THE ROLE OF MILITARY IN DISASTER RELIEF : CASE STUDY ON THE RELATIONSHIP BETWEEN THE ROYAL THAI ARMY AND GOVERNMENT AGENCIES IN FLOOD 2011 IN BANGKOK

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A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Arts Program in International Development Studies
Faculty of Political Science
Chulalongkorn University
Academic year 2012

บทบาทของทหารในการบรรเทาภัยพิบัติ กรณีศึกษาในความสัมพันธ์ ระหว่างกองทัพบกไทยและหน่วยงานภาครัฐในอุทกภัยพื้นที่กรุงเทพฯปี 2554

ร้อยโท วุฒิสาร เหลืองจินดา

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต
สาขาวิชาการพัฒนาระหว่างประเทศ
คณะรัฐศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย
ปีการศึกษา 2555

Thesis Title	THE ROLE OF MILITARY IN DISASTER RELIEF : CASE STUDY ON THE RELATIONSHIP BETWEEN THE ROYAL THAI ARMY AND GOVERNMENT AGENCIES IN FLOOD 2011 IN BANGKOK
By	Lieutenant Wutthisan Luangjinda
Field of Study	International Development Studies
Thesis Advisor	Associate Professor Panitan Wattanayagorn, Ph.D.

Accepted by the Faculty of Political Science, Chulalongkorn University in Partial Fulfillment of the Requirements for the Master's Degree.

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ร้อยโท วุฒิสาร เหลืองจินดา : บทบาทของทหารในการบรรเทาภัยพิบัติ กรณีศึกษาในความสัมพันธ์ ระหว่างกองทัพบกไทยและหน่วยงานภาครัฐในอุทกภัยพื้นที่กรุงเทพฯ ปี 2554 (THE ROLE OF MILITARY IN DISASTER RELIEF: CASE STUDY ON THE RELATIONSHIP BETWEEN THE ROYAL THAI ARMY AND GOVERNMENT AGENCIES IN FLOOD 2011 IN BANGKOK) อ.ที่ปรึกษาวิทยานิพนธ์หลัก : รศ.ดร. ปณิธาน วัฒนายากร, 70 หน้า.

งานวิจัยนี้เป็นการศึกษาบทบาทของกองทัพบกไทยในการปฏิบัติการบรเทาภัยพิบัติอุทกภัยในพื้นที่กรุงเทพฯ ปี 2554 โดยมีวัตถุประสงค์เพื่อทำความเข้าใจถึงอุปสรรคพื้นฐานของกองทัพบกไทยในการมีส่วนร่วมกับหน่วยงานภาครัฐในการปฏิบัติการบรรเทาภัยพิบัติ รวมถึงวิเคราะห์จุดด้อยของกลไกความร่วมมือทีมีอยู่ และแสวงหาหนทางในการจำกัดอุปสรรคพื้นฐานของการมีส่วนร่วมกับหน่วยงานภาครัฐในการปฏิบัติการบรรเทาภัยพิบัติ

งานวิจัยนี้เป็นการวิจัยกรณีศึกษาเชิงคุณภาพ ซึ่งใช้การวิเคราะห์ข้อมูลของเอกสาร รวมถึงการสัมภาษณ์เจ้าหน้าที่ของกองทัพบกไทยและหน่วยงานภาครัฐที่มีส่วนร่วมในการบรรเทาภัยพิบัติอุทกภัยในพื้นที่กรุงเทพฯ ปี 2554 โดยนำเอาโครงสร้างการประสานงานจากสถาบันกฎหมายแห่งชาติ กระทรวงยุติธรรมสหรัฐอเมริกา มาใช้ในการวิเคราะห์

ผลจากการวิจัยแสดงให้เห็นว่า อุปสรรคของกองทัพบกไทยสามารถแบ่งได้เป็นสองระดับ คือ ระดับนโยบายและระดับผู้ปฏิบัติ โดยทั้งสองระดับมีความคิดและข้อห่วงใยที่ต่างกัน อย่างไรก็ตาม อุปสรรคร่วมของทั้งสองระดับคือ การขาดความพร้อมสำหรับอุทกภัยที่ยืดเยื้อ โดยการปฏิบัติการบรรเทาภัยพิบัตินั้น ดำเนินการในรูปแบบเฉพาะหน้า ประกอบกับการขาดความรู้และประสบการณ์ ส่งผลให้เกิดความยุ่งยากในการให้ความช่วยเหลือ ซึ่งอุปสรรคสำคัญในระดับนโยบายคือเรื่องกฎหมายและโครงสร้าง โดยบทบาทของทหารในการบรรเทาภัยพิบัตินั้นถูกกำหนดให้เป็นหน่วยสนับสนุน นั่นหมายความว่ากองทัพบกไทยจะต้องปฏิบัติภายใต้การร้องขอจากหน่วยงานอื่นๆ ในขณะเดียวกันอุปสรรคสำคัญในระดับผู้ปฏิบัติ คือยุทโธปกรณ์ เนื่องจากยุทโธปกรณ์ที่มีอยู่นั้น ไม่ได้ออกแบบมาเพื่อการปฏิบัติการบรรเทาภัยพิบัติในสถานการณ์อุทกภัยที่ยืดเยื้อเช่นนี้ โดยการวิจัยนี้ สะท้อนให้เห็นว่า การตระหนักรู้และการเตรียมพร้อมในองค์รวมนั้น ยังไม่ได้รับการส่งเสริมอย่างเท่าที่ควรและไม่ได้นำไปใช้ในการจัดทำแผนการเผชิญภัยในระดับชาติ

สาขาวิชา การพัฒนาระหว่างประเทศ ลายมือชื่อนิสิต……..

ปีการศึกษา 2555 ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก……...

5481120724: MAJOR INTERNATIONAL DEVELOPMENT STUDIES
KEYWORDS: MILITARY / GOVERNMENT AGENCIES / DISASTER RELIEF / COORDINATION / FLOOD 2011/ BANGKOK

LIEUTENANT WUTTHISAN LUANGJINDA THE ROLE OF MILITARY IN DISASTER RELIEF : CASE STUDY ON THE RELATIONSHIP BETWEEN THE ROYAL THAI ARMY AND GOVERNMENT AGENCIES IN FLOOD 2011 IN BANGKOK. ADVISOR: ASSOC.PROF. PANITAN WATTANAYAGORN, Ph.D.,70pp.

This study focuses on the role of the Royal Thai Army (RTA) in disaster relief operations during the flood 2011 in Bangkok. This is aimed to understand the fundamental barriers faced by the RTA in interfacing with government agencies in disaster relief operations. It also analyzes the weaknesses of the existing interfacing mechanism as well as determines the possible ways in minimizing the fundamental barriers for the interfacing process with government agencies.

The study uses qualitative approach for the case-study, utilizing content analysis of written materials and key informant interviews in the form of semi-conducted style on the RTA units and key government agencies who were involved in the disaster relief operation during the Thailand Flood in 2011 in Bangkok. This study uses the Coordination Model, developed by the National Institute of Justice, the United Stated Department of Justice, to analyze the qualitative data from the interviews.

This study revealed that the difficulties for the RTA can be categorized at two levels, policy level and operation level. There is also some gap between these levels during the disaster relief operations in the flood 2011 in Bangkok, which helps to understand the difference in the thoughts and concerns of the personnel of both levels. However, one major common difficulty for both levels is the unawareness and unpreparedness for this prolonged flooding. The relief operations were done at hand with very limited knowledge and experiences, creating complexity in management of assistances. The vital concern at the policy level is the legal and structural aspect of barrier. The role of the military in disaster relief is stated to be the supporting one, which means that the RTA must only operate upon the requests of other agencies in disaster relief. At the operation level, it is found that the vital concern is the relief equipment as the existing equipment is not designed for relief operations in such prolonged flood situation. From this study, it is reflected that the collective awareness and preparedness for natural disasters are not thoroughly promoted nor productively utilized for national plan.

Field of study: International Development Studies Student's Signature:……

Academic Year 2012 Advisor's Signature:……

ACKNOWLEDGEMENTS

This work was partially supported by the Higher Education Research Promotion and National Research University Project of Thailand, Office of the Higher Education Commission (HS 1069A-55).

I would like to take this opportunity to sincerely express my appreciation to many people who have supported me and contributed to my success in the Master of Arts in International Development Studies (MAIDS) here in Chulalongkorn University.

I would like to express my greatest gratitude to my parents and my family who have always given me full supports in all aspects and made me who I am today. Without their supports, my success would be a definite impossibility. I also would like to greatly express my appreciation to my thesis advisor, Associate Professor Panitan Wattanayagorn, Ph.D., who has been very kind, supportive, and attentive to my work on this thesis. I would like to also thank to my chairperson and external examiner, Associate Professor Bidhya Bowonwathana, Ph.D. and Assistant Professor Tavida Kamolvej, Ph.D. respectively, for their supports and very fruitful contribution to my thesis.

More importantly, I would like to thank all the interviewees who gave me the opportunity to collect the valuable data for my thesis. Their information and data have be very vital to this thesis and set the core fundamental structure for the whole research.

Finally, I would like to thank all the MAIDS lecturers and staffs for their assistances and guidance throughout the academic year. Their works have been very crucial to my success as they have been working very effectively behind the stage, contributing all the available resources for my success in MAIDS.

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ABBREVIATIONS

AADMER	-	ASEAN Agreement on Disaster Management and Emergency Response
ADMM	-	ASEAN Defence Ministers' Meeting
AHA Centre	-	ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management
ASEAN	-	Association of South East Asia Nations
C-MEX	-	Crisis Management Exercise
CSO	-	Civil Society Organization
DM	-	Disaster Management
FROC	-	Flood Relief Operation Center
ICT	-	Ministry of Information and Communication Technology
MOOTW	-	Military Operations Other Than War
NTS	-	Non-Traditional Security
RTA	-	Royal Thai Army
SOP	-	Standard Operation Procedure

CHAPTER I

INTRODUCTION

1.1 Background

Military plays not only the direct role in security aspect of the nation, but also indirect role in various aspects of the nation. The key roles and responsibilities of the military are to protect national sovereignty, national territory, the Monarchy, democracy under the Monarchy, and the national interest in the context of national security[1]. At the same time, the military also have the supporting roles and responsibilities for the state in developing the nation, maintaining internal security, restoring law and order, providing humanitarian assistance and disaster relief operations, researching and developing its defence industry and technology, space technology, information technology and communication, military operations other than war (MOOTW) and other roles in regional and the international arena[2]. The motto of the Thai Military is "For the Nation, Religions, King, and People" and therefore, the interaction and cooperation between people and the military is inseparable. It is very simple to identify the distinct roles of military along the national borders, however, the roles in the urban society may not always be simple to identify. Sometime, military is viewed to have some involvement in politics of the nation, such as the military coup d'état to over throw the government during the Black May in 1992, and the 2006 Thai coup d'état.

Military is also often viewed to have very positively in supporting roles (Amelie Bottollier-Depois, 2011). The significant event which displays visible

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[1] The Strategic Research Institute National Defence Studies Institute Royal Thai Armed Force Headquarters (2008). The Defence of Thailand 2008. p. 33-34

[2] Ibid. p.41-44

supporting roles of the military in humanitarian assistance and disaster relief operations is the Thailand Flood in 2011 which was the worst flood of the history of Thailand (Amelie Bottollier-Depois, 2011). For some extend, people in Bangkok differentiated the military apart from the government. The newly elected government was largely discussed and criticized to be ineffective in disaster relief operation during the flood in 2011. The lost in communication, some even viewed as the lost control, between the government and the local authorities of Bangkok has worsened the confidence of the people on the government. The military, on the other hand, responded the situation very quickly with all the service branches, Army, Navy, and Air Force deployed for the disaster relief operations in both policy and operational levels. All military assets, including trucks, boats, helicopters, equipment or even bases were used for the ultimate purpose of disaster relief and service to the people. The disaster relief operations of the Thai military were carried in accordance with the government's policy; however, it was managed with very little dependency upon the government. It was to reduce time spent on administrative works and to have more interaction with the victims in order to acknowledge the needs and difficulties faced.

1.2 Problem statement

Disaster relief operations often involve various actors from all levels; local, domestic, regional and international. National government is always the most critical actor in disaster relief operation, because it sets the policy, coordinates and manages the overall operation, including international assistance**.** Along with the government, other actors such as Civil Society Organizations (CSOs), private sector, international agencies, and national and international militaries often play a very vital role in the disaster relief operations due to the capability in mobility, equipment, expertise, and experiences. However, interfacing of various actors with the government in an effective and timely manner can be a very vital element as it can make a lot of differences in the disaster relief operations.

Difficulties in the cooperation among actors in disaster relief operations include, firstly, the difference in organization structures and cultures. The military

structure is very systematic with the distinct Chain of Command which sets the military apart from any other agencies. On the other hand, the CSOs and many private sectors are based on independent networking system where information sharing is very quick and often time very difficult to manage. Secondly, the unpredictability of actors such as CSOs and private sectors sets the barrier towards the cooperation (Abiew, 2003). There are many actors involved in disaster relief operations and every actor is different from each other, varying in sizes and operational practices. It is very difficult for one actor to facilitate and coordinate all the actors with different practices. Thirdly, there is not any central agency or mechanism to act as the umbrella body to facilitate the cooperation among these actors. Each actor is now working by its own principles and practices with different policies, creating duplication of tasks. Lastly, the mutual lack of familiarity in roles of each other further enlarges the gap between these actors (Abiew, 2003). Each actor creates its own assumption for the roles of one another, creating more possible misunderstanding between actors.

It is often seen that, among all the actors in disaster relief, military is one very active actor as it has the high capability in mobilization and equipment. The responsibility in maintain national peace and stability sets the sense of service for the people, which lays the disaster relief operation as one of the supporting duties of the military. However, the cooperating mechanism for disaster relief operations can create complications in interfacing with the government.

Legal mechanism used during time of disaster is the core factor that determines the involvement procedures of the military for the disaster relief. However, the uncertainty of the usage of the legal mechanism can greatly impact the time spent in proceeding into the disaster relief operations of the military. During the period of disasters, time is one most important element in disaster relief operations because each minute passes by might mean the number of lives being lost or saved.

Furthermore, the differences in procedures and practices of military and government agencies can also affect the operations. The cooperation with different government agencies can also have some impact onto the overall disaster relief

operations as each actor performs differently according to each and individual strategy plan. Each plan may have basic fundamental idea and background with the reference to the common legal mechanism, however, the procedures on the practical operation can be very different and needed to be understood by all.

For Thailand, flood is the most frequent disaster which occurs every year in different parts of the country. The Disaster Prevention and Mitigation Plan of Action 2010-2014 (2010) states that between the years 2002-2008, there were total 71 of floods in Thailand which caused 958 dead with the total damage of 41,185.56 million baht (Department of Disaster Prevention and Mitigation, 2010, p.4). The Thai military is always the key actor who responds to the events according to the government's requests. However, from previous disasters, some difficulties in interfacing with the government are identified. Firstly, the lack of coordination of all agencies (Panadda Phucharoensilp, 2012) often occurred as all agencies stepped in and executed their operations right away (Army Disaster Relief Center, 2005) with the intention of rescuing and saving lives quickly. Secondly, there was not any standard procedure or rule of engagement for all agencies, which resulted in individual operations, executed in all levels – provincial, district and sub-district levels. This further resulted in unclear task assignment of each agency (Army Disaster Relief Center, 2005). Thirdly, agencies were not familiar with the practices and operational plans of each other, creating the difficulty in coordinating with each other (Army Disaster Relief Center, 2005). Fourthly, the lack of integration among national agencies created fragmented actions and resulted in less effective overall operation (Somporn Khunwishit and McEntire, n.d.). Lastly, the discontinuity of government also obstructed the ongoing development of effective emergency management as each Thai government often does not last long and it led to changes of personnel in top-management levels (Somporn Khunwishit and McEntire, n.d.).

In the flood 2011 in Bangkok, the abovementioned unsolved difficulties in interfacing with the government on disaster relief were clearly repeated. These repeated difficulties were the absence of integration of agencies, the lack of coordination among agencies, the absence of a clear system or plan to respond to the

crisis, the absence of the agency to act as the driving-force towards the implementation stage, the lack of familiarity of each other's practices. On top of these repeated difficulties, the use of legal mechanism was also the obstacle for the military to interface with the government in this particular case.

It is undoubtedly clear that the military is very active and can significantly make contribution in disaster relief operation, however, the cooperation and coordination among these actors must be effectively managed. Each actor must be informed about the roles and practices of each other and learn to adapt and understand the nature of the others in order to reduce the loss of lives and properties.

1.3 Research questions

It is very important to understand the situation of both the government and the military in the case of Thailand Flood 2011 in Bangkok. This is because different disaster events do not necessarily create the same difficulties for each actor, such as the absence of integration of agencies, the lack of coordination among agencies, the absence of a clear system or plan to respond to the crisis, the absence of the agency to act as the driving-force towards the implementation stage, the lack of familiarity of each other's practices. It is therefore crucial to ask what are the fundamental barriers that lead to the lack of coordination and impact the Royal Thai Army (RTA) in interfacing with government agencies in disaster relief operations? Did the use of legal mechanism such as the section 31 of the Disaster Prevention Act B.E. 2550 (A.D.2007) impact the RTA relief opeartion?

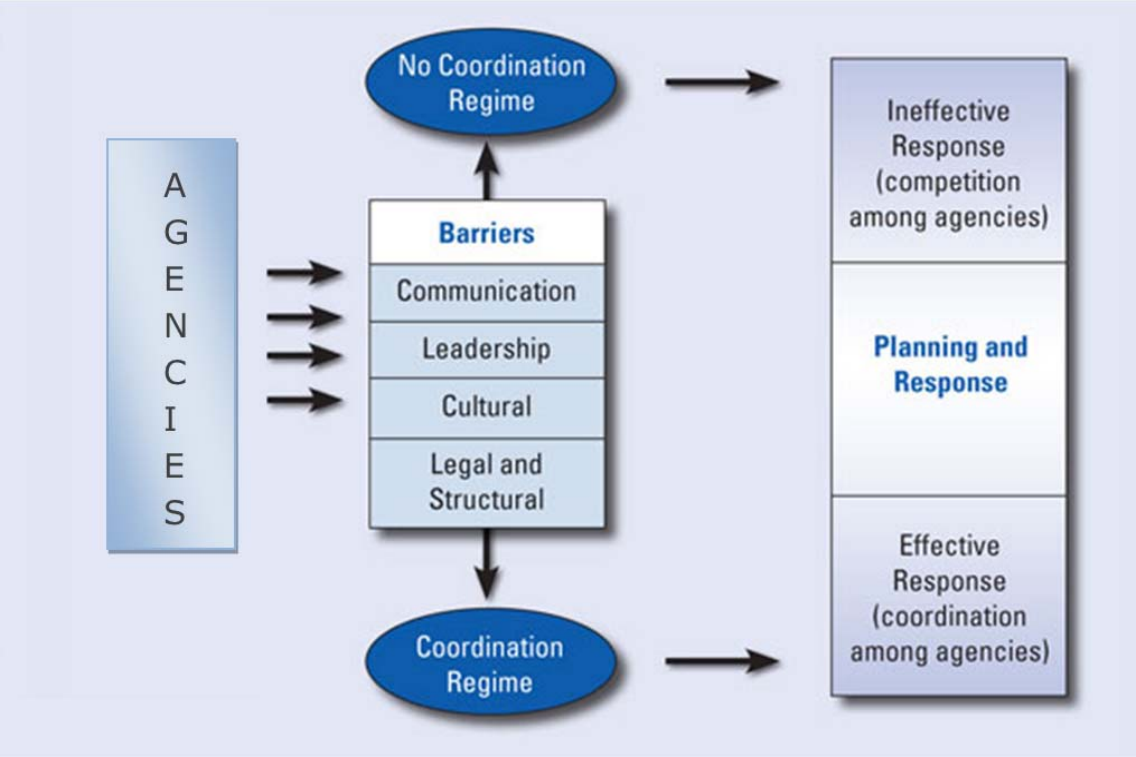
It also important to realize the existing approach of interfacing the RTA in this case, the assumption of the absence of approach should not be made. In exploring and analyzing existing approach, it is unavoidable to question what are the weaknesses of the existing interfacing mechanism on disaster relief operations?

With the date and information from the previous questions, the last question to be answered is how can the barriers in interfacing process with government agencies

be minimized in order to improve the disaster relief operations? This is to analyze all the gathered data and put into practice and give contribution the future cooperation.

1.4 Conceptual framework

Figure 1.1: Coordination Model



Source: From the National Institute of Justice Website (http://www.nij.gov/journals /261/coordination-model.htm)

The framework of this research will be based on the Coordination Model[3], developed by the National Institute of Justice, the United Stated Department of Justice. The model helps to identify the key barriers – communication, leadership, cultural, and legal and structural – which affect the coordination among agencies. This model is ideally promoting the approach towards to "Coordination Regime" which is the long-term system or mechanism to minimize the effects of all key barriers.

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[3] Shown in the official National Institute of Justice Website, which was modified in 2009 with the website address of http://www.nij.gov/journals /261/coordination-model.htm

For this research, each barrier can be defined specifically in relation to the relief operation during the flood 2011. Firstly, communication is defined as the information sharing among agencies during the flood as well as the channels of communication. Secondly, leadership is defined as the roles and the visions of the heads or the leaders of various agencies in the relief operations. This also includes the ability to respond the emergency situation at the national level. Thirdly, cultural is defined as the impacts of the differences in cultures and practices among agencies. The understanding of each other's cultures and practices could facilitate the effective respond in the collective operation. Lastly, legal and structural is defined as the limitations and impacts based on the legal mechanism of various agencies. The available resources and capabilities of various agencies should be productively utilized to respond to the flood.

These key barriers in the Coordination Model can be clearly seen in the case of flood 2011 in Bangkok. The lack of overall coordination and integration among actors further minimized the communication among them. The centralized role of the Prime Minister as the person in charge of the relief operation has impacted the coordination among actors as all operation must be commanded and controlled by the government. The cultural aspect was very visible as various actors from various backgrounds were involved, especially the military who has very distinct Chain of Command with the culture of obeying the strict order with highest respect of the commanders. The legal and the structural barrier in the case was a very crucial aspect of coordination because of the use of legal mechanisms as well as the structures of various actors was uncooperative. Furthermore, each actor was not familiar with any other actor's structure, creating more complexity in the overall operation.

1.5 Objectives

The first objective of this study is to understand the fundamental barriers faced by the RTA in interfacing with government agencies in disaster relief operations. This is because all disaster events are different in terms of locations, durations, time

periods or even cultures of actors. It is, therefore, very important to understand the situation of both the government and the military in the case of Thailand Flood 2011 in Bangkok.

The second objective of this study is to analyze the weaknesses of the existing interfacing mechanism for the RTA on disaster relief operations. In exploring and analyzing existing approach, it is important to realize and understand the structure of the existing approach of interfacing for the RTA in this case.

The third objective of this study is to determine the possible approach in minimizing the fundamental barriers for the interfacing process of the RTA with government agencies on disaster relief operations. With the data and information from the previous objectives, the last objective is aimed to analyze all the gathered data and put into practice and give contribution the future cooperation.

1.6 Hypothesis

It is hypothesized that, the use of the section 31 of the Disaster Prevention Act B.E. 2550 (A.D.2007) increased the time spent on decision-making process at the policy level of the RTA as it centralized the command and control to the government. It is further hypothesized that, the lack of understanding different procedures and plans among actors created duplication of tasks at the operational level of disaster relief.

1.7 Methodology

The methodology of this particular research is qualitative approach for the case-study. The methods used will include key informant interview in the form of semi-conducted style and content analysis of written materials.

For the key informant interview, the samples were the military units who were involved in the disaster relief operation during the Thailand Flood in 2011 in

Bangkok. At the policy level, the interviews were done on the Directorate of Civil Affairs, Royal Thai Army as well as the Office of Civil Affairs, Office of Policy and Planning, Ministry of Defence. The interviews were done on the military unit which executed the disaster relief at the operational level. The interview aimed to explore the procedures along with the actual practices and analyze them.

For government agencies, the interviews were done on the Department of Disaster Prevention and Mitigation, Ministry of Interior as well as National Disaster Warning Center. Interview were also done on local official at the Bangkok Fire and Rescue Department of the Bangkok Metropolitan Administration and official at district level in Bangkok, particularly in the Phra Nakhon District Office, Bangphlat District Office and Bangrak District Office. This aimed to explore the difficulties and the feedback towards the disaster relief operations.

The content analysis of written materials aimed to determine legal and structural barriers within the existing guidelines and legal mechanisms as well as related report from the Thailand Flood in 2011.

Qualitative data from the interviews was analyzed based on the Coordination Model in the conceptual framework, which looked at the various aspects of barriers – communication, leadership, cultural, and legal and structural – and determined the vital barriers in the case of the Thailand Flood in 2011 in Bangkok.

1.8 Research Scope

In this research, the period of flooding was focused from 20th October 2011 until 23 January 2012. This was because since 20th October 2011, the government recognized the flooding in Bangkok as the severe disaster and the Prime Minister used the power and authority under Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) to command and control the overall situation. On the 23 January 2012, the situation was back to normal with the starting of rehabilitation stage (Department of Disaster Prevention and Mitigation, Ministry of Interior, 2012)

The sources of the data collection from local officials were in the three particular district offices because firstly, the Phra Nakhon District is, with labeled as Bangkok area 1, the strategic historical location, where numerous key infrastructures as well as governmental offices are located. Some key infrastructures may include the Grand Palace, Ministry of Defence, Sanam Luang, Thammasat University, Silpakorn University, Bowonniwet Vihara Rajavaravihara Temple, Democracy Monument, The Giant Swing, and Khao San Road. Furthermore, the district is often used as the image of Bangkok. Secondly, the Bangphlat District is one of the populated residential district which covers Charansanitwong Road Arun Ammarin Road and a part of Borommaratchachonnani Road with four major bridges crossing the Chao Phraya River. Lastly, the Bangrak District is the vital business district of Bangkok which covers the Silom Road where numerous business offices are located.

The research focuses on the efficiency and effectiveness of the flood relief operations, not on the political dynamics between the government and the Bangkok Metropolitan Administration. Although it is understood that the governor of Bangkok is from opposition party and some scholars recognize the political conflict (Dalpino, 2012). Such conflict is also shown in the example in the Report of the Seminar on Fighting Crisis of Flood 2011, Prepare to Respond to Crisis of Flood 2012 (Department of Disaster Prevention and Mitigation, Ministry of Interior, 2012).

1.9 Significance of Research

Through the event of the Thailand Flood 2011 in Bangkok, it is shown that natural disasters have become one of the most alarming non-traditional security threats as they disregard the boundaries as well as categories of victims. The flood caused 813 deaths, impacted 13.6 million people with the damages of 43,253.60 million USD (Department of Disaster Prevention and Mitigation, 2012). More importantly, natural disasters are now visibly increasing in both frequency and degree of damage.

This research will contribute to not only the actors of the disaster relief operation, but also the victims and the affected ones. It is because the result of this research will further enhance the understanding of the practices and guidelines of the military and other agencies in disaster relief in Thailand, particularly in Bangkok. Furthermore, it will also help to reduce any possible conflicts which may be raised during the crucial time of disasters which will eventually be beneficial to victims and the affected ones.

In a larger aspect, this research will also have some contribution to the policy making in tackling the issues related to disasters in the future, hoping to improve the effectiveness of the cooperation between actors and facilitate the Disaster relief operations to respond in an effective and timely manner.

CHAPTER II

LITERATUER REVIEW

2.1 Natural Disaster as a Non-Traditional Security Threat

The Non-Traditional Security (NTS) has been increasingly acknowledged and become the main concern for the defence aspects in various countries. Formally, the Traditional Security played the fundamental role in policy making for defence agencies. The Traditional Security normally relates to territorial dispute, distinct sovereignty or conventional wars. In contrast with the Traditional Security, defence agencies are now realizing the increasing importance of international cooperation as NTS has widely spread and often intertwines various nations and various aspects of agencies. Some examples of NTS threats are terrorism, cybercrime, pandemic diseases, and natural disaster.

As the fact and characteristic of NTS, tackling the issues often involve various actors from all levels; local, domestic, regional and international. Evidentially, globalization has impacted security issues and perpetuated the NTS issues which widen and intensified the scope of threats of the region (Sukma, 2008). The problems may mostly originate from the domestic domain of a state, such as terrorism and environment problems, but globalization has transformed them to be transnational (Sukma, 2008). Since the September 11 attack on the United States, the home-grown terrorist networks as well as linkages to international terrorist organizations have ignited many attacks such as Bali bombings (Tin Maung Maung Than, 2007).

Environmental problems have also becoming an alarming NTS which gives a very clear characteristics and nature the security. The impacts of environmental issues do not usually appear directly occur onto the polluters themselves, many impacts are carried over to many other territories. A very visible example of the region is haze problem which originates from the burning of forests and plantation in Indonesia and

affected Singapore and Malaysia (Tin Maung Maung Than, 2007). Another example which greatly triggered the regional and global concern on environmental problem in term of NTS is the natural disasters. As the impacts of the disasters are very severe and the relief assistance is always in an urgent and immediate need, all available resources and actors are requested.

In relation to the resultant end of the environmental issues equation, natural disaster has become one of the duty operations for militaries in many countries all around the world. At the regional level, specifically in South-East Asia, natural disaster has been put into the common interest of the region. The Association of South East Asia Nations (ASEAN) has raised the issue on the natural disaster into a very high level of concern especially in defence aspect. In 2009, when Thailand was the Chair of ASEAN, the 3rd ASEAN Defence Ministers' Meeting (ADMM)[1] was held and organized by the Ministry of Defence, Kingdom of Thailand, on 26 February 2009 in Pattaya, Chonburi Province, Thailand. Three concept papers were adopted during 3rd ADMM and two of which were the concept paper initiated by Thailand on "ASEAN Defence Establishments and Civil Society Organizations (CSOs) Cooperation on NTS" and the concept paper initiated by Indonesia on "The Use of Military Assets and Capacities in Humanitarian Assistance and Disaster Relief" (ASEAN, 2009). This has proven the concern over the NTS issue especially on natural disaster for the defence aspect among ASEAN member states.

More practically, the legally-binding agreement of ASEAN Agreement on Disaster Management and Emergency Response (AADMER) was ratified by all the ten Member States of ASEAN and entered into force in 2009, containing provisions on disaster risk identification, monitoring and early warning, prevention and mitigation, preparedness and response, rehabilitation, technical cooperation and research, mechanisms for coordination, and simplified customs and immigration

[1] The ASEAN Defence Ministers' Meeting (ADMM) is the highest level of defence mechanism of the region, in which all defence ministers of 10 member states meet annually to address common security issues of the region.

procedures (ASEAN, 2011). Under the AADMER, the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) was officially launched by the ASEAN Leaders on 17 November 2011 at the 19th ASEAN Summit in Bali, Indonesia (ASEAN, 2011). The AHA Centre commits to undertake operational coordination of activities under the Agreement and facilitate co-operation and co-ordination among the parties, and with relevant United Nations and international organizations, in promoting regional collaboration.

2.2 Civil-Military Relations

It is important to look into the theory of Civil-Military Relations, when dealing with military and government. The nature and characteristic government and military are distinctively different as they play very different roles in the society. However, it is clear that the interaction between civilians and military has been existing for many decades. Samuel Huntington talked about Civil-Military Relations with the different stages of praetorianism through time. Respectively, praetorianism consists of oligarchical praetorianism, radical praetorianism and mass praetorianism (Huntington, 1968). The main characteristic in praetorian oligarchy is that politics is a struggle among personal and family cliques with dominant social forces are the landowners, the leading clergy and armed personnel (Huntington, 1968). In this particular stage, military play a key role in shifting to the stage radical praetorianism, which can be seen through the overthrowing of the absolute monarchy system. For radical praetorianism stage, the society has the additional struggle among institutional and occupational groups rather than just the cliques (Huntington, 1968). Even though, oligarchical stage would mostly evolve into radical praetorianism, it is not necessary that the radical praetorianism stage would have the origin from the oligarchical praetorianism (Huntington, 1968). More importantly, at this stage, riots and demonstrations by students and middle-class groups are common and therefore, military intervention would become usual response (Huntington, 1968). Lastly, the mass praetorianism level is dominated by social classes and social movements. In this stage of mass praetorianism , the military becomes the conservative guardian of the existing order (Huntington, 1968). This has clearly shown the evolution of

involvement and interaction of the military with civilian in different stages of praetorianism, which Samuel Huntington further summarized

> *In the oligarchical phrase, little distinction ususally exists between military and civilian leaders, and the political scence is dominated by generals or at least individuals bearing the title of general. By the time a society has moved into the radical meddle-class phrase, the officer corps has usually become more sharply delineated as an institution; influence is shared between military and other social forces; and a limited degree of political institutionalization may take place within the framework of a narrowly defined and non-expansible political system. Military intervention is frequently intermittent, with a alternation of military juntas and civilian ones and with gradual emergence of more powerful, counterbalancing, civilian groups. Finally, in the mass praetorian phrase, the influence of the military is circumscribed by the emergence of large, popular movements.* (Huntington, 1968, p.240)

Eventually, the overall system of praetorianism is changed to Civic order society, where the military acts as the institution-builder with more developmental role. Rebecca L. Schiff mentioned that one current conclusion of the Civil-Military Relations is the call for distinct separation of military physically and ideologically from political institutions. However, she also argued that, according to the concordance theory, the military, the political elites and the citizen should aim for a cooperative relationship upon four indicators of 1) social composition of the officer corps 2) political decision-making process 3) recruitment method and 4) military style (Schiff, 2009). The cooperation and integration between military and other partners of society is a type of civil-military relationships (Schiff, 2009). Schiff stated about concordance theory and military intervention that

> *By the standards of concordance theory, it is not the separation of institutions which makes domestic military intervention less likely. Rather, it is the ability of the partners to agree on the indicators mentioned above,*

regardless of whether the "civil" and the "military" are separate or not. (Schiff, 2009, p.33)

2.3 Difficulties in Cooperation

During the period of disaster relief operations, information sharing among all actors is very crucial, however, with the difference in organization structures and practices, information can be reached or shared less effectively. The distinct the distinct Chain of Command in the military creates very systematic and more reliable sources of information (The Institute for Foreign Policy Analysis, 2007). Before information can be shared or published, it will be thoroughly checked and verified for its validity, however, this process takes time which is a very valuable resource in time of disasters. On another hand, the networking structure of CSOs allows the information to be shared and spread around very quickly, however, the validity and reliability of the information can also be lack. Wrong information given on the field can mean more time is being wasted.

The complication of disaster relief operations increases due to the facts that there are many actors with different scales and sizes, such as the military, CSOs, and private sectors, involve in the operations. The unpredictability of various actors further enhances the complexity of the cooperation and interaction between actors (Abiew, 2003). Each actor has its own mandate and principles which often time can be very difficult to integrate them not only with military, but also among actors themselves (Abiew, 2003). Furthermore, each actor has its own specific area of interest with certain expertise. It is very difficult for one actor to facilitate, control and coordinate their work (Abiew, 2003). This might be because there are many actors who work in the competing manner rather than collaborating which leads to unwilling information sharing among actors (Abiew, 2003).

The mutual lack of familiarity and roles of each actor can also create complication (Abiew, 2003). In general the military plays a supporting role in helping civilians to provide relief assistance as military assistance is to be the last resource,

when there is no other way to fill an identified need (The Institute for Foreign Policy Analysis, 2007). However, often time the military think that it can provide better quality aid and the proliferation of civilians by the military occurs with creates great barrier in cooperation among them (Abiew, 2003). At the same time, the military organization, hierarchies and capability are often poorly understood and civilians have the perception that military is not as professional as they are in relief operation (The Institute for Foreign Policy Analysis, 2007).

This issue might be seemed very simple to be solved through joint consultation, planning and exercises between military and civilian agents in domestic bilateral and multilateral frameworks, which can certainly enhance the capacity for domestic and international disaster response (The Institute for Foreign Policy Analysis, 2007). However, it is questionable in their practical manner. In practice, each and every actor would not have enough time to do careful and thorough planning as disaster relief operations requires rapid response (The Institute for Foreign Policy Analysis, 2007). Every actor would want to step into the affected areas and executes their operations, aiming to rescue and reduce loses in lives and properties. More importantly, the limited budget is normally the situation to be out into consideration for all actors, especially during the period of disaster (The Institute for Foreign Policy Analysis, 2007). Additionally, the fact that actors do not share the same training priorities or political freedom must also be thought of.

2.4 Legal Mechanisms and Practices in Disaster Relief

It is very vital to look into the legal mechanisms and practices involved in the flood 2011 in Bangkok. The two fundamental legal mechanisms used in this event are the State Administration Act B.E. 2535 (A.D. 1991) and the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007). These two acts laid out the overall situation and operation of the government in tackling with the flood. Furthermore, other key documents involved in the flood are the Disaster Prevention and Mitigation Plan of Action 2010-2014, The National Preparedness Policy, the Royal Thai Armed Forces

Headquarters Disaster Relief Plan and the Royal Thai Army (RTA) Army Standard Operation Procedure (SOP) on Disaster Relief Operation.

The State Administration Act B.E. 2535 (A.D. 1991) was used by the governemt to establish the Flood Relief Operation Center (FROC). Prime Minister Yingluck Shinawatra used her authority under the act in section 3 and 9 to initialize the disaster relief operations, however, the act doesn't have any legal mechanism to control or administrate the agencies in responding to the government's requests. This act would simply reemphasis on the general administration on reallocation of tasks to designated agencies. It gives the authority to the Prime Minister to command and reorganize the plan of actions of ministries, bureaus and departments in order to operate in a timely manner. The complication occurred when the Prime Minister was not be responded accordingly and all the tasks were being done independently, creating duplications and miscommunication.

Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) was used instead of the State Administration Act B.E. 2535 (A.D. 1991) at the later stage of the flood. The Prime Minister used her authority under the section 31 of the act. The key characteristic of this act was the fact that the Prime Minister has the power to command, control and demand Commander in Chief, Directors, government agencies and related local administrations to deploy disaster prevention and mitigation and, most importantly, the abandons of their duties, deny compiling any commands from Prime Minister or designated Deputy Prime Minister, will be charged as highest disciplinary violation or improperly operation at highest degree. The act created the centralized power at the Prime Minister and all of the relief operations would be done under the absolute provision of the Prime Minister.

As for the practice of one key government agency, the Department of Disaster Prevention and Mitigation, Ministry of Interior, the Disaster Prevention and Mitigation Plan of Action 2010-2014 is used as the core procedures in disaster relief. The definition of disaster in this particular document would include fire, storm, drought, epidemic in human, epidemic in animals, epidemic in aquatic animals,

epidemic in plants as well as other disasters which affect the public, regardless of the cause – natural, man-made or other – , and harmful to lives or properties of the people or state and to also include disasters from the air as well as insurgency. This plan of action recognizes floods as the disaster which creates the highest damage for the country. This document clearly recognizes that disaster prevention and mitigation operations would require cooperation from all available resources, military, private sectors, volunteers, and foundations. The section eight of the plan of action clearly states the role and responsibilities of related sectors and agencies, in which Ministry of Defence is responsible for the disasters on national security, which may include disasters from wars, explosives, chemical or biological weapons. However, the Ministry of Defence is also responsible for giving support to give assistance to the victims of disasters and rehabilitate and restore the damages in a timely and effective manner. More specifically, in severe floods situation in Bangkok, the Ministry of Defence is to have a supporting role in the relief operations. The support is in terms of personnel, machines, equipments and vehicles.

The National Preparedness Policy was established in 2005 by the Office of National Security Council of Thailand, with the cooperation from the Ministry of Interior and the Ministry of Defence. The policy was established based on the realization of the complexity of the disasters and security threats of the present time. The policy recognizes the degree of the threats which has become so severe that a single agency cannot tackle them alone. The policy aims to bring all agencies in all sectors – government, state enterprises, private, civil society as well as the citizen – to work together in tackling these threats. The main objective of the policy is to prepare all mentioned sectors, during the normal situation, to have the readiness to effectively face and tackle disasters and security threats as well as emergency situations. The Policy focuses on four guidelines which are resource preparedness, participation of all sectors, planning, and management.

The Royal Thai Armed Forces Headquarters Disaster Relief Plan has one of the core objectives as the supporting role to the Disaster Prevention and Mitigation Plan of Action 2010-2014. The procedures for the SOP are divided into three phrases,

preparation phrase, operation phrase, and rehabilitation phrase. During the operation phrase itself, it recognizes the degree of disaster which starts from level one to be the lowest and moves up the scale until the level four which is the most severe type. However, in all degrees of disasters, the military would deploy the assistance upon the request of the Disaster Prevention and Mitigation Department and the request would include areas of operation as well. In the situation of very severe disasters, the military will be involved in the overall aspect with the Royal Thai Armed Forces Disaster Relief Center as the responsible unit.

The RTA SOP on Disaster Relief Operation, similarly to the Royal Thai Armed Forces Headquarters Disaster Relief Plan, there are three phrases, preparation phrase, operation phrase, and rehabilitation phrase, however, it categorizes the degree of disaster into three levels with level three be the highest level of severe disasters. In accordance with the Royal Thai Armed Forces Headquarters Disaster Relief Plan, one of its main objectives is to give support to the civilian agencies upon the requests, however, it give more emphasis and prioritize on the rapid response to reduce possible loses in lives of the people. It also lays out the more operational procedures during the disaster phrase which include evacuating victims, moving properties out of the risks areas, organizing mobile medical teams, distributing survival kits, and establishing temporary shelter at safe areas.

In practice, the Crisis Management Exercise (C-MEX) has been the vital ground field for various agencies to exercise and get familiar with each other in terms of policy, strategy and practices. The C-MEX exercise is to be conducted annually with under the supervision of the Disaster Prevention and Mitigation Department. The C-MEX 11 was the latest one which was held in Phetchaburi Province in September 2011. The scenario of the exercise was on national security aspect of disaster which involves insurgency and riots. The exercise aimed to facilitate and determine the channel of cooperation in the operations on the evacuation of people, humanitarian assistance as well as the cooperation with international agencies.

2.5 Disaster Management

The Disaster Management (DM) is the key concept which sets the foundation of disaster relief. It mainly aims to reduce the losses from hazards, assure prompt and appropriate assistance to victims of disaster, and provide rapid and effective recovery (Warfield, 2008). In DM, it is very important to understand the definition of the term disaster as there are many different various definitions used. The definition used in the DM handbook is *"An event, natural or man-made, sudden or progressive, which impacts with such severity that the affected community has to respond by taking exceptional measures"* (Cater, 1991, p. xxii). However, most definitions reflect the characteristics of

- *Disruption – to normal patterns of life. Such disruption is usually severe and may also be sudden, unexpected and widespread.*
- *Human effects – such as loss of life, injury, hardship and adverse effect on health.*
- *Effect on social structure – such as destruction of or damage to government systems, buildings, communications and essential services.*
- *Community needs – such as shelter, food clothing, medical assistance and social care.* (Cater, 1991, p. xxii)

The key element of the DM is the DM cycle which consists of four phrases which Corina Warfield (2008) stated namely, mitigation, preparedness, response, and recovery. Corina explained about each phrase in detail as follows:

> *Mitigation - Minimizing the effects of disaster. Examples: building codes and zoning; vulnerability analyses; public education.*
>
> *Preparedness - Planning how to respond. Examples: preparedness plans; emergency exercises/training; warning systems.*
>
> *Response - Efforts to minimize the hazards created by a disaster. Examples: search and rescue; emergency relief .*

> *Recovery - Returning the community to normal. Examples: temporary housing; grants; medical care.* (Warfield, 2008, para. 3)

Corina further elaborated that the mitigation phrase and the preparedness phrase could be strengthen through sustainable development, promoting of sustainable livelihoods and the protection to reduce hazards, prevent disasters, and prepare for emergencies (Warfield, 2008). As for the response phrase and the recovery phrase, they are under the humanitarian action in dealing with immediate response and recovery. Therefore, humanitarian agencies must experiences, trained personnel, adequate logistic support, communications, and guidelines for working in emergencies (Warfield, 2008).

Based on the definition of the key term disaster, DM requires the involvement of various agencies throughout the four phrases of the DM cycle. The most visible phrase of the military involvement in DM cycle is the response phrase. This is because of the characteristics of the phrase which include human effects and the disruption that often time be severe and sudden. The capability of the military in mobilization and rapid deployment contribute significantly to the response phrase along with the cooperation with other agencies. The involvement of the military at this phrase has undoubtedly created direct contacts with the civilians – the local authorities and the victims or the citizens – and therefore, connects the DM with the Civil-Military Relations theory. The role of the military at this stage would be the institution-builder, putting more focus onto the developmental role for the civic order society (Huntington, 1968). However, the Civil-Military Relations for the DM would shift towards the concordance theory, where the military, the political elites and the citizen aim for cooperative relationship among them (Schiff, 2009).

The involvement of the military in DM, especially at the response phrase, is clearly beneficial; however, one main constraint of the military which affect the cooperation with other agencies is that

> *"In many countries military commanders at all levels are unlikely to be practiced in operations with civilian authorities and public services and unused to their system of decision making, authority and responsibility. There is likely to be*

incompatibility in equipment (radio communications, for example) and little experience of collaboration in the achievement of a common task." (Cater, 1991, p.102)

In reference with the Coordination Model[2], the abovementioned constraint can be reduced through the analysis based on the four barriers of the model. This is to promote the coordination regime in order to achieve the effective response. The model facilitates the better understanding and realization of barriers of all involved agencies in any disaster situation, potentially increasing cooperation among various agencies based on common practices and interests.

2.6 Thailand Flood 2011

Military doesn't focus only on war operation, in facts, military has wide varieties of capabilities and disaster relief operation is one of the most crucial operations which military has been playing a very active role. This is because natural disasters have now become increasingly concerned by the government, especially in the defence sector. The Defence White Paper[3] states Public Disaster Relief as one of the operations for the military and, evidently, Public Disaster Relief Centers were established in the Ministry of Defence, Royal Thai Armed Forces Command, and every single Armed Force in order to assist people who are affected by natural and man-made catastrophes (The Strategic Research Institute National Defence Studies Institute Royal Thai Armed Force Headquarters, 2008). It is hypothesized that Military has now become very positively referred by people in Bangkok due to its operation during the Bangkok Flooding Situation in 2011. The flooding situation has brought up even more visible role of military in disaster relief here in Bangkok and

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[2] Shown in the official National Institute of Justice Website, which was modified in 2009 with the website address of http://www.nij.gov/journals /261/coordination-model.htm

[3] The *Defence White Paper* is unofficially used to refer to *the Defence of Thailand 2008* published by the Strategic Research Institute National Defence Studies Institute Royal Thai Armed Force Headquarters.

the people of Bangkok might have changed their perspective on military and the affect to their lives. From the article by Amelie Bottollier-Depois (2011), it is shown the dramatic positive change on people perspective toward Thai military from the relief operation for the Flooding Situation in 2011.

There are critics are made upon the effectiveness of the operation and the roles of government. For examples, in the research by Major General Piti Kumpoopong, the main focus was put towards the shifting of the roles of Military in the globalized world. The research clearly mentioned that rescue operation in time of natural disasters (Piti Kumpoopong, 2001) has become one of the main focuses for the military. On the other hand, Louis Lebel, Jesse B, Manuta and Po Garden (2011) criticized the Thai government's action on the flood situation in 2011 by putting more emphasis on the policy level. The paper identified institutional traps (Lebel et al., 2011) as one of the main problems in encounter the Flooding Situation in 2011. The absence of the connection between the military and the people is clearly shown in all the previous studies. The reason of this absence might be that, people are often ignored in policy level and their views or needs are often identified through assumption of policy makers. It is, therefore, needed further studies on the relation and the effects of the relationship between the government and the military on the disaster relief in this particular event of the flood 2011 in Bangkok.

CHAPTER III

RESEARCH RESULTS

This chapter will give the detail information on the research results for the case study. The research utilized key informant interviews on military personnel, key government agencies and local authorities at district level. All of the interviewees were actively involved in disaster relief operations during the flood 2011 in Bangkok. All the information from all of these interviewees was their direct experiences during the flood. The interviews were all done in Thai language which later translated into English and then used in this chapter.

3.1 Interviews of military personnel

3.1.1 Office of Civil Affairs, Office of Policy and Planning, Ministry of Defence

The Office of Civil Affairs, Office of Policy and Planning, Ministry of Defence is one very important military unit which responsible for issues related to disaster relief at the policy level. The key division which solely responsible for the disaster relief is the Disaster Relief Division, Office of Civil Affairs, Office of Pwutthisan9wolicy and Planning, Ministry of Defence. This particular division is the connecting channel between the military and the government. The director of the division, Colonel Kajohn Pimkasem, was interviewed on 9 July 2012 and information was retrieved and used for this research.

Legal and Structural

In Colonel Kajohn's view, the military is known to have the role as the supporting agency in disaster relief; therefore the military cannot initiate the operation. From the event of the flood 2011 in Bangkok, the expectation from the people and other agencies was on the military in relief operations, but the legal aspect as well as the role of the military restricted the execution of the military, the military

could only wait for the request. The confusion in the management of various agencies in accordance to the Disaster Prevention and Mitigation Plan of Action 2010-2014 was also another factor. This was because the Disaster Prevention and Mitigation Plan of Action 2010-2014 was not well studied by all actors. He further emphasized that the Disaster Prevention and Mitigation Plan of Action 2010-2014 was to be used as the National Plan for all agencies to follow, and every other agency would issue their own individual plan according to the Disaster Prevention and Mitigation Plan of Action 2010-2014. This was to assure that tasks and responsibilities would be assigned and operated with minimal duplications.

Colonel Kajohn mentioned that the use of the legal mechanism, the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007), was considered the right decision and did not affect and slow down the tasks and operations of the military which had been carrying out since the beginning of the flood. The military was still able to work according to the original plan.

Colonel Kajohn expressed his thought that people were not the only ones who believe that military was the main actor instead of the Department of Disaster Prevention and Mitigation in disaster relief during the flood. There were also many policy makers who trusted in military much more than any other agency in disaster relief during the flood. It was very difficult to promote the understanding that the military was not designed solely for disaster relief operations and our equipment was not designed to withstand the prolonged flood. The Military was not ready in the sense of equipment as our equipment was not designed for the disaster relief operations. It is also very vital to realize that the maintenance of military equipment is already very expensive and if the equipment is used in incorrect manners or purposes, the damages would be immeasurable and cost much more than usual to repair. In facts, the military has the capability in labor force which could be called and deployed very quickly; however, we have not been trained specifically for disaster relief operations. Our capability was more on labor intensive work.

Cultural

The difference in cultures among agencies also impacted the coordination among them as the military did not learn about the cultures of each other and therefore, communication could sometime become problematic. Colonel Kajohn believes that it was important to understand the structure of the existing mechanism for disaster relief. Moreover, the person in charge of the overall mechanism, in this case would be the Prime Minister, should know and understand the cultures as well as procedures and practices of all agencies involved in the operations. This was to reduce the possible conflicts and to enhance the better understanding among all the agencies. However, for the flood 2011, the Prime Minister did not know much about the cultures as well as procedures and practices of all agencies involved in the operations as she was very recently elected and did not have much time to learn about cultures and natures of various government agencies.

Communication

Colonel Kajohn observed that some community level relief operations were widely seen during the flood in 2011, however, they were not well planned in the collective approach. There were very limited communication and planning with other various communities and other agencies. Each community would only focus on their own safety without realizing the other communities' plans as well as other agencies. It is important that the people know the whole structure of the operations, making sure they know the channel of communication and go to the right person and the roles of various agencies.

Additional Information

Colonel Kajohn explained that the military has many units in various fields, medical, science, or humanitarian assistance and disaster relief; however, the military is not the expert in all the fields. We have all the fields designed to be operated during the war time; therefore, the military should only play the supporting roles for all various fields for the main specific agencies during normal time. The military should not do more than the stated roles and responsibilities because it might lead to other legal issue. There is also the issue on budget which is very difficult to request for

more defense budget as we are not the main agency in disaster relief. If the military would like to increase its role in disaster relief, the laws and structure of the Disaster Prevention and Mitigation Plan of Action 2010-2014 would have to be changed; however, the existing mechanisms are still very effective. The important approach is that all agencies should learn and thoroughly understand and follow the existing structure. There is no need to establish a new mechanism to act as the central agency to control the overall operations because we do have such mechanism, but it was not well studied and implemented accordingly.

Colonel Kajohn further viewed that the exercises and preparation for possible disaster such as the C-Mex is a very useful tool, however, it has not been used productively. Many agencies have overlooked the C-Mex, thinking that it is just a small scale of exercise and potentially led to less understanding of collective operation at the national level. The C-Mex has been put into at the field operation and not looking at the overall picture of the operation.

Colonel Kajohn concerned on the roles and responsibility of the Department of Disaster Prevention and Mitigation which has been ignored and misunderstood therefore, the publishing of the information to the people, not only among agencies, should be promoted. This is to make sure that people know the structures, procedures and channel of communication in time of disasters.

3.1.2 Directorate of Civil Affairs, Royal Thai Army

The Directorate of Civil Affairs, RTA is the vital RTA unit which executes the operations on disaster relief. The unit is directly under the supervision and command of the Commander-in-Chief of RTA. During the flood in 2011, the unit worked very closely with all of the assisting RTA operation units, planning and giving supports with all the available resources to all the RTA personnel to execute the relief operations. Colonel Narong Suwanumpai, Deputy Director of Project and Budget Division, Directorate of Civil Affairs, RTA and Colonel Thiratch Sombutsiri, Deputy Director of Development Division, Directorate of Civil Affairs, RTA, were

interviewed on 9 July 2012 for information concerning the roles of RTA during the flood in 2011.

Colonel Narong described generally that the RTA operates and executes tasks under the supervision of the Royal Thai Armed Forces Headquarters which is also under the Ministry of Defence. This channel of operation has always been the practice of the RTA even during the flood in 2011. After the announcement of this flood to be severe disaster, the RTA was assigned to be responsible for the flood situation in five provinces Nakhon Sawan, Ayutthaya, Lopburi, Pathumthani and Nonthaburi. However, once the flood got to Bangkok, the arrangement was reconsidered and the RTA units were assigned to various districts in Bangkok. The RTA had to recall all the support from all available units around the country.

Legal and Structural

Similarly to Colonel Kajohn's point, Colonel Narong explained that the RTA systematically operates and divides its tasks into various fields with different specific unit specialization such as supplies units, operation units, engineer units, and logistics units. During the flood in 2011, all the specialized units were able to execute their operations effectively with very limited assistance and supports from other agencies. However, other agencies have never before divided their tasks in the similar system. This potentially led to difficulty in coordination and operations among various other agencies. The RTA has also issued the order to all battalions of the RTA to establish one relief company to be ready at all times.

Colonel Narong realized that the Department of Disaster Prevention and Mitigation is the main actor, but they do not have enough labor force and capability to execute the relief operations. He further elaborated that although the RTA seemed to have all the resources and readiness for any emergency situation, the RTA had to adept the available resources to this particular flood situation as there was no equipment designed for the flood. The equipment which the RTA deployed for the relief operations was not designed for this severe prolonged flood. This was because the RTA normally would operate the relief operations in the situation of short period

of disasters; therefore, this long lasting flood was a new form of disaster which RTA faced. More importantly, Bangkok has never been through severe flooding for very long time, therefore, people were unprepared and did not know how to deal or live with the water.

Colonel Narong also mentioned that the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) was not affecting the operations of the RTA. Furthermore, the RTA already assigned the units attached to the various districts in Bangkok which helped the operations to be done very quickly. The core Policy of the Commander-in-Chief of RTA was to give assistances immediately, regardless of budget, putting more concerns on water management, labor force support, logistics, and integration with other agencies' tasks. However, one obstacle observed was that the people had the attitude of waiting for the assistances and not trying the help themselves, making assistances become less sustainable and raising the demands of assistances. More importantly, the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) and the Disaster Prevention and Mitigation Plan of Action 2010-2014 acted as the central mechanism to collectively manage the whole situation, but the mechanism was not well implemented. The documents such as the Disaster Prevention and Mitigation Plan of Action 2010-2014 as well as other agencies' plans were not carefully studied.

Leadership

In the larger picture, Colonel Narong observed that the management last year was poorly done. Many other agencies looked at the RTA as the main agency in disaster relief and would also leave many tasks to the RTA. The donations and aids were vastly given to the RTA as majority of the people would think only of the RTA when the term Armed Forces was mentioned. This put the task of management of donations and aids onto the RTA. Another very visible evident was the FROC which was not well planed and organized. It was flooded and had to be relocated, causing the distrust for the people. More importantly, the person in charge of FROC was the Minister of Justice, who does not work in the field of disaster relief on the normal basis. This should be led by the personnel of Department of Disaster Prevention and Mitigation. The highest level of the chain of command during the flood was the Prime

Minister who was recently elected and had no experience in disaster relief operations, making management went not too smoothly. The collective perspective of the situation was not put into attention. People were not informed of the overall situation; therefore, the local authorities and people would only prevent their area from flood without paying any attention on the other areas. Each province was blocking the water out of their areas, without looking at the overall situation. The information from the government was not well managed and there were many individuals and scholars giving different information, creating confusion to the people. Colonel Narong added that the media was also another actor that posed impact on the operations. Media would only report on the areas which severely flooded and still have not been given any assistance while, in facts, there were also many other areas which were given assistances, but were not put into the media broadcasting. This overwhelmed the assistances, especially from private sectors, to the particular reported areas, causing difficulty in management of assistances in the certain areas. Another factor which contributed to the poor management was the heads of various agencies as they would want to have the power and command over their own agencies and would not want to be commanded and controlled by other agencies.

Additional Information

In the preparation stage, Colonel Narong observed that exercises were performed by the government agencies, but hardly involved people and communities. The principle of self-assistance should be promoted as people should learn to help themselves and help each other instead of just waiting for assistance. Furthermore, the process of prevention should be focused, not the relief operation.

Colonel Thiratch was an RTA officer attached to the FROC. He realized that the existing plan and structure for disaster relief was not implemented. The plan and structure used during the flood in 2011was not familiar according to the existing plan and well as the exercises. Information and capabilities of involved agencies were not well managed as there was not any record of available of assets of various agencies. The sources of information were not well managed. There were too many spokesmen informing various type of information, creating confusion to the people.

Legal and Structural

Colonel Thiratch viewed that the roles of RTA was very visible at the operational level, this was because we have the readiness in labor force and adaptation on existing equipment. More importantly, we have the discipline in the work ethics and could be easily commanded and controlled and have always been working very closely with the local authorities. Furthermore, the government was able to approve the budget to support the RTA to execute the operation continuously, however, Colonel Thiratch emphasized that the RTA was just a supporting agency.

The use of the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007), to Colonel Thiratch's opinion, was not affecting the operations of the RTA. The problem was the implementation of the Disaster Prevention and Mitigation Plan of Action 2010-2014 and the exercises. This was because plans of various agencies were based on the Disaster Prevention and Mitigation Plan of Action 2010-2014, however, the plan was not prepared for such prolong flood, therefore, some plans was rearranged at hand according to the situation.

Leadership

Colonel Thiratch mentioned that the policy of Commander-in-Chief of RTA was to give the full supports upon requests. Additionally, RTA has the units attached to all districts areas; therefore, we could response to the requests of local authorities immediately. The Commander-in-Chief of RTA emphasized that units must work along with the local authorities, not taking over the role and responsibility of the local authorities. Colonel Thiratch observed that some units and military personnel had to give the assistances while they were the victims themselves, making them worried and could not operate effectively enough.

Additional Information

Colonel Thiratch and Colonel Narong commonly mentioned that humanitarian assistance and disaster relief has now become much more concerned and focused by many countries and international assistances would be problematic when they involve

military. This is because deploying defense forces into another nation would be a very sensitive issue.

3.1.3 First Battalion Artillery Queen's Guard, Royal Thai Army

Colonel Jeraroj Thoopteanrath, the Commander of 1st Field Artillery Battalion Queen's Guard, worked very actively at the operational level during the flood in 2011. His unit was deployed and very actively giving assistances and supports with all of available resources to the victims and other agencies in Bangkok especially in the Phra Nakorn District. His unit was assigned to be attached to the Phra Nakorn District and work very closely with the Phra Nakorn District Office, however, the troops and personnel of the unit had to also support other units in other districts upon request. Colonel Jeraroj was interviewed on 10 July 2012 for information concerning the roles of the unit during the flood in 2011.

Colonel Jeraroj generally commented that the Phra Nakorn District was considered very effective in flood management. The Phra Nakorn District Office called the meeting since the flood reached the provinces near Bangkok. This is because the district is a very vital location as there are many key infrastructures located in the area.

Colonel Jeraroj mentioned that communities were also very vital actors in responding to the disaster. Each community had different capability in responding to the flood as the people in communities could initiate the self-protection. The relationship between the unit and communities has always been very close as the unit would get involved with the communities' activities during the normal situation, keeping in touch and contacts with the communities. However, it is very impossible to initiate very good relationship with all communities in the area. During the flood in 2011, some communities were not giving cooperation with the assisting agencies. People would ignore the warning or the suggestion and prevention plan, waiting until the flood arrived and requested for immediate relief.

Legal and Structural

Colonel Jeraroj emphasized that the military does not have the expertise in disaster relief. We are the supporting agency who works along the local authorities. However, from the flood 2011 in Bangkok, people would expect the military to always be giving out assistances, seeing RTA trucks would mean that there would be food and aids for the people and be the transportation for the people. In facts, the truck actually had been ordered to go to some requested destinations for emergency missions, but people would told truck to stop and requested for food and aids.

The Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007), in Colonel Jeraroj's opinion, did not have any impact on the operation of the unit. The RTA Policy was to give immediate assistance without hesitation, need not to wait for orders when emergency situation occurs.

Communication

Colonel Jeraroj emphasized that the key problem was the equipment and assets. One very visible example was sand bags which were highly demanded and very often requested by all victims. Colonel Jeraroj explained that the source of information about flood situation was given by the Phra Nakorn District Office. There was very effective communication as the relationship has been very close long before the flood happened. The cooperation was very visible at the operational level, as the higher commanders fully supported the principle of giving the quick and immediate responses. During the flood in 2011, the unit was informed about the plans from the Phra Nakorn District Office and the coordination at the operational level was not a problem as all agencies had the common goal in giving assistances to the people, aiming only to help the people and protect the key infrastructures.

Colonel Jeraroj added that information sharing and awareness is very important for people at the community level, however, exercises for the people at community level would not be practical. It is because the only possible exercise in flood situation would be the evacuation and more importantly, the people in Bangkok do not give much attention or cooperation in field exercises. The attention should be

put into the prevention process, assistances and the channel of coordination as well as communication with other related agencies instead of exercises. As for assistances, the focus should be put into equipment and available assets for relief operations.

Additional Information

Colonel Jeraroj described that there has always been gap between the policy and operational level. This was because the policy level set the expectation, while the operational level has limited resources. However, this past flood, many policy level personnel came down to the operational level and work. In preparation for upcoming possible flood, the unit has checked the available assets and equipment. The strategy would be to cooperate closely with the district office, putting emphasis on the fatigue locations of the areas.

3.2 Interviews of key government agencies

3.2.1 Bangkok Fire and Rescue Department

The Bangkok Fire and Rescue Department is the department which is under the supervision of the Bangkok Metropolitan Administration. The Bangkok Fire and Rescue Department is the key agency responsible for disaster prevention and relief operation in Bangkok. During the flood in 2011, the Bangkok Fire and Rescue Department was acting as the secretariat for the Bangkok Metropolitan Administration. Mr. Teerayut Poomipak, Fire and Rescue Officer of the Bangkok Fire and Rescue Department, Senior Professional Level, was very actively involved in both policy and operational levels in relief operations during the flood 2011. Mr. Teerayut was interviewed on 17 July 2012 for information concerning the relief operations during the flood in 2011.

Legal and Structural

Mr. Teerayut explained that the Department of Disaster Prevention and Mitigation would be the responsible agency who announced the disaster situation area in Bangkok while in other provinces, the governors would be the persons who have

the authority to announce the area to be at risk. When flood was getting into Bangkok, unaffected provinces were ordered to give assistances to Bangkok as Bangkok was the headquarters of the country and it should be protected as much as possible. If Bangkok was totally flooded, other provinces would definitely be affected as there would not be enough distribution of aids and assistances from the Bangkok.

Mr. Teerayut commented that the use of the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) was the right option and did not slow down the relief operations, however, the use of Disaster Prevention and Mitigation Plan of Action 2010-2014 was not applicable for the situation as it was established before the prolong flood in 2011. Bangkok has always focused on disaster from fire as the first priority followed by storms, therefore, the Bangkok Fire and Rescue Department did not have any experience and equipment for such flood in 2011.

Mr. Teerayut described that all district offices were given the authorities to execute the relief operations without waiting for orders from higher, however, there was no time to discuss about plans of various agencies; therefore, the integration of tasks was not very smooth and the collective relief operation was not focused. Furthermore, the exercises such as C-Mex were not effectively done; they were often time symbolically done.

Mr. Teerayut viewed that the RTA has the capability in command and control their personnel very effectively as well as the equipment and labor force. The RTA was therefore, mainly given the logistic tasks to support as well a labor force, constructing temporary dams as well as filling sand bags. During the flood in 2011, the RTA did mostly in giving supports to operation tasks and therefore the people would have direct contact to the RTA and viewed that the RTA was the key main agency in disaster relief.

Communication

Mr. Teerayut mentioned that the FROC was the central point of contact with all the heads of agencies which helped in coordination and giving orders to the

operational level. However, the news and information from the government was not seen reliable as there were too many actors involved in announcing and giving situation information and warning orders to the people. This resulted in the use of information from various media which also had impacted the information sharing to the people, because people would not analyze the information but would just use the information directly.

Mr. Teerayut believes that it is important to integrate the tasks of all agencies and look the collective situation.

3.2.2 Department of Disaster Prevention and Mitigation

The Department of Disaster Prevention and Mitigation is the agency under the direct supervision of the Ministry of Interior. This agency is the main agency for the disaster relief operation at the national level. During the flood 2011, the Department of Disaster Prevention and Mitigation was put as the primary agency to over look the collective situation and coordinate all the involved agencies in accordance with the Disaster Prevention and Mitigation Plan of Action 2010-2014. Mr. Vithaya Makpan, the Director of Disaster Mitigation Directing Center, Department of Disaster Prevention and Mitigation, was interviewed on 31 July 2012 for information concerning the collective relief operations during the flood in 2011.

Legal and Structural

Mr. Vithaya described that the flood last year was much more devastating and sudden than Department of Disaster Prevention and Mitigation expected. The relief operations were therefore not very effectively executed. Furthermore, some agencies did not know their own roles and responsibilities well enough. He further added that the communication with other agencies was done in accordance with the legal mechanism, the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007). However, the system was not permanently setup and prepared for, therefore it was done in form of ad-hoc system. Furthermore, there were many experts as well as

sources of information, creating variety of information with limited collective information management and caused confusion to people.

Mr. Vithaya viewed that the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) did not have any negative impact on the operation. It, in facts, helped the government to collectively operate the relief task, however, the Prime Minister was recently elected; therefore, the preparation and operation did not go too smoothly. During the flood in 2011, there was not much discussion on the plans and practices of other various agencies. Furthermore, the Disaster Prevention and Mitigation Plan of Action 2010-2014 was put into force with very limited exercises. Mr. Vithaya also observed that the difference in organizational structures put some impacts on the operation as there was not much discussion and exercises. For example, the RTA has the capability in labor force and equipment and the operations were very certain and predictable and put the RTA at the very visible role, however, the limited flexibility could sometime increase the time spend on immediate unsuspected tasks.

Mr. Vithaya mentioned that the key policy was to put victims at the very first priority and keep the operations going. He also emphasized that the Department of Disaster Prevention and Mitigation was the coordination agency, not the operation agency.

Communication

Mr. Vithaya viewed that exercises and information sharing with the people would be very important. There was also not enough integration of people into the government since the planning stage. The obstacle was the lack of collective situation management as well as information management. Although the government has some degree of control over the media, however, the technologies and social network are so advanced that some information or in-depth information could be quickly and widely shared.

Additional Information

Mr. Vithaya added that the Department of Disaster Prevention and Mitigation is now in the process of making changes on the Disaster Prevention and Mitigation Plan of Action 2010-2014. There would also be a permanent command and control center in place of the ad-hoc system used during the flood in 2011.

3.2.3 National Disaster Warning Center

The National Disaster Warning Center is operating under the Ministry of Information and Communication Technology (ICT). The main task during the flood was setting up and maintaining the communication system for the relief operation at the national level. Mr. Manas Songseng, Senior Expert for National Warning Center, was interviewed on 16 July 2012 for information concerning the involvement of the National Disaster Warning Center in relief operations during the flood in 2011.

Mr. Manas generally described that the Department of Disaster Prevention and Mitigation is the main agency in disaster relief at the national level. He also viewed that the tasks of the National Disaster Warning Center during the flood in 2011were done and met the objectives of the National Disaster Warning Center. However, it was to understand that the flood in 2011 was very devastating and sudden and therefore tasks were not done at the full completion. The communication system center was setup at the FROC in form of ad-hoc system. Furthermore, the FROC itself was flooded and had to be relocated; therefore, the communication system had to be relocated and reset. More importantly, the highest commander of the FROC was the Prime Minister who was recently elected and therefore, the overall management was not very effective.

Legal and Structural

Mr. Manas realized that the Department of Disaster Prevention and Mitigation mainly worked on coordination among various agencies. He also commented that the use of the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) was the right decision as it centralized the overall operation. This did not have much impact

on the task of the National Disaster Warning Center. He observed that the plans of various agencies were not put into use as the situation was too sudden and there was not enough time to discuss about the plans of various agencies. The operations were done at hand and strategy of the overall plan was changing according to the current situation. It was also observed that the management of volunteers was not effectively done. There were many volunteers, but they were not be able to work at their full capacity, mostly were asked to perform a few common tasks such as filling sand bags and packing survival kits.

Communication

Mr. Manas viewed that media could also be the help to the National Disaster Warning Center as they got into some unreachable locations and report on the assistances needed. There were many sources of information from various agencies which were used in the National Disaster Warning Center. However, rumors and unreliable information were the problems for the National Disaster Warning Center. This was because people would not analyze nor screen the sources of information; they would only use that information directly.

Mr. Manas described that there were networks of personnel at the local level to keep tracks on the situation of the disaster. The E-Radio is the technology initiated by National Disaster Warning Center which links with all local volunteers to keep track of any disaster. It is opened for public usage; however, it has not been widely promoted.

Cultural

Mr. Manas mentioned that the RTA had the capability in logistic with discipline which helped the operations to be executed more effectively. In the overall picture, the Department of Disaster Prevention and Mitigation coordinates while military operates and executes. Mr. Manas added that the culture difference was not a barrier during the flood because all agencies had the common goal which was to help people.

Mr. Manas observed that there were too many agencies issued the warning orders for disaster during the flood last year. The main obstacle was the plans which were not implemented and caused the operations to be solely done at hand and changed according to the situation. However, the Prime Minister has now decided that National Disaster Warning Center would be the only agency to issue the warning order for disaster.

Additional Information

Mr. Manas suggested that exercises are very vital and needed to be seriously paid attention to. The exercises should also be done much more realistically and should involve more actors from various agencies. Exercises were not seriously performed, many times were done symbolically. Additionally, people should also be educated how to first help themselves and also about the plans so the people know the whole structure.

As for the preparation, Mr. Manas mentioned that the National Disaster Warning Center has coordinated all agencies for information and set the National Disaster Warning Center as the central agency for communication and information.

3.3 Interviews of local authorities at district level

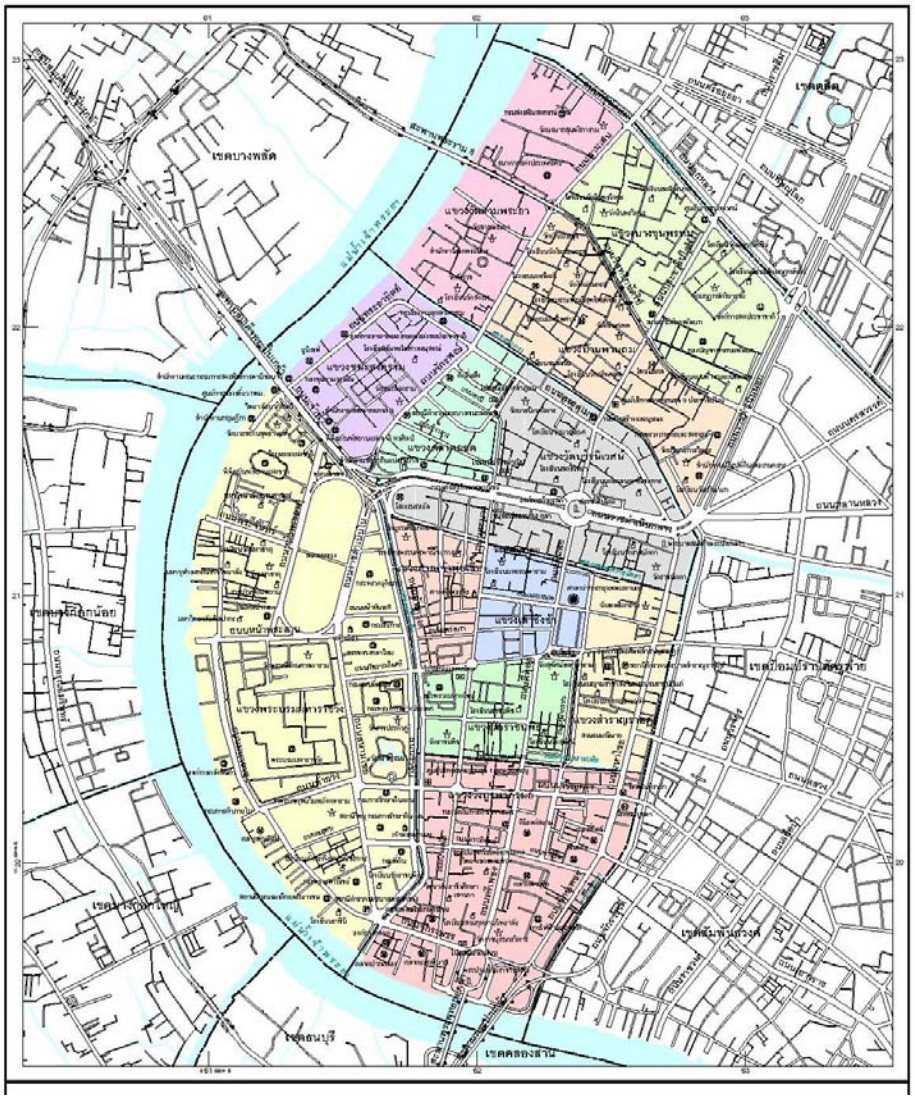
Figure 3.1: Map of Bangkok Districts

Source: From Bangkok Metropolitan Office Website (http://office.bangkok.go.th/housing/Temporary/DefaultReso/MapBangkokDistrict.html)

The district offices were very vital actors during the flood 2011 in Bangkok. This was because all the district offices were acting as the points of contacts for all the people in the each particular district. They also worked as the coordination centers for all the assisting agencies that came into the area. In this research, three districts were chosen to be studied which included Phra Nakorn District, Bangphlat District, and Bangrak District. One key common characteristic of these districts is the geographical location as they are all located along the Chao Phraya River, the major river which flows through Bangkok. However, each district also represents its importance with distinct characteristics.

3.3.1 Phra Nakorn District

Figure 3.2: Map of Phra Nakorn District



Source: From Bangkok Library Website (http://my.bangkoklibrary.com/2011/12/30/bangkok-district-maps/bma_bangkok_1001_district_map/)

The Phra Nakhon District is, with labeled as Bangkok area number one, the strategic historical location, where numerous key infrastructures as well as governmental offices are located. Some key infrastructures may include the Grand Palace, Ministry of Defence, Sanam Luang (the Royal Field), Thammasat University, Silpakorn University, Bowonniwet Vihara Rajavaravihara Temple, Democracy

Monument, the Giant Swing, and Khao San Road. Furthermore, the district is often used as the image of Bangkok. Mr. Chamnan Semjai, Mechanic for Phra Nakhon District Office, Operational Level, was interviewed on 11 July 2012 for information concerning relief operations during the flood in 2011 in the district area.

Communication

Mr. Chamnan described that the Phra Nakhon District Office put more concerns on determining the fatigue locations in the district and preventing the possible flood through those areas. There were also preparations on personnel as well as equipment and assets for the flood prevention and relief, putting more emphasis on the drainage systems in the determined fatigue locations. The information about flood would be received from various sources and analyzed before being used. He commented that the communication with RTA has always been very effective as the RTA has a unit attached to cooperate with the district office at the normal basis. During the flood in 2011, the communication with RTA was also not a problem, as there was a unit standing by at the office, waiting for request and give immediate assistances as needed. Mr. Chamnan pointed out that the Phra Nakhon District Office did not have enough labor force; therefore, the support from RTA was very important in term of labor force.

Cultural / Legal and Structural

The different culture of the RTA was, to Mr. Chamnan's opinion, very beneficial as it made tasks to be executed much more systematically and according to the plan. He also commented that the use of Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) was not impacting the operation within the district area; the Phra Nakhon District Office could still operate continuously.

Mr. Chamnan mentioned that the main policy from Director of the Phra Nakhon District Office was to respond immediately without waiting for order from higher and put people as the first priority. The office also coordinated with nearby districts during the flood, requesting and offering assistances from available resources. Although there has been planning before the flood and informing to the

people to prepare beforehand, communicating with people was not a simple task as some communities in the area might not give full cooperation.

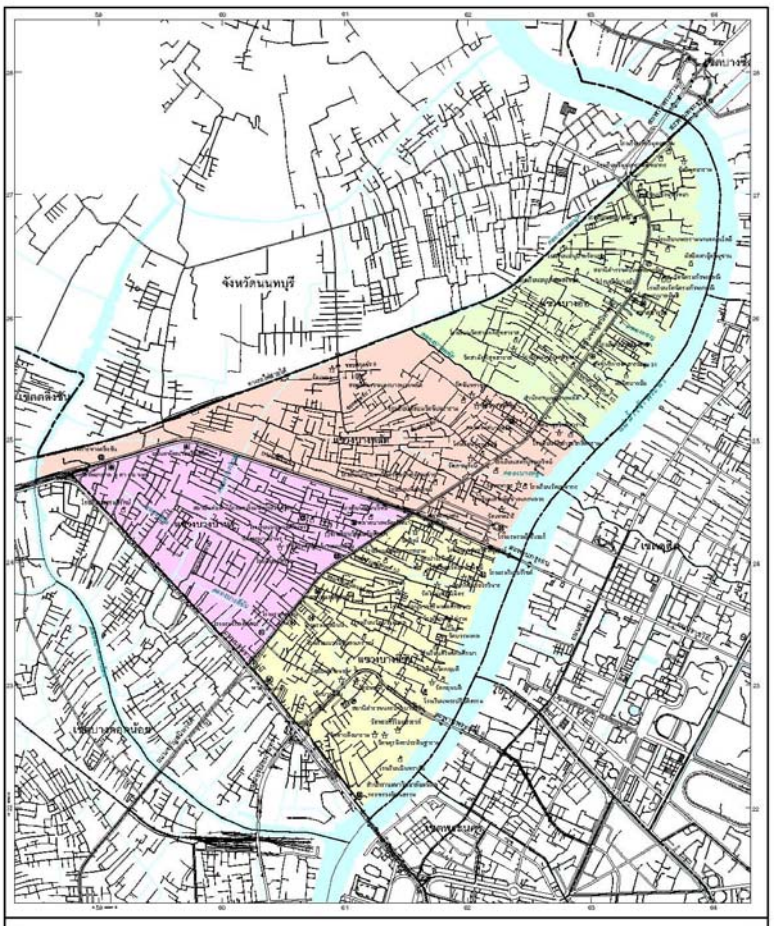
Leadership

Mr. Chamnan observed that there were many agencies and many heads of agencies involved in the relief operations, however, there was meeting and planning among agencies which reduced some potential misunderstandings among them. He further added that the office would also report the situation at the daily basis to the Bangkok Metropolitan Administration, keeping close track on the flood situation, however gap between the policy and operational level can been seen. Objectives set by the policy level sometime could not be achieved due to the lack of equipment and personnel. The operational level often time had to analyze the capability of the district in accordance with the objectives from the policy level and requested and reported back to the policy level on the possibility of achieving the objectives.

Mr. Chamnan viewed that the obstacle in coordination among agencies at the operational level was not visible as all agencies commonly aimed to help people. However, exercises for flood should be more widely promoted along with awareness for the people. As the preparation for upcoming possible flood, the office is putting more emphasis of the readiness of equipment and personnel.

3.3.2 Bangphlat District

Figure 3.3: Map of Bangphlat District



Source: From Bangkok Library Website. (http://my.bangkoklibrary.com/2011/12/30/bangkok-district-maps/bma_bangkok_1025_district_map/)

The Bangphlat District is one of the populated residential district which covers Charansanitwong Road Arun Ammarin Road and a part of Borommaratchachonnani Road with four major bridges crossing the Chao Phraya River. Mrs. Patchara Chornanan, Chief of Administration Section for Bangphlat District Office, and Mr. Pompet Rujiraturathron, Local Affairs Officer for Bangphlat District Office, Professional Level, were interviewed on 13 July 2012 for information concerning relief operations during the flood in 2011 in the district area.

Mrs. Patchara and Mr. Pompet commonly agreed that the flood in 2011 was very sudden and there was not any proper preparation to respond to the flood. Furthermore, there was not enough labor force as well as equipment to respond to all the requests from the people. There was not enough time to meet and discuss about various plans of various agencies, leading to ineffective communication and coordination. Mrs. Patchara further added that aids and assistances were centralized at the district office and people would just be waiting around at the office for them.

Cultural

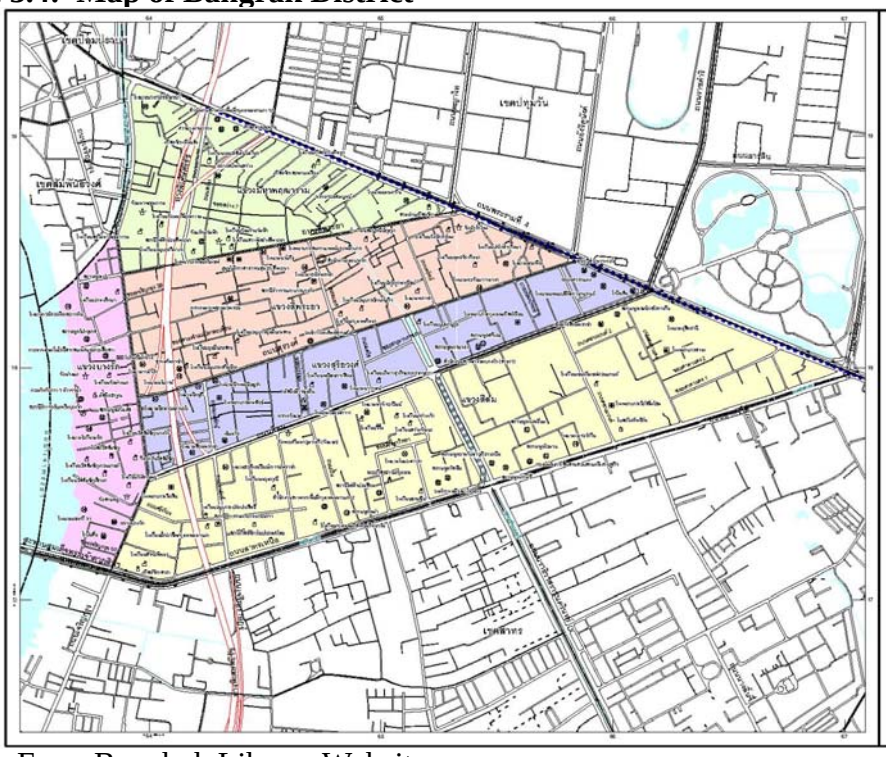
Mrs. Patchara and Mr. Pompet mentioned that the RTA had a unit attached at the standby mode for the Bangphlat District Office. They observed the culture of RTA was not always flexible as some missions of RTA had to be done only through the Chain of Command. However, the RTA could work very closely with the personnel of the Bangphlat District Office as all agencies had the same concern during the flood which was to help the people.

Legal and Structural

Mrs. Patchara commented that the use of the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) did not have any impact at the operational level and the Bangphlat District Office could still continuously operate the relief responses. Mrs. Patchara described that the Bangphlat District was surrounded by water; therefore, it was difficult to ensure on the flood prevention with the available capability of the office. The flood was too severe for the district office to handle, there were not enough personnel and logistic was a problem for this area. Additionally some people in the area did not cooperate with the office, resulting in fatigue locations. She added that the office focused of immediate response to all people. It was the 24hr operation which many of the personnel of the Bangphlat District Office had to stay over at the office.

3.3.3 Bangrak District

Figure 3.4: Map of Bangrak District



Source: From Bangkok Library Website. (http://my.bangkoklibrary.com/2011/12/30/bangkok-district-maps/bma_bangkok_1004_district_map/)

The Bangrak District is a very important business district of Bangkok which covers the Silom Road where numerous business offices are located. There are many foreign financial companies as well as luxury hotels located within the district. Mr. Saney Chomchanat, Local Affairs Officer for Bangrak District Office, Professional Level, and Mr. Wanchai Siritammakun, Public Works Technician for Bangrak District Office, Experienced Level, were interviewed on 17 July 2012 for information concerning relief operations during the flood in 2011 in the district area.

Mr. Saney described that the flood last year was very severe and the capability of the Bangrak District Office was not enough. The district is located along the Chao Phraya River; therefore, the office has always been putting attention on the water level every year. There were some fatigue locations in the area; therefore, the office had to put extra attention onto these locations. During the flood in 2011, the district

office was the central contact point for the area, coordinating with various agencies as well as the people. Information for the district office was mainly from the Bangkok Metropolitan Administration and also from various sources from various agencies.

Communication

Mr. Saney and Mr. Wanchai observed that the RTA was the key agency in giving the labor force as well as logistic support, integrating with the personnel of the office. The communication and cooperation with the RTA could be done very quickly as the RTA had unit to attached at standby mode for the office. The Bangrak District Office's key policy was about information sharing and report of the situation at all time. The office was opened and stayed by the personnel whose houses were flooded too. This was to make sure that the office still operated during the flood.

Legal and Structural

Mr. Wanchai mentioned that the plans of various agencies were discussed; however, the operations were executed more accordingly to the current situation rather than the existing plans. The problem was that the people were requesting for self assistances, ignored the collective situation of the district. He also commented that the use of the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) did not have an impact onto the operational level. Mr. Saney and Mr. Wanchai also observed that private sectors were also supporting the assistances to the district, aiming to protect the safety of the area. This may include luxury hotels and banks. There was also cooperation with other districts as well.

Additional Information

Exercises might be, to Mr. Wanchai's view, very difficult as it would involve many people. It would be more important to understand that water's volume would not change during flood and it would only seek for the exit and way to run. It is therefore vital to educate people in the area on how to live with the water and how to help themselves once flood occur as assistances could not always be quick enough to respond to all the requests. The main obstacle in the flood in 2011 was the insufficient labor force and equipment.

3.4 Disaster Management of the Royal Thai Army in Flood 2011

The RTA SOP on Disaster Relief Operation is the key document for the RTA in executing the relief operation in compliance with the Royal Thai Armed Forces Headquarters Disaster Relief Plan. The SOP divides the operation into three phrases, preparation phrase, operation phrase, and rehabilitation phrase, categorizing the degree of disaster into three levels with level three be the highest level of severe disasters. In accordance with the Royal Thai Armed Forces Headquarters Disaster Relief Plan, one of main objectives of the SOP is to give support to the civilian agencies upon the requests, however, it give more emphasis and prioritize on the rapid response to reduce possible loses in lives of the people. It also lays out the more operational procedures during the disaster phrase which include evacuating victims, moving properties out of the risks areas, organizing mobile medical teams, distributing survival kits, and establishing temporary shelter at safe areas.

According to the SOP, the procedures of the operation phrase include seven steps. First step is to plan, manage, coordinate, supervise and publicize the responsible relief tasks as well as providing supports to other agencies upon requests. Second step is to provide supports, with the first priority, in labor force, equipment, tools, communication systems, and transportation upon requests from other agencies. Third step is to evacuate victims and their properties to safe areas, putting the safety of the people as the highest urgency. Forth step is to established mobile medical teams to treat the injured victims. Fifth step is to distribute emergency survival kits, food, water, medicines and clothes to the victims. Sixth step is to establish temporary shelters at the safe zones for the victims. Seventh step is to giving other supports upon the requests of other agencies.

During the flood in 2011, the RTA established the RTA Disaster Relief Center under the provision of the Ministry of Defence Disaster Relief Center. The RTA assigned units to be responsible for each and every area at the district level. The main policy during the flood was the give immediate assistances and response to the disaster which threatens the lives and properties of the people (Suwanumpai,

interview, 9 July 2012). After the announcement of this flood to be severe disaster, the RTA was assigned to be responsible for the flood situation in five provinces Nakhon Sawan, Ayutthaya, Lopburi, Pathumthani and Nonthaburi, giving the supports under the roles and responsibilities of the respective governors. However, once the flood got to Bangkok, the arrangement was reconsidered and the RTA units were assigned to various districts in Bangkok. The RTA had to recall all the support from all available units around the country (Suwanumpai, interview, 9 July 2012).

The operations of RTA were divided into two categories. Firstly, the RTA executed the operation in compliance with the orders of the government or the FROC, which mainly was to build water barriers in the mentioned five provinces at the mitigation phrase. Secondly, the RTA executed the initiation on assistance management for the people at the response phrase, which focused onto water management, assistance management for the people, giving supports to the victims, and integration with other agencies (Suwanumpai, interview, 9 July 2012). During the flood 2011, the RTA deployed 50,258 personnel along with 4,508 RTA trucks and 2,725 flat-bottomed motorboats as well as other equipment for the relief operations (Suwanumpai, interview, 9 July 2012). At the recovery phrase, the RTA deployed 41 RTA relief companies, 27 RTA engineer companies and 100 RTA medical personnel along with equipment and transportation to support the government recovery committee (Suwanumpai, interview, 9 July 2012). For the long term mitigation phrase and preparedness phrase, the RTA is complying with the government initiation on sustainable flood solution measures (Suwanumpai, interview, 9 July 2012).

CHAPTER IV

RESEARCH FINDINGS AND ANALYSIS

This chapter will utilize the Coordination Model, developed by the National Institute of Justice, the United Stated Department of Justice, to analyze the RTA Disaster Relief Operations during the flood 2011 in Bangkok. The analysis will be separated into two levels, policy and operational levels and each level will be analyzed bused on four barriers, communication, leadership, cultural, and legal and structural.

4.1 Analysis of Royal Thai Army Disaster Relief Operations at Policy Level

Firstly, the communication barrier in the policy level was not very visible during the flood 2011 in Bangkok. The communication among the RTA and other government agencies was centralized by the FROC as it comprised of the heads of all involved agencies. The communication could be effectively done at the policy level before being passed down to the operational level. One key factor which contributes to the effective communication for the RTA is the structure of the organization. The RTA has established the Directorate of Civil Affairs to be responsible for disaster relief operations, familiarizing and cooperating very closely with other related government agencies on normal basis; therefore, during the flood 2011 in Bangkok, other agencies could quickly communicate with the RTA using the existing channel of the Directorate of Civil Affairs.

Secondly, the leadership aspect at the policy level was posing some degree of difficulty during the flood 2011 in Bangkok. Evidently, the flood was considered the worst flood which Thailand has ever experienced, resulting in the involvement of all available resources and agencies for the relief operation. The heads of involved agencies were very actively interested in giving assistances, however, they would still want to have the authority and power to command and control their own individual agencies, resulting in less effective in the collective operation. In relation to the RTA,

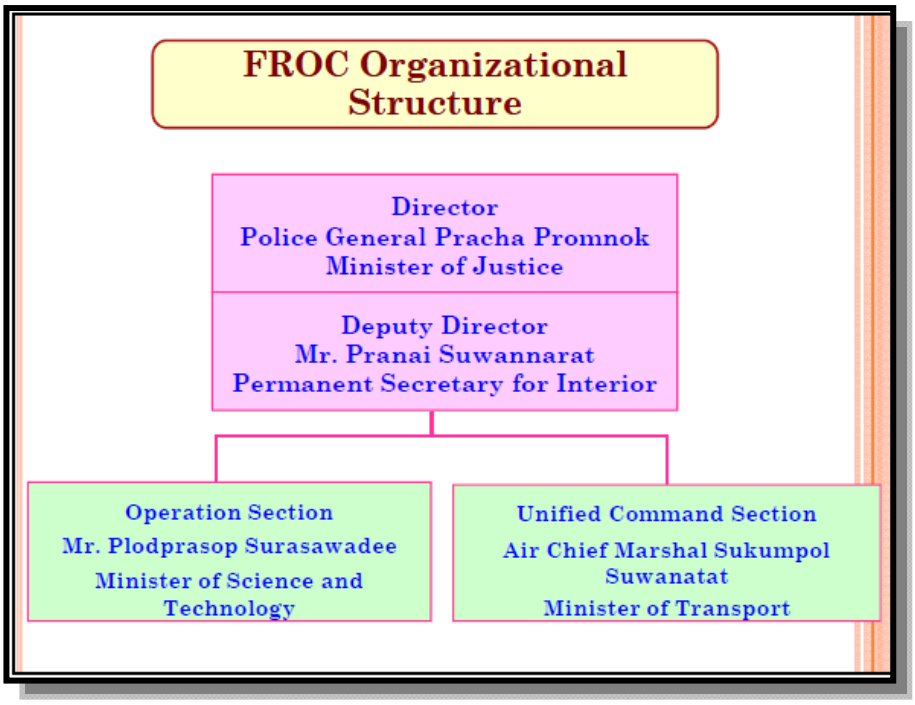
the Commander-in-Chief of RTA realized the role of the RTA in the flood 2011 in Bangkok which was the supporting one; therefore, his policy was focused more on the quick response upon request, putting the highest priority to the people. The role of leadership of RTA was not confined by the nature of the supporting role in disaster relief but also was not the vital factor in the collective operation. The vital leadership role during the flood 2011 in Bangkok was on the Prime Minister, as she was the highest commander in the chain of command in accordance with the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007). However, it was observed that her role as the leader was not very effective. This was because she was recently elected and did not have any experience in commanding and controlling various government agencies during emergency situation.

Thirdly, the cultural barrier in policy level was still visible during the flood 2011 in Bangkok. This was mainly because there was very limited planning and discussion before the flood reached Bangkok, restricting the understanding of organizational cultures of each other. It is vital to realize that effective communication does not always promote better understanding of cultures as communication in this study would mean the channels of information sharing and ability to distinguish the points of contacts among agencies. The RTA has a very distinct culture in discipline and strict chain of command which set the RTA apart from other government agencies. The lack of flexibility in RTA culture impacted the collective operation both positively and negatively. Positively viewed, the RTA could be ensured of its high performance reliability on all given tasks due to its discipline and strict culture; however, negatively, the situation was changing unpredictably and the tasks should also be immediately and accordingly changed and therefore, in relation with the unpredictable situation, the inflexibility of the RTA culture could sometime reduce the effectiveness of the operations.

Lastly, the legal and structural aspect acted as a crucial barrier for the relief operation at policy level during the flood 2011 in Bangkok. Evidently, the RTA has the capability in the labor force as well as equipment, even though the existing equipment is not designed ultimately for disaster relief purpose, it can be adapted and

deployed very quickly during the emergency situation. The Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) was put into force and authorized the Prime Minister to give the direct command and control on all the government agencies as well as to the RTA, utilizing appropriate resources in the relief operation. The use of the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) was actually a very wise decision as it centralized the overall relief operation and overlooked the situation in the collective manner. However, the factor which contributed to this particular act was the leader's vision and experiences in managing the collective situation. In connection to the previous aspect, the leadership aspect, the Prime Minister was not able to effectively manage the relief operation in the collective manner. She used her authority under the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) to establish the FROC and assign the Minister of Justice, who has much less experiences on disaster relief than the Director General of Department of Disaster Prevention, to be the person in charge of the FROC. This clearly displayed the improper understanding on the structures and roles of each and every government agencies for the Prime Minister.

Figure 4.1: FROC Organizational Structure



Source: Department of Disaster Prevention and Mitigation, Ministry of Interior (2012)

Based on the structure of the RTA, all units could be called and deployed very quickly, because the RTA systematically operates and divides its tasks into various fields with different specific unit specialization such as supplies units, operation units, engineer units, and logistics units. This specific structure enables the RTA to be able to execute the relief operations with minimal assistances from other governmental agencies. Unfortunately, the Disaster Prevention and Mitigation Plan of Action 2010-2014 was used and referred to as the National Plan, however, it strictly minimized the role of the RTA to be the supporting agency. This caused the RTA to remain their assistances to be at the standby mode, waiting for requests from other government agencies. The research revealed that all the agencies involved in the flood 2011 in Bangkok were lack of experiences and knowledge in dealing with such prolonged flood. Most of the relief operations were done at hand, solving and changing their strategies according to the current situation. More importantly, the Disaster Prevention and Mitigation Plan of Action 2010-2014 was not very well implemented as it was established based on information and data from disasters during pass few decades. Furthermore, the Disaster Prevention and Mitigation Plan of Action 2010-2014 was not well studies by all government agencies, resulting in less understanding of other agencies' roles and responsibilities.

It is therefore analyzed that, the key barrier at the policy level for the RTA is the legal and structural aspect. The Disaster Prevention and Mitigation Plan of Action 2010-2014 restricted the capability of the RTA to respond to the relief operations.

4.2 Analysis of Royal Thai Army Disaster Relief Operations at Operational Level

Firstly, the communication barrier in the operational level was not a concern to the relief operations. The RTA assigned units to be attached to all districts in Bangkok, working and cooperating with the district offices on the normal basis. During the flood 2011 in Bangkok, RTA could quickly communicate with the district offices, using the existing structure to closely cooperate and give assistances upon requests. At the operational level, it was observed that all agencies would commonly

aim to help the people, facilitating better communication among agencies based on common interest.

Secondly, the leadership aspect at the operational level was not putting any negative impact upon the relief operations. The leadership at operational level of the RTA was directly related to the policy level. This was because of the culture of the RTA which was to be very strictly followed the orders of the chain of command. The Commander-in-Chief of RTA clearly displayed the concern onto the safety of the people and gave the policy to all units to respond to any request immediately. The commanders of units actively complied with the policy and acted accordingly, working alongside with the local authorities without taking over the role and responsibility of the local authorities.

Thirdly, the cultural aspect at the operational level was not a problem for the relief operations. The difference in organizational culture during the flood 2011 in Bangkok was often time referred to the RTA. This was because the RTA has the distinct culture and work ethic when compared with other government agencies. It was observed that, at the operational level of relief operation, the culture of the RTA positively contributed to the relief operations. This was because the RTA could operate all given tasks with very limited assistances from other agencies. Furthermore, once an order was given, it was the culture of the RTA to strictly follow the order and strive for accomplishment of any given mission. This resulted in the relief operations to be done systematically with very high reliability.

Lastly, the legal and structural aspect at the operational level was not vitally posing impact onto the relief operations. The use of the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) did not have any effect at the operational level, all tasks and relief operations could still be executed continuously, although the act authorized the Prime Minister to command and control all the government agencies. The use of the Disaster Prevention and Mitigation Plan of Action 2010-2014 has certainly restrict the role of RTA in relief operation, however, at the operational level, the RTA would actually initiated the assistances with other agencies. The RTA

communicated and offered the assistances directly to the local authorities, attached the personnel to the district offices at all time. The problem at the operational level, in relation to legal and structure aspect, was about the realization of the structure and the roles and responsibility of the Disaster Prevention and Mitigation Plan of Action 2010-2014. People were not aware of the role of the RTA in accordance with the Disaster Prevention and Mitigation Plan of Action 2010-2014, they would expect the RTA to initiate the relief operations and be the key agency in disaster relief. It was observed that the logistic supports from RTA were expected to be solely for the people, not realizing that they were also used as the supports requested by other agencies.

The study also revealed that, the operation level faced one vital barrier in relief operations. It was the equipment which was used during the flood 2011 in Bangkok. The existing equipment of the RTA was not designed for the disaster relief purpose. Many units had to adapt their equipment to be used in the relief operations in such prolonged flood.

It is therefore analyzed that the key barrier of the operational level is the physical barrier, which is the equipment used for the relief operations. The RTA does not have the specific equipment designed solely for disaster relief; therefore, the RTA would have to adapt the equipment to use in such prolonged flood, causing less effective operation and severe damages to the existing equipment.

4.3 The Gap between the Operational and Policy Levels

The research revealed that the fundamental barrier of each level of the RTA is very different. The key goal of each level is the same, which is to reduce the damages and provide safety to the people. However, the concern on the process of each level is very different; the policy level would put the legal mechanism as the core concern, while the operation level ignored the legal mechanism and continuously executed the operations with all the available resources. As the culture and practice of the RTA, the orders and policy from the superiors are to be strictly followed and complied

throughout the chain of command from the policy level down to the operational level. However, in this particular event of the flood in 2011, the gap between the two levels has been revealed as the operational would initiate the assistances by offering their supports to the local authorities and other agencies, redefining the policy of supporting agency. Instead of waiting for requests from other agencies, the operational level offers the assistances without taking over the local authorities' roles and responsibilities. It is analyzed that the gap between the two levels is positively created in order to effectively respond to the emergency situation of the flood in 2011, achieving the common goal of reducing the damages and providing safety to the people.

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

In the first chapter, it was hypothesized that, the use of the section 31 of the Disaster Prevention Act B.E. 2550 (A.D.2007) increased the time spent on decision-making process at the policy level of the RTA as it centralized the command and control to the government. The study revealed that the hypothesis is rejected incorrect. The Disaster Prevention Act B.E. 2550 (A.D.2007) did not negatively impact the RTA disaster operations in both policy and operational levels. Initially, the use of the Disaster Prevention Act B.E. 2550 (A.D.2007) was viewed to increased the time spent on decision-making process at the policy level of the RTA as it centralized the command and control to the government. The decisions of the RTA were to be approved by the government before putting into the operations; however, it in facts facilitated the collective management of the situation and enabled the government to utilize all available resources. The research revealed that the RTA personnel at the policy level fully supported the use of the Disaster Prevention Act B.E. 2550 (A.D.2007). It did not slow down the decision-making process at the policy level because the role of the RTA was already set to the supporting agency, which could not initiate the operation but to operate upon requests from other agencies. It is therefore; found that the decision-making process of the RTA had to be complied with the requests of other agencies, who had the authorities to initiate the operations.

It was further hypothesized that, the lack of understanding different procedures and plans among actors created duplication of tasks at the operational level of disaster relief. This hypothesis is accepted as the study revealed that the Disaster Prevention and Mitigation Plan of Action 2010-2014 was not well studied by many government agencies, causing misunderstanding of roles and responsibilities of each other. The structure and procedures for relief operations were not effectively implemented, resulting in execution of tasks at hand.

This research is, firstly aimed to understand the fundamental barriers faced by the RTA in interfacing with government agencies in disaster relief operations. The first research question is on how do the legal and structural barriers set the foundation, with addition of the communication, leadership and cultural barriers, for the lack of coordination and impact the RTA in interfacing with government agencies in disaster relief operations. The study has revealed that the Disaster Prevention and Mitigation Plan of Action 2010-2014 restricted the capability of the RTA to respond to the relief operations, assigning the RTA to have a supporting role in disaster relief operations. However, the legal and structural aspect of barrier did not cause nor trigger other aspects of barrier, in facts; each and every aspect posed very minimal linkages to other aspects.

On the other hand, at the operational level, all the aspects of barriers did not pose any clear difficulty in relief operations. The study revealed that the physical aspect of barrier was the key difficulty in the operational level. The existing equipment of RTA is not designed for the relief operation, causing the RTA to adapt the available equipment to be used during the flood 2011 in Bangkok, which resulted in damages for the equipment. The use of the Disaster Prevention and Mitigation Plan of Action 2010-2014 and the Disaster Prevention and Mitigation Act B.E. 2550 (A.D. 2007) did not impact the operation at this level, in facts, they were not the concern at all in this level. The operations were able to be continuously executed, but they were actually done at hand according to the current situation.

Secondly, the research is aimed to analyze the weaknesses of the existing interfacing mechanism on disaster relief operations with the second research question of what are the weaknesses of the existing interfacing mechanism on disaster relief operations. The study revealed that the key mechanism used during the flood 2011 in Bangkok was the Disaster Prevention and Mitigation Plan of Action 2010-2014. However, the weaknesses of the mechanism are the restriction of the RTA to be at the supporting role and the lack of knowledge on prolonged flood. The RTA has a very high capability in deployment of equipment as well as labor force to be used in relief

operations, however, the mechanism prohibits the RTA from initiation of any relief operations and allows the RTA to execute operation upon requests of other agencies. Additionally, the lack of knowledge on such a prolonged flood caused the operations to be done at hand and changed according to the current situation during the disaster impacting the collective management of the situation.

Lastly, the research is also aimed to determine the possible approach in minimizing the fundamental barriers for the interfacing process with government agencies on disaster relief operations. The final research question is how the barriers in interfacing process with government agencies can be minimized in order to improve the disaster relief operations. It is revealed that one possible approach is to increase the role of the RTA in disaster relief operations, eliminating the process of waiting of requests of other agencies. This should be done along with the collective public awareness of the Prevention and Mitigation Plan of Action 2010-2014, ensuring the understanding of roles and responsibilities of all involved agencies. This is to effectively utilize all of the available resources with minimal duplication and be able to collectively mange the relief operation at the national level.

5.2 Recommendations

According to the analysis of this study, it is recommended that the Disaster Prevention and Mitigation Plan of Action 2010-2014 should be revised to give more active role to the RTA in relief operation at the national level. This is to ensure that all the available resources of RTA can be quickly and fully utilized instead of being put at the standby mode, waiting for requests of other agencies. From the flood 2011, it has clearly shown that the RTA has become the active actor in the relief operation, deploying all the available resources to the operation. The structure of the Disaster Prevention and Mitigation Plan of Action 2010-2014 for the extreme disaster at the national level puts the RTA at the supporting agency with limited authority to respond to the situation, while putting ten other ministries namely, the Ministry of Interior, the Ministry of Agricultural and Cooperatives, the ICT, the Ministry of Public Health, the Ministry of Natural Resources and Environment, the Royal Thai Police, Ministry of

Social Development and Human Security, the Ministry of Labor, the Ministry of Foreign Affairs, and the Ministry of Transportation[1] which have very limited capability in labor force, equipment and mobilization to be the operational agencies . The Ministry of Defence should be added into the structure of operational agencies as the very first agency.

In relation with the first recommendation, all agencies should also be obligated to document their available resources for relief operation and distribute to all involved agencies in the relief operation. This is to effectively utilize all the available assets of all agencies in a collectively manner and help reducing unnecessary purchases of existing equipment. After the documentation and earmarking of all available resources and assets, it is also recommended that the RTA should be given the approval to purchase or develop necessary equipment for specific purpose of disaster relief. This is to increase the capability for the RTA to respond to any disaster situation, minimizing the loss of lives and properties for the people.

More importantly, it is also recommended that the awareness on the Disaster Prevention and Mitigation Plan of Action 2010-2014 should be promoted for all government agencies as well as the people. This is to ensure that all the operations can be executed collectively, minimizing the misunderstanding of roles and responsibilities of all agencies. The exercises such as the C-Mex should be planned performed more realistically, setting the scenarios with limited advance notices to the involved agencies in order to create the situations of practical emergency. These exercises should also actively involve the communities as well as the people, promoting more participation from all levels. This can be done by setting the obligations not only to the local authorities, but also to the communities and the people to participate in the exercises. In relations to the public awareness, it is also recommended that DM is to be put into the primary education system. This is to imbue the sense of awareness to the children as one of the most vulnerable actors.

[1] Shown in the Disaster Prevention and Mitigation Plan of Action 2010-2014, p. 118.

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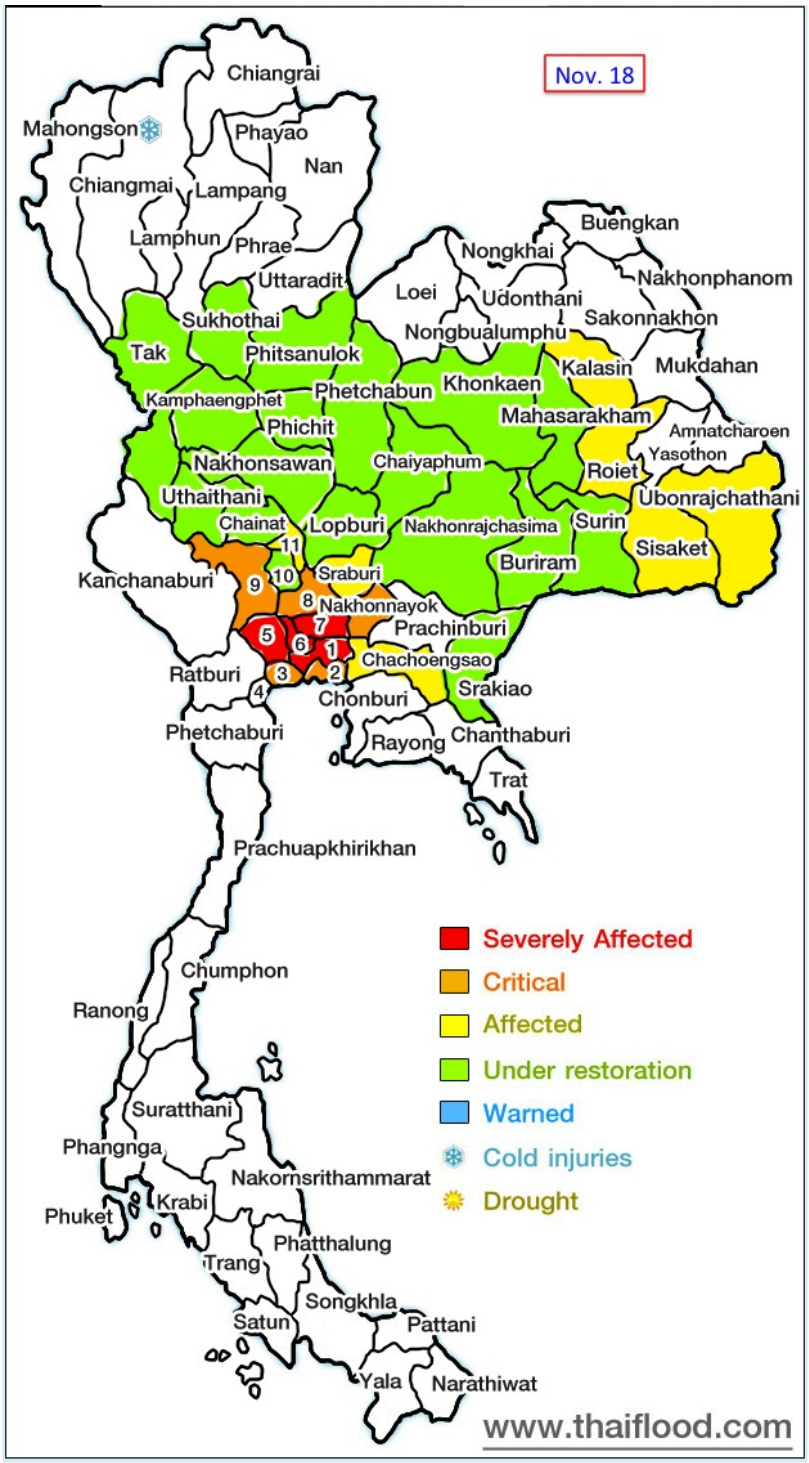
APPENDICES

APPENDIX A

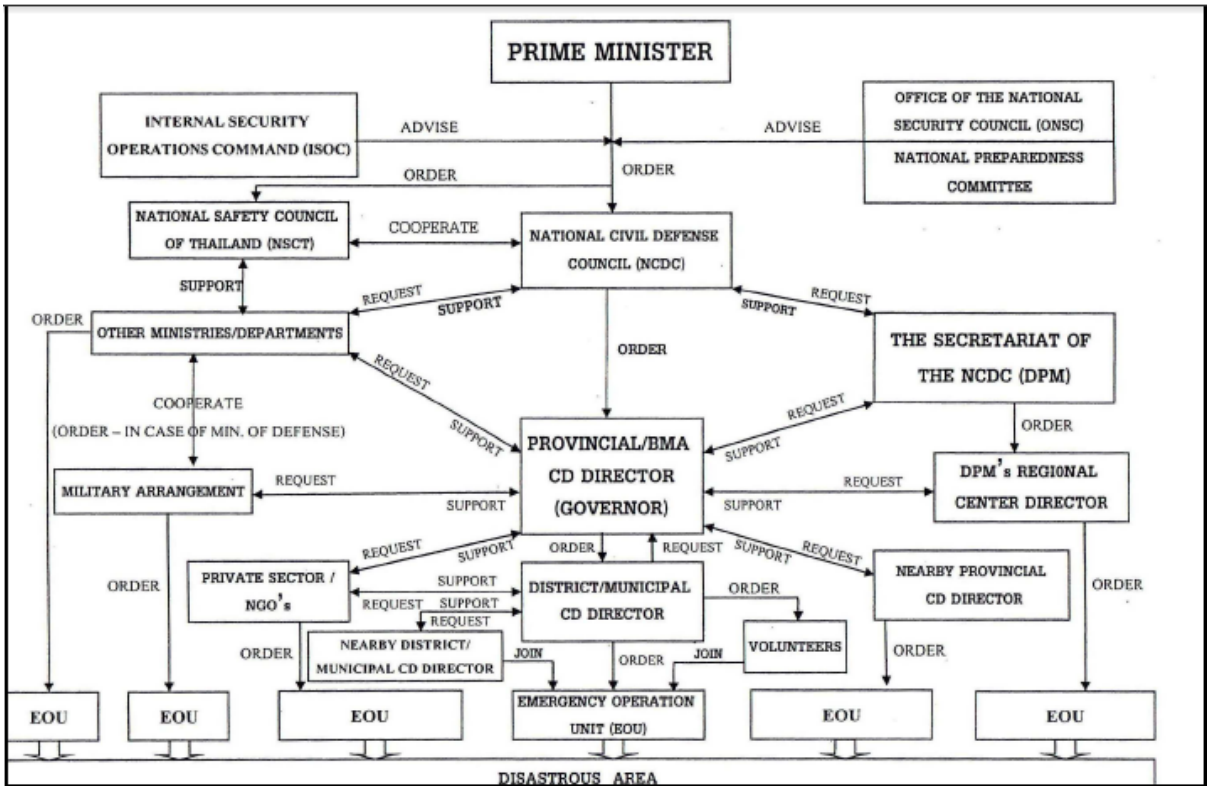
THAILAND FLOOD MAP ON 18TH NOVEMBER 2011



Source: Thai Flood web (http://www.thaiflood.com)

APPENDIX B

ORGANIZATION IN DISASTER MANAGEMENT OF THAILAND



Source: Department of Disaster Prevention and Mitigation, Ministry of Interior (2012)

BIOGRAPHY

Lt.Wutthisan Luangjinda went to Singapore for Secondary School education, following by Beijing China for about three months to learn Chinese Mandarin. He then went to Virginia, United States for collage. He graduated from the Virginia Military Institute (VMI) in 2007 with B.A. in Modern Languages and Cultures. He then went to Kyoto, Japan for about three months for Japanese Language. He was commissioned in 2009 as an Army officer and currently works as an officer in the International Security Cooperation Division (ISCD), Office of Policy and Strategy, Office of Policy and Planning, Ministry of Defence (MOD).