

## THAILAND'S COUNTRY REPORT ON DISASTER RESPONSE MANAGEMENT

### Disaster Situation

Most disasters in Thailand are associated with water. The most common disasters are floods, droughts and landslides due to the geographic and climatic characteristic of the country. With a vast mountainous areas in the north from where the main rivers (i.e. Ping, Wang, Yom, Nan and Chao Phraya) are originated, large volume of water flows down to the mouth of the ocean in Bangkok passing through many provinces. This phenomenon takes places every year during the rainy season, influenced by the southwest monsoon weather which arrives annually between mid-June and October. In recent years, the amount of water has exceeded the capacities of either rivers or reservoirs and subsequently causes flooding.

Flood is by far the worst disasters in Thailand. Between 2002 and 2010 flood killed more than 1,000 people and brought damage and loss in economic terms more than 40 billions Baht. It outnumbers the damage caused by all other disasters combined during the period.

Landslides occur frequently in Thailand due to the influence of monsoon rain. In most cases, landslide would occur in the northern and southern parts of the country which are mountainous.

Although drought does not pose danger to human life but it does cause a great damage to the economy and livelihood of the people especially in rural areas.

Thailand is also vulnerable to typhoon and windstorm disasters. In 1988, for instance, Typhoon Gay made landfall and destructed the southern province of Chumporn, incurring a massive loss of lives. As many as 458 people were killed by either drowning or being crushed by a series of blowing debris. But long before Gay Thailand had already experienced a big typhoon in 1962. Named as "Harriet", the typhoon surged Laem Talumpuk, Nakorn Sri Thammarat province in the South, causing 769 deaths.

The most destructive natural disaster in Thailand was the Indian Ocean Tsunami in 2004, which claimed 8,000 or more lives and contributed to economic loss of 1.5 Billions USD or around 1.5 percent of the country's GDP.

### Disaster Management System

When the Indian Tsunami struck Thailand's 6 southern provinces in 2004, the country had revealed its disaster management system to the international

community for the first time. The Interior Minister, as the Chair of the National Civil Defense Committee and as the Commander in-chief of National Civil Defense, played a vital role in the coordination among various government agencies and other parties concerned in the aftermath of the disaster. A large number of meetings were convened where all parties concerned attending to discuss the issues during the response, rehabilitation and recovery phases. This leadership was guided by the “Civil Defense Act 1979”.

Due to its outdated features and disadvantages, the Civil Defense Act 1979 was terminated after about 30 years of use. On 19 November 2007, the “Disaster Prevention and Mitigation Act 2007” entered into force, cancelling the old Civil Defense Act 1979. Thailand’s disaster management system has been based on the 2007 Act ever since.

The DPM Act 2007 has the provisions regarding the institutional arrangement as follows:

- (1) The National Committee on Disaster Prevention and Mitigation (NCDPM) serves as a policy making body. It is chaired by the Prime Minister. The Committee comprises 34 members, designated from ministries, agencies and organizations related to disaster management.
- (2) The Minister of Interior is by law the Commander in-chief when it comes to disaster emergency response particularly in large-scale disaster.
- (3) The Director-General of The Department of Disaster Prevention and Mitigation (DDPM) is by the law the Secretary General of the NCDPM.
- (4) The Director under the 2007 DPM Act is the Incident Commander when a disaster takes place.

### **National Master Plan for Disaster Prevention and Mitigation**

National Master Plan for Disaster Prevention and Mitigation for the year 2010 – 2014 is the master plan for all agencies concerned, and provides guidelines for the formulation of operational plan of agencies responsible for management of disaster. The first part of this master plan related to disaster prevention and mitigation principle. The second part focuses on standard operating procedures (SOPs) in dealing with 24 different types of disasters. And the third part is touches upon national security issues.

The Department of Disaster Prevention and Mitigation (DDPM) established in the year 2002, under the Ministry of Interior, is the principal agency for disaster management coordination among all agencies concerned at all levels.

## Budget for Disaster Management

Since its establishment in late 2002, the annual budget of DDPM has been increasing, jumping by 174 percent- from 31 Millions USD in 2003 to 86 Millions USD in the year 2010 Fiscal year (see the table below).

Budget of DDPM  
Fiscal Year 2003-2010

<b>Year</b>	<b>Amount (THB)</b>	<b>Amount (USD)</b>
2003	1,066,412,900	31,365,085
2004	1,312,578,500	38,605,250
2005	1,685,362,700	49,569,491
2006	2,437,850,700	71,701,491
2007	1,948,805,800	57,317,818
2008	2,184,972,800	64,263,906
2009	2,315,783,900	68,111,291
2010	2,934,135,400	86,298,100

## Priority on disaster risk management

Thailand urgently needs to reform disaster management systems and mechanisms as follows:

1. Pushing more public awareness and education and improving public safety of every sector particularly those who are living with risk by enhancing people's understanding of the threats posed by various types of disasters.
2. Materializing Early Warning Systems: Following the catastrophic tsunami disaster in 2004, Thailand took immediate action to establish National Disaster Warning Center, which covers the warning of both natural and man-made disasters.
3. Establishing More International Disaster Management Networks: Thailand needs to enhance the country's disaster management capacity and efficiency through the mobilization of technical assistance from foreign countries, particularly from developed and advanced countries.
4. Introducing remote survey technology to effectively assess the damages caused by large scale disaster. The staff of the agencies concerned needs to be trained to enhance their capacity in applying satellite images to assess the damage.
5. Enhancing the potential of local authority and community, who are in the front line in the event of disaster occurrence and consequently are the most vulnerable and effected, in responding to disasters, and to equip them with awareness and preparedness.

6. Highlighting on preventive approach. The new approach of disaster management has shifted its focus from “assistance” or “relief” to “prevention”. In this regard, risk reduction must be vigorously taken into account. So as to reduce the risk, both structural and non-structural measures should be materialized, thus, this new approach focusing on risk reduction will soon efficiently diminish the cost of disaster damage comparing to the traditional one.
7. Focusing on human resource development as a key factor for disaster management.
8. Placing an importance on livelihood rehabilitation with activities such as community development and vocational training. The improving of the standards of living should be immediately materialized to normalize disaster victims’ means of living.

## **Projects on disaster reduction**

### **1. The One Tambon-One-Search and Rescue Team (OTOS)**

In this regard, DDPM has launched OTOS program which contains; at the provincial level, the training of provincial SAR (search and rescue) team were completed and have been assigned to be SAR instructors; at district level, district SAR team have been trained to become instructors as well; at Tambon level (Thailand’s administrative unit between district and village), it is expected there will be Tambon SAR team in every Tambon nation-wide.

### **2. Disaster Management Training for Managers, Practitioners, Local Government Officers and Others**

**The Prevention and Mitigation Academy (DPMA)** established by Ministry of Interior, DPMA is now a principle educational institution in disaster management field.

### **3. Education for Disaster-Preparedness in Primary School**

This project is 4-month long (January – April 2006). The Asian Disaster Reduction Center (ADRC) has played a leading role with supports from Thailand’s Ministry of Education and DDPM. Objectives of the project are: a) to strengthen disaster preparedness capacity in primary schools b) to build teacher capacity for disaster preparedness and management and c) to disseminate knowledge of tsunami and other natural disasters to the children at schools.

#### **4. Community-Based Disaster Risk Management (CBDRM) Program**

Thailand by DDPM has adopted and applied this appropriate people participatory approach to generate the awareness among the general public and mobilize their participation in every phase of disaster management so as to build safe and resilient community. In the past year, DDPM, in collaboration with various government agencies, local authorities, NGOs and international organization, has launched CBDRM program in hundreds of communities at risk. This program will be jointly organized on continuous to cover all vulnerable communities nation-wide.

#### **5. “Mr. Warning” Training Program**

In conjunction with various government agencies and NGOs, DDPM has implement a community-based volunteer training program which aims at creating a disaster warning network in the flashflood and mud slide prone villages. The trained villagers are designated as “Mr. Warning” and assigned to be the “vigilant”, “forewarned” and “coordinator” in emergency and non-emergency situation respectively. This program has been in concerted with its preceded program, “Simple Rain Gauge Installation” program.

#### **6. Emergency Response Team Development project (ERT)**

Emergency Response Team or ERT has been developing to DDPM to response for each type of large-scale hazards of incidents. Basically, ERT was set up 20 teams, 2 teams embedded in DDPM, Bangkok Office, and the other 18 team in each Regional Center of DDPM. Each ERT will consist 10 members, including one (1) team leader, three (3) for planning, and six (6) for operation. Team leader will be the chief officer to coordinate with Provincial Director and officers of the Ad-Hoc Directing Center in case of disaster occurring