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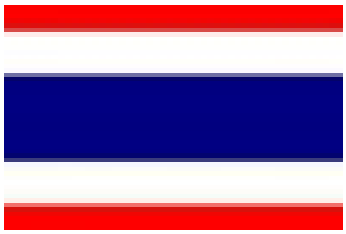

Thailand's country profile 2012

By

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Thailand

1. General Information

1.1 Geographical data

The kingdom of Thailand lies in the heart of Southeast Asia, has a land area of 513,115 sq.km. It is bordered by Myanmar (West & North), Laos (North & East), Cambodia (Southeast), and Malaysia (South).The Thai coastline stretches for 3,219 km along both the Gulf of Thailand on the Pacific side, and the Andaman Sea on the Indian Ocean side. The highest point in Thailand is Doi Inthanon, at 2,565 meters (8,415 feet).

The lowest point is the Gulf of Thailand, at sea level.

Thailand is divided into four regions; the North, the Central or the Chao Phraya River Basin, the Northeast or the Korat Pleateau and the south or the Southern Peninsula. The northern region terrain is mountainous which render this region to be prone to water-related disasters such as flashflood, landslide and debris flow. The northeastern region is an arid area on Korat Plateau and frequently suffers flashflood and inundation during rainy season, severe drought and cold spell during summer and cool season. The central region, the vast fertile land which is dubbed as the "Rice Bowl" of the country often encounters the repeated riverine flood and urban inundation during the rainy season. The southern region terrain is hilly on the west coast and the coastal plain on the east. This part of Thailand has occasionally frequented flashflood, mudslide, tropical storm and forest fire.

1.2 Climate information

Thailand enjoys a tropical climate with three seasons: hot (March-May), rainy with plenty of sunshine (June-September) and cool (October-February). Temperature during the time of the Congress is approximately 28°C (80°F)

1.3 Demographic data

Population Total 64,076,033 (in 2011), about 31 million males and 32 females.

People 75% Thais, 11% Chinese, 3.5% Malays, and others are Mons, Khmers, Burmese, Laotians, Indians and a variety of hill tribes.

Language Thai is the national language. English is widely understood in Bangkok and big cities.

Religion Buddhists 94.2%, Muslims 4.6%, Christians 0.8%, others 0.4%.

1.4 Administrative divisions

Thailand is a constitutional monarchy under the beloved king, Bhumibol Adulyadej, who has reigned since 1946. King Bhumibol is the world's longest-serving head of state. Thailand's current Prime Minister is Yingluck Shinawatra, who assumed office as the first ever female in that role on August 5, 2011.

The country comprises 77 provinces (changwat) and Bangkok municipality. The provinces are divided into 998 districts (amphoe), 8,860 rural administrative subdistricts (tambon).

Types of government administrations are the central, provincial and local. Local government is based on the principles of decentralization and self-government when certain legal conditions are met. Under the 1997constitution, elected local assemblies and elected or appointed local administrative committees were allowed four-year terms. Central government officials could not serve as local officials. Bangkok is a provincial-level entity with an elected governor and the legislative Metropolitan Administration Council. Supervision of provincial and local government takes place through the Department of Local Administration of the Ministry of Interior

2. Natural Hazards in Thailand

Generally, disaster can be categorized into two types: natural disaster and man-made disaster. All the same, whenever the disaster occurred, it will main and kill people, destroy property and environment and impede national sustainable development.

Besides, in the past two decades, also encountered numerous man-made disasters such as industrial accident, chemical spill and chemical related plant explosion, urban fire and road accident as the undesirable consequences of rapid progress in economic and social development.

2.1 Natural Hazards Likely to Affect the Country

Thailand has several natural disasters such as floods, mudflows, windstorm, drought, wildfire, earthquakes, unseasonal cold weather, and tsunami.

The recent earthquake occurred on the border of Myanmar and Thailand which was felt as far away as Bangkok. In some parts of the South, flood waters have risen to 3 meters. Meanwhile in Thailand's North East, there is a severe drought and in Northern Thailand, temperatures have fallen to as low as 5°C at Doi Inthanon near Chiang Mai.

2.1.1 Natural Disaster, the Level of Disaster Intensity, vulnerability, managing competence and risk Level of Thailand

Disaster	Severity	Vulnerability	Management	Tendency
Flood	High	Medium	Medium	High
Landslide/Mudflow	High	Medium	Poor	High
Windstorm	Medium	Medium	Medium	Medium
Drought	High	Medium	Medium	Medium
Fire	High	Medium	Medium	Medium
Explosive	High	Medium	Medium	Medium
Earthquake	Low	Low	Poor	Medium
Accident	High	Medium	Poor	High
Tsunami	High	Medium	Medium	Medium

Source: UNDP in 2002, DDPM Adjust in 2010

2.1.2 Rank Order of Risk of Disaster in Thailand

Type of Disasters Subjective	Rank	Numeric Weight
Flood	Accident	Explosive
Typhoon	Drought	Fire
Land slide	Earthquake	Civil Unrest/Refugee Influx
Pests	Epidemic	high
high	high	moderate
moderate	moderate	moderate
moderate	moderate	moderate
low	2.39	2.37
2.34	2.31	2.24
2.20	2.15	1.97

Source: UNDP in 2002, DDPM Adjust in 2010

2.1.3 Disaster Seasoning Calendar

The occurrences of natural disaster in Thailand are subject to seasonal cycle Type of Disaster/Event Periods of Time (month) such as cold spell, drought, flood, landslide and storm.

Type of Disaster	Disaster/Event	Periods of Time (month)
Natural	1. Cold spell 2. Drought 3. Flood 4. Landslide 5.Tropical Cyclone 6. Earthquake 7. Storm surge	October - January January - May October – November and June - September October – November and June - September January - May Year – round surveillance October – November
Natural/ human induced	1. Forest fire	Year – round surveillance Northern region April - May Northern region November – May Central region, Eastern region, Southern region: March – May

Source: Implementation Handbook 2009, DDPM.

2.1.4 Statistics of Thailand caused the disaster and its impact in the past 10 years is as follows.

1. *Flooding,* Thailand has floods every year. The damage is enormous. Floods are caused by the influence of the low pressure groove power across the region. Central and northeast monsoon and the southwest monsoon over the Andaman Sea and the Gulf of Thailand. The heavy rain and flooding made many people suffered and public assets damage .However, flooding in the latter became more serious and the damage is very high shown in the table below.

Table 1: The statistics data of the damages from floods during 2003-2011.

Year	Number		Damaged		
	(Time)	(Provinces)	Injured (People)	Deaths (People)	Cost (Million Bath)
2003	17	66	10	44	2,050.26
2004	12	59	3	28	850.65
2005	12	63	-	75	5,982.28
2006	6	58	1,462	446	9,627.41
2007	13	54	17	36	1,687.86
2008	6	65	16	113	7,601.79
2009	5	64	22	53	5,252.61
2010	7	74	1,665	266	16,338.73
2011	1 (JULY 25, 2011-JAN, 2012)	66	N/A	813	142,500
Total	79	569	3,195	1,874	191,891.59

Source: www. Nirapai.com, DDPM.

2. *Mudflow.* There are threats of mudslides that occur in Thailand. In the past, there was not much damage. Generally, mudslides occur simultaneously or occurring after the flash flood. As a result of the storm caused heavy rains continued damage, the mass of earth and stones, and therefore can not fully absorb the moves by the influence of the force of gravity. Current problems from mudslides occurred in more frequent and severe. It is caused by human behavior, such as deforestation. Farming in areas prone to soil degradation as a result of the increasing problems mudslides.

Table 2: The statistics data of the damages from mudflow during 1999-2010.

Year	Provinces	Damaged		
		Injured (People)	Deaths (People)	Cost (Million Bath)
1999	Phetchaboon (North of Thailand)	N/A	10	N/A
2000	Prea and Utaradit (North of Thailand)	N/A	43	100
2001	Phetchaboon (North of Thailand)	109	136	645
2004	Tak (North of Thailand)	391	5	N/A
2006	Prea and Utaradit (North of Thailand)	N/A	83	308
2007	Phetchaboon (North of Thailand)	N/A	6	N/A
2008	Surattanee (South of Thailand)	N/A	2	N/A
2009	Naratiwat (South of Thailand)	N/A	14	N/A
2010	Yala and Naratiwat (South of Thailand)	N/A	12	N/A
	Total	More than 500	553	More than 2,053

Source: Department of Mineral resources, www. Nirapai.com, DDPM.

3. *Windstorm* is a natural phenomenon that has affected a wide area of hundreds of square kilometers. In particular, the center of the storm moves through the area will be affected the most. Which often vary based on the severity of damage. When the storm has weakened to a depression in the rain and often followed by floods. The storm has weakened to a tropical storm or typhoons have caused many disasters and floods and hurricane storm surge swept to the side. This is dangerous and can cause severe damage. A number of people have died in Thailand's disaster of a windstorm several times.

Table 3: The statistics data of the damages from windstorm during 2002-2011.

Year	Number		Damage		
	(Time)	(Provinces)	Injured (People)	Deaths (People)	Cost (Million Bath)
2002	594	67	11	18	213.34
2003	3,213	76	434	74	457.43
2004	3,834	76	63	73	398.41
2005	1,313	57	-	13	148.87
2006	1,883	65	39	29	92.24
2007	2,233	67	71	10	234.54
2008	1,995	65	30	15	227.54
2009	1,348	68	26	24	207.37
2010	2,192	69	174	30	198.84
2011	1,212	69	30	38	157.98
Total	19,817	679	878	324	2,336.56

Source: www. Nirapai.com, DDPM.

4. *Fires,* most caused by negligence such as a short circuit. The flames from the explosion of a cooking or arson. For the collection Thailand reported fires not classified. Building and caused by the fire. Nonetheless. The fire has caused loss of life and property of the people a lot.

Table 4: The statistics data of the damages from Fires during 2002-2011.

Year	Number		Damage		
	(Time)	(Provinces)	Injured (People)	Deaths (People)	Cost (Million Bath)
2002	1,135	74	150	24	805.81
2003	2,267	76	167	56	565.54
2004	1,727	76	69	31	487.02
2005	1,559	62	68	48	931.91
2006	1,734	66	66	37	1,083.84
2007	1,901	71	156	45	875.79
2008	1,696	61	92	30	1,424.89
2009	1,527	62	312	83	817.33
2010	1,903	66	83	29	1,283.78
2011	1,524	61	149	42	2,776.51
Total	16.973	675	1,312	425	11,052.42

Source: www. Nirapai.com, DDPM.

5. *Drought,* Thailand is agricultural water scarcity is a serious impact on the public. Agriculture and changes in the weather conditions, the season is short. This means that the long dry season and in areas of the country will have less rainfall. As a result, the amount of water in dams and reservoirs across the country were not enough for public consumption and for agriculture. In particular, the area irrigated. The drought and water shortages. People have to suffer with the suffering in many areas.

Table 5: The statistics data of the damages from Drought during 2002-2011.

Year	Number	Damaged			
	(Provinces)	People effected (People)	People effected (Household)	Farmland (Number of frams)	Cost (Million Bath)
2002	68	12,841,110	2,939,139	2,071,560	508.78
2003	63	5,939,282	1,399,936	484,189	174.33
2004	64	8,388,728	1,970,516	1,480,209	190.67
2005	71	11,147,627	2,768,919	13,736,660	7,565.86
2006	61	11,862,358	2,960,824	578,753	498.26
2007	66	16,754,980	4,378,225	1,350,118	198.30
2008	61	135,298,895	3,531,570	524,999	103.90
2009	62	17,353,358	4,500,861	594,434	108.35
2010	64	15,740,824	4,077,411	1,716,853	1,415.22
2011	54	11,597,941	5,140,316	169,324	856.52
Total		246,925,103	33,667,717	22,707,099	11,620.19

Source: www. Nirapai.com, DDPM.

6. *Coldspell,* during the months of October to February each year the high pressure from China will extend into the mantle to cause the common cold, especially in the mountain areas and high mountain peak is cold which affect their daily lives. The cause of the outbreak was caused by the cold weather, such as respiratory diseases, flu and animal disease outbreaks . The impact that people have suffered a lot.

Table 6: The statistics data of the damages from coldspell during 2002-2011.

Year	Provinces	People effected (People)	Household	Cost (Bath)
2002	42	1,913,021	87,1229	N/A
2003	22	1,100,920	316,973	N/A
2004	32	1,246,112	521,225	N/A
2005	25	3,742,793	1,131,313	N/A
2006	47	2,303,703	821,999	N/A
2007	48	5,910,339	1,992,912	N/A
2008	49	9,554,992	3,780,051	N/A
2009	52	10,588,881	4,961,503	N/A
2010	52	10,609,301	4,961,525	N/A
2011	49	28,930,295	8,723,421	N/A
Total	418	75,900,357	28,082,151	N/A

Source: www. Nirapai.com, DDPM.

2.2 Recent Major Disasters

2011: *Widespread flooding*, the principle cause of the 2011 flooding in Thailand was exacerbation of the La Niña phenomenon, which caused the rainy to materialize sooner than usual, with an accumulation of rainfall extending from January through October that was 35 percent greater than the average. During mid-2011 Thailand was also hit by five tropical storms originating in the South China Sea (Haima, Nockten, Haitang, Nesat and Nalgae). Flash flooding impacted every region of Thailand. Deforestation in many parts of the country, the declining efficiency of the flood management infrastructure and the changes in land use patterns exacerbated the situation .The plan for diverting floodwater to rivers and channels to the east and west of the Chao Praya Rivers, which flow down through the center of Thailand to the gulf of Thailand proved inadequate. In addition, private construction of water barriers reduced the exist for the massive volume of flood water. The central region experienced the most prolonged period of flooding among regions. Uncoordinated management impeded the flow of water to the Gulf of Thailand. The flooding damaged large areas of agriculture land, and factories had to close or move operations elsewhere.

Flooding affected 65 of 76 provinces including Bangkok Metropolitan Administration (BMA). Thailand flood 2011 made economic and social impacts were seven industrial loss, 90 percent of damages and losses from the floods were private sector. Flood effected (JULY 25, 2011-JAN, 2012) effected People 13.6 million in 4 regions, loss of Life 813, loss of Job 400,000 people, economic Damage 46.50 billion USD.

2010: *The* ***2010 Thai floods*** were a series of flash floods that hit different areas in Thailand. Separate but related floods began in the Northeast and Central Thailand (6 region definition) early October due to abnormally late monsoon moisture over the Bay of Bengal, overflowed the Chao Phraya where the rivers meet, and affected Bangkok, and in the South were triggered by a tropical depression about 2 weeks later, and was later aggravated by related La Niña monsoon rains. Although flooding is a common and annual occurrence in this part of the world, a combination of inadequate drainage and having a higher than average rainfall in the month of October and November 2010, catching the nation unprepared and led to disaster. The death toll in the country stands at 232 people. According to the Thai government data the floods nearly affected 7 million people in more than 25,000 villages, mostly by destruction of property, livelihood and infrastructure. The government announced that 38 provinces have been hit by floods from October 1 until November 13 and waters have receded in 8 provinces leaving 30 provinces still affected including 12 in the southern region of the country.

2009: *Land slide and mudslide* occur frequently due to the influence of monsoon, heavy rain in northern which are mountainous including the south.

Flood and landslides 5 provinces in northern (Uttaradit Sukhothai Phrae Lampang Nan) Dead 88 Missing 29 in 22 May 2009

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.

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.

2004: *The Indian Ocean Tsunami, December 2004:* 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,PhangNga,Krabi, Ranongand Satun. Six Provinces had effected. Devastated Area had 6 provinces 25 districts/sub – districts, 95 Tambons and 407 villages. Death total 5,395 Thai 1,975 and foreigner 2,245.

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.

3. Disaster Management System

3.1 Disaster Management Law , Legal system, legal framework

3.1.1 The Disaster Prevention and Mitigation Act 2007:

The Disaster Prevention and Mitigation Act 2007 (DPM Act) has replaced the old and outdated 1979 Civil Defense Act and the 1999 Fire Prevention and Suppression Act, entering into force on 6 November 2007.

It stipulates the Department of Disaster Prevention and Mitigation (DDPM) as the core government department in handling national disaster management work. Also it authorizes local governments to take responsibility of disaster management in their respective areas, in line with the Provincial Plan.

The Disaster Prevention and Mitigation Act 2007 (DPM Act) has 4 prominent features, including

1) Introducing 3 main policy - making and planning bodies including National, Provincial and Bangkok Metropolitan,

2) Having Prime Minister or an designated Deputy Minister as the National Commander,

3) Empowering Department of Disaster Prevention and Mitigation (DDPM) as the core government agency in handling national disaster management work, and

4) Authorizing local governments to take responsibility of disaster management in their respective areas, in line with the Provincial Plan.

According to the new DPM Act, disaster can be classified into 3 categories namely:

1) Man-made and natural disasters;

2) Disaster resulted from air raid during wartime; and

3) Disaster resulted from sabotage or terrorist attack.

In terms of policy making, there are 3 levels:

1) National, which is chaired by the Prime Minister or a designated Deputy Minister

2) Provincial, which is chaired by Provincial Governor

3) Bangkok Metropolitan Administration level, which is chaired by the Bangkok Governor.

Each of three policy - making organs is composed of the committee as follows:

1) The National Disaster Prevention and Mitigation Committee (NDPMC)

2) The Provincial Disaster Prevention and Mitigation Committee

3) The Bangkok Metropolitan Administration Committee

3.2 Structure of Disaster Management

Disaster Prevention and Mitigation Act B. E. 2550 (2007) has explicitly prescribed and explicated disaster management arrangement that encompasses the types of disaster, policy guideline, operating procedure as well as coordinating procedure as illustrated in chart 1.1 :

(1) The Prime Minister is a chairman of National Disaster Prevention and Mitigation Committee. In case of extreme large – scale disaster the Prime Minister has been empowered to command National Commander, Director, state agency, and local administration organization to handle disaster situation.

(2) National Disaster Prevention and Mitigation Committee, which is chaired by the Prime Minister or the entrusted Deputy Prime Minister is obligated to lay down a policy for the formulation of National Disaster Prevention Mitigation Plan and integrate the development of disaster management system. Department of Disaster Prevention and Mitigation as the Secretariat of National Disaster Prevention and Mitigation Committee has been tasked to formulate the aforesaid plan in conjunction with relevant government agencies including the representatives from local administration organization.

(3) The National Safety Council of Thailand is the main body responsible for formulating the accident – related policy and developing safety mind. Department of Disaster Prevention and Mitigation as well functions as the Secretariat of National Safety Council of Thailand.

(4) All disaster operations related command, order and management at national, provincial/Bangkok Metropolis and local levels must precede according to the Act as illustrated in chart 1.1

Chart 1.1 Current Disaster Management Arrangements in Thailand

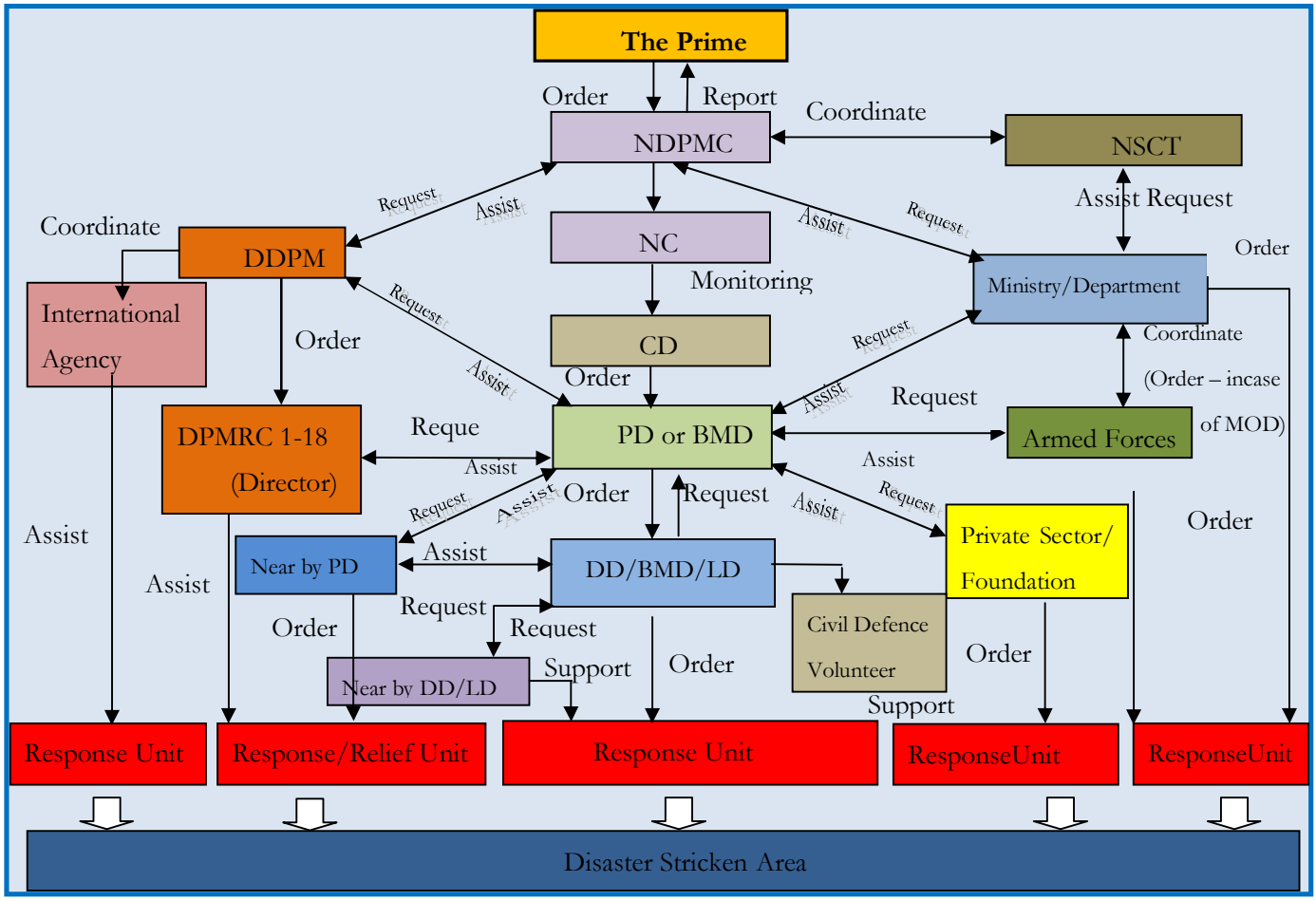


Table 7: Component of National Disaster Prevention and Mitigation Committee and its roles

National Disaster Prevention and Mitigation Committee and its roles	
Committee Members	**Mission**
1. Chairman:- Prime Minister or Deputy Prime Minister as assigned 2. Vice Chairman 1 - Minister of Ministry of Interior; Vice Chairman 2 - Permanent Secretary - Ministry of Interior 3. Committee:-Permanent Secretary - Ministry of Defence; - Permanent Secretary - Ministry of Social Development and Human Security; - Permanent Secretary - Ministry of Agriculture and Cooperatives; - Permanent Secretary - Ministry of Transportations; - Permanent Secretary - Ministry of Natural Resources and Environment;- Permanent Secretary - Ministry of Information and Communication Technology; - Permanent Secretary - Ministry of Public Health; - Director of the Bureau of the Budget; -Commander-in-Chief of the Royal Thai Police; - Supreme Commander;- Commander-in-Chief of the Royal Thai Air Force; - Commander-in-Chief of the Royal Thai Army; - Commander-in-Chief of the Royal Thai Navy; - Secretary-General National Security Council; - and not more than five qualified persons appointed by the Cabinets as committee members. 4. Secretary: The Director General, DDPM, 5. Assistant Secretary: 2 DDPM Officers	1. Establish the National Disaster Prevention and Mitigation Policy for establishing the master plan. 2. Approve the National Disaster Prevention and Mitigation Plan before submission to the cabinet. 3. Integration and develop the Disaster Prevention and Mitigation Plan of government agencies, local government agencies and private agencies. 4. Provide advice, consultation and support the implementation of Disaster Prevention and Mitigation's mission 5. Regulate the rules of remuneration, compensation and any expenses of the Disaster Prevention and Mitigation implementation 6. Perform other missions as mentioned in this Act or other Acts or assigned by the Cabinet.

3.3 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.

3.4 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.

3.5 National Disaster Warning Center

The National Disaster Warning Center was established under the Order of the Office of the Prime Minister. It is 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 Tsunami. Now, NDWC had transferred to be under of the Ministry of Information and Communication Technology.

3.6 Implementing Mechanism Arrangement

The following implementing mechanisms will be established to undertake disaster management responsibilities.

3.6.1 National Command Headquarters

The power and duty of National Command Headquarters are to direct, control, oversee, supervise, and coordinate disaster operations undertaken by Emergency Operations Centers of all levels. The Headquarters is headed by the Minister of Ministry of Interior as National Commander and other functioning staffs which comprise permanent secretary for Ministry of Interior as the Deputy National Commander, director general of Department of Disaster Prevention and Mitigation as the Central Director, the representatives from every government agency, public enterprise and the designated private entity. The main administration staffs of the headquarters will be the personnel from Department of Disaster Prevention and Mitigation.

3.6.2 Local Command Center

This category of center includes:

(1) Tambon Administration Organization Command Center is headed by chief executive of tambon administration organization (TAO) as the Director, other functioning staffs of the center comprise TAO clerk as the Deputy Local Director, sub - district headman, village headman and the representatives from private sector located within tambon jurisdiction. This first response mechanism is responsible for disaster operations within tambon jurisdiction.

(2) Municipality Command Center is headed by the mayor as Director; other functioning staffs of the center comprise municipal Clerk as the Deputy Director, chiefs of different divisions of municipality and the designated private sector's representatives. This first response mechanism is responsible for disaster operations within its jurisdiction.

(3) Pattaya City Command Center is headed by Pattaya City mayor as the Director, other functioning staffs of this center comprise Pattaya City clerk as the Deputy Director, chiefs of different divisions of Pattaya City office and the designated private sector's representatives. This first response mechanism is responsible for disaster prevention and mitigation operations within its jurisdiction.

(4) District Command Center is headed by district chief as the District Director, other functioning staffs of this center comprise district clerk, chiefs of different divisions of district office, representatives of the local administration organization and private sector located in district jurisdiction. The main function of this center is to carry out disaster operations within the district jurisdiction and to assist the provincial disaster operations.

(5) Bangkok Metropolitan District Command Center is headed by each Bangkok Metropolitan District Director as the Bangkok Metropolitan Assistant Director. This center is responsible for conducting disaster operations within district jurisdiction as well as assisting Bangkok Metropolitan Director. All officials of divisions and sectors of Bangkok Metropolitan district office and the representatives from public sector within its jurisdiction are the functioning staffs of this center. In addition, this center is obliged to assist Bangkok Metropolitan Administration in managing a disaster within Bangkok Metropolitan jurisdiction.

(6) Provincial Command Center is headed by provincial governor as the Provincial Director, and deputy provincial governor whom entrusted by provincial governor including chief executive of provincial administration organization are Deputy Provincial Directors. The functioning staffs comprise the chiefs of different government offices located in the province and the representatives from designated public and private enterprises.

(7) Bangkok Metropolitan Command Center is headed by Bangkok Metropolitan governor as the Bangkok Metropolitan Director, and a permanent secretary for Bangkok Metropolitan Administration as the Bangkok Metropolitan Deputy Director. This center is responsible for disaster operations within Bangkok Metropolitan jurisdiction.

Tasks of Local Command Center

(1) Direct, control, perform and coordinate disaster management activities within the area under responsibility.

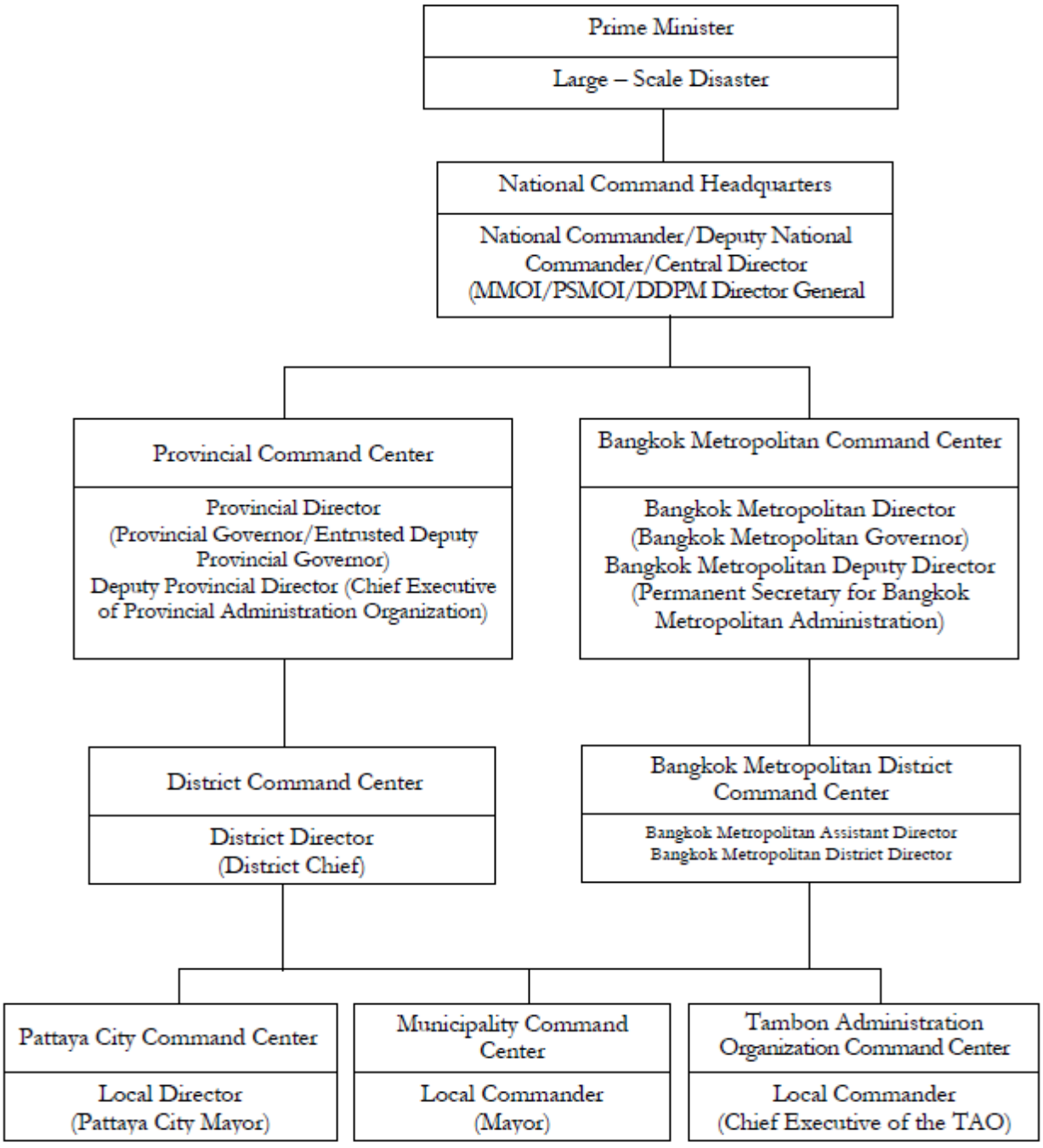
(2) Provide support to adjacent and other Command Centers upon request.

(3) Coordinate with government agencies and other relevant public enterprises located in the area under responsibility including private sector for cooperation on disaster management.

When a disaster occurs or is imminent in area under responsibility, the respective Command Center is obliged to establish Emergency Operations Center to provide assistance to the people in short notice.

The structure of implementing mechanism arrangement is illustrated in chart 1.2

Chart 1.2 Implementing Mechanism Arrangement



3.7 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.

3.8 Department of Disaster Prevention and Mitigation

Department of Disaster Prevention and Mitigation (DDPM), according to the Bureaucrat Reform Act 2002, has been formed by different organizations responsible for disaster prevention and mitigation as follows:

(1) Civil Defence Division of Department of Provincial Administration;

(2) Department of Accelerated Rural Development;

(3) Department of Social Welfare, Department of Community Development; and

(4) Office of National Safety Council

According to Article 11 of Disaster Prevention and Mitigation Act B.E.2550, DDPM is mandated to be central government agency under the umbrella of Ministry of Interior to undertake the work on disaster prevention and mitigation at a national level. Aside its Head Office in Bangkok, DDPM has thoroughly 76 DDPM provincial offices, and 18 regional centers. The locations of DDPM regional centers namely;

1) Disaster Prevention and Mitigation Regional Center, Zone 1 Pathum Thani

2) Disaster Prevention and Mitigation Regional Center, Zone 2 Suphan Buri

3) Disaster Prevention and Mitigation Regional Center, Zone 3 Prachin Buri

4) Disaster Prevention and Mitigation Regional Center, Zone 4 Prachuap Kiri Khab

5) Disaster Prevention and Mitigation Regional Center, Zone 5 Nakhon Ratchasima

6) Disaster Prevention and Mitigation Regional Center, Zone 6 Khon Kean

7) Disaster Prevention and Mitigation Regional Center, Zone 7 Sakhon Nakhon

8) Disaster Prevention and Mitigation Regional Center, Zone 8 Kamphaeng Phet

9) Disaster Prevention and Mitigation Regional Center, Zone 9 Phitsanulok

10) Disaster Prevention and Mitigation Regional Center, Zone 10 Lampang

11) Disaster Prevention and Mitigation Regional Center, Zone 11 Surat Thani

12) Disaster Prevention and Mitigation Regional Center, Zone 12 Songkhla

13) Disaster Prevention and Mitigation Regional Center, Zone 13 Ubon Ratchathani

14) Disaster Prevention and Mitigation Regional Center, Zone 14 Udon Thani

15) Disaster Prevention and Mitigation Regional Center, Zone 15 Chaing Rai

16) Disaster Prevention and Mitigation Regional Center, Zone 16 Chainat

17) Disaster Prevention and Mitigation Regional Center, Zone 17 Chanthaburi

18) Disaster Prevention and Mitigation Regional Center, Zone 18 Phuket

In 2004, Disaster Prevention and Mitigation Academy (DPMA) has been established and 6 campus in Prachinburi, Songkhla, Chiang Mai, Khon Kaen, Phuket, Phitsanulok which is currently conducting training for its own staffs, some government stakeholders and private organization.

DDPM's responsibility:

1. Materializing disaster and civil emergency prevention and warning Systems and creating preparedness in all areas.

2. Directing and implementing disaster and civil emergency mitigation activity systematically, rapidly, equitably and thoroughly.

3. Procurement of materials, equipments, and vehicles, indispensable for disaster prevention, mitigation, suppression and for relief operation.

4. Rehabilitation of damaged public utilities, physical and mental recuperation of disaster victim, and restoration of livelihood. All these activities are carried out on thorough, equitable and rapid basis, and be in harmony with the needs of the victims.

5. Mainstreaming and collaborating disaster prevention and mitigation system, programme, the implementation evaluation with other national and international agencies.

Disaster Management in DDPM's main activities

Disaster Management comprises 3 phases as follow;

1. Preparedness Phase: DDPM has supported the provinces to carry out preparedness related activities as follow;

(1) Formulating disaster prevention plan.

(2) Training the officials and Civil Defence Volunteer.

(3) Educating the general public.

(4) Procuring equipments, vehicles and other amenities and safety temporary shelters.

(5) Conducting annual drills and exercise in different levels.

2. Prevention and Mitigation Phase: In the event of disaster or the potential disaster, DDPM will implement the following activities.

(1) Early warning: After receiving the information of potential disaster from Department of Meteorological and Department of Mineral Resources, DDPM will immediately relay to the risk province to further warn the people of the hazard or evacuate the people.

(2) Directing Unit: The National Committee will set up “Operation Center” to manage disaster

(3) Providing relief operation to the affected people thoroughly and rapidly.

(4) Coordinating: In the event of large-scale disaster, DDPM will coordinate with all agencies concerned to mobilize relief efforts to affected areas.

(5) Telecommunication: The Director of National Committee is authorized to utilize all telecommunication facilities in the affected areas. DDPM will coordinate with telecommunication concerned agencies to provide the substitute facilities in case the telecommunication system in the affected area broke down.

(6) Public Relations: At national level, DDPM is responsible for disseminating the disaster related information to the public continuously to protect the life and property of the citizens. Moreover to alert the possibility of disaster just before a strong tremor is expected to strike as “a warning”

3. Recovery Phase: DDPM is responsible for

(1) Providing relief to affected people: Provincial/District/Local authorities assess the damages and losses and enlist the affected persons. DDPM will carry out to pay cash compensation the victims.

(2) Clean-up: DDPM will coordinate with all agencies concerned to mobilize the equipments to conduct clean-up activities.

(3) Long-term Rehabilitation: DDPM is responsible for coordinating with all agencies concerned to collect all relevant information on long-term rehabilitation projects and further submit for cabinet’s approval

4. Disaster Management Strategy, Policy, and Plan

Department of Disaster Prevention and Mitigation (DDPM) as the Secretariat of the National Disaster Prevention and Mitigation Committee (NDPMC), has the responsibility to devise the National Disaster Prevention and Mitigation Plan. This is to be done by conferring with relevant government agencies, local administrations, and private sectors. Once the National Plan is approved, it will be used as a master plan, upon which the provincial and Bangkok Metropolitan Administration will be based. The national plan will be in service for the period of 3 years. DDPM is to make sure that the new plan for the next 3 years is ready for use accordingly. According to the National Disaster Prevention and Mitigation Act 2007, the three - level plan shall have substantial parts as shown in the following table.

National plan	Provincial Plan	BMA Plan
(1) Guide lines, measures and adequate budget to support disaster prevention and mitigation operations systemically and continuously	(1) The setting up of Special Command Center when ever disasters strike, that center shall be constructed and has authorities to command and oversee disaster prevention and mitigation operations and activities	(1) establishment of command center where disaster occurred for construction and authorization for disaster prevention and mitigation operation
(2) Guide lines and methods for providing aids and mitigate the impacts of disasters in both short and long term, together with evacuation procedures of effected people, government services, and other local administrations, supports effected people on their public health, public utilities and communication system	(2) Plan and procedures for local administrations for procuring tools, equipments, materials, hardware and vehicles in disaster prevention and mitigation operations	(2) plan and process to procure materials , tools , equipment, and vehicle for disaster prevention and mitigation
(3)Relevant government agencies and local administrations shall proceed all operations under (1) and (2), and shall seek for availability and mobility of fund	(3) Plan and procedures for local administrations for procuring an early warning system and other equipments to inform people and communities on incoming disasters	(3) plan and process to procure signaling devices or others for notifying the occurrence and expectation of a disaster

National plan	Provincial Plan	BMA Plan
(4)Preparedness perspectives on support personnel, equipments and other materials to deploy upon disaster prevention and mitigation operations, and capacity building of those personnel and other people shall be included	(4) Operation plan for disaster prevention and mitigation at local administrations	(4) Bangkok Disaster Prevention and Mitigation Action Operation Plan
(5) Guide line on fixing, recovery and restoration to community right after disaster	(5) Cooperation plan to other relevant public charities.	(5) Coordination Plan with Public Charity Organizations in Bangkok

Department of Disaster Prevention and Mitigation, as the Secretariat of the National Disaster Prevention and Mitigation Committee, has the responsibility to revise the National Disaster Prevention and Mitigation Plan. The national master plan will be in service for the period of 3 years. DDPM is to make sure that the new plan for the next 3 years is ready for use accordingly.

National Master Plan for Disaster Prevention and Mitigation

comprises 3 parts:

Part I: Disaster Prevention and Mitigation Principle: comprises 9 chapters, including

(1) Disaster Situation and Management System

(2) Policy, Vision, Objectives, and Goals

(3) Strategies, Work Plan and Countermeasures

(4) Disaster prevention and Mitigation

(5) Disaster Preparedness

(6) Management during disaster emergency

(7) Post Disaster Management

(8) Roles of relevant agencies

(9) Implementation

Part II: Standard Operating Procedures for Disasters. This part comprises 14 chapters:

(10) Flood and Landslide

(11) Tropical Cyclone

(12) Urban Fire

(13) Chemicals and hazardous materials

(14) Transportation – related accidents

(15) Drought

(16) Cold Snap

(17) Haze and wild Fire

(18) Earthquake and collapse Building

(19) Tsunami

(20) Human epidemic

(21) Plant epidemic

(22) Animal epidemic

(23) Cyber terrorism

Part III: Disaster Prevention and Mitigation in the Aspect of National Security Issues comprise 5 chapters.

(24) Principle of National security

(25) Prevention and Suppression of sabotage

(26) Prevention and Mitigation of Disaster caused by Mines

(27) Prevention and Mitigation of Disaster caused by Air Raid

(28) Prevention and Suppression of Riot and Violent Protest

Civil Defense for Security (Rear-Area Protection) Component:

This component comprises 6 chapters:

(1) Civil Defence for Security

(2) Disaster Prevention and Mitigation during War-Time (Rear-Area Protection)

(3) Sabotage Prevention and Suppression

(4) Prevention and Mitigation of Disaster Resulted from Landmine and Torpedo

(5) Air-Raid Disaster Prevention and Mitigation

(6) Civil Unrest Prevention and Suppression

DDPM has listed 29 disaster threats in the National Master Plan for Disaster Prevention and Mitigation. This is to be done by conferring with relevant government agencies, local 14 administrations and private sectors. Once the National Plan is approved, it will be used as amaster plan, upon which the provincial and Bangkok Metropolitan Administration will be based.

5. Budget Size on National Level

Year	THB	USD(ml)	JPN(ml)
2003	1,066,412,900	35.02	2,797
2004	1,312,578,500	43.10	3,443
2005	1,685,362,700	55.34	4,421
2006	2,437,850,700	80.06	6,395
2007	1,948,805,800	64.00	5,112
2008	2,184,972,800	71.75	5,734
2009	2,315,783,900	76.05	6,074
2010	2,541,163,000	82.90	6,614
2011	2,541,163,300	82.90	6,614
2012	3,918,637,000	130.05	12,743

Source: DDPM (1 USD = 30.09THB, 100JPN= 32.52 THB)

6. Progress of the Implementation of Hyogo Framework for Action

The progress on implementation of Hyogo Framework for action (HFA) **2005 – 2015**: Building the resilience of Nations and Communities to Disasters. To achieve the goal of HFA is "sustainable reduction of disaster losses, in lives and in social, economic and environmental assets." In adopting the Hyogo Framework, Thai government; DDPM committed to five priorities for action; sets out the required actions – collectively known as " disaster risk reduction" – measures that be continuously implemented in order to achieve resilience to future hazards. Thailand had submitted its national progress report on the implementation of the HFA on April 05, 2011. Department of Disaster Prevention and Mitigation is the National Focal Point for the HFA and it coordinates implementation within the country. The following is a summary of National progress report on the implementation of the Hyogo framework for Action (2009-2011), reported by Department of Disaster Prevention and Mitigation.

Outcomes for 2007-2009

Area 1 *The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.*

Outcomes:

Disaster risk reduction is being adopted and integrated into national development plans. The DRR is being incorporated in the strategy of managing natural resources and environment towards sustainability under the 11th National Economic and Social Development Plan 2012-2016, which is going to be the framework for medium term national development towards the vision of "A Happy Society with Equity, Fairness, and Resilience". The plan provides guideline for natural disaster preparedness, including hazard mapping at national, regional, and provincial level and prioritization of identified hazards, in order to develop proper preventive and mitigating structural and non-structural measures with the emphasis on both social and economic aspects.

Area 2 *The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.*

Outcomes:

Existing mechanisms stated in the national disaster prevention and mitigation plan 2010 - 2014 are being adopted and executed in a more integrated and holistic fashion in order to create and strengthen disaster warning and assessment networks, as well as to encourage people's participation in disaster reduction activities at all levels. In the mean time, the new Frameworks and mechanisms are going to support capacity development of the existing mechanisms on a regular basis. This is to ensure the creation of "A Happy Society with Equity, Fairness, and Resilience".

Area 3 *The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.*

***Outcomes*:**

National risk reduction and risk management frameworks are translated into action at provincial and local level through a series of planning training, and a periodical plan monitoring and evaluation. In parallel with plan translation at local level, every risk prone village are being educated and trained using community-based disaster risk management approach (CBDRM) to enhance those villagers' capacity in properly handling with local hazards and disasters before outside assistance arrives. Based on each community's cultural, social, and economic structure, the risk prone community is going to have its own disaster prevention and mitigation action plan which includes its hazards map, risks assessment, organizational structure, warning system and protocols, and drill procedures.

Priority for action 1: *Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.*

Core Indicator	Level of Progress achieved	Progress
1. *National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
2. *Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels*	3	Institutional commitment attained, but achievements are neither comprehensive nor substantial
3. *Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
4. *A national multi sectoral platform for disaster risk reduction is functioning.*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Priority for action 2: *Identify, assess and monitor disaster risks and enhance early warning*

Core Indicator	Level of Progress achieved	Progress
1. National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.	3	Institutional commitment attained, but achievements are neither comprehensive nor substantial
2. *Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities*	3	Institutional commitment attained, but achievements are neither comprehensive nor substantial
3. Early warning systems are in place for all major hazards, with outreach to communities.	3	Institutional commitment attained, but achievements are neither comprehensive nor substantial
4. *National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.*	3	Institutional commitment attained, but achievements are neither comprehensive nor substantial

Priority for action 3: *Use knowledge, innovation and education to build a culture of safety and resilience at all levels*

Core Indicator	Level of Progress achieved	Progress
1. *Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
2. *School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.*	3	Institutional commitment attained, but achievements are neither comprehensive nor substantial
3. Research methods and tools for multirisk assessments and cost benefit analysis are developed and strengthened.	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
4. *Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Priority for action 4: *Reduce the underlying risk factors*

Core Indicator	Level of Progress achieved	Progress
1. *Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
2. *Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.*	3	Institutional commitment attained, but achievements are neither comprehensive nor substantial
3. Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities	2	Some progress, but without systematic policy and/ or institutional commitment
4. *Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
5. *Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes*	3	Institutional commitment attained, but achievements are neither comprehensive nor substantial
6. *Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Priority for action 5: *Strengthen disaster preparedness for effective response at all levels*

Core Indicator	Level of Progress achieved	Progress
1. *Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
2. *Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities
3. Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.	5	Comprehensive achievement with sustained commitment and capacities at all levels
4. *Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews*	4	Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

The Government of Thailand is indeed committed to disaster risk reduction and will continue its efforts towards implementing the priority areas of the HFA both at national and international levels and acknowledge the ongoing effort by UNISDR to promote and accelerate the implementation of the HFA.

7. Recent Projects on Disaster Risk Reduction

7.1 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). Nowadays, OTOS program is completed with 7,255 SAR teams (10 members) based in each tambon or local administration offices 6,119 local authorities throughout the country and more than 73,831 volunteers trained.

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

Department of Disaster Prevention and Mitigation has set up Disaster Prevention and Mitigation Academy (DPMA) in October 2004 to be the national training center in the field of disaster management. DPMA has coordinated with the agencies and developed countries including international organizations to develop curricula and mobilize the technology and knowhow for standardize training. The courses will be organized to serve the capacity of the government officers, local administration officers and private sector who are in charge of the disaster management including civil defence volunteers. Nowadays, DPMA has extended to 6 campuses in upcountry. The standard curricula have consisted of the Fire Fighting, Building Collapse (Search and Rescue), Hazmat Emergency Management, Civil Defense Volunteer and Disaster Management.

7.3 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 collaborates with various government agencies, local authorities, NGOs and international organization. This program will be jointly organized on the continuous to cover all vulnerable communities nation-wide. Nowadays, CBDRM program is completed with 8,000 vulnerable communities from 26,000 vulnerable communities.

7.4 "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. Nowadays, "Mr. Warning" training Program is completed with 8,221 trained people in the flood prone areas to be trained in this programme.

7.5 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.

7.6 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. Nowadays, Civil Defence Volunteer Network Program is completed with 1,106,465 trained people.

8. Counterpart of ADRC

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Website: www.disaster.go.th.

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