

A Study of Disaster Management Competency and Indicators in Thailand's Local Administration

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ABSTRACT—This qualitative research study aims to investigate functional and hazard specific competencies of Thai local administrative officers in disaster prevention and mitigation. The data was collected through document research, in-depth interviews and group discussions from representatives from a central policy making agency and with staff from disaster prevention and mitigation agencies in six local administrative organizations around Thailand. The data was collected in six localities and analyzed by means of content analysis. The results showed that there are three functional competencies, namely 1) understanding of laws, regulations and authority; 2) proactive analysis and evaluation of the situation; and 3) networking in operations and public and community relations.

Hazard specific competency in floods and mudslides includes the movement and evacuation of flood victims and persuasion of the management in the area, while hazard specific competency in storms includes specialization in the demolition of buildings and obstructions. The study found that human resource development in the local government should be developed through the concept of competency as a framework for development and performance appraisal.

Keywords: Competency, Functional Competency, Hazard specific competency, Human Resource Development

Introduction

The United Nations currently defines a natural disaster as a major public obstacle to a functioning society. It has significant human, economic and environmental impacts on the community and puts a strain on its resources (United Nations Office for Disaster Risk Reduction, 2017). Due to this reason, disaster management needs to integrate knowledge in a variety of fields. With its recurring natural disasters, Thailand is fully aware of the importance of disaster management, and has been using the Prevention and Mitigation Plan 2007 (2550 BE) and the National Disaster Preparedness and Response Plan 2015 (2558 BE) as a nation-wide national disaster management framework.

Disaster management in Thailand is often focused on the improvement of existing policies and the creation of a master plan, an action plan along with a command structure. The most important part of the Thai disaster management command structure is local government organizations who must act as the first agency to provide relief before further assistance from the central government and outside agencies. According to the Disaster Prevention and Mitigation Act 2007, a local administrative organization has the duty to prevent and mitigate disaster. Therefore, local government organizations must prepare for disasters, improve their capacity to respond to a natural disaster and be prepared to assist victims in the aftermath.

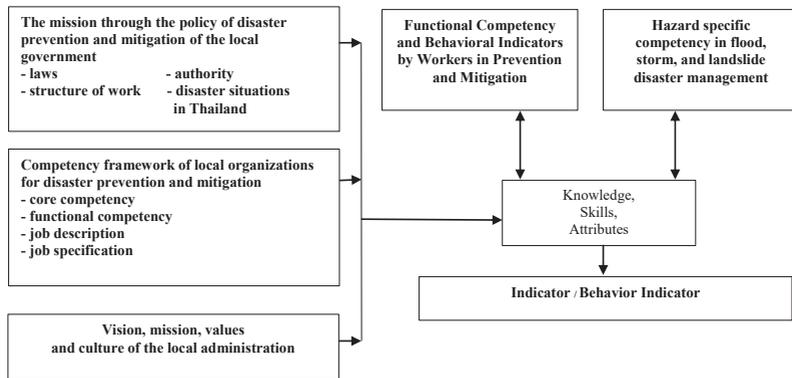
Human resource development is one of the most important factors in disaster management. Human resources are the most valuable asset to any organization and they can make disaster management more effective. Competency-based human resource management is the most commonly used human resource management tool as it allows staff to focus on objectives, goals and the effectiveness of a task. (The Board of Directors of the Personnel Performance Project of Rajamangala University of Technology Phra Nakhon, 2012). Therefore, development of staff competency in disaster prevention and mitigation will improve their capacity to respond to disasters.

2. Objectives of the research

1. To study functional competency of disaster prevention and mitigation personnel and hazard specific competency of disaster prevention and mitigation workers for floods, storms, and landslides.

2. To develop functional competency indicators on disaster management and hazard specific competency of disaster prevention and disaster mitigation officers for floods, storms, and landslides.

3. Conceptual framework



4. Research Methodologies

This study is a qualitative research. The data was collected through document research, in-depth interview, and group discussions with policy makers from the Department of Disaster Prevention and Mitigation, as well as local administrative staff from 6 local administrations as follows:

1. Ang Thong Municipality, Amphoe Mueang Ang Thong, Ang Thong Province. This area is flooded every year. There are many governmental resources such as measuring rainfall, sirens, Civil Protection Volunteers, Mr. Warning, participation in One Tambon One Search and Rescue Team (OTOS), and Community Based Disaster Risk

Management: CBDRM

2. Pak Kret Municipality Amphoe Pak Kret Nonthaburi. This area experiences annual flooding and has fewer management resources allocated from the government. On the other hand, past catastrophic events have been handled satisfactorily for both private and public sectors. This area is interesting in terms of how to handle the dimension of coordination.

3. Huayang Subdistrict Administrative Organization Amphoe Rong Kwang, Phrae Province. This area is prone to annual flooding, flash floods, and landslides. There are a lot of management resources allocated from the government such as measuring rainfall, sirens, Civil Protection Volunteers, Mr. Warning, participation in One Tambon One Search and Rescue Team (OTOS), and Community Based Disaster Risk Management: CBDRM

4. Mae Sai Subdistrict Administrative Organization, Wiang Sa Sub-district, Nan Province. This area experiences annual flooding, flash floods, and landslides. There are fewer management resources available from the government. This area is interesting in terms of how to adapt and respond to threats when there are few management resources available, while still obtaining the competency required in a limited situation.

5. Surat Thani City Municipality Amphoe Mueang Surat Thani Surat Thani. This area is vulnerable to cyclone and thunderstorms. It is often threatened by Level 2 Thunderstorms (moderate) and Level 3 Tropical Cyclones (severe).

6. Udon Thani City Municipality Mueang Udon Thani Udon Thani Province. This area has a risk of both Level 2 Tropical Cyclones (moderate) and Level 3 Thunderstorms (severe).

The following table shows the characteristics of the Study area:

Flood - Landslide			Storm	
Management Resources	Flood	Flash floods Landslide	Tropical Cyclones	Thunder-storm
High risk	Ang Thong Municipality	Huayang Subdistrict Administration Organization	Surat Thani City Municipality (Level 2 Threats (Moderate) and Tropical Cyclone Level 3 (Severe))	
Low risk	Pak Kret Municipality	Mae Sai Subdistrict Administration Organization	Udon Thani City Municipality (Level 3 Threats (Severe) and Tropical Cyclone Level 2 (Moderate))	

7. Personnel Development Institute for Disaster Prevention and Mitigation. The institute offers training to the public on disaster prevention and mitigation. It is open for application to personnel both inside and outside, under the Department of Disaster Prevention and Mitigation.

5. Results

Through analysis of the data, it can be seen that appropriate functional and hazard specific competencies for prevention and disaster relief in the Local Administration are as follows.

5.1 Functional Competency

In functional competency, there is a reasonable competency for staff to prevent and mitigate the disaster.

1) Understanding of laws, regulations and authority

The work of disaster prevention and mitigation staff in the local government organization must be performed under the relevant law or authority, and must take into account the relationship between departments to coordinate policies at the central, local, and regional levels. To operate in the situation efficiently and according to international standards, it is necessary to understand the operational characteristics of each area and be ready to exchange knowledge, rules, and procedures among disaster prevention and mitigation staff, as well as among people in the area to improve and to develop operational efficiency.

Necessary knowledge to achieve this category of competency includes legal knowledge, related action plans, international disaster management principles, specific understanding of the area of operation, and operational skills under specified plans and policy. For the disaster prevention and mitigation staff, this competency is an important internal attribute, and includes the readiness to share and exchange experiences, new knowledge and abilities to adjust working situations, as well as having integrity in following rules and regulations.

The elements of competency (Knowledge, Skills, and Attributes) are shown in the following table:

Understanding of laws, regulations, and authority		
Knowledge	Skills	Attributes
<ul style="list-style-type: none"> - Legal knowledge - Action Plan Knowledge - Knowledge of disaster management - Knowledge of the unique characteristics of the area of operations. 	<ul style="list-style-type: none"> - Operational skills under defined plans and policies - Coordination skills - Relay skills 	<ul style="list-style-type: none"> - Ready to share experiences and new knowledge - Can adapt to the required situation

This Functional Competency can be summarized in the following competency dictionary:

Description of competency	
Competency type	Functional Competency
Competency name	Understanding of laws, regulations, and authority
Definition	Ability to understand the law, authority, and power relations between central and local agencies, while fulfilling duties, achieving set goals, setting the standard for the workplace to be universal, and understanding the performance between actors in the area.
Proficiency Level	Behavior Indicator
Basic Level	<p>Understanding the Act Prevention and Mitigation of Disasters 2007</p> <p>Understanding the Action Plan for Disaster Prevention and Mitigation 2010-2011</p> <p>Understanding the Master Plan for Prevention and Mitigation (2012)</p> <p>Understanding the supervisory line and operational procedures of local disaster prevention and mitigation personnel.</p>

Description of competency	
Competency type	Functional Competency
Competency name	Understanding of laws, regulations, and authority
Doing Level	<ul style="list-style-type: none"> - Understanding the problem of spatial context in each area of local government organization, in social and political lifestyle contexts. - Ability to work in accordance with the action plan for the prevention and mitigation of disaster in local administrative organizations. - Understanding the action plan of neighboring areas. - Ability to work in a team.
Developing Level	<ul style="list-style-type: none"> - Ability to work in the area of local government effectively by adhering to the rules and plans. - Ability to create an action plan for the local government. - Ability to work and adapt to the area. - Ability to perform at the required performance standards. - Ability to coordinate with other related agencies.
Advanced Level	<ul style="list-style-type: none"> - Ability to transfer knowledge, rules and procedures to the defense and disaster relief officers in other local administrative organizations according to international standards. - Ability to exchange knowledge about techniques and methods to improve the efficiency of the work.

Description of competency	
Competency type	Functional Competency
Competency name	Understanding of laws, regulations, and authority
Expert Level	<ul style="list-style-type: none"> - Ability to transfer knowledge, rules and procedures to people and related agencies. - Ability to share information with the public to create understanding and practice together to improve the performance. - Ability to work with the people in the area. - Ability to work with related agencies according to international standards.

2) Proactive analysis and evaluation of the situation

Disaster prevention and mitigation staff in a local government also act as disaster prevention and mitigation administrators for their area. Therefore, it is necessary for them to be proactive, and to be able to analyze and evaluate the situation, while also complying with international standards on disaster prevention and mitigation in order to minimize the impact of a disaster. They must exchange knowledge in both internal and external operational levels, especially in terms of technical knowledge and specific knowledge about the local situation.

The situation must be analyzed and responded to swiftly and efficiently, and this category of competency requires a knowledge of risk management and disaster management, as well as knowledge of operational resources and of situation analysis. A knowledge of Community-Based Disaster Risk Management (CBDRM) is therefore necessary as it allows prevention and mitigation staff to focus on operational skills such as data analysis, situation assessment skills, crisis operational skills, coordination skills, skills in using tools for work, teamwork skills, and predictive skills based on limited information.

The elements of competency (Knowledge, Skills, and Attributes) are shown in the following table:

Proactive analysis and evaluation of the situation		
Knowledge	Skills	Attributes
<ul style="list-style-type: none"> - Legal knowledge - Knowledge of specific area of operations - Knowledge of rules and authority - Knowledge of risk management - Knowledge of disaster management - Knowledge of command systems - Knowledge of resources and management - Knowledge of resources to analyze and evaluate the situation. 	<ul style="list-style-type: none"> - Data analysis skills - In-practice Training - Coordination and training skills - Skills to help vulnerable groups of people - Skills to use tools to help - Teamwork 	<ul style="list-style-type: none"> - Commitment - Selflessness - Courage - Enthusiasm - Physical readiness

This Functional Competency can be summarized in the following competency dictionary:

Description of competency	
Competency type	Functional Competency
Competency name	Proactive analysis and evaluation of the situation
Definition	Ability to proactively prepare, respond, and rehabilitate with international standards, exchange data and information both inside and outside the organization, especially technical knowledge with neighboring local administrative organizations, and assess and analyze situations and events.
Proficiency Level	Behavior Indicator
Basic Level	<ul style="list-style-type: none"> - Understanding the mission and authority of disaster prevention and mitigation staff with practice on a regular basis. - Ability to receive information from agencies with technical sense and local government organizations. - Understanding the information received about rainwater level, atmospheric data, and meteorological data.

Description of competency	
Competency type	Functional Competency
Competency name	Proactive analysis and evaluation of the situation
Doing Level	<ul style="list-style-type: none"> - Monitoring and being ready for action 24 hours a day. - Ability to perform disaster response in the area effectively, courageously, and decisively. - Ability to gather information in their area, such as rainfall, air pressure, or alarm data. - Ability to gather data from external agencies for analysis. - Ability to work in a team.
Developing Level	<ul style="list-style-type: none"> - Ability to predict situations in response to obtained information. - Ability to help the victims in a timely manner. - Ability to advise the public so they may understand and follow the recommendations of disaster prevention and mitigation staff. - Ability to exchange collected information with coordinating agencies for assistance and accurate information.

Description of competency	
Competency type	Functional Competency
Competency name	Proactive analysis and evaluation of the situation
Advanced Level	<ul style="list-style-type: none"> - Ability to write a response plan and action plan to prevent and mitigate the disaster for the local government. - Ability to work in full compliance with international standards and always develop procedures. - Ability to manually collect data and receive information from other agencies in order to analyze and assess the situation. - Ability to accurately maintain public relations in the area.
Expert Level	<ul style="list-style-type: none"> - Ability to analyze data from situations that arise and report situations to government, provincial, and local agencies. - Ability to transfer knowledge and basic procedures when disaster occurs to the people. - Ability to disseminate information such as knowledge, analysis and assessment of the situation, including statistical data, to local authorities. - Ability to provide counseling and response plans or evacuation plans to work with local government organizations. - Ability to practice, share information, and improve response performance with other local government organizations and the public.

3) Networking in operations and public and community relations

As a local government organization also has a responsibility in disaster management and prevention in the area, it is necessary to create a network of relief teams and to involve the community in its operation. In some cases, it is also necessary to include the private sector or communities in the area in its disaster prevention and mitigation plan. Nonetheless, the disaster prevention and mitigation staff must follow the Incident Command System (ICS) and coordinate with government agencies and the public sector. They must be able to build and maintain a network with all actors who are involved in disaster prevention and mitigation in the area and ensure that all actors are collaborative with one another, while assisting them in resource management and knowledge sharing. For smooth coordination, all actors should be satisfied with the communication and reporting of the situation.

This category of competency requires the disaster prevention and mitigation staff to have knowledge of a command system and how to coordinate with government agencies. They must know how to communicate with the public, how to manage resources, and how to work with bureaucracy, and also possess coordination skills, collaboration skills, persuasion skills, communication and public relations skills, as well as negotiation and working skills.

The elements of competency (Knowledge, Skills, and Attributes) are shown in the following table:

Networking in operations and public and community relations		
Knowledge	Skills	Attributes
<ul style="list-style-type: none"> - Knowledge of command systems - Knowledge of risk management - Knowledge of coordination - Psychological knowledge - Knowledge of resources and management 	<ul style="list-style-type: none"> - Coordination skills - Collaborative skills - Persuasive skills - Public relations skills - Teamwork 	<ul style="list-style-type: none"> - Optimism - Selflessness - Physical readiness - Can adapt to the required situation - Good communication

This Functional Competency can be summarized in the following competency dictionary:

Description of competency	
Competency type	Functional Competency
Competency name	Networking in operations and public and community relations
Definition	Ability to build and maintain operational networks both inside and outside the organization, to improve coordination and coordination skills, and to work smoothly and satisfactorily so people are content with the communication and reporting of the situation.
Proficiency Level	Behavior Indicator
Basic Level	<ul style="list-style-type: none"> - Understanding the nature of coordination. - Understanding the potential of any unit to coordinate in any matter. - Understanding the psychology of communication with the community.
Doing Level	<ul style="list-style-type: none"> - Ability to help or coordinate with both internal and external organizations. - Ability to receive information in the Department of Meteorology. - Ability to report situations to commander accurately.

Description of competency	
Competency type	Functional Competency
Competency name	Networking in operations and public and community relations
Developing Level	<ul style="list-style-type: none"> - Ability to assist if support agencies are available, both inside and outside the organization, as well as the public and private sectors. - Ability to coordinate the data synchronization from technical units to analyze data. - Ability to report received technical information to the situation commander. - Ability to work in a team.
Advanced Level	<ul style="list-style-type: none"> - Ability to create a network for the staff to exchange information and know each other. - Ability to analyze and respond to information in the disaster prevention and mitigation. - Ability to report the situation so people in the area can understand and acknowledge it.
Expert Level	<ul style="list-style-type: none"> - Having a network for coordination with all sectors of the government and the private sector. - Ability to maintain a network and increase visibility in the network to improve coordination. - Ability to develop and transfer knowledge of each other in the network. - Ability to communicate technical information so people in the area can understand and acknowledge it.

5.2 Hazard Specific Competency

Although functional competency has already been identified, the nature of disaster prevention and mitigation also requires technical knowledge specific to different types of disaster, namely lowland flooding, landslides in the highlands and storm surges. Hazard specific competency refers to a set of competencies that disaster prevention and mitigation staff must be able to demonstrate. It is also a framework for human resource development in order to equip disaster prevention and mitigation personnel with specialized knowledge for different disaster risks.

5.2.1 Hazard specific competency in flooding and landslides

Disaster prevention and mitigation operations for local administrative organizations that are at risk from floods, storms, and landslides will be different from those of other local administrative organizations facing other forms of disasters.

A local government organization at risk of flooding needs to use knowledge in water management such as scientific knowledge about floods and knowledge about flood action plans in each area. It must also understand the psychology of persuasion in order to communicate with people in the area. It must know how to set up a disaster relief and how to operate a medical evacuation if necessary. Most importantly, it must possess a good knowledge of geography and local maps to be able to plan alternative evacuation or transport routes.

The elements of competency (Knowledge, Skills, and Attributes) are shown in the following table:

Hazard specific competency in flooding and landslide prevention and mitigation		
Knowledge	Skills	Attributes
<ul style="list-style-type: none"> - Water management knowledge - Scientific knowledge of the flood - Knowledge about the flood action plan in each area - Psychological knowledge - Knowledge of Victim Assistance Centers - Knowledge of evacuation - Basic knowledge of medical evacuation 	<ul style="list-style-type: none"> - Skills in moving to higher ground. - Instrumental skills of rescue - Persuasive skills - Skills in evacuation - Teamwork skills - Negotiation skills - Communication skills - Skills to help the victims 	<ul style="list-style-type: none"> - Courage - Physical readiness - Enthusiasm - Reliability - Leadership - Selflessness - Carefulness

The knowledge, skills, and attributes of work in flood and landslide prevention and mitigation can create specific competencies; Movement and evacuation of flood victims and persuasion of management in the area.

5.2.1.1 Movement and evacuation operations in response to emergencies or disasters

In areas with a repeated disaster threat, it is necessary for the local administrative organization to take control of the area. Disaster prevention and mitigation staff have a responsibility to prepare and to alert the public for a swift evacuation. However, the local government

must take the culture and the decision of local residents into account. A strong attachment to their home and belongings can cause an obstruction to the operation. The local government organizations must therefore have a backup plan to facilitate people who choose not to be evacuated from the area, such as the need to supply food, health care, and hygiene.

This Hazard Specific Competency can be summarized in the following competency dictionary:

Description of competency	
Competency type	Hazard Specific Competency
Competency name	Movement and evacuation of flood victims
Definition	Ability to prepare evacuation operations to respond to emergencies or disasters
Proficiency Level	Behavior Indicator
Basic Level	<ul style="list-style-type: none"> - Understanding the local disaster management and mitigation plans. - Having knowledge of water management. - Having awareness of operations and processes in disaster response and mitigation in the area. - Having knowledge of maintenance tools and tools. - Having knowledge of first aid and skills of self-defense. - Having knowledge of spatial aspects and the Community Safety Area

Description of competency	
Competency type	Hazard Specific Competency
Competency name	Movement and evacuation of flood victims
Doing Level	<ul style="list-style-type: none"> - Ability to respond to disasters that occur in the area effectively with courage and determination. - Ability to adapt to the pressure of work. - Ability to help and rescue victims in a correct and cautious manner. - Ability to negotiate with citizens when needing to evacuate. - Ability to work in a team.
Developing Level	<ul style="list-style-type: none"> - Ability to receive information from the response in the area and predict the situation. - Ability to help victims promptly and make decisions to assess the situation in the evacuation. - Ability to communicate effectively with the public so the public is not alarmed. - Ability to communicate the advice of the defense and disaster relief staff so the public can understand and act accordingly. - Ability to analyze and evaluate the situation when disaster strikes and evacuate people to safe areas in the community.

Description of competency	
Competency type	Hazard Specific Competency
Competency name	Movement and evacuation of flood victims
Advanced Level	<ul style="list-style-type: none"> - Having expertise in moving, elevating and evacuating. - Ability to assist victims with technical expertise. - Working with local government organizations or outside agencies to work in disaster relief centers.
Expert Level	<ul style="list-style-type: none"> - Ability to provide counseling, response plans, or evacuation plans to work with local government organizations. - Ability to convey the management of the evacuation center to external agencies. - Ability to convey the methods of preparation, response, and rehabilitation to the public.

5.2.1.2 Persuasion of management in the area.

The local administrative organization needs to provide disaster prevention and mitigation staff with skills in negotiation and persuasion in order to create trust between the staff and local residents especially when the operation can affect local beliefs, way of life, and culture. Disaster prevention and mitigation staff must familiarize themselves with the geographic, social, and political context of the area, and must possess an ability to convince the local residents and their colleagues to comply with the action plan. Furthermore, when a conflict or a negative impact of the operation arises, disaster prevention and mitigation personnel must have the ability to negotiate with the public in order to relieve the pressure and the conflict.

This Hazard Specific Competency can be summarized in the following competency dictionary:

Description of competency	
Competency type	Hazard Specific Competency
Competency name	Persuasion of management in the area
Definition	Ability to understand the environment in terms of geography as well as social and political contexts, convince people to follow instructions, and negotiate when there is a conflict related to work in the area.
Proficiency Level	Behavior Indicator
Basic Level	<ul style="list-style-type: none"> - Understanding the context of social and political life in the area. - Understanding the public relations system, how to publicize and disseminate information, and how to give honest warnings.
Doing Level	<ul style="list-style-type: none"> - Ability to operate in the area and have complete communication information. - Having enough information to communicate with the people. - Promoting communication without contradictory rules and choosing the way to communicate with the recipient.

Description of competency	
Competency type	Hazard Specific Competency
Competency name	Persuasion of management in the area
Developing Level	<ul style="list-style-type: none"> - Ability to find the appropriate way to communicate in each group. - Ability to negotiate when there is conflict in the area. - Ability to negotiate or mediate conflicts that occur in the area of work.
Advanced Level	<ul style="list-style-type: none"> - Ability to command all respondents in the area. - Ability to speak to others. - Ability to negotiate conflicts in the area before, during, and after the disaster.
Expert Level	<ul style="list-style-type: none"> - Ability to instruct workers in the work area to meet their needs with support. - Having leadership in communication and self-control when conflict occurs or under pressure. - Ability to be consulted on conflict management issues in the area.

5.2.2 Hazard specific competency in storm surge prevention and mitigation

In areas affected by a storm surge, a knowledge of construction engineering is an essential hazard specific competency. In response to a repeating storm surge, the local government must be ready to demolish buildings and to dispose of hazardous material to prepare the area for a storm surge season. The demolition of buildings and obstructions is required both during the disaster and in the aftermath. Therefore, employees need to have a good understanding of the use of equipment

and have a basic knowledge in engineering.

The elements of competency (Knowledge, Skills, and Attributes) are shown in the following table:

Hazard specific competency in storm surge prevention and mitigation		
Knowledge	Skills	Attributes
<ul style="list-style-type: none"> - Knowledge of the demolition of buildings - Knowledge of building structure and space - Knowledge of the use of equipment and tools suitable for the job - Knowledge of moving objects 	<ul style="list-style-type: none"> - Skills in using tools and resources in the workplace - Skills in maintenance - Tools to work - Coordination skills - Teamwork skills - Interpersonal skills 	<ul style="list-style-type: none"> - Speed of operation - Strength of body and mind - Carefulness

The knowledge, skills, and attributes of work in storm surge prevention and mitigation can create a specific competency; Specialization in demolition of buildings and obstructions.

5.2.2.1 Specialization in demolition of buildings and obstructions.

The prevention and mitigation for a storm surge disaster is a unique operation. The local government organization has to get itself ready long before the annual tropical storm and thunderstorm season. Its duty is to reduce the risk by demolishing obstacles and cutting down trees that obstruct traffic, and when a storm occurs, it is necessary to use the equipment for disaster prevention and mitigation. Moreover, when preparing to handle storms, it is important to prepare maintenance

tools, planning for operations, and engineering knowledge of building laws, in order for the staff to be able to operate, dismantle, or manage the building safely. It is necessary to know about building structures, user equipment, and tools that are appropriate for the job, while further knowledge of how to demolish buildings and move objects must comply with the current law. Disaster prevention and mitigation personnel in critical risk areas also need skills in using special tools and resources such as saw blade baskets for cutting wood and saw blades for cutting steel, as well as skills to maintain the machine properly so that it is always ready to use. Coordination skills are also important as most staff have to coordinate with a team of technicians and engineers and rely on teamwork to increase interpersonal skills. Disaster prevention and mitigation staff then require alertness in the operation with strength of body and mind and a willingness to work carefully, concisely, and selflessly.

This Hazard Specific Competency can be summarized in the following competency dictionary:

Description of competency	
Competency type	Hazard Specific Competency
Competency name	Specialization in demolition of buildings and obstructions
Definition	Understanding of the demolition of buildings and property as a result of storm damage.
Proficiency Level	Behavior Indicator
Basic Level	<ul style="list-style-type: none"> - Knowing the laws, rules, regulations, and policies on the work. - Understanding the basics of the law on the demolition of buildings. - Understanding the use of hand tools and management tools, such as mowers, baskets, and backhoe trucks. - Understanding the information received from technical units, such as wind speed and air pressure.
Doing Level	<ul style="list-style-type: none"> - Preparing to deal with the disaster from the start of the storm season. - Ability to work in the emergency response. - Ability to operate according to the rules of the demolition of buildings and obstructions. - Ability to work with tools to perform jobs properly. - Ability to work in a team.

Description of competency	
Competency type	Hazard Specific Competency
Competency name	Specialization in demolition of buildings and obstructions
Developing Level	<ul style="list-style-type: none"> - Ability to be a leader in performance as required by law. - Ability to use maintenance tools regularly. - Ability to write a response plan of the area by the authority. - Ability to transfer knowledge in the demolition of buildings and obstructions to colleagues.
Advanced Level	<ul style="list-style-type: none"> - Ability to plan operations in the field of storm disaster management throughout the process. - Ability to plan for maintenance of response tools. - Ability to work together with external agencies.
Expert Level	<ul style="list-style-type: none"> - Ability to transfer knowledge about the demolition of buildings and obstructions to external disaster agencies. - Ability to educate people when they are affected by storms. - Ability to operate and supervise the demolition of buildings and obstructions with the public and private sectors.

6. Suggestion

6.1 Policy Recommendations

1) In applying competency to human resource management in local government organizations, especially in disaster prevention and mitigation, it is necessary to review and understand the nature of the work to achieve the appropriate competency. Disaster Prevention and Mitigation is a technical work. Therefore, with each area having different situations and scenarios, different techniques may be required for a different areas. You should have proficient building capacities in both prevention and mitigation.

2) Standards and competencies prepared by the Department of Local Administration are only a framework for performance evaluation. They should be used to implement the competency to the full.

3) The use of competency in the development of disaster prevention and mitigation personnel should be supported by the implementation of either the training curriculum or the structure. To provide personnel in the prevention and mitigation, it can be done by training the current personnel by themselves. In personnel development, disaster prevention and mitigation is not necessarily required. Training alone, practicing together, or even learning from each other is what makes the workforce more productive.

6.2 Practical Suggestions

To bring competency into use in local government organizations, it is imperative that competencies and indicators are communicated to the individuals so that all levels understand. This study was conducted in the area and found that, for example, firefighters do not know themselves what the competency assessments are. This makes it difficult to apply competency concepts to local government organizations or to implement such policies; human resource development based on competency by using the competency road map might be a more effective method.

7. References

- Becker, Gary S. 1975. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. 2d ed. New York: Columbia University Press for NBER.
- Benner, P. 1984. *Form novice to expert: Excellence and power in clinical nursing practice*. Menlo Park. CA: Addison-Wesley.
- Boam, Rosemary and Paul Sparrow. 1992. *Designing and Achieving Competency*. McGraw Hill, Reading.
- Boyatzis, R.E. 1982. "Competence at work." In *Motivation and society*, edited by Stewart. San Francisco: Jossey-Bass.
- Department of Disaster Prevention and Mitigation. 2007. *Prevention and Mitigation Act*. Bangkok: Ministry of Interior.
- Department of Disaster Prevention and Mitigation. 2009. *National Disaster Prevention and Mitigation Program, 2010 – 2014*. Bangkok: Ministry of Interior.
- Department of Disaster Prevention and Mitigation. 2010. *A Guide to the Practice of Fire Prevention and Mitigation*. Bangkok: Ministry of Interior.
- Department of Disaster Prevention and Mitigation. 2015. *National Disaster Preparedness and Response Plan*. Bangkok: Ministry of Interior.
- Department of Disaster Prevention and Mitigation. 2014. *Book Terminology Management Risks From Disasters*. Bangkok: Ministry of Interior.
- Kamolvej, Tavida. 2009. "Disaster Management Science." *Journal of Political Science* (3).
- Kamolvej, Tavida. 2011. "Local Disaster Management Guide." Bangkok: King Prajadhipok's Institute.
- McClelland, D.C. 1975. *A Competency Model For Human Resource Management Specialists to Be Used In The Delivery of The Hu-*

man Resource Management Cycle. Boston: Mcber.

McClelland, D.C., J.W. Atkinson, R.A. Clark, and E.L. Lowell. 1953. *The Achievement Motive*. Chicago : Barakaldo Books

Office of the Civil Service Commission.2004. *Implementing Human Resource Management*. Capabilities Documents for the Seminar on Competency of Government Officials, January 31.

Schuler, R.S. “Strategic Human Resources Management: Linking People With the Strategic Needs of Business.” *Organizational Dynamics* 21(1) Summer.

Worawit, Anounsak.. 2004. “The concept of old performance that we lost.” *Chulalongkorn University Journal* 16(64).

Interview

Policy Executives of Local Government Organizations and staff in disaster prevention and mitigation in Ang Thong Municipality, Pak Kret Municipality, Huayang Subdistrict Administrative Organization, Mae Sai Subdistrict Administrative Organization, Surat Thani City Municipality Amphoe, Udon Thani City Municipality Manager and staff involved in the public health work at the Personnel Development Institute for Disaster Prevention and Mitigation.