## Summary of Evaluation Result

1. Outline of the Project			
Country: Thailand		Project title: The Project on Capacity Development in	
		Disaster Management In Thailand	
Sector: Disaster Management		Cooperation scheme: Technical Cooperation Project	
Division in charge: Disaster Management Division I,		Total cost (at evaluation): 260 million yen	
Water Resource and Disaster Management Group,			
Global Environment Department			
		Partner Country's Implementing Organization: DDPM	
Period of	August 2006 to August 2008	(Department of Disaster Prevention and Mitigation),	
Cooperation		MOE (Ministry of Education)	
		Supporting Organization in Japan: : Earth System Science	
		Co., Ltd.	

## 1. Background and Summary of the Project

The Indian Ocean tsunami in December 2004 caused serious damage to Thailand with about 8,500 people missing or killed. Under this circumstance, the Government of Thailand requested a technical cooperation project to Japanese government in 2006. It intended to strengthen the capacity of disaster management of the Department of Disaster Prevention and Mitigation (DDPM) of the central government by establishing a system to collect, accumulate and utilize information on disaster and disaster risk management, enhancing relationship and coordination with relevant organizations and improving capacity of DDPM staff, reviewing local disaster prevention and mitigation plans and implementing a disaster management program in the pilot project sites in order to improve the capacity of disaster management of the local government and communities.

The Government of Thailand also focused its attention on the role of schools which can activate disaster preparedness programs at provincial and community levels and requested a technical cooperation project for school-based education for disaster preparedness. After discussions with the Government of Thailand in the preliminary survey in March 2006, cooperation between the Ministry of Education and the DDPM was considered to be essential to enhance the disaster prevention capacity of provincial and community levels. Thus the Japanese government decided to conduct technical cooperation project combining both request, aiming high efficiency and synergistic effect.

The Japan International Cooperation Agency (JICA) signed the Record of Discussion (R/D) with the DDPM, Ministry of Interior, and Ministry of Education (MOE) of the Government of Thailand on July 17, 2006. The project was planned to be for two years and has been launched beginning in August 2006.

#### Contents:

## (1) Overall Goal

To enhance the capacity for disaster risk management against future disasters at central, provincial, district and community levels in Thailand.

## (2) Project Purpose

- Capacity of DDPM is enhanced as a principal national government agency to carry out the tasks and responsibilities of disaster management
- 2. People's capacity for disaster management is improved through the enhancement of national and local educational services, as well as strengthening the regional organizations of DDPM and MOE,

## (3) Outputs

- A system which enables the collection, accumulation, and utilization of information on disaster and disaster risk management is established in DDPM.
- 2. Relationship and communication between DDPM and other relevant organizations are strengthened through publishing of a White Paper and formulating a National Disaster Prevention and Mitigation Plan.
- 3. System for enhancing the capacity of DDPM staff on natural disaster management is strengthened.
- Capacities of DDPM staff and village people are enhanced to promote disaster management activities at village level.
- Capacities of MOE staff and teachers at model schools are enhanced to promote education for disaster preparedness at schools.

(4) Inputs (at evaluation)

Japanese side:

Experts dispatched: 14 Trainees received: 12

Local cost: 44,319,000 yen

Thai side:

Counterparts: 75

Land and Facilities: experts office (for DDPM and MOE)
Local cost: 3,983,000 yen (total of DDPM and MOE)

## 2. Members of the Evaluation Team

2. Wellock of the Evaluation reality			
	(1) Mr. Kazuo SUDO (leader): Senior advisor, Global Environment Department, JICA		
Evaluators	(2) Mr. Hiroyuki WATABE (disaster management administration): Senior researcher, Asian Disaster		
	Reduction Centre		
	(3) Ms. Saki NAKAZAWA (cooperation planning	g): Disaster Management Division I, Water	
	Resource and Disaster Management Group, Global Environment Department, JICA		
	(4) Ms. Yukiko SUEYOSHI (evaluation and analysis): Global Link Management		
Period of	June 1 to June 21, 2008	Type of Evaluation: Terminal Evaluation	
Evaluation			

3. Summary of Evaluation Results (A: very good, B: good, C: partially good, D: bad)

3-1. Achievements

Achievement Level of each Output

## (1) A system which enables the collection, accumulation and utilization of information on disaster and disaster risk management is established in DDPM

Evaluation result (A): A GIS database which has accumulated information of disasters and disaster prevention and mitigation throughout Thailand was developed in the Information Technology Centre of DDPM (Department of Disaster Prevention and Mitigation) with close cooperation and data provision from relevant organizations and agencies. In addition to "manual for developing provincial hazard maps" and "Community Hazard maps for the pilot sites", "Guidebook for the utilization of hazard maps and GIS database" was also developed for utilizing the database and hazard maps in formulating Disaster Prevention and Mitigation Plans. Counterparts (C/P) are on their own initiative utilizing these techniques and teaching materials, and conducting seminars for DDPM staff. Thus it is fair to conclude the project has contributed to strengthening the system to accumulate and utilizes information on disasters and disaster management of DDPM.

# (2) Relationship and communication between DDPM and other relevant organizations are strengthened through publishing a White Paper and formulating National Disaster Management Plan

Evaluation result (A): A working group has been set up under the National Disaster Policy Division of DDPM for preparing the first Thai White Paper on disaster prevention and mitigation summarizing information from relevant organizations and is slated to be published and distributed by the end of the project. Since the new "National Disaster Prevention and Mitigation Act" has been enacted, the project provided information on Japanese disaster prevention plans to support formulating the National Disaster Prevention and Mitigation Plans to the National Disaster Policy Division of DDPM. Furthermore, the concept of gender integration on disaster management was introduced. Accordingly, a network with other ministries and agencies was established. Through these activities, especially publishing White Paper and introducing gender sensitiveness, the relationship between DDPM and other relevant organizations has been strengthened.

(3) Systems for enhancing capacity of DDPM staff on natural disaster management is strengthened

Evaluation result (A): A system to improve the knowledge of DDPM staff on disaster management was strengthened. E-learning materials on natural disasters (flood, landslide, earthquake and tsunami) were developed and a utilization plan for e-learning was also formulated mainly by the Disaster Prevention Promotion Division. The e-learning system is expected to have a big effect to improve the knowledge of DDPM staff on natural disasters. Experts provided information on seminar and training on natural disasters in Japan for the preparation of the master plan of the DPMA (Disaster Prevention and Mitigation Academy) and a draft of the master plan (the chapter on natural disasters was prepared by DDPM) has been submitted to DPMA.

## (4) Capacities of DDPM staff and village people are enhanced to promote disaster management activities at village level

Evaluation result (A): Through the activities of CBDRM (Community Based Disaster Risk Management), staff of DDPM and DPMPO (Disaster Prevention and Mitigation Provincial Office) and local residents in three pilot sites gained not only the basic concepts, but the know-how to carry out the CBDRM. "Manuals for CBDRM" and "Facilitator's guide" were also developed for the DDPM, DPMPO staff, and village chiefs to carry out CBDRM activities and expand its activities to other villages in disaster-prone areas. Also, templates for the disaster prevention and mitigation plan have been formulated in three levels, which cover province, district and village, and will be distributed with the CBDRM manuals. In two pilot sites (flood and landslide), the Village Disaster Prevention and Mitigation Plan was formulated, and based on the plan, the VDPM (Village Disaster Prevention Management Committee) and an early warning system were established.

## (5) Capacities of MOE staff and teachers at model schools are enhanced to promote education for disaster preparedness at schools

Evaluation result (A): A working group consists of the OBEC (Office of the Basic Education Commission), ESAO (Educational Service Area Office), and teachers at model schools developed a textbook for education for disaster preparedness (supplementary reading and teachers' guide). They are planned to be distributed to public schools throughout the country within the project duration. Teachers at the model schools and associate schools acquired the concept and practice of disaster preparedness education (lectures on natural disasters, DIG, evacuation drill) through workshop. A workshop for disaster preparedness education conducted by teachers at a model school is planned and will invite relevant organizations in July. Also, the action plan on disaster preparedness education will be formulated.

### Achievement of Project Purpose: Evaluation Result (A)

【Capacity on disaster management of DDPM】 The following have been achieved through this project: ①Having acquired skills on data collection, analysis and information management through the activities regarding GIS database, ②Capacity development in coordination and team work among various organizations through preparing the White Paper, ③Having acquired knowledge on natural disasters through preparing e-learning materials, and ④Enhancement of skills to formulate policy through formulating the National Disaster Prevention and Mitigation Plan, the Provincial Disaster Prevention and Mitigation Plan and the DPMA's Master Plan.

[Capacity on disaster management in pilot sites] DPMPO and ESAO in three pilot sites acquired knowledge and skills in CBDRM activities. DPMPO, in particular, is conducting CBDRM workshops in disaster-prone areas in the province utilizing the skills they have learned from the project. Some behavioral changes of local residents which suggest their understanding of appropriate activities against emergency situations have been reported.

[Capacity on implementation of disaster preparedness education] Through a participatory approach in the planning and formulation process of the action plan and various educational materials as well as conducting workshops, MOE, ESAO and teachers at model schools and associate schools have acquired the knowledge and skills to conduct a disaster preparedness education.

## 3-2. Summary of Evaluation Results (A: very good, B: good, C: partially good, D: bad)

### (1) Relevance: Evaluation Result (A)

The 10th Socio Economic Development Plan of Thailand indicated the necessity of the establishment of a natural disaster management and prevention system. It was also stipulated that DDPM is a responsible core organization for disaster prevention and mitigation in Thailand by the National Disaster Prevention and Mitigation Act of 2007. In addition, "National Education plan of MOE" clearly states that education for disaster management should be promoted, especially in disaster-prone areas. Thus the project's relevance is very high vis-á-vis the national development policies in Thailand. Furthermore, JICA's Country Assistance Strategy includes assistance for wide ranged natural disaster under the theme of human security, which is one of core issues of JICA's implementation plan. Accordingly, this project's relevance is also high in JICA's development assistance policy.

The project identified DDPM, the principal government agency for disaster management, and MOE, responsible for disaster preparedness education, as its main target group. Due to relatively short period after its establishment, DDPM's function needed to be strengthened to coordinate disaster management activities. MOE also needed knowledge and skills for promotion of school-based disaster preparedness education. Given these needs, the selection of target groups was appropriate as well as the selection of pilot sites in disaster-prone areas and selection

of DPMPO, ESAO, local residents and school teachers who are essential for promotion of local disaster management activities..

### (2) Effectiveness: Evaluation Result (B)

As described earlier about the achievement of the project purpose, this project contributed to the improvement of DDPM's capacity as the principal government organization in charge of disaster management and MOE's capacity of providing education for disaster preparedness. It also helped strengthening the function of DPMPO, ESAO and community-based disaster management organizations in the pilot sites. For better effectiveness of the project, it is important for DDPM or MOE to adopt and disseminate the knowledge and skills of disaster management learned from the project to the relevant organizations. For this end, it is needed to further improve their capacity of policy formulation and strengthen the coordination mechanism among relevant agencies.

Five outputs have directly contributed to the Project Purpose and the Project is heading in the right direction toward the Overall Goal. However, the project purpose could have been achieved more effectively by close collaboration among the working groups under each Output.

## (3) Efficiency: Evaluation Result (A)

The quality, quantity and timing of the provision of Japanese inputs were adequate, and the level of expertise of the Japanese Experts matched the C/P's needs. Utilization of the equipment provided during this Project is also reasonable. However, some further consideration is necessary regarding user's maintenance and analytical ability. The Thai Government assigned appropriate C/Ps for carrying out project activities. Some of the activity was negatively affected by the transfer of key personnel in the working group. However, they are actively contributing to the project activities with a strong intent and accomplishment, and delayed activities will be recovered in the end.

## (4) Impact: Evaluation Result (B)

The achievement of the overall goal is still limited considering the fact that the disaster management of DDPM and disaster preparedness education of MOE are in early stages. It requires more time to expand the outcome to enhance the capacity of other relevant agencies. The positive impacts by the Project have been observed are as follows; 1)the disaster preparedness education materials are planned to be distributed to not only public schools but private schools, 2)seminars are planned voluntarily by C/P to demonstrate the use of the hazard maps, 3)The knowledge students obtained through the Project's activities was disseminated to their parents by the students, 4)a village selected as a pilot site was nominated as a provincial model village for disaster management. There was no negative impact reported during the Project.

## (5) Sustainability: Evaluation Result (B)

In Thailand, there is a clear mid-term and long-term policy on disaster management and disaster preparedness education in the government. Therefore, a continuous support in strengthening disaster management and sustaining the Project outcomes is highly secured.

As for the organizational aspect, the responsibilities and mandates of DDPM and MOE in disaster management and disaster preparedness education are clearly recognized. Thus, these two organizations will likely continue activities to fulfill their mandates. Probability of continuous financial support by the government is also high. In pilot sites, although systems for disaster management and disaster preparedness education have been organized, support of local governments should be strengthened to continue the activities in the future.

As for the technical sustainability, DDPM and MOE are approaching to a stage where their knowledge and skills on disaster management are established and enable them to transfer it to other sections and organizations based on teaching materials and manuals produced in this project. In the pilot sites, although knowledge and skills obtained from the project are appropriately utilized, some assistance from local and central government is necessary for villagers for regular evacuation drills and knowledge dissemination in the future.

## 3-3. Factors that facilitated the effectiveness

- > The sense of ownership of DDPM, MOE and local residents and teachers in pilot sites is very strong. It is mainly because; ① the contents of technical transfer matched the need of the target group and ② the production of many visible achievements raised their motivation.
- As C/Ps were encouraged to participate in all processes of planning, discussing, and decision-making throughout the project, they were highly committed and they deepened their understanding on transferred knowledge and skills. As a result, technical sustainability has been increased.

### 3-4. Issues concerning Project implementation process

- The ambiguity on the Project Purpose especially with its reference to the "disaster management" or "education service", initially invited uncertainty in terms of what the intended outcomes of the Project should be. In addition, while Capacity development is a widely accepted concept, when translating such needs into specific Project inputs and activities, careful consideration is imperative in defining which specific capacities the interventions should cater to, and what outputs to expect.
- The project purpose has been achieved to a great extent in the relatively short period, two years. However, during interviews, some commented that the Project period should have been longer to establish mechanisms to expand project outcomes horizontally among relevant organizations.

## 3-5. Conclusion

The Project has produced a variety of fruitful results for disaster prevention and mitigation in Thailand owing to the dedicated efforts of Thai counterparts, other relevant organizations and people concerned in the pilot sites. The five outputs of the Project have been achieved to a great extent, considering the indicators for achievements of each output. The Project purposes also have been achieved successfully because of strong sense of ownership and commitments of DDPM and MOE. There are, however, many more issues for DDPM and MOE to deal with in order to further strengthen disaster management in Thailand after termination of the Project.

### 3-6. Recommendations

- (1) Issues to be tackled before the end of the Project (recommendations to C/P organization and experts)
- In order to continuously produce the White Paper, the annual work schedule for publishing it should be drawn up and shared with relevant organizations for close collaboration.
- Disclosure and effective PR activities should be done on the Project's achievements and outputs.
  - (2) Issues to be tackled after the end of the Project(recommendations to C/P organization)
- It is necessary to identify and delineate disaster-prone areas and to formulate strategic action plans for disaster prevention and mitigation for such areas focusing on specific frequent disasters so that countermeasures against natural disasters could be executed rapidly and effectively.
- The capacity of local administrative offices of DDPM should be enhanced.
- Regular Conduct of Disaster Preparedness Education and its extension among all schools in Thailand, especially in disaster-prone provinces are necessary.
- DDPM and MOE should continuously maintain close collaboration while strengthening relationship with other relevant organizations.

### 3-7. Lessons Learned

- Collaborative relationship upon trust between communities and local administrations is imperative in CBDRM activities. In selecting pilot sites and communities, various stakeholders in the community were well consulted and their ideas were taken into account. This process highly contributed to building trust between people and local administrations. A sense of ownership for CBDRM activities were also fostered among stakeholders along with the training of CBDRM activities such as evacuation drills and the formulation of a village-level disaster preparedness plan. Continuous practice of CBDRM activities are planned at the communities in cooperation with provincial DDPM offices after the termination of the Project.
- The Project developed a variety of visible products, which raised a sense of achievement of counterparts and other stakeholders. Subsequently, it enhanced their willingness to actively learn new knowledge and skills and participate in activities in disaster management and disaster preparedness education.