



# Country Profile



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Ministry of Interior  
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# THAILAND

## 1. Natural hazards in Thailand

### 1.1 Natural Hazards likely to affect the country

Drought, earthquake, epidemic, flood, landslides, wave/surge, wild fires, windstorms, tsunami, cold spell.

### 1.2 Recent major disasters

year	Disaster type	Frequency	Killed	Injured	Total affected	Damaged (Baht)	Damaged (USD)
2008	<b>Flood</b>	<b>6</b>	<b>113</b>	<b>16</b>	<b>7,921,127</b>	<b>7,601,796,302</b>	<b>228,969,768</b>
	Drought	n/a	0	0	13,298,895	103,900,841	3,129,543
	Cold Spell	n/a	0	0	9,554,992	n/a	n/a
	Storm	1,995	15	30	242,944	227,549,741	6,853,908
	Fire	1,696	30	92	8,392	1,424,889,050	42,918,345
2007	<b>Flood</b>	<b>13</b>	<b>36</b>	<b>17</b>	<b>2,326,179</b>	<b>1,687,865,982</b>	<b>50,839,337</b>
	Drought	n/a	0	0	16,754,980	198,304,732	5,973,034
	Cold Spell	n/a	0	0	5,910,339	n/a	n/a
	Storm	2233	10	71	245,619	234,547,154	7,064,673
	Fire	1,901	45	156	9,761	875,791,793	26,379,271
2006	<b>Flood</b>	<b>6</b>	<b>446</b>	<b>1,462</b>	<b>6,050,674</b>	<b>9,627,418,620</b>	<b>289,982,489</b>
	Drought	n/a	0	0	11,862,358	495,275,738	14,917,944
	Cold Spell	n/a	0	0	2,303,703	n/a	n/a
	Storm	1,883	29	39	142,849	92,244,108	2,778,437
	Fire	1,734	37	66	9,708	1,083,845,622	32,645,952
2005	<b>Flood</b>	<b>12</b>	<b>75</b>	<b>0</b>	<b>2,874,673</b>	<b>5,982,283,276</b>	<b>180,189,255</b>
	Drought	n/a	0	0	11,147,627	7,565,861,139	227,887,384
	Cold Spell	n/a	0	0	3,742,793	n/a	n/a
	Storm	1,313	13	0	61,429	148,871,750	4,484,089
	Fire	1,559	48	68	23,250	931,191,005	28,047,922

(1 USD = 33.20 Baht)

Source: Department of Disaster Prevention and Mitigation (DDPM)



### **December 2004's Tsunami: the Most Catastrophic Disaster in Thai**

At 07.58 a.m., of 26 December 2004, the massive earthquake magnitude of 9.0, the strongest in the world since 1964, struck deep under the Indian Ocean off the west coast of Sumatra, Indonesia, and triggered the cataclysmic tidal wave that slammed on the Andaman coastal provinces, southern Thailand. The catastrophic incident devastated 6 provinces namely, Phuket, Trang, Phang Nga, Krabi, Ranong and Satun.

Right after the tsunami waves ebbed, the relief activities were immediately and continuously activated. It is widely accepted that Thailand had led an effective relief efforts and response immediately on the day of tsunami strike. As the consequence, Thailand had achieved the rapid success in relief operation within a few months later. The key factors in the effectiveness of relief response can be delineated as follows;

- The synergy of Thai people from all walks of life to provide all kinds of assistance to their suffered countrymen.

- The close and integrated collaboration and cooperation among the civil, military, police, NGOs, charitable foundations, civil defence volunteers etc.

- The influx of endless support and humanitarian assistance from international communities, organizations, NGOs near and far.

The Royal Thai Government, private sector and NGOs, have continuously launched restoration activities to enhance livelihoods and rebuild the environments of the affected people and areas following the initial phase of rescue and humanitarian relief. Simultaneously, has conducted preparedness activities so as to reduce the vulnerability and increase the resilience in the tsunami hit communities. The international communities, NGOs and United Nations mechanisms also continue to endlessly support Thailand in these humanitarian assistance activities.

**2007** : Cyclone Lekima hit Thailand between 4 and 6 October 2007 killed 17, affected 1,552,936, and whose total loss was US\$ 30.8 million.

**2008** : Cyclone Mekkahla hit between 31 September and 1 October 2008. The cyclone caused torrential rains which killed 32, affected 2,864,484 and whose total loss was US\$ 21.6 million.

## **2. Disaster Management system**

### **2.1 Administrative system**

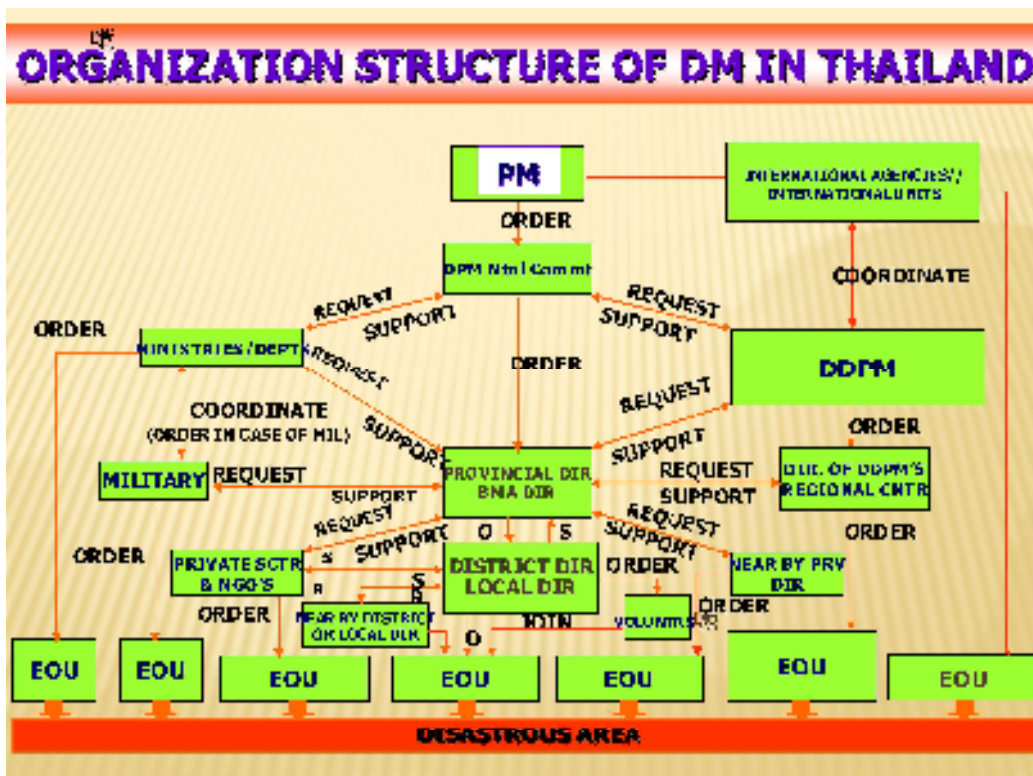
<i>Conventional long form:</i>	Kingdom of Thailand
<i>Conventional short form:</i>	Thailand
<i>Government type:</i>	constitutional monarchy
<i>Capital:</i>	Bangkok
<i>Administrative divisions:</i>	76 provinces (changwat, singular and plural)

### **2.2 Legal system, legal framework**

The **Civil Defence Act** of 1997 has classified disasters into 3 categories:

- 1) Man-made and natural disasters
- 2) Disaster resulted air raid during wartime
- 3) Disaster resulted from sabotage or terrorist attack

Disaster management system in Thailand has mainly based on Civil Defence Act of 1979 and the Civil Defence Plan 2002. The Natural Civil Defence Committee (NCDC) is the main policy making body. Prior to October 2002, the erstwhile Civil Defence Division of Department of Provincial Administration (the then Department of Local Administration, Ministry of Interior), had been in charge of the Nation Civil Defence Committee Secretariat. After October 2, 2002 Thai government has enacted the Bureaucrat Reform Act 2002, Department of Disaster Prevention and Mitigation (DDPM), has come into existence under the umbrella of Ministry of Interior and has been designated to shoulder responsibility of disaster management of the country and has thus, replaced the former Civil Defence Division as the National Civil Defence Committee Secretariat.



### 2.3 Structure of Disaster Management

In 2002, Thailand established the **Department of Disaster Prevention and Mitigation (DDPM)**, under the Ministry of Interior, as the principal agency for disaster management coordination among all agencies concerned at all levels. As regards disaster risk reduction, DDPM shall conduct activities in coordination with other agencies such as: the Meteorological Department (TMD), Ministry of Information Technology, Royal Irrigation Department (RID), Ministry of Agriculture and Cooperatives, Department of Water Resources, Ministry of Natural Resource and Environment.

#### National Civil Defence Committee (NCDC)

It coordinates all activities relevant to civil defence and disaster management. The National Civil Defence Committee performs all functions relevant to management of disaster at national level, such as formulation of Civil Defence Master Plan, evaluation of the implementation of the above-mentioned plan by an audit mission, organizing annual or periodical training courses on civil defence and disaster management for government officials at all levels and for the general public, issuing regulations on the payment of remuneration, compensation and other expenditures relevant to civil defence and disaster management activities carried out by all agencies concerned.

#### National Safety Council of Thailand (NSCT)

Apart from National Civil Defence Committee, Thailand has another disaster management related mechanism which has highlighted its tasks and responsibility on man-made disaster management only... that is "The National Safety Council of Thailand" (NSCT). The NSCT has been established in 1982 on the ground of the problem of road traffic accidents in Thailand which annually resulted in the tremendous loss of lives, properties and national economy. Later on, its responsibilities have been extended to cover the prevention of chemical accident, occupational accident, accident in home and public venues, considering preventive measure of fire in high-rise building, accident prevention in subway tunnel construction, providing education of safety etc.



### **National Disaster Warning Center**

The National Disaster Warning Center was established under the Order of the Office of the Prime Minister. It is a Prime Minister Thaksin Shinawatra's commitments to protect lives and properties of Thai people and foreign visitors by setting up the National Warning Center as soon as possible. The major task of the National Disaster Warning Center is to detect earthquake and to analyze seismic data to determine the possibility of a Tsunami generation before issuing notification messages to the public and related authorities and rescuers for evacuation of people into safe places. This is to prevent the loss of people's lives and properties as much as possible. From now on, the National Disaster Warning Center will be developed, upgraded of its early warning system and extended its telecommunication networks to be able to cope with multi-hazards disasters apart from Tsunamis

### **2.4 Priority on disaster reduction management**

#### **Priority on disaster risk management**

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

1) *Public Awareness and Education*. Improve 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) *Effective Damage Assessment*: Remote Survey technology must be introduced 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) *Application of Community-Centered Approach*: Local Authority and community are in the front line in the event of disaster occurrence, consequently, they are the most vulnerable and effected. It is indispensable to enhance their potentials in responding to disasters, and to equip them with awareness and preparedness.

6) *Highlight on Preventive Approach*: The new approach of disaster management has shifted its focus from "assistance" or "relief" to "prevention". In this regard, risk reduction to be vigorously taken into account. So as to reduce the risk, both structural and non-structural measures should be materialized, thus, the cost of risk reduction will yield invaluable rate of return when compared with the cost of disaster damage.

7) *The Focus on Prevention*: Proactive disaster management can reduce the damage and impact substantially.

8) *The Focus on Public Participation*: The past disaster management in Thailand had underlined the roles of government agencies and simply ignored private sectors, non – government organization, communities and even the public. Unfortunately, there has been a lack of cooperation among agencies concerned. This is a real challenge for DDPM to bring these stakeholders together.

9) *The Focus on Unity in Management*: The application of the Incident Command System (ICS) will demonstrate unity in management.

10) *The Focus on Efficient Communication*: The efficient communication system consists of the major system and the reserved system, which are vital for disaster management.

11) *The Focus on Human Resource Development:* Human resource development is a key factor for disaster management.

12) *Livelihood Rehabilitation:* Livelihood rehabilitation activities such as community development, vocational training, improving the standards of living should be immediately materialized to normalize disaster victims' means of living.

### 3. Disaster management plan

The Civil Defence Secretariat is responsible for identifying disaster prevention measure and policies and the National Civil Defence Plan. This Plan serves as the master plan for all agencies concerned, and provides guidelines for the formulation of operational plan of agencies responsible for management of disaster. The Civil Defence Secretariat does not only implement policies, but also provides equipment, technical assistance and training courses for local agencies and the public. It also coordinates with agencies that are in charge of disaster relief and rescue operations.

According to the Civil Defence Act 1979, the functional agencies are responsible for formulating their own disaster management plan. The master disaster management plan which is regarded as a national civil defence plan is to be made by the Civil Defence Secretariat. The Plan is to be reviewed and updated every three year term, and further proposed to the National Civil Defence Committee for approval. The current national civil defence plan which was reviewed and updated in 2005 consists of two components, Disaster Prevention and Mitigation Component, and Civil Defence for Security (Rear-Area Protection) Component.

### 4. Projects on disaster reduction

#### 4.1 One-Tambon-One-Search and Rescue Team (OTOS)

DDPM has realized the urgent need to setup efficient and skillful search and rescue team at provincial, district and local levels. In this regard, DDPM has launched OTOS program which contains ; at the provincial level, the training of provincial SAR teams 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 in between district and village), it is expected there will be Tambon SAR team in every Tambon (7,255 in number) nation-wide at the end of 2008.



#### 4.2 Disaster Management Training for managers, practitioners, local government officers and others through DDPM's Disaster Prevention and Mitigation Academy (DPMA)

Established by Ministry of Interior, DPMA is now a principle educational institution in disaster management field.



#### 4.3 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.



#### 4.4 Community-Based Disaster Risk Management (CBDRM) Program

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 safer and resilient community. In the past year, DDPM, in collaboration with various government agencies, local authorities, NGOs and international organizations, has launched CBDRM program in hundreds of communities at risk. This program will be jointly organized on the continuous to cover all vulnerable communities nation-wide.





#### 4.5 “Mr. Warning” Training Program

In conjunction with various government agencies and NGO, DDPM has implemented 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”, “forewarner” and “coordinator” in emergency and non-emergency situation respectively. This program has been in concerted with its preceded program, “Simple Rain Gauge Installation” program.



#### 4.6 Emergency Response Team Development Project (ERT)

Emergency Response Team or ERT has been developing by DDPM to response for each type of large-scale hazards or incidents. Basically, ERT was set up 20 teams, 2 teams embedded in DDPM, Bangkok Office, and the other 18 teams 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.





#### 4.7 Development of Civil Defence Volunteer Network Program

The main objective of this program is to increase the number of community-based Civil Defence Volunteer whose function is to holistically assist the government official's operation of all disaster. Currently, there are approximately 1 million Civil Defence Volunteers that had been trained and registered nation-wide. These Civil Defence Volunteers are based in their community and are on stand-by to be summoned all time.



#### 5. Counterpart of ADRC

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