

# THAILAND



## DRR Policy Peer Review Report 2009

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### **DRR Policy Peer Review**

ADRC launched the Pilot Project of the DRR Policy Peer Review in 2009 to facilitate mutual learning among member countries for the purpose of achieving the goals established by the Hyogo Framework for Action 2005-2015 (HFA). This activity is not intended to be a one-way process, but an interactive effort that facilitates the sharing of experiences and good practices in disaster risk reduction among members.

Certain themes are selected for each year's reviews in accordance with HFA priorities. The theme for the 2009 was "promoting disaster risk education and raising public awareness," which is related to HFA Priority 3: "Use knowledge, innovation and education to build a culture of safety and resilience at all levels."

Disaster risk education and public awareness play a crucial role in enhancing people's knowledge of disaster risks, affecting their attitudes, and motivating them to adopt a culture of disaster prevention and resilience. This in turn requires the following tasks:

- Develop a program to raise awareness of disaster risk reduction
- Include disaster risk reduction in the education and research systems
- Develop disaster risk reduction training for key sectors
- Enhance the compilation, dissemination, and use of disaster risk reduction information

The review process started with the submission of reports by target countries. The country reports were carefully examined by a team of reviewers consisting of representatives of other member countries, disaster management experts, and ADRC staff members. This examination was followed by visits to the target countries to conduct on-site surveys and interviews of government ministries and agencies, NGOs, international organizations, and academic institutions involved in disaster risk reduction activities. Through their surveys and interviews, the reviewer teams identified the strengths and weaknesses of the target countries and provided each country with a set of recommendations, which are to be shared with all ADRC member countries.

## **Summary of Country Report of Thailand**

### **1. General Information on Disaster Management in Thailand**

#### **Overview of Natural Disasters**

The major disasters that occur in Thailand are floods, landslides, tsunamis, forest fires, wind storms, drought, lightning, hail, and epidemics.

#### **Disaster Management System**

##### 1) Legal System

The Disaster Prevention and Mitigation Act of 2007 (DPM Act) was enacted on 6 November 2007 and replaces the outdated 1979 Civil Defence Act and the 1999 Fire Prevention and Suppression Act. It establishes Department of Disaster Prevention and Mitigation (DDPM) as the core governmental department responsible for handling national disaster management work, and authorizes local governments to take responsibility for disaster management in their respective areas, in accordance with the Provincial Prevention and Mitigation Plan.

##### 2) Organization

At the national level, the National Disaster Prevention and Mitigation Committee (NDPMC), chaired by the Prime Minister or designated Deputy Prime Minister, is primarily responsible for developing disaster risk management policies. At the local level, the Provincial Disaster Prevention and Mitigation Committee and Bangkok Metropolitan Committee have been formed to formulate the provincial disaster management plans under the guidance of National Disaster Prevention and Mitigation Plan.

DDPM was established under the Ministry of Interior as the primary agency responsible for coordinating disaster risk management activities by all related organizations at all levels. The Disaster Prevention and Mitigation Academy (DPMA) was established for human resource development in the field of disaster risk reduction.

##### 3) Plan

A Disaster Prevention and Mitigation Plan was formulated and went into effect on 17 November 2009. In addition, the Strategic National Action Plan (SNAP) for Disaster Risk Reduction 2010-2019 was developed for fulfilling the strategies of the Hyogo Framework for Action (HFA).

### **2. Disaster Risk Education and Public Awareness in Thailand**

The work of disaster risk education and public awareness in Thailand is handled by many actors both in the government and non-government sectors. DDPM, Ministry of Education, and Department of Mineral Resources and National Disaster Warning Center (NDWC) are among the leading government

agencies that have implemented programs and activities to educate the people regarding disaster risk reduction. The Thai Red Cross Society and Asian Disaster Preparedness Center (ADPC) are also helping to raise public awareness in Thailand.

## **Current Efforts in Disaster Risk Education and Public Awareness**

### **Department of Disaster Prevention and Mitigation (DDPM)**

DDPM is the lead coordinating agency for disaster management in Thailand, and has been conducting the following activities and programs for disaster risk education and public awareness.

#### 1) Training at DDPM's Disaster Prevention and Mitigation Academy (DPMA)

The DPMA was established in 2004 with six campuses across the country. It provides training for DDPM staff members, other government officials at the national and local levels, community leaders in disaster prevention, the private sector, Civil Defence Volunteers, and others involved in disaster preparedness activities in Thailand. The DPMA has developed five training programs according to disaster type and target trainee type, and these are further subdivided on the basis of each trainee's abilities.

#### 2) Community-Based Disaster Risk Management (CBDRM) Programs

DDPM has been conducting CBDRM projects with local governments, utilizing the basic programs developed by the Asian Disaster Preparedness Center (ADPC), GTZ and JICA. Community leaders who were trained at the DPMA are actively involved in on-site activities.

#### 3) Involvement of Civil Defense Volunteers

Civil Defense Volunteers have been part of the disaster management system in Thailand for more than 30 years. To strengthen the capacity of local communities, Article 41 of the Disaster Prevention and Mitigation Act of 2007 indicates that disaster management personnel in local governments are required to utilize volunteers in their respective areas to assist government officials in the tasks of disaster prevention and mitigation. DDPM has a policy to increase the number of volunteers by one million persons nationwide or not less than 2% of the population in each area, and not less than 50 persons in each Tambon administrative organization. There were 1,138,659 Civil Defense Volunteers as of 30 September 2009.

#### 4) "Mr. Disaster Warning" project

The Mr. Disaster Warning Project teaches the specific knowledge and skills that community members need to monitor potential flash floods and landslides using warning tools such as simple rain gauges, and also teaches them how to warn their community members using a manual siren and other appropriate means.

#### 5) Information Dissemination Through the Media

Television, radio, newspapers, newsletters, and the Internet have been used to raise public awareness of disaster risk reduction. DDPM broadcasts a 15-minute radio program every Saturday aimed at raising public awareness of natural disasters. It also produces IEC materials such as posters, leaflets, and booklets.

#### 6) ASEAN Regional Drawing Competition on ASEAN Day for Disaster Management and International Day for Disaster Reduction (Second Wednesday of October)

ASEAN countries have been observing the ASEAN Day for Disaster Management (ADDM) on the second Wednesday of October, which is co-incided with the United Nations' International Day for Disaster Reduction. As part of the observation of ADDM, ASEAN has organized the ASEAN Regional Drawing Competition since 2008. Thailand as the lead shepherd country of this program, has played a key role in the organization of this regional event with the main aim of raising public awareness of disaster reduction. In 2008, the contest targeted children between 8 and 15 years old and focused on the theme of "Safer Community – Hospital, School and House of My Dream." The committee received 500 entries from the ASEAN countries and selected the three best regional drawings. Prizes ranging from US\$ 300 to 1,000 were paid to the winners. In 2009, the competition focused on the theme of "Safe Hospitals – Hospitals in ASEAN Safe from Disasters" and attracted more than 900 entries from seven ASEAN countries participating in the activity.

#### **The National Disaster Warning Center (NDWC)**

The NDWC was established in May 2005 in response to the lessons learned from the Indian Ocean Tsunami disaster. Its major task is to detect earthquakes and analyze seismic data to determine the possibility of tsunami generation before issuing notifications to the public, related authorities, and rescuers to facilitate safe evacuation measures. The NDWC has been working on issuing warnings for typhoons and floods as well.

Early warnings will be issued through warning towers installed in 300 locations across Thailand, as well as via the mass media, SMS texts, the Internet, and other media.

The NDWC has conducted several tsunami evacuation drills in six areas since 2006 to facilitate the smooth evacuation of residents and tourists during emergencies. Also, a training program entitled "Training of Public Hazard Relief and Prevention in the Case of Typhoon Disaster" was conducted in Chumphon in November 2009. This consisted of evacuation training and training for search and rescue activities. These trainings and drills have been implemented in close collaboration with DDPM, local authorities, and other relevant agencies.

#### **Basic Education Commission, Ministry of Education**

This agency is the lead agency responsible for promoting disaster risk education in schools in Thailand.

Thailand has a 6-3-3 school structure with nine years of compulsory education offered free of charge. The rate of enrollment in primary school is 94.5%, while the rate of enrollment in both lower and upper secondary levels is 71.5%<sup>1</sup>. Data published by the Ministry of Education in 2008<sup>2</sup> indicates that the rates were 78.5% for lower secondary education and 34.6% for upper secondary education (ordinary high schools only; does not include vocational high schools or vocational training schools). Educational expenses account for more than 21% of the national budget.

There is no independent course offered on disaster risk reduction, but the essence of this topic has been integrated into existing subjects, such as social studies, science, and health. Various school disaster education projects have been conducted in cooperation with such organizations as ADRC, JICA, UNICEF, and UNESCO.

Given this, the Thai Ministry of Education, with assistance from JICA, ADRC, and other organizations, began a pilot project in 2006 to create supplementary school books on three types of disaster: floods, landslides, and tsunamis. It has also been implementing disaster risk reduction programs at 30 schools (in three regions) that have been using these books.

Also, since January 2009, the Basic Education Commission has been implementing a project entitled "Personnel Capacity Building and School Children Education on Disaster Reduction" with the DDPM.

Individual schools have been participating in the community activities being conducted by the DDPM and NDWC, but rather than coordinating activities with each government agency, the Ministry of Education has been letting each school manage its own involvement. With only one person assigned to disaster risk reduction efforts, the Ministry of Education has little in the way of personnel to handle related activities.

### **Thai Red Cross Society**

The Thai Red Cross Society has been conducting a three-year Community Based Disaster Risk Reduction project in 55 communities in four provinces since 2008 with financial support from a sister society that amount to US\$ 900,000. The program has been developed by ADPC and slightly modified by Thai Red Cross based on input from the International Federation of Red Cross and Red Crescent Societies (IFRC). It is therefore fundamentally the same as the Community-Based Disaster Risk Management Program being implemented by DDPM.

To implement its own Community-Based Disaster Risk Reduction project, the Thai Red Cross concluded a cooperative agreement with seven organizations (including DDPM) and assigned specific target regions to a couple of them.

The Thai Red Cross Society also conducts education and awareness raising activities aimed at promoting disaster risk reduction knowledge among general public by distributing leaflets and

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<sup>1</sup> UNICEF ([http://www.unicef.org/infobycountry/Thailand\\_statistics.html#56](http://www.unicef.org/infobycountry/Thailand_statistics.html#56)), December 2009

<sup>2</sup> "Towards a Learning Society in Thailand," Ministry of Education, Thailand, November 2008

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engaging in other activities.

**Other activities**

According to DDPM, other actors such as the Department of Mineral Resources, NGOs, and the ADPC have been involved in public awareness and disaster education activities in Thailand. However, we were not able to learn about their efforts during our mission due to time constraints.

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**ADRC Counterpart**

Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior  
(<http://www.disaster.go.th/html/english/>)

## **Overview of the Mission to Thailand**

### **Members**

#### 1) Counterparts in Thailand (DDPM)

- Mr. Adthaporn Singhawichai, Director of Research and International Cooperation Bureau, DDPM, Ministry of Interior, Thailand
- Ms. Chatchadaporn Bunyavaha, Chief of Foreign Affairs
- Mr. Arun Pinta, Planning and Policy Analyst, Senior Professional level
- Ms. Areerat Vjijtpatcharaphon, Planning and Policy Analyst, Professional level
- Ms. Amornthip Paksuchon, Human Resources Development Specialist
- Mr. Napas Boonyamalik, Disaster Prevention and Mitigation Officer

#### 2) Reviewer Team to Thailand

- Mr. Naoki Shiratsuchi, Deputy Director, Development Cooperation Division, International Department, Operations Sector, Japanese Red Cross Society
- Dr. Alvaro Antonyan, President, Armenian National Survey for Seismic Protection Agency (NSSP)
- Ms. Maki Yoshida, Researcher, Asian Disaster Reduction Center (ADRC)

### **Mission Date**

17-18 November 2009

### **Organizations & Officials Visited**

#### 1) DDPM

See the above list.

#### 2) NDWC

- Mr. Kriengkrai Khovadhana, Adviser/Expert
- Mr. Kohlak Charoenrook, ADM., Adviser/Expert

#### 3) Basic Education Commission, Ministry of Education

- Mr. Somsong Ngamwong, Chief of International Cooperation Unit
- Ms. Sararat Leepaiboon, Bureau of Academic Affairs & Educational Standards, Office of the Basic Education Commission

#### 4) Thai Red Cross Society

- Lt. Gen. Dr. Amnat Barlee, Director, Relief and Community Health Bureau
- Ms. Chor Kemsiri Kongrukreatiyos, Family Physician, Relief and Community Health Bureau

## Observation and Analysis (Including Discussion Content)

First, there were many constraints on this study in terms of the time available, institutions examined, and quantity of data collected, and it should be noted that the following observations and recommendations are made within the context of those constraints.

### 1. Positive Aspects

- The hazards that occur with the greatest frequency in Thailand are (1) floods, (2) drought, and (3) landslides, but typhoons also occasionally cause damage. However, it is rare for any of these to occur on a large enough scale to require international assistance, and Thailand is not generally viewed as a "disaster-prone country." However, the Thai government began actively taking steps to improve its disaster management organizations and systems even before the enactment of the Hyogo Framework for Action (HFA). In 2003, it established Department of Disaster Prevention and Mitigation (DDPM) under the Ministry of Interior, and in the following year, it established the Disaster Prevention and Mitigation Academy.
- In December 2004, the Indian Ocean Tsunami caused 8,345 fatalities in six provinces of Thailand and caused more than US\$400 million in damage, making it the worst disaster in Thai history. As many foreigners were also lost in this disaster, international attention was highly attracted. Since about 30% of Thailand's national revenue comes from tourism, the Thai government put the full force of its power behind relief and recovery activities, and also received international assistance with its efforts. Driven by this experience and the enactment of the HFA, the Thai government further strengthened its legal systems and structures by enacting the Disaster Prevention and Mitigation Act in 2007 and establishing the National Disaster Warning Center (NDWC) in May of 2005, and actively began conducting activities aimed at disaster risk reduction. The Act also stipulates institutional arrangement as illustrated by the National Disaster Prevention and Mitigation Committee (NDPMC), chaired by the Prime Minister. NDPMC is primarily responsible for developing national disaster risk management policies. At the local level, the Provincial Disaster Prevention and Mitigation Committee have been formed to formulate the provincial disaster management plans under the guidance of National Disaster Prevention and Mitigation Plan.
- The Thai government's approach and active efforts to make disaster risk reduction a national priority should be highly commended. Thailand should also be highly regarded not only for its domestic efforts, but for the leading role it is playing in disaster management in the ASEAN region.
- In the area of "disaster risk education and public awareness," a wide variety of activities are being conducted by various agencies at the national level, as illustrated below. These activities cover broad target groups, including central and local government officials, community leaders and members, school children, and the general public, making a good use of various approaches



and tools based on the particular purpose of the activity and the disaster being addressed.

- Training at the Disaster Prevention and Mitigation Academy (managed by DDPM under the Ministry of Interior)
  - Community-Based Disaster Risk Management Program (same as above)
  - Strengthening the involvement of Civil Defense Volunteers in disaster management activities (same as above)
  - Mr. Disaster Warning Project (same as above)
  - Information dissemination via the media (same as above)
  - ASEAN Regional Drawing Competition (same as above)
  - Evacuation drills to prepare for tsunami or typhoon emergencies (managed by the NDWC, Ministry of Information and Communication Technology)
  - Publishing Disaster risk management booklet and school disaster risk management education activities using that booklet (managed by the Ministry of Education. Project supported by JICA and ADRC.)
  - Community Based Disaster Risk Reduction project (managed by the Thai Red Cross Society)
  - Provincial education drill twice a year for every province
  - Pilot project for school disaster education (training of students)
- Adequate resources appear to be available at the central government level. For example, DDPM has a preliminary FY 2010 budget of US\$ 86 million, almost three times the size of its original budget in FY 2003 (approx. US\$ 31 million). This suggests that the Thai government is making a serious investment in disaster risk management.
  - The discussion conducted during the on-site survey also revealed the Thai government's high level of awareness, motivation, and capabilities in the area of disaster risk education and public awareness. This may be supported by the diligence, educational level, and discipline of the Thai people.
  - There are also many non-governmental disaster management organizations that enjoy "home-court advantage" in Thailand, including the UNISDR, Thai Red Cross Society, ADPC, and the International Federation of Red Cross and Red Crescent Societies (IFRC). Thai government is working in partnership and cooperation with these organizations in the field of disaster risk education and public awareness.
  - It is vital that the pace of efforts at the central government level be maintained and developed going forward.

## **2. The Challenges Ahead**

- One of the challenges in the field of disaster risk education and public awareness is to figure out how to keep and augment the strengthening of the efforts at the central government level as well as at the local government level. Specifically, local government officials need to increase further

their skills and knowledge of disaster risk education and public awareness. In this regard, prioritizing the disaster risk management and allocate more budget at the local governments is expected. DDPM is currently working on establishing the policy on disaster risk education that will be in place accordingly, so that school teachers will raise their awareness of disaster risk education. As such, strong initiative at the national level is an important factor to prioritize disaster risk reduction activities at local level.

- Even on efforts undertaken by the central government, it is assumed that individual agencies and organizations tend to promote their own activities rather independently. At the policy level, National and Provincial Disaster Prevention and Mitigation Committee provide relevant agencies a valuable opportunity for effective coordination and information sharing. At project/activity level, however, establishing more clear mechanism for coordination and information sharing is deemed necessary so as to contribute to the effective project implementation.
- Another common problem is the concentration of responsibility. The closer you get to the community level, the more likely it is for the responsibility for various activities, including but not limited to disaster management initiatives, to be concentrated in a few talented individuals. For example, even in the interview with the Ministry of Education, we learned that school teachers, because they are so respected in their communities, are already very busy with various activities, and thus do not have enough time to add in disaster risk education and public awareness activities as well. Given this situation on the ground, it is inefficient for individual disaster management agencies to promote their own activities independently.
- In addition, we were given the impression that the level of attention of each agencies to collect basic data to ascertain the progress being made on various activities, such as the number of times that training programs have been conducted and the number of participants in such programs, as well as to analyze and evaluate the effectiveness of those efforts is not always high.
- During this survey, we also learned that even in the ASEAN Regional Drawing Competition, though it is not an activity specific to Thailand, there are some issues to consider regarding how to attract more participants and how to provide monetary winner prizes. This competition has just started since 2008, therefore more improvement/development are expected from now.

## **Strengths and Weaknesses**

Based on the above observations, the following strengths and weaknesses were noted with regard to disaster risk education and public awareness in Thailand.

### **3. Strengths**

- Thai government's strong commitment to making disaster management a priority.
- Well established institutional arrangement in national and local government for decision making and coordination at policy level
- Active approach to support the strengthening of disaster risk management cooperation in the ASEAN region.
- A fair allocation of budget to disaster risk management efforts at the national level.
- High level of awareness, motivation, capabilities of officials at the national level.
- Diligence, educational level, discipline of the Thai people.
- "Home-court advantage" of many international disaster risk management organizations in Thailand, including the UNISDR, ADPC, and the IFRC. Also, regional support by JICA and ADRC.
- Because Thailand is not a particularly disaster-prone country, there is some breathing room (time) to prepare (in disaster-prone countries where large-scale disasters occur frequently, many resources have to be allocated to relief and recovery activities, leaving little left to prepare for future emergencies).
- Existing MoUs and plans that stipulates strong cooperation between related agencies.

### **4. Weaknesses**

- Capacity of personnel at the local level in disaster management.
- Need to prioritize the disaster risk management and allocate more budgets at the local government.
- More clear mechanism for coordination and information sharing at project/activity level.
- Securing qualified personnel at the local level, as many roles are played by a small number of prominent members of the community (such as school teachers).
- Activity monitoring, data collection and analysis, outcome measurement.
- Further promotion of the ASEAN Regional Drawing Competition, including active participation of member countries and partnership with other agencies.

## **Findings and Recommendations of Reviewers**

### **1. Maintain and develop the pace of efforts at the central government level.**

- The efforts taken at the central government level should be highly commended. Going forward, it is vital to maintain and develop these efforts under the leadership of the DDPM so they are not treated as temporary measures.

### **2. Strengthen efforts at the local and community level**

- A major challenge is to figure out how to expand the efforts being promoted at the national level across Thailand to local and community levels. In the future, local governments should give more priority in promoting such efforts, and further training should be provided to local disaster risk management officials who are primarily responsible for these tasks.
- At the same time, larger budgets need to be allocated to disaster risk management at the local level. Also, need more budget allocation for activities (not only for salary or office cost) at the national level as well.

### **3. Set priorities**

- It is difficult to solve all challenges at once, and it is therefore necessary to determine the order of priority from various aspects (for example, types of hazards, regions, or target groups).
- In the most vulnerable regions, local disaster management plans need to be developed with attention to frequent hazards, and even in disaster risk reduction and public awareness activities, materials need to be developed based on these local disaster management plans.

### **4. Further promote partnerships and cooperation with relevant organizations**

- Government organizations should not try to do everything themselves, but need to make greater efforts to promote partnership with NGOs and the private sector. For example, the Disaster Prevention and Mitigation Academy provides disaster management leadership training for the leaders of community-level disaster reduction activities. But this kind of training could be taken over to similar programs conducted by the Thai Red Cross Society or the ADPC, so that the Academy could more focus on training activities to the needs of local government officials.
- Also, establishing a more systematic information sharing and coordination mechanism among relevant agencies at project/activity level might contribute to increasing effectiveness.

### **5. Monitor activities and measure outcomes**

- To maintain and improve the quality of activities, it is important to monitor them and measure outcomes. To do this, appropriate indicators must be established, and data must be systematically collected and analyzed. Such monitoring and measurement could contribute to get the greatest number of people to appreciate the efforts of organizations involved in disaster reduction as well.

**6. Explore ways to further promoting the ASEAN Cooperation**

- One way to further promote the drawing contest is to seek support from agencies concerned. For instance, since the Thai Red Cross Society is independently organizing a similar poster contest, the event could be revitalized by asking the Thai Red Cross Society and the IFRC South East Asia Regional Delegation to work together to encourage participation among Red Cross Youth members in the ASEAN region using the Red Cross Red Crescent network.

### **Acknowledgements**

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#### **Asian Disaster Reduction Center**

The Asian Disaster Reduction Center (ADRC) was established in Kobe, Hyogo prefecture, Japan in 1998, with a mandate to facilitate multinational cooperation for disaster risk reduction in the Asian region. In cooperation with its 28 member countries (as of 31 March 2010), the ADRC implements activities aimed at promoting further prosperity and safe, peaceful, and comfortable communities in Asia through such means as information sharing, human resource development, and capacity building programs.

#### Member countries

Armenia, Azerbaijan, Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Japan, Kazakhstan, Republic of Korea, Kyrgyz, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Russian Federation, Singapore, Sri Lanka, Tajikistan, Thailand, Uzbekistan, Viet Nam, Yemen

#### Advisor countries

Australia, France, New Zealand, USA

#### Observer

Asian Disaster Preparedness Center (ADPC)