

Building Community-based Tsunami Early Warning and Mitigation System for Thailand: Adaptive Management Approach

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On December 26, 2004 there was a huge earthquake in the sea in the northwest of the Sumatra Island with magnitude of 9.0 on the Richter scale. A great tsunami approached the Andaman coasts of Thailand at Phuket, Pang-Nga, Krabi, Trang, Satoon and Ranong causing 5,396 casualties of Thais and foreign tourists. This could be regarded as the most severe disaster that has ever occurred in Thailand's history. The Government of Thailand committed to put in place as soon as possible an effective tsunami early warning arrangement in Thailand and the National Disaster Warning Center (NDWC) was inaugurated on May 30, 2005. The Center is currently operating under the Office of the Prime Minister Regulation and functions as a national central command center in nation-wide multi-hazard disasters early warning.

The assessment on national disaster early warning capability was made in August 2005 by an expert team from Intergovernmental Oceanographic Commission/ the United Nations Educational, Scientific and Cultural Organization (IOC/UNESCO). It was found that there was a communication gap between the national warning center and the target last miles at the community level. One of the recommendations was to provide knowledge capacity building and to strengthen community preparedness and resilience to ensure most effective end-to-end early warning and mitigation system.

The Adaptive Learning in Disaster Management for Community Awareness and Resilience Project (ALDC) under UNESCO/IOC was initiated to focus on enhancing people's learning and participation in the planning and coordination on disaster warning, preparedness, response, mitigation, and recovery to build up awareness and resilience at the community level. The project has provided strategic integrated models and approaches for national government interagency departments and all relevant stakeholders for implementation at the community level. The project activities targeted approximately 24 village locations located in six Andaman coastal provinces affected by the 26 December 2004 tsunami in Thailand. The project duration was two years from January 2007 to December 2008. The three components of adaptive learning process under the school and community-based management include their adaptive learning for school



and community work plans development, ways to reduce risks in school and community, and assessment of the preparedness and response by carrying out tsunami early warning and evacuation exercise.

It is suggested that there should be a mechanism in which representatives of governments can act as a coordinating body at the national, provincial and local levels to disseminate and discuss/implement the information, knowledge and understanding on relevant issues at all levels. At the community level, all relevant stakeholders should participate in planning, discussion and decision making processes based on "learning by doing" basis.