

Disclaimer

This report was compiled by an ADRC visiting researcher (VR) from ADRC member countries.

The views expressed in the report do not necessarily reflect the views of the ADRC. The boundaries and names shown and the designations used on the maps in the report also do not imply official endorsement or acceptance by the ADRC.

Leng Heng An
National Committee for Disaster Management
Royal Government of Cambodia

(ADRC Visiting Researcher FY2013B)

Research PAPER

Collaboration in Disaster Risk Reduction (DRR) between the National Committee
for Disaster Management and Non-Government Organizations (NGO)

April 2014

LIST OF ABBREVIATIONS

ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Centre
ADRC	Asian Disaster Reduction Centre
CBDP	Community-based Disaster Preparedness Program
CBDRM	Community Based Disaster Risk Management
CBDRR	Community Based Disaster Risk Reduction
CC	Commune Council
CCDM	Commune Committee for Disaster Management
CDP	Commune Development Plan
CRC	Cambodian Red Cross
DCDM	Disaster Committee for Disaster Management
DIPECHO	ECHO's disaster preparedness programme
DM	Disaster Management
DRR	Disaster Risk Reduction
ECHO	The European Commission's Humanitarian Aid department (ECHO)
ECHO-DG	European Commission Humanitarian Aid and Civil Protection DG
EWS	Early Warning System
GFDRR	Global Facility for Disaster Reduction and Recovery
HANet	The Humanitarian Accountability Network

IEC	Information, Education and Communication
IRP	International Recovery Platform
JAG	Joint Action Group
JANIC	Japan NGO Center for International Cooperation
JICA	Japan International Cooperation Agency
MOWRAM	Ministry of Water Resources and Meteorology
NCDM	National Committee for Disaster Management
NDMT	The United Nations Disaster Management Team
NGO	Non- Government Organization
NPO	Non-Profit Organization
PCDM	Provincial Committee for Disaster Management
UNDMT	UN Disaster Management Team
UNDP	United Nations Development Program
UNISDR	The United Nations Office for Disaster Risk Reduction
VCDM	Village Committee for Disaster Management
VR	Visiting Researcher
WB	World Bank

ACKNOWLEDGEMENTS

First of all, I would like to express my gratitude to the Asian Disaster Reduction Center (ADRC) and all the ADRC staff members for providing financial, administrative and logistic supports during my three-month research program in Japan.

My special thanks to HE. Mr. PONN Narith, NCDM Secretary General and the National Committee for Disaster Management (NCDM) of the Royal Government of Cambodia for nominating me to attend the ADRC 2013B Visiting Researcher, and HE Mr. MA Norith, NDCM Deputy Secretary General for sharing with me useful documents for my research at ADRC.

I would like to acknowledge Ms. Akiko Nakamura, ADRC Senior Researcher and my mentor for her guidance and motivation in my research work.

My great appreciation to Ms. Yumi Shiomi, ADRC Researcher and ADRC 2013B Coordinator for her excellent facilitation and coordination of VR 2013 program from my first day to my last day with ADRC.

My particular thanks to Mr. Shoji Kawahara, my Japanese language teacher, constantly providing us local inputs about Japan and Japanese culture and guiding us to interesting places.

Last but not least, my appreciation to representatives, officials and staff members of Japan government agencies and ADRC partners for receiving us at their offices/facilities and their valuable, informative lectures/presentations.

CONTENTS

LIST OF ABBREVIATIONS

ACKNOWLEDGEMENTS

CHAPTER 1 INTRODUCTION

- 1.1 Background to the Study**
- 1.2 Rationale**
- 1.3 Aim and Objectives of the Study**
 - 1.3.1 Aim**
 - 1.3.2 Objectives**
 - 1.3.3 Outcomes of the Research**
- 1.4 Gaps and Limitations of the Study**

CHAPTER 2 LITERATURE REVIEW

- 2.1 Disaster**
- 2.2 Disaster Risk**
- 2.3 Disaster Risk Management**
- 2.4 Disaster Risk Reduction**
- 2.6 Collaboration Concept**
- 2.8 International Response to Disaster Risk Reduction**
- 2.9 Roles of NGOs in Disaster Risk Reduction**
- 2.10 Overview of Disaster Management in Japan**
- 2.11 DRR Agencies/NGOs/NPOs in Japan**

CHAPTER 3 DISASTER REDUCTION SITUATION IN CAMBODIA

3. NATRUAL HAZARDS IN CAMBODIA

3.1 Natural Hazards Likely to Affect Cambodia

3.1.1 Floods

3.1.2 Droughts

3.1.3 Typhoons

3.2 Recent Major Disasters

3.2.1 Flood in 2011 & 2013

3.2.2 Droughts from 2009-2012

3.2.3 Typhoon Ketsana in 2009

3.2.4 Lightning Strikes

3.3 DISASTER MANAGEMENT SYSTEM

3.3.1 Disaster Management Plan, Policy and Strategy

3.3.2 Structure of Disaster Management

CHAPTER 4 RESEARCH METHODOLOGY

4.1 Research Design

4.2 Data Collection Techniques

4.3 Data Analysis Methods

CHAPTER 5 FINDINGS & DISCUSSION

5.1 Initiatives and Collaboration

5.2 Good Practices and Lessons learned

5.3 Challenges

5.4 Possible suggestions to enhance the collaboration

List of Figures

Annexure

REFERENCES

CHAPTER 1

INTRODUCTION

1.1 Background to the Study

The occurrence of regular flood and drought in Cambodia, often within the same year, makes the country among the most disaster prone in Southeast Asia. Eighty percent (80%) of Cambodia's 14 million population is dependent on agriculture and fisheries, both of which suffer the brunt of drought and flood, threatening the lives of already vulnerable communities. Cambodian food security depends heavily on the cycle of the Tonle Sap and Mekong Rivers. The waters feed agricultural plains and provide fish - the country's main source of protein. Because of widespread poverty (food insecurity and lack of livelihood), even a slow and relatively predictable flood or drought phenomenon increases the vulnerability of many poor families. Previously, a more typical response to regular drought and flooding involved the temporary provisions in the communities, in the form of food, shelter, health services, water and sanitation. However, increasingly, over the years, there has been a realization among NGOs and the government that while emergency response is important, it is more sustainable and effective to establish preparedness, mitigation and prevention mechanisms at all levels (ADPC et al. 2008).

1.2 Rationale

In collaboration with the National Committee for Disaster Management (NCDM), a good number of DRR projects have been implemented by various non-government organizations (NGOs) in their target areas throughout the country. Some of the implementing NGOs receive funds from the same donors, namely DIPECHO of European Commission, Asian Development Bank and World Bank and others. Sovann, R. (2006) lists multiplied impacts of effective coordination which includes effective risk reduction strategy; maximization of limited resources; focus beneficiary targeting, clearly defined roles and responsibilities; effective and efficient utilization and dissemination of information; and identified actors on different aspects of disaster management. Disaster risk reduction involves cross-cutting, socio-economic sectors and multi-stakeholders including government, private sectors and civil society organizations. Thus, it is crucial that all the stakeholders work in good coordination and collaboration to optimize their resources, productivity and operational effectiveness in DRR.

1.3 Aim and Objectives of the Study

1.3.1 Aim

The primary aim of the research “**Collaboration in Disaster Risk Reduction between NCDM and NGOs**” is to explore the extent and nature of DRR collaboration between NCDM and NGOs in Cambodia.

1.3.2 Objectives

1. To study NGOs’ projects and activities with relation to DM/DRR, in Japan
2. To examine NGOs’ projects and activities with relation to DM/DRR in Cambodia
3. To suggest possible pathways for enhancing collaborations between NCDM and NGOs in DRR.

1.3.3 Outcomes of the Research

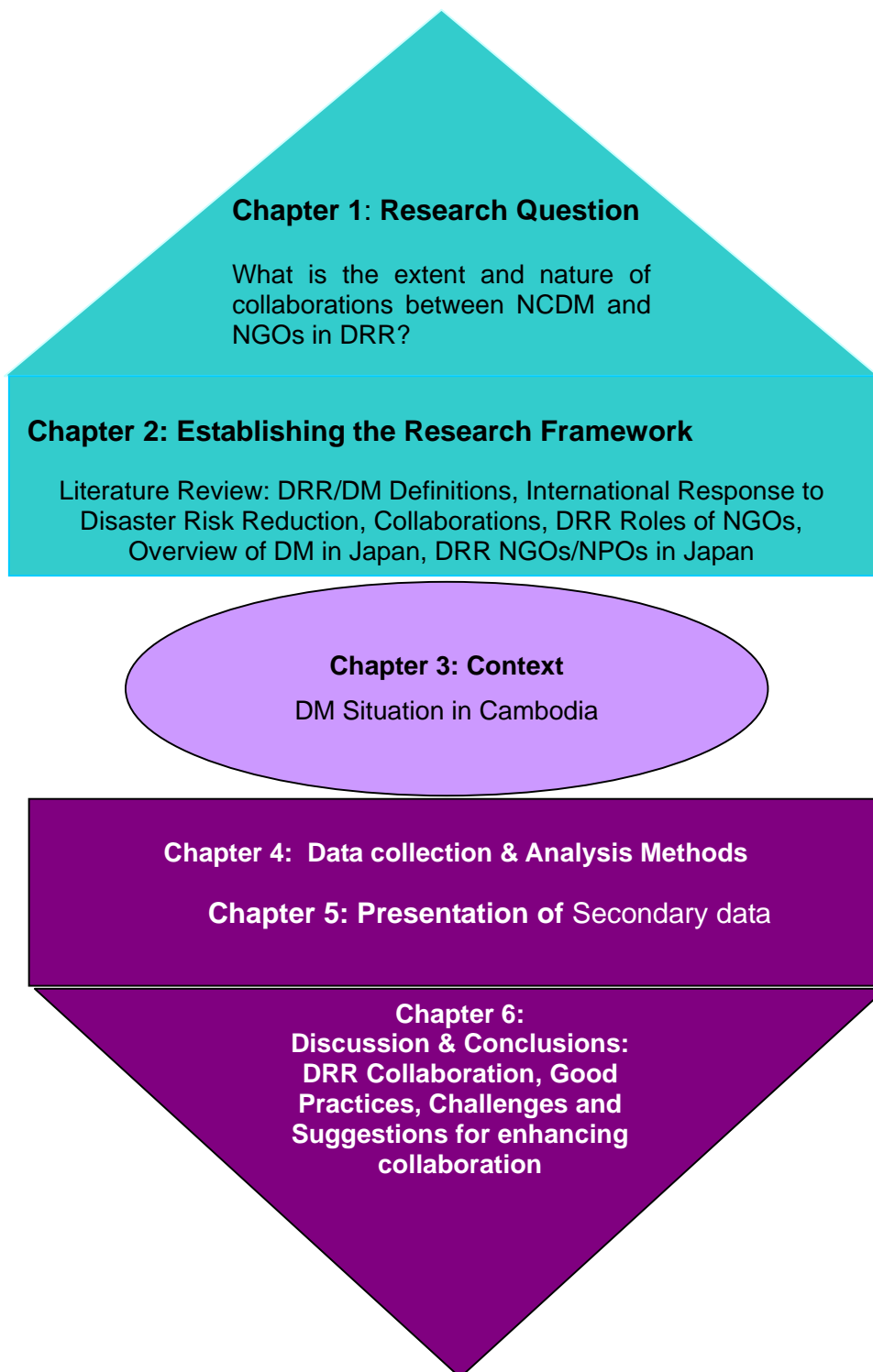
The outcomes of the research will be:

- Increased knowledge about the collaboration in DRR.
- Suggestions for innovative and distinctive alliances and collaboration in DRR.

1.4 Gaps and Limitations of the Study

The research is conducted at Asian Disaster Reduction Center (ADRC) in Kobe, Japan. Documents, reports, online resources, and research papers related to their DRR activities in Cambodia and Japan were reviewed and used as secondary data. Due to resource and time constraints, the number of documents reviewed is limited, and the researcher does not have time to interview representatives of DRR NGOs in Cambodia or listen to their views on collaboration with NCDM. Additionally, some of documents reviewed are very recent were produced approximately five or six years ago. Therefore, the generalization of findings to broader contexts is limited.

Figure 1: Overview of the Research Structure



CHAPTER 2

LITERATURE REVIEW

This chapter presents key definitions of disaster management (DM) and disaster risk reduction (DRR) and highlight international responses to disaster risk reduction, collaboration concept, DRR Roles of NGOs, overview of disaster management in Japan and DRR NGOs/NPOs in Japan.

2.1 Disaster

A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources. Disasters are often described as a result of the combination of: the exposure to a hazard; the conditions of vulnerability that are present; and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease and other negative effects on human physical, mental and social well-being, together with damage to property, destruction of assets, loss of services, social and economic disruption and environmental degradation (UNISDR, August 2007).

2.2 Disaster Risk

The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period. The definition of disaster risk reflects the concept of disasters as the outcome of continuously present conditions of risk. Disaster risk comprises different types of potential losses which are often difficult to quantify. Nevertheless, with knowledge of the prevailing hazards and the patterns of population and socio-economic development, disaster risks can be assessed and mapped, in broad terms at least (UNISDR, Jan 2009).

2.3 Disaster Risk Management

According to UNISDR (August 2007), disaster risk management is the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.

2.4 Disaster Risk Reduction

The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events. A comprehensive approach to reduce disaster risks is set out in the United Nations-endorsed Hyogo Framework for Action, adopted in 2005, whose expected outcome is “The substantial reduction of disaster losses, in lives and the social, economic and environmental assets of communities and countries.” The International Strategy for Disaster Reduction (ISDR) system provides a vehicle for cooperation among Governments, organisations and civil society actors to assist in the implementation of the Framework. Note that while the term “disaster reduction” is sometimes used, the term “disaster risk reduction” provides a better recognition of the ongoing nature of disaster risks and the ongoing potential to reduce these risks (UNISDR, August 2007).

2.5 International Responses to Disaster Risk Reduction

In the last two decades, the world has experienced more frequent natural disasters with greater magnitude. Recent disasters include two mega disasters in Japan: the Great Hanshin earthquake, which occurred in Kobe on 17 January, 1995 and the Great East Japan Earthquake in Tohoku region on 11 March 2011; the 2008 Shichuan Earthquake in China; severe flooding in Thailand and Cambodia in the last few years; Hurricane Sandy, which hit 24 States in the United States of America in October 2012; Typhoon Haiyan in the Philippines in November 2013, let alone disaster occurrences in urban areas such as fire, stampede and building collapse; and flooding, draughts and Avian influenza pandemics that have affected the world, especially in least developed countries in Asia and Africa.

To cope with alarming tendency of disasters, there have been significant international responses to disaster risk reduction, starting from the United Nations proclamation of the “International Decade for Natural Disaster Reduction (IDNDR)” in 1990, the “Yokohama World Conference on Natural Disaster Reduction” in 1994, the IDNDR successor “International Strategy for Disaster Reduction (ISDR)” in 2000 and more recently the “Hyogo World Conference on Disaster Reduction” in 2005, which have ushered a major shift in the understanding and practice of disaster management around the world (NCDM et al, 2008).

In January 2005, one hundred and sixty-eight nations around the world participated in the World Conference on Disaster Reduction (WCDR) held in Kobe, Japan, organized by the UNISDR and adopted the Hyogo Framework of Action (HFA), a comprehensive set of five priorities targeted at achieving a substantial reduction in disaster losses, both in terms of lives and the social, economic and environmental assets of communities and countries, by 2015 (PreventionWeb). The HFA five priorities for action are: 1. ensuring that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation, 2. identifying, assessing and monitoring disaster risks and enhance early warning, 3. using knowledge, innovation and education to build a culture of safety and resilience at all levels, Reduce the underlying risk factors, and 5. strengthening disaster preparedness for effective response at all levels (UNISDR, 2007). On 20 December 2013, the United Nations General Assembly passed a resolution to hold the 3rd UN *World Conference on Disaster Risk Reduction* from 14 to 18 March 2015 in *Sendai*, Japan.

Disaster risk reduction is an integral part of social and economic development, and is essential if development is to be sustainable for the future. Making development sustainable requires addressing natural hazard risk and vulnerability in development plans (UNISDR).

2.6 Collaboration Concept

Collaboration is a very important means used by different stakeholders working to achieve convergent objectives. In industrialized, transitional, and developing countries, interest in cooperation between state and non-state actors has grown appreciably over the past decade. At the present time, around the world it is widely recognized that societal problems cannot be solved by governments acting on their own (Brinkerhoof, 1999). Moreover, cross-sectoral interactions, state-civil society partnerships whose purpose is to achieve convergent objectives

through the combined efforts of both sets of actors generate synergistic effects; that is, more and/or better outcomes are attained than if the partners acted independently (Brinkerhoof, 1999).

Brinkerhoof (1999) added that to make collaboration effective, collaborative stakeholders need to deal with a number of basic factors: specification of objectives and degree of convergence, mechanisms for combining effort and managing cooperation, determination of appropriate roles and responsibilities, and capacity to fulfill those roles and responsibilities.

2.7 NGOs' Roles in Disaster Risk Reduction

The key role which communities play in disaster management and disaster risk reduction is strongly acknowledged by the ISDR secretariat, whose vision is to “enable all communities to become resilient to the effects of natural hazards, technological and environmental disasters.” Experiences show that community-based approaches offer viable solutions for managing and reducing risks and ensuring sustainable development.

Today, an increasingly predominant view is that for risk reduction strategies to be truly effective in protecting lives and livelihoods, they need to be people centred. They need to build on people's local knowledge and cultural practices, and apply tools and approaches that people can easily understand and integrate into their lives.

Conversely, disaster reduction using top-down government and institutional interventions alone are often considered insufficient as they tend to have a lower understanding of community dynamics, perceptions and needs, and ignore the potential of local knowledge and capacities.

On many occasions, local people and organizations are the main actors in disaster risk reduction and disaster response. When a disaster strikes, immediate response (i.e., search and rescue and care for those injured, traumatized and homeless) is often carried out by family members, friends and neighbours and grassroots organizations. In the case of the many small-scale events triggered by natural hazards, there may be little or no external support at all, especially in countries where government capacity is limited.

Many members of local communities also represent the greatest potential source of local knowledge of hazardous conditions, and are the repositories of traditional coping mechanisms suited to their individual environment. Their awareness of historical risk scenarios is often stronger than that of other people.

NGOs' involvement in DRR activities has proved beneficial for a number of reasons, including the following:

NGOs can operate at grassroots level with communities and local organizations as partners, and take a participatory approach to development planning. This allows them to respond better to local people's priorities and build on local capacities. NGOs enjoy higher operational flexibility as they are relatively free from bureaucratic structures and systems, and better able to respond and adapt quickly and easily.

NGOs often work with and on behalf of most needy groups: the poorest and the most vulnerable.

In spite of the encouraging trend observed over the past decade, it should be noted that NGOs have found it hard at times to gain acceptance, both at national and international levels. They have sometimes been regarded as minor players, especially in countries whose governments have been hesitant to concede authority and resources to the civil society. As a matter of fact, some governments do not always welcome the growth of civil society, and may sometimes resist the expansion of its role, especially where this involves criticism of government policies or practice.

Finally, NGOs' participation in high-level decision-making processes so far has also been rather limited. This said, some NGOs are gaining growing recognition in the ongoing process of promoting DRR, and are becoming more actively involved in a number of different activities. Over the past years, some NGOs have committed themselves to advocate for policy changes. Others have been active in mainstreaming DRR into rehabilitation and recovery programmes. Many others have engaged actively in capacity building, knowledge transfer and public awareness in communities at risk.

All these efforts have contributed to reducing the vulnerability of those living in disaster-prone areas and increasing their resilience through educational activities and capacity building.

Overall, the following broad areas of intervention have been identified as being the ones in which NGOs appear to be more actively involved: policy and advocacy, knowledge and education, community-based risk and vulnerability assessment, and community-based mitigation and preparedness (ISDR, 2006).

2.8 DRR Roles & Activities of NGOs/NPOs in Japan

Before we go into details about roles and activities of NGOs/NPOs in Japan, it is important to get an overview of disaster management system in Japan.

2.8.1 OVERVIEW OF DISASTER MANAGEMENT SYSTEM IN JAPAN

Likewise, its national government system, disaster management in Japan is also vested on 3-layered system – national, prefectural and municipal layers. Disaster management system of Japan has undergone tremendous advancement throughout the past 5-6 decades. Disaster Management Councils established at each level and each council is responsible for the implementation of all disaster management related issues under its authority. The comprehensive coordination and communication system has been put in place to foster holistic and effective management at each level. The outline of Disaster Management System of Japan, the structure of Central Disaster Management Council established under the DCBA as well as Disaster Management Planning System based on the same law is shown below:

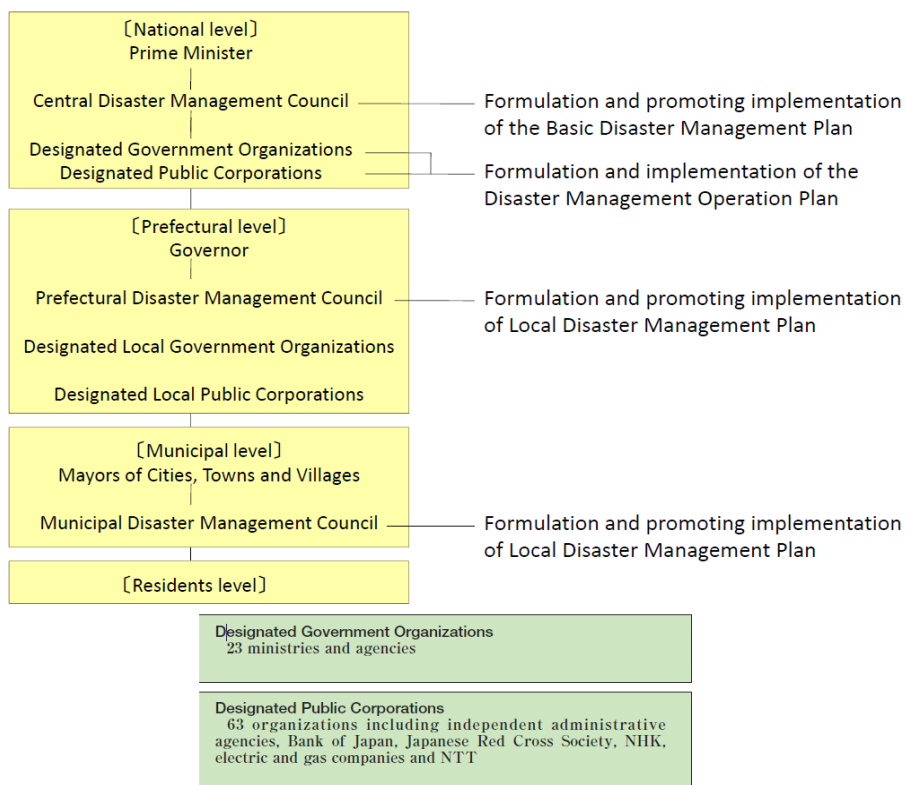


Figure 2: Outline of the disaster management system in Japan

Central Disaster Management Council consists of the prime minister, who is the chairperson, Minister of State for Disaster Management, all ministers, heads of major public institutions and experts. The council promotes comprehensive disaster countermeasures including deliberating important issues on disaster reduction according to requests from the Prime Minister or Minister of State for Disaster Management.

Duties of the council include formulating and promoting implementation of the Basic Disaster Management Plan and Earthquake Countermeasures Plans, formulating and promoting and promoting implementation of the urgent measures plan for major disasters, deliberating important issues on disaster reduction according to requests from the Prime Minister or Minister of State for Disaster Management (basic disaster management policies, overall coordination of disaster countermeasures and declaration of state of disaster emergency) and offering opinions regarding important issues on disaster reduction to the Prime Minister and Minister of State for Disaster Management.



Figure 3: CDMC Composition

Disaster management planning in Japan is implemented at three levels:

1. Basic Disaster Management Plan is prepared by the Central Disaster Management Council and basis plan for disaster management activities. The plan must be based on Disaster Countermeasure Basic Act. The structure of it is as shown in the figure below:

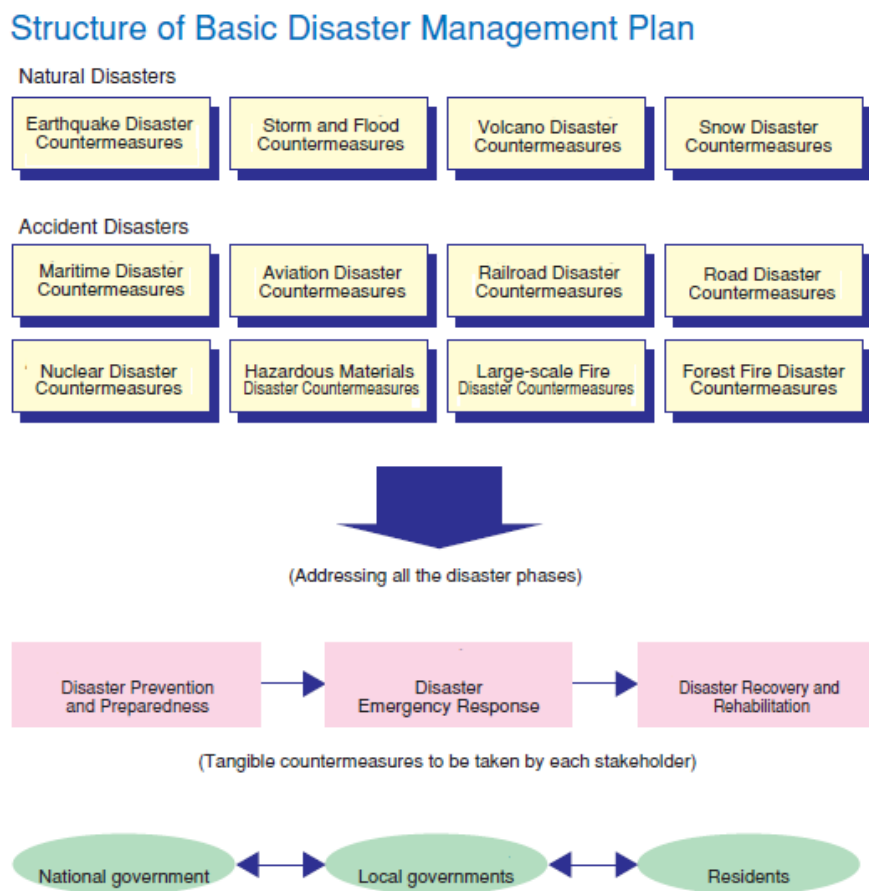


Figure 4: Structure of Basic Disaster Management Plan

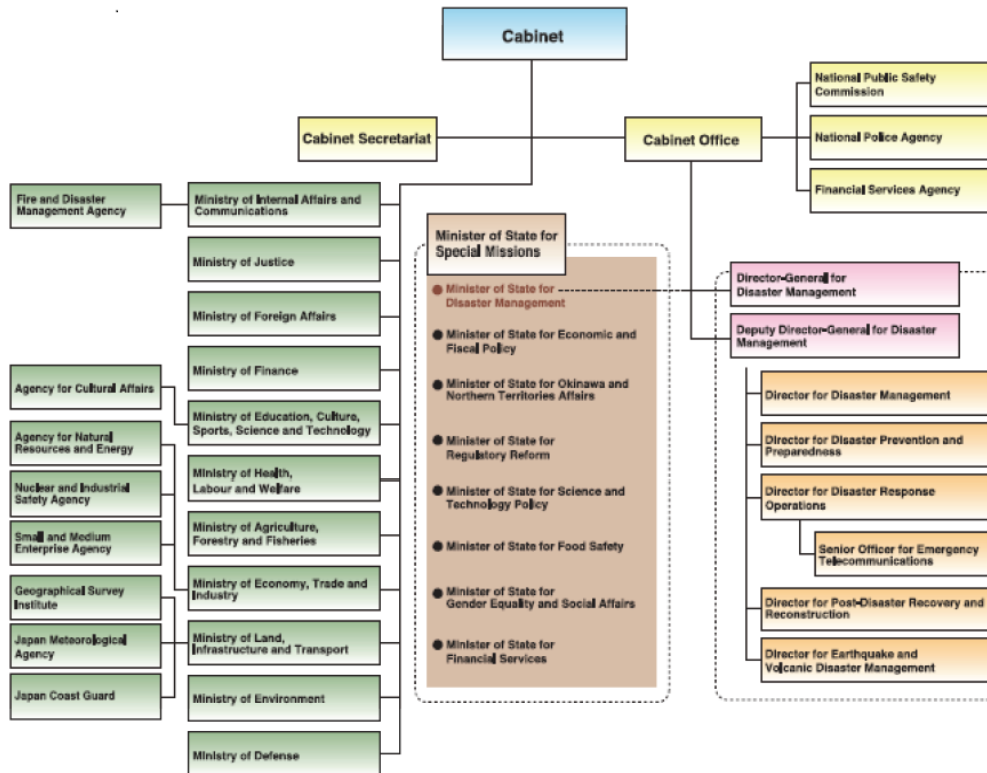
2. Disaster Management Operation Plan is made by each designated government organization and designated public corporation based on the Basic Disaster Management Plan

3. Local Disaster Management Plan is made by prefectural and municipal disaster management councils, subject to local circumstances and based on Basic Disaster Management Plan.

Mission of Cabinet Office - Along with a series of reforms of the central government system in 2001, the post of Minister of State for Disaster Management was newly established to integrate and coordinate disaster reduction policies and measures of ministries and agencies. In the Cabinet Office, which is responsible for securing cooperation and collaboration among related government organizations in wide-ranging issues, the Director-General for Disaster Management is mandated to undertake basic disaster management policies and response to large-scale disasters, as well as conduct overall coordination.

Additionally, taking into account lessons learned from the Great Hanshin-Awaji Earthquake, the Cabinet Secretariat System was strengthened, including the appointment of the Deputy Chief Cabinet Secretary for Crisis Management and the establishment of the Cabinet Information Collection Center, to strengthen risk management functions to address emergencies such as large-scale disasters and serious accidents. Thereby, the Cabinet Office has a role in supporting the Cabinet Secretariat regarding disaster management matters.

Figure 5: Organization of National Government and Cabinet Office (Disaster Management)



(Disaster Management in Japan brochure, 2011 in Nazarov, E, 2011)

2.8.2 Designated Public Corporations

Designated Public Corporations are comprised of 63 organizations including independent administrative agencies, Bank of Japan, Japanese Red Cross Society, NHK, electric and gas companies, and NTT.

2.8.2.1 Japanese Red Cross (JRCS)

The JRCS is specified as a “Designated Public Corporation” under the Disaster Countermeasures Basic Act. According to the Disaster Relief Act, the JRCS is obligated to cooperate with the national and prefectural governments in the provision of relief assistance, the details of which are laid out in the agreement signed by the Minister of Health, Labour and Welfare and the President of the JRCS. Based on this, the JRCS is developing disaster relief responses according to relief regulations and disaster management plans. Additionally, as a member of the Central Disaster Management Council headed by the Prime Minister, and in collaboration with other organizations, the JRCS is responsible for a part of the country’s overall disaster management, including medical relief, stockpiling and Distribution of relief supplies, provision of blood products, collection of donations, disaster volunteer activities and psychological care (Chariyaphan, R , 2012).

2.8.2.2 NHK (Japan Broadcasting Corporation)

As the sole public broadcaster of Japan where earthquakes, volcanic eruptions, typhoons, and other natural disasters are all too common, NHK is expected to play a twofold role in emergency situations. In its usual capacity as a source of information, NHK reports on the damage caused and the state of the disaster-affected area. But it is also regarded as part of the infrastructure of disaster prevention and crisis management. This perception is stipulated in the Disaster Countermeasures Basic Act. By the law NHK is designated as ‘public institution’ to contribute, through its broadcast, to the prevention of the disaster. NHK must broadcast warnings of tsunami, or other dangerous weather conditions in order to promote precautionary measures and the mitigation of damage (TANAKA, T., 2013).

2.8.3 Japan International Cooperation Agency (JICA)

Japan International Cooperation Agency (JICA) is the development agency of the Government of Japan, which carries out cooperation activities that is rooted in Japanese experience. Thus, naturally JICA's approach has been to continuously extend cooperation in the field of DRR with the aim to build capacities of developing countries to cope with disasters as means to achieve sustainable development.

JICA views that DRR investment is an essential investment to be made to achieve economic growth and, subsequently sustainable development. DRR investment covers both investments in DRR as an independent sector, as well as those in other sectors that have DRR consideration incorporated. JICA will enhance its support to projects /programs of other sectors that incorporates DRR consideration to contribute to building a resilient society, which embodies sustainable development, in the context of development cooperation (JICA, 2013).

JICA also cooperates with Japanese NGOs operating in affected areas in order to implement more effective operations. JICA has worked to build better partnerships with Japanese NGOs since the launch of specific collaboration schemes in 1998. This has occurred through local projects in developing countries as well as through periodic meetings, trainings, and joint project evaluation.

JICA and Japanese NGOs hold regular NGO-JICA meetings every three months, with the aim of facilitating information exchange and enhancing mutual understanding. These meetings began in 1998 and continued after JICA became an independent administrative institution in 2002. Meeting participants include representatives of JANIC, the Nagoya NGO Center, and the Kansai NGO Council, as well as related sections from JICA and observers from MOFA, the Japan Bank for International Cooperation (JBIC) and relevant NGOs.

An NGO-JICA Japan Desk is currently being set up. The main functions of the Desk will be support for in-country activities of Japanese NGOs and Japanese nationals, promotion of collaboration between Japanese and local NGOs, and promotion of collaboration between local NGOs and JICA programs (JANIC).

2.8.4 Inter-Governmental Agencies

The United Nations Office for Disaster Risk Reduction (UNISDR)

The UN General Assembly adopted the International Strategy for Disaster Reduction in December 1999 and established UNISDR, the secretariat to ensure its implementation. UNISDR, the UN office for disaster risk reduction, is also the focal point in the UN system for the coordination of disaster risk reduction and the implementation of the international blueprint for disaster risk reduction - the "Hyogo Framework for Action 2005-2015: Building the resilience of nations and communities to disasters".

The mandate of UNISDR expanded in 2001 to serve as the focal point in the United Nations system for the coordination of disaster reduction and to ensure synergies among the disaster reduction activities of the United Nations system and regional organizations and activities in socio-economic and humanitarian fields (GA resolution 56/195). This was in response to a need for mainstreaming disaster risk reduction within the development and other areas of work of the UN.

The "Hyogo Declaration" and the "Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters" was adopted by the World Conference on Disaster Reduction, held in Kobe, Hyogo, Japan, in January 2005. The Hyogo Framework for Action (HFA) tasked UNISDR with supporting the implementation of the HFA (UNISDR).

The Asian Disaster Reduction Center (ADRC)

The Asian Disaster Reduction Center was established in Kobe, Hyogo prefecture, in 1998, with mission to enhance disaster resilience of the member countries, to build safe communities, and to create a society where sustainable development is possible. The Center works to build disaster resilient communities and to establish networks among countries through many programs including personnel exchanges in this field.

The Center addresses this issue from a global perspective in cooperation with a variety of UN agencies and international organizations/initiatives, such as the International Strategy for Disaster Reduction (ISDR), the Office for the Coordination of Humanitarian Affairs (OCHA), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the World Meteorological

Organization (WMO), and the World Health Organization Regional Office for the Western Pacific (WHO/WPRO).

ADRC has the mission and aims to enhance disaster resilience of the member countries, to build safe communities, and to create a society where sustainable development is possible (ADRC).

The International Recovery Platform (IRP)

The International Recovery Platform (IRP) was conceived at the World Conference on Disaster Reduction (WCDR) in Kobe, Hyogo, Japan in January 2005. As a thematic platform of the International Strategy for Disaster Reduction (ISDR) system, IRP is a key pillar for the implementation of the Hyogo Framework for Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters, a global plan for disaster risk reduction for the decade adopted by 168 governments at the WCDR.

The key role of IRP is to identify gaps and constraints experienced in post disaster recovery and to serve as a catalyst for the development of tools, resources, and capacity for resilient recovery. IRP aims to be an international source of knowledge on good recovery practice.

The mission of the IRP is to identify gaps and constraints currently experienced in the context of disaster recovery and to serve as a catalyst for the development of tools, resources and capacity for resilient recovery. IRP strives to be an international source of knowledge on good recovery practice.

The goals of the IRP are:

- to ensure that risk reduction approaches are systematically incorporated into the design of emergency preparedness, response and recovery programmes – in accordance with strategic goal (c) of the Hyogo Framework for Action;
- to promote “Build Back Better” approaches and supporting the development of enhanced recovery capacity at a regional, national and sub-national level with a particular focus on high-risk low-capacity countries, the IRP works for the achievement of measurable and visibly positive impact of recovery processes in disaster-affected communities;

- by closely linking its work with the goals of the HFA, to promote a shared vision amongst IRP Partner Organizations and members of the larger IRP Community of Practice, and a common strategic approach for recovery and risk reduction interventions;
- to serve as an international repository of knowledge and a clearing-house for the development of recovery and risk reduction resource (International Recovery Platform).

2.8.5 Coordinating Agencies

2.8.5.1 Japan NGO Center for International Cooperation (JANIC)

JANIC is a non-profit, non-partisan networking NGO founded in 1987 by a group of NGO leaders who saw the need to better coordinate activities in Japanese society and facilitate communication with groups overseas. JANIC has 96 NGO members and is governed by a Board of Trustees, with a secretary general and 33 staff members.

JANIC 's missions are to promote networking and collaborative activities among citizens' organizations (NGOs) engaged in international cooperation, to facilitate collective action by its members and wider Japanese civil society to influence the policies and practice of governments and institutions at domestic and international levels, to strengthen the institutional capability of NGOs in carrying out their missions, to disseminate information and knowledge concerning people's living conditions in developing regions of the world and the impact of the public's way of life on these people, and to enlighten the general public on the role of NGOs and encourage them to participate in NGO activities in any form.

As a networking NGO and a proponent for strengthening civil society, JANIC's activities have revolved around the following activities: promoting partnership among NGOs, coordinating meetings and cooperation among JANIC's official member NGOs, cooperating with other network NGOs, cooperating with NGOs overseas, strengthening capacity and social responsibility of NGOs, providing capacity building opportunities for NGO staff by offering training programs, raising awareness on accountability and Social Responsibility issues and promoting of Accountability Self Check 2008 (a self-assessment framework developed by JANIC to member NGOs).

Funds

JANIC has five major sources of income: 1) membership fees, 2) individual and corporate contributions, 3) income from publication sales, seminar fees, and other services, 4) private foundations; Foundations within Japan, such as: The Mitsubishi Bank Foundation, Niwano Peace Foundation, Rissho Kosei Kai -- One Meal Campaign Committee, Environmental Restoration and Conservation Agency of Japan (ERCA), and others, and subsidies: Ministry of Foreign Affairs, and JICA (JANIC).

2.8.5.2. Japan Platform

Japan Platform (JPF) is an international emergency humanitarian aid organization which offers more effective and prompter emergency aid, in response to the world situation, focusing the issues of refugees and natural disaster. JPF conducts such aid with a tripartite cooperation system where NGOs, business community, and government of Japan work in close cooperation, based on equal partnership, making the most of the respective sectors' characteristics and resources.

JPF is an international emergency humanitarian aid organization made up of a consortium of 36 Japanese NGOs, the business community, and the Ministry of Foreign Affairs of Japan

As for activities in Tohoko, Japan Platform (JPF) have supported a total of over 200 projects with donation. "Stand by Together Fund" was established after the earthquake to support local NGOs in Tohoku. In order to deliver the support to the afflicted areas more efficiently, established offices in Sendai and Tono. Staffs ensure that the fund is spent appropriately by monitoring the NPOs. Also give advice on people activities and fund management to enhance their capabilities.

As of March 11, 2011, the day of the Great East Japan Earthquake, Japan Platform (JPF) has received numerous generous donations and contributions from about 3,300 companies/organizations and about 43,000 citizens all over the world. Those contributions have been utilized to provide more than 310 aid activities implemented by around 80 NGOs/NPOs. In addition to donations, many companies and organizations have also provided prompt support in the form of various kinds of emergency relief assistance.

According to the Reconstruction Agency, as of February 2014, approximately 270,000 people are still displaced from their homes. JPF is dedicated to supporting the long-term efforts of local people toward their recovery, extending to our strategic support plan and including the "Tomoni ikiru (Live together) fund" for local NGO/NPOs, with results achieved by the end of the 2015 fiscal year. In the Fukushima area, we will need to provide even more extensive support to deal with all the challenges there (Japan Platform).

2.8.5.3 Hyogo Volunteer Plaza

Hyogo Volunteer Plaza was opened in June 2002 to serve as a base for prefecture-wide support network incorporating NGOs, NGOs and other local activity groups. Its main functions include Functions: exchange and networking, provision of information and consultation, financial support for activities, human resource development and research and study. This facility offers useful assistance to prefectural citizens undertaking diverse volunteer activities. It has play very active roles during the disaster emergency reliefs: the Great Hanshin Awaji Earthquake in 17 January 1995 and the Great East Japan Earthquake on 11 March 2011.

Immediately after the Great Hanshin Awaji Earthquake, disaster victims helped one another. Neighborhood associations, fire fighting associations and the like exchanged help and support across regional communities, and 1.38 million volunteers rushed into the stricken region from all over Japan. In view of this fact, 1995 was designated the "Year of the Volunteer" in Japan, and a Disaster Management Volunteer Day (January 17) and Disaster Management Volunteer Week (January 15-21) were instituted.

Subsequently, there was a nationwide upsurge in activities mobilizing "regional power" and "citizen power", spearheaded by the NPOs and NGOs which sprang up and flourished in the wake of the earthquake. In December 1998, this led to the implementation of the Law to Promote Specified Nonprofit Activities (NPO Law). In April 2003, the Hyogo Prefectural Government also passed municipal bylaws regarding the promotion of active participation and cooperation by the residents of the prefecture, and efforts are being made to encourage prefectural residents to participate actively and cooperate in working for the mutual benefit of the regional community, and in projects run by the prefectural administration.

A good example is provided by the Hyogo Forum for Advocating Individual Recovery, which bridges the gap between the earthquake victims and the authorities as well as other forums for cooperation between NPOs and the public administration (Phoenix Hyogo).

2.8.6 DRR NGOs/NPOs in JAPAN

According to Peace Boat, roles and contributions of non-profit and non-governmental groups in the relief efforts, especially after the Great East Japan Earthquake and Tsunami have been increasingly recognized. In 1998, the growth of the non-profit sector led to the introduction of the Law Concerning the Promotion of Specific Non-Profit Organization Activities (a.k.a. the NPO Law). This new legislation was established to help NPOs organize effectively and to create a more official role for non-profits both in times of disaster and peace time.

2.8.6.1 Disaster Preparedness

Disaster-Safe Welfare Community (“BOKOMI”) and Kaeru Caravan: DRR Learning for Children have successfully been running community-based disaster preparedness programs involving school children and the entire community through innovative fun leaning approaches in preparing for and working toward disaster prevention. (Please see Annex 1 for details)

2.8.6.2 Emergency Relief and Recovery

Below is the list of NPOs and an overview of their activities of their relief work following Japan earthquake and Tsunami in Tohoku Region, based on the documents compiled by the Japan NGO Center for International Cooperation (JANIC, 2012). However, it is not the exhaustive list

1. Institute of Cultural Affairs (ICA) has been supporting households in the southern coast of Miyagi Prefecture, and the northern coast of Fukushima Prefecture, whose house was detected as half destroyed.
2. The Japan Asian Association & Asian Friendship Society (JAFA) has been providing household goods for basic needs and food in Utatsu District, Minamisanriku Town, Miyagi Prefecture and helping them reconstruct their local shops.

3. ICAN has been supporting victims in each of the evacuation centers located in Ishinomaki City, Miyagi Prefecture. ICAN has been providing foods for the families and school supplies for children. Families are forced to live in evacuation centers due to earthquake and tsunami.
4. ADRA Japan has been providing supports (food and household items) at evacuation centers In Wakabayashi Ward, Sendai City, Higashi-Matsushima City, Yamamoto Town, Watari County in Miyagi Prefecture, Fukushima prefecture.
5. The Association of Medical Doctors of Asia (AMDA) has been providing medical relief since March 12th, 2011 in Minamisanriku Town, Kamaishi, Otsuchi Town (Iwate Prefecture).
6. The Action against Child Exploitation (ACE) has been supporting people living in the temporary housing In Yamamoto town of Watari district in Miyagi prefecture, Sendai city in Miyagi prefecture.
7. The Organization for Industrial Spiritual and Cultural Advancement-International (OISCA) has been providing emergency relief goods (blankets, protection against the cold, candles, underwear, papers, diapers, water, instant noodles, medicine, nutritional supplements) to victims In Northern part of Ibaraki Prefecture, Iwaki City in Fukushima Prefecture, and affected areas in Miyagi Prefecture.
8. Caring for Young Refugees (CYR) has been providing childcare services in plastic tents or in evacuation centers in 30 project areas In Miyagi and Fukushima prefectures.
9. Oxfam Japan has been providing support earthquake and tsunami survivors especially for small children and their mothers, single mothers, people who have immigrated to Japan, people who face the domestic violence and sexual violence in Morioka City (Iwate Prefecture), Sendai City, Tagajou City, Shiogama City (Miyagi Prefecture), Koriyama City, Aizu Wakamatsu City, Fukushima City (Fukushima Prefecture), Hitachi City (Ibaraki Prefecture) and other areas where victims are evacuated.
10. Good Neighbors JAPAN has been providing emergency support in Kamaishi City, Otsuchi Town, Yamada Town, Iwate Prefecture.
11. CARE International Japan has been providing warm and balanced meals right after the disaster as well as cooking ingredients for those who stayed in their own house in Miyako City

and distributed kitchen utensils, sanitary stuffs, towels, shampoo, mattresses, sheets and so forth in Yamada Town, Otsuchi Town, Miyakoshi, and Kamaishi City, Iwate Prefecture.

12. Foundation for International Development/Relief (FIDR) has been providing household items, food ingredients and basic commodities and other supports in Miyako City, Yamada Town, Okaji town and Tanohata village, Iwate prefecture.

13. International Volunteer Center of Yamagata (IVY) has been providing commodity support for those who are in the shelters in remote locations and small scale shelters. With 'Cash for work', our objective is to reach those who lost job in Ishinomaki City and Kesenuma City.

14. Kokkyo naki Kodomotachi, Children without Borders (KnK) has been providing psychosocial care and education support to juveniles in 5 municipalities in coastal part of Iwate Prefecture (Yamada Town, Otsuji Town, Kamaishi City, Ofunato City and Rikuzentakada City).

15. Service for the Health in Asian and African regions (Share) has been providing emergency medical assistance in Natori City right after the massive earthquake and working as a bridge between local government or local medical agencies and victim according to the needs.

16. JAPAN TEAM OF YOUNG HUMAN POWER (JHP) has established disaster volunteer center in collaboration with local social welfare associations in Minami Sanriku town, Miyagi Prefecture. JHP has continuously been helping registration and assigning volunteers as well as needs assessment of evacuation centers and regions.

17. JEN has been providing support for rubble removal, support for temporary housing, community space, recovery assistance for Small and Medium sized Enterprises/individual business owners, providing the reconstruction support as well as start-up business support for individual business owners who were affected by disasters, volunteer recruitment and management and organizing psychological care workshops.

18. ShaplaNeer (Citizens' Committee in Japan for Overseas Support) has been running disaster volunteer center, distributing emergency relief supplies, clearing collapsed houses, accepting volunteers to activities and coordinating between NPOs and the Social Welfare Council.

19. Shanti Volunteer Association (SVA) has been providing support for victims in temporary houses and organizing/facilitating in meetings of residents for recovery and reconstruction in

Kesennuma City, Miyagi Prefecture, Rikuzen Takata City, Ofunato City, Otsuji Town and Yamada Town, Iwate Prefecture.

20. Japanese Organization for International Cooperation in Family Planning (JOICFP) has been providing support to omen, pregnant women and new born children who were affected by this devastating disaster in Iwate Prefecture, Miyagi Prefecture, Fukushima Prefecture and Ibaraki Prefecture

21. Terra People Act Kanagawa (TPAK) has been providing psychosocial care and support to children in two nursery schools in Kamaishi city in Iwate prefecture.

22. Terra People Association has been providing psychosocial care and support to disaster affected victims, especially children and mobilizing volunteers to remove debris in Ishinomaki city and Kesennuma city in Miyagi prefecture.

23. Child Fund Japan has been delivering relief supplies to Minamisoma City, Fukushima Prefecture, Natori City, Sendai City, Ishimaki City, Miyagi Prefecture and Ofunato City, Iwate Prefecture and provided psycho-social care to children and families whose lost lives of their members.

24. Japan Association for Refugees (JAR) has been providing support to those who tend to be left behind in existing assistance system such as women, foreigners continuing to live in Japan, as well as individuals who have difficulties in living at evacuation centers in both Iwate and Miyagi Prefecture.

25. Association for Aid and Relief, Japan (AAR) has established our field offices in Sendai City and Morioka City and has been working together with government and related organizations and providing emergent and recovery supports responding to changing needs such as food, fuels, daily commodities, care beds, wheel chairs and office equipments for re-starting service at social welfare institutions.

26. Japan Overseas Christian Medical Cooperative Service (JOCS) has been providing mental care assistance by dispatching counselors and nurses to support people who settled at shelters temporarily and those who live in isolated villages in cooperation with Charitas Kamaishi.

27. Japan Volunteer Center (JVC) has been doing advocacy work, sharing information regarding effects of nuclear plants in Miyagi and Fukushima Prefecture and distributing radios in Minami Soma City.

28 Results Japan, based in Tono City, Iwate Prefecture, our activity cites range from 5 municipalities such as Kamaishi City, Yamada Town, Otsuchi Town, Ofunato City and Rikuzentakada City, Iwate Prefecture, has been providing assistance through soup kitchen and conducting hearing to catch the needs for life and employment at evacuation centers in cooperation with other organizations in the coast of Iwate Prefecture.

29. Habitat for Humanity Japan has been conducting need assessments, coordinating volunteers' activities, removing debris and distributing goods, tool kits and commodities necessary for rebuilding of houses and reconstruction of communities, in Ofunato and Rikuzentakata City, Iwate Prefecture, Ishinomaki City and Onagawa Town, Miyagi Prefecture

30. Campaign for the Children of Palestine has been providing support to children and their families (supplementing classes, provision of playing spaces, library corner, acceptance and provision of stationary, provision of picture books and school backpacks, activity for Children's Day) in Otsuchi Town, Iwate Prefecture

31. Peace Winds Japan (PWJ) has been providing basic commodities and psychosocial care to those who have moved to temporary housing.

32. Bridge Asia Japan (BAJ) has been providing a wide variety of nutritious side dishes cooked in the kitchen of a driving school in Rikuzentakada City and delivering them to temporary housing in cooperation with assistance team "Save Iwate" based in Morioka City, Iwate Prefecture.

33. Médecins du Monde Japon has dispatched psychiatrists, nurses, specialists in exercise therapy, clinical psychotherapists, psychiatric social workers, acupunctures, medical coordinators, general coordinators and managers to the devastated area in Otsuchi Town, Iwate Prefecture.

34. World Vision Japan has been providing basic commodities, mental care for children, school supplies, buses and lunch to support school life of children in the affected areas in Minami Sanriku Town, Tome City and Kesenuma City, Miyagi Prefecture.

CHAPTER 3

DISASTER MANAGEMENT SITUATION IN CAMBODIA

This chapter provides an overview of natural hazards, recent major disasters in Cambodia and disaster management system in Cambodia.

3. NATURAL HAZARDS IN CAMBODIA

3.1 Natural Hazards Likely to Affect the Country

Disasters are inseparable from economic, social and environmental features of Cambodia. The country experiences almost all types of hydro-meteorological hazards such as floods, drought, heavy storms (or typhoon), fire incidents and epidemics. Most geographical regions of the country (i.e. Riverine Central Plains, coastal ecosystems and Dangrek mountain range in the north and Cardamom mountains in the southwest) are exposed to one or more of these hazards. Additionally, climate change is expected to increase the frequency, intensity and severity of these extreme natural events. As the majority of Cambodians are farmers and their livelihoods mainly depend upon subsistence agriculture, the vulnerability of people living in rural areas is very high and may continue to rise, requiring improved preparedness and planning (NCDM, 2013a).

3.1.1 Floods

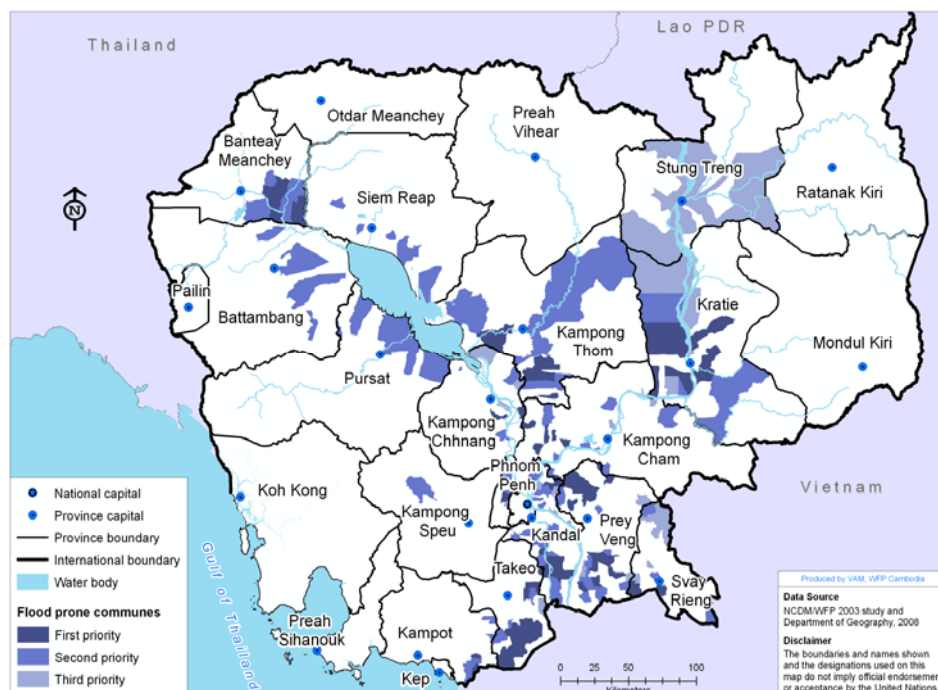
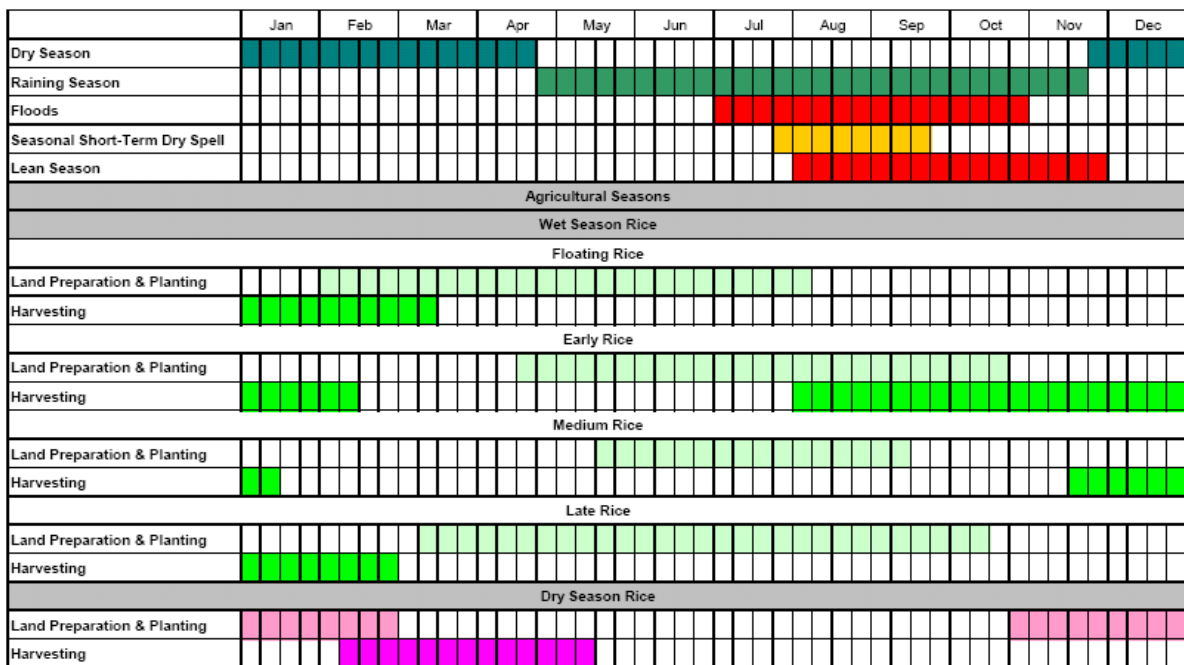


Figure 6: Flood Map

Cambodia is one of the five countries located along the Mekong River, and its landscape consists of rolling plains and lowland. During the monsoon season, Cambodia experiences flash floods usually after heavy rainfall. The provinces of Battambang, Kampong Chhnang, Kampong Speu, Kampong Thom, Kampot, Kandal, Pursat and Rattanakiri are regularly hit by flash flooding. The second type of flood, the much slower but prolonged flooding, is caused by the overflow of Tonle Sap river and Mekong tributaries, inundating the provinces of Kampong Cham, Kratie, Kandal, Prey Veng, Stung Treng, Svay Rieng and Takeo.

Figure 7: Cambodia Hazard Calendar



Source: MAFF, NCDM

Source: MAFF, NCDM in UNDMT (2011)

3.1.2 Droughts

Compared to floods, drought is arguably less understood and researched making it difficult to generate national and international response. The drought condition – primarily a result of erratic rainfall – is exacerbated by limited coverage of irrigation facilities (the current coverage is around 20%).

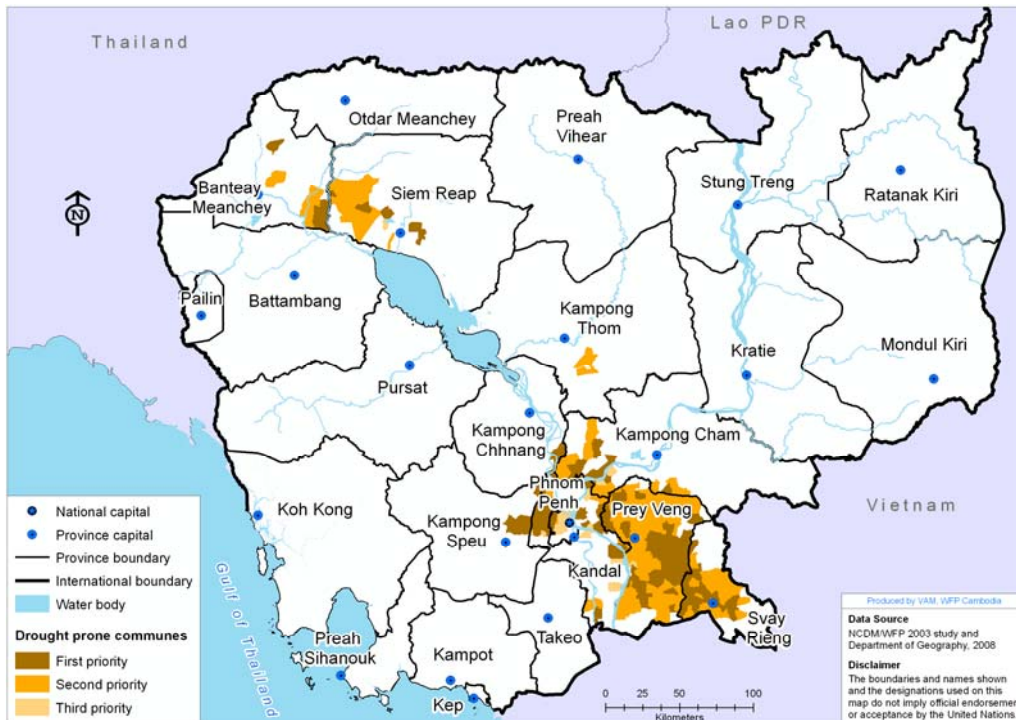


Figure 8: Drought Map

Drought in Cambodia is characterized by loss of water sources caused by the early end or delays in expected seasonal rainfall. Drought severely affects farming productivity especially among rice growing communities who rely solely on rain or river-fed irrigation. Low agricultural yield due to extended drought has increased indebtedness of families and contributed to widespread food shortages.

3.1.3 Typhoons

Tropical cyclones are the most costly meteorological disasters affecting East Asia and the Pacific with, on average, 27 tropical cyclones affecting some parts of the region each year (Chan 2008, quoted in WB 2013). Some typhoons and tropical depressions that reach Indochina do not weaken over the land and produce torrential rainfall and extensive flooding in Cambodia. Typhoon becomes most damaging when it hits during the flooding season (September-October) as it causes heavy precipitation events.

3.2 Recent Major Disasters

3.2.1 Flood in 2011 & 2013

In 2011, floods affected 350,000 households (over 1.5 million people) and 52,000 households were evacuated. 18 out of 24 provinces in Cambodia were affected; 4 provinces along Mekong River and Tonle Sap were worst hit. 250 people lives were dead and 23 people sustained injuries in the floods in 2011. 431,000 hectares of transplanted rice fields were affected and 267,000 hectares of rice fields were damaged. 925 kilometers of the national, provincial and urban roads were affected and 360 kilometers of the roads were damaged. The 2011 floods caused an estimated loss at 630 million USD.

Source: NCDM

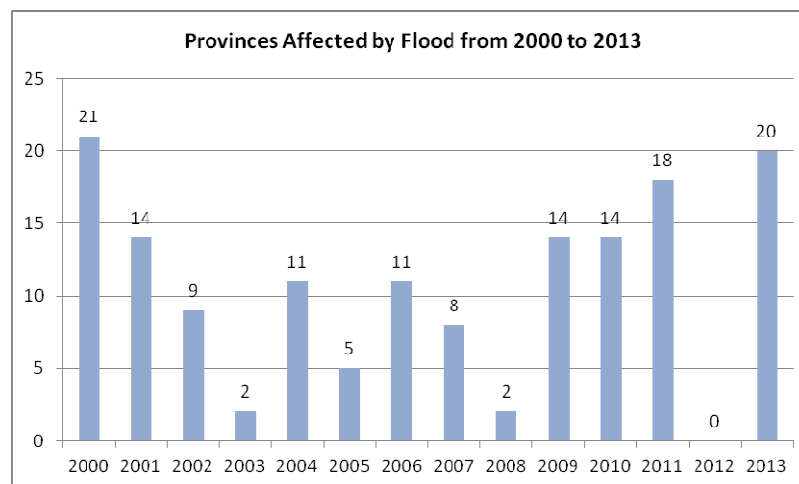


Figure 9: Province affected by flood from 2000 to 2013

In 2013, floods affected 20 out of 24 provinces, 377,354 households and claimed 168 lives and forced 31,314 households to evacuate themselves to safe areas. Compared to floods in 2011, floods in 2013 appear to have been less extensive in scale, although in some provinces the impact – including number of evacuated families, damaged crops, damaged infrastructure – was more significant due to a combination of factors such as: unexpected gravity of the floods, both in extent and intensity, longer time for waters to recede, repeated floods and flash floods, limited preparedness undertaken in advance and limited early warning.

3.2.2 Droughts from 2009-2012

In 2009, 13 provinces out of 24 provinces were affected by severe droughts. 57,965 hectares of rice crops were affected and 2,621 hectares were destroyed. In 2010, 12 provinces out of 24 provinces were affected by severe droughts. 14,103 hectares of transplanted rice were affected by droughts; 3,429 hectares of transplanted rice seedlings and 5,415 hectares of subsidiary crops were damaged. In 2011, drought affected 3804 hectares of rice fields and destroyed 53 hectares. In 2012, drought hit 11 out of 24 provinces, affected 14,190 hectare of rice fields and destroyed 3151 hectares.

Source: NCDM

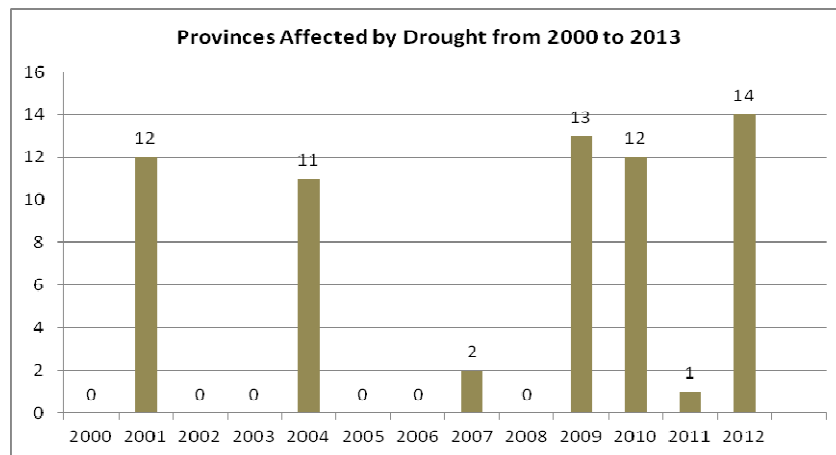


Figure 10: Province affected by drought from 2000 to 2003

3.2.3 Typhoon Ketsana in 2009

On 29 September 2009, Cambodia was hit by Typhoon Ketsana. 14 out of 25 provinces were hit by the typhoon, and it affected 180,000 households, killed 43 people and injured 67 people.

3.2.4 Lightning Strikes

Lightning strikes claim human lives and livestock and destroyed house and facilities mainly in the rural areas. In 2011, Lightning strike killed and injured 165 and 149 and 101 people and injured 72 people in 2012.

3.3 DISASTER MANAGEMENT SYSTEM

The Royal Government of Cambodia considers disaster management as a key component of its social and economic planning. Floods and droughts have caused serious damage and loss to Cambodia, and endanger the Royal Government's efforts to enhance the economy and well-being of Cambodian society. Cambodia's resources are very limited and these have to be shared across a wide range of development programs such as roads and bridges, and relief for affected communities. It is clear that natural calamities have worsened poverty in Cambodia and thus effective disaster management would be an important contribution to poverty reduction.

Following the adoption of Hyogo Framework of Action, Cambodia developed the National Action Plan and Strategy on Disaster Risk Reduction 2008-2013 to deepen its efforts to reduce disaster risks. The following diagram presents the country's disaster management policy development:

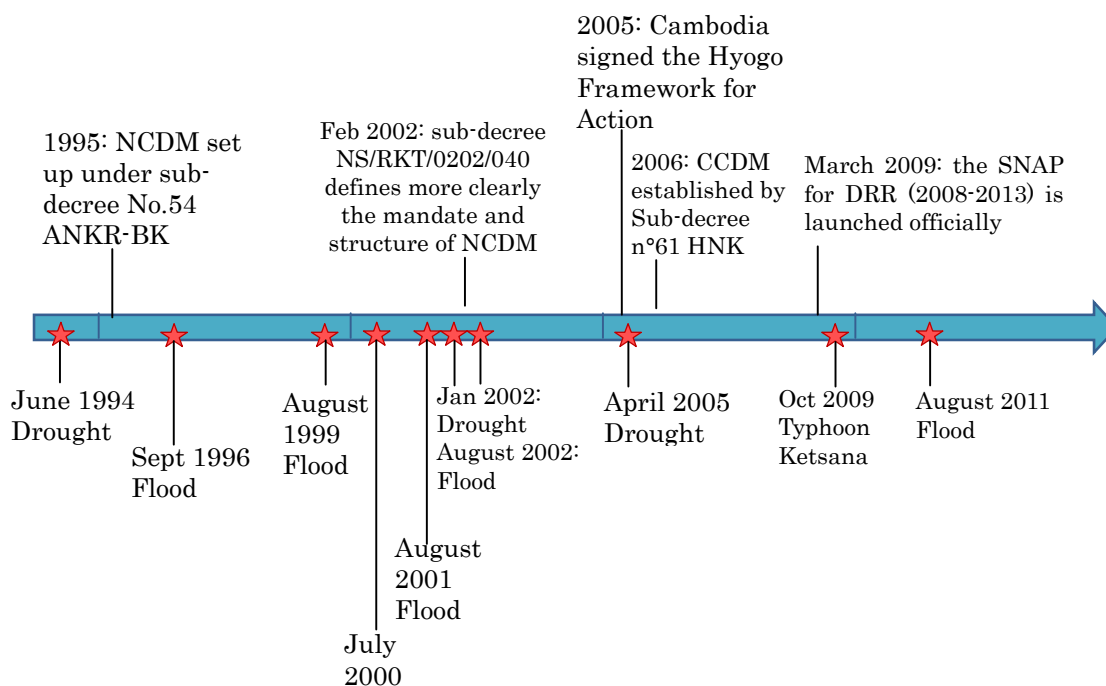


Figure 11: Evolution of Disaster Management in Cambodia

Source: NCDM, 2013

3.3.1 Disaster Management Plan, Policy and Strategy

Legal System and Framework

NCDM Mechanism structure has been established from the national level down to the commune and village levels in conformity with:

+ Royal Decree No. NS/RKT/0804/236 dated August 31, 2004 on Amendment of Article 1 and Article 2 of Royal Decree No. NS/RKT/0202/040 dated December 16, 2002 on the Establishment of National Committee for Disaster Management;

+ Sub-decree No. 30 ANKR.BK, dated April 09, 2002 on the Organization and Functioning of the National and Sub-National Committees for Disaster Management;

+ Sub-decree No. 61 ANKR.BK, dated June 29, 2006 on the establishment of the Commune Committee for Disaster Management (CCDM);

+ Circular No. 02 on Preparedness and Disaster Management, dated July 02, 2001;

+Circular No. 01 S.R on Disaster Preparedness and Response, dated June 07, 2002;

+ Direction No. 315 NCDM, dated July 21, 2010 on the establishment of the Village Disaster Management Team (VDMT) for the implementation of CBDRM.

+ Law on Disaster Management was drafted and will be submitted to the National Assembly for enactment by 2014.

+ National Strategy Development Plan (NSDP) 2009-2013; Strategic National Action Plan for Disaster Risk Reduction (SNAP) 2008-2013 & National Action Plan for Disaster Risk Reduction 2014-2018 (drafted & adopted by 2014)

National Strategic Development Plan (NSDP) Update 2009-2013 and the Strategic National Action Plan on Disaster Risk Reduction (SNAP) 2008-2013 work as the overarching frameworks, and provide strategic direction to disaster risk management for the country. The Royal Government of Cambodia (RGC) has invested considerably to reduce disaster risks through its regular development programmes at national and sub-national levels.

Following the establishment of National Committee on Disaster Management (NCDM) in 2005 and adoption of SNAP in 2008, the RGC has emphasised systematic and proactive efforts in DRR. The country has achieved remarkable knowledge and skills to live with disaster risk. Cambodia endorsed the Hyogo Framework for Action (HFA) in 2005 that provides a systematic and strategic approach to reduction of vulnerability and risk to disasters.

The current SNAP comes to an end in 2013. The independent assessment of SNAP has taken stock of key achievements, challenges and gaps of the strategic plan. Building on these and other evidence and learning, this National Action Plan on Disaster Risk Reduction (NAP-DRR) is developed for 2014-2018.

+ Community Based Disaster Risk Management (CBDRM) Strategy

CBDRM is a strategy that builds upon existing capacities and coping mechanisms of communities to collectively design and implement appropriate and doable long-term risk reduction and disaster preparedness plans. The strategy involves the participation of local actors, particularly vulnerable communities, who actively work to identify causes of vulnerability and actions to mitigate the impact of vulnerability from these natural disasters.

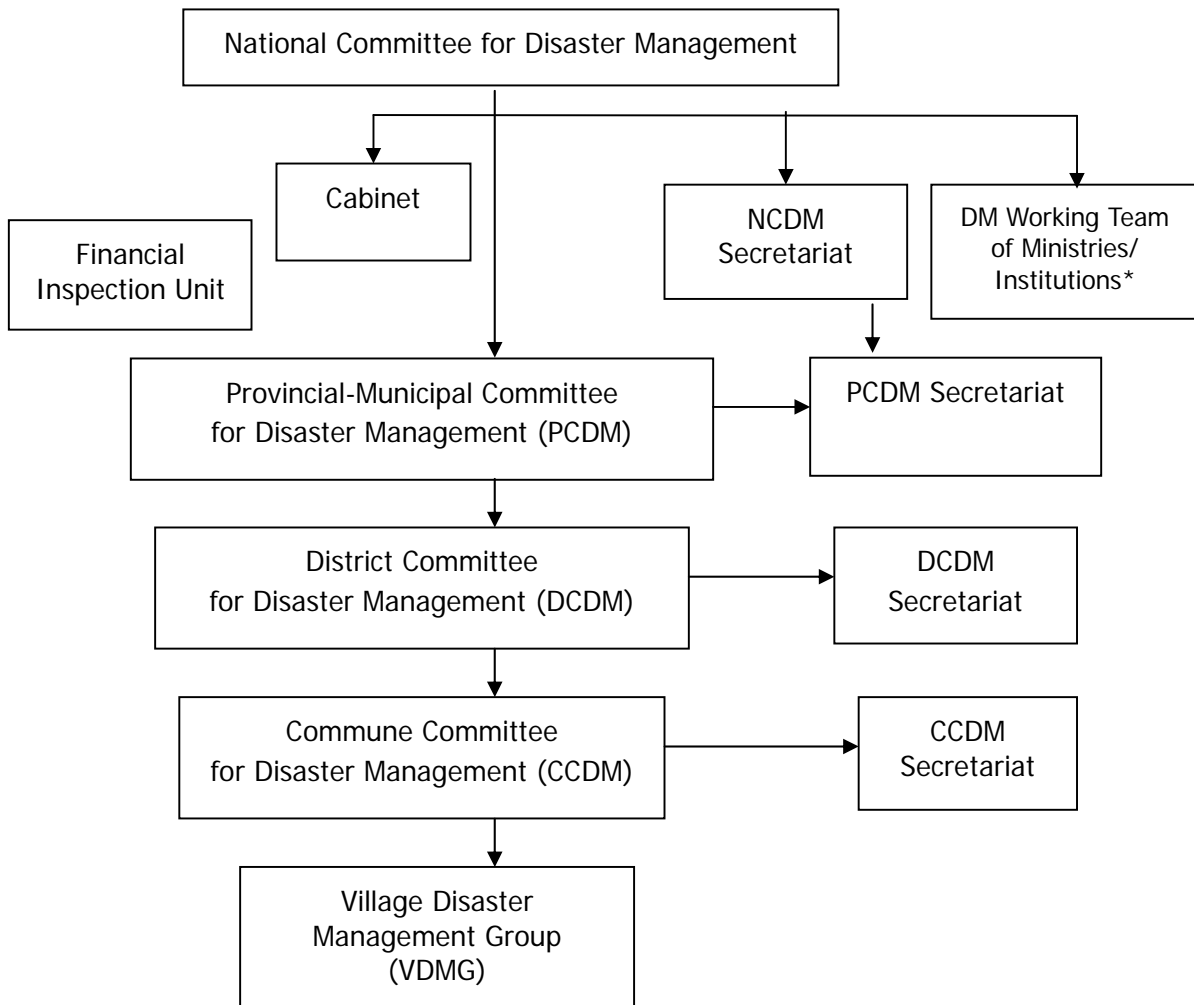
Additionally, the strategy empowers communities towards long-term capacity to adapt. With recurrent drought and flooding and threats from other natural disasters in Cambodia, CBDRM is seen as the way forward in minimizing enormous loss of life, property and livelihood. In Cambodia, the government considers CBDRM as an integral part of its rural development program to alleviate poverty

3.3.2 Structure of Disaster Management

National Committee for Disaster Management (NCDM) is established for overall coordination for disaster management. Cambodia has set up necessary legal, policy and institutional foundations for disaster management. Headed by the Prime Minister, NCDM was set up in 1995 that consists of 22 members from different Ministries, Cambodian Armed Forces, and Civil Aviation Authority as well as representatives of Cambodian Red Cross.

The NCDM Secretariat, which is the locus of disaster management for the country, was set up to lead and coordinate disaster management affairs and to provide support to NCDM. As part of the

decentralization process, disaster management institutions such as Provincial Committee for Disaster Management (PCDM), District Committee for Disaster Management (DCDM) and Commune Committee for Disaster Management (CCDM) have been set up to lead disaster management at their respective levels. Village Disaster Management Group (VDMG) is also in place as the lowest level body for disaster management.



* DM Working Team of Ministries/ Institutions

Each ministry/ institution has established the Disaster Working Group of the Ministry/Institution in order to boost the spirit of self-reliance in participating and solving disaster. It is responsible for coordinating all activities involving Disaster Preparedness, Response and Rehabilitation.

Figure 12: Disaster Management Structure of Cambodia

Source: NCDM, 2013

2.7 DM/DRR Collaboration/Assistance in Cambodia

NGOs play important roles in the implementation of the community based DRR activities. They work with the NCDM Secretariat to develop outreach strategies to cover the locations that are vulnerable to current and future disasters. They also play important roles with the NCDM Secretariat in the advocacy for resource mobilisation, facilitate knowledge management and take part in the monitoring and evaluation of the NAP-DRR (NCDM, 2013a).

The National Committee for Disaster Management (NCDM) has received assistance and been working in collaboration with the following development partners:

DRR Donors (UNISDR, et al., 2009):

- **DIPECHO:** Ongoing funded projects include Promoting and Strengthening Disaster Resilient in Cambodia. DIPECHO Partners include several NGOs including Action Aid, Lutheran World Federation (LWF-Cambodia), Cambodian Red Cross, Danish Red Cross, Netherlands Save the Earth, etc. DIPECHO South East Asia Action Plan (Subject to availability of funds) will support DIPECHO projects beginning April 2010 and will have duration of maximum 15 months.
- **AusAID:** Reducing the vulnerability of the poor to natural disasters is one of the three themes for Australia's engagement in development cooperation with Cambodia.
- **ADB - Community Based Disaster Risk Reduction Strategy for Flood and Drought (2007 – 2012)** Implemented with ADPC, in partnership with MoWRAM. Promoting community level action and developing CBDRM plans.
- **UNDP:** UNDP is engaged in supporting the NCDM and Mekong River Commission as well as in developing climate forecasts and applications, and flood mapping and early warning initiatives
- **World Bank:** The GFDRR/WB is preparing a Technical Assistance to ensure better coordination and implementation of SNAP-DRR , to integrate disaster risk reduction into national development planning, implement the national CBDRR strategy and develop guidelines for integration of DRR into local development plans, initiate the mainstreaming DRR into policies and programs of two ministries, support the development of provincial multi-hazard DRR plans

and implement partnerships in at least two new provinces, strengthening the Management of NCDM. Similarly past World Bank engagement under the completed Flood Emergency Rehabilitation Project (FERP) repaired and rehabilitated infrastructure damaged by floods in 2000, and provided TA to help build capacity to more effectively manage and mitigate future water disasters.

GTZ: Providing • major support to MRC; GTZ-MRC -ADPC Flood Emergency Management Strengthening (FEMS)

- WFP: Food aid through Food For Work program targeted towards poorest communities; damage and needs assessment (DANA) guidelines and tools for NC DM developed
- UNESCAP: Partnership for Disaster Reduction in Southeast Asia (PDR-SEA) (Phase I, II, III & IV)

UN Agencies

UNDMT	UN Disaster Management Team
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Program
FAO	Food and Agriculture Organization of the United Nations
WFP	World Food Programme
WHO	World Health Organization

REGIONAL

ADRC	Asian Disaster Reduction Center
ADPC	Asian Disaster Preparedness Centre
AHA	ASEAN Coordinating Centre for Humanitarian Assistance on disaster management, "the AHA Centre"

GLOBAL

UNDAF	United Nations Development Assistance Framework
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNISDR	United Nations International Strategy for Disaster Reduction

CHAPTER 4

RESEARCH METHODOLOGY

This chapter presents the research design, data collection techniques and data analysis techniques. The following research methodology was chosen to best answer the aim and objectives of the study seeking to investigate collaboration between the government and NGOs in DRR/DM.

4.1 Research Design

Secondary data from the reports and relevant documents of NGOs and government agencies and relevant online resources were selected. The selected data are related to initiatives of NGOs and DM government agencies on DM/DRR activities, formation of collaboration, strategies employed in DM/DRR, existing collaboration, past achievement/participation in DM/DRR and challenges and suggestions for more enhanced collaboration.

4.2 Secondary Data/Documentation

The approach to collecting and analysing secondary data is to conduct an analysis of all available information, in an attempt to identify DRR in collaboration between NCDM and the nature of their collaboration and to suggest possible pathways for enhancing collaborations and alliances between the two parties in their DRR endeavors.

Analysis of these documents involved the assessment of the following issues: initiatives, collaborations, strategies, current activities, constraints and suggestions for enhancing the collaboration.

4.3 Data Analysis Methods

According to Yin (1989), data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence, to address the initial proposition of a study. Yin (1989:99) noted “analyzing case study evidence is especially difficult because the strategies and techniques have not been well defined in the past”. Therefore, analyzing case study depends

much on an investigator's own style of rigorous thinking, along with the sufficient presentation of evidence and careful consideration of alternative interpretations (Yin, 1989).

The selected secondary data from the reports and relevant documents of the NGOs and the DM Government Agencies were categorized and analyzed according to the following issues:

- DRR initiatives;
- collaboration, strategies, current activities; and
- constraints and suggestions for enhancing DRR.

CHAPTER 5

FINDINGS & DISCUSSION

This chapter presents findings and discussion of the relevant secondary data. Secondary data were reviewed to identify strategies of NGOs and the government in DRR, nature and extent of their collaboration, and to answer questions related to initiatives on DRR collaboration and partnership, how collaborations were formed, their past achievements in DRR, and challenges and possible solutions to enhance the collaboration.

The information gained through the secondary data are presented and discussed respectively as initiatives and collaboration; good practices and lessons learned; and challenges and possible suggestions to enhance the collaboration in DRR, as follows.

5.1 Initiatives and Collaboration

Collaboration between NCDM and NGOs in DRR is reflected in suggestions of Brinkerhoof (1999) in making collaboration effective. He suggests collaborative stakeholders need to deal with a number of basic factors: specification of objectives and degree of convergence, mechanisms for combining effort and managing cooperation, determination of appropriate roles and responsibilities, and capacity to fulfill those roles and responsibilities.

This sub-chapter presents initiatives and collaboration between NCDM and NGOs which include DRR activities of NGOs in Cambodia, DRR NGOs' Networks and DRR Forum.

5.1.1 DRR Activities of Non-Government Organizations in Cambodia

In Cambodia, there are a good number of NGOs working on various aspects of development encompassing livelihoods, education, agriculture, rural development, DRR, climate change adaptation, health care, women and gender and good governance. ADPC et al. (2008) summarizes DRR Activities implemented by NGOs in Cambodia as follows:

- + Capacity building for NCDM sub-national levels and local structures and local partners to mitigate the risks and address the disasters affecting vulnerable, rural communities, through orientation workshops and relevant trainings on DM/DRR

- + Mobilization and training of volunteers, first aid trainings, psychosocial trauma counseling with special focus on women;
- + Support the decentralized structures of NCDM to integrate disaster risk reduction into the national development agenda, and to realize the Hyogo Framework of Action goals; CDP/CBDRM planning, facilitation in integration of DRR into sub-national and commune development plan, supporting provincial DRR action plans;
- + Mainstreaming DDR in school curriculum & Disaster risk reduction through school activities
- + Building community resilience to disasters: Hazard mapping, Flood EWS, Community assessments, participatory vulnerability assessments;
- + Emergency responses, small-scale mitigation infrastructures, livelihood assistance; and
- + IEC material production and distribution.

Please see Annex 1: the list of NGOs implementing DRR and their project activities.

5.1.2 DRR NGOs' Networks

5.1.2.1 UNDMT

The United Nations Disaster Management Team (UNDMT) is composed of representatives from the UN Food and Agriculture Organization (FAO), United Nations Development program (UNDP), United Nations Children's Fund (UNICEF), UNFPA, World Food Program (WFP) and World Health Organization (WHO) in the country. The WFP coordinates this group, which is responsible to the UN Country Team. As part of its preparedness activities, the UNDMT meets regularly to compile key information about disaster risks and preparedness arrangements in country; coordinate the assistance of the various UN organizations/agencies in relation to national disaster preparedness arrangements; draw up and regularly review an action/preparedness plan for the UN system at country level so that humanitarian assistance is timely, coherent and effective; review the implications of known and potential hazards for the development process in the country. The UNDMT reports to the UN Country Team. The UNDMT works closely with the National Committee for Disaster Management (NCDM) in disaster coordination, preparedness and response. UNDMT members actively participate in country-level partnerships, such as Disaster Risk Reduction Forum, which aim to bring together government, donors, international organizations and NGOs to share information and harmonize interventions on disaster management and response (UNDMT, 2011).

5.1.2.2 HANet

The Humanitarian Accountability Network (HANet) primarily promotes accountability in the humanitarian sector. This group is currently chaired by CARE and it counts World Vision, Oxfam GB, IFRC, CRC, CONCERN and other local NGOs among its members. This is a Forum for facilitating and promoting accountability among practitioners, advocating for standards and good practices.

5.1.2.3 JAG

According to Kaneka, K, (2011), another network is Joint Action Group (JAG): A strategic group to discuss about the DRR issue, coordinating and sharing information concerning DRR activities between ActionAid, Oxfam, Concern, DRC/CRC, DCA/CA and ADPC, Plan International and SCA. JAG members meet regularly to share information out of session and collaborate to implement the JAG Activity Plan. The JAG meetings are currently chaired and hosted by JAG member organizations on a revolving basis. JAG's main function is to work with NCDM to support DRR Forum, to develop TOT training strategy & plan for NCDM to deliver training, to coordinate and do advocacy at national sub-national level, conduct joint awareness raising activities and joint research, support regular consultation of Commune Council leaders at national level and share first hand experiences and knowledge through exchange visits

5.1.3 DRR Forum

DRR Forum is quarterly organized with participation of representatives from NCDM, NGOs/INGOs and UN agencies, and participation in the DRR forum can extend to all individuals, organisations, and government agencies concerned with disaster management in Cambodia.

To maximize human and financial resources, there should a regular forum where NGOs can discuss and share their interventions, as well as their coverage areas. This is to minimize duplication of efforts among project partners and participating local communities. Sharing of key technical and social expertise on health, sanitation, and management is also a positive way to harmonize to the extent possible efforts and resources (ADPC et al., 2008).

NGOs receiving funding from DIPECHO established the 1st Community Based Disaster Risk Reduction (CBDRR) forum on 01st August, 2005. The CBDRR forum members were only among the DIPECHO partners at the outset. Later on the forum invited the National Committee for Disaster Management (NCDM) to participate the forum. At that stage, the objectives were to promote exchange of DRR experiences; increase coordination of DRR agency activities; and raise awareness of DRR issues in the wider development community & RGC institutions - including advocate for mainstreaming of DRR in local development planning processes.

Following the changing scenarios of disaster in Cambodia and participation more stakeholders in disaster management program, CBDRR forum needed to be extended. In 2006, CBDRR forum was renamed as Disaster Risk Reduction (DRR) forum and all stakeholders working in the field of disaster management have been invited to participate in the forum. DRR forum is chaired by NCDM with financial support of partner NGOs.

DRR Forum aims to enhance disaster management in Cambodia through improved information sharing; coordination of initiatives and joint action to promote the highest possible standards and disaster risk reduction practices.

The current objectives are to enhance coordination and learning among all agencies working in DRR and emergency responses through information sharing, experience exchange and joint initiatives; to build the capacity of relevant agencies and practitioners in disaster management; and to initiate and contribute toward policy dialogues for improving disaster-related policies and practices of policy makers and implementers.

5.2 Good Practices and Lessons learned

There are some good practices and lessons learned from collaborative work between NCDM and NGOs, which includes ongoing consultation and information sharing, DRR training workshops, mainstreaming DRR into school curriculum, integration of DRR into sub-national development plans, assistance in developing provincial disaster preparedness contingency plans and Disaster Information Management System (MDIS), DRR forum, creating NGOs' networks and NGOs' consortium, collaboration in developing IEC materials and joint celebration of the ASEAN Day for Disaster Management and the International Day for Disaster Reduction.

5.2.1 Ongoing Consultation and Information Sharing

Donors' representatives and/or heads of NGOs implementing DRR programs in Cambodia have met NCDM leaders to inform NCDM about their progress of the current project activities and their future project activities and target areas, share with them about good achievements and things to be improved for their upcoming projects, and explore windows of opportunities in areas they may assist NCDM. They sought NCDM's suggestions to improve effectiveness and efficiency of their project activities. In return, NCDM have updated about its activities and share with them about areas NCDM needs their assistance.

5.2.2 DRR Training Workshops

Most DRR training workshops for building capacity of sub-national levels and local structure of NCDM have been organized in collaboration between NCDM and NGOs. NCDM has played roles in communicating and facilitating with its sub-national levels in selecting their officials to attend the trainings and assigning senior officials to be speakers/trainers/facilitators during the trainings, while NGOs have been responsible for logistics and financial assistance for the trainings. NCDM and NGOs have collaborated to design and develop training modules. NGOs have translated relevant documents and training modules in Khmer language, and NCDM officials have proofread, checked and revised DRR/DM terminologies.

5.2.3 Mainstreaming DRR into School Curriculum

Key stakeholders have been working closely in implementing this project. These stakeholders include Ministry of Education, Youth and Sports (MoEYS), NCDM, United Nations Development Program (UNDP) Cambodia, Pedagogical Research Institute and Cambodia Education Sector Support Project (CESSP). Project Working Group meeting was chaired by a MoEYS Under-secretary of State, and technical working group meeting was held regularly with officials from pedagogical research department to review the existing secondary curriculum and to revise the draft DRR module. Representatives of NCDM, MoEYS and NGOs have collaborated in developing training modules and school materials for mainstreaming DRR into school curriculum, training school teachers of target schools and conducting monitoring and evaluation of the project activities.

5.2.4 Integration of DRR into Sub-National Development Plans

A number of NGOs have worked with NCDM in their target provinces to build capacity of sub-national levels and local structure of NCDM in integrating DRR into development plan and facilitate in local planning processes to ensure that CBDRM was integrated into the local development plans. ADPC has developed Guideline for Integration of DRR into Development Planning Process at Sub-National Level in CAMBODIA. NCDM officials at the national and sub-national levels and staff members of NGOs have provided guidelines and facilitating in integrating DRR into development plans and investment plans at commune levels.

5.2.5 Assistance in Developing Provincial Disaster Contingency Plan.

UNDP Flood Early Recovery Project assisted NCDM and PCDMs to prepare the national and provincial contingency plans in 5 target provinces. The plans included the main 3 components in DRR content such as disaster preparedness, emergency response, and recovery phase to ensure the NCDM and PCDM can use their National and Provincial Contingency Plans to cope with future disaster events. As a result, NCDM and PCDM have been putting these 3 components in their National and Provincial Contingency Plans and also replicating it into other provinces. In addition, NCDM and PCDM considered its national and sub-national contingency plans as an important tool for response to future disaster events effectively (UNDP, 2013).

5.2.6 Assistance in Developing Disaster Management Information System (DMIS)

In order to improve coordination in humanitarian assistance, UNDP had assisted NCDM to establish Disaster Management Information System (DMIS). The DMIS was officially launched in August 2013. The DMIS has now existed in Provincial Committee for Disaster Management (PCDM) in the 5 selected provinces such as Prey Veng, Kratie, Kampong Thom, Siem Reap and Kampong Chhnang in Cambodia. With the support from UNDP, NCDM and PCDM have been able to establish a disaster loss database and develop the capacity of relevant institutions and organizations on managing disaster data. The DMIS provides useful information and analysis to support policy and decision-making for preparedness, mitigation, response, and risk reduction.

5.2.7 DRR Forum

Disaster Risk Reduction Forum has improved the coordination and collaboration among DRR stakeholders and with NCDM. NGO partners, on revolving basis and/or as a consortium, co-organize DRR Forum with NCDM and provide financial and technical assistance for organizing DRR Forum. DRR Forum has raised different themes for discussion based on urgency and time relevance of themes such as Wet Seasonal Preparedness for Emergency Response; experiences on communities and families disaster preparedness cooperation on DRR and climate change resilience; and mainstreaming of DRR/CCA into national programs.

Notably, DRR Forum has engaged with key government agencies and NGOs working in CCA to make linkage between DRR and CCA and identify good practices and challenges on mainstreaming of DRR/CCA into development plans.

5.2.8 NGOs' Consortium

Plan International Cambodia (Plan) and World Vision Cambodia (WVC) have established a consortium funded under DIPECHO VIII to support national and sub-national Disaster Management Committees to improve their ability to manage the risks associated with disasters. The consortium has hired a project consultant who has an office within the NCDM building. Hence, it is convenient and cost-effective to work in collaboration with government agencies, namely NCDM, through creation of a consortium of a few NGOs with similar activities and objectives and having a focal point of the consortium based in the NCDM facilities.

5.2.9 DRR Networks

Apart from DRR Forum with participation of many stakeholders, the existence of the United Nations Disaster Management Team (UNDMT), the Humanitarian Accountability Network (HANet), Joint Action Group (JAG) and NGOs' Consortium, is crucial in coordinating their activities, jointly liaising with NCDM as a group, building synergy among themselves, and sharing and exchanging information and lessons learned/good practice and advocacy, with relation to DRR.

5.2.10 Collaboration in Developing IEC materials

To date, through collaboration between NCDM and NGOs, a good number of IEC materials have been produced. The IEC materials include prevention manuals such as Risk Land Game (Disaster Awareness for school kids), Flood Preparedness, Drought Preparedness Posters and Drought Mitigation Radio Drama and Psychosocial Care in Disaster Management, Facilitation Manuals for Trainers of Trainees in Natural Disasters & Tsunami Disaster, Psychological Care for Women have been developed and produced and distributed to target communities. NCDM has assigned a focal person to work with NGOs during IEC development process. NGOs fund IEC production while NCDM gives relevant inputs and suggestions on content and terminology and revise IEC drafts.

5.2.11 ASEAN Day for Disaster Management and the International Day for Disaster Reduction

NCDM and NGOs have organised joint collaborative activities to commemorate the ASEAN Day for Disaster Management and the International Day for Disaster Reduction, such as exhibition/display of IEC materials/banners, parade campaigns, school contests/activities (quiz and drawing contest) to raise awareness of disaster preparedness.

5.3 Challenges

There are several challenges in collaboration processes. Specification of objectives and degree of convergence which is the starting point for any partnership is often problematic especially in developing countries for a variety of reasons: the multiplicity of actors and their broad range of interests making it difficult to reach agreement on policy and program objectives, the power differential among the various actors which arises as a function of differences in resource level; operational capacity and political clout; and the tendency for partners' objectives to shift and potentially diverge over time as policy implementation is an extended process, and the interests and purposes of the actors involved can change (Brinkerhoof,1999).

Casals, J. (2013) raised issues and challenges on NCDM/NGO collaboration such as NCDM organizational capacities encompassing significant resource constraints, unsustainable project implementation, uncoordinated donor support, lack of human resource development initiatives and inadequate information management system.

This sub-chapter presents and discusses challenges of working in collaboration between NCDM and NGOs, including resource constraints, coordination issues and information management systems.

5.3.1 Resource Constraints

The current lack of more formal and legal basis for various ministries to undertake disaster risk management initiatives together with the absence of regular operational budgets for national and local disaster management bodies (i.e., NCDM, PCDMs, DCDMs and CCDMs) are the most serious constraints in the pursuit of disaster risk reduction in the country (NCDM et al, 2008).

The capacities of NCDM, PCDM and DCDM, local district authorities in terms of knowledge and skills on disaster management are still limited. In addition, they also have limited coordination and national budget to support their own structure and existing human resources. This is due to the fact that the Disaster Management Law has not been enacted that would enable NCDM to have its own national budget to implement the disaster management programmes (UNDP, 2013).

Allocation of government's own resources is limited. There are also challenges with staff capacity at NCDM Secretariat and key Ministries. At sub-national levels DRR is still an add-on responsibility of the provincial and district officials. PCDM and DCDM are now managed by staff for whom DRM is an additional responsibility (NCDM, 2013a).

To make good coordination and effective collaboration, it is necessary for both parties to have similar resources and understanding of and capacity to respond to the issue. As far as collaboration between NCDM and NGOs is concerned, NGOs have financial and human resources while institutional capacity of NCDM at national and sub-national levels is insufficient, and NCDM does not have dedicated budget to provide trainings to officials at the sub-national levels. DM is still an add-on responsibility of sub-national level officials. Like NCDM at the national level chaired by the Prime Minister and its members including all the cabinet ministers, at the provincial level, at the provincial level, provincial governors are the presidents of the Provincial Committee for Disaster Management (PCDM) and all heads of provincial departments

are members of PCDM. In practice, one of the provincial deputy chief of the cabinet is in charge of all daily functions of PCDM as his additional function. This practice is also the same at the district and commune levels which DM is an additional task to them.

As stated in the previous chapters, NGOs in Cambodia receive direct funding from donors: DIPECHO, World Bank, and ADB, to name a few. They can afford to employ experts and skilled and competent staffs and allocate funds for their project activities. Thus, they have both financial and technical resources to implement their project activities while NCDM has minimal financial and human resources. According to NCDM (2013b), there seems to be no structures for CBDRM where there are no NGOs.

Casals, J. (2013) states that under its mandate, the NCDM is responsible for developing disaster management capacities at three levels, namely: for its member ministries, for its own staff, and for the sub-national DM committees (PCDMs, DCDMs and CCDMs). He notes that citing the lack of financial and material resources, the Department of Preparedness & Training has been unable to perform this task. NCDM sponsored capacity building and training for the different ministries is non-existent. It does not have sufficient experience and capacities to provide sector-specific disaster management training to the different ministries. Capacity development of the NCDM for its own staff is limited, sporadic and predominantly one-time short courses. There are significant capacity development initiatives at commune levels mostly from DIPECHO partners but NCDM participation remains largely activity-based and is reluctant to take the lead. For sub-national DM committees, especially at provincial and commune levels, CBDRM projects of NGOs represent the only source of training and capacity building.

Chris Eijkemans, Oxfam country director, points out that the NCDM, which officially has no budget, was improving but still lacked elements vital to the timely delivery of aid. Chris Eijkemans states that “Oxfam believes that the [NCDM] needs to be fully empowered and [given] sufficient resources to coordinate relief efforts and ensure the relief assistance is provided in a timely and appropriate manner” (The Cambodia Daily, 2003).

5.3.2 Coordination Issues

According to NCDM et al. (2008), the coordination of a wide range of disaster risk reduction initiatives involving collaboration and partnerships between an equally wide range of national

and local government institutions, non-government organizations and potential technical and financial support institutions requires a strong coordinating mechanism. This coordinating mechanism should build on existing structures within the NCDM especially since it is the sole government agency with the existing legal mandate to coordinate disaster management efforts in the country.

Casals, J. (2013) observes that the number of donors and stakeholders providing access for DRR and DRM initiatives is increasing as there is a current trend among development aid agencies including the major development banks (e.g., DFID, WB, ADB, etc...) to allocate a portion of disaster assistance provided, for DRR purposes (i.e., preparedness and mitigation activities to reduce impact of future disasters).

However, NCDM (2013b) suggests those NGOs who are present in the same provinces need to coordinate their programs on the ground so that non-project areas are covered and duplication of project partners and target areas are avoided and see each other as a resource, making use of each other's specializations, i.e. water and sanitation, health, etc. At the sub-national level, current capacity building support remains limited to only high risk zones (covering only 50% of the provinces) (NCDM, 2013 a).

The project-based approach in use also results in very strong tendencies for the projects and activities of different stakeholders and donors to be implemented independent of each other despite obvious complementarities and opportunities for synergy (Casals, J. 2013).

Damien Riquet, a Bangkok-based disaster risk reduction expert working in Cambodia with international development organization PLAN, agrees that the government institutions dealing DRR/DM have limited capacity and coordinating DRR activities, especially regarding monitoring and reporting skills (the Cambodia Daily, 2013). He was quoted as saying in the Cambodia Daily (2013) that "monitoring and reporting has become the number one priority for disaster risk reduction in Cambodia, but it is difficult when there is a lack of organization and leadership". He added that "the relevant ministries and authorities are getting involved more and more with disaster risk reduction, they are making great progress, but without coordination between them, they don't get the most efficient result."

Coordination between NCDM and NGOs has been made through various mechanisms including DRR Forum, UNDMT, HANet and JAG. However, Kaneka, K (2011) raises challenges in coordination among NGOs and different DRR networks. She stresses that many networks have been developed, but they do not understand each other well, and implementation of agreed activity still not deliver on the deadline. DRR Forum still depends on external resources.

5.4 Possible suggestions to enhance the collaboration

Despite the facts that many constraints exist in the collaboration, it is necessary for NCDM to give top priority in enhancing coordination and liaison with NGOs/Donors. An office in charge of liaison with NGOs/donors and DRR Forum needs to be created at NCDM to ensure effective coordination with NGOs/donors and to make it convenient for them to find a right office/right officials to work with, rather than requesting for an appointment to meet top officials who are occupied with many tasks. Due to its current lack of capacity and resources, the DRR networks and the consortium should provide technical and financial support to NCDM in creating such an office and make it fully functional and operational. A similar office should be created in PCDM, enable effective coordination mechanism at the sub national levels. PCDM should have its own office/facilities and dedicated officials to deal with its daily functions, instead of treating it as secondary and additional responsibilities of senior officials at the provincial level.

Considering there have been sufficient mechanisms among DRR stakeholders, including DRR networks, consortiums and DRR Forum, it is necessary to strengthen these existing networks needs rather than creating new networks/mechanisms, making more difficult for coordination. Due to the crucial role of DRR Forum in bring all DRR stakeholders together, donors, UNDTM, HANet, JAG and world Vision and Plan Consortium should collaboratively assist NCDM in strengthening the existing DRR Forum at the national and sub-national levels.

UNDP, donors and NGOs should continue providing support for creating Disaster Management Information Systems at all the provinces in Cambodia and train key PCDM officials to use and maintain DMIS. DMIS is a crucial tool enhancing coordination and collaboration among all DRR/DM stakeholders.

The Royal Government of Cambodia should expedite enactment of the DM Law to enable NCDM and its sub-national levels to have budget and dedicated staff to implement DM programs in Cambodia.

List of Figures:

Figure 1: Overview of the Research Structure

Figure 2: Outline of the disaster management system in Japan

Figure 3: CDMC Composition

Figure 4: Structure of Basic Disaster Management Plan

Figure 5: Organization of National Government and Cabinet Office (Disaster Management)

Figure 6: Flood Map

Figure 7: Cambodia Hazard Calendar

Figure 8: Drought Map

Figure 9: Province affected by flood from 2000 to 2003

Figure 10: Province affected by drought from 2000 to 2003

Figure 11: Evolvement of Disaster Management in Cambodia

Figure 12: Disaster Management Structure of Cambodia

ANNEXURE:

ANNEX 1

A. Disaster-Safe Welfare Community (“BOKOMI”)

As one of the lessons learned from the Great Hanshin-Awaji Earthquake, Kobe City established voluntary organizations for disaster prevention in communities called “Bokomi” or Disaster-Safe Welfare Communities. In Kobe City, educational programs on disaster management is resident-oriented and involves the entire community in preparing for and working toward disaster prevention. The Kobe City Community-Based Disaster Risk Reduction and Management Program is dubbed as “Bokomi” or Disaster-Safe Welfare Community.

BOKOMI is Kobe City’s Community-Based Disaster Prevention Organization. Accordingly, BOKOMI is established in every municipal elementary school district by the residents. The reason why BOKOMI is based on all elementary school districts is that there is an existing “Welfare Community” organization established for welfare purposes in each elementary school district and a disaster-prevention (bosai) organization integrated into the existing organization. Also, elementary schools serve as evacuation sites for communities in emergencies (such as disasters and crimes) in Japan. This is another reason why BOKOMI is established in each elementary school district so that each BOKOMI can operate their evacuation site in case of an emergency.

The process of establishing BOKOMI in local areas requires certain criteria such as first, the establishment of a community-based disaster prevention organization is discussed and decided on by local government organizations including the local city office (ward office) and the local fire station, together with leaders of local residents’ associations, women’s associations, elderly associations, volunteer fire corps, Parents-Teachers Associations (PTAs), etc.

During normal times, each BOKOMI conducts various emergency drill programs including how to use the provided equipment and materials, as part of the activities in preparation for major disasters.

In order to enable the utilization of people’s networks in case of emergency, BOKOMI also conduct welfare activities (such as keeping in touch with and holding lunch gatherings for the elderly who live alone) as an effort to cover both community welfare activities and community

disaster prevention activities. This is a characteristic feature of the community-based disaster prevention organizations in Kobe City which were established based on the lessons learned from the Great Hanshin-Awaji Earthquake (NOGRA, M.A., 2012)..

B. Kaeru Caravan: DRR Learning for Children

Kaeru Caravan is a brand new disaster prevention art program launched as part of the ten-year commemorative project for the Great Hanshin-Awaji Earthquake. This program consists of a workshop which allows participants to learn how to extinguish a fire and rescue and aid people while enjoying game-like activities and "Kaekko Bazaar", a toy exchange program designed by artist Hiroshi Fuji. As a result of this program, young families who rarely participated in disaster drills before began to actively participate in the program.

Iza! Kaeru Caravan! is a new type of disaster drill program co-developed by plus (+) arts and the artist Hiroshi Fuji. Based on the toy barter trading program "Exchange Bazaar", invented by Fuji in 2000, that can attract a broader range of audiences and creates an enjoyable atmosphere, the program turns bazaar's "hands-on corner" into amusing disaster drills such as "fire-fighting", "rescue" and "first-aid". The participants are able to learn about disaster prevention and acquire related skills while enjoying themselves. This new attempt has attracted young families who were not necessarily proactive about disaster drill before and had total of 7,000 family members participated in the 10th anniversary events for the Great- Hanshin-Awaji Earthquake, over 19 days at seven different venues, in Kobe in 2005.

In 2006, in order to expand the program throughout Japan, the program changed its name from "Kobe Kaeru Caravan 2005" to "Iza! Kaeru Caravan!", and held events in Yokohama, Niigata, Osaka and Miyazaki. The program has continued to organize events in different cities in Japan including Tokyo since 2007 while it starts to launch in the cities of other Asian countries. With the help of +arts, most of the cities that held the program for the first time conducted the second and following events voluntarily (NOGRA, M.A., 2012).

Annex 2:

The list of NGOs implementing DRR below is compiled in Monitoring and Reporting Progress on Community-Based Disaster Management in Cambodia (ADPC et al. 2008). It is presented alphabetically and not an exhaustive list of NGOs involving with DRR in Cambodia.

5.1.1.1 ActionAid

Established in 1999 in Cambodia, ActionAid is an international organization working to fight poverty and promote human rights (women's rights, education, food security, human security during conflicts and emergencies, just and democratic governance and the right to life and dignity in the face of HIV/AIDS).

ActionAid established CBDRR in Cambodia in 2007. Its program called "Strengthening community resilience to flood and drought in Cambodia" seeks to build the capacity of community members and local authorities to understand and prepare for flood and drought. The project works with partner NGOs to reach its target of 48 villages in Kratie, Svay Rieng and Banteay Meanchey provinces over a period of 15 months.

Project activities include the capacity building and training of CCDMs, youth volunteers and school teachers. Awareness-training activities are conducted in 16 primary schools. Technical training on disaster preparedness, mitigation and management, community development processes and project orientation seminars are also conducted with local authorities and local leaders.

ActionAid's program includes an information and awareness raising component that reaches out to the larger village population and is integrated into the school curriculum. Local groups and local authorities are trained to conduct vulnerability and hazard assessments, and develop village development plans. To support this, there is a conscious effort to strengthen the relationship and coordination with the local and national level structures on CBDRM.

5. 1.1.2. Cambodian Red Cross (CRC)

The Disaster Management Department of the Cambodian Red Cross (CRC) was established in 1994. With lessons from the flooding of 1996, the CRC piloted its Community-based Disaster Preparedness Program (CBDP) in late 1998. It began with addressing flood hazards and was developed further to include drought impacts.

The goal of the CBDP program is 'to reduce the impact of disasters on the most vulnerable people affected by disasters in Cambodia'. The objectives are; 'to develop the capacity of the CRC to effectively prepare for, and to respond to, natural disasters affecting Cambodia', and 'to successfully implement natural disaster prevention and mitigation strategies at the community level, through its network of Red Cross Volunteers (RCV)'.

5.1.1.3. CARE

CARE is an international organization working with the most vulnerable individuals and households to identify resources, share experiences, and address poverty through sustainable solutions. The main activities of CARE in Cambodia are in education, health, rural development and emergency response.

CARE's DRR work is built into its Integrated Rural Development Program implemented in Prey Veng and Svay Rieng provinces. The DRR components of the IRDM program have taken off from lessons learned from the Disaster Preparedness Planning program, which was started in 2004. The initial project worked on capacity building of local authorities through action planning exercises.

The new component Integrated Rural Development Program, which began in June 2006, aims to put together functional drought and flood preparation and mitigation action plans and establish accessible information exchange networks in at least 75 percent of the target villages. At this phase of implementation, roles and responsibilities of the village implementation committees (VICs) are clarified, and coordination with local and national authorities strengthened.

Another project, the Community Led Innovations in Disaster Preparedness, builds community capacity for flood and drought preparedness and management. Major project activities are drought emergency needs assessments, indigenous early warning systems and small scale mitigation infrastructure operation.

5.1.1.4. CARITAS

Disaster Management Program is one of Caritas cross-cutting programs such as community development, community health program, rights based approach and advocacy and youth development program. The program is categorized into 2 parts, one is Emergency Relief Response and the second one is Community Based Disaster Preparedness. The main goal of the program is to promote a collective disaster preparedness, relief and rehabilitation of people affected by natural calamities.

Emergency Relief Response is a national program, established networking for disaster preparedness at different level in order to prevent and mitigate the effect of natural disaster, to assist, and enables victims to restore their normal lives. Further, the program seeks to establish the disaster management policy and its effective dissemination of disaster management, also establish the disaster management information systems nationally. The national program covers various activities includes prevention, response and rehabilitation.

Community Based Disaster Preparedness is a community level program. The program helps build the capacity of the target community members on disaster management so that they are able to manage the disaster in an effective manner and restore their normal life during the disasters situation and after the disaster. We will form and strengthen the committees for disaster at the local level (village, commune, district, provincial) , improving the understanding to key field staffs, VDA, federation , MC in the target areas on disaster management policy and guideline. The target community shall be trained on ecology and environmental issues.

5.1.1.5. CONCERN Worldwide

Concern Worldwide has been in Cambodia since 1991. Its mission is to strengthen the ability of poor and most vulnerable people to exercise their rights and make informed choices to achieve a better quality of life without compromising the environment, and with the government meeting

its obligation to respect, protect and fulfill the rights of the Cambodian people The Disaster Risk Reduction project is one component of Concern's Supportive Initiatives Livelihood Improvement (SILIC) program. DRR work is conducted through 18 local partner NGOs and includes awareness raising, support for 23 small-scale mitigation infrastructure systems benefiting 3,938 vulnerable families.

Concern has had a number of achievements from previous project cycles including supporting community infrastructure projects, responding to emergencies and supporting replanting of rice paddies. Future plans include DRR training of partner NGOs, completion of risk vulnerability assessments with the communities, development of action plans and strengthening of coordination and capacity of the local authorities and local partners in implementing CBDRM.

5.1.1.6. Church World Service (CWS)

The Church World Service has been in Cambodia since 1979, delivering relief and implementing development programs. Its mandate has been to develop the capacity of the most vulnerable to meet their basic needs sustainably, and to participate in the emerging democracy. CWS works with local partners and community organizations focusing on building technical and institutional capacity.

With the support of the ADB, ADPC and MOWRAM, CWS recently completed the Community-based Disaster Risk Reduction Project in nine villages in Svay Rieng province. These villages are pilot sites for the project on Disaster Risk Reduction, which ran from July 2006-September 2007 and whose main achievement was the development of a three-year Action Plan for Disaster Risk Reduction. Its current project, Provincial Partnership for Disaster Risk Reduction, undertakes action planning, training, establishment of CCDMs and VCDMs and focuses on supporting the PCDM of Svay Rieng province in implementing the action plan.

5.1.1.7. Lutheran World Federation (LWF)

Established in 1979 in Cambodia, the Lutheran World Federation (LWF) is a church-based international organization whose overall program goal is to empower rural communities to manage development processes, advocate for their rights and improve their options for sustainable livelihoods. From 2003 to 2007, LWF implemented the Community-based Disaster

Management projects in 300 villages across the provinces of Kampong Speu, Kampong Chhnang and Battambang together with Dan Church Aid, Church World Service and partners from their Integrated Rural Development through Empowerment projects. It also worked with the NCDM and CRC in facilitating local planning processes to ensure that CBDRM was integrated into the local development plans. Related participatory activities include organizing village disaster volunteers and building the capacity of the PCDMs, DCDMs, CCs through training. Information and awareness-raising activities such as the distribution of information and educational materials were also conducted. Small-scale community infrastructures for disaster mitigation were supported. Current project focuses on capacity building by training of trainers on CBDRM, conducting more CBDRM trainings and organizing a CBDRM forum while continuing to strengthen coordination with other NGOs and the local authorities.

5.1.1.8. Mekong River Commission (MRC)

The MRC was established in 1995 as part of the agreement between Cambodia, Laos, Thailand, and Vietnam to design and plan long-term and cross-cutting strategies for sustainable use and management of all water and land resources in the Mekong River Basin. The MRC's Flood Management and Mitigation Center (FMMP) based in Phnom Penh leads in flood forecasting and dissemination of flood-related information to vulnerable communities. It works with national partners such as the Cambodia Red Cross and Action against Hunger. Every year, the MRC and FMMP would organize the Annual Mekong Flood Forum to assist managers, civil society organizations and other DRR implementers to share their experiences in flood mitigation and management and to identify ways to improve flood management in the region.

5.1.1.9. Oxfam International

Oxfam International is a global group of independent organizations dedicated to overcoming poverty and fighting injustice. The lead agency for the humanitarian program is Oxfam Great Britain. Other Oxfam agencies with presence in Cambodia are Oxfam America, Oxfam Hongkong, Oxfam Quebec, Oxfam Australia, Oxfam Novib and Oxfam Solidarite. Oxfam is highly regarded for its directions to build human resource for disaster management in the country. Since 1999 up to present, Oxfam, jointly with Cambodian Red Cross and CWS, has provided 13 trainings on disaster preparedness and response to about 600 participants representing NCDM, INGOs, CNGOs and the UN. The Oxfam International CBDRR program

has three components: community-based flood preparedness, community-based drought preparedness and mitigation, and community-based disaster risk reduction. It works with partners in Kratie for the community-based flood preparedness, Kampong Speu for community-based drought preparedness and mitigation and Svay Rieng for community-based disaster risk reduction. Oxfam also responds to emergencies such as flash floods, with recent emergency efforts in Kratie in 2006 and Preah Vihear in late 2007.

A cross-cutting element that ties the three programs is a common goal to reduce risks from disasters, increase resilience of people and communities to drought and flood, and capacitate communities, partners, field staff and local authorities to implement CBDRR strategies. Oxfam and its partners work closely with the NCDM and its counterpart structures at the local level. Since January 2005, the joint Oxfam program has invested more than USD 1.3 million in CBDRR and emergency efforts, which have directly benefitted 16,636 households and aided another 28,666 households. From 2003 to 2006, Oxfam, in cooperation with CCK, implemented a pilot project on Flood Preparedness and Mitigation in 13 villages in Takeo. Local level activities involved preparation of village needs assessments, formulation of village DRR plans, capacity-building on key topics on disaster management, gender, leadership, accountability, community mobilization and climate change, among others. During the project period, Oxfam supported the construction of infrastructure such as flood gates, water catchments and latrines.

5.1.1.10. Plan International

Plan International first established its presence in Cambodia in 2002, with its office in Siem Reap. Plan works with children and their families, communities, organizations and local governments to implement their program interventions on health, education, water and sanitation, income generation and cross-cultural communication.

To launch its CBDRR efforts, Plan initiated a DRR capacity building program for its staffs and community partners. The organization plans to eventually integrate DRR in its programs. In preparation for its programmatic integration, Plan is building relations with organizations, network and government agencies working on DRR to assist them build organizational capacity for future programming.

5.1.1.11. World Vision (WV)

World Vision is a Christian humanitarian organization dedicated to working with children, families and their communities worldwide to reach their full potential by tackling the causes of poverty and injustice. For many years, WV has responded to emergencies in the country but it was only recently that it has developed a long term strategy for disaster management. World Vision established the Community Disaster Mitigation project (CDMP) under its Emergency Affairs (HEA) Program, where they work closely with CCDMs to improve their understanding of their roles in disaster management and build their capacity by providing trainings on disaster management, and CBDRM, report and proposal writing, accountability, and local capacity for Peace and environmental conservation. Through this project, information on natural disasters such as floods and droughts and emerging disasters threats like avian influenza are systematically shared with communities. To support community learning, WV organizes cross-visits between the CCDMs from the two provinces where they work. Parallel efforts included the formation and training of and support for self-help groups, which are crucial support mechanisms for CCDM. WV plans to eventually integrate disaster management into the area development plans (ADPs), of which 20 are already developed for six provinces and Phnom Penh City.

5.1.1.12. ZOA Refugee Care

ZOA-Refugee Care supports refugees, internally displaced (IDPs), returnees and other groups who are affected by conflict or natural disasters in their transition from their current state of instability and lack of basic needs into a situation where enabling conditions for structural development have been (re)established. ZOA has implemented a program geared towards reducing the impact of droughts in Oddar Meanchey province. Program achievements include the selection and training of village disaster management councils (VDMCs), and formulation of participatory risk assessments and DRR plans. ZOA also collaborated with NCDM to provide training to the CCDM and the PCDM of Oddar Meanchey. The organization has also undertaken drought mitigation activities like construction of irrigation ponds, wells and forms of water catchment, and distribution of farming implements and drought-resistant rice varieties and cash crops.

The new program phase, which aims to build the capacity of communities to reduce the impact of disaster, particularly drought, has expanded its coverage from the pilot site in Oddar Meanchey province to seven communes. VDMCs were formed and trained on CBDRM and hazard, vulnerability and capacity assessments. Those who were trained will lead the development of more village disaster management plans. Additionally, ZOA provided tractors and other farming implements, distributed rice seeds, and supported the construction of drought mitigation structures.

REFERENCES:

1. Abhas K. Jha, et al. (2013). *Strong, Safe, and Resilient A Strategic Policy Guide for Disaster Risk Management in East Asia and the Pacific*. World Bank, 2013
2. Brinkerhoof D. W. (1999) *Exploring state-civil society collaboration: Policy partnerships in developing countries*, *Nonprofit and Voluntary Sector Quarterly*, San Francisco, vol 28
3. Casals, J. (2013). *Institutional Review and Capacity Assessment of the National Committee for Disaster Management*, Ministry of Economy and Finance, 2013
4. Chariyaphan, R (2012), *Tracking system and management of donated goods in Japan*
5. Disaster Management in Japan brochure (2011), Published by Director General for Disaster Management, Cabinet Office. 2011, http://www.bousai.go.jp/1info/pdf/saigaipanf_e.pdf in Nazarov, E, (2011). *Emergency Response Management in Japan*
6. ADPC et al. (2008). *Monitoring and Reporting Progress on Community-Based Disaster Management in Cambodia*, April 2008
7. Heng An L. (2014), *Cambodia Country Report on Disaster Management Situation*
8. Humanitarian Response Forum (HRF) Final Report - No. 07, Dec 2013, *Cambodia: Floods*
9. ISDR (2006), *NGOs & Disaster Risk Reduction: A Preliminary Review of Initiatives and Progress Made*
10. Kaneka, K (2011). *Partnership Approach to Support Disaster Risk Reduction in Cambodia*, Humanitarian Advocacy, Oxfam, 2011
11. MA. ALETHA A. NOGRA (2012). *Institutionalizing Resilience of Communities and Nation: the Philippines and Japan Experiences*
12. NCDM (2011). *Summary Annual Report on Disaster Events in Cambodia from 2000-2010*
13. NCDM (2013a). *National Action Plan for Disaster Risk Reduction (NAP-DRR) 2014-2018 (draft)*
14. NCDM (2013b). *An overview of community based disaster risk reduction initiatives in Cambodia*
15. NCDM et al (2008). *Strategic National Plan for Disaster Risk Reduction, 2008-2013*
16. Sen H, (2004). *Address at the Sixth International Meeting of Asian Disaster Reduction Center and the Third Meeting of the Secretariat of International Strategy for Disaster Reduction*, Phnom Penh, 02 February 2004
17. Sovann, R (2006). *IMPLEMENTATION OF DISASTER RISK REDUCTION (DRR) in the Context of HYOGO FRAMEWORK FOR ACTION*, The Asian Conference on Disaster Reduction 15-17 March 2006, Seoul, Republic of Korea
18. UNDP, Cambodia (2013), *Final Project Report: Project Title: Flood Early Recovery Assistance Project, From 15 January 2012 to 15 January 2013*

19. UNDMT (2011), *CAMBODIA, DISASTER PREPAREDNESS & RESPONSE PLAN (Draft)*, (updated August 2011)
20. UNISDR (2007). *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*
21. UNISDR, et al. (2009), *Global Facility for Disaster Reduction and Recovery Disaster Risk Management Programs for Priority Countries, Summary 2009*

Online Resources:

- 1- UNISDR, *Terminology on DRR*. <http://www.unisdr.org/we/inform/terminology>
- 2- UNISDR (2013). *Information and Knowledge Management for Disaster Risk Reduction (IKM4DRR) Framework and Scorecard*, UNISDR, May 2013. Retrieved from http://www.unisdr.org/files/35238_ikm4drframeworkscorecard.pdf
- 3- Prevention Web, <http://www.preventionweb.net/english/hyogo/framework>
- 4- PreventionWeb. Are we being successful in disaster risk reduction? Retrieved from http://www.preventionweb.net/english/hyogo/gar/press/documents/UNISDR_insert_6-HFA-progress_prFINALI-r.pdf
- 5- UNISDR. *Sustainable Development*. Retrieved from <http://www.unisdr.org/we/advocate/sustainable-development>
- 6- The Cambodia Daily, published on 31 October 2013. *NCDM Lauds Flood Response, NGO Calls for Better Coordination*. Retrieved 01 April 2014 from <http://www.cambodiadaily.com/archives/ncdm-lauds-flood-response-ngo-calls-for-better-coordination-46404/>
- 7- Peace Boat. *Japan CSO Coalition for 2015 3rd World Conference on Disaster Risk Reduction (JCC2015)*. Retrieved from <http://peaceboat.jp/relief/news/japan-cso-coalition-for-2015-3rd-world-conference-on-disaster-risk-reduction-jcc2015/>
- 8- TANAKA, T. (2013). *NHK's Disaster Coverage and Public Value from Below: Analyzing the TV Coverage of the Great East Japan Disaster*. Retrieved from <http://www.mediacom.keio.ac.jp/publication/pdf2013/takenobu.pdf>
- 9- JICA (2013). *Linking Disaster Risk Reduction to Sustainable Development*. Retrieved from http://www.preventionweb.net/files/globalplatform/51960b1d4b022JICA_flyer_Final.pdf
- 10- Phoenix Hyogo: *Ten Years after Creative Reconstruction*, http://eird.org/cd/recovery-planning/docs/2-planning-process-scenario/Hyogo_Phoenix_Plan_Book.pdf

11- International Recovery Platform. Retrieved from http://www.recoveryplatform.org/about_irp/

12- The Japan NGO Center for International Cooperation (JANIC). *Details of activities: NGO Relief Fund for Japan Earthquake and Tsunami*. Retrieved from http://www.janic.org/en/details_of_activities.php

13- Japan Platform. Retrieved from <http://www.japanplatform.org/E/about/>