

Action Plan for Technical Cooperation on Geohazards

Task Force II



Action Plan for Technical Cooperation on Geohazards

(1 March 2005)

I. Introduction:

The Asian Tsunami Disaster of 26 December 2004 caused catastrophic loss of life and damage to the coastal environment and infrastructures of Thailand and other affected countries. Many countries and international organizations have kindly offered to Thailand immediate and long-term assistance in post-tsunami physical and mental rehabilitation and in future readiness for the possible future hazards. The Thai Government had on 17 January 2005 three Task Forces formed under the Joint Subcommittee on Post-tsunami Rehabilitation of Ecosystems and Livelihood as follows: Task Force I on “coral reefs and coastal habitats”, Task Force II on “geohazards”, and Task Force III on “Livelihoods”. The tasks of these Task Forces are to establish a well organized system for implementing the offers of technical assistance from various countries, regional and international organizations in post-tsunami rehabilitation, facilitating coordination of the assistance offered, and develop post-tsunami implementation/action plans.

The Ministry of Natural Resources and Environment through the Department of Mineral Resources (DMR) has been assigned to be the host for Task Force II, and has thereby prepared this “Action Plan for Technical Cooperation on Geohazards” in order to facilitate, coordinate and implement the efficient cooperation.

II. Objectives: Three main objectives of the plan are to :

- (1) Rapid assessment the impacts of the earthquake and tsunami for rehabilitation in the six affected provinces.
- (2) Strengthen capacity of Thai related agencies to identify and mitigate geohazard risk areas in Southern Thailand.
- (3) Establish a net work of monitoring and warning system in the Andaman Sea, including building capacity of Thai related agencies.

III. Development strategy

To achieve the program objectives, the following strategies/activities/outputs will be carried out by the agencies with technical assistance (technical and/or coordination advices, studies/survey, equipment, training, human resource development, and other capacity building activities) from the international communities:

Strategy 1 : Improve capacity of Thai related agencies to response effectively to the needs for rehabilitation of the six affected provinces with respect to coastal erosion, saline sediments/water intrusion, land slide and sinkhole collapse.

Main activities may include, but not limited to, the followings:

Activities	Inputs/Outputs	Remarks
(1) Coastal erosion, saline sediment and water intrusion		
1.1 Rapid assessment and preparation of action plans to rehabilitate the coastal erosion, saline sediment and water intrusion.	Support agencies will send a team of experts to work with DMR during the next few months. Expected outputs will include (a) the extent of the impacts, (b) priority areas for rehabilitation, cost estimates, including management plan and (c) an action plan for each area, including needs for capacity building.	<ul style="list-style-type: none"> • Details on work program field visit, and budget will be discussed with DMR. • Surveying and testing equipment will be needed.
1.2 Implementation of the action plans.	Depends on the findings and action plans.	Support agencies is expected to provide assistance.
(2) Land slide and sinkhole collapse		
2.1 Rapid assessment and preparation of action plans to rehabilitate the land slide and sinkhole collapse.	Support agencies will send a team of experts to work with DMR during the next few months. Expected outputs will include (a) the extent of the impacts, (b) priority areas for rehabilitation, including cost estimates, and (c) an action plan for each area, including needs for capacity building.	<ul style="list-style-type: none"> • Details on work program, field visit, and budget will be discussed with DMR. • Surveying and testing equipment will be needed.
2.2 Implementation of the action plans.	Depends on the findings and action plans.	Support agencies are expected to provide assistance.

Strategy 2 : Strengthen capacity of Thai related agencies to identify and mitigate geo-hazard risk areas in Southern Thailand.

Main activities may include, but not limited to, the followings:

Activities	Inputs/Outputs	Remarks
(1) Establish geo-hazard mitigation plan		
1.1 Development of an action plan to establish mitigation system in the geo-hazard risk area.(coastal erosion/ saline intrusion/ landslide/ sinkhole collapse/ active fault)	DMR has been preparing a baseline map. However, needs assistance to establish an active mitigation system including public education/awareness plan for the geo-hazard risk area.	<ul style="list-style-type: none"> • Need to identify potential donor for this.
1.2 Implementation of the action plans.	Depends on the agreements and action plans.	<ul style="list-style-type: none"> • Need to identify interested parties.
(2) Build technical capacity of Thai agencies on geo-hazard and marine geology.		
2.1 Need assessment for capacity building in the area of geo-hazard and marine geology both for short and long term, including training of staff.	Carry out detailed discussion with interested donors. Expected outputs (12 month) would include capacity building plan, budget and inputs.	<ul style="list-style-type: none"> • Need to identify potential donor for this.
2.2 Implementation of the action plans.	Depends on the agreements and action plans	<ul style="list-style-type: none"> • Need to identify interested parties.

Strategy 3 : Establish a net work of monitoring and warning system in the Andaman sea .

Main activities may include, but not limited to, the followings:

Activities	Inputs/Outputs	Remarks
(1) Establishment of a regional network		
1.1 Convening an international seminar on the development of the warning system.	To be carried out by DMR in cooperation with CCOP on 31 January – 1 February 2005. Expected outputs will include agreements on (a) approach and strategy to establish an effective Earthquake Tsunami warning system, (b) coordination and cooperation mechanism, (c) action plan and inputs, etc.	<ul style="list-style-type: none"> Assistance on equipment, technical assistance, and capacity building will be necessary.
1.2 Implementation of the action plans.	Depends on the agreements and action plans.	<ul style="list-style-type: none"> Need to identify interested parties.
(2) Capacity building of Thai agencies		
2.1 Need assessment for capacity building for DMR and other agencies to improve responsiveness and efficiency of agencies to monitor and prevent adverse impacts due to geo-hazard in Thailand.	Carry out detailed discussion with interested donors. Expected outputs (12 month) would include (a) capacity building plan, including budget and inputs.	<ul style="list-style-type: none"> Need to identify potential donor for this.
2.2 Implementation of the action plans.	Depends on the agreements and action plans	<ul style="list-style-type: none"> Need to identify interested parties.

IV. Post-Tsunami Coordination Framework (Geohazard Management)

(1) Rehabilitate the impacts of Asia Tsunami on the coastal erosion, landslide and sinkhole collapse in the 6 affected provinces		
<i>Objectives/Agencies</i>	<i>Activities/work schedule</i>	<i>Remarks</i>
Australia (AUSAID)		
Finland (GTK)		
France	Saline intrusion	
Germany (BGR)	Integrated natural disaster management	
Israel (GSI)	Geoscience (sinkhole) and seawater intrusion to the groundwater aquifer	Proposed to DMR and the Department of Groundwater Resources, MONRE
Japan (JICA / GSJ)	Dispatch disaster expert	
Netherlands (TNO)	Coastal plane	
Norway (NGI)	Geo-technical assessment hill slope, erosion/sinkhole	
Poland	Detail assessment of coastal area	
Switzerland (FOWG)	Natural hazard assessment, earthquake mitigation	
UK (BGS)	Tsunami sediments, Satellite images, Data processing, Rehabilitation	
USA (USAID)	Coastal management	Proposed to Taskforces I
CCOP		
FAO	Saline intrusion and Tsunami sediment	
IUCN	Ecosystem	
UNEP	Assessment of damage	
World Bank		

(2) Strengthen DMR capacity to identify and monitor hot spots with respect to geo-hazard in Thailand		
<i>Objectives/Agencies</i>	<i>Activities/work schedule</i>	<i>Remarks</i>
Australia (AUSAID)		
Finland (GTK)	Development of policies on hazard mitigation	
France		
Germany (BGR)	Integrated natural disaster management	
Israel (GSI)		
Japan (JICA / GSJ)	Disaster management course	
Netherlands (TNO)		
Norway (NGI)	area planning, set up workshops focusing on Thailand land-use	
Poland		
Switzerland (FOWG)		
UK (BGS)		
USA (USAID)		
CCOP	To be a regional center for geohazard coordinating network	
FAO	Strategic planning for management and preparedness for disaster Land resources assessment and land use planning	
IUCN	Ecosystem	
UNEP		
World Bank	Possible to develop a grant project with the Global Environment Facilities (GEF) on the international waterways.	

(3) Establish a net work of monitoring and warning system in the Andaman sea and Gulf of Thailand, including building capacity of agencies.		
<i>Objectives/Agencies</i>	<i>Activities/work schedule</i>	<i>Remarks</i>
Australia (Ausaid)		
Finland (GTK)		
France		
Germany (BGR)		
Israel (GSI)		
Japan (JICA / GSJ)	Prevention, management , warning system	
Netherlands (TNO)		
Norway (NGI)	Early warning system in regional scale	
Poland		
Switzerland (FOWG)		
UK (BGS)		
USAID	Early warning system at global level. Technical capability of ADPC	
CCOP		
FAO		
IUCN		
UNEP	Establishment of early warning system for disasters	
World Bank		