR it could find up to three directors, the transition, this is a rather difficult we must repeat*

*approaches ...” (R15/ Ref2). It also happened in the local region R15 express “... changes of government both at the centre and the area as well, my friends in the region are changing again it’s mainly BNPB and BPBDs, if BAPPEDA rarely tolerable replacement, not quite long cycle BNPB and BPBDs. It becomes a challenge for us to continue to study it, especially if the same relation to the donor ...” (R15/ Ref3).*

Distribution of consultants in the national and province level who existed with the disaster institution. **R20** was gives some notes about “... *the BPBDs in that area are people who already want to retire or were not used in offices and afterwards two-thirds of it is that they are temporary employees as such, so that there is no elite and then also they sometimes because they feel that they are disposed to anything, so there is something ...” (R20/Ref1).*

### **5.6.3.2. Sustainability of CBDRR**

United Nations International Strategy for Disaster Reduction was concerned with community strategy. DFID (2011a) defined “The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner” (DFID, 2011a).

Community-Based Disaster Risk Reduction (CBDRR) and in Indonesia called PRBBK, it was important for still continues under supervision by local government, NGO and community. **R05** noted, “... *the PRBBK (Community-Based Disaster Risk Reduction) programme is actually the lessons learnt from previous UNDP programs, from UNDP-ERA project ...” (R05/Ref1)*

Besides that, after continuation by the ERA project and continued by SCDRR, local government, NGOs and the community felt the benefit from this CBDRR and requested it to continue after the SCDRR was complete.

Sustainability that can be seen from participation in allocating local budget to continue the CBDRR. **R06** noted “... *budget actually allocated for schools, activities PRBBK, village disaster resilient and tough against vulnerabilities ...” (R06/ Ref1).*

Community is to be an important aspect in the CBDRR. **R15** expressed “... *CBDRR ago remains to be expanded into other areas because after you, we form at the national level cannot necessarily will arrive smoothly down (area) without community engagement, that community engagement for DRR is very necessary but indeed to think that this should really come from the people not to move the public funding only from the outside, that it is his awareness ...” (R15/Ref1)*

Community engagement for DRR activity is essential, the issue that was captured by BNPB and integrated through regular of ministry program. Related to this, **R20**

wrote "... *National Disaster Management Agency (BNPB) its establishment in 2008, before it was National Coordination Agency for Disaster Management (called Bakornas PB), so it had been going on and what I read and what I hear it was quite positive, so the initial milestone how BNPB developed programs for disaster risk reduction or develops safer communities toward disasters or life joint disaster or whatever in terms of disaster risk reduction so that it endorsed by SCDRR ...*" (R20/Ref1).

### **5.6.3.3. Sustainability of DRR Forum**

The Disaster Risk Reduction Forum was created based on an initiative from all stakeholders. They consist of representatives from government, community, NGOs, and also the private sector. BNPB was noted the existence of Disaster Risk Reduction Forum (called Forum PRB) by the public, increase the repertoire of disaster, so that they become better prepared and vigilant (BNPB, 2012).

R02b expresses about DRR forum in "... West Sumatra Province DRR forum also be representatives of government, not only to discuss DRR but also other disasters around them ..." (R02b/Ref1). DRR forum those were useful in supporting and give feedback to local government. R02b adding more information about existence of DRR forum in DIY. "... DIY also that the forum is still strong and active when Merapi Disaster..." (R02b/Ref2). Also another such as "...Palu City DRR forum remains active and on-going. Continue as if Bali, Bali formed us and still exists ..." (R02b/Ref3).

NGO gave recommendations for sustainability of DRR forum, according to (BNPB, 2012). **R11** noted, "... *NGO difficulty if they wish to meet government and private sectors is hard, and vice versa if the government wants to see the private sector and NGOs. Through this forum, which is a combination of various stakeholders, they can talk, and no formal coordination, and does not require a letter, the letter even later, but we're talking about his vision and current issues in advance ...*" (R11/Ref1).

There is a slightly different picture in Central Java Province and not quite as active. "... (*Forum DRR*) in DI Yogyakarta Province, West Sumatera Province, and Bengkulu Province is still active, in Central Java the common problem and obstacle are very large coverage ..." (R11/Ref2). "...In Bali is quite active and in Palu City still functioning, But I'm not sure in North Sulawesi Province, but in East Nusa Tenggara Province still active ..." (R11/Ref3).

Sustainability of the DRR forum was shown during the Merapi disaster and the quick response to helping victims of the Merapi Eruption. R11 expressed *"... DRR forum assisted survey LGZ of BNPB, so DRR Forum in DIY became a reference of how DRR forums must act in the event of emergency. At the second disaster of Merapi, DRR forums were active in coordinated between the government, NGOs in emergency response activities, rehabilitation, reconstruction, and not just in DRR activities ..."* (R11/Ref4). Support by DRR forum for the local government, which can be made the solution in time to evacuate the victims.

For the DRR forum which not active caused of limited fund, R11 suggests to integrate the DRR forum into the regular action plan of BNPB, in addition said , *"... to the secretariat, although its members organizations but need the secretariat to collect the key's person, if there are no budgets, it will be hard to collect, his commitment difficult. Hopefully, here takes the role BNPB to be able to establish it all. BNPB can make this forum as well as his counterpart in the implementation of the program ..."* (R11/Ref5).

On the other side of involvement, is directly into disaster response. However, DRR forum should be sustainable in helping the government action plan and supporting capacity building and strengthening capacity. That was stated by **R15** *"... if the forum they escort their action plans, that they will have a planner of action for a year and two years so right, now they oversee the action plan after that of the action plan that what they are doing, then also capacity building for not capacity building more leads socialization of DRR into to local communities ..."* (R15/Ref1). This activity it will be useful to support government in monitoring and evaluation of the program and activities.

In West Sumatera Province, DRR forum needed business support to activate. **R22** recommended activating *"... it again by involving BPBDs business institutions, for example, there are a lot of supports by Semen Padang Company ..."* (R22/Ref2). Through supported by Semen Padang that can be active in managing disaster support policy to local government action in DRR activities.

#### **5.6.4. Recommendations for the Pilot Project Area after SCDRR**

The National Disaster Management Agency (called BNPB) used the guide from the result of the SCDRR project. **R02b** noted about the recommendation of SCDRR in *"... PRBBK (community-based risk reduction) it has been a pioneer for BNPB in create guidelines for disaster resilient village ..."* (R02b/Ref1). And **R09** and R21 express in general *"... SCDRR, is sustainable because it is perceived true benefits, and outputs everything it not only a project ..."* (R09/Ref1) and R21 noted example

*"... in Yogya, although their project has finished but activity remained sustained, continues because of this public awareness..." (R21/Ref1).*

And **R21** added more recommendations after SCDRR project finished, in particular, about the way of DFID on DRR after Indonesia; furthermore, continuity of research sciences on DRR; and including increasing the cooperation between the university in joint research on DRR (R21/Ref2/Ref3/Ref4).

#### **5.6.5. The Challenges in Designing DRR Project in Indonesia**

The tsunami and earthquake of 2004 was to be the starting point for stakeholders (government, NGOs, and community) in the preparing of mitigation before disaster. Earlier in 2006, the DRR paradigm was to be the main issue after rehabilitation and reconstruction in Indonesia. Designing the DRR project that was a needed by government, actually when the government still have to disburse a lot of budget was allocated for rehabilitation and reconstruction. Initiatives by government to ask donors support was announced officially to support the state budget.

R04 said "... it is not easy for tapping the commitment of donors to help the new initiation. We are also busy with the recovery program! ..." (R04/Ref1), it caused the government to have to switch the paradigm from an emergency response to mitigation. Switching ideas was started from the birth of the SCDRR project. Furthermore, R04 added about other challenges a *"... very clear on institutional aspects, in addition to empowerment to initiate BNPB, BPBDs but also facilitates multiple external stakeholders such as the platform, at the National Platform, continued DRR forums in the region, it is in addition supported by SCDRR ..."* (R04/Ref3).

In line with R04, **R08a** mentioned another challenge in the *"... strengthening of policies or strengthening public policy in disaster, had this not been explored due to several factors ..."* (R08a/Ref1). It is the common challenge after the institution for handling DRR issue that which was created.

Outside of the policy, the political factor **R10a** mean that *"... as long as we do not get a buy-in of the government or the political will of its minimal, then the activity so it will not have much impact ..."* (R10a/ Ref1). After major initiative coming from the government, that will present the positive impact for country and donors.

#### **5.7. Effect of Humanitarian Assistance for DRR in Indonesia**

Post disaster earthquake and tsunami in 2004, Indonesia was open to every kind of humanitarian assistance from various countries, in particular, to a response for

the emergency and recovery phase of disaster. It found in Table 5.1 below that countries that supported Indonesia's disaster through the humanitarian assistance (starting from emergency; recovery; rehabilitation; reconstruction; post reconstruction; and disaster risk reduction (DRR)).

**Table 5.1 Recovery and Reconstruction in Aceh and Nias: Donor Assistance Profile (2004-2012)**

No	Funding Source	Commitment	Mission					
		(Figures in US Dollars)	Emerg	Recov	Rehab	Recon	Post Recon	DRR
	<b>Donor Countries</b>							
1	Australia	246,219,050	✓	✓	✓	✓	✓	✓
2	Austria	5,972,544	✓	✓	✓	✓		
3	Bangladesh	9,325,000	✓	✓	✓	✓		
4	Belgium	24,154,233	✓	✓	✓	✓	✓	
5	Bosnia Herzegovina	565,083	✓	✓	✓	✓		
6	Brunei Darussalam	5,010,000	✓	✓	✓	✓		
7	Canada	278,067,128	✓	✓	✓	✓	✓	
8	Cayman Island	60,000	✓	✓	✓	✓		
9	China	36,322,736	✓	✓	✓	✓		
10	Czech	3,007,209	✓	✓	✓	✓		
11	Denmark	27,731,024	✓	✓	✓	✓	✓	
12	Finland	14,848,661	✓	✓	✓	✓	✓	
13	France	92,935,702	✓	✓	✓	✓	✓	
14	Germany	483,944,093	✓	✓	✓	✓	✓	
15	Greece	242,000	✓	✓	✓	✓	✓	
16	Hongkong	12,196,039	✓	✓	✓	✓		
17	Hungary	2,345,679	✓	✓	✓	✓	✓	
18	India	123,457	✓	✓	✓	✓		
19	Ireland	23,182,965	✓	✓	✓	✓		
20	Italy	60,782,698	✓	✓	✓	✓	✓	
21	Japan	157,512,297	✓	✓	✓	✓	✓	✓
22	Kuwait	20,000,000	✓	✓	✓	✓		
23	Kazakhstan	34,777	✓	✓	✓	✓		



No	Funding Source	Commitment	Mission					
		(Figures in US Dollars)	Emerg	Recov	Rehab	Recon	Post Recon	DRR
24	Laos	100,000	✓	✓	✓	✓		
25	Libya	900,000	✓	✓	✓	✓		
26	Malaysia	7,489,474	✓	✓	✓	✓	✓	
27	Monaco	1,851,852	✓	✓	✓	✓		
28	Mexico	200,000	✓	✓	✓	✓		
29	Netherlands	269,912,054	✓	✓	✓	✓	✓	✓
30	New Zealand	15,437,907	✓	✓	✓	✓	✓	✓
31	Norway	35,070,055	✓	✓	✓	✓	✓	✓
32	Oman	6,000,000	✓	✓	✓	✓		
33	Pakistan	150,000	✓	✓	✓	✓		
34	Poland	315,591	✓	✓	✓	✓		
35	Portugal	2,570,899	✓	✓	✓	✓		
36	Qatar	8,791,281	✓	✓	✓	✓		
37	Romania	46,000	✓	✓	✓	✓		
38	Saudi Arabia	50,000,000	✓	✓	✓	✓	✓	✓
39	Singapore	28,410,333	✓	✓	✓	✓	✓	
40	South Africa	2,000,000	✓	✓	✓	✓		
41	South Korea	19,413,000	✓	✓	✓	✓		
42	Spain	18,508,806	✓	✓	✓	✓	✓	✓
43	Sweden	28,956,627	✓	✓	✓	✓	✓	✓
44	Switzerland	52,038,220	✓	✓	✓	✓	✓	✓
45	Taiwan	4,035,000	✓	✓	✓	✓		
46	Turkey	20,103,463	✓	✓	✓	✓		
47	United Kingdom	326,021,684	✓	✓	✓	✓	✓	✓
48	United Arab Emirates	5,070,780	✓	✓	✓	✓	✓	
49	United States of America	910,000,085	✓	✓	✓	✓	✓	✓
50	Venezuela	2,000,000	✓	✓	✓	✓		
	<b>Sub Total</b>	<b>3,319,975,486</b>						
	<b>Multilateral Organizations</b>							

No	Funding Source	Commitment	Mission					
		(Figures in US Dollars)	Emerg	Recov	Rehab	Recon	Post Recon	DRR
1	Asian Development Bank (ADB)	357,970,189	✓	✓	✓	✓	✓	✓
2	European Commission	340,546,183	✓	✓	✓	✓	✓	✓
3	International Finance Corp. (IFC)	1,043,600	✓	✓	✓	✓		
4	Islamic Development Bank (IDB)	3,000,000	✓	✓	✓	✓	✓	
5	International Federation of Red Cross & Red Crescent Societies (IFRC)	41,368,727	✓	✓	✓	✓	✓	✓
6	*Multi Donor Fund (MDF)		✓	✓	✓	✓	✓	✓
7	Organization of the Islamic Conference	2,700,000	✓	✓	✓	✓	✓	
8	Recovery Aceh Nias Trust Fund (RANTF)	97,202,382	✓	✓	✓	✓		
9	United Nations Agencies (UN)	479,152,803	✓	✓	✓	✓	✓	✓
10	World Bank	25,000,000	✓	✓	✓	✓	✓	✓
	<b>Sub Total</b>	<b>1,347,983,884</b>						
	<b>Indonesian Sources</b>							
1	Government of Indonesia	2,391,304,348	✓	✓	✓	✓	✓	✓
2	Local NGOs	8,740,460	✓	✓	✓	✓	✓	✓

No	Funding Source	Commitment	Mission					
		(Figures in US Dollars)	Emerg	Recov	Rehab	Recon	Post Recon	DRR
3	Private & communities	127,665,127	✓	✓	✓	✓	✓	✓
4	Red Cross (PMI)	252,800	✓	✓	✓	✓	✓	✓
	<b>Sub Total</b>	<b>2,527,962,735</b>						
	<b>Total:</b>	<b>7,195,922,105</b>						

Sources:

Recovery Aceh-Nias (RAN) Database (Off Budget data) and BRR Finance Directorate (On Budget data), (2008). Also researcher analysis using current donor activities.

\*MDF: Commitment included in respective donor countries and multilateral institutions.

Based on Table 5.1, it can be seen that the performance of the donor countries in supporting humanitarian assistance in Indonesia was huge. Most of the country missions are focused in the emergency; recovery; rehabilitation and reconstruction stages. Some continue funding activities to the stages of post reconstruction and disaster risk reduction.

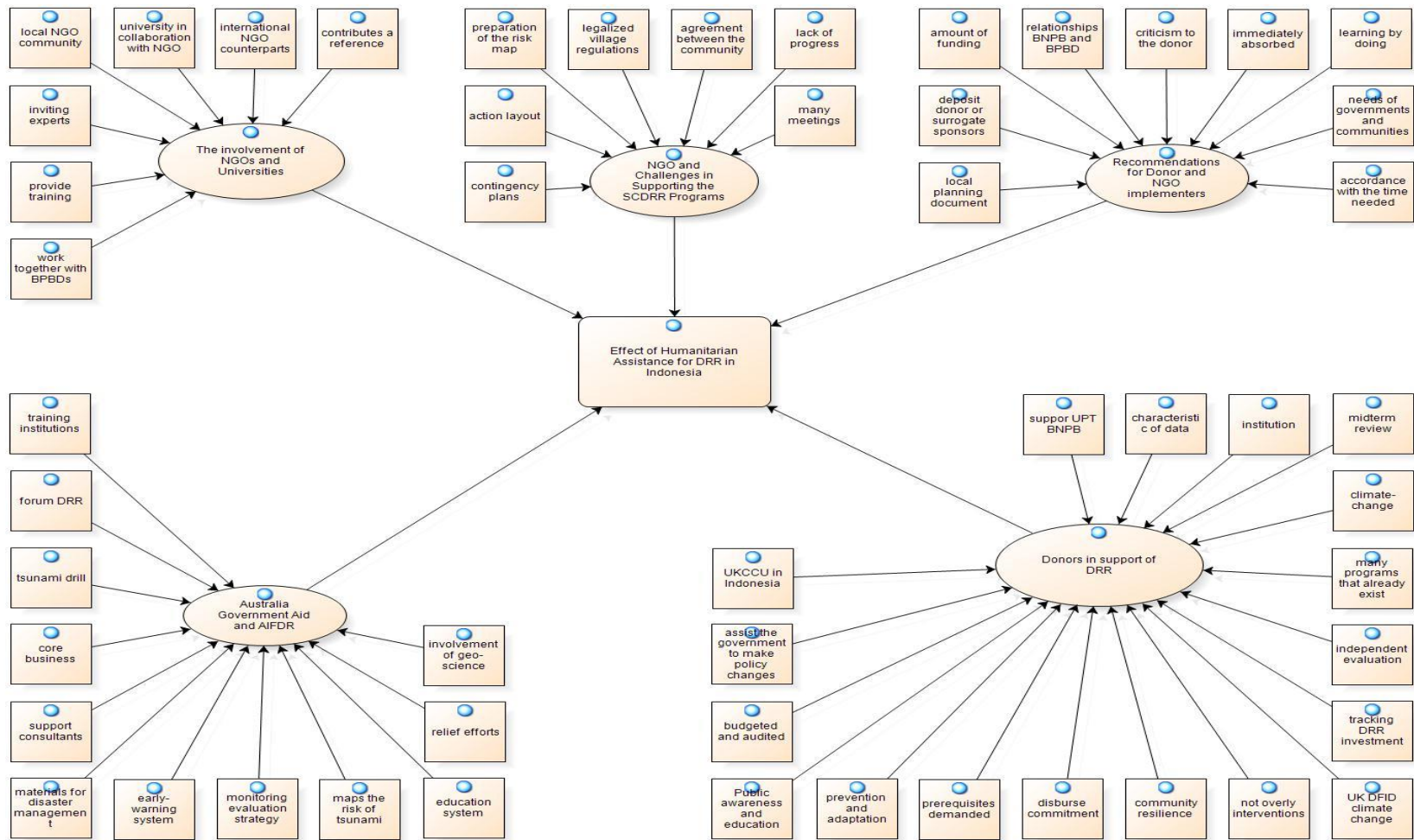
The United Kingdom through the DFID was supporting funding for all missions for humanitarian action in Indonesia after earthquake and tsunami in 2004. The Government of the United Kingdom was made Good Humanitarian Donorship principle in support other countries in humanitarian assistance mission. DFID (2011c) noted the "Good Humanitarian Donorship." In line with the Good Humanitarian Donorship principles, such as *humanity; promote adherence; flexible ; involve beneficiaries; strengthen local capacity; support civilian organisations; support learning and accountability* the UK's humanitarian work will (DFID, 2011c):

Based on the principles, DFID through the UK AID in 2006 was an initiative as the first donor in extending the mission to support the 'Disaster Risk Reduction' program in Indonesia. DFID used UNDP Indonesia as the administrative agent, and coordination with the Bappenas to introduce and integrate to National Work Plan of Government of Indonesia. Furthermore, with the Bakornas PB (now called BNPB) and MoHA for implementation in local government. Bappenas, UNDP, MoHA and BNPB was committed to create the project (named Safer Community for Disaster

Risk Reduction (SCDRR)) to implement the program DRR in Indonesia. At that time, other donors also put attention on the DRR issue, and the influence of humanitarian aid assistance for DRR activities was in various locations of the SCDRR pilot project.

Before starting exploring this in the following sub section, it found as a cognitive map in the Figure 5.3.

**Figure 5.3 Cognitive Map of Effect of Humanitarian Assistance for DRR in Indonesia**



### 5.7.1. Donors in support of DRR

Humanitarian assistance action for countries as disaster victims can be seen as having various treatments by donors in support of the disaster. There are countries that come for existence for international pride, and also countries with the mission for humanitarian purposes only. Post-earthquake and tsunami 2004, Indonesia was outward looking for support in emergency, recovery, rehabilitation, reconstruction, post reconstruction and disaster risk reduction (mitigation). Several countries were committed to support disaster victims in Indonesia.

The effect of humanitarian assistance for DRR in Indonesia has brought new images for donors in support of DRR activities. **R04** noted that when DFID first came to disburse commitment, DFID also asked the other donors to support activities. *"... it was certainly one of the prerequisites demanded by DFID some kind of initial support, which is expected to be funded by other donors as well, so not only single support from DFID alone ..."* (R04/Ref1). After commitment by DFID happened, other donors also followed. It was noted by R04 about *"... fund SCDRR it is not yet fully fulfilled because apart from DFID and after that some donor wrote that later were added such as the UN, when it ESCAP about three million, then of UNDP itself from CPRU, there is some support may be two to three million, if I'm not wrong new total collected about fourteen or fifteen million ..."* (R04/Ref2).

According to the commitment of DFID, usually they were concerned in effectiveness of implementation. R04 adding the note *"...regulatory, institutional, educational, and public awareness, the four of them. Regulation in the context of this policy, this continues what it's called, second, organized institutions, third-education, dissemination of many problems. The fourth is the implementation within the context of the effective implementation of DFID..."* (R04/Ref3).

During the implementation, monitoring and evaluation as the basic need for performance UNDP Indonesia as the administration agent, and also with the government. It was noted by R04, when *"...already fully submit to the UNDP and the government, although there are interesting when they propose the name of a sort of midterm review..."* (R04/Ref4). Regarding the midterm review of DFID implementation report from DFID. DFID through UNDP Indonesia supported the midterm review of evaluation of implementation half period of implementation of NAP-DRR 2006-2008.

Besides the regular evaluation that was supported by the project, SCDRR also made independent evaluations with the international team. R04 describes *"... they also do some sort of independent evaluation of the implementation of this SCDRR, including things that actually also interesting that time ..."* (R04/Ref6). Team representative from DFID also involved into the independent team.

It related the evaluation as described by R04 above, OECD (1991) mentioned aid evaluation assumes a fundamental part in the endeavours to improve the quality of advancement co-operation (OECD, 1991). The importance of aid evaluation was a positive impact to get the best result in the future.

Transparency is an important part during the disbursement of funding by DFID, and it mainly went smoothly into pilot project location. R06 noted, *"...Alhamdulillah, in fact, I would say that 100% of the budget of UNDP and that all budgeted and audited in a transparent manner, and does not raise the slightest risk, we also utilized optimally as planned, because I'm also responsible directly ..."* (R06/Ref1). Transparency during implementation of SCDRR was effective and gave influence to disaster management institutions in the local and central government.

Another donor, USAID, was in existence in DRR activities, R06 noted, *"...There are also some institutions that go to the same activity, namely disaster resilient villages. In 2013, we prioritised 27 villages, the donor USAID..."* (R06/Ref2). Disaster resilient villages were famous after SCDRR phase 1 and continued to phase 2 in the earliest part of 2014.

UNISDR supported the promotion of the Indonesian Disaster Data and Information (called DIBI), characteristics of data that can be found the details of information about Indonesia. R07 stated, *"... according to UNISDR, that in Indonesia was the best in the Asia-Pacific region, he said it was best in the Asia-Pacific region as other countries refer to the history data of Indonesia..."* (R07/Ref1).

**R10a** noted support that came from DFID, AUSAID and DHL. *"... Public awareness and education DRR SCDRR, at the moment it is not only the funds from DFID, but there is from AUSAID and also from DHL if I'm not wrong ..."* (R10a/Ref1).

The Government of Indonesia were aware about duplication of the program coming from donors, and so the government recommended doing coordination with related disaster management institutions at the local and central government levels. R10a stated that *"... need to be observed or may be considered by the donors if you want to put together a program, please also re-inform in there are many programs that already exist, so as not to duplicate or similar things done ..."* (R10a/Ref2). R10a also added the UNOCHA performance in establishing the forum for education, R10a

stated *"...Consortium for Disaster Education (CDE) was formed from UNOCHA ..."* (R10a/Ref3).

In line with the R10a, **R12** stated *"...the UNDP assist the government to make policy changes ..."*(R12/ Ref1). UNDP supported the SCDRR program in establishing the policies related to DRR with the government development program.

The government of Australia via Australian aid also supported many programs from SCDRR, in particular for strengthening the government system. **R20** stated they *"...already build units for the technical implementation UPT BNPB in West Sumatra Province. The issue now is BNPB have not a decision on how the existing government structures in UPT (called task unit)..."*(R20/Ref1). The function of UPT is for the leader to get an easier decision at the local government, and also as the extension of central government.

**R21** described *"...actually it is not only SCDRR, especially for awareness that the introduction of threats, vulnerabilities, risk is important. Number of donors also assisting Indonesian government, for example, the methodology for recognition of vulnerability and risk of geological disasters ..."* (R21/Ref1). Based on R21 descriptions, numerous donors were committed to do humanitarian action and or investing in Indonesia. The government of Indonesia still identified and classified all donors who helped Indonesia.

R21 added other activities related to DRR that was supported by Ausaid, *"...Through Ausaid, there are other Bappenas activities conducted with directorat in tracking DRR investment in Indonesia. Actually about government investment, national and regional budgets for disaster risk reduction ..."* (R21/Ref2/Ref3). Supported by Ausaid for tracking investment in Indonesia that brought the formulation for integrated budget allocated into the Annual work plan, also for setting up for state budget allocation for all of line ministries.

The Asian Development Bank (ADB) was described of their commitment to support of DRR activities. R22 recommended *"...Disaster risk reduction. We just received a grant from them (ADB) and they are already confirmed about grant, so if they interested we directed to the areas of community resilience..."* (R22/Ref1). The government of Indonesia through the BNPB has been totally in support of strengthening community resilience.

According to DFID (2011c) concern of the country was found from the example of the British Government UK in distributing more incomes to building resilience at national, institutional and community levels and to delivering humanitarian results (DFID, 2011c).



### 5.7.2. NGOs and Challenges in Supporting the SCDRR Program

Implementation of the SCDRR program was going smoothly after collaboration with potential NGOs at the national or local level. The role of NGOs during support of implementation of SCDRR, was mostly in the local government, in particular, when the SCDRR had no connection directly to local communities. NGOs became the mediator between the community, local government and central government.

During the implementation, many challenges were uncovered in various issues in the pilot project location. R05 has experience with own management, *"...that there are some things there that are unsuitable, for example, they are asked to make contingency plans, but if contingency plans are necessary to be made..."*. Challenges such as the contingency plan can be solved from the beginning and before the start of the project, having deals between implementers and NGOs.

Many meetings took place between local government, NGOs and the community that can make challenges for them in the implementation program. R05 noted, *"... then finally lasting to make lots of process meetings, proceeds with brainstorming, in the field, we already have too much to run, sometimes imagine the programme for three years, but must be completed within 1 1/2 years, more or less around 13 months, plus too many meetings, coordination meetings, which is only due to perceived lack of progress..."*. People were feeling it was wasting time during implementing programs. Local government and NGOs can make a decision to optimize the limited time.

R05 added more notes related to this issue *"... there is an action layout for the community that is planning its disaster risk reduction, has integrated the various needs of DRR through Musrenbang village, thus becoming the village plan ..."*(R05/Ref5). After Musrenbang (Development Plan Meeting) will be the homework for NGOs to make the communities understand about the development plan framework. NGOs following explain to communities about the availability of accommodation/ lump sums in every meeting. When the people were understood, R05 stated, *"... community action planned to make a disaster plan for the village as they wish, continue to create forums DRR in the village..."* (R05/Ref7). The community action plan was needed to make a disaster resilient village.

Similarly, R09 and R05 had views on the strengthening of capacity of village apparatus. R05 stated, *"... if in the village planning, if the Perkumpulan Lingkar, then we come to training them...eventually teach to know about Musrenbang, How to handle Musrenbang, how to construct a village regulation..."*(R05/Ref1). NGO Perkumpulan Lingkar was support communities in the project location.

R05 also noted about performance of NGO Perkumpulan Lingkar "... a village mitigation and disaster management plan be drawn up later legalized village regulations, then proceed to the next higher level..." (R05/Ref2).

Similarly with the challenge of NGOs in the community and private sector, stated by R05: "... region Perhutani region carries on later there is an agreement between the community and Perhutani, to continue monitoring for prevention of floods and landslides, and these activities are once a year is still held by the community..." (R05/Ref4).

### **5.7.3. Recommendations for Donors and NGO Implementers**

The progress of implementation of the SCDRR project in the pilot project location in Indonesia was carrying several positive impacts for donors, central government, local government, community and also NGOs. A lot of recommendations that have been produced post implementation of the project. It was already known if mostly NGOs running the activities from the budget from donors and government. DFID as the donors was supporting many NGOs for the development goals in the world. Based on notes by Lords (2012),

*DFID works closely with local and international non-governmental organisations (NGOs). About 15% of DFID's bilateral aid funds projects run by NGOs, while for the major UK NGOs, DFID accounts for as much as 10–20% of their total income (Lords, 2012).*

Based on the statement above that can be analysed for international donors such as DFID and produced many results to improve their program, to see the results of NGOs who cooperated with DFID.

The recommendations for NGOs that focused on government and communities needs. **R10a** was "... seen from the programmatic donor or NGO that anyone would want to do or implement the programme to the government, should not only focus on deposit donor or surrogate sponsors, but also see the needs of governments and communities where it would go. It would be much easier during implementation because the government will feel supported, and it was felt that it needed the program..." (R10a/Ref1). Some NGOs focused on government need, and communities will automatically be a part of implementation from the government programs.

Running the fund should be immediately absorbed that can bring the ministry or government in command to improve their capacity. It was stated by **R10b**, "... with its capacity-building course, we also are fashionable and do not educate them

*at the time of learning by doing right should not be running quickly while funds should be immediately absorbed. When you want to run speedy to be induced funds for the set of delivery, then the result will be pragmatic..." (R10b/Ref1).* Implementation of DRR activity using the right capacity resource will take the positive effect to the project goals.

R10b added, *"...Yes (not only prepare the report), which became my criticism to the donor, please note that the amount of funding provided should be in accordance with the time needed..." (R10b/Ref2).* Adjustment between time limit projects allocated and budget disbursement that very important for sustainability project and result than can be expected.

Positive recommendations for donors can be seen, when the donors expected to get the same result for every project location. That is impossible, it caused characteristics of projects location that were different in budget need and result maximum to be expected. That was described by **R15** *"...finally, we advocate upwards (to donors) that could not be so if we are talking about the people we play what works with communities not merely as easy as that we implement even so let alone until comparing DI Yogyakarta Province with East Nusa Tenggara Province for example, or between Yogyakarta to another..." (R15/Ref1).*

R15 added that when using the planning document that comes from local government, for example Yogyakarta and that will be easier that caused the local government of Yogyakarta also using them as the guidelines. R15 stated about *"...The planning documents may be institutions in Yogyakarta. It was easier because they are used to make it, but if the institutions within the province or wherever it is not used them to make the document..." (R15/Ref2).*

Joint cooperation and implementation programs between government, NGOs and donor will make the programs go faster and integrate with the local government work plan. **R20** was concerned about this when monitoring *"...relationships with BNPB, BPBD, with other governments, with ministries other and also with the United Nations such as UNDP, IOM. IOM categorise as part of the UNWFP also so we're working with them to develop program's disaster management more resembling to support the priorities of the government program..." (R20/Ref1).* The program that was resulting from the good involved of all stakeholders can be made the effectiveness of the optimisation of the donor's budget.

#### **5.7.4. Australia Government Aid and AIFDR**

This section, is a brief analysis of the performance evaluation of the Australian government in support of DRR activities in Indonesia.

**R20** describes the profile of Australian Aid "...at present Australian Aid, first AusAID (Australian Agency for International Development) is now not there anymore as it has been renamed the Department of foreign and trade (DIFAT) working directly under the Australian embassy..." (R20/Ref1). Australian government aid through The Australia-Indonesia Facility for Disaster Reduction (AIFDR) program supports SCDRR activities in Indonesia.

R20 added "...AIFDR started in of 2008 for five years, as an SA (Subsidiary Arrangement) with the Indonesian government (BNPB and Bappenas) and it was agreed that the programme would run for five years until 2013 with a value of approximately 65 million dollars. It has been agreed there are four areas that the programme targets in East Java, South Sulawesi, East Nusa Tenggara and West Sumatra ...." (R20/Ref2).

AIFDR have locations in line with the pilot project of SCDRR activity. About the AIFDR, **R02b** noted, "... **First**, AIFDR was completed in 2014, and 2013 should have been completed in phase one. **Second**; they have restructured the original independent which is now under the Ministry of Trade and Foreign Affairs ..." (R02b/Ref2). The existence of the AIFDR gets much attention from government, in particular, from BNPB. The AIFDR program supports the strengthening of the apparatus of BNPB, and also supports the regular program.

AIFDR is also focused on the education system, forum DRR and tsunami drill, **R15** emphasized "... AIFDR focussed more towards education especially the early-warning systems and the establishment of the forum. The forum concentrates more on DRR workshop CBDRR..." (R15/Ref2).

R16 and R02b agreed on the importance of strengthening the capacity of apparatus, **R16** stated, "... (AIFDR) has (support capacity BNPB) no expert support when there are sub training institutions. There is sub training in law risk reduction, institutional emergency response and BNPB relations with the core business. They also help the (process) BNPB UPT construction in West Sumatra Province..." (R16/Ref1). The outcomes to be achieved from AIFDR is, all building of apparatus and disaster management institutions in the pilot project and can therefore be the leader for every disaster in the local government.

In line with R16 and R02b, **R20** also explains "... The goal is to increase capacity of BPBDs BNPB in disaster relief efforts, we talk about how to perform programme management, ranging from preparation of programme design, implementation, monitoring and evaluation ..." (R20/Ref4).

Outside of the government, AIFDR also supports the university in Indonesia with collaboration with Geo-Science Australia. **R20** explains “....from the side of science, AIFDR is involved with geo-science, Australia and has designed a programme with several institutions of science Indonesia, the ITB, UGM, LIPI. The Agency for Geology and Volcanology has made several maps mapping the risk of tsunami earthquakes and volcanos. There have been several discussions, and we had issued a number of modules to be used as teaching materials and materials for disaster management programs, especially related to science, such as tsunamis, earthquakes and volcanoes in Indonesia ...” (R20/Ref5). AIFDR also supports government in developing programs, for example in provided the technical assistance for BNPB and Bappenas. R20 described “...if there is a shortage or additional support is required AIFDR provide help as support consultants and are able to think more about monitoring evaluation strategies and then develop or replicate best practices which we can support from existing funds... (R20/Ref6).

## **5.8. Existence of Indonesian Disaster Data and Information (DIBI)**

This section will explore the existence of DIBI as the one kind of support that was supported by SCDRR project. It was implemented to all pilot project locations. There is can be found various results of benefit from DIBI application. The general about DIBI application it was captured from the official website of Indonesia Disaster Management Agency (BNPB) as stated below:

*This application is built through the cooperation between: BAPPENAS, BNPB, MoHA, UNDP and DFID. Desinventar is a project developed by LA RED, a network of social studies on the prevention of disasters in Latin America. LA RED is a non-profit organization with 12 years of activity. Which most operations in Latin America, the Caribbean and now in Asia and Africa.*

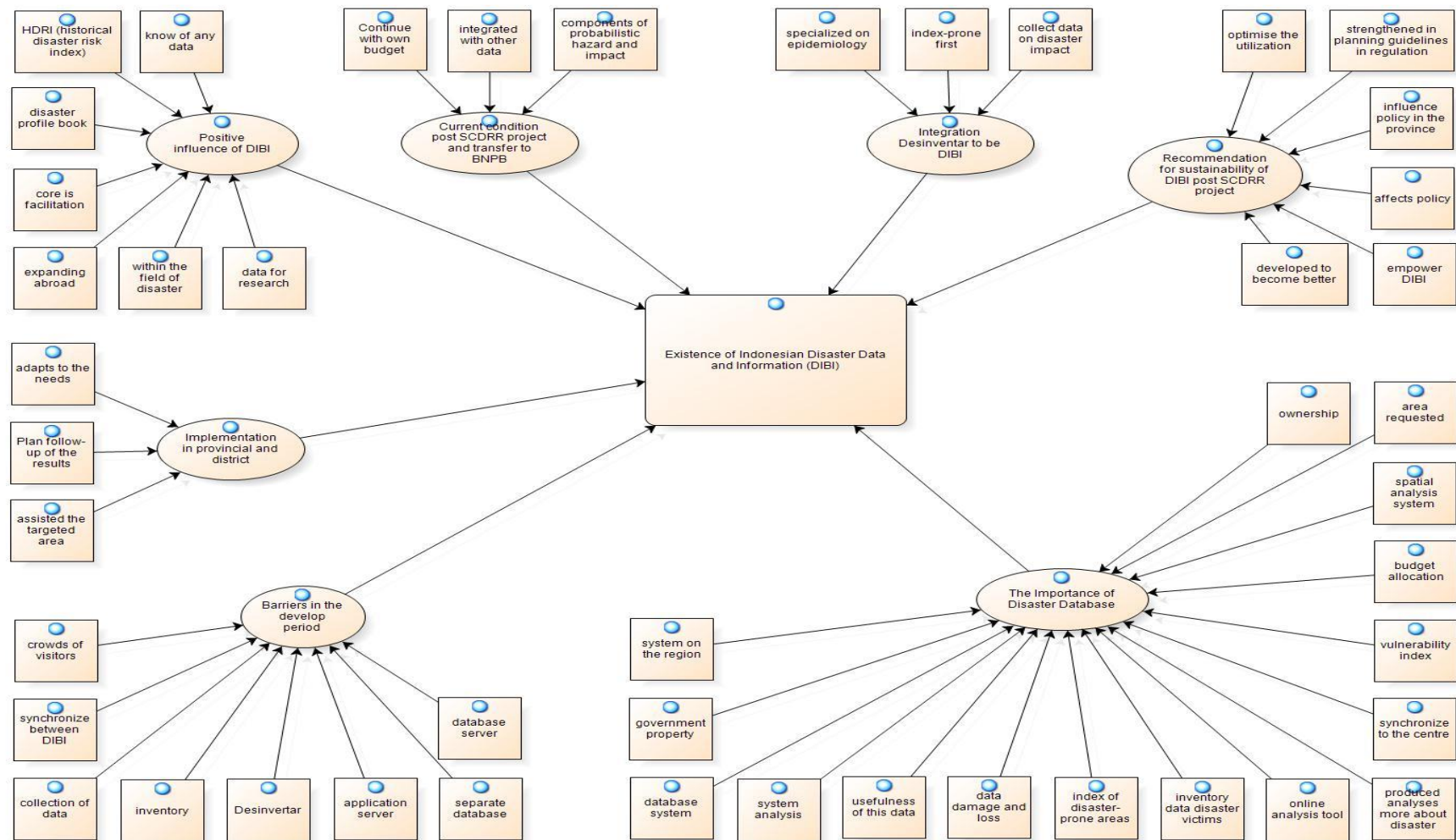
*The contribution made by the United Nation Development Program (UNDP) is to finance part of the funding to support web Desinventar that serves as the basis for the development of Indonesian Disaster Data and Information (DIBI).*

*Expected DIBI can support BNPB in terms of enhancing the ability of disaster management both at central and local levels, to support the implementation of activities manufacture of disaster event reports accurately and quickly, as well as provide information that is*

*complete and current on all parties associated to the element of disaster management in Indonesia as well as foreign countries through a global facility. (<http://dibi.bnpb.go.id/tentang-dibi>)*

In the next section are the stages of existence from DIBI application in Indonesia. Before starting exploration in the sub sections, it can be seen as a related issue that has been found during analysis, and will be displayed in the cognitive map Figure 5.4.

**Figure 5.4 Cognitive Map of Existence of Indonesian Disaster Data and Information (DIBI)**



### 5.8.1. Barriers in development period

Several barriers were found in the first of development of the DIBI application at central government level, in particular in the line ministry. These barriers related to responsibility, updating and database management issues.

Common DIBI barriers in the development period came from technical issues. It was captured by **R01**, *"... no one has a good inventory ..."* and also *"...ideally they would have two servers; one as the database server, one as the application server..." (R01/Ref1&Ref2)*. Staff operators were recommended to head the project and BNPB was to assist them to solve future issues. R01 added that more barriers came from the availability of server database, when *"...anticipating crowds of visitors ideally a minimum of two servers are used in other words split the application server to the database server..." (R01/Ref03)*.

R01 also noted other challenges as *"...the biggest challenge was in infrastructure, and moreover, bureaucracy...R01/Ref4)*, Infrastructure for the existence of a database is the most important area for the development of data and information. Bureaucracy issues usually arise from other technical line ministries, such as Ministry of Public Work (MoPW), Ministry of Health (MoH), and Centre of Statistic Agency (Called BPS). R01 said, *"...I remember were three ministries involved which could cause bureaucratic problems..." (R01/Ref7)*. The bureaucracy issues in the development period can affect the application portal which they are using to look through the data in each ministry. Its need more preparation time in order to integrate into a one system database.

The other barrier that was found by R07 in the early integration of Desinventar into DIBI. R07 was *"... trying to capture the government desires and needs and seeing if it can be answered by Desinventar or not was difficult, It turns out that it actually does fit with government wants, but the vagueness of the explanation of the previous team that made the government not accept it so easily..." (R07/ Ref1)*.

Both R01 and R07 identified barriers in getting all of the details of data collection. R07 stated *"...it is impossible to break down the data as detailed and as required locally. The first problem is the difficulty in the collection of data and the second is for the amount of data..." (R07/Ref2)*

It has shown significant progress after the data collection process. Communities via the head of the village have received updates and brought this to the head of local development planning.



The result from the local data collection process will be automatically synchronized with central government. This is because DIBI was created separately between local and central government, R07 adding, *"...The system automatically synchronizes between DIBI in the area and in the centre due to the separate database. This was the first problem, data collection, the second. The disaster is locally owned and not owned centrally..."* (R07/Ref3). The synchronization of disaster data will be effective when the next stage of data is needed. This will start with local government then move to provincial government, and central government (line ministries).

The capacity of the apparatus is also a major problem during synchronization of DIBI. Limited resources are common in local government. R07 noted *"...sometimes it is constrained by resources, meaning that the area still felt that people should focus on maintenance and that there should be a special person..."*(R07/Ref4).

### **5.8.2. Current condition post SCDRR project and transfer to BNPB**

The impact of DIBI on the SCDRR pilot project location need to progress. Some of them improve the local government performance in updating DRR database. However, also in other locations, the local government does not care about the sustainability of local DIBI, which is caused by the limitations of state budget allocation.

R01 did not deny *"...after SCDRR closed, it looks like a lifeless area and is actually dead..."* (R01/Ref1). However, there is a differentiation between most and East Java. R01 stated, *"...there is one local government that is very interested and will use their own budget to continue this programme, East Java..."* (R01/Ref2). The government of East Java Province are aware of the importance of disaster data. Because it enables quick decisions and the design of the right policy for the disaster events.

The benefits of data from DIBI are not only for the identification form number of victims and rehabilitation of buildings, but can be used in economic analysis, health sector and prediction for mitigation. R01 added, *"...If SCDRR wanted to continue to develop further it would be good. Suppose that it develops and makes it much easier to be integrated with other data? They could then develop data services from the data so it can be used by other agencies..."* (R01/Ref4). That would enable *"...two-way direction. So the agency can use data from other agencies..."* (R01/Ref5).

Two-way direction from government agencies can be supported and improved on the apparatus performance. That can bring other positive effects for coordination between Governor, Regent/ Mayor, district heads, line ministries and the private sector.

Another current condition based on data and analysis interview with R07 was noted, "... *DIBI part on the hazard assessment because he was seen components of probabilistic hazard and impact. Probabilistic was related with the frequency, the frequency is related in the history. Meaning is DIBI...*" (R07/Ref1). It can be seen that sharing frequency information can have a positive influence for all stake holders.

R07 stated "...it was evaluated and after the support of SCDRR for DIBI completion significant changes occurred. DIBI has now been integrated into the baseline data. So it has been modified in the DIBI tool, integrated with the server BPS..." (R07/Ref2).

### **5.8.3. The involvement of NGOs and Universities**

Project SCDRR recruited resource from the local area in order to distribute and implementing the program and its activities. Universities and NGO's were to be an option for local resources to use. Mostly local NGO's and universities were chosen as implementers of the project because of their ability to interact with the communities.

**R10a's** experience was "...in Bengkulu it was all three universities, but in Yogyakarta and Bengkulu the universities collaborated with NGO's..." (R10a/Ref1). That shows the collaboration between universities and NGO's can produce the positive outcome for the DRR activities.

Similarly R10a, R11 expressed their experience when involved with government and universities as value for SCDRR project. **R11** was noted, "...we provide training, also contributes a reference to the form of disaster risk maps, especially for universities so that they work together with BPBDs in making disaster risk map, in disaster risk map required RPB (Disaster Management Plan) as mandated by law, as RPB basic formulation was essentially required for disaster risk maps and risk analysis..." (R11/Rf1). That shows the benefits of collaboration in providing disaster risk maps. The risk map is a very important resource for every local government in the risk area. It helps to identify basic needs and helps government prepare policy for planning and budgeting for disaster risk reduction (mitigation) activity.

In line with R10a and R11. **R12** noted. "... *international NGO counterparts can be more imaginative in the use of existing local institutions...*" (R12/Ref1). Participating international NGO's can encourage local NGO's and communities to be more creative and share local experiences.

Another involvement of collaboration was noted by **R13** "...we are (*in the preparation of the draught regulation*) *involving related area's regulations in the implementation of disaster management in the region...*" (R13/Ref1).

However, the local resources have more potential to support project activities in the field. Régnier et.al (2008) said: Is mostly domestic. Overseas NGO's have slight or no knowledge in new small business start-up, particularly in a post-disaster background. They have neither skills nor staff to recognize new potential marketplaces and facilitate access to business development services (Régnier et al., 2008).

Similarly with the Régnier et.al (2008), **R15** also noted the experience "...we use the local NGO community because we think that the base should indeed those who know the area. If they are not familiar in the area, it was a bit difficult,..." (R15/Ref1).

#### **5.8.4. Implementation in provincial and district**

The existence of DIBI led to the first online information database. Coverage of DIBI implementation database brought the model to other countries. Implementation of DIBI from central regions was adjusted to local government needs. **R07** stated "...the socialization of this tool roughly assisted the targeted area, which adapts to the needs within the area, and during this time the area had problems with it. It does not encourage the region to be the way, not forcing the area to be used but only gives information through socialization..." (R07/Ref1). That meant that the characteristic of local government will determine the socialization. After local government and the community accept the socialization of DIBI, the next step is the active performance from local government or community in operating DIBI.

Related this issue, R07 also noted, "...Plan follow-up of the results of socialization according to participants in the area, because those who participated are not only from government..." (R07/Ref2).

From the step that was noted by R07, the importance of community or local government participation in developing and operating of DIBI is clear.

### 5.8.5. Integration of Desinventar to DIBI

DIBI is modification and upgrade software from the methodology of Desinventar. DFID through SCDRR has been allocated budget to support Desinventar to be DIBI with more features-related to disaster management. R01 stated about the integration process *"...SCDRR project adopted the DIBI name from methodology Desinventar, the methodology itself was developed by a group of researchers from South America which at that time was actually intended to study disease outbreaks in the area of South America,..."* (R01/Ref1). From disease software to disaster management software required developing special techniques. R01 also adding that this integration process came from *"...the government initiated the use of this Desinventar methodology as a basis for the programme was developed..."* (R01/Ref2).

The replacement name of this software was to be DIBI, as noted by R07 *"...One very significant event was that they did not want to use the name Desinventar, so it must use the name related to Indonesia, it became (DIBI) Disaster Data and Information Indonesia. DIBI was named we did not want to think of this as Desinventar formerly, ..."* (R07/Ref1). The government of Indonesia agreed to adjust this search engine to be both Indonesian style and disaster management style. R07 added *"...Initiated in 2008 and launching in 2009..."* (R07/Ref2).

R01 and R07 agreed about the background of Desinventar to be DIBI. R07 adding, *"...This actually is a research instruments from Latin American to collect data on disaster impact. However, in 2000s simultaneously converted into a pure disaster, meaning than originally specialized on epidemiology..."* (R07/Ref3).

The first task for DIBI was to create an index. R07 noted, *"...It is index-prone first in 2009, when it was already beginning to become DIBI. The first prone indices used by the historical data that is data and the impact of events/ The year after the index was used by government officials, the Ministry of Home Affairs, by the Ministry of Finance, all the areas referred to eventually including Bappenas..."* (R07/Ref4).

### 5.8.6. Positive influence of DIBI

The positive influence came from all users and in particular, from local government institutions, who needed to synchronize with data at central government. **R01** identified the positive influence. It consists of: *"...we now know of any data that used for disaster..."* (R01/Ref1) *research within the field of disaster that could use*

*the data..." (R01/Ref3); "...at least four students taking this data for research, the level of degree to master degree..." (R01/Ref4).*

In general, known data can be used, optimised data for research and expanding the data research for academic level.

**R04** stated that DIBI was an achievement of the SCDRR project, *"...recognised as necessary is the establishment DIBI, DIBI also from SCDRR, the core is facilitation initially and then a lot of things have been published..." (R04/Ref1).* The establishment of DIBI brought various achievements for disaster management institutions.

In line with the R04, **R07** also identified positive influences of producing the publications related to disaster management. It consists of: Disaster profile Book, *"...We make regional disaster profile book, make a book named HDRI (historical disaster risk index)..." (R07/Ref1).* *"...Generally, according to my personal (influence) is quite positive and has enough impact. While the Ministry of Finance he asked IRBI to update it every two years and has allocated a special allocation fund..." (R07/Ref4).* After the allocation of funds for publishing IRBI, DIBI became famous in other countries. It can be seen as stated by R07 *"...it has been expanded abroad. DIBI is already beginning to be adopted by the East Timor, I also trained there. Manila, Philippines was previously adopted..." (R07/Ref5).*

#### **5.8.7. The Importance of Disaster Database**

DIBI became famous as the disaster database after a changing the process from Desinventar. Application databases for disasters were claimed by stakeholders in disaster management. Indonesia brings a lot of benefit in supporting governments from district, regent, province and central. It can be seen in previous sections that DIBI can help make correct policy decisions and enable a quick response for every disaster event.

According to the importance of existence of DIBI, **R01** noted, *"...the government urgently needed other data, it will be used to inventory data disaster victims, the data damage and loss from that disaster..." (R01/Ref1).* Another of the benefit from database disaster by R01 is *"...it will be used also to look through the index of disaster-prone areas..." (R01/Ref2).* An index of disaster prone areas that will have an impact over policy decisions in government. It is allocated through the budget to response disaster.

In the regional area, government was allocated through national budget allocation for DIBI through BPBD. R01 stated, *"...The Ministry of Finance for budget allocation,*

*continued by the Ministry of Home Affairs is also in establishing regional disaster management agency (BPBD)..." (R01/Ref3). Following the budget allocation for database activities, in 2013 some of the local governments were identified, as stated by R01 "...at the end of 2013, much of the area requested to be activated, because they feel the usefulness of this data..." (R01/R04).*

The function of DIBI as stated in the first (section 5.8) was that local government should feel the usefulness of this database for every condition of disaster. Another advantage of the disaster database was noted by R01 *"...index is also vulnerable, including vulnerability index and from there it can produced more analyses about disaster areas..." (R01/Ref5).*

In line with the R01, R07 agreed that since Desinventar became the government of Indonesia's property, local government were very enthusiastic in using the database to support them. **R07** express experience when following *"...the forum gathered the data, the data described was correct. They agreed to start, and since then Desinventar has become government property..." (R07/Ref1).* The forum gathering data was a regular forum for synchronizing data-related disaster management.

R07 also noted about technics, *"...DIBI is an online analysis tool, which serves as a database system, system analysis, as well as a spatial analysis system..." (R07/Ref2).*

Another benefit of DIBI is that it identifies the season of disaster activities and that can only be recognised using the climate parameter. The DIBI application can be a shortcut to the answer. It was stated by R07 *"...in terms of spatial, for example, during the last 10 years was the concentration of the disasters in Indonesia related to climate parameters in any region?! It can be seen instantly through spatial analysis. People can analyse the season, within a year, approximately when do catastrophic events most often occur and in what related season? It can be directly..." (R07/Ref3).*

Another of significance came from local government and how they feel about the ownership of the DIBI application for local government. R07 stated, *"...DIBI is something they own. Therefore, anyone must be a supplier of a donation in order to have their own system in the region and it is formalised by agreement, they must name a portfolio of their own, by the time they agreed with both the name of the concept and the method of data collection. Results must be synchronized with the centre. So it did not input to the data centre itself..." (R07/Ref4).*

Now that can be shown that socialization is the first step at all SCDRR pilot project locations and second to build a DIBI local version, and all data is synchronized with the central government.

#### **5.8.8. Recommendation for sustainability of DIBI post SCDRR project**

Sustainability of the DIBI application was a success in the regions with high risk of disaster. After SDRR projects were completed, many program/activities as the result from DIBI, were recommended to be integrated into regular programs of local or central government. Particularly in producing the book of HDRI (Historical Disaster Risk Index) and modules about types of disaster.

**R01** gives support for continuation of DIBI to be expanded to every province and district. R01 noted, *"...it continued and developed to become better..." (R01/Ref1).*

Related to R01, R07 also stated about recommendation for sustainability that can bring a positive effect to performance programs and activities. **R07** said, *"...SCDRR does not have to intervene in the first stage, but the challenge is how to optimise the utilization of system, for example areas that already exist in DIBI; how can we empower DIBI to produce something that affects policy..." (R07/Ref1).* In the regions that already used DIBI, the local government were better prepared for disaster attack.

DIBI through the HDRI (Historical Disaster Risk Index) influenced policy at provincial and district levels. R07 explains about this *"...current index cartilage generated by DIBI is already influencing policy at the national level, why do not we now support in order to influence policy in the provincial and district levels below..." (R07/Ref2).*

Another recommendation supported sustainability related to the standard guidelines and clear regulation support. **R08a** noted *"...It should be strengthened in planning guidelines in regulation and then drilled in the in the regions.." (R08a/Ref1).* Regular practise will also support the implementation of a smooth project process.

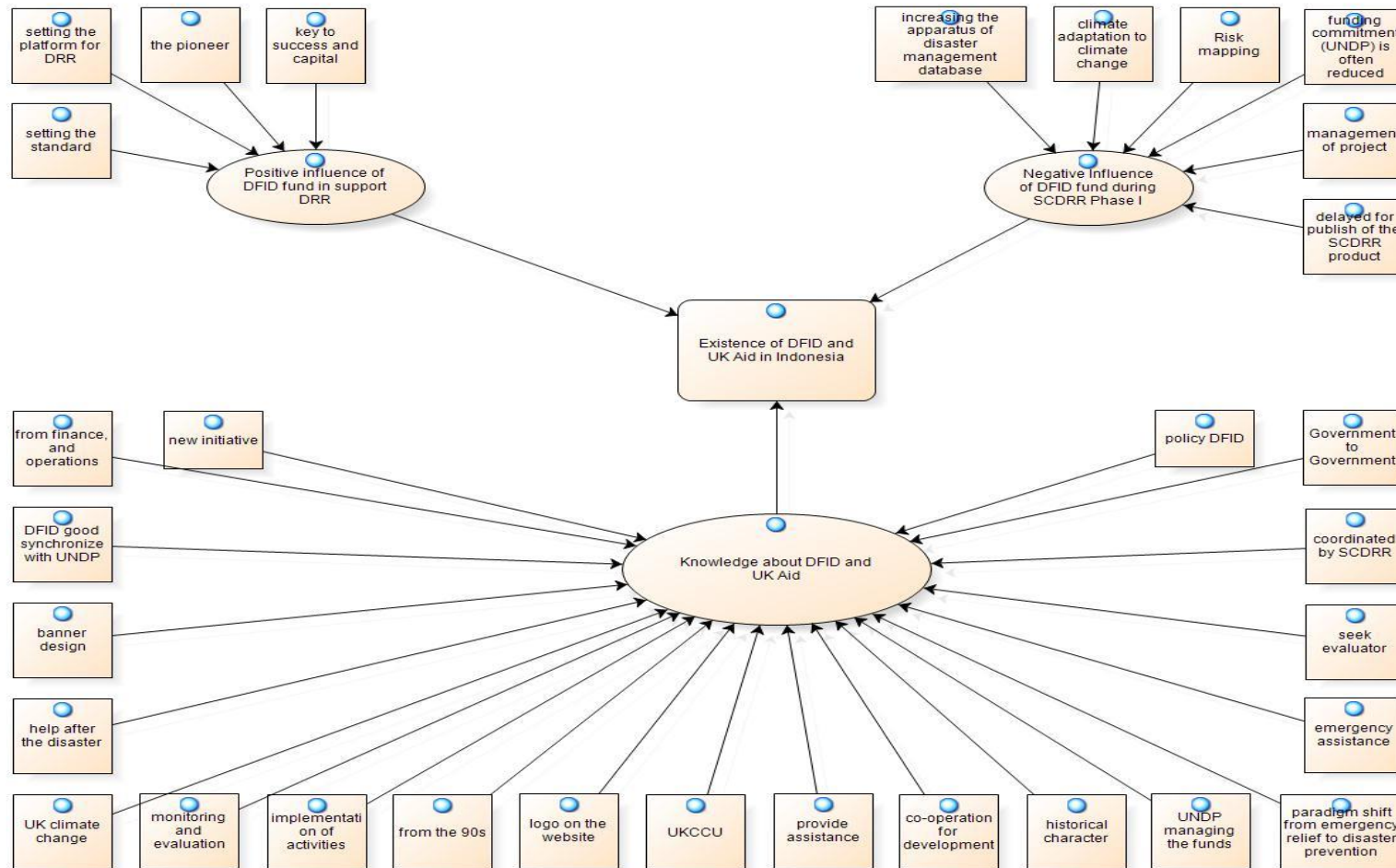
### **5.9. Existence of DFID and UK Aid in Indonesia**

This section will explore analysis based on respondent views related to the knowledge and performance of DFID and now most popular UK Aid, including the existence of the United Kingdom Climate Change Unit (UKCCU) in the UK embassy in Indonesia as the part of DFID unit in Indonesia. This section will also discuss the

positive influence and negative influence of DFID whilst implementing DRR activities in Indonesia. Before started explore this sub section, the related issues found during analysis will be displayed in the cognitive map Figure 5.5.



**Figure 5.5 Cognitive Map of Existence of DFID and UK Aid in Indonesia**



### 5.9.1. Knowledge about DFID and UK Aid

The Department for International Development (DFID) is part of United Kingdom Aid (UK Aid). This section will explore knowledge from interviewees and the literature review related the DFID in Indonesia.

DFID became known in Indonesia after the earth quake and tsunami disaster in 2004. According to SCDRR project, it can be seen honestly by **R01** which knew about DFID form *"...logo on the website SCDRR..." (R01/Ref1)*. Logo DFID was officially captured in every official letter of SCDRR to other stakeholders.

**R04** understood DFID from the history of existence of DFID in Indonesia, R04 specifically stated, *"...Maybe some kind of a historical character from DFID and also from the UK climate change that we can appreciate the commitment from the UK government in connection with initiating some new initiative in Indonesia..." (R04/Ref1)*. DFID brought new initiatives about the paradigm of mitigation before disaster called disaster risk reduction. The Government of Indonesia gave much appreciation for the British Government through DFID. R04 also adding *"...the paradigm shift from emergency relief and post-disaster recovery to disaster prevention and disaster risk reduction 2007-2010, and then in 2011 to change the structure or change the character of DFID into UK climate change..."(R04/Ref13)*.

In the middle and the end of SCDRR project, donors with independent monitors came into the field for monitoring and evaluation.

Similarly R01 and R09, R09 stated that the source operation and the budget project was from the finance division,. **R09** said, *"...Donors generally knew when the implementation of activities such as FGD displays the name of it donor . Usually, we get the information from finance, and operations. So when the banner is designed, the logo will be put on the banner, including the display name of the donor, whether from DFID or UNDP..." (R09/Ref1)*.

Other information about DFID performance was known by people, in particular, when crisis attacked UK and Europe. **R10a** noted that related to this issue *"...many years later there is a crisis in the UK and in Europe, which changed the policy so that DFID policy funds that are not distributed throughout the year cannot be carried over but was eventually taken by DFID..." (R101/Ref1)* that can be seen from the budget allocation. It must be returned to DFID and cannot be carried over to next year program.

**R12** states in a different context about *"...DFID precisely because it is very honest and good, I always feel DFID has been sincere and well. So all those coordinated*

by SCDRR phase one strongly believe so, I do not know, on the one hand, seek evaluator who was writing only nice things I read...(R12/Ref1). DFID chose an Independent evaluation monitor to provide a credible report which can be a model to other countries that may implement donor budgets.

As with R01 and R09, R13 knew about DFID from UNDP, which also manages the budget from UK and Australia as well. **R13** stated, "...(*UNDP funds from DFID*), I know because UNDP are managing the funds in a few donors, they were from the UK, from Australia as well, we knew it, the budget was not clear so could be reduced annually in the MoU..." (R13/Ref1). R16 referred to DFID since the recovery Aceh. **R16** stated, "...From the time of recovery of Aceh, DFID had already begun to provide assistance to Indonesia..."(R16/Ref1). It shown the existence of DFID in the 90s, DFID was active in the humanitarian action program. R16 also was added details of year intervention. "...from 2009, 2004, if not wrong, then to do with the disaster that I know that they started to help after the disaster in Aceh, from 2004 to 2009..."(R16/Ref2). Related with the disaster events in Aceh, *DFID (2008) in response to the tsunami in Aceh and Nias Indonesia, DFID funds cleared over 1.1 million cubic meters of debris from agricultural land, helping approximately 1,400 households return to farming, and helped re-establish municipal waste services to 97,000 households (DFID, 2008)*. DFID was known in Indonesia for supporting a changing paradigm to disaster risk reduction, R16 stated, "...a paradigm shift in disaster management Indonesia with increasing intensity of disastrous events that DFID made possible through the agency of Indonesia's development partners in UNDP began to assist the efforts of disaster risk reduction. A corresponding paradigm shift in disaster management Indonesia was probably associated with some of the activities that the target is an attempt by the capacity of communities..." (R16/ Ref3). As with R13 and R16, , it can be seen from the administrative agent UNDP performance. **R17** stated, "...The UK wanted to help, which is supported by the Indonesian government not UNDP. There were some issues and problems with the administration. They do not have networking and also do not have the infrastructure to channel the money, so they use the UNDP..." (R17/Ref2). R09 and **R19a** also known about DFID "...actually SCDRR finance came from DFID funds or the British government..." (R19a/Ref1). The finance division also plays a role in socialization about funders or the donors of the project.

R21 stated that DFID was well synchronized with UNDP. **R21** stated, "...DFID money came but it could not be separated from UNDP..." (R21/Ref1). R21 express about relation with government of Indonesia, between "...Government, UNDP and

*SCDRR are clear that this DFID included...(R21/Ref2). Government through Bappenas was choosing MoHA for detailed implementation to local government.*

**R23** is focused on administrative structure of DFID in Indonesia, she *"...talked about UKCCU (United Kingdom Climate Change Unit), because UKCCU, included DFID which combines the Department for International Development (DFID), the Foreign and Commonwealth Office (FCO) and the Department for Energy and Climate Change (DECC). UKCCU sometimes have reported to central government that they have 15 people on staff. The staff handle many projects in Indonesia..." (R23/Ref1). In general, the projects of UKCCU are generally reported to Bappenas through the Directorate of Bilateral Foreign Funding. Inside that, R23 adding, "... UKCCU regularly reported to the Ministry of Finance and also to the Bappenas about update in developments of activity, there is always a bilateral meeting continued our bilateral meetings with UKCCU..." (R23/Ref2).*

Various models of the project were implemented in Indonesia through UKCCU, R23 stated that *"...Government to Government cooperation, particularly our co-operation for development is handled through this directorate, because it only handles deputy finance funding for development cooperation, this (SCDRR) may be emergency assistance or any other form..."*, SCDRR was categorized as emergency assistance for humanitarian action. R23 said that it can be identified at *"...the time in the existing bilateral meeting, the minutes of meeting of summary report satisfaction, it is usually at the front..." (R23/Ref4).*

### **5.9.2. Positive influence of DFID fund in support DRR**

The impact of British Government aid in support of Disaster Risk Reduction in Indonesia assisted various influences and impacts in many institutions of government, started from community, local NGO, local government in district and province, disaster management institution, and central government. OECD (2013) defines impact as:

*The positive and negative changes produced by a development intervention, directly or indirectly, intended or unintended. This involves the main impacts and effects resulting from the activity on the local social, economic, environmental and other development indicators. The examination should be concerned with both intended and unintended results and must also include the positive and negative impact of external factors, such as changes in terms of trade and financial conditions (OECD, 2013).*

The positive influence of DFID (UKAid) can be seen in as: the key to success and capital; the pioneer; trendsetters; setting the standard; setting the platform for DRR; initiatives based society; local wisdom; community-based disaster risk management (CBDRM); legislation product; National Disaster Management Plan; NAP-DRR; strengthening the readiness or capacity of BNPB and BPBDs.

The downside is that DFID almost didn't find; investment in DRR. DIBI Indonesia was the best in the Asia-Pacific; closeness between BNPB with Bappenas; and community action plan (CAP).

R03 noted about arrival of the budget from DFID at that time was to be one of the main supports for stated budget allocation for disaster risk reduction. In line with R03, R04 stated, *"...Before launching in Bappenas in 2007, we still held a preparatory workshop and at that time a new SCDRR informed us that DFID is possibly the only donor support..."*(R04/Ref8),

**R03** noted, *"... of the government since that time, the controlling is very precise and there is also no support, especially at the time of entry to DFID, this became the key to success and capital. Our success is to insert RPJM and our funds to move after being RPJM..."* (R03/Ref1). Similar to R03, **R04** raised concerns that the DFID are active in capturing the inspiration from the government of Indonesia in initiation the mainstreaming of DRR into development. R04 stated, *"...the name activities funded by DFID had become the pioneer but also a kind of trendsetters, so some sort of setting the standard, setting the platform for DRR to actually,..."* (R04/Ref2).

### **5.9.3. Negative Influence of DFID fund during SCDRR Phase I**

The negative influence of DFID (UKAid) during implementation of SCDRR project can be found in various areas. Generally, it can be found in analysis about: management of the project; adaptation of the program: Risk mapping; delay published of SCDRR product; increase apparatus database of BNPB; funding commitment (UNDP) is often reduced; and climate adaptation to climate change.

The management of project implementation will determine the path through the project. **R12** mentioned, *"...the path establishment with the same personnel, they want to be comfortable, and they do not want anyone else disturbed. Although if you want to be checked properly or not they have good leadership..."*(R12/Ref1).

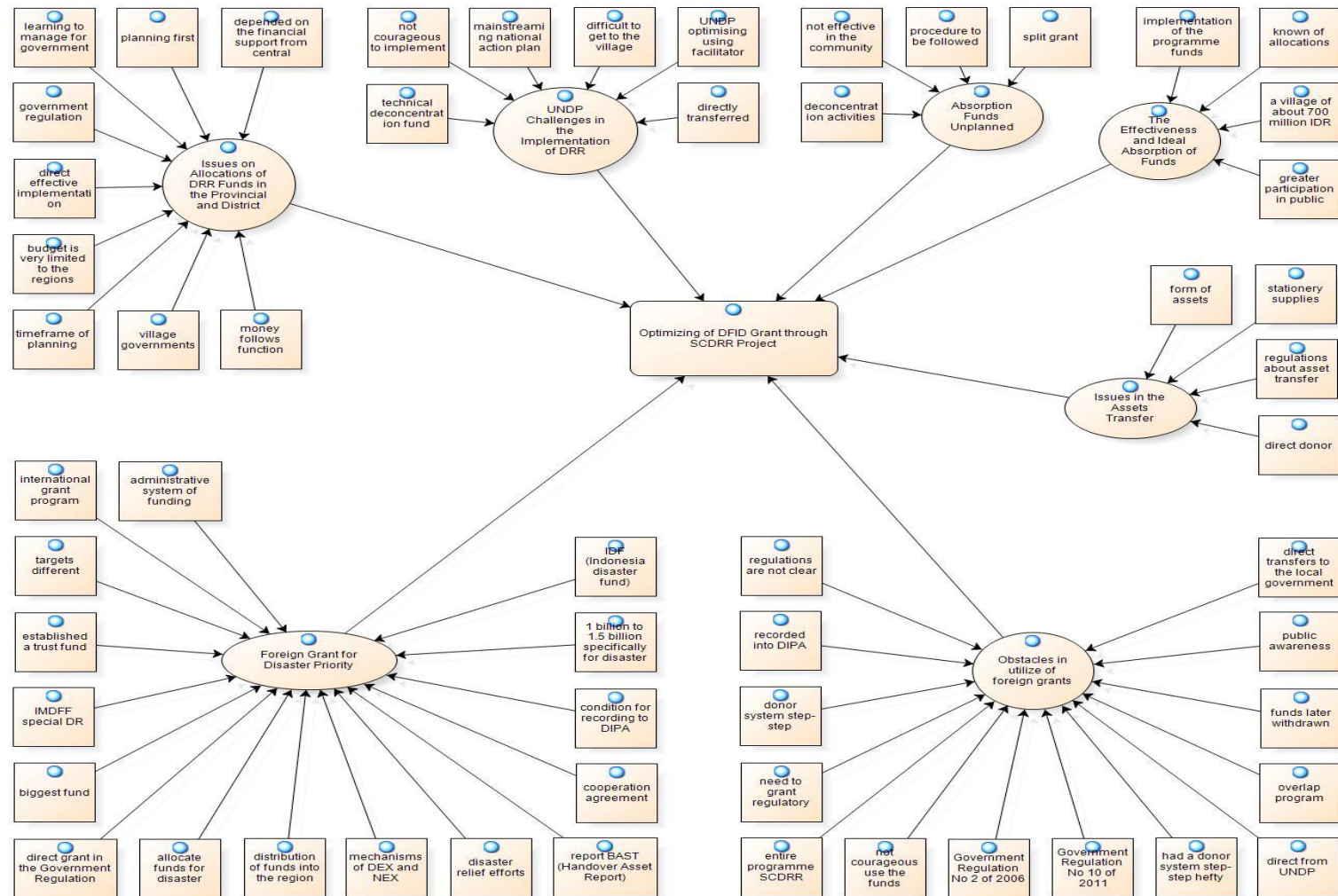
Adapting the program that can be a success when using good components. R12 analysis on the risk mapping program was, *"...in making a map of the province of risk mapping. Risk mapping is done by SCDRR phase one. That's really cool, but when it was taken over by the government through BNPB it will be applied in 33*

*provinces instead. So if we compare the quality of risk mapping made by UNDP with the risk mapping made by BNPB, UNDP is better.” (R12/Ref2).*

### **5.10. Optimizing of DFID Grant through SCDRR Project**

This section, will explore analysis based on respondent views and literature support associated with the foreign grant for disaster, absorption, issue in transfer of assets and other impacts as obstacles and challenges of implementation of SCDRR. Before starting to explore this sub section, the related issues found during analysis are displayed in the cognitive map Figure 5.6.

**Figure 5.6 Cognitive Map of Optimizing of DFID Grant through SCDRR Project**



### 5.10.1. Absorption Funds Unplanned

Unplanned absorption of funds usually happened in the government institution that caused many programs and activities that have to be completed as the regular program. That affects other extra unplanned programs in the government annual work plan. Mostly, the absorption grants were also unplanned. That caused uncompleted regulatory related grants to be implemented.

**R10a** noted *"...why absorption is not according to plan, as we all know that the program? UNDP is always associated in the government, at the moment with regard to the government, the first procedure to be followed, and the procedure to be followed later from the administrative side of the project. It may be a matter of how to split grant. While the reply of the technical programs was to coordinate with the related sector's relevant line ministries..." (R10a/Ref1)*. It was related to the relevant sector which will implement the grant having different issues to be solved. However, OECD (2013) noted relevance is the extent to which the aid activity is matched to the priorities and rules with the target group, beneficiary and donor, in assessing the significance of a program or a project, (OECD, 2013).

SCDRR in optimising grant from DFID was overall effective but in several, cases can be found to be not effective, in particular, in the community. It was stated by **R12** *"... we must admit that it was nice to have SCDRR on several sides but if appropriate questions such as whether it was effective? Not effective in the community..." (R12/Ref1)*. UNDP as an administrative agent of DFID didn't have an extension of the hand to local government.

Another absorption funds unplanned was related to the model of disbursement from central to local government. **R13** was concerned about *"... SCDRR looks like a de-concentration, but not the deconcentration activities for physical development, just to increase the capacity of the apparatus, so more to socialization, meetings; coordination meetings continue. There are also some simulations, so that no large assets were handed over, unless the assets were stationery, including computer equipment..." (R13/Ref1)*. Grants from DFID for SCDRR activities can't be categorized as de-concentration. It caused the grant not to be registered in MoF or MoHA or other line ministries. So implementation only can be done through off budget and off treasury mechanisms.

R13 also noted about grants with the UNDP during implementation. R13 *"...in our experience with the UNDP, there were a few (funds) which were reduced, eventually this caused activity to not take place until the end..." (R13/Ref2)*. It was then discussed at the project board meeting.



### 5.10.2. Foreign Grants for Disaster Priority

This section will analyse grants that were allocated for disaster priority. Before the disaster earthquake and tsunami in 2004 the Government Indonesia only allocated for disasters from social state budget allocation. Now, government through the Ministry of Finance (MoF) allocates specifically for the disaster management. Allocations were included for anticipated (emergency phase) and continued rehabilitation and reconstruction phase.

**R01** stated *"...Ministry of Finance allocated funds for disaster by looking at priority areas..." (R01/Ref1)*. This can be seen by an increasing allocation for disaster every year from state budget and grant.

The DRR program has the biggest allocation from grant DFID and it is in line with as noted by **R02a** *"...indeed most of DFID, the half of a fund, so really the biggest fund .. I think the eight million (R02a/Ref1)*. The Government of Indonesia was supported DFID. The allocation of grant to DFID is officially recorded in DIPA (state budget). **R02b** adding more about *"...DIPA it is only as a condition for the recording but the activity remains in accordance with the programs that we operate..." (R02b/Ref1)*.

Other DRR activity from other ministries also allocated different values. It can be found in the Ministry of Home Affairs (MoHA) state budget as mentioned by **R08a** *"...The province involves all the districts within the city, it is not a lot; one area ranged from 1 billion IDR to 1.5 billion IDR specifically for disaster..." (R08a/Ref1)*.

Disaster management institutions called BNPB stated that money coming from the grant is allocated and fills the funding gap between state budget allocation. It is stated by **R16** *"...now the quantity BNPB toward foreign grants is more of a fill funding gap..." (R16/Ref2)*. The fill funding gap has different meanings in the finance departments of government. **R16** adding more *"...It means that the program and its activities were begun with the already planned. It's like that. Therefore, suppose we have got a programme with its coverage of 100. Then there are good donors in donor countries which are well directed to implement a programme as made possible in the area to 101, 102, 103, it is an international grant program and activities are basically the same, only perhaps its targets different,..." (R16/Ref3)*.

The Government of Indonesia initiated the creation of trust fund institutions for managing the grants from foreign donors, in particular, grants for disaster management. The institution was initiated by Bappenas and BNPB. It was also stated by **R16** *"...Since 2010 Bappenas with BNPB has already established a trust*

*fund that had originally IMDFF special DR specifically geared to support the recovery of grants to support the recovery. In 2013, it was converted into the Indonesia Disaster Fund meaning the trust fund for the entire disaster management..." (R16/Ref4). After IMDFFDR was established and running with the government regulation, the government changed the policy to allow the institution to be general and covering any fund, which coming from loan and grant for disaster. The institution is called Indonesia Disaster Fund (IDF). R16 adding notes about IDF, "...now IDF (Indonesia disaster fund), so the strategy being pursued is to support the government in disaster relief efforts as a whole, whether it pre-disaster, during disaster or post-disaster, and the hope is that all grants go through the channel of IDF..." (R16/Ref5).*

After IDF was established under supervision by National Disaster Management Agency (called BNPB) it was supported by the government in accelerating the related regulation around the grants, loans and also about the mechanism of distribution from central government to provinces and districts. Government also carried out ongoing revision for regulations-related cooperation and joint programs in disaster risk reduction. R16 also identifies some regulations in that that have been an obstacle for institutions to implement grants in local government. R16 expressed *"...the difference was, if previous patterns still allowed on and off treasury budget, off-budget and off treasury or all sorts, but did not pay attention to that goal, as long as they follow the rules and procedures in government in Indonesia..." (R16/Ref6).*

Another implementation modality also affects the distribution of foreign grant disaster priority. **R21** note about the two modalities that were used by UNDP. *"...Through direct UNDP funds, there is money that is handed over to the government, through government funding. There are two mechanisms of DEX and NEX..." (R21/Ref1).* DEX is Direct Execution, and NEX is National Execution. The next step after the budget is ready to be implemented, usually central government (officially by line ministry) with the local government in agreement about the process of distribution and delivery of the budget. R21 also noted about this condition, *"...on the condition that the distribution of funds into the region passes through the path of government cooperation agreement, although the money directly from the UNDP. This is the pathway for financing and I think it's not a problem. It means as we go through all the normal procedures..." (R21/Ref2).*

Regulations related the distribution of foreign grant are still an obstacle, in particular, the existing regulations about grant need to be revised. **R23** expressed relating to the regulation, *"...if (implementing) the grant was difficult because of*

*government regulations on the actual grant is also not perfect, it still needs to be much-improved..."(R23/Ref1). R23 said, "...Because the direct grant is in PP (Government Regulation) it is when emergency situations, especially when disaster..." (R23/Ref2).*

The existing of government regulation No.11 relating to the grant foreign aid mechanism, still needs to be revised. That will allow the allocated state budget for maintenance of assets to run after the project is complete. R23 was informed about *"... they've followed the rules of government, by submitting a report BAST (Handover Asset Report) for each of the projects undertaken. It has also been carried out by projects funded by grants from UKCCU.*

### **5.10.3. The Effectiveness and Ideal Absorption of Funds**

This section will discuss issues regarding aid effectiveness and the ideal absorption of funds. Analysis was captured from many sources during the implementation of the SCDRR project and from the literature reviews.

It is difficult to comparing the effectiveness and ideal absorption of funds due to the dispersal of budgets. **R10b** mentioned, *"...4.3 million GBP was spent over many years. That means that, it is difficult to find a comparative example of all annual funds from other donors and consider the absorptions or the implementation of the programme funds that are absorbed and produce output that is effective?" (R10b/Ref1).* It can only be considered if the comparison subject available is equal. DFID (2008) concern relating to aid effectiveness is concerned with achieving the best poverty reduction possible for each pound or dollar of aid spent. The UK government aims to maximize the impact of UK aid on the world's poor. DFID provides 12% of total global ODA and helps to lift at least three million people permanently out of poverty every year (DFID, 2008).

Funds allocated for disaster resilience in village are disbursed effectively and the disbursement of the grant if local government is managing the NGO and local community. It was identified by **R18** *"..., a village was provided about 700 million IDR if I'm not mistaken, and it was actioned by an NGO appointed directly by SCDRR..." (R18/Ref1).* After SCDRR was completed, local government and the communities felt the benefit from disaster resilience. Villages and local government allocated funds based on capacity of the local state budget at around 300 million IDR for one village.

#### **5.10.4. Issues in Assets Transfer**

Asset transfer is the process that has to be completed for every government project. SCDRR is one of the government's projects which focuses on mainstreaming the disaster risk reduction program. It includes asset transfer and is prevalent at both national and central government level. **R13** stated, *"...if it is at national level, it would be our asset. When I was in the Jakarta, UNDP would handover items to national assets, such as two computers and scanners and stationery supplies..."*(R13/Ref1). R13 stated that assets transferred at national level would be registered as a ministry asset.

Activity regarding transfer of assets was increased in Indonesia after disaster earthquake and tsunami in Aceh and Nias. It also affected other government projects in order to learn lessons in solving asset management issues. **R17** described lessons learned about asset transfer, *"...After the tsunami, a lot of problems arose in asset transfer cases as it was difficult to direct a donor such as an outside partner. They supplied assets directly as they did not have a partnership with central government and this became extremely complicated when the transfer of assets was addressed. The asset's transfer process needs to be clear at the time of the handover to a development partner of the government."* (R17/Ref1). Asset transfer in the SCDRR project should be solved after it has been registered with the government. The registration process can be implemented at both the asset institution in local government and at the line ministry at national level.

SCDRR asset registration from the phase one is a still on-going process and some assets cannot be identified and are waiting for policy decisions from the government. **R21** mention *"...in the end, what has been donated by DFID through this SCDRR project, must be received by the Indonesian government in the form of an asset and in a timely manner but the rules are not yet clear..."*(R21/Ref1). The government regulations about asset transfer are not in fully clear about specific asset and some assets have to transfer after the compliance with additional regulations. This is an on-going process.

Similarly, R21, R23 also stated that, *"...it is not easy to be able to solve the problem of assets, due to regulations. Regulations make it difficult for ourselves, and sometimes the rules that we make it more difficult..."* (R23/Ref1).

During the data collection process by the researcher, the asset transfer process from the SCDRR project in phase one was still on-going and verification of more than half of the assets transferred were being carried out by local government and line ministry.

#### **5.10.5. Issues of Allocation of DRR Funds in the Provinces and Districts**

The allocation of DRR funds to local government (through province, regent and city) supported the development of local government and the community. Various donors chose local government to distribute the DRR fund. DFID is one of the donors who chose local government as a target location. During the distribution of the fund several issues were identified as obstacles.

In the main local government did not take action in response to disaster events. This caused of confusion in particular towards regulations prior to government regulations relating to disaster management. **R04** stated *"...central government was not organised due to government regulation (called PP) before the creation of disaster legislation in 2006. As a result they did not allocate funds to the disaster due to a lack of authority" (R04/Ref1)*. Although the institution was established, the administrative process and regulations did not readily solve problems.

Institutional disaster management in the local government, called BPBD could not operate as an optimised operation. R04 mentioned that *"...BPBDs are still not strong and independent as yet. BPBDs in Indonesia are still very dependent on financial support from BNPB..." (R04/Ref4)*. Mostly the new institution operated as the technical operational unit from the line ministry and was located within the province. Regularly the institution needed operational support from central government but didn't have independent state budget allocation.

Similarly with R04, **R08a** also spoke about the performance of BPBD in the region, *"...There are complaints. BPBDs is formed but weak. There are technical instructions but no budget..." (R08a/Ref1)*. This has become a lesson learnt for central government. R08a stated that *"...the direct effect was implementation without learning. Especially lessons relating to the management of government officials and local government..."(R08a/Ref2)*. The government of Indonesia should be aware about this common issue, anticipate and look for a solution.

As mentioned by R04, R08a and **R09** stated that the budget for local government should have priority based on the emergency budget allocation. R09 mentioned that *"...the budget is very limited in the regions and does not meet the needs of those preparing activities related to disaster risk reduction..." (R09/Ref1)*

R15 compared the performance of a local institution at the village changed into baseball club.

#### **5.10.6. Obstacles to the utilization of foreign grants**

This section will analysis obstacles found during the implementation of SCDRR project utilizing foreign grants. The obstacles include performance of the line ministry; donor policy changes; management distribution budget; unsupported local and central regulations; overlapping of the programs and activities; and weaknesses in the regulations when utilizing a foreign grant.

Policy change effected to the implementation of the SCDRR project. **R10a** that was stated, *"...The majority of the time DFID was utilized, but some programs or funds were later withdrawn because it was not distributed due to a lack of public awareness of the entire programme SCDRR..."* (R10a/Ref1). Policy changes from donors who were effected reduced budget absorption of the program/activities during implementation. Management projects should consider contingency plans.

Management of the distribution of budgets is unsupported by the regulations related to the utilization of grants. It was noted by **R13**, *"...Essentially several regions are given assistance. They work in the hope that the regulations also support them. They use the funds carefully if the regulations are not clear as they do not want to be fined or imprisoned later. This is a problem, indeed the regulation at the time was not yet complete, and the first new funding went directly to the DIPa. When it is a grant that is directly transferred to the local government the absorption is good..."* (R13/Ref3). If funds are utilized without following regulations it can be punished by law. Grants from DFID through UNDP 2006 was a new model and was distributed with cooperation from the local government. The distribution budget looks like a deconcentration model, but differs from that of a foreign grant.

The model of distribution from foreign grant is also mentioned by **R13** in *"...they (the local government) are better directed by the UNDP, but because there are regulations under the Jakarta Charter stating that foreign grants must be routed through central government since all foreign grants were authorised by central government (through the ministry / agency) and UNDP was sent directly to local and regional levels, it is therefore directly accountable for the UNDP, so they really do not want to be burdened. However, after removing the rules regarding the grant, everything must go through the central government..."* (R13/Ref4). Every grant distribution model has to follow the latest regulations. Government Regulation No.10 Year 2011 relates to Utilization of Foreign Loans and Grants Admissions, and replaces Government Regulation No 2 Year 2006 which relates to Procedures for Procurement of Loans and / or Acceptance of Grants and Forwarding Loans and / or Grants Abroad. R13 and R15 were also concerned about the implementation of on-time payments from donors. **R15** note *"...The donor system was a step by step*

*payment but was not the lowest payment and required a schedule so that the public could budget properly. ...” (R15/Ref1).* A delay in payment of budget affects the expected outcomes causing a delay of program execution.

Similarly with R15, **R17** discussed the overlap issue *“...for example unusual overlaps between the forestry and agricultural environment then confusion is caused in areas where it overlaps occur...” (R17/Ref1).* Overlapping of programs between line ministries is common and usually solved by a Multilateral Directorate at Bappenas. It manages loans and foreign grants in multilateral area. R17 added, *“...UNDP acts as the neutral party between the government and implementing partners” (R17/Ref2).* Sometimes the ruling institution cannot be effective for grant utilization in that location.

#### **5.10.7. UNDP Challenges in the Implementation of DRR**

Challenges to UNDP Indonesia during the implementation of DRR can be seen from various actions from UNDP in support of sustainability of the SCDRR project. **R12** noted *“...mainstreaming national action plan or RAN was difficult without UNDP or SCDRR support. This should have been supported by government...” (R12/Ref1).* The Government of Indonesia was highly appreciative of the UNDP for supporting the SCDRR project. Mainstreaming a national action plan is an important part of SCDRR. UNDP finds it difficult to mainstream DRR in the local community as UNDP has found it difficult to be a part of the community.

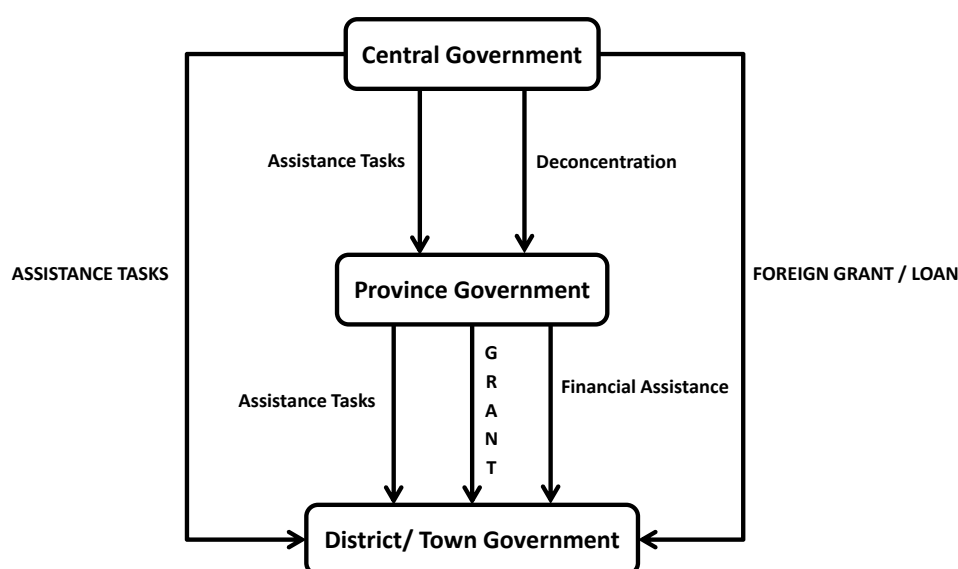
Generally, UNDP is an institution, which has a mandate to disburse foreign grants and engage with government. UNDP does not implement directly through provinces or regions, but is distributed through central budgets, UNDP acts as a facilitator.

Related to this and in terms of facilitation, R12 added more *“.....Because it builds a network within the community that cannot be built, a UN agency that would find it very difficult to get to the village would use a facilitator like UNDP. The facilitator is not necessarily a person who comes from that location but who come from the region. For example in West Sumatra Province that has a facilitator for the district, but the district has only two villages...” (R12/Ref2).*

Another challenge for UNDP in managing budget mechanisms to decide which scheme will be chosen. The decision will effect to overall performance of the related ministry. **R13** stated that *“...If the technical deconcentration fund is actually almost the same as that of the deconcentration, because the funds come from UNDP it is different the project executor must open an account themselves in the area in order to receive the funds. After the implementation of the deconcentration, these funds*

could be taken to the Treasury Office in the area of disaster-related activities, or directly transferred into the account of the fund managers in the region, not through the Treasury Office,..." (R13/Ref1). A Deconcentration mechanism is the best option for budget delivery to local government, but could not be implemented. Due to the regulations not being supported. SCDRR was active in the first-year of the project and tried to solve the problem.

**Figure 5.7 Simple Illustration of Deconcentration Fund and Assistance Tasks Fund**



Sources: Analysis from Budget Concept by Supervisory Financial and Development Agency and Ministry of Finance

Budget from DFID via UNDP to MoHA for distribution to local government according to R13 is a mix method between deconcentration budget and distribution mechanism. R13 also mentioned, "...UNDP for example, obtain funds of 1 billion which were directly transferred to the account manager. This pattern has resembled deconcentration and is called the deconcentration mixture (off budget and on treasury), this is the first time that it has been applied and has included a grant to the DIP A APBN..." (R13/Ref2).

Another challenge for the UNDP during implementation is the difficulty in explaining to local government about distribution or budget allocation. Some of the local government representatives at project locations did not encourage taking decisions where the regulations were unclear. R13 also identified "..., there are few rules. Whoever supports do not necessarily encourage implementation..." (R13/Ref3). Until the end of the first year of implementation there is a low absorption rate for program activities with the local government.

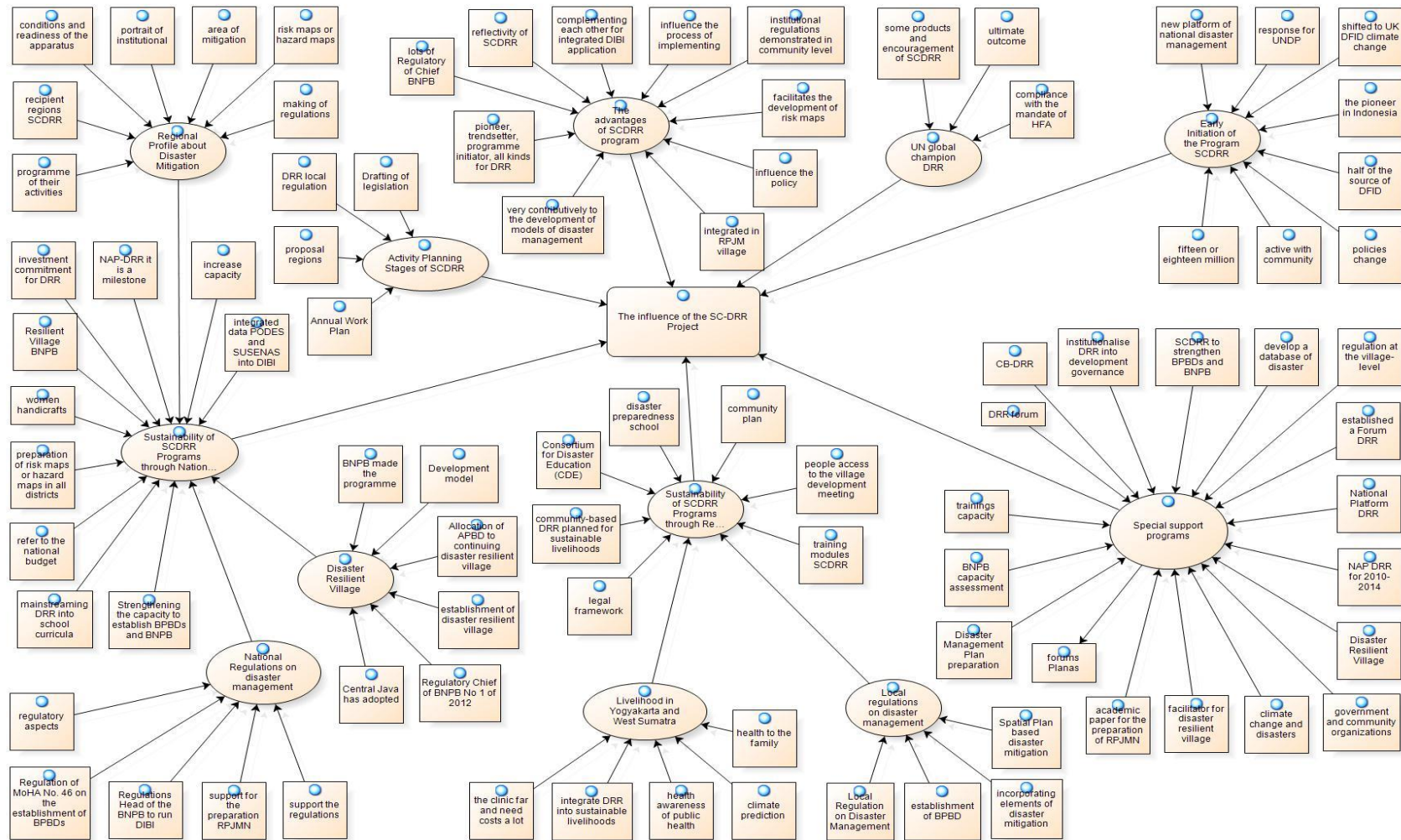


### **5.11. The influence of the SCDRR Project**

This section will explore the analysis related to the influence of SCDRR Projects in Indonesia which are funded by DFID. We know that SCDRR is a government of Indonesia Project is which funded by DFID through UNDP Indonesia. The line ministry that was responsible for the project board for implementation of this project are Ministry of Home Affairs (MoHA), National Disaster Management Agency (NDMA) called BNPB, and the Ministry of National Development Planning (Bappenas). The First Phase of the SCDRR project it was started in 2006 until 2012 and continues with the Second Phase which has limited the coverage. During implementation, this project was been supported by various donors, and largest being DFID (UKAid together with other donors. The SCDRR project influenced the strengthening of the project board (two ministry and one national agency), and local government in eight provinces and one city. In the second phase extra location coverage location was implemented.

Before starting explore in sub sections, the related issues found during analysis will be displayed in the cognitive map Figure 5.8.

**Figure 5.8 Cognitive Map of The influence of the SCDRR Project**



#### **5.11.1. Activity Planning Stages of SCDRR**

The planning stages of SCDRR were strongly related to other institutions, other project board members and stakeholder partners such as other lines ministries outside project boards, local government, International NGO's, National NGO's and community forums. In the planning stage of the SCDRR project via **R09** stated that, *"...we usually prepare an Annual Work Plan (AWP). We invite different areas of the pilot project SCDRR and collect all proposals from each region in order to decide the activities for next year to be entered in the AWP..."* (R09/Ref1). The proposals are usually from the region and can be a useful contribution for the revision of AWP.

R09 was concerned about *"...What is needed in the local regulation DRR? and drafting of legislation on Disaster Management. Included in the discussions were, consultants, FGD (Focus Group Discussion) and existing workshops. We all explored details of the budget in order to obtain a total budget of activities to draw up a local regulation DRR..."* (R09/Ref2). Strengthening the disaster management institution is an important part of planned activities from SCDRR support. During SCDRR project implementation a lot of regulations at the national and local level that have been established were supported.

#### **5.11.2. Special support programs**

The DFID fund was provide and distributed to any intensive special support pilot project location. Various special support programs have been identified, such as application DIBI; DRR forum; National Platform (called Planas) Forum; academic research for support preparation of RPJMN; climate-change adaptation; disaster resilience village facilitators; action plan for communities; Community-Based Disaster Risk reduction (CBDRR); strengthening capacity of disaster management institution; institutionalise DRR into development governance;

Development of DIBI it was noted by **R01** *"... develop a database of disaster...."* R01 also adding database information about disasters that was called *"...Data and Information of Indonesia Disaster (DIBI)..."*.

Various special support programs were mentioned in the first paragraph of this section relating to implementation of the SCDRR program. **R02b** active in the SCDRR project showed concern *"...We support at the national level through forums. Planas still exists in eight regions, we support DRR forums. These will be the partner in the region in support of DRR activities..."* (R02b/Ref1). DRR forums in some regions are still active and contribute to local government development planning.

In supporting new government transition in the preparation of National Medium Development Planning (Called RPJMN). R02b also identified that *"...this year (2014) SCDRR assisted Bappenas with background studies for an academic paper for the preparation of RPJMN. This became the basis for the new government and continues the same process of assisting Bappenas..."* (R02b/Ref2). It assists Bappenas in preparation of background studies for New RPJMN as part of SCDRR phase two.

A facilitator was to be part of the success of the disaster resilience village program, R02b stated, *"...SCDRR was asked to become a facilitator for a disaster resilient village where regulation remained at village-level ..."* (R02b/Ref4). The facilitator in support of the SCDRR paid attention to the related regulations at village level. As well as supporting the disaster resilient village, SCDRR also supports communities. R02b added, *"...we also provide assistance to some communities for the action plan, there are approximately one hundred million rupiah..."* (R02b/Ref5). Impact in the communities related the thinking about action for communities regardless of the effect of budget allocation. It related the importance of assistance in the community. DFID (2011c) was also concerned that we should improve our thoughts around the affected contexts, original causal causes and the long-term effect that aid has on communities, societies and economies. This is particularly important in fragile and conflict-affected states. Quality humanitarian programming often needs to be integrated and multi-sectoral, and the UK will support and encourage its partners to take such an approach (DFID, 2011c).

Based on the DFID approach grant assistance for other countries should support the economic pillars of the state, community is one of those pillars of state. Resilience in the community depends upon the effort from local government in managing disasters.

SCDRR also had goals regarding whom should be provided with support action within the community, R02b noted, *"...a pilot project of Disaster Resilient Village or Community-Based Disaster Risk reduction (CBDRR) was helped by local a NGO that contracted directly with UNDP..."* (R02b/Ref7).

A target outcome for SCDRR in disaster resilient villages is to establish stronger holistic villages, such as buildings, village structure, community etc. Elements of resilience can be varied and depend on resilience classifications itself.

Strengthening capacity was important for the apparatus that was the influence of SCDRR, **R04** stated, *"...SCDRR was also asked to consider BNPB capacity assessment, I think this is important when seen within the context of institutional..."*(R04/Ref3). It supports to strengthening of capacity of the BNPB and BPBD.

A result of strengthening the capacity of disaster management institution is the expected compilation of a development planning document to support disaster risk reduction. R04 mentioned, *"...Disaster Management Plan preparation, preparation of the NAP DRR for 2010-2014, including the fact of our time preparing the NAP DRR 2006-2009 became the beginning of the early support of SCDRR..."*(R04/Ref5).

Similarly R04, **R09** also mentioned, *"...the 4th output frequency to the community often conducts training associated with the community. Then if the output of the 2nd training includes the capacity to build both at the government and community organizations..."*(R09/Ref1). R09 also stated the importance of training capacity for the apparatus of disaster management institutions.

In parallel with the R04 and R09, R11 was strongly concerned about the establishment of disaster management institutions. **R11** noted, *"...Output 2 is to institutionalise DRR into development governance, through regional institutions, such establishment of institutions that deal with disaster management is handled by the government, then formed as BPBDs and BNPB..."*(R11/Ref1). R11 adding more *"...In the end it then becomes the task of SCDRR to strengthen BPBDs and the newly formed BNPB. The BNPB exists to support the institutionalisation of DRR as soon as possible at national and local levels, which are in nine locations, eight provinces and one city..."* (R11/Ref2). The influence of the SCDRR program is active and must establish and institutionalise DRR into development. It should also endorse the establishment of disaster management institutions at national level (BNPB) and at provincial and district level (BPBD). SCDRR also supports the establishment of Forum DRR into Platform National.

R11 also added that another similarity in strengthening capacity of this apparatus is that it can be included in discussing current issues. It also *"... established a Forum DRR which at national level was named the National Platform DRR, if in the area DRR forum a national level were not initiated each region would support the establishment..."*. (R11/Ref4). Similarly with R11, R20 also agreed on the establishment of Forum DRR and National Platform, **R20** noted, *"...the establishment of the National Platform (Planas), it seems to me Planas until now, according to my opinion is not too much to contribute, but at least it was as one of the recommendations it had been implemented HFA 1..."* (R20/Ref1).

### **5.11.3. Sustainability of SCDRR Programs through National Programs**

The influence of the implemented SCDRR project brings a new framework for handling and managing disasters. The achievement of the SCDRR program was recommended to sustain new programs into national programs such as; investment commitment for DRR; Resilient Village

BNPB; integrated data PODES and SUSENAS into DIBI; module mainstreaming DRR; Strengthening the capacity to establish BPBDs and BNPB; preparation of risk maps or hazard maps in all districts; NAP-DRR;

**R04** mentioned that, *"...SCDRR very concerned to improve what it called an investment commitment for DRR, especially at the level of ministries through RAN PRB that has been prepared by SCDRR..."*(R04/Ref2). The Government of Indonesia as the country which located in the disaster-prone area should increase investment commitment for DRR.

**R05** stated that *"...BNPB has adopted a concept derived from this program, now using the name from the village program; it originated from the ERA Project then was tested within the SCDRR Project and continues to be referred to as Resilient Village BNPB program..."*(R05/Ref1). Disaster resilient villages became one of the national programs at BNPB after SCDRR project completion.

**R07** integrated data PODES and SUSENAS into DIBI. R07 noted, *"...demographic data such as PODES (The Village Potential Statistics), SUSENAS (National Socio-Economic Survey) has been synchronized to the data DIBI, meaning that there has been a historical communication from the data DIBI including baseline demographic data from Bappenas..."*(R07/Ref1). It indicate DIBI is an application which was easy to integrate with other systems.

In the education sector it was identified as stated by **R10a** *"...We then compiled a module mainstreaming DRR into the school curricula in elementary, junior, and high schools for five types of disasters, continue existing training modules. The module was composed and prepared by the central team curriculum which also provided enrichment on disasters and DRR by each expert associated in certain disasters..."*(R10a/ef1). SCDRR had support from local NGO's. For integrating into school curricula, R10a stated *"...we give grants and we are accompanied, its mean Curriculum Centre (called Puskur) it allocated the expert and there also did are several workshops..."*(R10a/Ref2).

*BNPB is diverse; they are associated with the analysis, produce data and disaster information about Indonesia and others, and also provide training for staff BPBDs..."*(R11/Ref1).

R11 mentioned, *"...Strengthening the capacity to establish BPBDs and National Regulations on disaster management"*. Similarly mentioned by R11, R15 about specific strengthening capacity in the districts Blingo, Kulon Progo and Kebun Bawang, **R15** stated, *"...there are budgets provided to increase capacity in Blingo, their marketing was used for the regions women handicrafts, selecting products and which were promoted by other agencies and recognized by the local government through Bappeda, Bappeda played a very important role at the time in Blingo, Kulon Progo and in Kebun Bawang..."* (R15/Ref1).

Budget allocation in SCDRR was referred to national budget regulations. **R18** stated, *"...SCDRR goods are already referred to the national budget. It will be utilise the national budget better..." (R18/Ref1)*. Referring to the national budget for every single project will make it easy for the government to identify assets after project completion. It will be easy for government to allocated budget for regular maintenance of the assets.

*R18 also added, "...we have prepared risk maps or hazard maps in all districts within the city and provinces, and we think each term is probably every three years so they need to be updated..."(R18/Ref2)*. Hazard maps are urgently required in every disaster-prone area.

R20 stated that, *"...NAP-DRR is a milestone and is a good thing. It enables BNPB to look for trends such as future of government programs relating to disaster management, and disaster risk reduction..."(R20/Ref3)*.

#### **5.11.3.1. Disaster Resilient Village**

Disaster resilient village influences the SCDRR project. Disaster resilient village became a national program within the sustainability BNPB of the SCDRR program through the National program. BNPB (2012) identified Villages/ Sub villages resilience that have an independent ability to adapt in the face of threats of disaster and recover quickly from adverse disaster effects. Resilient Village is a village-level community assistance program to reduce the potential impact of the disaster, by building and strengthening the knowledge, participation and community and village government regulations for disaster risk (BNPB, 2012). BNPB also added that the Resilient Village program requires time and space to enable it to be alert and resilient. *The stages of this process that will determine the selected program to proceed are: (1) Organizing (2) Identification of Potential and Risks of Disasters, (3) Preparation of Disaster Management Plan (4) Public Education, (5) Economic Empowerment and Institutional and legalization Resilient Village and public regulatory system and the village government for risk reduction (BNPB, 2012).*

Disaster Resilient Village was adopted as a national program of BNPB. It has been identified during data collection and can be found in various analyses:

**R04** mentioned that, *"...Development model of a resilient rural village includes a lot of things that have been initiated by SCDRR..."(R04/Ref1)*. **R05** stated, *"...BNPB provided the program even before the disaster resilient village. Central Java Province has been adopted and then had budget allocated. Based on what I know it is only Central Java, others have not. Naturally Central Java Province happened without the intervention of BNPB, but now this is required by all regions..."(R05/Ref1)*. **R16** noted, *"...Related implementation of BNPB is assists disaster resilient village..." (R16/Ref1)*. **R18** also mentioned, *"...Outside of the BPBDs the best in our opinion it is*

*the establishment of disaster resilient village in Cilacap district. There are six villages in Cilacap district formed by SCDRR...*" (R18/Ref1). **R20** concern about *"...they do activities within the community, such as move the disaster resilient village programme into a national programme issued by BNPB through Regulatory Chief of BNPB No 1 of 2012..."*(R20/Ref1). **R21** mentioned *"we also developed, education for the public; particularly Disaster Resilient Village..."*

Local government allocated the local state budget for disaster resilient village. According to budget allocations for disaster resilient village, **R18** stated, *"...(APBD continuing disaster resilient village), the budget is not enough, most of the budget allocation for the disaster resilient village programme is around IDR 200 million, that is contrasted with SCDRR budget allocation up to IDR 700 million, so while activities still continued tough villages and constructing disaster risk map..."* (R18/Ref2). **R22** mentioned, *"...there are 14 province in 2014, in fourteen districts. This means 28 villages in 20 districts of fourteen, there are 40 villages. So in 2014 our total there are 68 villages this means it takes 126 facilitators..."* (R22/Ref1).

### **5.11.3.2. National Regulations on disaster management**

This sub section is about national regulation disaster management and its impact on SCDRR implementation with the local government.

**R02a** was mentioned, *"...We support the regulations, such as Government Regulation, Regulation (Regulation of the Minister of Home Affair)..."*(R02a/Ref1). **R04** stated, *"... The regulatory aspects of the policy support the elaboration of legislation, PP (Government Regulation) including Regulation No. 21, 22, 23 at that time..."*.(R04/Ref1). **R07** mentioned, *"...guidelines and Regulations Head of the BNPB to run the database system is a disaster in which the contents reside in DIBI. It was already his Head of BNPB Regulation (called Perka)..."*(R07/Ref1). **R09** noted, *"...the birth of Regulation No.46 concerned the establishment of disaster response agencies in the regions, it is also supported by SCDRR on output one and continued with the preparation of regulations PB, local regulations about disaster management in East Nusa Tenggara Province..."*(R09/Ref1). **R21** mentioned about SCDRR support local government. **R21** stresses the important support of SCDRR to RPJMN, and said, *"...research funded by SCDRR includes SCDRR support for the preparation RPJMN, for the next RPJMN, there is ..."*(R21/Ref1).

### **5.11.3.3. Regional Profile about Disaster Mitigation**

Regional profiles including disaster mitigation were designed to be a national program for BNPB in 34 provinces in Indonesia. Regional profiles and disaster risk maps are needed by every



province in Indonesia. **R14** mentioned, *"...profiles of disaster mitigation in the area include sample recipient regions of SCDRR so that we can compare our profile portrait to institutional hazards. We can see the programme of their activities and why they are managing the hazards in their area ..."* (R14/Ref1), **R14** adding more about specification of the books, said *"...It begins with just identification of the wrapper and included the institutional profile, conditions and readiness of the apparatus, as well as the legal basis for the regulations such as profile examples. Furthermore, we look into the geography, demographics climatological conditions, and how to program and budget activities of the programme. From there we expect to understand the extent to which BPBDs able to contribute to the disaster for the region...."* (R14/Ref3).

#### **5.11.3.4. In strengthening the capacity of disaster management institutions at national and local level,**

This sub section relates to the impact of national regulations on disaster management and the impact of SCDRR implementation within local government and local government. **R02a** mentioned, *"...We support the regulations, such as Government Regulation, Regulation (Regulation of the Minister of Home Affair)..."* (R02a/Ref1). **R04** stated, *"... If the regulatory aspects of the policy aspects, it was to support the elaboration of legislation, PP (Government Regulation) all kinds of what it called Regulation No. 21, 22, 23 at that time..."* (R04/Ref1).. **R21** mentioned that SCDRR supported local government. **R21** argument important support of the SCDRR to RPJMN, and said, *"...SCDRR support provided research funding for the preparation RPJMN, on the background study to draw up RPJMN, for the next RPJMN."* (R21/Ref1).

Regional profiles of disaster mitigation was designed to be a national program of BNPB for 34 province in Indonesia. Regional profiles and disaster risk maps are needed by every province in Indonesia. **R14** mentioned, *"...when profiling disaster mitigation in the area, we sampled recipient regions in SCDRR and tried to profile, the programme of their activities and understand why they were managing the hazards in their area of mitigation ..."* (R14/Ref1), and **R14** adding more about specification of the books, said *"...It begins with identification of the wrapper, including the institutional profile, conditions and readiness of the apparatus, as well as the legal basis for the making of regulations such as profile examples. Furthermore, we look into the condition of geography, demographics climatological conditions, and how to program budget activities during any kind of programme activities. From there we expect to understand the extent to which BPBDs able to contribute to the disaster for the region...."* (R14/Ref3).

Similar to R14, **R18** expressed that *"... preparation of risk maps or hazard maps in all districts within the city and province need updating currently, and we think each they probably need to be updated every three years ..."*(R18/Ref1).

#### **5.11.4. Sustainability of SCDRR Programs through Regional Programs**

SCDRR project influence regional programs. The achievement of the SCDRR program was recommended as a sustainable answer for new programs into regional programs. These can be identified as, disaster preparedness School (SSB); training modules SCDRR; Consortium for Disaster Education (CDE); legal framework; community plan; community-based DRR planned for sustainable livelihoods.

Sustainability of Disaster Preparedness School (Called Sekolah Siaga Bencana (SSB)), **R10a** mentioned, *"...we provide grants to the three institutions to draw up or establish disaster preparedness schools in three area (Palu City, Bantul City, and Bengkulu Province). In Each district there are 3 grades (elementary, middle school, and high school) The were supported by a local institution within a year so that they could be disaster prepared schools which are tough and resistant to disasters in terms of awareness..."*(R10a/Ref1). R10a also adding about *"...SSB activities like training modules in SCDRR were used by a variety of local and national NGOs for their training in the area, they also continue to provide the awareness campaign activities SSB by the Consortium for Disaster Education (CDE)..."*(R10a/Ref4).

With regards to the performance of the community for sustainability livelihood in the locations of the pilot project, **R15** mentioned, *"...As SCDRR moved more towards its legal framework, then the activity at the community level, including the community plan, was prepared around the legal framework."*(R15/Ref1).. Government played a part in this support for the success of the community livelihood.

*Régnier et.al (2008) through the British development agency (DFID) provides a rather comprehensive definition to the concept of "livelihood": A livelihood comprises the capabilities, assets (including both material and social resources), and activities required as a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural base (Régnier et al., 2008).*

The community plan in Yogyakarta was designed to give people access to the village development meeting (called Musrenbang). R15 mentioned, *"...community plan are provided through musrenbang at district and provincial levels... at that time the people of Yogyakarta were already*

*aware of this but this shows that it is more difficult that we expect to enter the level to a higher level..." (R15/Ref2).*

#### **5.11.4.1. Livelihood in Yogyakarta and West Sumatra**

This sub section describes the influence of the SCDRR project, in particular, relating to livelihoods in DI Yogyakarta Province and West Sumatera Province. R15 states that, *"...in Yogya to start livelihood,...", "...the co-operation with local agencies and the problem of integrating DRR into sustainable livelihoods driving them more towards the economy..." (R15/Ref1).* Sustainable livelihood was implemented with guidelines from the Community Action Plan (RAK). R15 noted, *"...Community Action Plan (Called RAK) in Bantul City, used of some existing waste around. The livelihood of people in both areas were affected, the first one, in Yogyakarta, afterwards the second in West Sumatra Province. West Sumatra Province is much later because West Sumatra is optional, they test climate for climate change and make climate predictions then use these tools to estimate and anticipate disasters. "(R15/Ref3).*

Health of the family is also a program within livelihood, R15 stated, *"...actually the first is the health of the family, this would change delivering a better chance of them living a healthier life, due to better direction towards an increase in the health awareness of public health as such..." (R15/Ref5).*

#### **5.11.4.2. Local regulations on disaster managements**

Sustainability of local regulations was extremely important when implementing national policy and local policy-related disaster management. **R02b** stated *"...we support Local Regulation (Called Perda) on Disaster Management, as well as legislation on the establishment of BPBD..."(R02b/Ref1).* Local disaster management institutions called for BPBD recommendations for sustainability support in establishing local regulations related DRR.

In line with R02b, **R06** maintains *"...we have Spatial Plan based disaster mitigation and additionally district / city RPJMD. We are already incorporating elements of disaster mitigation, because we are in Bappeda and other sector will follow us. In addition we already have legislation that provides final PB and RTRW based disaster mitigation, including activities in community-based disaster risk reduction..."(R06/Ref2).* R06 specifically stated that spatial based DRR is strongly needed to be integrated into RPJMD (Provincial/ District medium-term development plan).

#### 5.11.5. The advantages of SCDRR program

During implementation of SCDRR project, it many advantages were discovered. They are : institutional regulations demonstrated in community level; pioneer, trendsetter, programme initiator, all kinds for DRR; all contributed to the development of models of disaster management complementing each other in integrated DIBI; influence in the process of implementing; facilitating the development of risk maps; influencing policy; and integration in RPJM village.

R02b identified the following advantages, and **R02b** mentioned, *"...term institutional regulations demonstrated in community level, including in the school community, but we are not there just to fund a pilot project be we also supported legislation such as RPJMN..."* (R02b/Ref2).

**R04** noted, *"...SCDRR was a pioneer, trendsetter, programme initiator, all kinds for DRR and included revenue examples of disaster management priority in RPJM..."* (R04/Ref1). R04 also adding, *"...SCDRR is contributed to the development of models of disaster management as a whole, not just in the context of pre-disaster but also, in the context of auditing systems for the emergency response..."*(R04/Ref4).

SCDRR and BNPB are complementing each other in integrated DIBI applications. R07 mentioned, *"...of the 11 regions, , there are 10 that supported the budget, nine regions supported budgets in SCDRR, one in BNPB, and one used its own regional budget..."* (R07/Ref1).

**R08a** stated, *"...SCDRR influenced policy regulations, but it looks like this project had a lot more influence over the process of implementing, not just regulating..."*(R08a/Ref1).

Similar with the R08a, **R21** also mentioned, *"...after its birth, BNPB has lots of influence on the Regulatory Agency (called Perka) BNPB, which has been published..."*(R21/Ref2). R21 also adding, *"...SCDRR also facilitates the development of risk maps in Yogyakarta, which has finally been perfected now. So at this point the risk map scale of 1: 250.000 had become a disaster plan in provinces throughout Indonesia..."*(R21/Ref4). R21 adding another *"...SCDRR is one program, which has influence the policy and had major impact. ..."*(R21/Ref6).

**R22** express about *"...This strategic plan, which is integrated in RPJM village made this process acceptable, and that's why we also we have nearly 17 ministries, which had support from villages., there are an Energy and Food Independent Village..."*(R22/Ref1)

#### 5.11.6. UN global champion DRR

*President Susilo Bambang Yudhoyono is the first person to be designated a global champion by the UN office for disaster risk reduction, UNISDR, and is being recognised for making disaster risk reduction a national priority following the Asian*

*tsunami which hit the country on December 26, 2004, just two months after he took office. The first head of State to convert the international blueprint for disaster risk reduction, the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities in Disasters into a national plan following which Indonesia adopted a new Disaster Risk Reduction law in 2007. As part of his new role as Global Champion, he will continue to advocate and promote the importance of disaster risk reduction particularly in the areas of school and hospital safety. (<https://www.unisdr.org/archive/23632>)*

Publications from the UNISDR office show the effort of government in the strengthening of mainstreaming DRR into development. The achievement of global champions cannot be isolated from the support of the SCDRR effort for the integration of DRR into the government work plan.

**R04** commented about this relationship, *"...I think that ultimately a global champion award should be given to the President SBY..." (R04/Ref1)*. Similarly with the R04, **R21** also adding about performance of president Indonesia, *"... The president might become a Global Champion of the (SCDRR project), because we are actually in compliance with the mandate of HFA; mainstreaming DRR was funded by the state, in this case the central government and local government..." (R21/Ref1)*.

From R04 and R21 it can be understood as to why Indonesia can be the global champion. Furthermore, it can be found in the government annual work plan relating to the allocation towards DRR activity. It was noted by **R12**, *"...It be seen to be a bright star but if one looks at mainstreaming in terms of policy I think this is acceptable. There are some areas of encouragement for SCDRR to build Local Regulation (called Perda), to build what it's called mainstreaming of NAP (National Action Plan ) and RAD (Regional Action Plan)..." (R12/Ref1)*.

## **5.12. Summary and link**

The chapter analyses the data gathered from the interviewees in the semi-structured interviews from various institution related to SCDRR project performance and in connection other institutions at national and regional level/ this was also supported by related literature reviews. Firstly, the interview results analysis was presented in section 7. Section 5.5 described Aid influence in strengthening the government institutions, until section 5.11 this influence of the SCDRR Project was categorized as the scope of impact, with integrated findings inside analysis. Sections and sub sections elaborated on issues related to the analysis from impact of UK aid through DFID in support of the disaster risk reduction program in Indonesia. The researcher also

added other performance donors that have been integrated into the section attached in this chapter such as Australian Aid (see section 5.7.4). Also in every main section is complete with the cognitive map to show the analysis of connecting sections and sub sections.

An analysis based on the National and Regional Level have been integrated together in every section of analysis. The detailed chapter data analysis will be separate in chapter 6 relating to findings. The next chapter identifies the main findings that were categorized based on 7 scopes of impact and 2 units of analysis (National Level and Regional level).

# CHAPTER 6 - Findings

## 6.1. Introduction

Chapter 5 presented the data analysis from the semi structured interviews. This chapter presents the empirical research findings that have been identified from interviews and literature review analysis. Accordingly, this chapter explains the updated research framework designed and analysis from semi-structured interviews from the previous chapter. The chapter then summarises the findings of the interviews, research results and validates the framework along with the set of the identified sustainability action responsibilities based on the findings of analysis. Accordingly the chapter is structured as follows.

- Firstly, the scope finding analysis is structured in the unit of analysis ‘national level and regional level’. This is presented in seven scopes of impact: (1) Aid influence in strengthening of government institution; (2) Challenges and lessons learnt activities post SCDRR; (3) Effect of humanitarian assistance for DRR in Indonesia; (4) Existence of Indonesia Disaster Data and Information (DIBI); (5) Existence of DFID and UK Aid in Indonesia; (6) Optimizing of DFID grant through Project SCDRR; and (7) The influence of the SCDRR Project.
- Secondly, research results are presented through existence theory, policy implication, good practice and lessons learnt.
- Finally, the chapter will present the section research results with existence theory, policy implication, good practice and lessons learnt as part of the conceptual framework and connected with the aim and objectives of this study.

## **6.2. Scope of Finding Analysis**

### **6.2.1. Aid Influence in Strengthening the Government Institution**

The interview results and literature review found that the aid influenced the strengthening of the government institutions. In the SCDRR case project the aid influence will elaborate into two coverage findings for analysis: (1) National (including central government, donors, NGOs and line ministry institutions) and (2) Regional (including local government in the provinces and districts, local NGOs and local institutions).

#### **6.2.1.1. National**

National level coverage as the unit of analysis about aid influence, in the '*MoHA in Support Preparation of Spatial DRR and Capacity strengthening*' at section 5.5.2 and literature review that found the main findings have impact. Especially those related to the portion of budget allocations for DRR activities and time limit process for submission and budgeting; Distribution financial process for deconcentration fund from grants or humanitarian aid including account (DIPA) registered to MoF, that needed human resources training and strengthening of the institution, and increasing knowledge about disaster themes such as guidelines for spatial planning.

MoHA was successful in the distribution of support in the implementation of DRR programs in particular for the government institutions in the national and regional levels about the process for submission and budgeting for important DRR action with the socialization and coordination meeting; also in optimization of the SCDRR resources as facilitator for supporting the local institution personnel with provision of the human resources training.

The state budget allocation for DRR was to be the international commitment for the country that was concerned in the DRR activities. One percent of the state budget was chosen as the minimum level from the budget allocation for DRR programs from the national budget. Post SCDRR implementation in related to this analysis was found in the government of Indonesia action plan about the 0.7% of national budget was committed for DRR programs; also specific recovery action up to 10% of the national budget. It was committed to allocating about 4% in the National Disaster Management Agency (BNPB) budget for the DRR program.

The budget allocation details *one percent from the state budget* as shown in section 5.5.3. As the commitment for Global Platform for DRR (GP-DRR), outside of the 1% for DRR, the government also allocated 30% of funds for the climate change program as part of three global commitments.



Another impact of aid influence that was captured in section 5.5.5 and was elaborated about support aid as the pioneer of the *mandate of Law number 24 of 2007 on disaster management*. Several actions were identified after existing this regulation. In particular, disaster management funds for administering grants and distribution in utilizing the deconcentration fund.

The aid influence after existing regulation about disaster management was identified and established a forum on disaster risk reduction for DRR campaign, also strengthening institutional disaster management in the region. During existence in the region was also supported by legal regulations. Included in expanding support for global platform was the rehabilitation and reconstruction after disaster.

Another evidence found is that the government was greatly assisted by the support in the preparation of the National Action Plan for DRR as the product planning, which also included determining of priorities, environmental and disaster management as the part of direction in the development program. The summary mapping of the impact from the aid influence in strengthening of the government institutions at the national level is shown in Table 6.1 below.

**Table 6.1 Summary mapping of impact from section aid influence in strengthening of the government institution at the national level**

No	Scope of Impact	Unit of Analysis		Findings
1	Aid influence in strengthening of the government institution	National	MoHA in Support Preparation of Spatial DRR and Capacity strengthen	<ul style="list-style-type: none"> <li>• Portion of budget allocations for DRR activities and limited time process for submission and budgeting</li> <li>• Distribution financial process for deconcentration fund from grant or humanitarian aid including account (DIPA) registered to MoF</li> <li>• Needed provide human resources training and strengthen institution, such as DRR facilitator for support the implementation of government programs on DRR</li> <li>• Increase knowledge about disaster thematic such as guidelines for spatial planning</li> </ul>
			One Percent of State Budget	<ul style="list-style-type: none"> <li>• Government of Indonesia has allocated 0.7% from the national budget commitment for DRR, and</li> </ul>

No	Scope of Impact	Unit of Analysis		Findings
			Allocated for DRR	<p>increase every year.</p> <ul style="list-style-type: none"> <li>• 1% budget allocation for DRR from national/ state budget that come from the global commitment for every country in disaster prone area.</li> <li>• 10% of the recovery fund should be dedicated for DRR program and activity.</li> <li>• Ability of government funding allocation and data priorities for initial assessment before action in disaster event.</li> <li>• Every year BNPB was allocated up to 4 % for DRR as the allocation commitment for DRR</li> </ul>
			The Mandate of Law Number 24 of 2007 on Disaster Management	<ul style="list-style-type: none"> <li>• Official regulatory framework for disaster management as existence of legal regulations.</li> <li>• Constraints in administering grants in particular for regulation aspects to implementation of DRR programs and distribution of utilizing deconcentration funds.</li> <li>• DRR campaign through established a forum on disaster risk reduction and strengthening global platform in the rehabilitation and reconstruction.</li> <li>• Establishment institutional of disaster management in the region.</li> <li>• Institutional strengthening for product of planning, priorities and environmental and disaster management with preparation of the NAP in quarterly.</li> </ul>

Source: Summary of findings analysis

#### 6.2.1.2. Regional

At the regional level of the analysis from the aid influence identified several findings that were revealed during analysis from the interviews and the literature review. The discussion about the *issues that arose in the provinces and the district development* that was stated in detail in section 5.5.1 in particular, about the importance of the coordinating role at the central

government and being highly visible in the knowledge about disaster management. Weaknesses in the regulations and procedures about the distribution of budget with the direct transfer mechanism from UNDP Indonesia to the local government during the waiting period, the new regulations about transfer mechanisms were established. These solutions applied to avoid delay performance of project activity in the regions. Another was in the rules for building infrastructure based DRR, e.g. building for the local prison based DRR that was integrated in the local government working plan. Strengthening apparatus and local people about ownership, commitment, willingness and responsibility for any public facilities that was built by government and other institutions.

In connection to *recommendations for the sustainability of DRR in the Local Government*, as mentioned in 5.5.2 it was identified about the importance of the existence of the standards for the disaster management institution with the needed competency standards on disaster management for qualified personnel. The allocated budget for disaster insurance and emergency including simulation of drills as routine activities. Another finding in the implementation of standard operating procedures for emergency treatment was supported by policy regulations. Increasing improvement and strengthening capacity of the apparatus for local government, including the cooperating strategy between local governments and private companies. The summary mapping of the impact from the aid influence in strengthening of the government institutions at the regional level are shown in table 6.2 below.

**Table 6.2 Summary mapping of impact from section aid influence in strengthening of government institutions at the regional level**

No	Scope of Impact	Unit of Analysis		Findings
1	Aid influence in strengthen of the government institution	Regional	Issues in the province and district development	<ul style="list-style-type: none"> <li>• Important of the coordinating role at the central government and highly visible in the knowledge about the disaster management</li> <li>• Weakness in the regulation and procedures about distribution budget</li> <li>• Local government waiting the new regulation about transfer mechanism</li> <li>• Rules for building infrastructure based DRR</li> <li>• Ownership, commitment,</li> </ul>

No	Scope of Impact	Unit of Analysis		Findings
				willingness and responsibility for any public facilities
			Recommendations for the sustainability of DRR in the Local Government	<ul style="list-style-type: none"> <li>• Disaster management institution with needed the competency standards on disaster management for qualified personnel</li> <li>• Budget for disaster insurance and emergency with including simulation of drill as the routine</li> <li>• Operation procedure for emergency treatment with supported by policy regulations</li> <li>• Improvement and strengthen capacity of the apparatus for local government</li> <li>• Cooperating strategy between local governments and private company</li> </ul>

Source: Summary of findings analysis

### 6.2.2. Challenges and Lessons Learnt of Activities Post SCDRR

The interview results and literature review found the challenges and lessons learnt of activities Post SCDRR. It is split into two coverage findings analysis: (1) National (including central government, donors, NGOs and line ministry institutions) and (2) Regional (including local government in the provinces and districts, local NGOs and local institutions).

#### 6.2.2.1. National

Challenges and lessons learnt post the SCDRR project were identified as several findings in the section *challenges during implementation of the DRR project*. The details for the findings as mentioned in detail in section 5.6.1. Several findings show roles of donors in emergency situations, the donor's involvement for orientation changing. In particular, for donors that come with grants and their own program and sets of agenda to follow. There were challenges in implementing programs in the limited time. Another in strengthening capacity building at the new institutions with different backgrounds and resource capacities in apparatus that effected implementation of distribution for all program activities. Included in this was the readiness of the team in changing the paradigm from rehabilitation and reconstruction to disaster risk reduction. Efforts in the regions with extra coordination between institutions at the national and regional level, including bringing influential policy and regional planning mechanisms for disaster management institutions.

*The education sector* is an important sector for mainstreaming DRR as mentioned in detail in 5.6.1.1 and was found to be related to the overlap program between the national project and the local project, in particular for student curriculum development about disasters. Another important point is in establishing the consortium for disaster education.

Based on *performance of sector ministries* as stated in section 5.6.1.5 for the BNPB in adopting and allocating the national budget for continuity of the program from SCDRR including the distribution of the grant. Optimization of BNPB to the bottom (called BPBD) in the region, and several times they were late in responding to urgent responses for their regular program. MoHA in distributing the regulations for local government to solve susceptibility also in the district. MoHA and BNPB was supported at the national level in socialization about the importance of awareness for the community in handling disasters.

*Recommendations for the pilot project area* as stated in detail in section 5.6.4 identified the importance of continuity from DFID contribution for knowledge exchange in expanding research science, methodology and risk assessment methods in a disaster area. The roles of government support for HFA implementation 2015 and sustainability of using guidelines for disaster resilient villages were also important.

In brief, findings of the impact from challenges and lessons learnt activities post SCDRR at the national level are shown in table 6.3 below.

**Table 6.3 Summary mapping of impact from challenges and lessons learnt activities post SCDRR at the national level**

No	Scope of Impact	Unit of Analysis		Findings
2	Challenges and Lessons Learnt Activities Post SCDRR	National	Challenges in the Implementation of DRR Project	<ul style="list-style-type: none"> <li>• Roles of donors in the emergency situation donor's involve for orientation changing</li> <li>• Donor come with grants and their own program, set of followed agenda, and limited time</li> <li>• Different background and resource capacity apparatus that effected in implementing distribute all program activities</li> </ul>
			Education sector	<ul style="list-style-type: none"> <li>• Overlap program between national project and the local project in particular for student curriculum development about disaster</li> </ul>

No	Scope of Impact	Unit of Analysis		Findings
				<ul style="list-style-type: none"> <li>Establishing of the consortium disaster education</li> </ul>
			Performance of sector ministries	<ul style="list-style-type: none"> <li>BNBP in adopted and allocated the national budget for continuity the program from SCDRR</li> <li>Optimization BNPB to the bottom (called BPBD) in the region</li> <li>Late in responding the urgent response for regular program</li> <li>MoHA in distributed regulations for local government to solved susceptibility</li> <li>MoHA and BNPB was support socialization about importance of awareness for the community in handling disaster</li> </ul>
			Recommendations for the pilot project area after SCDRR	<ul style="list-style-type: none"> <li>Importance of continuity from DFID contribution for knowledge exchange in expanding research science, methodology and risk assessment method in disaster area</li> <li>Roles of government support for hfa implementation 2015 and sustainability of using guidelines for disaster resilient village</li> </ul>

Source: Summary of findings analysis

#### 6.2.2.2. Regional

Another impact at the regional level is about *availability of regulations for DRR implementation* and found the minimum capacity from local government that have skills in drawing up risk maps, and regulatory barriers in government regulations no.38 of 2006 which do not include DRR priorities as the instrument of government (details in section 5.6.1.3). In the analysis for *establishment of disaster institution and strengthening capacity* (mentioned in detail in section 5.6.1.2) was found to establish a regional disaster management institution (BNPB and BPBDs), followed by strengthening institutional capacity building, technical support - financial, in-house training and technical guidelines for implementation in the field. Socialization about disaster in the Regional Regulation (called Perda) and preparing RPD (Regional Development Planning).

*The Local government of Palu city contributed to the lessons learnt* (details in section 5.6.1.4) in awareness of people that provide the evacuation path with simulations; also, expanding the

strategy with cooperation with other cities about green houses, green planning, and green transportation.

The impact from *support from the local institution* (details in section 5.6.3) was identified in support of collaboration between government and NGOs in the field. The establishment of MoU with the University was in collaboration in the mapping disaster risk. Local government created the Historical Disaster Risk Index (HDRI) to support the national database in disaster management. The existence of sustainability of SCDRR activities from the past affect support from the local government budget.

The sustainability of CBDRR activity (detailed in section 5.6.3.2) revealed the effort of local government in budget allocation and occurrence of community engagement with local government, NGOs and the community in developing safer communities. In sustainability of the DRR Forum (detailed in section 5.6.3.3) the local support assisted the survey and helped them in preparing action plans. Involving BPBDs business institutions and chosen key persons from the local institutions for handling secretariat DRR forum. A summary mapping of the impacts from the challenges and lessons learnt of activities post SCDRR at the regional level are shown in table 6.4 below.

**Table 6.4 Summary mapping of impact from challenges and lessons learnt of activities post SCDRR at the regional level**

No	Scope of Impact	Unit of Analysis		Findings
2	Challenges and Lessons Learnt Activities Post SCDRR	Regional	Availability of regulations for DRR implementation	<ul style="list-style-type: none"> <li>• Minimum of capacity from local government have skill in draw up of risk map</li> <li>• Regulatory barrier in government regulation no.38 of 2006 not include DRR priorities as the instrument of government</li> </ul>
			Establishment of disaster institution and strengthening capacity	<ul style="list-style-type: none"> <li>• Establish of regional disaster management institution (BNPB and BPBDs)</li> <li>• Strengthen institutional for capacity building, technical support financial, in-house training and technical guidelines for implementation at the field</li> <li>• Socialization about disaster in the Regional Regulation (called Perda) and preparing RPD (Regional</li> </ul>

No	Scope of Impact	Unit of Analysis		Findings
				Development Planning)
			Lesson Learnt from the Government of Palu	<ul style="list-style-type: none"> <li>• Awareness people with provide the evacuation path with simulations</li> <li>• Expanding strategy with cooperation with other city about green house, green planning, and green transportation</li> </ul>
			Support from Local Institutions	<ul style="list-style-type: none"> <li>• Collaboration between government and NGOs in field</li> <li>• MoU with the University in collaboration in the mapping disaster risk</li> <li>• Local government create Historical Disaster Risk Index (HDRI) to support national database in disaster management</li> <li>• Existence of sustainability of SCDRR activities from the past effect support from local government budget.</li> </ul>
			Sustainability of CBDRR	<ul style="list-style-type: none"> <li>• Effort of local government in budget allocated and occurrence of community engagement with local government, NGO and community in develop safer communities</li> </ul>
			Sustainability of DRR Forum	<ul style="list-style-type: none"> <li>• Local support assisted survey and escort for preparing action plans</li> <li>• Involving BPBDs business institutions and chosen key person from the local institution for handling secretariat DRR forum</li> </ul>

Source: Summary of findings analysis

### 6.2.3. Effect of Humanitarian Assistance for DRR in Indonesia

The interview result and literature review found the Effect of Humanitarian Assistance for DRR in Indonesia. It is split into two coverage findings analysis: (1) National (including central government, donors, NGOs and line ministry institutions) and (2) Regional (including local government in the provinces and districts, local NGOs and local institutions).



### 6.2.3.1. National

At the national level it was identified from *donors in support of DRR* (detailed in section 5.7.1) that related to the donor performance in assisting the government to make policy changes and providing independent evaluation for maintaining the quality project was crucial. Support tracking DRR investment for sustainability of community resilience, public awareness and education. Efforts from Australian aid in support of the establishment of a technical unit (called UPT of BNPB in the districts and provinces brings positive effects for disaster management at the regional level.

In the analysis on *Donors and NGO implementers* (details in section 5.7.3) it identified the commitment for the amount of funding and in accordance with the time needed, to accommodate the needs of governments and communities and integrating it into local planning. Building relationships with BNPB and BPBD in getting input and criticism about performance was immediately absorbed.

A summary mapping of the impact from the Effect of Humanitarian Assistance for DRR in Indonesia at the national level is shown in table 6.5 below.

**Table 6.5 Summary mapping of impact from effect of humanitarian assistance for DRR in Indonesia at the national level**

No	Scope of Impact	Unit of Analysis		Findings
3	Effect of Humanitarian Assistance for DRR in Indonesia	National	Donors in support of DRR	<ul style="list-style-type: none"><li>Assisting the government to make policy changes and provided independent evaluation for maintain the quality project</li><li>Support tracking DRR investment for sustainability of community resilience, public awareness and education</li><li>Effort from Australian aid in support to establishment technical unit of BNPB ('Unit Pelaksana Teknis BNPB') in the regional</li></ul>
			Recommendations for Donor and NGO implementers	<ul style="list-style-type: none"><li>Commitment for amount of funding and accordance with the time needed</li><li>Accommodate needs from governments and communities and integrated into local</li></ul>

No	Scope of Impact	Unit of Analysis		Findings
				planning <ul style="list-style-type: none"> <li>• Building relationships with BNPB and BPBD in getting input and criticism about performance and immediately absorbed</li> </ul>

Source: Summary of findings analysis

#### 6.2.3.2. Regional

At the regional level, especially in terms of the impact *to NGOs and challenges in supporting the SCDRR programs* (details in section 5.7.2) found effectiveness in agreement between the communities in preparation of the risk map, and action layout for contingency plans. Few obstacles appear in the legalized village regulations and effect on performance of the project.

A summary mapping of the impact from the Effect of Humanitarian Assistance for DRR in Indonesia at the regional level is shown in table 6.5 below.

**Table 6.6 Summary mapping of impact from effect of humanitarian assistance for DRR in Indonesia at the regional level**

No	Scope of Impact	Unit of Analysis		Findings
3	Effect of Humanitarian Assistance for DRR in Indonesia	Regional	NGO and Challenges in Supporting the SCDRR Programs	<ul style="list-style-type: none"> <li>• Effectiveness in agreement between the communities in preparation of the risk map, action layout for contingency plans</li> <li>• Little obstacle appears in the legalized of village regulations and effected to performance of the project</li> </ul>

Source: Summary of findings analysis

#### 6.2.4. Existence of Indonesian Disaster Data and Information (DIBI)

The interview results and literature review found the existence of DIBI Indonesia as the impact of SCDRR implementation. This this section will also be demonstrated as two coverage findings for analysis. Two of the coverage analyses are: (1) National (including central government, donors, NGOs and line ministry institutions) and (2) Regional (including local government in the provinces and districts, local NGOs and local institutions).

#### **6.2.4.1. National**

The existence of DIBI Indonesia was chosen as part of the impact from implementation of DFID through the SCDRR project. DIBI changed the disaster management database system in Indonesia and it became better and integrated with another system database, which is connected with population, people, the poor and other statistical data. The analysis in the national level identified *barriers in development period* (details in section 5.8.1) limited database server also affected data collection and handling for crowds of visitors. There was a recommendation from Desinventar to change to the new system and system inventory for support of synchronization between DIBI and other disaster management institutions.

With regard to the *positive influence* (details in section 5.8.6) was found in open data for people to know about the field of disaster and benefits as the core of facilitation forum, including support for research students in optimizing data from DIBI. Data from DIBI supported BNPB in producing a disaster profile book HDRI (historical disaster risk index) and improving the method and socialization with expansion plans for abroad.

The *importance of the disaster database* (details in section 5.8.7) found that ownership is full government property and most of the SCDRR project location used DIBI. The allocation from local budgets for sustainability of DIBI. DIBI operated as the online analysis tool, system analysis and spatial analysis and automatically will synchronize to the system in the central database in National Disaster Management Agency. Usefulness of this system elaborated data damage and loss assessment analysis, vulnerability index, including an index of disaster-prone areas.

A *recommendation finding for the existence of DIBI for sustainability of DIBI post SCDRR project* was identified from performance and positive impact of DIBI itself (see in section 5.8.7). Especially the given effects for policy related to the better development in disaster risk reduction as part of disaster management. For empowering DIBI in sending influential policy in the provinces and districts. This also included optimizing the utilization of budget allocation and increasing the program in strengthening planning guidelines in regulations.

A summary mapping of the impact from the existence of Indonesian Disaster Data and Information (DIBI) at the national level is shown in table 6.7 below.

**Table 6.7 Summary mapping of impact from existence of Indonesian Disaster Data and Information (DIBI) at the national level**

No	Scope of Impact	Unit of Analysis		Findings
4	Existence of Indonesian Disaster Data and Information (DIBI)	National	Barriers in development period	<ul style="list-style-type: none"> <li>Limited database server will be effected to data collection and handling for crowds of visitors</li> <li>Recommendation from Desinventar to changing to the new system and system inventory for support of synchronize between DIBI and other disaster management institution</li> </ul>
			Positive influence of DIBI	<ul style="list-style-type: none"> <li>Open data for people to know about field of disaster and benefit as the core of facilitation forum</li> <li>Support for research student in optimizing data from DIBI</li> <li>Data DIBI was support BNPB in produce disaster profile book HDRI (historical disaster risk index)</li> <li>Improving the method and socialization with expanding to abroad</li> </ul>
			The Importance of Disaster Database	<ul style="list-style-type: none"> <li>Ownership is fully government property and most of SCDRR project location was using DIBI</li> <li>Allocation from local budget for sustainability of DIBI</li> <li>Operate as the online analysis tool, system analysis and spatial analysis and automatically will synchronize to the system in the central database in National Disaster Management Agency</li> <li>Usefulness of this system elaborate data damage and loss assessment analysis, vulnerability index, include index of disaster-prone areas</li> </ul>

Source: Summary of findings analysis

#### 6.2.4.2. Regional

The existence of the Indonesian Disaster Data and Information (DIBI) at the regional level in particular *implementation in the provinces and districts* (details in section 5.8.4) found the aspect needed assistance from central government for how to adapt when disaster exists in their area; they also need assistance for getting the targeted area; and support for the preparation of plans to follow-up the results.

A summary mapping of the impact from the existence of Indonesian Disaster Data and Information (DIBI) at the national level is shown in table 6.8 below.

**Table 6.8 Summary mapping of impact from existence of Indonesian Disaster Data and Information (DIBI) at the regional level**

No	Scope of Impact	Unit of Analysis		Findings
4	Existence of Indonesian Disaster Data and Information (DIBI)	Regional	Implementation in provincial and district	<ul style="list-style-type: none"><li>• How to adapt when disaster exists in their area</li><li>• Support for the preparation of plan to follow-up</li></ul>

Source: Summary of findings analysis

#### 6.2.5. Existence of DFID and UK Aid in Indonesia

The interview results and literature review found the existence of DFID and UK Aid in Indonesia and this will be elaborated together into national and regional findings analysis. (1) National (including central government, donors, NGOs and line ministry institutions) and (2) Regional (including local government in the provinces and districts, local NGOs and local institutions).

##### 6.2.5.1. National and Regional

The existence of DFID and UK Aid in Indonesia (details in section 5.9.1) identified the importance of *knowledge about DFID and UK Aid*, DFID was known by Indonesian people since the 90s and became famous when taking action in contribution to the support of the Aceh province after the tsunami and earthquake in 2004. Also, during the implementation of SCDRR project to support government (Bappenas and MoHA) and as the international agency will cooperate for further development. DFID have good synchronization with UNDP in managing the funds in a professional way and using independent evaluators to handle the good quality, professional work.

The researcher was successful in capturing findings based on the positive and negative influences. *In the positive influences* (details in section 5.9.2) of DFID fund in support of DRR

in Indonesia, in particular at the support of setting the platform for DRR and key successes for Indonesia as the pioneer in getting global champions in disaster risk reduction.

Another side was the *negative influence* (details in section 5.9.3) during SCDRR implementation DFID requested to integrate climate adaptation to DRR and that was an effectively delayed performance Of the SCDRR product. In the budget about funding commitment (UNDP) is often reduced in the middle of implementation and effective to the time schedule and reshaping the target project.

A summary mapping of the impact from the Existence of DFID and UK Aid in Indonesia at the national and regional level is shown in table 6.9 below.

**Table 6.9 Summary mapping of impact from existence of DFID and UK Aid in Indonesia at the national and regional level**

No	Scope of Impact	Unit of Analysis		Findings
5	Existence of DFID and UK Aid in Indonesia	National and Regional	Knowledge about DFID and UK Aid	<ul style="list-style-type: none"> <li>Known by Indonesian people since 90s and become famous DFID popularity when taking action in contribution for support Aceh province after tsunami and earthquake in 2004</li> <li>Implementation of SCDRR project to support government (Bappenas and MoHA) and as the international agency will cooperation for development</li> <li>Have good synchronize with UNDP in managing the funds in professional and using independent evaluator to handling in the good quality and professional</li> </ul>
			Positive influence of DFID fund in support DRR	<ul style="list-style-type: none"> <li>DFID fund in support DRR in Indonesia in particular at the support of setting platform DRR</li> <li>Key success for Indonesia as the pioneer in getting global champion in disaster risk reduction</li> </ul>
			Negative Influence of DFID fund during SCDRR Phase I	<ul style="list-style-type: none"> <li>Request to integrating climate adaptation to DRR and that was effect to delayed performance of the SCDRR product to publish</li> <li>Budget about funding commitment (UNDP) is often reduced in the</li> </ul>

No	Scope of Impact	Unit of Analysis		Findings
				middle of implementation and effect to the time schedule and reshaping the target project

Source: Summary of findings analysis

### 6.2.6. Optimizing of DFID Grant through SCDRR Project

The interview results and literature review that was found in terms of Optimizing of DFID Grant through SCDRR Project will be split into two coverage findings analysis. The two coverage analyses are: (1) National (including central government, donors, NGOs and line ministry institutions) and (2) Regional (including local government in the provinces and districts, local NGOs and local institutions).

#### 6.2.6.1. National

In the unit analysis of *absorption funds unplanned* (details in section 5.10.1) identified findings related to the deconcentration mechanism activities in distribution fund effected to program in the community that caused the problems in grant distribution. A split grant between deconcentration and direct payments by the government is a good solution without avoiding the necessary procedures.

In the *foreign grant for disaster priority* (details in section 5.10.2) found MoHA allocation to be 1 billion to 1.5 billion Rupiah from the ministry budget for disaster management in local government. The government of Indonesia have obstacles in distribution from British Government in particular for regulation for distribution off budget. The majority of regulations related to off budget were established by SCDRR project supported and existed at the end of the project implementation especially in recording grants to the DIPA (ministry account budget). Regulations for distribution of grants (off budget) affected local institutions financial mechanisms. Indonesia with BNPB support, in establishing the IDF (Indonesia Disaster Fund) previously known as the IMDFF-DR. In distributions of grant to local government from the UNDP using DEX and NEX mechanism. Grants that have been recorded to government will affect officially registered BAST report (Handover Asset Report).

*The effectiveness and ideal absorption of funds* (details in section 5.10.3) found the ideal for a disaster resilience village of about 700 million IDR that was allocated by SCDRR. For sustainability programs disaster resilience village government adjusted the availability of the local budget. Greater participation in public and known grant allocations projects will be easily solved in distribution programs in the local government.

In *the assets transfer* (details in section 5.10.4) found at the end of the SCDRR project in particular for assets with direct transfers to local government were difficult to identify the ownership of the asset.

*Obstacles in utilization of foreign grants* (details in section 5.10.6) found in the national level especially in the understanding Government Regulation No 2 of 2016 and No. 10 of 2011. UNDP and MoHA solved this in splitting the budget transfer in half via UNDP and other via DIPA MoHA.

In the other side *UNDP also had challenges in the implementation of DRR* (details in section 5.10.7) they found about the grant distribution from the UNDP to local government using the NEX mechanism with the MoU between the UNDP and local government. UNDP have to use facilitators to get access to the village.

A summary mapping of the impact from Optimizing of DFID Grant through SCDRR Project at the national level is shown in table 6.10 below.

**Table 6.10 Summary mapping of impact from optimizing of DFID Grant through SCDRR Project at the national level**

No	Scope of Impact	Unit of Analysis		Findings
6	Optimizing of DFID Grant through SCDRR Project	National	Absorption Funds Unplanned	<ul style="list-style-type: none"> <li>Deconcentration mechanism activities in distribution fund effected to program in the community that caused the not smoothly in grant distribution</li> <li>Split grant between deconcentration and direct payment by government is the good solution without avoid the procedure to be followed</li> </ul>
			Foreign Grant for Disaster Priority	<ul style="list-style-type: none"> <li>MoHA allocation 1 billion to 1.5 billion Rupiah from ministry budget for disaster management in local government</li> <li>Government of Indonesia have obstacle in distribution from British Government in particular for regulation for distribution off budget</li> <li>Majority of regulation related off budget establish by SCDRR project support and exist at the end of project implemented especially in recording grant to the DIPA (ministry account budget)</li> </ul>



No	Scope of Impact	Unit of Analysis		Findings
				<ul style="list-style-type: none"> <li>• Regulation for distribution grant (off budget) effect to local institution financial mechanism</li> <li>• Indonesia with BNPB support in establish IDF (Indonesia disaster fund) before known as IMDFF-DR</li> <li>• In distribution grant to local government from UNDP using DEX and NEX mechanism</li> <li>• Grant that have recorded to government will effect to officially registered BAST report (Handover Asset Report)</li> </ul>
			The Effectiveness and Ideal Absorption of Funds	<ul style="list-style-type: none"> <li>• The ideal for a disaster resilience village of about 700 million IDR that allocated by SCDRR</li> <li>• Sustainability program disaster resilience village government adjusted to availability of local budget</li> <li>• Greater participation in public and known of grant allocations project that will be easily in distribution program in the local government</li> </ul>
			Issues in the Assets Transfer	<ul style="list-style-type: none"> <li>• At the end of SCDRR project in particular for asset with direct transfer to local government difficult to identifying the ownership of the asset</li> </ul>
			Obstacles in utilize of foreign grants	<ul style="list-style-type: none"> <li>• In the national level especially in the understanding Government Regulation No 2 of 2016 and No. 10 of 2011</li> <li>• UNDP and MoHA solved in split the budget transfer in half via UNDP and other via DIPA MoHA</li> </ul>
			UNDP Challenges in the Implementation of DRR	<ul style="list-style-type: none"> <li>• Grant distribution from UNDP to local government using NEX mechanism with MoU between UNDP and local government</li> <li>• UNDP have to using facilitator to get access to the village</li> </ul>

Source: Summary of findings analysis

#### 6.2.6.2. Regional

At the regional level, *Issues on Allocations of DRR Funds in the Provinces and Districts* (details in section 5.10.5) found the limited budget in the regions made local government have good performance in the distribution of the DRR program. Learning to manage the DRR program for government should be allocated through a timeframe of planning as a potential in optimizing the continuity of the DRR program and activities.

A summary mapping of the impact from Optimizing of DFID Grant through SCDRR Project at the national level is shown in table 6.11 below.

**Table 6.11 Summary mapping of impact from optimizing of DFID Grant through SCDRR Project at the regional level**

No	Scope of Impact	Unit of Analysis		Findings
6	Optimizing of DFID Grant through SCDRR Project	Regional	Issues on Allocations of DRR Funds in the Province and District	<ul style="list-style-type: none"><li>• The limited budget in the regions made local government have a good performance in distribution of DRR program</li><li>• Learning to manage in DRR program for government is should be allocated through timeframe of planning as potential in optimizing the continuity DRR program and activities</li></ul>

*Source: Summary of findings analysis*

#### 6.2.7. Influence of the SCDRR Project

The interview results and literature review found that the influence of the SCDRR Project will be elaborated into two coverage findings analysis. Two of the coverage analyses are: (1) National (including central government, donors, NGOs and line ministry institutions) and (2) Regional (including local government in the provinces and districts, local NGOs and local institutions).

##### 6.2.7.1. National

At the national level, in connection with the *special support program* (details in section 5.11.2) found the SCDRR project has supported academic papers for the preparation of RPJMN as part to institutionalize DRR into the government development program. Institutionalizing DRR found in BNPB, BPBDs increasing in capacity assessment and effect to the government and community organizations. The DRR forum, National platform, including CB-DRR in the local

government. NAP DRR and regulations at the village-level as a part of endorsement to continuity of the disaster management plan to local programs for disaster resilient villages.

The majority of data relating to the *sustainability of SCDRR programs through national programs* (details in the section 5.11.3) found integrated data PODES and SUSENAS into DIBI. Tracking investment commitment for DRR in the national budget, in the education sector about continuity in the mainstreaming of DRR into school curricula. Continuity for establishing NAP-DRR and preparation of risk maps or hazard maps in all districts. Strengthening the capacity after establishing BPBDs and BNPB and continuity of the resilient village model from BNPB.

*Especially related to a Disaster resilience village* (details in section 5.11.3.1) found the commitment of local government for budget allocation in APBD to continuing disaster resilient village. Central Java province as the earliest local commitment that was adopted as the development model. The BNPB made the disaster resilience village as the regular program and committed in the Regulatory Chief of BNPB No 1 of 2012.

*National Regulations on disaster management* (details in section 5.11.3.2) found Regulation of MoHA No. 46 on the establishment of BPBDs. Another regulation from the Head of the BNPB to the operation of DIBI, including regulation for support for the preparation of DRR into RPJMN.

With regard to the *regional profile about disaster mitigation* (details in section 5.11.3.3) found the existence of MoHA through regional profile integrated with the area of mitigation, regulations related to DRR, portrait of institutional with current conditions and readiness of apparatus in DRR.

*The advantages of SCDRR program* as the impact from the grant from DFID (details in section 5.11.5) found as follows: SCDRR have the strongest support in complementing for integrated DIBI application from desinventar. Success facilitates the development of risk maps supported from local resources. This influences the policy and institutional regulation related to disaster management, also the process of implementation during the process such as changing programs and reducing the budget. Disaster resilience villages were integrated in RPJM village. BNPB was establishing a lot of regulations from the head of BNPB related to the allocation of budget, guide lines, and programs / activities related to DRR. Reflectivity of SCDRR was enacted as the pioneer, trendsetter, program initiator, all varieties for DRR action. This was a huge contribution to the development of the disaster management model in Indonesia.

In the end of phase one, the SCDRR project had successfully received *UN global champion DRR* (details in section 5.11.6). It was identified that the programs and activities of SCDRR

compliance with the mandate of HFA. As the ultimate outcome and some DRR products of government of Indonesia were encouraged after the SCDRR project.

A summary mapping of the impact from the influence of the SCDRR Project at the national level is shown in table 6.12 below.

**Table 6.12 Summary mapping of impact from the influence of the SCDRR Project at the national level**

No	Scope of Impact	Unit of Analysis		Findings
7	The influence of the SCDRR Project	National	Special support programs	<ul style="list-style-type: none"> <li>• SCDRR supaport academic paper for the preparation of RPJMN as part to institutionalize DRR into government development program</li> <li>• Institutionalize DRR found in BNPB, BPBDs increasing in capacity assessment and effect to the government and community organizations</li> <li>• DRR forum, National platform, include CB-DRR in the local government</li> <li>• NAP DRR and regulation at the village-level as part for endorsement to continuity disaster management plan to local program for disaster resilient village</li> </ul>
			Sustainability of SCDRR Programs through National Programs	<ul style="list-style-type: none"> <li>• Integrated data PODES and SUSENAS into DIBI</li> <li>• Tracking investment commitment for DRR in the national budget; in the education sector about continuity the mainstreaming DRR into school curricula</li> <li>• Continuity for establish of NAP-DRR and preparation of risk maps or hazard maps in all districts</li> <li>• Strengthening the capacity after establish of BPBDs and BNPB and continuity the resilient village model from BNPB</li> </ul>
			Disaster Resilient Village	<ul style="list-style-type: none"> <li>• Commitment of local government for budget allocation in APBD to continuing disaster resilient village</li> <li>• Central Java province as the earliest local commitment that was</li> </ul>

No	Scope of Impact	Unit of Analysis		Findings
				<p>adopted as the development model</p> <ul style="list-style-type: none"> <li>BNPB made the disaster resilience village as the regular program and committed in the Regulatory Chief of BNPB No 1 of 2012</li> </ul>
			National Regulations on disaster management	<ul style="list-style-type: none"> <li>Regulation of MoHA No. 46 on the establishment of BPBDs Regulation of MoHA No. 46 on the establishment of BPBDs</li> <li>Another regulation from Head of the BNPB to operation of DIBI, include regulation for support for the preparation DRR into RPJMN</li> </ul>
			Regional Profile about Disaster Mitigation	<ul style="list-style-type: none"> <li>Existence MoHA through regional profile with integrated about the area of mitigation, regulations related DRR, portrait of institutional with current conditions and readiness of apparatus in DRR</li> </ul>
			The advantages of SCDRR program	<ul style="list-style-type: none"> <li>SCDRR have strongest support in complementing for integrated DIBI application from desinventar</li> <li>Success in facilitates the development of risk maps with supported from local resources</li> <li>Influence the policy and institutional regulation related disaster management, also the process of implementing during the process such as changing program and reducing the budget</li> <li>Disaster resilience village was integrated in RPJM village</li> <li>BNPB was establishing a lots of regulatory from head of BNPB related the allocation budget, guidelines, and programs/activities related to DRR. Reflectivity of SCDRR was enacted as the pioneer, trendsetter, program initiator, all varieties for DRR action</li> <li>High contribution to the development of disaster</li> </ul>

No	Scope of Impact	Unit of Analysis		Findings
				management model in Indonesia
			UN global champion DRR	<ul style="list-style-type: none"> <li>• Programs and activities of SCDRR compliance with the mandate of HFA</li> <li>• As the ultimate outcome and some of DRR products of government of Indonesia that become encouragement from SCDRR project</li> </ul>

Source: Summary of findings analysis

#### 6.2.7.2. Regional

At the regional level, related to the *sustainability of SCDRR programs through regional programs* (details in section 5.11.4) found the programs have potential for communities such as community-based DRR planned for sustainable livelihoods. The Consortium for Disaster Education (CDE) from the NGO-NGO. Disaster preparedness school as the guideline for student in mainstreaming DRR.

The sustainability of *livelihoods in the Yogyakarta and West Sumatera area*, (details in section 5.11.4.1) found health awareness for public health for families that caused destination of the clinic or medical center as public health location, the community needed extra cost from home to medical center.

*The local regulation on disaster management* that was needed by local institutions (details in section 5.11.4.2) found through the establishment and optimizing BPBD institutions in the districts should be incorporated with other elements of disaster mitigation stakeholders. The needed existence and sustainability of spatial plan is integrated in the Local Regulation on Disaster Management.

A summary mapping of the impact from the influence of the SCDRR Project at the national level is shown in table 6.13 below.

**Table 6.13 Summary mapping of impact from influence of the SCDRR Project at the regional level**

No	Scope of Impact	Unit of Analysis		Findings
7	The influence of the SCDRR Project	Regional	Sustainability of SCDRR Programs through Regional Programs	<ul style="list-style-type: none"> <li>The programs have potential for community such as community-based DRR planned for sustainable livelihoods</li> <li>Consortium for Disaster Education (CDE) from the NGO-NGO</li> <li>Disaster preparedness school as the guideline for student in mainstreaming DRR</li> </ul>
			Livelihood in Yogyakarta and West Sumatra	<ul style="list-style-type: none"> <li>Health awareness for public health for family that caused destination of the clinic or medical centre as public health location, community need extra cost from home to medical centre</li> </ul>
			Local regulations on disaster managements	<ul style="list-style-type: none"> <li>Through establishment and optimizing BPBD institution in district should be incorporating with other elements of disaster mitigation stakeholders</li> <li>Needed existence and sustainability of spatial plan integrated in the Local Regulation on Disaster Management</li> </ul>

Source: Summary of findings analysis

### 6.3. Research Results

The research results will present existence theory (see section 6.3.1), policy implication (see section 3.8.4, 6.3.2), good practice (see details in section 6.3.3) and lessons learnt (details in section 6.3.4) that will be useful for the contribution of knowledge in the research study. In particular, for researchers interested in the dynamics of grants or humanitarian aid in affecting government policy.

#### 6.3.1. Existence Theory

During analysis of the literature review and transcribing the interviews from the resource persons in the semi-structured interviews, the researcher has identified the theory that has been evident in many events related to disaster risk reduction. The theory identified from section 5.5.4 which comes from R18 expresses "...The theory is one dollar can save seven dollars for the disaster risk reduction..." (R18/Ref3). Resource person's discussion with the

researcher related the importance of disaster insurance, and R18 agreed with the government institution who will provide disaster insurance for the staff in their institutions.

Many considerations are necessary for this theory to be implemented, not least the availability of the government allocation of budget for insurance. On the other side, the government of Indonesia has, every year, made increases in the allocated budget. It can be seen that there is the commitment of the government of Indonesia in their allocation of more than one percent for mitigation including disaster risk reduction. The commitment of the government of Indonesia can be seen in (section 5.5.3 and section 6.2.1 ).

A similar theory came from DFID (2011c) when it stated: *"The loss of life and suffering that results make it both wasteful to respond only after a crisis has taken hold. Increasingly, the evidence suggests that early actions to help people before the effects of drought are fully felt can help avert famine. Every £1 invested in disaster risk reduction saves at least £4 in relief at a later stage. For the poor, this means reduced loss of life and suffering, increased security, and greater ability to hold on to their assets"* (DFID, 2011c). From that statement that can be seen for the developed country such as the United Kingdom they have concern in allocating budget for disaster management issues. The DFID can support another country with a lot of missions that have been planned. For example, Indonesia has accepted the grant from the British Government of around 4.3 million pound sterling. That has been allocated to the BNPB budget for disaster management.

Another theory also coming from the *evaluation of the earthquake save house (Rumah Aman Gempa) campaign and identifying the importance of cultural diversity in selecting communication methods and theories of behavior change for DRR in Indonesia* (see section 2.10.3) that can be seen from the people of Indonesia after an earthquake and tsunami. In particular, for people who know the area, they have greater struggles and that is a behavior change.

Based on the theories above, for this study it can be seen that if foreign aid or humanitarian aid from the British Government to the Government of Indonesia was made, then changing paradigms of the people of Indonesia from the emergency/ rehabilitation to be the people who know the disaster risk reduction and mitigation.

The budget and program that is managed with care and professionalism can be adopted as the national government work plan. Including the UN Award on DRR as an effect from the DFID support program for implementing the SCDRR project.



### **6.3.2. Policy Implication**

According to the findings from results, there have been a lot of policy implications from this case study. The majority of the policy implications are around strengthening institutions and capacity building. The various implications of policies is presented in the list below:

- Policies in the field of DRR, refer to section 6.2.2 related to the recommendations for the sustainability of DRR in the Local Government. Local government have a lot of requests for policy related implementation of DRR, such as the need for competency standards on disaster management for qualified personnel.
- Influencing policy and BNPB, based on section 6.2.1, it connected to the performance of the disaster institution in serving the public in disaster events. In particular, for the performance of BNPB it can be seen at the earlier stage of established need more guidelines for the institution at the national level are needed, also in managing the local government.
- In strengthening public policy, refer to section 5.6.5. Strengthening public policy in specially related empowerment initiatives with strategy for strengthening national policies in disaster risk reduction and disaster management in general. The community still hope to get the same treatment as the public policy.
- Assisting the government to make policy changes, refer to section 5.7.1 providing independent evaluations and midterm reviews for maintaining the quality of the project, also for tracking DRR investment; continuity focus on characteristics of data that will effect disburse commitment; support for sustainability of community resilience. Various kinds of assistance for the government that should have the transfer of knowledge.
- Effects on policy; influence on policy in the provinces, based on section 6.2.4.1, especially in giving effects for policy related to better development in disaster risk reduction as part of disaster management.
- Policy DFID, based on section 5.9.1, with the DFID policy, also success in providing assistance for monitoring and evaluation of performance of project activity. Since the SCDRR project started in 2007, DFID have had good synchronization with the UNDP, and the UNDP have optimized the trust from DFID in managing the funds in a professional way.
- Policy change, refer to section 6.2.1.1, during the project a lot of changes were made to policy, for example, the shift to UK DFID climate change.
- The DRR policy integrated in the annual work plan, refer to section 4.3.3. The government prepares an RKP on an annual basis. The document sets out all programmes for each sector in the year in progress. In Law No. 13/2005 on State Revenue and Expenditure

Budget for the fiscal year 2006, disaster risk reduction activities were allocated under the Natural Disaster Management policy through the following programmes: (1) Enhancement of natural disaster mitigation and climate forecasting; (2) Spatial planning and natural resource protection zoning, including disaster-prone areas in coastal and sea areas; and (3) Development of a natural disaster management system and early warning system.

### **6.3.3. Good Practice**

The SCDRR project with support from DFID have been ordered to develop linkages between local practices and the emerging policy and regulatory framework for DRR, SCDRR has piloted activities in eight provinces (see section 5.2.1). Some pilot projects are sustainable by optimising the local budget in continuing the program.

The mainstreaming of DRR activities have been adapting from HFA and the mandate from GP-DRR (see section 6.2.1.1). By mandate, the GP-DRR has mandated: (1) Assess progress made for the implementation of the Hyogo Framework for Action; (2) Enhance awareness of disaster risk reduction; (3) Enable the sharing of experiences and lessons from good practice; and (4) Identify remaining gaps and recommend targeted action to accelerate national and local implementation.

Cooperation between local government and university provided more benefits for government (see section 5.6.3), R06 mentioned related to this cooperation "... signed MoU with the University those students who carry out the practice on the field with thematic disaster mitigation. Then the students will be placed in disaster areas, to convey to the public about the importance of disaster resilient villages ..." (R06/Ref3).

Additional support consultants for monitoring and evaluating to support the target (see section 5.7.1), if there is a shortage there or required additional support as support consultants to be able to think more about thinking about monitoring evaluation strategy and then develop or replicate the best practices, which can be supported from existing funds... (R20/Ref6)

### **6.3.4. Lessons Learnt**

Lessons learnt have been identified coming from the Government of Palu City (see section 5.6.1.4), R19b stated as the head of the planning institution with another institution in Palu City... being the awakening of awareness through local governments, also cooperation with another city in different countries was joint in green planning, green houses and green transportation. Also, establishing the city policy to activate monthly simulation events including evacuation instructions and evacuation from any kind of disaster.

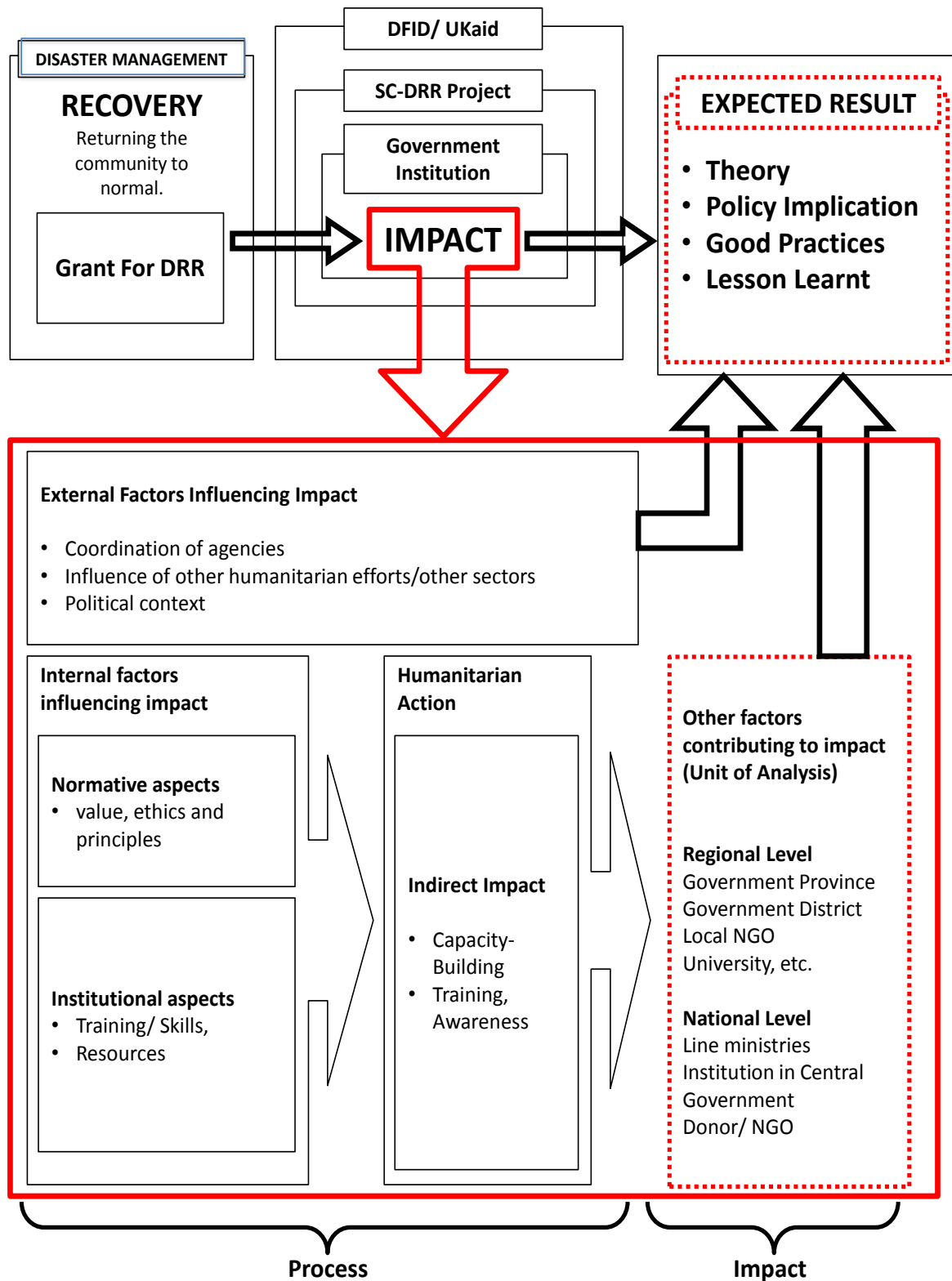
*The Community-Based Disaster Risk Reduction (see section 5.6.3.2) which the Indonesians call the PRBBK programme is actually the lessons learnt from previous UNDP programs, from UNDP-ERA project ...” (R05/Ref1).*

It was identified that transfer of assets was a problem (in section 5.10.4 and 6.2.6.1). R17 gave the opinion on lessons learnt about asset transfer, “...especially after the tsunami, a lot of problems arose as the asset transfer cases are difficult to do, a direct donor such as those that are the outside partners may be best (R17/Ref1).

### **6.3.5. Regulatory Framework**

In support of the regulatory framework, as stated in section 5.5.5 and 6.2.1.1, was the support aid as the pioneer of the *mandate of Law number 24 of 2007 on disaster management*. Several actions were identified after the existence of this regulation. In particular, a disaster management fund for administering grants and distribution in utilizing the deconcentration fund. From the mandate of Law number 24 of 2007, that created any regulations in various level institutions, the Decree from the Ministry of Finance related to the budget for DRR, the Ministry of Home Affairs about the guidelines for local government in implementing DRR, the Head of Bappenas about development of a plan for DRR, the Head of BNPB about guidelines for practice for BPBD in the regions (provinces and regency), the governor and regent circular letter for the community in the village.

#### 6.4. Figure Framework Results from Impact Analysis



**Figure 6.1 Framework Results from Impact Analysis**

#### **6.4.1. Summary and link**

This chapter has presented the main findings, existence theory, policy implication, good practice and lessons learnt from the research, while adapting from the findings from the interviews and literature. There is a framework that details the impact of British Government aid. The chapter then summarises the findings of validation from semi-structured interviews and the recommendations. Having summarised the findings of the research, the next chapter presents the conclusions of this research.

# CHAPTER 7 - Conclusion

## 7.1. Introduction

This thesis started with Chapter 1, which was an introduction to the thesis, followed by Chapter 2 which was a detailed literature review. Thereafter, Chapter 3 presented the research methodology chosen by adopting the research onion model proposed by Saunders et al. (2009). Chapter 4 outlined the key issues derived from the literature while justifying the key issues based on semi-structured interviews. Accordingly, Chapter 4 presented the conceptual framework of the study followed by Chapter 5, which presented the detailed data analysis of the empirical data gathered through semi-structured interviews. Chapter 6 presented the main findings of the research. In this context, this chapter arrived at the research conclusions by summarising the results of the research objectives. Accordingly, the chapter is structured as follows:

- *Firstly*, the findings of the research objectives are summarised;
- *Secondly*, the findings of the research objectives are presented;
- *Thirdly*, the implications to theory and practice are discussed;
- *Fourthly*, the limitations of the study are identified;
- *Finally*, some further research areas are suggested.

## 7.2. Synthesis on the Objectives of the Study

As captured in Section 1.3 the research aim is to explore and investigate the impact of the UKAid project in support of Disaster Risk Reduction programs implemented by the Indonesian Government. The aim of the study was examined by means of four research objectives as listed in Section 1.3. The first objective was to explore and understand the context of UK Aid in support of the DRR project post- disaster in Indonesia. This was mainly addressed through the literature review (see Section 7.2.1). The second objective is to explore the SC-DRR project as a part of humanitarian aid implemented in UK Aid in Indonesia. This was explored through semi-structured interviews and literature reviews and supported by local report project performance (see Section 7.2.2). The third objective was to analyse the obstacles affecting the impact of UK Aid at governmental level and in optimising foreign assistance funds for DRR activities. This was mainly analysed through obstacle investigation via resource person interviews and supported by the literature review (see Section 7.2.3). The final objective was to identify and assess the lessons and good practices learnt after the DRR project in maintaining post project sustainability by incorporating the lessons learnt into the government regulatory framework. This was mainly reviewed through literature and resource person

interviews (see Section 7.2.4) and supported by reports of case studies. The following sections summarise the key findings related to each of the research objectives of the study.

### **7.2.1. Objective 1: To explore and understand the context of UKAid in support of the DRR project post- disaster in Indonesia**

The first objective was to explore and understand the context of UKAid in support of the DRR project post- disaster in Indonesia. This objective was explored through the literature review in Chapter 2 (see section 2.9.1). In 2007, DFID, with the country mission, was working intensively with the government of Indonesia in the delivery of grant support for DRR activities. Since 2012, DFID changed flag and is now under UK Aid and in Indonesia it has to be part of UK climate change. One of the missions that can be identified is *incorporating disaster risk reduction into development programming as a regular part of country-office of DFID approaches*. Another commitment of DFID, in 2008, was a £38 million contribution from DFID to join with the Multi-Donor Fund for the tsunami-affected Aceh Province and Nias, and North Sumatera Province, this has enabled the rebuilding of social and economic infrastructure (see section 2.9.2). Around £4.3 million of support was specifically for the DRR program (details in section 2.10.2). The British government was also intensively promoting the good governance and public service programs and commissioned the humanitarian emergency response review.

From the analysis of interviews (see section 5.9.1) UK Aid support was proof of the changing paradigm of people in Indonesia from dealing with emergency to mitigating the disaster. DFID also was known in Indonesia as supporting the changing paradigm to disaster risk reduction, similarly R13, R17 and R16 shared this view, R13 mentioned "*...there has been a paradigm shift in disaster management in Indonesia with increasing intensity of disastrous events that DFID possible through the agency of Indonesia's development partners in UNDP began to assist the efforts of disaster risk reduction corresponding paradigm shift in disaster management in Indonesia, probably associated with some of the activities that the target is an attempt by the capacity of communities...*" (R16/ Ref3). In the national and regional level (see section 6.2.5.1) started through SCDRR project, was successful in a changing paradigm shift from emergency relief to disaster prevention. With the DFID policy also successful in providing assistance for monitoring and evaluation performance of this project activity.

### **7.2.2. Objective 2: To explore the SC-DRR project as a part of humanitarian aid implemented in UK Aid in Indonesia.**

The second objective was to explore the SC-DRR project as a part of humanitarian aid implemented in UK Aid in Indonesia. The roles were first identified through the literature review as detailed in section 2.10. The SC-DRR project is a Government of Indonesia initiative

led by the National Development and Planning Agency (Bappenas) in collaboration with the Ministry of Home Affairs (MoHA) and the National Agency for Disaster Management (BNPB). The foundation and ultimate result of the SCDRR programme is to build a culture of safety in the areas where it works. When the SCDRR programme was designed, key to its success was the need to link the legal framework and DRR policy at the national level into the development planning processes at the national, provincial and district levels of government.

Implementation of the SCDRR project utilized foreign grants. The obstacles included the performance of the line ministry; donor policy changes; management distribution of the budget; unsupported local and central regulations (see in section 6.2.3.2); overlap in the programs and activities; and weaknesses in the regulations for utilization of foreign grants (details in section 6.2.6.1).

The grants from DFID through the UNDP in 2006 was a new model of distribution with cooperation with the local government as the beneficiary. The model distribution of budget looks like the deconcentration model, but it is different in that it comes from foreign grants (details in section 5.10.6). Every distribution model of grant has to follow the latest regulation in the utilization of grants. The Government Regulation No 10 of 2011 about Utilization of Foreign Loans and Grants Admission, was a replacement from Government Regulation No 2 of 2006 about Procedures for Procurement of Loans and / or Acceptance of Grants and Forwarding Loans and / or Grants Abroad. It was used as a guideline in the implementation of the SCDRR project. Regulations from 2006 were evaluated by many stakeholders showing weaknesses in implementation. It showed from the SCDRR that the establishment of regulations in managing grants was endorsed.

### **7.2.3. Objective 3: To analyse the obstacles affecting the impact of UK Aid at governmental level and in optimising foreign assistance funds for DRR activities.**

The third objective of this research was to analyse the obstacles affecting the impact of UK Aid at governmental level and in optimising foreign assistance funds for DRR activities. The participation of governance in the foreign aid activities had an effect on implementation, also in some cases influence for economic evolution was still a cause of governance obtaining the aid from another country (details in section 2.6). This was supported by interviews that found, in section 5.10.2, that the government also had ongoing revisions for regulations-related cooperation and joint programs in disaster risk reduction. R16 also identified some regulations that have been an obstacle for institutions to implement grants in the local government. R16 explained that the difference was that sometimes rules were followed and sometimes were combined with old legislation with regard to the treasury budget. In section 5.10.6 it identified



the obstacles that are included about performance of the line ministry; donor policy changes; management of the distribution of budget; unsupported local and central regulations; an overlap in the programs and activities; and weaknesses in the regulations for utilization of foreign grants.

In the new local disaster management institution, it was also identified that there were *obstacles in replacement and displacement of apparatus* (see section 6.2.2.1 and section 5.6.3.1). Common obstacles come from retired apparatus; or temporary employees that were recruited by the institution; and also apparatus coming from a transition period. That caused an effect of wasting time and budget of the institution. In section 5.10.6 the government were shown to have obstacles related to regulation of funds in distribution from the British Government to Indonesia. At the end of the SCDRR project, most of the regulations related to off budget and should have been prepared for recording to the DIPA. Also, direct grants in the Government Regulations were used. The distribution of funds with a cooperation agreement with the region would have made these available to local institution mechanisms. It would have therefore been part of the disaster relief efforts.

**7.2.4. Objective 4: To identify and assess the lessons and good practices learnt after the DRR project in maintaining post project sustainability by incorporating the lessons learnt into government regulatory framework.**

Objective 4 was to identify and assess the lessons and good practices learnt after the DRR project in maintaining post project sustainability by incorporating the lessons learnt into government regulatory framework. In section 2.10.5 the lessons learnt were supported and implied in the sustainability of the DRR program. Such a lesson learnt was the establishment of the disaster resilience village program, an establishment regulation at local level.

The government project was to get the lessons learnt to solve the asset issue. One participant had argued that especially after the tsunami, many issues arose with regard to asset transfer; direct donors such as outside partners were difficult to implement and this in turn meant that links with central government were lost, complicating the transfer of assets even further. Then, when the government abolished the BRR without first resolving the issue, it became even worse. Reflecting on the disaster in Aceh, asset transfer in the SCDRR project could be solved by correct registration in the first place. The registration process could be implemented at the asset institution in the local government and at the line ministry at the national level (see section 5.10.4).

The availability of regulations for DRR implementation are urgently needed for the regulatory framework as much as they are needed by government (detail in section 5.5.5 and section

6.2.1.1), in particular, by local government most disasters happened in the local government area, before the advent of Law no.24 of 2007 about disaster management. There was limited availability of regulations for implementation of the SCDRR project, in particular for distribution of budget from central government to local government. This presents a significant challenge for finance managers in managing foreign aid. Another participant was concerned about barriers in the regulations during the implementation stage, saying that while funds in the central government were not absorbed, so some of the activities were not carried out, the majority of these were due to regulatory barriers (see section 5.6.1.3).

### **7.3. Contribution to Theory**

This thesis has contributed to theory in the following ways:

Analysis impact for humanitarian aid developed by Hoffman was modified and integrated with foreign aid analysis impact based on grant project model and disaster management cycle was effective can applied for grant and foreign aid analysis to developing country.

The study demonstrate of significant contribution from humanitarian aid assistant post disaster in developing country for contribution in transformation paradigm of government from emergency response into DRR/ mitigation integrated with development program.

Based on the theories above for this study, identifying if foreign aid or humanitarian aid from the British Government to the Government of Indonesia has made a change in paradigm of the people of Indonesia from an emergency / rehabilitation focus to be people who understand the importance of disaster risk reduction and mitigation.

### **7.4. Contribution to Policy**

Based on the analysis from Indonesia case study, it can be identified contribution knowledge to policy implications of this study for the government, Non-government and private institution particularly in:

- Optimizing of humanitarian aid assistance required in line with national and regional regulation about grant distribution mechanism.
- One direct policy that from central government to local government (province, district, village) in disaster management will endorse the effectiveness of distribution information as part of strengthening institution capacity.
- Integrated independent monitoring system will eliminate the useless outcome and may increasing the quality of result for implementation of grant/ foreign aid.
- Increasing the number of disaster resilience village model in disaster prone area indirectly will effect to sustainability of community resilience.

## **7.5. Contribution to Practice**

Model framework for impact analysis from grant of UKAid through SCDRR project can applied for another foreign aid model impact analysis with modified based on analysis needed and the factors of analysis from the country.

Establishment of national level and regional level factor in impact analysis framework will helping grant user in identified the institution in charge as the policy maker in optimising the foreign aid from unplanned absorption.

Indonesia as the one of developing was proof the effectiveness of foreign aid n optimizing the grant for shifting paradigm from emergency to disaster risk reduction (mitigation).

## **7.6. Limitations of the Study**

As explained in Section 3.14, various techniques were used to ensure the validity and reliability of the study. An in-depth analysis was conducted using sources of evidence; interviews, and literature review. However, due to the philosophical stance of the research generalising the findings to a wider context was difficult as the findings were context specific to the case study. However, the primary and secondary data findings do contribute to the wider impact of the British Government aid in Indonesia, and in particular for support of DRR programs. Another limitation is that the data collection was limited to Indonesia, and so this was context specific.

## **7.7. Further Research**

### **7.7.1. Multiple cases in other developing countries**

One of the limitations of the study is a non-multiple case of the developed framework. As such it is proposed that the developed framework is applied to multiple case studies, in other developing countries, to test the validity of the framework.

### **7.7.2. Wider Considerations for National and Regional Context**

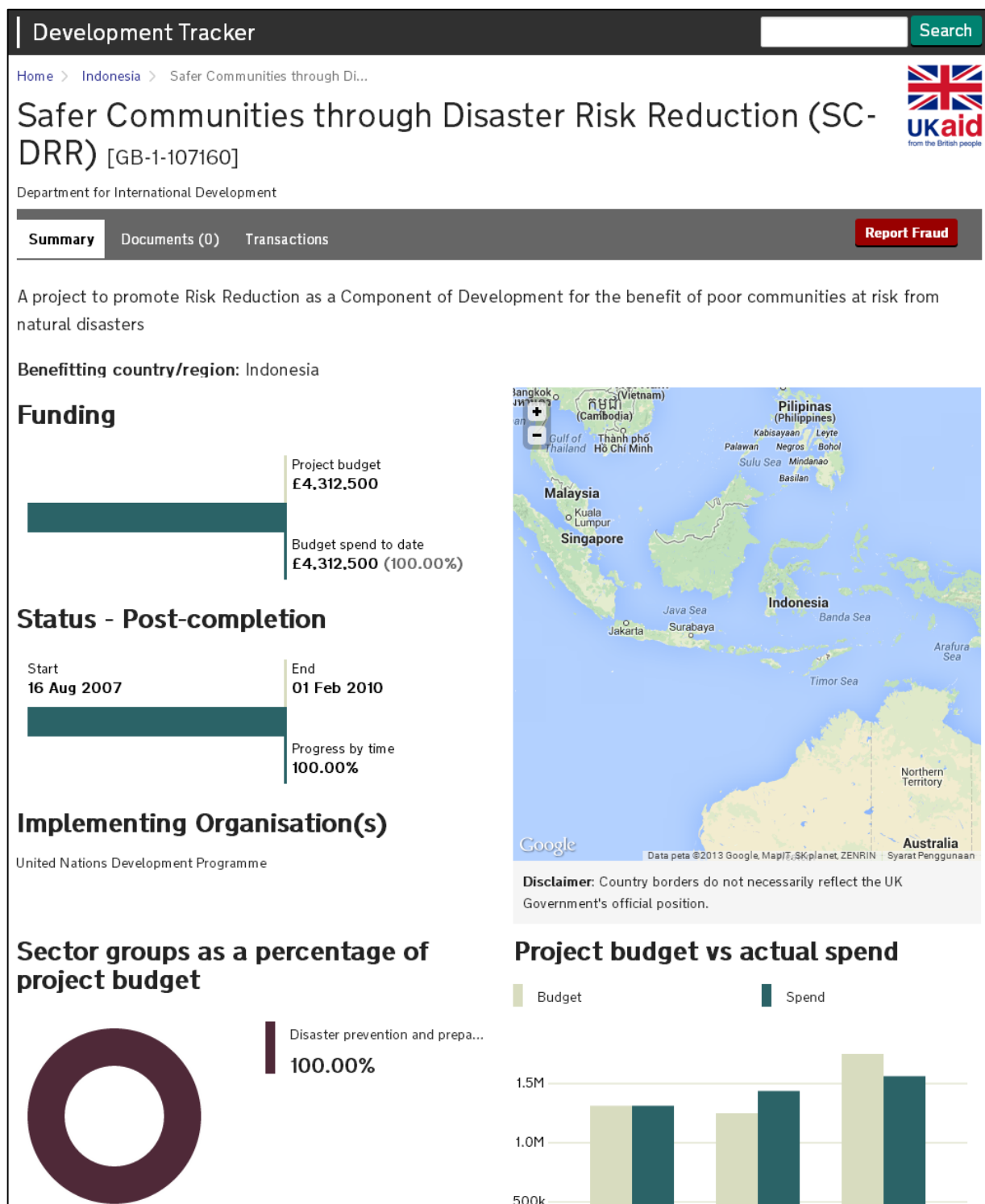
The study was limited to the foreign aid context, and therefore, the developed framework to analyze the impact of humanitarian aid is limited to this national and regional context. Therefore, it is suggested that a study could be conducted that is not limited to the national and regional context and a framework developed for another aspect and various indicators in social and engineering science to disasters covering the entire spectrum of work related to the role of government.


## **7.8. Final Note**

This chapter summarised the main conclusions of the study obtained from the literature review, expert opinions through interviews, and validation group interviews. The study developed the impact as the expanding theory about the impact of humanitarian aid. Accordingly, this research contributed to theory, policy and practice as explained in Section 7.3, section 7.4 and section 7.5 respectively.

# Appendices

## Appendix 1 : Summary of SCDRR Project In Development Tracker (www.GOV.CO.UK)



Development Tracker				Search
Home > Indonesia > Safer Communities through Di...				
Safer Communities through Disaster Risk Reduction (SC-DRR) [GB-1-107160]				
Department for International Development				
Summary	Documents (0)	Transactions	Report Fraud	
Budget				£4,312,500
(Current approved budget)				
Financial Year				Value
FY07/08				£1,312,500
FY08/09				£1,250,000
FY09/10				£1,750,000
Commitment				£4,312,500
(Obligation to provide funding)				
Activity Description	Activity ID	Date	Value	
HUMANITASSISTANCE and P0061 for Safer Communities through Disaster Risk Reduction (SC-DRR)	GB-1-107160-101	01 May 2007	£4,312,500	
Expenditure				£4,312,500
(Project spend)				
Description	Receiver Org	Activity ID	Date	Value
Aggregated spend data - Financial Year 2009 Quarter 4		GB-1-107160-101	31 Mar 2010	£687,500
Aggregated spend data - Financial Year 2009 Quarter 3		GB-1-107160-101	31 Dec 2009	£437,500
Aggregated spend data - Financial Year 2009 Quarter 2		GB-1-107160-101	30 Sep 2009	£437,500
Aggregated spend data - Financial Year 2008 Quarter 4		GB-1-107160-101	31 Mar 2009	£562,500
Aggregated spend data - Financial Year 2008 Quarter 3		GB-1-107160-101	31 Dec 2008	£437,500
Aggregated spend data - Financial Year 2008 Quarter 2		GB-1-107160-101	30 Sep 2008	£437,500
Aggregated spend data - Financial Year 2007 Quarter 4		GB-1-107160-101	31 Mar 2008	£437,500
Aggregated spend data - Financial Year 2007 Quarter 2		GB-1-107160-101	30 Sep 2007	£875,000

## Appendix 2 : Research Brief

### RESEARCH BRIEF

This sheet is our invitation to you to be able to participate in this research. Please read the summary of information about the research before you decide to participate or not to participate in this study. If you have any questions about this research, please ask the researchers via the address below.

#### About the Research

**Title :The Impact of UKAid in Support of the Disaster Risk Reduction Program in Indonesia**

Student/ Researcher: Muhammad SyathiriArmia  
Email: muhammad.armia@hud.ac.uk  
School of Art, Design and Architecture (ADA)  
The University of Huddersfield  
Supervisor: Prof. Dilanthi Amaratunga  
Co.Supervisor : Prof. Richard Haigh  
Course of Study : Doctoral (PhD)  
Funding : This research as mandatory task as PhD student and the researcher (the student) is funded by scholarship from Human Resources Development Commission, The Government of The Province of Aceh.

#### Aim of the Research

This research aims at exploring and investigating the impact of the UKAid project in support of Disaster Risk Reduction programs implemented by Indonesian Government during SC-DRR project as a case study in 2007-2010. With the main objective to identify and assess the lessons and good practices learnt in maintaining post project sustainability by incorporating the lessons learnt into government regulatory framework.

#### Why were you selected as respondent?

We chose you as the respondent based on a consideration that you had acted for the SC-DRR project implementation in Jakarta and or in some locations pilot project in Indonesia during 2007-2010.

#### Do I have to participate?

It is up to you to decide whether or not to take part. If you are interested in participating, please sign the form provided and save this leaflet. And you can also decide to stop at any time and it will not give any influence on you. Your shared experience is invaluable in order to support the sustainability of disaster risk reduction programs in Indonesia.

#### I want to participate in this survey, What is the next step?

We will conduct a semi-structured in-depth interviews directed to find out the Impact of UK Government's Aid During a SC-DRR project activities in Supporting Disaster Risk Reduction Program in Indonesia during the period 2007 to with 2010. In-depth interviews will take approximately 30-60 minutes.

#### Do I have any option if I want to participate?

You have several options:

- Do not participate;
- Participate by answering questions.
- Can be stopped at any time, may be continued later or not at all.
- Allowed not to answer questions that are not known.
- Please ask for confidentiality of the profile / institutions / and published the results of the interview.

#### How is the confidentiality of the information provided in this research?

All information obtained from these interviews will be kept confidential according to the code of ethics of research from the University of Huddersfield. The results of the interview will only be identified through research code (eg. R01) and or using fictive names. All detailed information about the profile / institute / will be removed from reports and publications.

Thank you for participating in this research. For further information please contact:

#### Muhammad SyathiriArmia

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School of Art, Design and Architecture  
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Queensgate, Huddersfield, UK, HD1 3DH  
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## RESEARCH PARTICIPANT CONSENT FORM

Title of research : **The Impact of UKAid in Support of the Disaster Risk Reduction Program in Indonesia**  
 Name of researcher : Muhammad Syathiri Armia  
 Name of Supervisor : Prof. Dilanthi Amaratunga  
 Name of Co. Supervisor : Prof. Richard Haigh

	Please tick <input checked="" type="checkbox"/> where appropriate		
	YES	NO	NA
1. I confirm that I have read and understood the information sheet for the above study and what my contribution will be			
2. I have been given the opportunity to ask question (face to face, via telephone, and e-mail)			
3. I agree to take part in the interview			
4. I agree the interview being recorded			
5. I agree to digital images being taken during the research exercises			
6. I understand that my participation is voluntary and that I can withdraw from the research at any time without giving any reason			
<b>7. I hereby AGREE to take a part in the above study</b>			

Name of Participant : .....  
 Signature : .....  
 Date : ...../...../.....

Researcher :  
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 muhammad.armia@hud.ac.uk  
 Phone: +447517122980



## Appendix 3 : Interview Guide For Expert

### INTERVIEW GUIDE FOR EXPERT

#### I. Time and Location

Date : \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Time : - : \_\_\_\_\_

#### II. Informant Identity

Name : \_\_\_\_\_  
Job : \_\_\_\_\_  
Office : \_\_\_\_\_  
Address : \_\_\_\_\_  
Phone : \_\_\_\_\_  
Email : \_\_\_\_\_

Stakeholders Category :

International NGO	National NGO	University	Research Institut

Working Experience During Implementation SC-DRR Project 2007-2010 :

Years	Location	Position/ responsibility

#### III. General questions, about the role of institutions DFID / UKAID in supporting disaster risk reduction in Indonesia.

1. Do you know about the existence of the agency DFID / UKAID in Indonesia?
2. If your answer Yes, where did you find out about the agency? And what is need to know about the agency?
3. Did you know that the DFID agency, through UNDP Indonesia has provided grants to support disaster risk reduction programs in Indonesia?
4. The program was named the "Safer Communities Through Disaster Risk Reduction" which is better known as the SC-DRR during the years 2007-2010, did your institution involve in the project implementation?
5. To what extent do you know about the project "Safer Communities Through Disaster Risk Reduction" conducted by UNDP Indonesia together with the Ministry of National Development Planning / National Development Planning Agency, Ministry of Home Affair and the National Disaster Management Agency (BNPB)?
6. Did you know that the project has supported the government in mainstreaming DRR program?

#### IV. Questions about the influence of foreign grants in support of disaster risk reduction program (DRR) in Indonesia.

1. What is your opinion about the effect of foreign grants support in the performance of agencies / institutions in Indonesia.
2. What do you think about the existence of the grant funds to implement projects in supporting the planning and budgeting for DRR activities in institutions / government institutions in Indonesia?
3. In your opinion, what are the constraints and obstacles often arise in the optimization of grants, especially at institutions / agencies?
4. To what extent is the foreign grants influence in policy changes and government regulations in disaster risk reduction?
5. In your opinion, what should be done by the government after the end of the projects funded by foreign grants?

## Appendix 4 : Interview Guide For Policy Makers

### INTERVIEW GUIDE FOR POLICY MAKERS

#### I. Time and Location

\_\_\_\_\_, \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
: - : \_\_\_\_\_

#### II. Informant Identity

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Stakeholders Category :

Central Gov. Officers	Local Gov. Officers
_____	_____

Working Experience During Implementation SC-DRR Project 2007-2010 :

Location	Position/ responsibility
_____	_____
_____	_____
_____	_____
_____	_____

#### III. General questions, about the role of institutions DFID / UKAID in supporting disaster risk reduction in Indonesia.

1. Do you know about the existence of the agency DFID / UKAID in Indonesia?
2. If your answer is yes, how did you find out about the agency? And what do you know about it?
3. Did you know that the agency DFID through UNDP Indonesia has provided grants to support disaster risk reduction programs in Indonesia?
4. The program was named the "Safer Communities Through Disaster Risk Reduction" which is called as the SC-DRR during the years 2007-2010, did your institution involve in the project implementation?
5. To what extent do you know about the project "Safer Communities Through Disaster Risk Reduction" conducted by UNDP Indonesia together with the Ministry of National Development Planning / National Development Planning Agency, Ministry of the Interior and the National Disaster Management Agency (BNPB)?
6. Did you know that the project has supported the government in mainstreaming DRR program?

#### IV. Questions about the SC-DRR project implementation grant from DFID / UKAID for disaster risk reduction (DRR) in Indonesia.

*The existence of the SC-DRR project in support for the planning and budgeting for DRR in Government Institutions*

1. To what extent the support for the SC-DRR activities in planning at your institutions / agencies ?
2. What are the forms of the support in the planning?
3. To what extent the support for the SC-DRR activities in terms of budgeting in your agencies / organization?
4. What are the forms of the support in budgeting?
5. Does the existence also supports strengthening the capacity of government officials? what is the form of the support?

*The Influence of grant support through the SC-DRR activities in support for the performance of institutions / agencies in mainstreaming DRR.*

1. Is the mainstreaming DRR activities are prioritised in the agency / institution?
2. If your answer is yes, which level of priority as compared to other existing programs?
3. How how great is the support of terms of scale toward the SC-DRR project with a budget allocation provided by your institution?
4. what are the benefits felt during the activity of SC-DRR? Did it contribute toward the new policy/regulation changing?
5. were there any new initiatives / policies / regulation that were made during the existence of the SC-DRR activities?

*Barriers and obstacles during the implementation of the SC-DRR program in mainstreaming DRR implemented by agencies / institutions..*

1. Were there any problems and constraints during the implementation?
2. If your answer is yes, what form of constraints and obstacles encountered?
3. what are solutions offered in handling of obstacles and constraints?
4. Were these obstacles repeated in the future?
5. what was the forms of coordination in overcoming the problems during the implementation of the activities?

**V. Questions about the identification of learning and practice that can be used after the end of the SC-DRR project as input to the government policy framework.**

*Identifying the effects and lessons learnt during the implementation of the project to the SC-DRR for sustainability in mainstreaming DRR.*

1. In the integration of the program, was there any impact of the project support which indicated direct and indirect changes toward the program?
2. If your answer is yes, how was the impact of the perceived changes during the project?
3. How was the readiness of your institutions / agency after the project ended?
4. As a lesson learnt, Does the agency / institution have any specific strategy for the sustainability of the program?
5. how was the institutional readiness to support the sustainability of the program?

*Optimisation of grant funds and policy recommendations regarding reforms in government regulations about DRR.*

1. How was the mechanism of the aid received by the government? Whether it went directly or through a DIPA (national budget)?
2. In supporting the program integration, was the obtained grant funds utilized optimally for the appropriateness of the program?
3. How was the support of the project affected the existing regulations in your agency / institution?
4. were there any lessons that you can learn during the implementation of the project ?
5. If your answer is yes, what have you applied for short-term development programs (action plan)?
6. And what you have also applied for medium-term and long-term development programs?
7. Do you have any specific recommendations as a consideration for the government policy changes in mainstreaming DRR?
8. Do you support the continuation of the implementation of the project to covering all provinces in Indonesia?

## **Appendix 5 : List of Researcher's Publications**

- Armia, M. S., & Amaratunga, D. (2013). Impact of Foreign Aid in Support of Disaster Risk Reduction in Indonesia. Proceeding of ANDROID Residential Doctoral School, Cyprus, 23-25 October.
- Armia, M. S., Amaratunga, D, & Haigh, R (2014). Impact of the British Government Aid/ UK Aid in Support of Disaster Risk Reduction programme in Indonesia. Abstract of 4<sup>th</sup> International Conference on Building Resilience, Salford, 8-11 September.

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- Coppola, D. P. (2011c). Chapter 5: Preparedness *INTRODUCTION TO INTERNATIONAL DISASTER MANAGEMENT* (pp. 251-303).

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