

# DISASTER MANAGEMENT IN CAMBODIA: COMMUNITY-BASED DISASTER RISK MANAGEMENT IN THE CASE OF DROUGHT IN AORAL DISTRICT

BY

MISS CHHOUN NARETH

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS (ASIA PACIFIC STUDIES)
COLLEGE OF INTERDISCIPLINARY STUDIES
THAMMASAT UNIVERSITY
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### THAMMASAT UNIVERSITY COLLEGE OF INTERDISCIPLINARY STUDIES

**THESIS** 

BY

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#### **ENTITLED**

# DISASTER MANAGEMENT IN CAMBODIA: COMMUNITY-BASED DISASTER RISK MANAGEMENT IN THE CASE OF DROUGHT IN AORAL DISTRICT

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#### **ABSTRACT**

The study seeks to examine whether the existing Community Based Disaster Risk Management (CBDRM) in Cambodia that helps the community to cope with drought in Aoral district, Kampong Speu province. Within that study, it discusses the challenges faced and possibility to improve CBDRM in order to minimize the impact of natural disasters in terms of the loss of property, livelihoods and lives. The study utilize the concept of CBDRM process as the way forward in understanding the two communes that had been selected for the study by exposing five theme that contributes towards a better performing CBDRM such as Local capacity/Knowledge, Decision Making, Local Resources, Stakeholders Involvement and local participation. The research findings revealed that the CBDRM to a certain extent, helps people mitigate risks to disasters by providing the basic knowledge to local people as well as authorities, create the space of stakeholder's involvement that bring people to participate despite constraints faced. Based on the findings, few suggestions and recommendations have been put forward. These suggestion and recommendations served as a guideline for stakeholders and related parties on ways and areas to improve the workings of CBDRM in Cambodia.

**Keywords:** Cambodia, CBDRM, Aoral District, drought, NCDM, disaster.

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#### LIST OF ABBREVIATIONS

Abbreviations Terms

ADB Asian Development Bank

ADPC Asian Disaster Preparedness Center
ALWS Australian Lutheran World Services

CBDRM Community-Based Disaster Risk Management

CBO Community Based Organization

CCDM Commune Committee Disaster Management
CDRI Cambodia Development Resource Institute

CRC Cambodian Red Cross
CRC Cambodian Red Cross

D&D Decentralization and Deconzentration

DCDM District Committee Disaster Management

DRM Disaster Risk Management

FAO Food and Agriculture Organization

FGD Focus Group Discussion

GFDRR Global Facility for Disaster Reduction and Recovery

HFA Hyogo Framework for Action

ISDR International Strategy for Disaster Reduction

LWD Life with Dignity

LWF Lutheran World Federation

MAFF Ministry of Agriculture, Forestry and Fisheries

MAPS Master of Arts in Asia-Pacific Studies

MoE Ministry of Education

MoH Ministry of Health

MoND Ministry of National Defense

MPWT Ministry of Public Works and Transport

MRD Ministry of Rural Development

MWRM Ministry of Water Resources and Meteorology NCDM National Committee for Disaster Management PCDM Provincial Committee Disaster Management

UNDMT United Nations Disaster Management Team

UNICEF United Nations International Children's Emergency Fund

UNDP United Nation Development Programme

UNISDR United Nations International Strategy for Disaster Reduction

VDMG Village Disaster Management Group

WFP World Food Programme

WHO World Health Organization

# CHAPTER 1 INTRODUCTION

#### 1.1 Background and Problem Statement

Disaster is known to be both global and regional concern as it brings a lot of devastation along its way and affects a lot of vulnerable groups. From 1994 to 2013 alone, there are about 218 million people that were affected by disaster worldwide (CRED, 2015). In Asia alone, during that period of time, disaster had struck the region 2,778 times, causing mass havoc, affecting 3.8 billion people in the region and killed about 841,000 human lives in the process. The world community recognize the impacts of disaster and acknowledge that, no place, country or geographical location can escape from disaster, although, vulnerability to disaster varies from one scenario to another. Therefore, with such awareness, there is a global efforts dedicating in this issue alone, making a gradual progress in lessening the hazards of disaster to both humanity and the environment.

According to United Nations International Strategy for Disaster Reduction, it defines disaster as 'a major disruption to the functioning of a community that may caused mass sufferings, damages and loss of life and often this disaster exceeds the capacity of the community to cope with it (UNISDR, 2009). As of now, there are four main categories of disaster namely natural disaster, Natural disasters, environmental emergencies, complex emergencies and pandemic emergencies (World CPT, 2017). http://www.wcpt.org/disaster-management/what-is-disaster-management. For example, natural disaster refers to common disasters caused by the nature such as earthquakes, volcano eruptions, typhoons, drought, floods, landslides and often it caused widespread misery and damages. According to World Bank, Natural disaster is the most common category of disaster, which have impacted 4.4 million people for the past 20 years and led to \$2 Trillion economic losses during that period of time alone (World Bank & GFDRR, 2010).

Another category is environmental emergencies, which refers to accidents caused by technical or industrial activities. Often these activities involved producing or transporting hazardous materials or substance which can bring hazards to human

lives. Another example fall for this category is forest fire because of human negligence (cigarette butts, shattered glass, open fire etc). Next one is Complex emergencies that includes total breakdown due to dysfunction authority, attacks on strategic installations, war or any military conflicts. Last but not the least is the pandemic emergencies; as its name suggest, refers to spread of contagious disease or virus that can harm human lives (World CPT, 2017). Normally, developing countries suffer more as they lack in many fronts in handling disaster. Global Facility for Disaster Reduction and Recovery (GFDRR) for example, simulate the impacts of disaster between the developed and developing countries and found out, disaster happening in developing countries affecting their GDP 20 times higher than the former (World Bank & GFDRR, 2010). Therefore, reducing disaster losses has become the priority for many governments and organization in these countries. Following this, United Nations adopted The International Strategy for Disaster Reduction (ISDR) in 2000, serving as a guide to coordinate stakeholders in their efforts to build resilient communities in order to achieve sustainable development (UNISDR, 2010).

Cambodia as a developing country has been identified as one of the most natural disaster prone countries in Southeast Asia (UNWFP, 2003). The country experience different kind of disaster, of which drought and floods as the most common type of disaster to struck Cambodia. Drought has been identified to become one of the two disaster that could paralyse the country as it could be a recurrent phenomenon and recently it happened almost annually. The last drought happened in late 2015/ early 2016 has broken all records as if affects literally all of the country and caused emergency crisis for 2.5 million Cambodians (Save the children, 2016). Therefore, a study on this particular issue is necessary to understand the nature of issues surrounding 2015/2016 drought; from preparations to emergency response in order to know better of Cambodia's capacity in handling disaster especially focusing on drought. Such a study will eventually policy makers to make improvements on Cambodia's disaster risk management as well as a reference to future research related to this topic.

#### 1.2 Objective and Research Questions

The main objective of this study is to examine whether the existing CBDRM helps the community to cope with drought and to oversee the possibility of improvement of CBDRM from the two drought-prone communes as can be seen from the drought 2015/2016. For the fact that Cambodia is heavily depends on agriculture and most of the people are living in rural areas are whom their livelihood depends on Agriculture as the only source of income; thus it is important to have better mechanism to be put in place in order to mitigate the impact of this seemingly unavoidable natural disaster. This leads to the question of whether current CBDRM helps communities cope with drought and what should be done to improve the effective CBDRM. Thus, this study tries to address two research questions:

- 1. How Community-Based Disaster Risk Management (CBDRM) process helps communities cope with disaster especially drought?
- 2. What are the capacities, limitations, and challenges that need to be addressed at community level?

#### 1.3 Scope of Study and Limitation

As for scope of study, this thesis primarily focus on the workings and implementation of CBDRM at the community level, especially the front liner of disaster risk management. This study also will put more emphasis on drought aspect of the CBDRM while touching the rest in passing. As for case study, this research pin pointed the community that affected the most by the drought and fit to be a suitable case study for the research.

#### 1.3.1 Information on Case Study:

The community selected are some of the most affected by the drought of 2015/2016. Located in Aoral District of Kampong Speu Province, these two communities have an ongoing CBDRM plan which can be utilize during the drought. The following table will show related information regarding the community chosen to facilitate explanations.

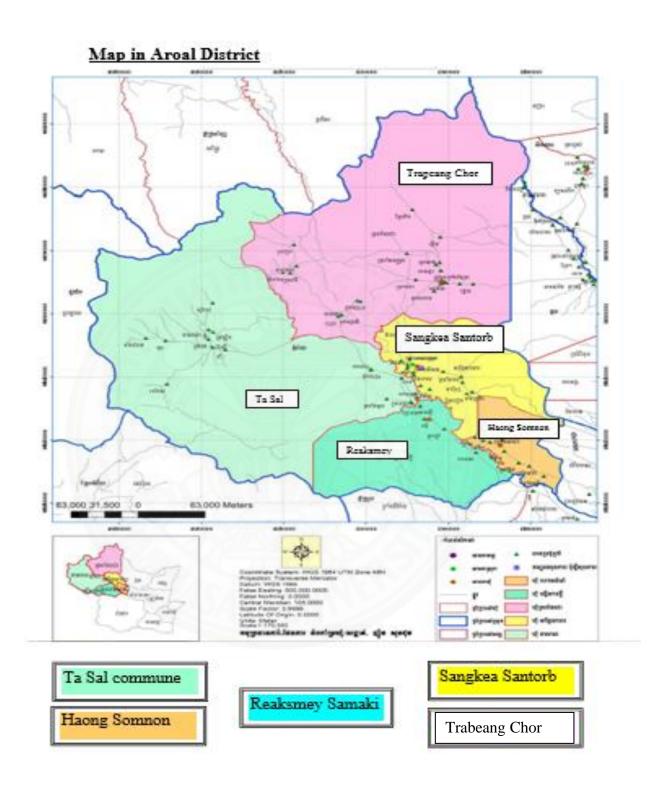


Figure 1.1 Map of Aoral District

The map above shown the overview and land area of Aoral District, where 2 Communes has been selected for this study. The two communes; Ta Sal & Reaksmey Samaki has been selected as these areas are well known to be drought prone while almost the entire population depends on agriculture (Aoral district report, 2013). At the same time, this District has an ongoing CBDRM to help the population to cope better in the case any disaster especially drought.

#### **1.3.2** Limitation of the Study

The study recognized some limitations on the study such as accessibility to data, unforeseen incidents and limited data available on disaster or CBDRM in Cambodia. For example, in term of accessibility to data, the study faced the problems of 'off limits' data on certain occasion. The reason for not being allowed to access these data from the officials on duty remains unknown. During fieldwork, the researcher also faced some unforeseen incidents such as non-receptive villagers or local authorities, unwilling individuals to cooperate, Community Based Organisation (CBO) unwilling to disclose some data that is deem necessary to the study and attitude problems of the local authorities; all of these have become a hindrance in the process of data collection. Some of key informants that are at Commune Committee for Disaster Management (CCDM) could not be interview as planned because they cannot spare their time for the research due to their works. Last but the least, there are limited study and reviews had been made on the issue of disaster in the country, let alone specifically discussing about drought in detail. It can be said that, this study is the pioneer in studying the nature of drought and its impact to the local community in Cambodia. Therefore, all the above are some of the limitation the study faced along the way.

#### 1.4 Research Methodology

This research basically qualitative in nature, whereby extensive secondary data complement the primary data in order to come up with a good finding for the study. The secondary data is used to explain the concepts and ideas on disaster risk management intertwined with the idea of making the community responsible for it. At the same time, the study also employs secondary data in analyzing the structure and

functioning of disaster risk management as existed in Cambodia. In term of primary sources, it is employed in the fieldwork, whereby the strategy Focus Group Discussions (FGDs), Semi-Structured Interviews (SSIs) and observation are being utilize. This helps to get a clearer picture of what is happening at the frontline and the challenges they faced. A fieldwork has been conducted from end of July to August 2016 at Ta Sal & Reaksmey Samaki Commune of Aoral District, Kampong Speu Province, Kingdom of Cambodia.

Semi Structured Interview or SSI is what normally known as interview, whereby the researcher asked preset open questions at the same time making the method of inquiry flexible enough to engage some sort of discussions to explore the issue deeper. While a focus group discussion (FGD) basically converging target groups that shared similar backgrounds or experiences to engage in a discussion of a specific topic. The existence of a moderator is needed to guide the flow of the discussion as well as to record the whole process. On the other hand, observation involved the need for a researcher to quietly observe their surrounding using their senses in order to make sense things that is happening around.

The whole process of data collection within the qualitative methodology can be observed as below.

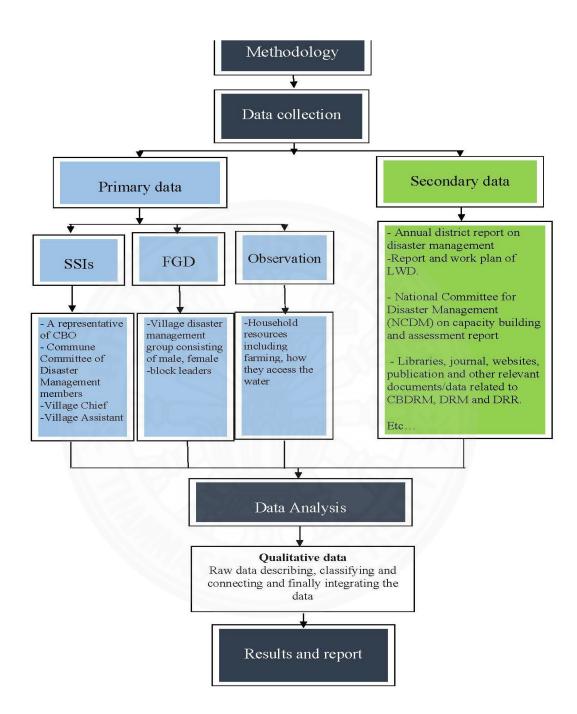


Figure 1.2 Method of data collection

Data analysis for this research combined that of the primary data obtained through semi structured interview (SSI), focus group discussions (FGD) and Observation together with the secondary data through documents analysis. For the primary data through semi structured interview and focus group discussion, the data were obtained from the feedbacks given back the informants. Key informants selected for FGD and SSI based on their relevance to the study such as the officers related to CBDRM in Cambodia and the individuals and authorities related to this such as the Commune Committee for Disaster Managements (CCDM) and related individuals. These data then were analyzed according to its category before being utilized throughout the study.

#### **CHAPTER 2**

# COMMUNITY BASED DISASTER RISK MANAGEMENT (CBDRM)

This chapter will explore the concept of CBDRM by explaining how each part of the concept; from community to disaster risk management and CBDRM as a whole. Later on, it will touch upon the decentralization strategy that is conducted in Cambodia as part of institutional changes to better facilitate the government workings at all levels of administrations. This decentralization strategy is crucial in making CBDRM to work smoothly. Citizen participation also being discuss thoroughly in order to understand this concept fairly. At the end of this chapter, it will discuss on the 'CBDRM Process' whereby this process will be the guide in developing CBDRM in each commune. From the previous discussion on conceptions involved in CBDRM, the researcher come up with 5 components that can help to see the effectiveness of the plan and what improvements can be made.

#### 2.1 Concept of Community

When discussing about the concept of Community, it can be broad definitions with different meanings brought different understanding according to the context given. For example, community can be a cluster of living households, a small neighbourhood in a settlement, a small village or even a group of people that have shared experience and livelihood with each other. Such a shared experience can be translated into something that binds them together for example interest groups, language groups, common identity groups. Phillip Alperson compares Community to some sort of 'association', whereby this so called association push the ideas of kinship values such as solidarity, unity, reciprocity amongst other (Alperson, 2002). Koentjaraningrat shared the same idea of Community by extending it to includes mutual purpose, task or function which form some sort of common identity in the group, creating an invisible bond between them. While Asian Disaster Preparedness Center (ADPC) for example coined community more or less as a number of families

residing together in one locality that have their own socio cultural system and collective identification (Murshed at all, 2004).

As the research concern about Cambodian, it is wise to introduce the concept of Community in Cambodian perspective. In Cambodian society, the common structure of community basically refers to Commune and Villages as the forefront of the grassroots communities. These communities have some sense of identification with each other; in a sense that they have been living with each other for a number of years and a duty to look after each other. This community is more close knit that the urban areas, as they livelihood depends on mutual brotherhood and trust with each other, in the absence of modern community concept as such exists in the urban areas. Despite like that, Communes and villages do have their own administrative offices, which commonly called as 'local authorities' led by Communes Chief up to Block leaders<sup>1</sup>. These two administrative offices are part of the sub national administrative structure up to the Provincial level, whereby, Commune answerable to the District and Village is the lowest of local administration in the strata. In Cambodia, it is common for the community to see and receive NGOs and Community Based Organisations (CBO) from time to time. These organisations basically there to help these communities to implement community projects and development.

#### 2.2 Concept of Disaster Risk Management (DRM)

Developing countries across the world experiencing growth in the overall socio economic development of their respective countries. Yet, disaster hampered these developments as it resulted in a considerable number of deaths, casualties, infrastructural damages, financial losses, not to mentioned emotional damages (ADB, 2013). These kinds of setbacks either slowdown poverty reduction program or spike them due to absence of proper consideration in pursuing developments by neglecting

<sup>&</sup>lt;sup>1</sup> The local authorities include positions such as Communes Chiefs, Deputy Commune Chiefs, Village Chiefs, Deputy Village Chiefs, Block Leaders (each leader take care of a particular neighbourhood block in a village)

lash backs from mother nature. It has become part of the process, therefore developing countries tries to find ways to solved this problems from recurring in order to have a sustainable socio economic developments for all of its citizens.

According to United Nations International Strategy for Disaster Reduction (UNISDR), disaster has become a menace to be reckoned with as it brings with it a considerable and widespread losses on its way. Often, it exceeds the ability of the affected community to cope and resulted in a widespread problem such as shortage in basic necessities and the required funds to for reconstruction efforts. Therefore, it is crucial to take into account criteria that can help reduce these losses in the long run by maximizing community to cope and adapt to such situations. It can be done so by assessing a community exposure to hazard and their vulnerability to disaster, after that works on ways to empower these community to cope. This is what being called as 'identifying disaster risk' by taking into account the potential losses across all spectrums (health, death, livelihood, asset, services etc.) that a particular community could face in specified period of time in the future (UNISDR, 2009). A disaster risk usually happened when a particular community exposes to different kind of natural hazards and failed to take necessary steps to cope with it due to lacks in capacity or resources to do so. However, when discussing about disaster, there is no guarantee that any plan or coordination that they make will save them from the disaster itself.

These mechanisms is what commonly called as 'Disaster Risk Management', whereby a proper system is in place to utilize operational skills, experience and operation directives develop over time to implement strategies and policies as well as to improved coping capacities to reduce the impacts of hazards and disaster (UNISDR, 2009). In short, DRM main objectives is avoid, reduce or transfer the impacts of these hazards through the implementation of activities, plan and measures specifically design to prevent, mitigate and prepare for disaster. It seeks to reduce the vulnerability of a particular community with the hope that, once they are able to cope with disaster, in the long run the community can develop a proper system that change disaster into opportunity. DRM has become more important than ever as the worrying up ward trends natural disasters occurrence across the world cause a widespread misery and losses annually. If CBDRM successfully executed across the

globe, like wise it can lead to sustainable developments, especially in term if food security and poverty reduction.

## 2.3 Literature on the concept of Community-Based Disaster Risk Management, D&D, and Citizen Participation.

In this section, it will discuss the theory or concept of CBDRM, D&D and Citizen Participation that lead to the five components including local capacity/knowledge, Decision making, local resource, stakeholder involvement and local participation.

#### 2.3.1 The Concept of Community-Based Disaster Risk Management

This concept basically taking a footing in this region for the past 20 years. NGOs and institutions such as citizen organization, youth organization, humanitarian agencies and government departments; all familiarize themselves with CBDRM, knowing the importance of such concept as one of the approach to manage and reduce disaster risk. Back in 2001, governments, civil societies and communities across Southeast Asia participated in the Partnerships for Disaster Reduction-South East Asia Partnerships for Disaster Reduction-South East Asia that promotes CBDRM (Emmanuel, 2008). CBDRM becomes sounder to Southeast Asia as its fit the 'Asian Narratives' of what communities is as a tightly knit society across the region. By utilizing such factor towards the building up of 'community centered' decision making and implementation in the running of disaster risk management which includes risk assessment, mitigation, preparedness, response and reconstruction. It can be said that, Community in the context of CBDRM can be understood as people who shared common identification to each other and shared same experience and threat to common hazards, common experience in responding to and experience in the reconstruction period, although they might have different perceptions of exposure to risk.

Not only that, CBDRM is flexible enough to include local risk coping knowledge as part of CBDRM that will ensure better understanding of the local sensitivities of geography and culture. This will ensure the communities to have

a sense of belonging to such plan that can help to win the support of the locals as well as to create community resilience against natural disasters. By doing so, the communities at the centre of all activities of CBDRM; from decision making, trainings, preparedness and management activities without looking at social status or backgrounds.

As compared to any other Disaster Risk Managements out there, Community-Based Disaster Risk Management generally works similar, although much emphasise given to the community level and its bottom up approach. CBDRM make sure that the community participation exist at many levels and stages in order to fully empowered the community. The following are few more definitions of CBDRM from different perspectives. For example, Asian Disaster Preparedness Centre (ADPC) coined CBDRM as "Community-based Disaster Risk Management (CBDRM) is a process in which at-risk communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their capacities. This means that people are at the centre of decision making and implementation" (ADPC 2003; Abarquez 2004).

It worth noting that, CBDRM may be fully conducted by the community themselves or it can be led by other actors through collaborations such as by government agencies and NGOs. Therefore, sometime, it is quite intriguing to know how far the words 'local initiatives' can be expand and use. One example can be derived from Lavell (2008) saying "local always refers to something that is more extensive than a community and smaller than a region or zone". Abarquez et al argues, citizen participation helps promotes commitment to decisions that will make sure local problems can be solved as appropriate as possible. By doing so, community learns to know available resources and capacities and how to utilize them in time of disaster which eventually builds support and sense of ownership of risk reduction projects (Abarquez et al., 2004)

CBDRM seek to reduce vulnerabilities by focusing on ways to prevent or minimize loss and damage to not only human life but also cover livelihood of the people, property and the environment. It can be said that, Community Based Disaster Risk Management (CBDRM) seek to build people's capacity in coping with

disaster risk thus it can helps to reduce their overall vulnerability and led a more safer and resilient community. CDBRM is widely accepted by disaster experts since approaches in disaster risk management have been more into structural/physical aspects, top down, focused only on emergency, and rarely contributed to sustainable disaster risk management especially on the community level. CBDRM provides the answer that includes principles such as efficiency since it involves low transaction cost as a result of maximum local inputs and minimum external intakes. The core principle of CBDRM is the creation of local participation, decision making power, capacity building, and interaction with other agencies within the communities itself (UNDP report 2013: Bhutan 2011, CISC: VN 2011). This concept happen mostly in developing countries especially for the country who have the system of transferring power; such as decision making to sub-national level including provincial, district and commune level. In such arrangement, people participation is very important because they are the real wielder of decision making and implementation (CISC: VN 2011).

At the sub national level, CBDRM works to identify, analyse, treating, monitoring and evaluating of any presence of disaster risk so that their risk can be carefully assess and the data will use to enhance their capacities. The ideas of bringing the community based approach is actually to solve the problem of disjuncture between the top command and the lower recipient of which it often ignored the locals needs. If there is an understanding between the two, CBDRM can works better by utilizing locals resources and capacities wherever it exist (Center for Disaster Preparedness). The Hyogo Framework for Action (HFA) state facilitator participatory evaluation of CBDRM activities become a problem in CBDRM, as it is hard to find a facilitator with sound knowledge on a specific community resilience knowledge. Local resources and a language that is easily understood by community should be used in the process of assessing the progress of DRM implementation in each criteria guided by proxy questions. The concentration of power and knowledge at one point (central/regional government) and marginalization of community in decision making have made many flood, drought, earthquake, volcanic eruption mitigation projects become mere representation of the vested interests of those in power or the funding agency rather than the interest or the need of the community.

Lack of participation can undermine the program sustainability, and increase vulnerability to disaster.

Local community has the opportunity to know better about the challenges, constraints and strength at the local level in coping with disaster. Local resources in disaster management (and development) should be developed in a sustainable manner. Experience of CBDRM developed at a given community can be modified, revised, and adopted somewhere else. CBDRM works by assessing differences in risk perceptions, understanding and perceptions in order to have a total picture on how to reduce each particular community's vulnerabilities.

In order for CBDRM to be effective, it requires the good will and the capacity of stakeholder involvement. In the absence of the active participation of stakeholders and their lack of involvement in the decision making, it can becomes a hindrance. At the same time, without funding and resources aids, the activities of CBDRM cannot be achieve in a sustainable way. There is a need for an analysis of resources for CBDRM that will involve what resources are needed, the availability of such resources, strategies to mobilize it and the assessment either such strategies can be access and/or created by other actors.

#### 2.3.1.1 Effectiveness and Challenges of CBDRM

Conceptually, CBDRM sounds good, but the everyday implementation found to be quite a challenge. From a report provided by UNDP back in 2013, the report support the effectiveness of CBDRM as the following. The community that found to be successful in their implementation of CBDRM able to diversified their plans prior to droughts especially on the issue of agriculture and water containment. Agriculture for example, the community successfully construct water harvesting structures to keep the water for irrigation all year round, even during the driest period of the year. This enables them to continue farming by using new variety of seeds that will grow crops which doesn't need a lot of water. The community also adopted different cropping calendar to improve the farming activities as a whole (UNDP 2013). In case of drought, successful communities utilize floods to their own advantage by making them as both drainage and irrigation canals according to the situation that they are in. These can further enhanced farming productivity all year round by assimilating those two natural elements by turning them from disaster

into opportunity. Both scenarios provided by these communities shows that, CBDRM does help community to effectively reduce their vulnerability at the same time upgrade their standard of living once they are able to cope and adapt to any situations (Asia pacific risk 2014).

However, it is worth to take note that, disaster management even in the smallest scale can be delicate matters thus it needs a strong collaboration from different stakeholders in order to make it successful. Different sections of the community need to step up and be part of the whole process to ensure it can be successfully executed and brings the benefit as hoped. Exchange of data and information is crucial in order to assess drought and flood pattern which later on help policy makers/Community planners to come up with their contingency plans. Moreover, the researcher also emphasize that, there are existing challenges in managing risk information and translate them into practice, thus to fill the gap between the information and decision-making, all stakeholders such as civil society, private sector, academia and the scientific community need to cooperate, and citizen have a role to play in risk information generation and use. The encouragement of local participation especially at the commune level including local action groups and local leaders and participation with pro-active group such as group of youth, volunteer networks, women, older person, person with disability shall be boost.

## 2.3.1.2 Community Based Disaster Risk Management (CBDRM) Strategy in Cambodia

In the case of Cambodia, government utilise this concept to be implemented in sub-national level in order to mitigate disaster. The Cambodian government envisioned, in the long run, CBDRM can helps to alleviate poverty as part of the rural development program. As for Cambodia, CBDRM as a strategy that utilize the communities existing capacities and coping mechanisms in the shaping up of a collective CBDRM plan that can be executed in a sustainable way. This includes their long term risk reduction strategy and plan in case of incoming disaster. In order to do that, it requires strong support and participation by the community by first identifying causes of vulnerability and create an action plan to mitigate such impacts. In the long run, CBDRM envisioned to empower the community towards having a long-term capacity to adapt. As Cambodia come faced with cycles of natural disasters

almost every year, CBDRM become a crucial tool to minimize its impact on both human lives and infrastructures.

#### 2.3.2 Decentralization and De-concentration

The concept of decentralization and CBDRM seems inseparable. Decentralisation has become an integral part to have a successful CBDRM. Before that, the study should look at some literatures that gives reason for this. First off, decentralization meant to bring national & local administration closer to the people. This concept more popular in the developing countries as it helps to transfer power and resources and delegate them across the nation. This approach hopes to address the issue of urban rural disjuncture as well as development gap that exists between the two (Mawhood, 1983 & Smith 1985). In the same line of thinking, the World Bank appropriate the concept more as *public sector reorganization*, whereby it could helps to empower local administration that is closer to the grassroots communities (World Bank, 2017). Crook et al however reminded that, the success of its implementation depends on Political, socio-economic, cultural and historical contexts of each country (Richard Crook and Manor 1998). By saying so, it does implies that, despite its enormous benefit, it is not easy to carry out. According to decentralization theory, there are three types of decentralization including political, administrative and fiscal:

- 1) Political decentralization, basically to decentralize political power and decision making authority all the way to the grassroots local administrations
- 2) Fiscal decentralization mainly involves resource reallocation to local government in order for them to function properly. This is done through negotiations between the national and local authorities.
- 3) Administrative decentralization primarily involves the transfer of decision-making authority, resources and responsibilities of specific public services towards sub national/ local administration fulfilling its main objectives to bring these services closer to the people (World Bank, 2017)

Decentralization works best as a mean to rebuild the country in the aftermath of national crisis, such as the case of natural disaster which decentralization is often recommended as a tool to rebuild the country and create effective delivery of government services as well as to ensure the efficient allocation of resources (CSIS,

2011). Some governments opted decentralization especially to enhance democracy, people's participation, and to bring government closer to where people live and work (Litvack et al. 1998; Manor 1999). In Cambodia, the government has carried out decentralization and deconcentration process since 2001<sup>2</sup>, particularly to reach the Cambodia people as well as to look after their livelihood. According to CDRI, there are 3 main objectives for this, and the most crucial part that correlates to this study is its objectives to 'promote a culture and practice of local participatory development in planning, managing and resource mobilization' so that every citizen, it does not matter near to the capital or not; will be able to receive helps and the voice will be heard by the government and local authorities (Caroline, 2004).

Following Government decentralization, National Centre for Disaster Management also utilize this in its structure. The organizational structure of the agency shown that, although much works and resources concentrated at the national level, yet Committee for Disaster Management (CDM) at other level also have their own responsibilities and allocated resources, according to the size of their administrative area. For example, Provincial Committee for Disaster Management (PCDM) have almost all the services and resources as available at the national level, although at the village level, it is reduce to necessary services such as health and water. Although like that, the Committee at each level all played an important role in giving the best possible services to the people under their care.

Decentralisation of power and responsibility helps CBDRM a lot in a sense that it can bring about better planning, coordination and management. Although largely dependent on the local official's political skills, leadership and development strategy, yet without support from the national and other international level, CBDRM will not be successful. Through decentralization, it creates new opportunity as new partnership between the local authorities and the national government can be established as well as establishing political & financial support. Many developing countries apply the concept of CBDRM under the framework of decentralization (Astrid and Edith, 2014). By having strategic use of CBDRM in their

<sup>&</sup>lt;sup>2</sup> Law on Administration and Management of Communes/Sangkat (LAMC) & Law on Communes Elections 2001

countries, government or other international NGO believe that mitigation of vulnerable people will be decrease that lead to poverty education in respond to UN Sustainable Development Goal.

#### 2.3.3 Concept of Citizen Participation

Another concept that plays important role in effective functioning of CBDRM is citizen participation. Citizen participation here can be understood as a process whereby individuals, may it in public or private manner; taking part in to contribute their views in a particular policy. The earliest example of citizen participation can be found in the ancient Greek civilization and during the colonial era of New England (now part of USA Eastern coasts). There are many benefits of allowing people's participation, and the summary of that benefits can be found in Cogan and Sharpe (1986) work. Both of them identified, there are five benefits of citizen participation namely allowing contribution of information and ideas on public issues; establishing public support for planning decisions; conflict preventions that can be costly; establishment of trust and good will which can help to carry out decisions; and last but not the least, to promote the sense of cooperation and trust between the authority involved and the public.

Cogan's and Sharpe's (1986) points on information sharing, public support for planning and cooperation are relevant for the study of the effectiveness of local committee for disaster management. The success of such actions due to as disaster responses depends heavily on the communication of expert's idea and direction of response and at the same time local input which requires effective communication of ideas. Participation allow the citizens to take part in the governance process by communicating their need for development, idea on how solution to local problems could be provided thus better sense of involvement and ownership. At the same time, through local participation, the community understood the importance of such programs/activities and can communicate well between them and the higher authority. This brings the citizens and government closer, a condition seen as essential for effective governance. This is supported by Abarquez and Murshed (2004), who points out that citizen participation promotes commitment to decisions, by ensuring all options on the table had been reviewed and the decision taken deals directly with the problems in an appropriate and cost effective manner. Abarquez and Murshed

(2004) also goes on to suggests that participation ensures that all programs and activities carried out with community goals in mind. It also helps to educate both the community and relevant stakeholders on available resources and Capacities. This in the end can help to create some sort of resiliency to disaster in the long run and sense of ownership of such projects Abarquez and Murshed (2004). Thus this study of the effectiveness of local institution's response of disaster will focus on the extent on how far the local citizens are allowed to participate.

#### 2.3.3.1 Understanding Levels of Participation

Arnstein (1969) first seriously looks at the subject of participation and come up with three main categories of participation: **non-participation** (Manipulation Therapy), **degree of tokenism** (Informing, Consultation, and Placement, and **degree of citizenship** (Partnership, Delegation power, Citizen control).

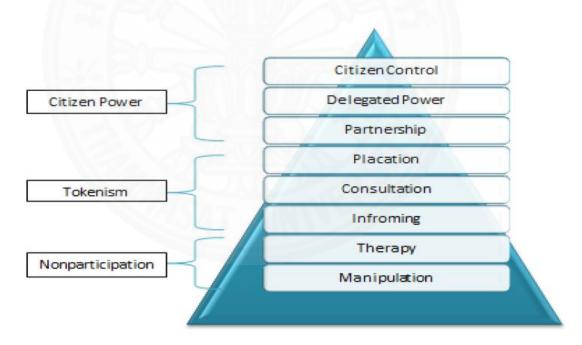


Figure 2.1 Levels of Participation

Participation of community can start from the stage of concept development to the stages of construction, operation-maintenance, and monitoring & evaluation. There are 7 levels of community participation based on the mechanisms of interaction: (1) rejection, (2) information sharing, (3) consultation, (4)

consensus and joint agreement, (5) collaboration, (6) capacity and risk sharing, and (7) empowerment and partnership.

For each step, the power and involvement of citizen are gradually increase in public policy; powers of citizen towards public policy are, for example, social, political, cultural and environmental issue including poverty reduction, disaster management especially in community level. Yet, Manipulating and therapy are define as nonparticipation.

In the case of disaster management, the level of participation is categorise in three level including preparedness, respond and recovery. (Jason, 2012), the individual, despite their active participation during the mitigation process, they plays passive role. The general public play more important role in the preparedness phase as institutionalized role. In these regards, authorities such as officials, agencies members and first-responders are more active in shaping plan, training, conducting and executing the plan. In the third phase that is response, civil society, international organization, institutionalized public participation and citizen involvement are important in order to share the information of affected people in order to help them more effectively

In the case of community based disaster risk management, citizen participation is needed to upgrade from the first to the highest level in order to sustain those kind of activities. How to reach to that level, the engagement from different stakeholders who have expertise, fund and other facilities are working together in order to fill this gap. Yet, this thesis is going to see how people participate rather than to evaluate; in order to see which area can be improved based on the model shown above. All different stakeholders would play very important roles in community disaster risk management since they could support capacity building, facilitating, and training.

#### 2.4 Community Based Disaster Risk Management (CBDRM) Conceptual Framework

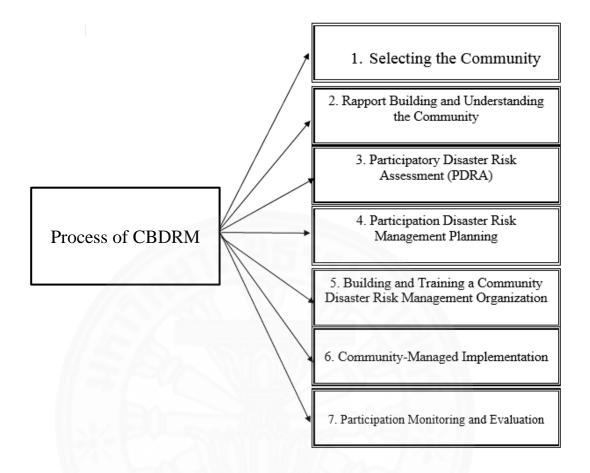
For this research, the study utilize two main conceptual frameworks related to CBDRM namely first 'CBDRM Process' and second the five Components that helps to evaluate the performance of the community's CBDRM. These two

frameworks have become the main approach for the researcher throughout the study and has been used extensively during the fieldwork.

#### 2.4.1 Community-Based Disaster Risk Management (CBDRM) Process

CBDRM Process basically a seven development phase in the shaping up of a community CBDRM. Each of the phase develop according to the ability of community to learn and participate. At the end of this process is the exiting strategy for the NGO or Community Based Organisation (CBO) to let the community handle and utilize CBDRM for their own benefit. Basically, this process involved warming up of relations between the CBO and the community, that shown gradual participation of the community following the shaping up of their CBDRM plan and committee. It will followed with intensive and wide ranging assessment of each household vulnerability and their exposure to disaster risks. From that data, CBO and the local authorities proceeded with the establishment of their very own Commune Committee for Disaster Management (CCDM) in order to better organize them in preparation of disaster or even during disaster itself. This CCDM later on collaborate with CBO to come up with their own CBDRM plan. Following this phase, the community will proceed with the trainings and knowledge transfer to help them equip with necessary skills and knowledge.

After the CBO and the local CCDM satisfied with the progress so far, they will held disaster drill from time to time as well as conducting activities and programs that can help them prepare better during disaster. Their collaborations runs for few years, until CBO allocated funds almost ran up or both parties satisfied with the progress made. All of those seven steps can be understand fully through the following table.



Source: The Asian Disaster Preparedness Center 2004.

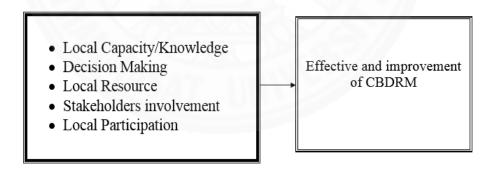
Figure 2.2 Process of CBDRM

#### 2.4.2 The Five Components to Evaluate the Effectiveness of CBDRM

As discuss above, the concepts of D&D, Citizen Participation CBDRM as mentioned above, in the nutshell helps to make CBDRM better. However, the researcher come up with 5 components that can helps to make CBDRM to perform effectively. These five components also can helps to evaluate a particular CBDRM performance in order to look at aspects that can be improved. The idea come up from the assessments of the concepts provided above, which becomes the reference to create a single method to evaluate the effectiveness of CBDRM. First of all, the idea of having D&D in place especially in the case of Cambodia is can be understood as the government effort to decentralize and de-concentrate its powers through the first Commune Election in 2002. This mark the government initiative to

transfer the power from the centre to the periphery in term of decision making and resource mobilisation. This helps to spurred more development initiatives by local authorities due to the newfound liberty and authority. As part of this initiative, local authorities such as Commune Chiefs or Councilors have the right to establish contact or create a partnership with Community based organization to help kick start projects within their mandate.

As being discuss earlier, CBDRM Process put an emphasis on the importance of local participation especially in decision making. The concept basically calling for a better preparation in the case of disaster by coming up with plan execute by the community. As for citizen participation, this concept try to identify and understand different involvement of stakeholders that can influence and invoke sense of ownership to the said project/plans. Based on the concepts aforementioned above, the researcher pinpoints 5 components that can help to see whether a particular CBDRM had performed better and find ways to improved it. The researcher come up with this components in order to make better recommendations and suggestions that can eventually help a better performance of CBDRM. The 5 components can be found as the following:



In term of local capacity and knowledge, this is required to deal with disaster in order to help each government to prepare, or to provide response and recovery immediately and as effective as possible, especially at the local level (Mark et al., 2014). In this study, local capacity and knowledge of disaster management refers to coping abilities as well as human knowledge, skills and capability. Local capacities can also refer to assets, resources and skills of a particular community and these capacities can be used to reduce the risks from disaster. At times, it may include

leadership and management, which sometimes affects the result of CBDRM. Interestingly, each communities may possessed some sort of important assets or local knowledge that has been passed down over generations. This can help to contribute further in strengthening of CBDRM in their community. The knowledge of understanding the warning signs, dealing with disaster during the crisis, local safe and vulnerable areas as well as experience of past disaster provides some vital information in building up the knowledge of CBDRM (Frank et al., 2009).

As for decision making, there is a need for an effective decision making at the local levels including provincial, district and commune levels. Decision in this study means decision concerning resource mobilization, resource allocation, intervention and annual strategic planning on disaster risk management. This also link to an important element in order to be successful in coping with disaster. In the concept of CBDRM, one of the principle point is to make the affected people at the centre of decision making of DRM. Their participation is crucial in order to reap the benefit (Imelda; 2004).

Decision-making plays very important role and actively engage in the process of Community Based Disaster Risk Management (CBDRM) (Shesh, 2006). Moreover, this work also stated that it is difficult to reduce the vulnerability and losses without involvement from people in different level especially at individual and community level. Hence, the participation of stakeholders in decision making is as important as the rest. Within this kind of explanation, there is a need for an effective decision making at the local levels including provincial, district and commune levels. In this stage, the knowledge and capacity of commune committee for disaster management which includes commune chief, police officers, health officers, the elders and monks; all of them are very important in decision making to ensure participation across wide section of the people.

Third component revolved round local resource. Literature of decentralization suggest that the resource availability is as important as capacity and decision-making power towards having an effective local government participation and supervision in CBDRM. Local resource here refers to financial support, local labor contribution in kind that local people might make. Without resource, the activities and implementation will not happen. By having resource alone is not

enough, therefore resources must be utilise in effective way according to priority. Thus, the significant of resource mobilization that community has and has control over and become the integral part of community daily lives (Jonathan, 2011). Availability of resources will determined the life span of a particular project and often such project takes a longer period of time to finish.

Stakeholders involvement is seen as crucial for the success of CBDRM as the operation of disaster management is already a complex situation and involve resource beyond the local capacity. Stakeholder's involvement here may refers to involvement of local individuals, local government, central government and civil societies; any f which have some interest in a particular community. Successful programs mostly taken the participation of stakeholders as one of their main priority. It enables them to understand local's context while having a strong collaboration with the locals. (Qazi 2010). Not add endnote yet Despite CBDRM wide recognized and implemented all around the world, in reality, participation of stakeholders is quite rare. The reason for this is due to the fact that, stakeholder involvement can be time-consuming, eats up resource and requires strong skills. More importantly is cooperation with local authority.

Ideally, CBDRM become a community empowering approach that reduces internal vulnerability of community and dependency on external stakeholders, more importantly during disaster emergency, and that increase the capacity and resilience of the target community. In the absence of the active participation of stakeholders in finding the solutions to their own problems and their lack of involvement in the decision making processes will eventually affects disaster risk management (DRM). It is really hard to achieved CBDRM without involvement from different stakeholder's especially local organization during crisis. The case study suggests that Local NGOs are seen as the source of funding for disaster management activities. During disaster, the local people contact local NGO directly as these NGOs can help them immediately as long as it is within their capacity. However, if report were made to the commune or national level, helps will only come after quite some time or even doesn't come at all. Last but not the least, is the local participation. Local participation argued to be important for CBDRM. Participation can allow the citizens to take part in the governance process by communicating their need for

development, solutions to local problems could be provided thus better sense of involvement and ownership (Jessica, 2008). People in the communities are expected to be actively participating in learning to identify, analyse, treating, monitoring and evaluating disaster risk.

Disaster risk management practitioners commonly agree on the importance of local participation involvement in the community based program. The vulnerable groups are encouraged to be involved in the planning and implementation of disaster risk management activities and work together with all entities at the local, provincial, and national level entities. Community based disaster risk management are aimed at reducing the vulnerability and strengthening the capacity of community in dealing with hazards and disasters. It is imperative that community is directly involved in the implementation of disaster risk actions at the local level. Thus, this study will be using citizen participation to understand how local people participate in communities-based disaster risk management.

## **Summary**

This chapter as can be seen from extensive arguments provides above, basically entails about the concept of CBDRM as a whole. It also touches upon conceptual frameworks that will be used throughout the research, especially in the findings. Overall, it seek to create an understanding of the whole concept and workings of CBDRM by looking at how its come about, its importance and benefit. These understandings will help to bridge with the next chapter which will touch upon CBDRM within the context of disaster management in Cambodia. The next chapter becomes the groundwork for the study that eventually touch upon the case study featured in this research.

## **CHAPTER 3**

### DISASTER MANAGEMENT IN CAMBODIA

This chapter will focus on the workings of disaster management in Cambodia. It start off with extensive explanations on the kind of natural disasters that affects Cambodia the most, with particular reference to drought. At the same time, impacts of drought is shown in the same section. Later on, it will touch upon the reasons for CBDRM as the key strategy for disaster management in Cambodia and how it is executed under the framework of National Committee for Disaster Management (NCDM). This chapter basically introduce the basic information on disaster management in Cambodia that can helps to explain the upcoming discussion.

#### 3.1 Disaster in Cambodia

Kingdom of Cambodia spanned about 181, 035 square kilometer, with the land features consist of floodplains, hilly areas, coastal lands and forested areas, hence its landscape feature mostly either a low lying floodplains, uplands or low mountains. Sharing a border with three friendly Mekong neighbours namely Thailand, Laos and Vietnam; Cambodia sit almost at the heart of the mainland Southeast Asia. Cambodia has a population of 15.577 million according to recent estimate (http://data. worldbank.org/country/cambodia). Overall, there country is administered and divided into 25 provinces, where each province consist many district and several communes before reaching the grassroots level i.e. villages. About 80 percent of the population still lives in the rural, and out of that fraction, 73 percent relies heavily on agriculture for their survivals (FAO, 2011). Therefore, when natural disaster strikes, it hits the country quite hard as many citizen depends on earth and natural elements to provide foods

There are 1,621 communes all together in Cambodia, and 500 of them has been identified as being prone to disaster. SNAP elaborates that, there are 260 communes that are prone to flood while 293 communes prone to drought (NCDM, 2008). The country has identified flood, drought and storm as the main natural hazards that hinders smooth livelihood of the people and caused loss of life as well as

incredible amount of damage both in term of physical and emotional damages. Cycles of disaster has cost the people and the government dearly, therefore it has become apriority than ever to smoothen the impacts of such cycle especially for the Cambodian people. NTS Insight recently ranked Cambodia at the 13<sup>th</sup> spot as the world most vulnerable countries in term of natural disaster (Jonathan, 2017).

In Cambodia, flood and drought has affected the country more than any other kind of natural disaster. Floods normally happens during the monsoon season (May to November annually), when heavy rainfall caused flash floods all over the country, especially settlements near to water body. Therefore, the overflow of Tonle Sap River and the Mekong River commonly expected, as well as small rivers near to these two rivers. However, as the study focuses on drought, therefore it is wise to give priority to natural disaster in relation to drought. Drought is said to be more dangerous than flood, as this disaster is invisible yet the effect is enormous (Leng Heng, 2014). This matter haven't been explore much in the context of Cambodia hence the understanding of the nature of this disaster is not sufficient. In Cambodia, drought normally happens when the prior rainy season didn't produced much for the concurrent dry season and the delay in seasonal rainfall makes the matter worst (ADB, 2016). Apart from that, the local knowledge of geography of surrounding areas complemented with technological data helps to identified two 'dry' areas which expected to have high chance of drought annually, namely Cardamom and Elephant Mountains & Phang Hoei Range. These two mountain range limits the rain movement, creating some sort of rain shadow in the nearby areas, making such place not to receive much rainfall. Therefore, by identifying such areas, this help the related parties to initiate some projects to alleviate the effects of drought in the stipulated areas. However, when the droughts prolongs, it starts to spread to other areas, or such the case when the drought strike all over the country in late 2015/early 2016.

According to the data made available in 2016, naturally, Cambodia experience dry season every year, but there are extremities in the weather as experience in 1986-87, 1994, 1997-98, 2001, 2002, 2004, 2005, 2009, 2011, 2012, 2014; with the worst one before the event of 2015 stated at the year of 2004/2005 (NFFC, 2016). The below table will show the difference in physical impacts of drought that happens in Cambodia from 2004 until 2015.

Table 3.1 Data on the Impacts of Droughts from 2009-2016<sup>1</sup>

Year	Land Affected	People affected by drought	Rice destroyed	Affected Provinces
2004-2005	300,000 H	500,000	Unavailable	14 out of 24
2009	57,965 H	Unavailable	2,621 hectares	13 out of 24
2010	17,532 H	Unavailable	5,415 hectares	12 out of 24
2011	3804 H	Unavailable	53 hectares	Unavailable
2012	14,190 H	Unavailable	3,151 hectares	11 out of 24
2014	116,129 H,	Unavailable	20,289 hectares	Unavailable
2015-2016	77,419 H	2.5 million	Unavailable	18 out of 25

As can be seen from the table above, Cambodia experience drought almost annually in recent years, especially since 2001. From the available data compiled from different sources (see footnote), the impacts of drought in Cambodia still consider as worrisome. Every year during the drought, a lot of rice fields and crops were destroyed, while making the land cannot produce any crops. NCDM has pinpointed 2004/2005 drought as the worse drought ever experience by the country, looking at thousands of hectares of lands affected by this drought (NFFC, 2016). But, the drought in 2015/2016 is totally unprecedented and set a new record of massive destruction all over the country. Never before, it affected so much people and widespread to almost the whole country, in addition nationwide crisis on the alarming limited access to water. This event creates a new sense of urgency for related agencies, especially the government to equip better in the case of expected future droughts. UNDP commented that, the impacts of drought not solely because of

<sup>&</sup>lt;sup>1</sup> 2009, 2010, 2011, 2012 (Leng Heng An (Feb, 2014), Country report of Cambodia Disaster, Kobe, Japan), 2004-2005 (Nyda Chhinh PhD thesis 2015): Drought, Drought vulnerability and Adaptable policies in Cambodia with reference to the farming sector. MoWRM & ADB (June 2016), Preliminary flood and drought risk assessment report, Phnom Penh: Cambodia, 2014, 2015-2016: (save the children (May 2016), EI Nino –induce drought in Cambodia Rapid Assistant Report

government oversight, as the government underwent a major institutional change<sup>2</sup>. However, what the country is lacking is on the infrastructure part, which deem as a major obstacles to handle the matter efficiently.

The impacts of drought to Cambodians cost them dearly. Communities across the country anxiously waiting for the rain in order to bring an end to their sufferings. Dried up rivers, died crops, failure to grow substitute crop, no access to drinking water among other things mentioned as the struggle that the people had to face every time drought strike the country. As more than half of the population relies heavily on agricultural produce as a source of living, droughts is the biggest catastrophe that they could experience in their life. Rainfalls and yearly precipitation helps to determine the output that they are going to get after months long labour on the field. Without sufficient water to irrigate the crops and livestock, the people basically at the mercy of mothernature (NCDM 2012, NCDM 2003). The Cambodian Central Intelligence Agency in their report stated that, agricultural losses closely related to the country's lacks of substantive irrigation system. As of 2014, only about 3,536 KM of cultivated land in the country has been sufficiently cultivated (CCIA, 2014). Shall the cultivated lands properly irrigated, as such found in neighbouring country, such a big losses to both national economy and the people livelihood can be alleviated.

When drought strike, it affects the poor the most as they are reliant on natural elements to make a living. There are instances that, every dry season, especially drought periods, they had to sell their assets and livestock just to get by. Some brave enough to take loans in order to survive or initiate efforts to dig well, buy bottled water or water pumps (Sophea, 2016) https://www.europe-solidaire.org/spip.php?article39411. As farming and fishing cannot be done, they are unable to do anything for a living, and left to their own device (Carlso, 2016). Therefore, it is normal to see migration to areas that is not affected by the drought during this time, just to find a job to pay for their ends meet. In this regards, children were affected the most as the parents refused to allow them to go to school in order to help them to take

<sup>&</sup>lt;sup>2</sup> https://www.cambodiadaily.com/news/prime-minister-warns-of-water-shortage-amid-drought-111705/

or find water<sup>3</sup>. Even they were to be allow to go to school, the school also unable to provide the children neither drinking water nor sanitation. Therefore, in times of drought, they are the most vulnerable groups as they suffer from poor nutrition due to difficulties caused by such situation.

In term of health and nutrition, the general public that is affected by the drought contracted weather related sickness such as heat strokes, malnutrition due to lack of food, diarrhea due to consumption of unsafe drinking water, fever and different kind of respiratory problems (Caritas, 2016) http://www.caritas cambodia. orgindex.php/cambodia-drought-emergency-appeal-2016. Related agencies scrambles their resources and mobilise helps to alleviate these developing problems alongside with other impacts of this disaster. In short, often the time, when drought strike Cambodia, the country preparedness to handle the situation can be said as lacking. Despite it is a known fact that drought will happen annually, yet the relevant stakeholder unable to respond effectively as well as make an improvement to lessened the impacts of drought. As can be seen, 2004/2005 was seen as the worst drought happened in Cambodia, yet, 2015/2016 set a new record. If such pattern continues, it is expected, such drought will become even worse and frequent, thanks to unpredictable climate change happened around the world. Therefore, for quite some time, Cambodian authorities working on CBDRM as a mean to help the community to better prepare themselves for such situation at the same time to create a strong response program shall disaster strike Cambodia.

### 3.2 Community Based Disaster Risk Management in Cambodia

Cambodian government pinpoint disaster management as a key component of its social and economic planning (Leng Heng, 2014). In a sense, natural disaster such as floods and droughts have caused serious damage and loss to Cambodia, and at the same time, becomes and obstacle for the government's efforts to enhance the economy and overall well-being of Cambodian society. As more than

<sup>&</sup>lt;sup>3</sup> UNICEF Cambodia. http://www.scmp.com/news/asia/southeast-asia/article/1945488/drought-and-soaring-heat-leave-cambodian-schoolchildren

half of the population depends on agricultural produce, natural disaster therefore the enemy of the people and state. Hence, the government initiate a program to empower the people to combat such problems through knowledge empowerment. Hence, CBDRM comes into the picture, as this this measure help not only to reduce the vulnerability of the people in the long run, but it also can helps to alleviate poverty. By having CBDRM initiated in each communities, the government hopes to lift up the livelihood of the people by first making them able to cope with such disaster first.

Cambodian government sees CBDRM as a strategy to empower the people to cope with disaster and eventually reduce their vulnerability by first building up the existing capacities knowledge to be upgraded with up to date coping mechanisms (Leng Heng, 2014). Disaster management envisioned will be a long term plan to help the people to get by in case of disaster and later on learn to increase their standard of living after they capable to turn disaster into opportunity. In order for it to work, it must receive strong support and participation from many actors so that it can be successfully executed. After a while, it is expected that the communities will develop long term capacity to adapt. In short, CBDRM is selected as the most suitable way for the Cambodian government to help the people in the long run by assessing the core of the problem.

# 3.3 Structure & Frameworks of National Committee for Disaster Management (NCDM)

To facilitate the coordination and formulation of CBDRM at the grassroots level, Cambodian Government established National Center for Disaster Management in 1995, to establish a leading management agency solely overseeing disaster management in coordinating between stakeholders to prepare for disaster, coordination during disaster and reconstruction efforts post disaster as well as to regulate the running of active NGOs working in Cambodia. It is created under special sub decree No. 54 ANK-BK to entitle this agency to do their work effectively (Casals, 2013). NCDM presided over by the Prime Minister himself and other representatives from 22 government ministries. Cambodian Armed Force and Police also have a role in this agency. Cambodian Red Cross becomes core partner in emergency response in

case of disaster through a MOU made in 2007. As of 2015, the agency complemented with 'Law on Disaster Management', whereby this law becomes the template for the roles, responsibility and structure of NCDM to make it an even more effective agency handling matters related to national disaster. Article 2 of the law stipulated the agency main task as to prevent, adapt and mitigate pre disaster period as well as to create an organic emergency response efforts across all sectors/actors during and recovery post disaster (NCDM, 2015). The table below will show the whole frameworks of NCDM through the workings of its secretariat.

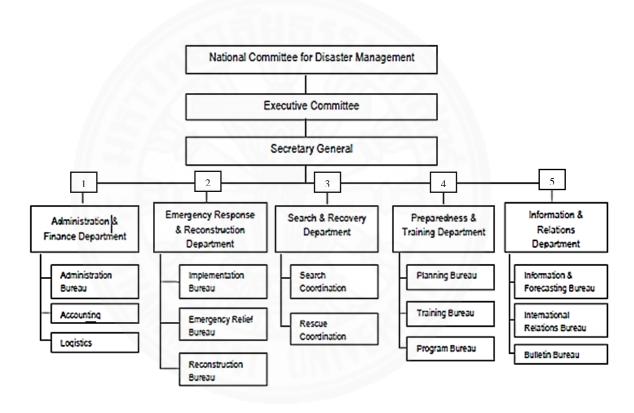


Figure 3.1 Structure of NCDM Secretariat

From the table shown above, it can be seen the division of different workings of NCDM. The division stated number 1 & 5 specifically deals with general matters related to disaster management. While the division No. 2 basically focuses on emergency response during the disaster and reconstruction post disaster. As during disaster, especially during flood for example, a lot of people going missing, division no. 3 will works in this particular area. While division no. 4 i.e. preparedness and training primarily concern with the level of national preparedness towards any

disaster. All in all, through NCDM Secretariat, the works is quite specific and aligned to each particular scenarios of different kind of disaster. This secretariat basically the heart of NCDM. Furthermore, NCDM and the Law of Disaster Management follows the recent institutional changes (decentralization and de-concentration of government roles) instituted in 2001, whereby bottom up approach is emphasise at the same time delimits disjuncture while implementing such strategy. Therefore, the structure of NCDM goes deep into the village level; as can be seen from the table shown below.



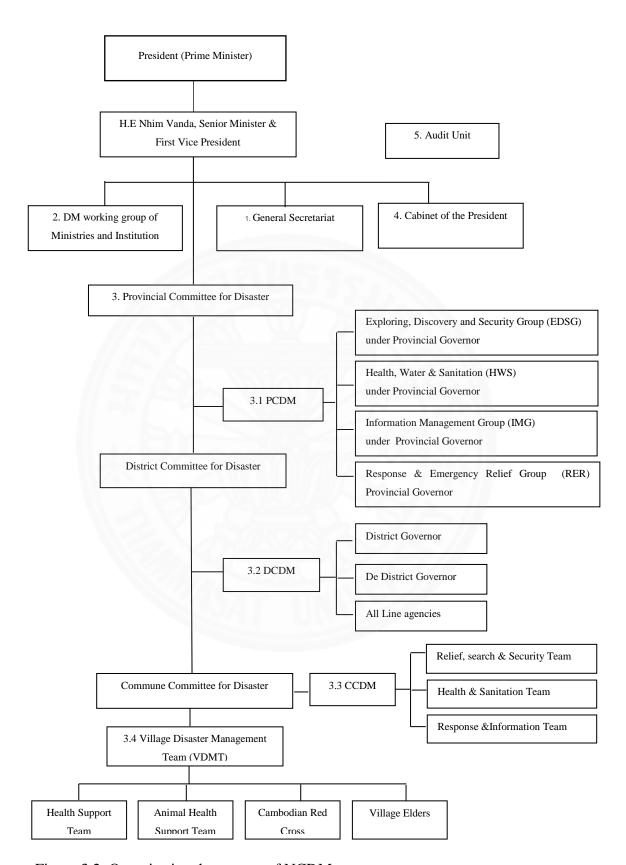


Figure 3.2 Organisational structure of NCDM

Looking at the organizational structure above, the workings of NCDM following this structure is quite substantive. As it follows the decentralization policy of the government, this agency is structured in such a way it works both bottom up & top to bottom approach. The agency headed by the Prime Minister himself, showing the importance of national disaster management priority for the government. However, the real 'overseer' of the agency is The First Vice President of NCDM, concurrently headed by His Excellency Nhim Vanda, Cambodia's Senior Minister. As the de facto president of the agency, the Vice President is tasked to administer the smooth running of the agency in fulfilling its objective to prepare the country in case of any disaster as well as effectively carrying out its duties to coordinate relief efforts shall disaster strike as well as to initiate port disaster reconstruction initiatives. In NCDM, basically, the Vice President have to follow up and administer 5 different parts of the agency, namely General Secretariat, Disaster Management working group of ministries and institutions, Sub National Committee for Disaster Management (Provincial, District, Commune & Village), Cabinet of the President and the Audit unit. Basically, the Cabinet and audit unit separated from the rest, as these two functions as to facilitate the running of NCDM, specifically to assist the President and Vice President to execute initiatives or emergency matters as well as to create a check and balance for the agency. As for the Secretariat, as being explained earlier, this is the heart of the NCDM which helps to bring about National preparedness in case of any disaster.

NCDM also includes important ministries and Institutions in the shaping up as well as the implementation of disaster related projects or programs. Ministries such as Ministry of Water Resources and Meteorology (MWRM), Ministry of Health (MOH), Ministry of Education (MOE), Ministry of National Defense (MND), Ministry of Agriculture, Forestry and Fisheries (MAFF), Ministry of Rural Development (MRD) and Ministry of Public Works and Transport (MPWT); all these ministries create a working group specifically to discuss and plan their roles to prepare the country better in case of disaster or in case of emergency relief. NCDM also integrated relevant organisations and institutions to give a better review and guide for NCDM to become better in achieving their goals. Institutions such as United Nations Disaster Management Team (UNDMT), United Nations Children's Fund

(UNICEF), Food and Agricultural Organisation of United Nations (FAO), World Food Program (WFP), Cambodian Red Cross (CRC) and World Health Organisation (WHO); all of these organizations and institutions provide their own working group to help giving their input in NCDM (Jerome Casals, 2013).

The third section of the agency concern with the Committee for Disaster Management at the sub national level, consisting from the Provincial level up to the village. As can be seen, each Provincial committee divide its works into different groups namely the exploring, discovery and security group, health, water and sanitation group, information management group and response and emergency relief group; of all in which under direct supervision of each provincial governor. This is due to ease the burden of the secretariat as well as to streamline projects, program and implementation in the sub national level. For Districts and Communes level, both have the same structures that includes 3 main teams namely relief, search and security team, health, sanitation and water team and lastly response & information team; each of which under direct supervision of either district or the commune authorities/committee members. The grassroots level i.e. village will mostly concern and follow the initiatives of the communes leaders in order to prepared in the case of any disaster or relief efforts during and post disaster.

After a prolong explanations on NCDM, it is wise to introduce how the NCDM works in case disaster struck Cambodia. Basically, all the above groups and division, may it be at the national or sub national level have some sort of trainings and knowledge on how to respond in case of disaster. As disaster can strike anytime, therefore the emergency relief efforts will be bottom up approach, according to the timeline since the disaster struck. For example, immediate response will be conducted by frontline actors such as volunteer groups, local authorities (districts, communes, village chiefs) local police and Community Based Organisations. These actors will proceed with by sending people to safe areas and helping injured persons to health center. This will be their ultimate goals. Other actors such as monks, laymen, NGOs and charitable individuals proceed to help in giving food and water to the affected community. Some also provide basic necessities such as gasoline as a source of light at night, temporary tents, and medical supplies for example. Within 24 hours, NCDM will access these areas to give better relief measures to the affected communities with

the help of frontlines actors and the military. NCDM will smoothen the coordination at the field by making constant adaptations to the needs of each particular area and feedbacks from all the actors on the field. In short, this is the scenario that NCDM laid down in case of disaster strike i.e. by preparing frontline actors to respond to such situation to limit the impacts of such disasters to people's lives. Therefore, it is crucial for NCDM and related parties to constantly being trained and updated in order to assess their preparedness in case of disaster.

Yet, looking at how NCDM respond to the drought situation in 2015/2016, NCDM failed to deliver help unless there is direct intervention by the Prime Minister himself. Despite the situation aggravate to become worse in 2016, NCDM failed to deliver water and provide relief measures to the affected communities. Not only that, on the community part, this means the communities relies on NCDM and the government to provide them all the required necessities. Such situations still happened, despite endless drills and trainings given. Therefore, in such cases, CBDRM play more important role than ever to help community in case such help doesn't come at all. At the same time, CBDRM help to the communities to prepare better in any situations with or without government help.

#### 3.4 Function, Roles and Responsibilities of Local Authorities (Commune & Village)

In Cambodia, the government sub divided into two main segments; the national (central government) and the sub national level. This section, the study will discuss about the sub national level on the roles and responsibilities as well as their overall operations. The local authorities mentioned here, in Cambodian perspective not similar to the conventional one, rather it refers to the authorities at/near to the grassroots such as the Communes and Villages. The individuals whom given authority by the government is actually have to gone through natural process of by election. The positions such as Commune Chiefs, Commune Councillors and focal persons; all of these positions have to be contested in Commune election. Another group of profession that falls into local authorities includes Police officer, health inspector and officer, school president and Village head (normally appointed by Commune Chiefs).

All of these 'authorities' is serving the need of the local people through their specified roles and responsibilities of which the details of each will be discuss below.

With regards to disaster management, at the commune level, there is a committee who responsible in this matter namely "Commune Committee for Disaster Management (CCDM)" which is divided into three group including Relief, search & Security Team (Police officer, Primary School Custer, commune chief and volunteers), Health & Sanitation Team (Commune Health Center director - Animal Health Agency (Vet) - Women & Children's Affairs) and Response & Information Team (Red Cross Volunteer - Chief of Commune - Oldest in Commune) and commune chief is the vice-chair (See Table 5). The structure and division of task of CCDM are as the following:

Table 3.2 The structure and division of task of CCDM

Task Area	Commanded by	Main task
Commune Committee for Disaster Management (CCDM)	Secretary of CCDM	<ul> <li>Establish Disaster Risk         Management and Commune         structure for Disaster Management         in all commune</li> <li>Acting as the main authority during         and post disaster at commune level</li> <li>Answerable to the National level         (NCDM)</li> </ul>
Relief, search & Security Team	<ul> <li>Chief of Police Force at the Commune/Sangkat (President)</li> <li>President of Primary School Assocition at the Commune (Vice President)</li> <li>Police, teachers, Volunteers (Members)</li> </ul>	<ul> <li>To help citizens in need</li> <li>Help to search missing persons</li> <li>Provide security</li> </ul>
Health & Sanitation Team	<ul> <li>Director of Commune         Health Centre (Head of         Operation)</li> <li>Animal Health Inspector         (Deputy Head))</li> </ul>	<ul> <li>Providing health services and inspection all the time</li> <li>Making sure smooth operation of health services during disaster strike</li> <li>overseeing health of both Women/Children health and Animal</li> </ul>
Response &Information Team	<ul> <li>Appointed Representatives from Cambodian Red Cross (President)</li> <li>Appointed elderly from the Commune (Vice President)</li> </ul>	<ul> <li>Counting the head of each communes to ensure all are taking care of</li> <li>Providing vital information that can help to bring about an effective CBDRM</li> </ul>

As can be seen above, all the task areas has been assigned and each of it come with their own responsibilities. CCDM responsible for many things, for example to come up with plans for disaster risk reduction as well as emergency preparedness and response; coordinate with district and village level DRM and to implement disaster management policies and strategies.

As for Village Disaster Management Team, it is the smallest unit that exist within the whole structure of DRM in Cambodia. VDMT as it called, focus more on overall welfare of the village as a close knit neighbourhood. In such a way, the group trying to make things better in the village by disseminating knowledge about disaster, educate them how to prepare and respond, spread warnings if there is any incoming threats and help people evacuate during emergency. The structures of VDMT is limited to health and sanitation as the most basic requirement needed in the village, while other task jointly carried out by local elders and police. Despite like that, this Team have a vibrant cooperation and information sharing sessions to help them identify any problems as well as to come up with solutions to it. Most of the people involved in the Team basically work on voluntary basis and anyone can report to the group if there is a sign of impending threats especially on disaster. In normal process, if the team in need of assistance, it need to go through the hierarchy (Top to Bottom approach) yet, in case of emergency, the team can opted to seek for help from local Community Based Organisation (CBO).

### 3.5 Volunteerism in Cambodia

From can be seen, volunteering plays an important role especially in CCDM. In Cambodia, volunteerism amongst the youth is quite impressive and active. Every Cambodians proud to volunteer at least one of the NGO working in various issues across the country. Generally, there are two forms of volunteerism in Cambodia, namely traditional kind of volunteerism, such as scout or girls guide or the new trend of volunteerism driven by a particular issue such community, women, youth empowerment, poverty reduction etc. The earliest form of volunteer that can be observed is from Pagoda Association that existed since 1970's, suffering a set back during Khmer rouge and reemerged afterwards in the 80's Eva Mysliwiec 2005.

In recent years, Volunteerism especially amongst the youth in their high school years or university level has seen a significant increase year to year engaging with society to help providing aids and solutions to the needy. There are about 50-60 youth initiated organizations in the country according to a study conducted by Forum Syd in 2002. These organization could help to shape the future as the youth represent the majority of the population with nearly 70% out of 13.4 million people who are under 30 years old. These youth activities include that to promotes a responsible and civilized youth, encouragement of activities that could led to social improvements and change, which all these activities contribute to their development and character building. This can help to develop some sort of confidence that could be beneficial for their later adult life. These organizations exist with the aims to create a better future for Cambodian society as a whole.

Youth in Cambodia are engaging in various issues such as human rights, good governance, social, political issue and natural resource, of which their participation based on voluntary basic with a strong support by local and international organization who work with youth to develop and enhance their knowledge. As for the organization or community based organization who are working in the provinces or rural areas, they rely the youth as their focal person as they are still young with desire of learning. Generally, youth who wants to participate in a particular society or community, they can do so by asking help from Cambodian Red Cross and youth organization to assigned them where is appropriate. However, youth affiliated with Cambodia Red Cross does not really have much activities at the remote areas as the community have issue to accept them or to host them due to their own constraints. On contrary, many organization who work in community level as well as at the national level opted to choose youth as focal person and provide them with training and assign some work to them beside study hours. This is different from the former as these organisations basically nonpartisan and favours restraints from political issue, different from CRC.

Therefore, volunteers in CCDM usually come from youth from CBO and the locals without any political influence or motives. Disaster at the community level is one the issue that local authorities as well as CBO targeted to send their volunteers as it needs participation as focal person or guide. As disaster does not happen often, these youth therefore switch their roles in various issues at the community depending on organization and CBO activities and vision. Through such experience, the youth can understand their society better and at the same time equipped themselves with proper knowledge and trainings, shall that day come that needs their immediate help. At the same time, this helps them in finding proper jobs and filling their spare time with beneficial activities

### **Summary**

Natural disaster in Cambodia had caused the country and the people dearly. As disaster prone country, Cambodia cannot escape but to face this challenges head on. Their main concern is the long term impacts of these disaster to the people as it hinders the long term socio economic developments of these communities. Together with insufficient infrastructures across the whole country, this makes it hard to mobilise emergency response effort in case of disaster. Therefore, CBDRM has been pinpointed as the way forward to handle this situation effectively. CBDRM has been recognized as a successful disaster risk reduction that could led to considerable reduction in communities vulnerabilities. As global phenomenon of climate change makes the climate unpredictable thus translated into different timing when the season going to change. In simple terms, due to global warming, it is hard to predict the next dry or monsoon season, and often the drought period is getting harsher as year goes by. Therefore, there is a sense of urgency for the people to equip themselves with necessary knowledge and trainings to cope better in these kind of situations.

Notwithstanding that, CBDRM in Cambodia also envisioned as a method to lift up the standard of living of the people and get rid of poverty altogether. This can be done by empowering the communities to cope better in time of disaster by preparing them prior, during and post disaster scenarios. With the help of Community Based Organisation (CBO), local community will be guide through on the shaping up of their own CBDRM plan and the following implementation and training. In the long run, Cambodian authorities hopes the people and communities can break themselves and create opportunity out of this cycle. National Committee of Disaster Management (NCDM) therefore established in 1995 and overtime integrate CBDRM as the focal strategy to prepare the communities against any case of disaster as well as to train the frontline actors to gives emergency response. NCDM receives the help and

suggestions from many international organisations in order to improvise their national preparedness plan from time to time.

However, looking at how the NCDM has been working during the drought in 2015/2016, their performance in handling the situation can be seen as inadequate. Emergency response and supplies mainly played by the frontline actors and NGOs. If not because of the intervention of Prime Minister himself, basic necessities such as drinking water will never arrived to the needy in time. Therefore, the next chapter will features the findings found during the fieldwork conducted by the researcher. The same situations can be found hence the communities and CBO basically left to their own device. The drought of 2015/2016 gives an opportunity to see how the frontline actors play their role based on their performance and all the challenges that they faced.

### **CHAPTER 4**

### FINDINGS FROM FIELDWORK

In this chapter, the study will explain about the all the findings acquired during fieldwork. To ease the understandings of the whole findings, this chapter will be divided into 4 main part, namely general information of the two communes including that of Life With Dignity (LWD) as the prominent Community Based Organisation (CBO) that works in these communes, 7 steps process in empowering CBDRM in the two communes and 5 components to explain the progress that had been made by these communes. Later on, it will be followed with a summary that will help to pave the way for the discussions in the final chapter.

# 4.1 General information, Geographical & Environmental features of the Two Communes

Ta Sal and Reaksmey Samaki communes are located in Oral district in Kampong Speu province and these two communes affected by disaster almost annually especially drought because of their geographical location. The following are the information about the two communes.

### 4.1.1 Ta Sal commune

Ta Sal is one of the commune in Oral district and it comprised 17 villages which is divide to upstream and downstream in Kampong speu province, it about 53 from the province. There are 1409 households which is total 6845 people including 3467 as female. The main occupation of the people in this commune are farmer including rice farming and some works as rice workers, factory workers and getting some timber in the forest for their survival. Drought is identified as the most serious disaster than any other type for this commune. Normally, the people in this commune rather migrate temporary during drought and return when the season ends. Drought in recent years has become so rapid that, the people accumulated debts just to survive and lose their ability to pay. Drought normally happened between June to August but in 2015/2016 it prolongs than usual. As the land areas is soil mix with

sands and highland areas so it is hard for people to dig pond to retain water, on top of financial woes to do so. Land related issue is not only the issue in this commune but climate change and rapid deforestation in the last decades further change the course of the nature wellbeing and force the situation become worse than ever (Ta Sal commune report by LWD, 2015)

### 4.1.2 Reaksmey Samaki commune

Reaskmey Samaki is one of the five communes in Oral district in Kampong Speu province and comprised 8 villages. This commune is situated at the highland area and mostly it's use for agriculture. There are 23,306.95 hectares of lands, which is include 6063 hectares accountable for agriculture, 12261.1 hectares are for farming such as to grow rice, sugar cane and some other crops and the rest of land is for settlement. The commune features water bodies such as 4 irrigation schemes, 8 small lake which traditionally exist for quite some time, 35 wells pump, 15 small pond and 1 rain pool. Reaksmey Samaki is the newest commune among other communes in Oral district. Because of Khmer rouge, people moved out from this area only to return in 1980. People generally could do rice farming just once time a year, that is during rainy season. Below is some historical record of disaster that happened in this commune:

Year 1994 -2004, recorded severe drought happened in 1984 and 2002. Year 2000 was flood but since 2006 till present, drought dominated the record especially in year 2015/2016. The commune normally experience disaster such as drought, fire forest, storm and thunderstorms. Life with Dignity report (2015) stated that severe drought resulted in severe damage to their crops and affected their productivity and income. The commune has to allocate the usage of the scarce water for drinking, crops and animals. In relation to climate change, for the past 10 years, there is an observable changes especially in the duration and frequency of such drought happened. Such prolong drought exhausted water retain during the rainy season, which in the past is enough to get them by. The commune normally observed drought from February to May and July (Reaksmey Samaki commune report by LWD, 2015)

### 4.1.3 Community Based Organisations working in the Two Communes

A number of organization is working this district as well as these two communes in various issues, yet only Life with Dignity (LWD) as community based organization who provide the training to local people as well as local authorities how to cope with disaster. Life With Dignity or LWD as a prominent Community Based Organisation, not only in Aoral District, but in whole Cambodia, has long established itself in the Aoral district. LWD has dominated CBDRM building process in the whole district, therefore it is wise to give a brief background on Life With Dignity. This organization, initially an associate program to that of a renowned and well established Lutheran World Federation (LWF), was named Australian Lutheran World Services (ALWS) before it was restructured and renamed to LWD in January 2011. LWD aims to empower rural community to claim their rights, create a sustainable community development projects while at the same time improving their standard of living. With the core values of justice, equity, people's participation, transparency and accountability; LWD work following four main approaches namely the empowerment approach, integrated approach, right-based approach and lastly the community based approach. Fitting the research, this study will only focus only on LWD works based on community based approach in the Ta Sal and Reaksmey Samaki commune.

LWD community works in Aoral District can be traced back from its initial years as an associate program to Lutheran World Federation, whereby at that time, it was called as Australian Lutheran World Services (ALWS) and was tasked to do community works in Aoral District since 1997. It covers all five communes existed in Aoral namely Haong Somnon, Reaksmey Samaki, Ta Sal, Trapeang Chor and Sangkea Santorb. During that time, Aoral district was chosen due to this district received frequent disasters such as flood, drought and storm. On top of that, as this district is far from any urban centres, there are not many organisations willing to spend time and do community works in the district. Since then, LWD as the pioneer organization, have contributed a lot in community building and empowerment for the past 2 decades in Aoral district. About 80 percent of the existing roads in the district were built thanks to the initiative by LWD, together with basic infrastructures and education facilities throughout the district. LWD continuously maintain relations with

the National Committee for Disaster Management (NCDM) and Cambodian Red Cross (CRC) in facilitating exchange of reports in its efforts to integrate CBDRM into local development plan.

LWD reserved the rights to choose which commune or district to do community work as stipulated in the Sub-Decree on Decentralization of Powers, Roles and Duties to Commune/Sangkat Councils (Royal Government of Cambodia No. 22 ANK/BK) which allowed local authorities to do whatever is necessary in order to promote and fasten development in their own commune, including inviting NGOs to help bring in development to their community. This is only allowed, as long as it served the interest of the community, then permission from the national government is not needed. Therefore, LWD need to keep transparency of its work to relevant stakeholder, it free to pursue whatever it seems necessary to achieve what is the best for each commune, as long as it established relationship with the local authorities. LWD will stay or stationed in each commune according to the initial assessment that they already process, translated into budget and resource allocation for the proposed project. LWD also conducted annual evaluation of each commune that they worked on based on criteria that they already set up i.e. Grade A as zero basic knowledge of CBDRM to Grade D as advance knowledge of CBDRM, whereby the commune has been able to learn/absorb all the knowledge and trainings that had been given and at the same time been able to utilise the resource available to them in time of disaster. Once the commune reaches this point, LWD will proceed with their exit strategy whereby there will be six months of continuous monitoring before LWD leave the commune (LWD brand manager).

As for this study, the researcher chooses two villages in Ta Sal (Ta Sal & Doung) and Reaksmey Samaki Commune (Prey Thom & Pos Veak) to complement the study. Both communes were affected the most by the drought in late 2015/early 2016 in Aoral District and worth studying as both commune just started to work on their CBDRM plan for their community since 2011. Drought in 2015/2016 give a time to reflect back on their preparations dated back to 2011. Below are some discussion related to general information of each commune.

# 4.2 The CBDRM Process: Providing Information on How the Two Communes Run CBDRM Process

The CBDRM Process that includes seven steps had been discussed in the previous chapter, in this section, the study going to look at how these two communes running their respective CBDRM process. Generally, these two communes haven't completely finished all the process, as there is only one CBO name Life with Dignity (LWD) who running these two communes. The main focus for this section is to know the two commune's performance related to local authorities and local participations.

### 4.2.1 The 7 Steps Process Towards a Sustainable CBDRM

Life With Dignity employed the 7 steps process to guide and develop each communes to have their own CBDRM. These steps, commonly called as 'CBDRM Process' entails each steps that the communes have to gone through until they are fully equipped with the basic knowledge and trainings on CBDRM. As this research focuses on drought, LWD as the main Community Based Organisation working in these two communes use this 'Process' to evaluate the level of readiness of each communes shall drought strike them again in the future. LWD seek to reduce vulnerability by building a sustainable CBDRM system for each commune. The steps of works in establishing CBDRM involved first selecting the community and followed by getting to know the selected community. Then the NGO can proceed with the umbrella authority that will be in charge in this, which later on will carry out participatory disaster risk assessment. After establishing the umbrella authority, or better known as Committee for Commune Disaster Risk Management (CCDM), this authority joint hand with NGO to carry out participatory disaster risk management plan, by inviting the representatives from the community to give their input that can help to shape their community CBDRM plan.

Once the plan is solidified, the NGO can carry out trainings and knowledge transfer to the community according to the plan. Later on, the Committee will be ask to carry out the plan according to the knowledge and trainings that had been given by the NGO, with close supervision of the NGO itself. After a while, when the community is ready to be assess for their preparedness, the NGO will evaluate and

assess their performance according to their own indicators before proceeding with exit strategy. Once all of these steps have been achieved, then LWD may move to another location as the commune is deem to be ready to run their own CBDRM. To see the whole picture, Table will help to give a clear picture on each process that each commune had in each step.

Table 4.1 'CBDRM Process' of Each Commune

Steps/ Process	7 Steps of 'CBDRM Process'	Ta Sal	Reaksmey Samaki
1 <sup>st</sup> Step	Selecting community (the selection is based on the criteria of each NGOs or CBO) such as frequently struck by disaster including drought, storm and flood, the remote it is, the less NGOs willing to stationed there	<ul> <li>Disaster frequently happen</li> <li>Not many NGOs or CBOs are working in this areas</li> <li>Accessibility to the information is limited</li> <li>Poor community</li> </ul>	<ul> <li>Disaster frequently happen</li> <li>Not many NGOs or CBOs are working in this areas</li> <li>Accessibility to the information is limited</li> <li>Poor</li> <li>Land concession areas</li> </ul>
2 <sup>nd</sup> Step	Rapport Building and Understanding the Community (building relationship or win the trust of the local people and authorities. This to ensure smooth working relations between the NGO and the locals by learning political, economic and social systems).	LWD has been around since before the introduction of CBDRM in the country	LWD just started their operations back in 2012 yet the village chiefs have experience in working with NGO
3 <sup>rd</sup> Step	Participatory Disaster Risk Assessment (PDRA) (This is the process to identify the risks that community faces and how people overcome these risks. The process involves hazard assessment, vulnerability assessment and capacity assessment)	Monthly meeting     between LWD and     local authority     including Commune     Committee for     Disaster Management     (CCDM), the overall     assessment for local     people in term of     hazard, capacity and     vulnerability     Selecting focal     person to work with	<ul> <li>Monthly meeting         between LWD and         local authority         including Commune         Committee for Disaster         Management (CCDM),         the overall assessment         for local people in term         of hazard, capacity and         vulnerability</li> <li>Selecting focal person         to work with</li> </ul>

Table 4.1 'CBDRM Process' of Each Commune (Cont.)

Steps/ Process	7 Steps of 'CBDRM Process'	Ta Sal	Reaksmey Samaki
4 <sup>th</sup> Step	Participatory Disaster Risk Management Planning (this is the planning stage after the results of participatory risk assessment. People themselves identify risk reduction measures that will reduce vulnerabilities and enhance capacities. These risk reduction measures then translated into a comprehensive community risk management plan).	<ul> <li>Head of households are invited to join give some inputs as the NGO will come up with a plan for the whole community</li> <li>Less local people participated in such activity</li> </ul>	<ul> <li>Head of households are invited to join give some inputs as the NGO will come up with a plan for the whole community</li> <li>Local people interested to participate in the making of such plan</li> </ul>
5 <sup>th</sup> Step	Building and training a community disaster risk management organization (CDRMO) (Disaster risk are better managed by a community organization that will ensure that risks are reduced through implementation of the plan).	<ul> <li>LWD designed specific training that fits the local requirement such as early warning system, coping strategies, emergency response and preparedness.</li> <li>The coordination network with local authority had been established</li> <li>This commune has completed their trainings and knowledge transfer</li> </ul>	<ul> <li>LWD designed specific training that fits the local requirement such as early warning system, coping strategies, emergency response and preparedness.</li> <li>The coordination network with local authorizes had been established</li> <li>This commune continue their trainings and knowledge transfer</li> </ul>
6 <sup>th</sup> Step	Community-Managed Implementation (CCDM should lead the implementation of the community plan and motivate members of the community to support the activities in the plan).	LWD monitors the Committee for Commune Disaster Management (CCDM) strategies and implementation	LWD just started monitoring the Committee for Commune Disaster Management (CCDM) strategies and implementation
7 <sup>th</sup> Step	Participatory Monitoring and Evaluation (The last step whereby, the CBO will assess overall performance of the commune CBDRM preparedness and long term monitoring to ensure the commune remains committed to the CBDRM plan created).	<ul> <li>LWD have their own grade of evaluation from A to D, which is A as the lowest vulnerability and the highest rate of preparedness.</li> <li>This commune will be monitored for 6 more months before LWD will pull out from the commune</li> </ul>	This commune haven't reach this step yet

## 4.2.2 Ta Sal commune's CBDRM process

Looking from the table shown above, Ta Sal Commune under the guidance of LWD have done a lot of improvements in order to help them to cope better during drought. LWD as the main CBO working in the commune received lukewarm reception from the local authorities to work on this matter. This commune had been selected to implement CBDRM as this commune is known to be pronedisaster, and not many NGOs who are working in this area especially in disaster management issue; accessibility to the information is limited due to its remote location so radio or television news is less accessible to get the information; the people are generally poor and majority of them are less educated.

According to the CBDRM Process, the second step is to build relationship with the local authorities in order to gain their trust by understanding their social, economic and social issue. However, LWD skipped this step the commune establish contact with LWD way back since 1997. In the 3<sup>rd</sup> step, LWD is working closely with local authorities (CCDM and VDMG) as well as local people at this stage in order to identified the risks that Ta Sal commune faces and how to overcome these risks. The process involves hazard assessment, vulnerability assessment and capacity assessment. In this stage LWD also selects focal person mainly from the youth to be as the focal person for the purpose of training, and use those knowledge to help the community. They also the one who share the information to local people, at the same time CBO as well as local authorities could contact them for any queries.

For the step 4, head of household are invited to join by giving inputs as the NGO will come up with the plan for the whole community, yet in this commune, less people participate in such activities due to people rather migrate, majority of population made up elders, they are poor which make them less interested in social activities. Even though participation does not meet the requirement but LWD continue to use whatever data they have in coming with specific training related to early warning system (who they should contact and how to report when disaster hit in their community), coping strategies emergency response and preparedness. In this stage, community encouraged to support the activities in the plan and LWD stand only to observe and monitors how the commune committee for disaster management

(CCDM) conduct their operations in according to the plan. What is quite worrisome for this commune is, they rather rely on LWD to execute the plans or just ask and wait for help from the district and provincial level to come, as in the case what is happening in 2015/2016. Even though Ta Sal Commune is well on its way to finished all the 7 steps required to have their own CBDRM, yet according to the replies given by LWD staffs on the ground, Ta Sal commune has been less productive in following the CBDRM plan. Thus, LWD speed up their operations in the commune looking at the cost and benefit of maintaining their operation there.

### 4.2.3 Reaksmey Samaki's CBDRM process

There is not much different between this two communes in term of the 7 steps process of CBDRM by starting the selection community and end up with the seven steps of participatory monitoring and evaluation.

There is a CBO name LWD who is implement the process of CBDRM by supporting and collaborate with local authorities. This commune had been selected to implement CBDRM as because this commune is known as pronedisaster, not many NGOs who are working in this area especially in disaster management issue, accessibility to the information is limited because it is remote areas so radio or tv news is less accessible to get the information, this is the land concession areas which is clear the forest to build the houses and re-grow the again. In the concept of CBDRM second is need to build relationship with the local authorities in order to build the truth by understanding their social, economic and social issue, yet this step does not exist in this commune as LWD is working in this areas since 1997 with different issues so the truth and relationship already happen for a certain extent. LWD is working closely with local authorities (CCDM and VDMG) as well as local people at this stage in order to identified the risks that Reaksmey Samaki commune faces and how people overcome these risks. The process involves hazard assessment, vulnerability assessment and capacity assessment. In this stage LWD also selecting focal person mainly youth to be as the focal person in the mean of joining the training, and use those knowledge to help the community. They also the one who share the information to local people and CBO as well as local authorities could contact them for any queries. For the step 4, head of household are invited to join by giving inputs as the NGO will come up with the plan for the whole community, local people are

really active to participate as well as focal person. LWD had been designed specific training based on result of measurement related to early warning system (who they should contact and how to report when disaster hit in their community?), coping strategies emergency response and preparedness). Reaksmey Samaki commune is still in this stage which is working closely and active with LWD. Even though, local authorities integrate their strategic plan from LWD but a lot of contribution and ideas this CCDM. LWD is monitors commune committee for disaster management (CCDM) strategic and implement.

# 4.3 The Five Components Explaining How Each Commune run CBDRM

Earlier, the study touch on the 5 components to assess and improve the effectiveness of each CBDRM plan. To complement this research findings, the study employed this framework to see how each commune run their CBDRM based on the findings found. The five components include local capacity and knowledge, decision making, local resource, stakeholders' involvement and local participation. Below are the table that shows what each commune has or don't have as part of their CBDRM. Later on, there will be overall overview of both communes in regards of the five components to facilitate this section.

Table 4.2 Commune run CBDRM Plan in relations to the 5 Components

5 Components	Ta Sal	Reaksmey Samaki
Local Capacity/Knowledge	Absence of emergency	This Commune have basic
(Human knowledge (how to	respond and immediate relief	knowledge and trainings on
cope with the disaster; the	efforts coordination	how to cope with draught
combination of all the	<ul> <li>This commune have no</li> </ul>	<ul> <li>This commune actively</li> </ul>
strengths, attributes and	basic knowledge and trainings.	engaged with LWD and
resources available within a	Basic knowledge and trainings	other NGOs
community, society or	on how to cope with draught	The commune have a well
organization that can be used	provided by LWD.	allocated human resources
to achieve agreed goals	<ul> <li>Training was given to</li> </ul>	• The commune managed to
(UNDISR))	Commune Committee for	grow crops even in the dry
	Disaster Management (CCD)	season and have a robust
	with the help of line	agri-related business all year
	Ministries	round.
	This commune lack of	
	resource/ knowledge on how	
// //w/ /L ==	to grow crop in dry season,	
11 200 1500	therefore during this season,	(63)
	villagers seek for employment	
	elsewhere	1
	Human resource related to	
	local capacity of this	- No. 10
	<ul><li>commune is very limited</li><li>Knowledge access to</li></ul>	1996/
IIVIN L.M.	information is limited	1-0/18
	In relation to willingness of	7 \ 10
	this commune to learn new	- //
	knowledge and trainings from	
	LDW, the Commune Chief	
	reluctant to welcome and	
	absorb all the knowledge	
	given, thus explain slow	
	transfer of knowledge and	
	trainings from LDW	
<b>Decision Making</b>	This commune have the	<ul> <li>No rights in budget</li> </ul>
(Resource mobilization,	rights to decide where the	decision making
Resource allocation,	resource should be mobilise	<ul> <li>No budget allocation in</li> </ul>
intervention or emergency	or allocated only in	this commune
respond, annual strategic	emergency cases. Otherwise, it	
plan)	have to go through the	
	hierarchy trail especially	
	anything that involved money.	
	<ul><li>The people in this</li></ul>	
	commune have a part in	
	annual strategic plan,	
	although it needs to be	
	approved by the provincial	
	authority.	

Table 4.2 Commune run CBDRM Plan in relations to the 5 Components (Cont.)

5 Components	Ta Sal	Reaksmey Samaki
Local Resource	<ul> <li>No budget allocation for</li> </ul>	<ul> <li>No budget allocation for</li> </ul>
(Refers to financial support,	Commune Committee for	Commune Committee for
local labor contribution)	Disaster Management	Disaster Management
	(CCDM) in this commune	(CCDM) in this commune
	<ul> <li>Local labour contribute as</li> </ul>	<ul> <li>Local labour contribute as</li> </ul>
	part of local resource,	part of local resource and it
	although limited to only	continues prior, during and
	during the period of disaster	post disaster. One of the
		village called Pos Veak, the
		level of participation by the
		locals is very encouraging
		and positive.
Stakeholders Involvement	• In this commune, there are	<ul> <li>In this commune, there</li> </ul>
- CCDM	several notable stakeholders	are several notable
- NGOs, CBOs	that involved in providing	stakeholders that involved in
- Line department	supports and aids to the	providing supports and aids
- Other contributors	commune.	to the commune.
	Commune Committee for	<ul> <li>Commune Committee for</li> </ul>
	Disaster Management	Disaster Management
	(CCDM) played an important	(CCDM) played an important
	role in coordinating programs	role in coordinating
	in preparations of draught at	programs in preparations of
	the same time coordinate	draught at the same time
	during and after disaster has	coordinate during and after
	struck.	disaster has struck.
	NGOs exist in the	NGOs exist in the
	commune, especially LWD  Line ministries	commune, especially LWD
	Line ministries	and Cambodian Red Cross
	Well-endowed individuals	Line ministries     Contributions from
	in this commune from time to	• Contributions from
	time respond to the plea from	foreign aids and fellow
	the village chiefs to provide aids	countrymen
Local Participation	aius	
(Local authorities alone may	<ul> <li>In this commune, people</li> </ul>	<ul> <li>The people in this</li> </ul>
not be enough to achieve	participate in monthly	commune is very active in
CBDRM including disaster	meeting to share information	participating in any activities
reduction, preparedness and	or problems faced.	concerning disaster
response therefore in need of	or problems faced.	management
active involvement and		<ul><li>The locals are more</li></ul>
participation from local		attentive on the how to
people).		improve their livelihood by
I F -7-		making the most out of these
		NGOs.

The table above just to give an idea how active each commune is in pursuing the CBDRM plan despite limitations faced by them. Not only that, the question of the willingness of each commune worth taking into consideration. The above table also gives some pictures on the different socio-economic background, whereby Ta Sal situated on a flat land of which the land itself is not that favourable for crops to grow hence in dry season, the villager rather opted for temporary migration out from the settlement. On the other hand, Reaksmey situated on a fertile land of a forested area surrounded by mountains, making it suitable for agriculture except for seasonal dry spell that swept the whole area. Both communes basically an agrarian community that make a living through agricultural produce, yet the unprecedented drought make it tough for them to survive. The following are the findings of both commune based on the 5 components stated earlier:

### 4.3.1 Local Capacity/ Knowledge

Local capacities are the assets, resources and skills available within a community, society or organization that can be used to reduce the risks or effects of a disaster. All communities and villages have some vital important assets to deal with disaster. The knowledge of understanding the warning signs, dealing with disaster during the crisis, local safe house and vulnerable areas as well as experience of past disaster provides some vital information in building up the knowledge of CBDRM (UNISDR, 2008).

Based on the interview and the observation made, Ta Sal commune had made some progress in preparing their CBDRM plan. The commune almost completed their works to have CBDRM with LWD although the feedbacks given by the Community Based Organisation is not that favorable. Overall, both Ta Sal village and Doung Village hasn't done well in their efforts to create and implement CBDRM plan for their own village, especially in the case of drought that struck the village in late 2015/ early 2016.

As a starter, in term of local knowledge and capacity, despite intensive knowledge transfer and trainings given by LWD, line ministries<sup>1</sup> and

<sup>&</sup>lt;sup>1</sup> Department of Health and Department of Agriculture and Fisheries

volunteers from non-government sectors, the people reluctant to put these knowledge into practice and continue on doing as they did in the past. Department of Agriculture and Fisheries for example provide free seeds of the crops that can survive dry season, the people rather move out from the commune and seek job elsewhere and return when the wet season has come.

At the same time, the researcher found conflicting statement by the village chief of Doung, stating the issue of not having enough resources such as financial supports, seeds and technical training as the main reason not to pursue farming during dry season. For whatever reason it is, the researcher believes it is only an excuse given by the people. The Commune Chief himself states that '...drought is a natural occurrence, its already in God's hand, therefore nothing can be done about that...' (Doung Village Chief).

as the people totally making a living based on their agriculture produce, the people of Prey Thom and Pos Veak engaged actively with LWD and other relevant stakeholders on ways to improve their living conditions, especially during post drought last year. Since the very beginning, the local authorities such as the Commune Chief and Village Chief actively engaged and meet with LWD and this active relationship continues throughout. The Prey Thom Village Chief knew, in order to make things better, they need to adapt to the changing situations and makes the most from what they can learn from LWD. This positive attitude by the local authorities helps to shore supports from other villagers in order to make things better for everyone. In terms of local capacity/knowledge,

In Ta Sal commune, generally local people as well as local authorities got their training from Life with Dignity (LWD) in term of early warning system. The early warning system is to teach on how, who and where to report when disaster hit.

Local knowledge in these two communes had been provided by LWD as well as local authorities, for example line department such as Water Resource Department & Agricultural Department. The training had been provided to these two communes based on the assessment by LWD with collaboration of local authorities. Basic knowledge had been provide to these local people especially focal person such as early warning system. This early warning system is giving them much

needed understanding on how to report to relevant people when disaster hit and who need to report to as well as to provide first aid support to local people while waiting help from the related agency.

In general, local capacity and knowledge already a common practice after having CBDRM process in place. As what can be observed in Reaksmey Samaki, the people have the knowledge of choosing the right crop growing in dry season.

"Since this village (Pos Veak) established in early 2000 and people are moving from different place in other commune or district; they do not have any knowledge on how to cope when the dry season come. What they do is just getting timber in the forest rather growing by our own because we do not think that we can grow anything during the drought. However, through LWD, they train us which type of crop that we can do in dry season and how to grow it in effective way". (Pos veak Village Chief)

While Ta Sal commune is facing the problem of the capacity, the capacity of land resource does not complement the situation. The land area is soil mixed sand which makes it harder for people to grow anything.

The vulnerabilities had been reduced while focal person effectively utilise early warning system by sharing information immediately to relevant people including police officer and health care center. For example, in Reaksmey Samaki especially the two villages of Prey Thom and Pos Veak share their experience of helping each other in the emergency case by calling to each block leaders in order to help the people on time.

"...at least somehow, we can call for help from each other in our community because we know who are responsible along this chain of command and who we need to contact first in case of emergency case" (Te Youeng, Block leader in Reaksmey Samaki)

These two communes somehow have the knowledge and capacity of early warning system and coping strategy but accessing to the information is quite a challenge for them. Nowadays, the information is wide-spread through social media as well as internet especially in the case of disaster which at times due to climate change that caused frequent drought or flood. They could get the information until it had been translated to the local language while the information sharing in Cambodia delivered primarily in English rather than Khmer. The knowledge of local people to understand and access the information through technology is very important yet, their knowledge to access the technology is either still limited or none. The informal talk with one of the housewife in Reasksmey Samaki commune, she said:

'I do not have phone to access internet and understand about what happen in the world, until it happened. Even though I have, I do not think I know how to use it as I'm only educated until Fourth Grade. Mainly, I get information through radio or announcement from village security or volunteers'. (Chamnan, 33 years, housewife)

Even though, they have some knowledge of early warning system, yet the researcher found that the local capacity and knowledge in these two communes is uneven. Regarding to the interview with local authorities including commune chiefs, village chiefs and relevant people, the coping abilities is still limited. In this scenario, meaning that even people knew that in that areas, drought happened every year but they do not have ability to store water in order to reduce risk once the drought hit like the case during late 2015 and early 2016.

'Yes, we aware that drought always come during this season but most of people do not have enough resource to buy water storage. We, as local authorities only can help by asking around for support from local NGO to help. Yet, we really do not know that the drought this year is taking too long which in some villages have already ran out of water for drinking, luckily that the announcement of Prime Minister help to reduce our burden (in reference to immediate call for action from PMO to send water to affected villages and communes)". (Reaksmey Samaki, Commune Chief)

From what can be observed above, local capacity and knowledge is important to help the locals to prepare as well as to educate them what to do when disaster strike. At the same time, it gives the local authorities the experience to cope with disaster by using their knowledge they gained from CBO such as LWD as well as other line department.

#### 4.3.2 Decision Making

In the discussion with these two communes, this study found that the decision –making is not fully functioning well, as it stated only in the paper but not implemented in reality. The decision-making is strongly related to resource especially financial resource. In the case of drought, there is a need to build water canal, buying some water storage and digging pool to store water when dry season is expected. Commune Committee for Disaster Management responded that, they actually cannot make any decision regarding to build any water storage because they do not have enough money to do so since its will involve a huge amount of money. Thus, when the decision has come to utilize the financial resource, they still faced problems as there is no budget allocation in disaster management at sub-national level. The two communes have similar thought that they cannot make any decision based on any activities that in need of money therefore making it difficult for them to help people on time as shown below:

"It is hard for us to decide anything because every decision needs money to do especially in the case of drought like this. When we have no power, sometime it is hard to help people on time. In early 2016, when some villages do not have enough water to drink and we send report to national for intervention and we cannot get respond on time but luckily, one of the monk president is use Facebook to upload what happen in our community and we get support after that" (Commune Chiefs, Reaksmey Samaki and Ta Sal)

With this kind of constraint, it is hard for local authority to make a decision on time to help the people, thus what they normally do is seeking support from local NGO. So far, even though Cambodia have committee for disaster risk management which is establish under the framework of decentralization & deconcentration, it is the duty of commune counselor to implement those activities. Their commune budget resource is mainly allocated for commune development, child and women issue but not for disaster management. However, local authorities have the rights to seek other source of funds in order to help people hit by the crisis for example raising funds from businesses and rich individuals.

In the communes, there is a monthly meeting in order to prioritize what is needed to be done in order to improve the situation within the communes. Village Chief who gather information related to people affected by disaster, information related to security, people livelihood and so on. Then, all of this information compiled into a report submitted to district level. Yet, those annual

strategic plan in need to be send to national level for approval because commune level plans does not necessarily approved by sub-national level.

'Every year, we put in the report to build water canal as our priority in our commune since when the dry season come, it is hard for us to have water. What we got the feedback from national level is, they said they do not have enough money to do as per our request'. (Reaksmey Samaki Commune Chief)

As can be seen above, the decision making does not exist at commune level as long as there is budget allocation is not available. Moreover, if the budget is not available for this issue, means the government did not see this issue (disaster) as their priorities. This becomes a major problem especially during the drought, without the much needed budget, the commune suffer more as a result. Should there is a budget allocated and the project able to be carried out, then burden felt by the villager will be lessened especially in getting water for daily needs. In a related matter, the Commune Chief also express his regret on the budgetary issue, stating absence of budget at the commune level made it hard for the local authorities to help their fellow villagers. The only thing that they can do is to make a report via phone call to the district and provincial office, without any visible solutions in sight. In short, Reaksmey Samaki commune (Pos Veak & Prey Thom Village) has done well in their preparation should another disaster strike their commune. Despite all the difficulties that they faced, it doesn't mean that the commune will stop paying attention or do something as this involve their livelihood. Now, as the commune receive trainings and knowledge transfer from LWD, if this pattern of close cooperation and hard work continues, Reaksmey Samaki will eventually be prepared according to their CBDRM plan.

## **4.3.3 Local Resource**

Community Based Disaster Risk Management (CBDRM) is an approach that promotes the involvement of grassroots community disaster risk management at the local level. However, the effort of community relies on their self-interpretation of hazards and disaster, reduction and monitoring and evaluation of their own performance in disaster risk reduction. Thus, the significant of resource mobilization that community has and has control over and become the integral part of community daily lives (Paripurno, 2006). Local resource here refers to financial

support, local labor contribution in kind that local people might make. By having resource to spend is not enough but how to use such resource in effective way has become the priority. Moreover, the availability of resources is strongly correlated to the sustainability of a project and according to the literature, funding is connected to the project as being a long-term process.

All the key informants that researcher had interviewed including CBO (LWD), CCDM members, villages and other relevant people share the same thought of having difficulty to implement any project especially in the case of disaster if they do not have any budget in place. These two communes as well as other communes in Cambodia is facing the same problem of no budget in carrying out disaster management plans and activities at sub-national level. Because they do not have any specific budget from commune budget plan to implement activities in term of disaster, thus every month meeting at the commune is discussion in general issue rather than specific on disaster plan. Even though drought had been identified as the first priority in the two communes but no budget given in this case at all that is how this CBDRM rely on other stakeholder's involvement in order to make things move forward.

Reaksmey Samaki Commune Chief share his perspective on the budget:

Budget is very crucial to implement any activities of disaster management especially at the grassroot level, how can we help the people on time if we do not have budget in place that is why whatever happen, the villages contact to CBO like LWD first because somehow they can save our people life and provide swift response. This issue had been raised every year but we do not see any change at all, wait and see this year. (Reaksmey Samaki Commune Chief)

With regards to local resource, the (CCDM) run into financial problems to maintain their operation or to conduct beneficial projects for the commune. Ta Sal's Committee for Commune Disaster Management (CCDM) however had to contribute about 40,000 Riel/USD 10 (at commune level) or 20,000 Riel/USD 5 (at village level) to Cambodian Red Cross annually, whereby this money is said will be used when disaster strike in any part of Cambodia. Yet, when the drought strike the commune, this annual 'contributions' hardly being seen and be

utilise in the commune. Not only that, the pre supposed help and support from Department of Agriculture and Fisheries hardly come by to the village anymore. The village chief of Ta Sal said:

"Ministry of Agriculture providing the training and give seed to people to grow after dry season since our rice is gone but lately we did not see any staffs who come here to provide us more seed (I think maybe because we do not return seed back to them after harvesting and some people even use that seed for cooking rather than growing" (Ta Sal Village Chief)

Even though, no budget allocation at sub-national level but Cambodian Red Cross (CRC) is a vital partner of National Committee for Disaster Management (NCDM) from national to sub-national level including province, district and commune. Yet, CRC is having some funds in emergency respond support from international organization and contribution from business and tycoon within the country.

Interestingly, at sub-national level especially commune they are automatically entitled to access such funds as the member of CRC. CRC makes it clear that, as part of their responsibility is to channel the annual contributions to be keep in district level for emergency response purposes when the disaster happen in the community. This arrangement although informal, for commune chief is entitle to receive 40000 riel a year which equal 13 USD, commune counselors is 30000 riel which equal 7.5 USD and village chief is 20000 riel equal 5USD.

Even though, budget is not available to implement any activities but local authorities is trying to find a way to manage some disaster that happen in their community by calling businessman, or in the kind of contributions such as water storage. With the law of disaster management adopted in 2015, human and financial resource and equipment should be allocated for disaster relief as indicated in article 12 as below:

The emergency response activities shall focus on the period of the disaster by taking immediate action to lead, command and coordinate the emergency response operation, obstruct the spreading of hazards, mobilize humanitarian assistance, basic materials, equipment, human and financial resources for disaster relief. (Law of Disaster Management, 2015)

#### **4.3.4 Stakeholder Involvement**

Stakeholder's involvement is seen as crucial for the success of such effort as CBDRM which feature a complex operation and involved resource beyond the local capacity. Successful programs have taken all stakeholders on board, understood local people's needs and requirements, and had strong consultation and social mobilization (expert comment; Qazi 2010). Community-based disaster risk management has been acknowledged and used successfully in many regions around the world. However, the participation of stakeholders and civil society in decision-making integrate into policy, planning and implementation is rarely seen. Stakeholder involvement is a time-consuming, resource-intensive exercise and requires strong skills. More importantly is cooperation with local authority. It is really hard to achieved CBDRM without involvement from different stakeholder's especially local organization during crisis. We will discuss below how important of stakeholders involvement in community-based disaster risk management.

In Reaksmey Samaki commune as well as Ta Sal commune, there are a number of NGOs as well as CBO named Life with Dignity (LWD) who are working in these area for a number of years with different activities and mission but with common purpose of community development. In the case of disaster management, there are numbers of stakeholder involvement not only CBO but line ministries such as department of Water Resource, department of Agriculture, Cambodian Red Cross at the sub-national level and member of Commune committee for disaster management and some business people within the community. They all have different function and operation according to their specific assigned tasks.

For example, in Reaksmey Samaki, LWD is helping local people as well as local authorities in many stages by helping them to design and implement the CBDRM. More than that, they are helping local authorities to come up with commune disaster strategic plan, provide some sort of material when disaster hit the commune as much as they can. As seen in 2015/2016 drought, LDW is providing water storing equipment, water pump and gasoline. People as well as local authorities recognize the important role of stakeholder's involvement in disaster management especially LWD. Prey Thom village share his view:

"Whatever happen, whenever we need support, we always contact to LWD first than we will report to commune chief later. It is very simple why I contact to them first as because they have resource, equipment helping us on time" (Prey Thom Village Chief)

There is heavy presence of LWD on the ground staffs and from the ministries here in the Reaksmey as compared to in Ta Sal, showing reciprocal relationship between the two. In addition to that, the level of trust towards LWD went skyrocket in Reaksmey. Pos Veak Village Chief said:

"Whenever we have any problem in our community we call to LWD first, as they could help us immediately for example when we do not have water and our water in our water storage has run out, we just propose and making a report that our community is need as such and such, or some house destroy and we need emergency respond in term of food and basic; they able to send us immediately, while district Red Cross will come later" (Pos Veak Village Chief)

Stakeholder involvement is not only helping people as well as local authorizes in the emergency case but they train the local people in coping strategy such as how to choose the right crop in dry season and what else can be done in dry season in order to become resilient during this tough times so that people do not really need to migrate. While they can grow any crops within the dry season, they can not only sustained their livelihood also some extra money to buy water for their survival.

"Our people could still grow sugar cane as you can see while you driving, that is what we had been train from LWD. At the same time, they can do small business of selling thing in front of their houses". (Pos Veak Village Chief)

LWD is not the only stakeholder involved in this commune, Department of Agriculture also involve by contributing their seed to local people after dry season and their crops gone. They provide the seed to local people, although they need to return those seeds after next harvest. However, a lot of the villagers unable to return as promised, as some use those seed to cook. Thus, the Department has been discouraged by such malpractice.

Since CBDRM plan at the commune level is created under the umbrella of Commune Committee for Disaster Management (CCDM), the nature of bureaucracy remains bottom up approach. Disaster is a cross cutting issue which in

need of the participation of different stakeholders to be in place. Thus, the stakeholder's involvement here is also included the interaction from national level especially when the case of sub-national did not function well to response or in the case of serious like the drought in late 2015 and early 2016. Yet, this interaction also involves with other stakeholder within community itself to boost this transition work quickly.

"Three villages within this commune hit severely by drought in late 2015 and early 2016, we have made a report to district level for their intervention but it seems a bit slow since they need to report to provincial level for intervention. A monk who also affected from this drought make a video record and post at to Prime Minister Facebook, a day later there is an immediate intervention from Prime Minister calling relevant stakeholders to deliver water to people immediately" (Ta Sal Commune Chief)

For the above discussion, we could see the important of the different stakeholders involvement in disaster management such as CBO name LWD, local authorities such as village chief, commune chief, police and monk. Through this discussion and finding, the study found that LWD as an active CBO exist in the commune play very important role in supporting both physical and material helps as well as training. The question is, what will happen when this CBO exited the community? Therefore, the involvement of national level is needed to strengthen their capacity, funding & human resource in order to help the sub-national level to improve their performance in helping the needy.

# 4.3.5 Local Participation

Local participation is arguably important for CBDRM. Participation can allow the citizens to take part in the governing process by communicating their need for development, idea on how to give the solution to local problems and gives a better sense of involvement and ownership. People in the communities are expected to be actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their capacities. The discussion here will be discussed on how people devote their time to participate in disaster management at their communities.

As shown in Reaksmey Samaki, people participate as volunteer from the block to the village level. As told by village chief of Prey Thom, at least five block leaders within a village and they all work as volunteer. They are quite active in any meeting, contributing their ideas and devote their own time without any salary but what they do based on their own willingness.

"I do not have any resources or money to help my community, thus I could devote my time as much as I can for my community which is people around really happy what I did. Whenever I go anyway, they know that I am happing the community which is the most inspired to me". (Yoeung Sambath, 27 years old, volunteer at Prey Thom Village)

Reaksmey has comprehensive human resource; as there are 7 selected individuals chosen to be trained as the focal person to refer to in relation to disaster. Not only that, each village further divided into each block together with a leader to manage each one of them. These block leaders will take care of their own block to prepare for disaster, or extend help during and post disaster. They will spread new information and give some knowledge and trainings to their own blocks so that each block can look after each other more effectively. One block leader said "...I am happy to be work as volunteer in my community as I can help people as I have family and my business here as well, helping people in the community making people feel proud of you..." (Block Leader in Pos Veak). Such spirit can be found throughout the Commune as far as the researcher can see, not to mention their eagerness to work with LWD.

The ideas of creating block leaders following in each village is due to they want to tackle any issues that is happening in this commune for example when disaster hit like storm & drought. In Pos Veak & Prey Thom, the number of people living in this two villages is a lot more if to compare with rest villages within this commune, so the initiative of creating the block leaders come from the discussion and collaboration of village chief, commune chief and this CBO (LWD). Those block leaders as well as people who volunteers in the village mainly are the frontline that helps the people within the community in various issues for example when line ministry at the district level want to know about the situation in term of water, rains

and drought; they call directly to those focal persons rather than call to commune chief, Village Chief of Pos Veak added.

Having to spend time with the group of block leaders as well as some of volunteers in these two villages, they feel so happy in helping people in their community. They got many kinds of motivation in doing such work such as helps and contribution from local organization or CBO like LWD who provide the training in various issues showing the significant of their contribution to the society especially their communities. Even though, so far block leaders as well as volunteers in the villages are so active in this commune but they also raising their concern related the sustainability of their contribution to this community. So far, they do not get paid for any activities but they incurred travelling expense in term of gasoline during their mission as well as have to find meals and refreshment by themselves. On related matters, they aired their worries if the CBO phase out their operation in the communes, how will they cope with such new situation.

"I am willing to help my community in any circumstances but I do not have enough resource to help them. Luckily that LWD and other NGOs could give us some money to fill our gasoline need. Otherwise, we cannot continue our activities. I am really concern what will happen to our community if these NGOs finish their work and we do not have enough money to do anything". (Samnang, 24 years old, Volunteer at Pos Veak Village.)

A very similar concern raised by Prey Thom village as well:

"We are very lucky to have these NGOs in place to do some activities as they gather people especially youth in doing such a good thing in our community. We do not know how long such a nice thing could be? we can not blame the youth or people who volunteer as well if they stop their volunteering work because they need to think about their family while do not have any budget to pay them". (Prey Thom Village Chief)

As we can see what is happening in Ta Sal commune of local participation. Ta Sal also got the training from LWD to local authorities as well as focal person in each village. Mainly, there are five people as the focal person in each village as mentioned by first deputy of commune chief. Most of volunteers are young in between age 18-25 years old and some of them are still study and some already

drop out as they do not have enough money to study and they need to earn money to support their family so their time in contributing to this commune is uneven as they do it when they are free. In this commune, it is a challenge to find people to volunteer as many young people either migrate to other provinces as well as other countries or disinterested in doing so, thus people left in this commune majority are elder which have less interest in participating in societal issue. What is happening to this commune, at the first start in 2011, they have five people who volunteer in each village and they really active in term of sharing information, interact with local authorities and any NGOs either CBO like LWD. From year to year, their interest and participation had been losing their momentum, LWD brand manager added.

One of the village that the researcher had interviewed, the researcher could only gather 2 volunteers to ask detail of their work in the village. This less participation in this commune as well as the villages is due to people migrating to other provinces as well as outside the countries or already have family.

"In the past, we have more people who participate in our community development as volunteers but since we do not have any budget or support to their work, it is hard to stop them leaving the job. For example, Theary, 18 years old got married recently, her husband does not allow her to continue volunteering without any salary while her living condition is really good". (Doung Village Chief Assistant, 35 years old)

Lack of participation really affects the performance in responding to disaster as well as any issue within their community. The concerns of volunteerism is quite similar to Reaksmey Samaki of suitability of joining this social activity. One among the other two said:

"I really want to help my village as much as I can but I can not even help paying my family's debt. So how can I help other people? If I could get some support like salary I think I will continue this work because what I got so far only the money for travelling to LWD office for meeting". (Buntheun, 19 years old)

Local authorities could be the push factor for youth volunteerism in their community. Some block leaders who volunteers in Pos Vek and Prey Thom village share very similar sentiments that: "Our village chiefs are very active, motivate the people and devote their time for our community in any circumstance. Their energy becomes our role model and inspired us as the young generation even we do not have enough resource to contribute". (A group of volunteer in Pos Veak and Prey Thom villages)

While another youth in Ta Sal commune, Dong village quite pessimistic with commune chief as well as village chief.

"He drunk almost every day and he never care what is happening in our village at all, I do not really have kind of motivation to do such activities in my village at all. Luckily that LWD always get me in for any training and engage me but I do not know how long I could continue this work". (Thoeun, 22, volunteer.)

In short, what we had learn from these two communes as well as 4 villages, local participation play very important role in any issue that happening their communities especially disaster issue. Their role could be as the frontline as they are living in those areas. Without their swift actions in helping in case of disaster, a lot more damage and loss of life can be expected.

# 4.4 Summary on How the Two Communes Run CBDRM in Relations to 5 Components

From what can seen above, in term of how both commune run the CBDRM is not much differences. This is due to first, the commune works closely with the same CBO that reflected almost similar structure of CBDRM plan in both communes. Since this two communes lead by one CBO, thus their operations seem do not much different from the first stage up to the last stage of CBDRM process. Second, both communes shared almost similar challenges and difficulties due to their proximity to each other. On the other hand, the differences can be observed only on the attitude of each commune that reflects the way they work according to the slated plan. Local participation could be the significant difference between this two communes for example how they operationalize such as block leaders. This difference also means that, active commune might have a better and innovative way in coping with drought. This can help them to prepared better for incoming droughts and

become resilient overtime. This reflected to their level of preparedness since LWD intervention in 2011 and the drought in 2015/2016.

Based on the findings as shown above, despite LWD has been around 4 years prior to 2015/2016 drought, both commune have a differing level of preparedness in the case of incoming disaster. Ta Sal commune for example, despite has been spending learning and collaborating with LWD, this commune CBDRM seems not taking off due to limitations and challenges stated above. While, Reaksmey Samaki used this drought to do better and as a lesson learn. If not because of the drought, in due time when LWD is not around, the commune will continue to suffer due to limitations such as no budget allocations. Therefore, because of the drought, the commune value the existence of LWD even more, together with an enabling environment that push the cooperation between relevant stakeholders to a new height. In summary, the findings above give a clear picture on how CBDRM is conducted in each commune and how the commune had perform when the drought as well as the impact of the commune post drought. This will help to established some recommendations and suggestions in the next chapter. Later in the next chapter, there will be an extension of the findings that will discuss more on the limitations, challenges and capacity facing these communes before continuing a conclusion.

# CHAPTER 5

# CONCLUSION, SUGGESTION & RECOMMENDATION

In this chapter, it will continue with the last chapter concluding remarks based on the researcher findings, observation as well as the buildup arguments up to this chapter. The conclusion will feature first, the issues with capacity, limitations and challenges faced by the communes. Later it will incorporated some important points that will served as the basis of the suggestions and recommendations that follows. All the suggestions and recommendations made in reflection to the 5 components discuss earlier. All the suggestions and recommendation featured in this chapter based on practical and logical explanations, shall these points taken up for review by the relevant parties.

# 5.1 Discussions on Capacity, Limitations & Challenges of the Communes

During the fieldwork itself, the researcher also conducted interviews and observations to see the extent of capacity each commune has, as well as limitations and challenges faced by each commune. Coping Capacity mentioned here refers to the ability of the commune to cope with disaster through either knowledge, trainings or available resources given and how they adopt and utilize such skill, resources and knowledge to their advantage. As for limitations, it may include issues due to a condition that limit the commune to pursue activities or programs that can help them to cope with disaster better such as budget constraint, human resource, service limitations, and accessibility limitations among other. While challenges primarily refers to a delicate situation whereby the commune have to face and take extra effort in providing solutions so that it no longer become a problem for the commune in the future. The following are the findings on the issue of capacity, limitations and challenges of each commune, based on what happened during the drought in 2015/2016.

# **5.1.1** Issue of Capacity of the Communes

In term of capacity, both commune have different level of coping capacity. As shown from the findings on the effectiveness of each commune, Reaksmey Samaki commune fare better than Ta Sal, so does in term of coping capacity. Ta Sal for example, they only have coping capacity related to only the essential matters, such as establishing early warning system and empowering people's knowledge on disaster risk management. Other than that, the researcher couldn't find other coping strategy available in the commune. On the other hand, Reaksmey Samaki have an even more comprehensive coping capacity strategy. Their early warning system for example, extended to include block leaders and volunteers. Furthermore, they know how and where to report to in case of emergency as well as necessary respond need to be given. The commune also have a great spirit of brotherhood, whereby they are willing to sacrifice their energy, time and resource for the benefit of all as can be found while the researcher is there. Hence explain the level of participation and cooperation that existed in the community. Apart from that, in term of information access, villagers here have some knowledge on how to access information through social media, different from Ta Sal. This give them the upper hand to receive news especially with regards to weather or any useful information that can enhance their crop and share it amongst them. At the same time, the people in Reaksmey Samaki adopt what they have learn from the NGO and Department of Agriculture and Fisheries on what crop to grow.

"We grow sugar cane even though we do not have enough water as this type of crop does not need much water. So people rely on such crop and does not need the reason to migrate temporarily out of the village or have no crop to grow at all during the dry season". (Commune Chief, Reaksmey Samaki)

That is why Reaksmey can survived the drought in making a living by planting crops that doesn't need a lot of water. These crops help them to go through the tough time by selling them to get the daily needs that they need. In short, Reaksmey Samaki commune have come far in its adaptation of CBDRM as can be seen from different coping strategies existed in the commune, compare to Ta Sal Commune.

# **5.1.2** Issues related to Limitations Faced by the Communes

The biggest limitations faced by both communes is limitation on budget. Without sponsors or financial contributors, any beneficial projects or programs cannot be carried out. Furthermore, delegation of prompt relief effort or emergency response cannot be done effectively due to lack of budget to facilitate this matter in the commune therefore have to wait from the national level. Commune Chief of Reaksmey Samaki commune commented on this matter as the following:

"Yes we aware of drought is come every year in this season but they do not have enough money to buy water store. We, the local authorities also cannot help them as we do not have budget allocated for us just to do that. However, if we seek support from LWD, they somehow try their best to help us". (Commune Chief, Reaksmey Samaki)

Hence, it no doubt that the commune increasingly become reliant to the NGO that the state authorities as their service will be swift despite they have their own limitations. In term of information access, both commune faced almost similar problem, as the rate of technology literacy is quite low therefore it is almost impossible to speed up the process knowledge transfer and to let them to search for more information by themselves. In addition to this, all the information they need is in English while the command of English language amongst the local villagers is close to non-existent. This is another limitation, and to some extent, quite a challenge on how to bring this information to the locals.

Other than that, for Reaksmey Samaki, they face the problem of lack in health care services available in the commune. It is already tough on normal days, but become a bigger problem should disaster strike the commune. As for Ta Sal commune, limitations most of it come due to lack of leadership quality existed in the commune. Among all the Village Chiefs and the Commune Chief that the researcher interviewed, all of them within the range of age of 60-80 years old. Based on the researcher observation, due to their age and health, most of them are incapable to be active in doing their tasks. Similarly, they become skeptical of what the NGO and the line ministries seek to do to improve their livelihood. Hence, without the strong support of the local authorities, it translated to luke warm reception by the locals in coming up CBDRM plan for their commune. To add to this problem, the people in

this commune usually left the commune in the dry season seeking for job elsewhere. Some of them return back to become farmer when the favourable season return, while others left the commune should they managed to find better living conditions elsewhere. Therefore, this add another burden to the commune as they don't have a stable human resource to maintain CBDRM system that in place.

# **5.1.3** Challenges Faced by the Communes

First of all, both communes faced similar challenge in term of unpredictable weather or when a disaster will strike. The unprecedented drought late 2015 and early 2016 just enough to teach them a lesson that, no matter how much they would be prepare for the next dry season, they should think in the long run should the dry season prolongs or become extreme. The Deputy Commune Chief of Reaksmey Samaki commented, they never thought that the drought last year is so severe that they don't even have water to drink. Therefore, learning from this experience, Reaksmey Samaki commune put extra efforts on how to avert the same situation not to happen again.

Comparatively, Ta Sal Commune as a whole face the challenge on how to accept how grave the situation is by not thinking it as a natural occurrence. The NGO itself faced a dilemma either to continue helping or just proceed with the exit strategy due to lack of willingness as well as contradiction in term of local religious belief that the disaster happens due to some deity is not satisfied or happy with the commune.

"We do not have water even to drink this year because Deity Neak Ta is not happy with us or what we do" (Deputy Village Chief, Duong)

With such a strong belief, it is hard for the NGO to carry out programs, activities and training that eventually can help the community to improve their livelihood. Combined with the limitations mentioned before, CBDRM efforts in Ta Sal is deem to fail eventually. In short, there is a big contrast between the two communes in many fronts.

#### 5.2 Conclusion

#### 5.2.1 Local Capacity & Knowledge

With regards to community based coping strategy, their journey in learning and utilising CBDRM to their advantage has help to shape coordination between the community and relevant stakeholders, especially during drought 2015/2016. During that particular disaster, this give an opportunity for them to use what they had learnt and improvise wherever they can. This can be seen quite clearly in Reaksmey Samaki commune, thanks to their active participation as well as attentive collaborations with LWD. CBDRM in both communes envisioned to create an organic response in case of disaster struck their commune. Both commune is well on their way to have a fully functioning CBDRM, only that, how each commune perform is another matter to look at, as stated extensively in the last chapter. The drought in late 2015/early 2016 helps this study to give a good comparative case study in explaining how CBDRM has help the commune in coping with disaster.

# 5.2.2 Decision Making

In decision making, as can be observed, it is related to budgetary issues, strategic plan for Disaster Management and cooperation with other organization. In term of budget, decision making almost inexistence simply due to no budgetary allocation for matters related to disaster at the Sub national level. Therefore, even though local authorities did come up with proposed activities, plans, and projects specifically for this matter, yet without budgetary allocation, non of this can be implemented. Hence decision making in this matter is at nil. On another related matter, due to decentralization and de concentration concept that the government is undertaking, the local authorities have the leeway on financial matters through cooperation with NGO/CBO. The NGO roles basically providing financial contributions according to their capability and can play a vital role in pushing for some sort of contributions from the national level. Therefore, local authorities reserved the rights to decides what is the best for their commune through different channels available to them

#### **5.2.3 Local Resources**

Despite all the efforts made by all parties in the making as well as implementation of CBDRM; there are several issues that has become hindrance to have a fully functioning CBDRM in these communes. Budget issue for example, encompasses many aspects that can change how CBDRM perform. Without financial contributions or funds available to help these communes initiating activities or projects that can help them prepared better in time of crisis, it become the biggest hurdle that many communes faced. Not only that, if there is any budgets available, the Commune Committee for Disaster Management (CCDM) cannot access these funds despite tabling their proposals up to the national level. Therefore, at most, these communes rely on Community based organisation to come up with strategic plan, activities or projects to help the community.

#### **5.2.4 Stakeholder Involvement**

Basically, based on the researcher observation, the community and CBO were left on their own device without much help from outsiders let alone the government. Lacks of involvement and intervention by NCDM and government agencies is another matter that should be look at seriously. It seems, the hands off approach by NCDM is not a good approach at all. Furthermore, annually, local community based organisations swarmed by reports of their activities with the helps of the local authorities to be submitted to NCDM, before all the reports being compiled and made available for the parliament. Unfortunately, there is no pro active action afterwards, prompting dissatisfaction on first, the need to produce reports that end with nothing and second, inability of NCDM to play a bigger role in helping the locals to be prepare for any kind of disaster by shoving them to the CBO.

Government on the other hand has done much less in helping to strengthen or empower local community in the face of disaster. Relevant government agencies have an attitude based on calculative measures such as, is their time, energy and resource is beneficial enough to help local community or not, as what happened to Ta Sal and Reaksmey. In Ta sal commune, Department of Agriculture and Fisheries refuse to lend any help as the locals refuse to follow their instructions. On the other hand, their help does not come free, as all the seeds and fertilizer given, each community is force to return these back to the department. Hence, with such condition

imposed, how can these 'supposedly government led assistance' can provide help and assistance to the community? Often in times that, line ministries are missing from community meetings and projects. Even in time of crisis, important relief ministries cannot provide immediate respond unless there is an intervention from the Prime Minister Office. In much bigger scale, there are few proposals that recommend the government to improve waterways and canal nationwide, in a bid to reduce the effects of dry season. Yet, as the financial budget centralised in Phnom Penh, sub national and rural areas often oversight from any significant mega projects that eventually can help alleviate these problems.

Therefore, in these two communes, community based organisation, in this case, LWD play important role than any actor that exist within the framework of CBDRM. They are there prior, during and post crisis; their dedication known no limit despite all the pressure and challenges they faced daily just to help those communes. Although as such, the researcher would like to add, LWD should let the commune to do more by themselves, in order to fasten their learning curve and further empower them. As in the case of drought in late 2015 early 2016, although Reaksmey Samaki fare better despite not finishing all the 7 steps needed to have a fully functioning CBDRM; it is still a long way to go as Reaksmey Samaki increasingly becomes reliant on LWD approaching to the end of their tenure ship in the commune. In term of volunteerism in the communes, it can be seen that, a strong sense of volunteerism exist in Reaksmey, but not so in Ta Sal commune. They are basically 2 categories of volunteers that works in CBDRM for the commune. The first group basically are volunteers attached to the CBO to gained experience. This group normally consist of high school students and undergrads as well as unemployed. The second group basically from the people of the commune themselves either the head of the household, villagers or students. Together, both groups of volunteers help each other in the spirit of brotherhood. The different between the group is, the former has experience and being trained by the CBO prior coming to the field helping the community. Most of them volunteering based on voluntary basis, with CBO only support their meals or some necessary matters such as allowance for fuel to come to meeting.

# **5.2.5 Local Participation**

One of the most striking points that the study found out from the field works is difference in attitude in the process of installing CBDRM would affects the outcome of CBDRM in each commune. As can be found from what happened between Reaksmey Samaki and Ta sal Commune, the former fare better thanks to the willingness of the community in engaging as well as active participations in order to make CBDRM works. However, it is not as simple as lack of willingness to participate, the study found out this related to how the local authorities especially the Commune Chiefs and Head of Village behave. In Cambodia, Commune Chief basically quite powerful as it holds the rights to appoint village chief in his Commune. At the same time, Commune Chiefs leadership style also affects how thing goes in the whole communes. Despite the position is open for contestation through election every five years, often the time, powerful commune chiefs seek re-election both through intimidation or coerce. Therefore, in the case of Ta Sal, CBDRM implementation seems to be problematic due to lack of willingness of the local authorities and down to their constituents. Without a strong support from the local authorities, it is hard for CBO and relevant stakeholders to initiate changes in their commune, despite it is done for their well being.

In relation to the above statement, leadership also plays an important role in establishing order as well as to rally people for beneficial projects. Therefore, leadership style has become a backbone of CBDRM implementation especially in the case of Ta Sal Na Reaksmey Samaki Commune. The local authorities served as the focal points for guidance and instruction, source of motivations, initiator of initiatives, coordinator in time of peace and crisis and most importantly, unifier of the whole community they lived in. This reflects very well in Reaksmey Samaki, but not so in Ta Sal Commune. What happened in that commune thanks to strong leadership skills and collaboration of both Commune Chiefs and the Village Chiefs. They are well endowed with vast knowledge and experience of the outside world apart from their commune and open to any kind of suggestion and improvement should these changes brings better benefit to their livelihood. Therefore, thanks to the encouragement from the local authorities, the villagers naturally follow their footsteps and a strong engagements and commitments throughout the community can be seen.

On the other hand, Ta Sal leadership situation reflects their performance in carry out CBDRM. The Commune Chief himself has been in the office for more than 3 decades and he handpicked his loyal supporters to be the village chiefs of the village within his commune. The Commune Chiefs has been less receptive of LWD's projects and let his deputy to handle anything to do with the CBO. This is due to his personal opinion that all these techniques and technology can do anything against mother nature, together with a strong local beliefs on animism which hindered implementation of CBDRM. The researcher also has experience with of of his wing man, one of the village chief which happens to be a heavy drinker. During interview, the chief is not sober and blabbing on nonsense stuff. LWD which accompanied the researcher during the session, admitted it is tough to work with this particular chiefs, as reflection of the leadership style across the commune. Looking at this, it is no doubt why Ta Sal community less interested in engaging in the making up of CBDRM. During the drought of 2015/2016, the commune does not even practice what they had learnt neither they implement the plan in their CBDRM. In short, leadership skills and style of the commune play an important role in making CBDRM successful.

# **5.3 Recommendation and Suggestion**

# 5.3.1 Local Capacity & Knowledge

Throughout the research, the researcher found out that, the local people is quite left behind on what happening around them as the penetration of information and communication technology and remains low, on top of majority of them are uneducated. Therefore, it is crucial for the local authorities to exposed themselves on ICT so that this can be taught and spread across the community. News updates, ability to read foreign language news and information as well as to improve literacy (both technology and traditional literacy) amongst the people in the community should be encourage. Capacity training to Commune Committee for Disaster Management (CCDM) in term of BCC (behavior communication change) to see important issue of disaster risk management by NCDM (or CBOs/NGO) need to coherent with the priority of each commune. This is due to, each commune delivers

different perspectives and needs in this matter. By matching the issue laid down by both the national level and the grassroots, this will ensure CBDRM to be carry out in a more comprehensive and effective manner.

## **5.3.2 Decision Making**

Speaking of budget constraints, Cambodian Government in serious need to review their national budget to be given specifically for this matter. This budget can help not only save a lot of lives, but also the source of living for many Cambodians especially in time of crisis. Despite the government acknowledgements of the effects of disaster, its seem, budget wise, the government still reluctant to see the importance of budget allocation specifically for disaster. At the same time, government needs to decentralize decision making in budgetary issue. Although accounting wise, this will cause a lot of problems, yet, with some sort of autonomy given to the grassroots community, this can help them greatly in making preparations for the upcoming dry season or disaster.

Furthermore, it is time for Cambodia Law of Disaster Management put into practice. As can be found from previous chapter, Cambodian Law of Disaster Management is quite comprehensive on how to approach matters related to disaster. Yet, despite its availability, all parties involved in disaster management rarely refer or follow the stipulated law. The reason given is due to lack of budgetary provisions to carry out related activities and projects. Despite government recognised the importance of disaster management, it is still far away from making it a priority, to be compared like education for example. NCDM as the governing body to oversee the operation of Disaster Risk Management (DRM) across the country didn't show strong leadership and commitment in leading the whole command structure. Hence, all the chaos seen in the findings. Should the law put into practice, issues such as disjuncture between related stakeholders, budget, resource mobilisation amongst other will eventually can be solve. Therefore, Cambodian Law of Disaster Management can be a good source for CBDRM improvements in the long run. The key actor that is possible to make Cambodian Law of Disaster Management visible in practice is National Committee for Disaster Management. They are the one who proposing the budget, strategic plan of their respective institution by showing how the important of disaster is need to be take care and oversee. The budget of allocation is need to be sent to

Ministry of economy of finance with the approval of senate and relevant stakeholders involvement who can decide.

#### **5.3.3 Local Resources**

The community based organisation should teach and share data storing to be used for future reference of their CBDRM. Data on lose of property, life, vulnerabilities of the people need to be done properly, especially by the Commune Committee for Disaster Management (CCDM) so that they can familiarise with all these data collection and processing process. In addition to that, there should be more drills from time to time to assess the community preparedness in the case of disaster. This will help to familiarise the community and prevent them from slacking due to no threat of disaster that could cause them to be complacent. The community should also learn to be independent of any other actors, may it be the government or CBOs, so that they can stand on their own feet after the CBO no longer station in their commune. By doing so, this well help them to keep improvising their plans or find alternative to funds their projects.

#### **5.3.4 Stakeholder Involvement**

It is quite clear that, lack of involvement by national authorities has cost the implementation of CBDRM. The hands-off approach by allowing community based organisations to take up the role in helping the far flung and impoverished region is not wise to do so. Despite the decentralisation principle that administer this issue, yet, there is apparent disjuncture between the government (and related agencies), community based organisations and the community. The current arrangements will not serve the purpose in preparing the people for incoming and unexpected disaster in the future. It is well known that NCDM is a new agency that handling this matter, but it is not a valid reason not to know better of their line of work. Since Cambodian government seek to use CBDRM as a tool to reduce poverty in the long run, it becomes more important than ever for NCDM to get involve deeper in realising this goal. The current arrangements of relying to the NGOs/CBOs no longer works, and a robust cooperation and coordination should follow.

As for example, NCDM has annual reports from different parts of Cambodia, gathered by CBOs scattered all over the country. NCDM should use this data in coming up with a better plan and coordination with CBDRM, by looking at

some integral matters such as streamline the resources, funds, capacity and relief strategies. These data also valuable as it can be used to come up with 'a guideline' or template for establishing CBDRM by assessing the local reception and sensitivities in order to maximise the implementation of CBDRM. This will save CBOs resources and funds by cutting the need for establishing contact and trust with the community. Furthermore, NCDM can help in this matter by sending their representative to each CBO in order to give some sense or legitimacy (from government side) at the same time truly helping CBO in achieving their goal in where they are stationed at. NCDM should play more role in reviewing the works of CBO, in a sense that, if there is any improvements can be done in terms of techniques or technology used. In short, NCDM as the key agency working on disaster management should play active roles in helping to set up and make CBDRM successful. In this sense, NCDM should provide training especially CBDRM process at sub-national level by having experts from respective organization to fulfill government's aim of reducing poverty. On top of that, related institutions such as line ministries for example Ministry of Water Resources and Meteorology Ministry of Agriculture, Ministry of Health and Ministry of Environment (MOE), Ministry of Interior (MINT), Ministry of National Defense (MND), Ministry of Economy and Finance (MEF), Ministry of Public Works and Transport (MPWT), Ministry of Information (MINF), Ministry of Rural Development (MRD), should be strengthen as they also have working group in each ministry working on disaster at sub-national as well. This can be done by designing monitoring process to make sure that their disaster risk management working groups continue to conduct monthly meeting and put it into practice as they plan. Furthermore, NCDM needs to revisit the existing working groups in each and every ministry to keep them active at their work and foster strong collaboration with all relevant stakeholders.

This working group supposed to meet each other one time per month in order to follow up what had been done at the commune and village of their respective areas of working but this is not really happen as they do not have budget allocation for this working group to work on. So far what they did during their field work visit is to collect data to make a report to the national level. However, despite reports being made every year, nothing much have change has change. Therefore, in order to give a better service and support for CBDRM, despite budgetary problems,

all the agencies should try to find ways outside financial means to help these communes. As direct agencies that works in this matter, what is needed more is a better coordination between them and CBO in order to successfully expedite projects to support CBDRM in Cambodia.

# 5.3.5 Local Participation

Another matter that worth looking at is to boost the volunteering spirit in the country by giving some sort of incentives. Incentives such as financial contributions can help to bring in much needed resources, especially for young, unemployed youth whom, they can seek experience while waiting for job application replies. Government (NCDM) might initiate some sort of awards or recognition for most active youth, activist or volunteers whom have contribute much of their time and energy in the service of the society. If it is possible, some sort of competition for best CBDRM plan for each commune can be held, in order to boost the spirit and increase awareness of the effect of disaster to the society. By doing so, this is another alternative to channel the budget constraints faced by a lot of commune. Furthermore, volunteerism could be enhanced, so that the issue of not enough human resource shouldn't be an issue anymore. By strengthening local volunteers' networks will eventually help to facilitate in realising CBDRM across Cambodia, and there are already existing active youth volunteer groups that can kickstart such project for example Union of Youth Federations of Cambodian led by son of the presiding Prime Minister. To strengthen volunteerism networks at sub-national level in the area of disaster management, there are two different scenarios. The first scenario is to utilize the existing network such as Union of Youth Federations of Cambodia led by H.E. Hun Mani. This scenario will make use of youth who are available in that particular areas, engage and include them into the disaster risk management plan. Second scenario, NCDM should create formal network of youth under NCDM at sub-national level and provide them incentive, salary, or other benefits. They need to work closely with local authorities, CCDM, such as commune chief to avoid phase out the CBO while volunteerism moves out of the commune. NCDM should have policies that state clearly role of youth, volunteerism, and their responsibilities.

On the community part, the people shall seek for the best for them. As can be seen that, if they elect wrong person as the commune chiefs, things will

become redundant without any improvements. Therefore, it is important for them to elect the correct person in order for things to move forward. The government (NCDD either Ministry of interior) can help to regulate this matter, by making some stringent requirements in service of their own people as well as trainings from time to time to remind them of their duty to their people under their care. The local authorities also should take an even more active role in pursuing CBDRM as opposed to CBO led CBDRM initiatives. This is need to be done by National Committee for Disaster Management (NCDM) to have the clear guideline and also regularly monitoring and evaluation to the sub-national level especially commune and village level to see what is happening, challenge of their implementation and come up with the solution rather than just waiting the report. This will ensure the local authorities to really understand the whole system and able to implement it in the long run, not just when the CBO is around. By doing so, the sustainability of such program can be ensured and led the commune to be vigilant at all time.

In summary, based on the arguments provided above, CBDRM in Cambodia, with specific regards to Ta Sal and Reaksmey Samaki Commune has a long precedent. Despite like that, CBDRM in these two communes still have a lot to improve, based on their performance during drought 2015/2016. The most striking issue of Disaster Risk Management implementation in Cambodia is the issue of absence in budgetary allocation. This problem is so pervasive as it exist in all level of CBDRM structure in Cambodia. It affected not only the national body, the NCDM, but also all the agencies involved, not to mentioned the burden felt at the grassroot level (Commune and villages). Despite like that, CBDRM proved to help them at certain aspect of their life, such as lowering the effects of drought to their livelihood, but yet the problems of no access to clean water still persist. At the same time, the reliance to CBO increasingly become a problem as the commune lose any channel to help themselves other than these CBO. With such problems still exist, therefore CBDRM in Cambodia have a long way to go in order to cope better with drought in the future.

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# **APPENDIX**

# INTERVIEW REFERENCES

No.	Description	Date
1	Interview with commune chief, police, members in Ta	29 July, 2016
	Sa commune	
2	Interview with branch director of LWD	29 July, 2016
3	Interview with village chief of Dong, Ta Sal	30 July 2016
4	Interview with village chief of Ta Sal, Ta Sal	30 July 2016
5	Interview with village chief of Prey Thom village,	01 August, 2016
	Reakmey Samaki	
6	Interview with village chief of Pos Veak, Reakmey	01 August, 2016
	Samaki	
7	Interview with commune chief, police, members in	01 August, 2016
	Reakmey Samaki	
8	Focus group with youth and village assistants in Dong	02 August, 2016
	village, Ta Sal commune	///
9	Focus group with youth and village assistants in Dong	02 August, 2016
	village, Ta Sal commune	
10	Focus group with youth and village assistants in Prey	03 August, 2016
	Thom village, Reaksmey Samaki commune	
11	Focus group with youth and village assistants in Pos	03 August, 2016
	veak village, Reaksmey Samaki commune	
12	Random interview with local people in the two	04 August, 2016
	communes	