

Thailand

National progress report on the implementation of the Hyogo Framework for Action (2009-2011)

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Strategic goals

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.

Strategic Goal Statement 2011-2013:

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.

Strategic Goal Statement 2011-2013:

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.

Strategic Goal Statement 2011-2013:

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.

Priority for action 1: Core indicator 1

National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Is DRR included in development plans and strategies? Yes
- * Yes: National development plan
- * Yes: Sector strategies and plans
- * Yes: Climate change policy and strategy
- * No: Poverty reduction strategy papers
- * No: Common Country Assessments (CCA)/ UN Development Assistance Framework (UNDAF)

Description:

Disaster Prevention and Mitigation Act 2007 is enacted to replace Civil Defence Act 1979 and Fire Defence Act 1999. This Act is more oriented to the harmonization and systematization of disaster management practices of all stakeholders at all level. Based on this new structure, the National Disaster Prevention and Mitigation Plan 2010 – 2014 was formulated and approved by the Cabinet to provide a strategic framework of action for all stakeholders. According to the Act, disaster management organizational structure, roles and procedures are identified for all administrative level; national, provincial, district, and sub-district

Context & Constraints:

The structure and frameworks in the plan has not yet been effectively implemented due to several limitations. The most challenging gap is people's disaster awareness. It is important that an effective disaster risk reduction practice must be in tune with the fostering of “disaster safety culture” in every part of society, particularly among the local community members, local authorities, and school students and teachers who have the capability to build, promote and maintain a “culture of safety awareness”. However, past experiences have shown that our people are not well aware of hazards and disaster. The lack of safety culture has resulted in limited knowledge and capacities, and unorganized disaster management. Good governance is also another constraint for effective implementation of national policy and framework.

Priority for action 1: Core indicator 2

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Is there a specific allocation of budget for DRR in the national budget?
- * 0 % allocated from national budget
- * 0 USD allocated from overseas development assistance fund
- * 0 USD allocated to hazard proofing sectoral development investments (e.g transport, agriculture, infrastructure)
- * 0 USD allocated to stand alone DRR investments (e.g. DRR institutions, risk assessments, early warning systems)
- * 0 USD allocated to disaster proofing post disaster reconstruction

Description:

Not all administrative levels have resources available for DRR. According to Disaster Prevention and Mitigation Act 2007 and National DPM Plan 2010-2016, authorities at national and provincial levels are enforced and encouraged to develop its own DPM action plan as well as budget for plan implementation and exercises. Central government also allocates some amount of budget to support plan exercise for the province at least once a year to ensure the effectiveness and applicability of the plan.

Context & Constraints:

The DPM Act 2007 does not enforce local authorities at sub-district, and village levels to create its own DPM action plan. Therefore, a small part of DRR is incorporated in local development plan which usually puts priorities to building infrastructure rather than disaster preventive and mitigating measures. In many communities, the construction of roads obstructs water way. So, during rainy season, these communities suffer from flood and inundation.

Priority for action 1: Core indicator 3

Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Do local governments have legal responsibility and budget allocations for DRR? Yes
- * Yes: Legislation
- * Yes: Budget allocations for DRR to local government

Description:

After government reformed in 2002, Thai government had decentralized authorities to local authorities and provided budget for administration. Besides, reference to Disaster Prevention and Mitigation Act 2007, the provincial governor as the provincial director will be responsible for disaster prevention and mitigation of his/her own province and have the authorities to provide basic support to victims and mobilize resources from related agencies such as personnel, equipment and in budget to disaster management activities. Furthermore, local administration Chief will be assigned as District Director to perform their duties to disaster prevention and mitigation and some budget and resources are provided also. The Department of Disaster Prevention and Mitigation has collaborated with other related agencies such as Department of Meteorology, Royal Thai Irrigation, Department of Mineral resources and Thai Red Cross to conduct the appropriate people participatory approach to raise public awareness and mobilize their participation in every phase of disaster management so as to build safer and resilient community. Many implementation projects such as Community Based Disaster Reduction Management (CBDRM), Civil Defence Volunteer, Mr. Warning and One Tambon One Search and Rescue Team are required community participation. The achievement of the above mentioned projects are in some certain level.

Context & Constraints:

Thailand especially government sector has initiated a great number of community participation programs and projects for local disaster risk reduction and risk management. However, the government mainly focuses on quantitative achievement rather than qualitative achievement. Therefore, most of the community-based disaster risk management projects or other initiatives do not have a comprehensive monitoring and evaluation system to ensure the transfer of training and improved competencies of the local people and local authorities to properly handle with risks/disasters.

Priority for action 1: Core indicator 4

A national multi sectoral platform for disaster risk reduction is functioning.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

* Are civil society organisations , national planning institutions, key economic and development sector organisations represented in the national platform? -- not complete --

* 0 civil society members (specify absolute number)

* 0 sectoral organisations (specify absolute number)

* 0 women's organisations participating in national platform (specify absolute number)

Description:

By law, National Disaster Prevention and Mitigation Committee presided over by Prime Minister or designated Deputy Prime Minister. This national committee, which comprises all ministries and organizations of every sector, is the national body to provide framework and guidance for disaster management in Thailand. To ensure good coordination and functioning among members and their respective organizations, disaster emergency exercise at national level are carried out every year. Also, Thailand participates in several regional DRR platforms to strengthen national DRR capacities.

Context & Constraints:

The above-mentioned platform has not yet functioned efficiently due to the lack of shared vision among member organizations. For instances, a DRR and CCA issue, CCA national framework makers pay very much attention on the reduction of carbon dioxide emission, and rather overlook the interconnected nature of DRR and CCA. Also, not all stakeholders actively participate in the platform. Budget, and expertise in DRR remains our top five challenges for the development of Thailand's disaster risk reduction.

Priority for action 2

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 2: Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

* Is there a national multi-hazard risk assessment available to inform planning and development decisions? Yes

* No: Multi-hazard risk assessment

* 0 % of schools and hospitals assessed

* 0 schools not safe from disasters (specify absolute number)

* Yes: Gender disaggregated vulnerability and capacity assessments

* No: Agreed national standards for multi hazard risk assessments

Description:

Risk assessments at national and local level are carried out by competent and experienced national agencies, namely Department of Mineral Resources (DMR) for geo-hazards; Royal Irrigation Department (RID) and Department of Water Resource (DWR) for water related hazards; Thai Meteorological Department (TMD) for weather and earthquake monitoring; National Disaster Warning System (NDWC) for Tsunami monitoring and warning. These data and information are available for other key agencies such as Department of Disaster Prevention and Mitigation to make use of the information for DRR program/project development and communicate with respective offices at regional and provincial level for timely preparation and response.

Context & Constraints:

The hazard mappings for disaster are not available for all the regions of Thailand such as for earthquake, floods and landslide. Moreover, the government agencies which prepare the hazard mapping using different scale and parameters; therefore, Thailand does not have standard mapping for risk prone area. As well, the digital mapping is requiring the experts implementing. So, it is difficult for local community to understand. The integration among related agencies has some gaps and lacking of effective operation system for disaster management for all phases of disaster.

Priority for action 2: Core indicator 2

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Are disaster losses systematically reported, monitored and analysed? -- not complete --
- * No: Disaster loss database
- * No: Reports generated and used in planning

Description:

Thailand by responsible national agencies has systems in place to monitor, archive and disseminate data on key hazards and vulnerabilities, such as tsunami, landslide, telemetering for flood, and earthquake. Besides, we also set up the community-based systems to monitor flashflood and landslide in the risk prone areas. The information dissemination are providing in the manual, CD-Rom, web-site and other channels. The data base development and updating is accordance with the user requirement. Besides, the warning messages, the data of hazard and vulnerable areas are existed and developing for real time forecasting.

Context & Constraints:

Though systems are available, in times of increasing and wider impact of disasters, the existing systems are not able to effectively mitigate the impact. Besides, most of people living in risk areas are not yet well aware of the risk. They sometimes do not follow the warning or instruction from the authorities. As per government side, information on risk and hazards are not friendly for lay people and users. The development of data base is required the commitment, skills, resources and participation of all sectors to fulfill the goal of safer community. All agencies concerned are preparing mapping individually and we are requiring expertise to update the hazard mapping. Therefore, it is necessary to integrate the resources and designate the function clearly together with provide training course for users at all levels.

The amount of early warning equipments for tsunami/earthquake are limited and are not covering all areas such as seismic stations, warning towers and buoys in the Andaman Coastal. Moreover, the maintenance costs are very expensive under limited budget and the limitation of officers to 24 working hours for monitoring the disaster situation. The media does not recognize how severely of disaster when it receives the warning messages they are not disseminate messages immediately.

The recommendation is to develop dissemination to autonomic and continually. In addition, human development capability is essential for warning system and urges the understanding with media for advance forecasting.

Priority for action 2: Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Do risk prone communities receive timely and understandable warnings of impending hazard events? -- not complete --
- * No: Early warnings acted on effectively

- * No: Local level preparedness
- * No: Communication systems and protocols
- * No: Active involvement of media in early warning dissemination

Description:

Thailand has several agencies responsible for developing and maintaining early warning systems for Thailand's major hazards, namely flood, landslide, drought, and earthquake/tsunami. Protocols for warning or advisory message are established and implemented. Every disaster management related agencies understand their roles and responsibilities when disasters are expected. Mass media and TV pool are the main means of public communication. National DPM Plan also appointed structures and mechanisms to ensure that the early warning message and instruction are reachable at all administrative levels. At the village level, Thailand also trains local people/volunteers to be Mr. Disaster Warning for monitoring and delivering warning messages within their communities and installing the raining gauge and manual siren to local communities.

Context & Constraints:

At the national efforts for early warning, ministries and departments concerned cannot optimize their own plan and systems due to the fact that the Government does not dedicate resources and budget for a more advanced technology to develop multi-hazard early warning systems. For example, weather forecast cannot be done precisely at community or sub-district level. In addition, at the local level, not all risk areas have early warning systems. This result in losses that can mitigated at an early stage.

Priority for action 2: Core indicator 4

National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Does your country participate in regional or sub-regional DRR programmes or projects? -- not complete --
- * No: Programmes and projects addressing trans-boundary issues
- * No: Regional and sub-regional strategies and frameworks
- * No: Regional or sub-regional monitoring and reporting mechanisms
- * No: Action plans addressing trans-boundary issues

Description:

At the regional level Thailand is a member of ASEAN and has participated ASEAN Committee Disaster Management: ACDM which has the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) for disaster risk reduction framework and also the member country of Asian

Disaster Reduction Center for sharing information and visiting researchers. Whereas, at the global level Thailand takes part in implementing HFA by mechanism of SNAP for disaster risk reduction and also as a member of WMO under UNESCAP implemented the risk reduction related to water disaster such as tropical cyclones.

Context & Constraints:

The collaboration among member countries has gaps of technology, equipment and expertise; therefore, the recommendation is sincerely sharing resources among member countries.

Priority for action 3

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 3: Core indicator 1

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Is there a national disaster information system publicly available? -- not complete --
- * No: Web page of national disaster information system
- * No: Established mechanisms for accessing DRR information

Description:

National information management on disaster risk is available in forms of 1) weather forecasting 2) Geo-Hazard Mapping 3) Daily/Weekly/Monthly disaster situation update 4) disaster education through various types of communication in all levels. For national level, mass media, warning towers, short message warning via mobile phones and web-site are the major means of information dissemination. For local level, community radio towers, mobile units and sirens are the major means. Moreover, Mr. Warning and Civil Defence Volunteers trained by DDPM are key players in relaying disaster information to the community

Context & Constraints:

Most of the information is available through networks and arrangement among agencies concerned. Not all people can access and make use of such information, especially at the local level.

Priority for action 3: Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Is DRR included in the national educational curriculum? -- not complete --
- * No: Primary school curriculum
- * No: Secondary school curriculum
- * No: University curriculum

* No: Professional DRR education programmes

Description:

School curricula, education material and trainings are not promoted widely. For universities, disasters are included in many courses such as natural disasters, earthquake, so as to enable university student to be aware of hazards in Thailand and properly handle with disasters. Thai universities in collaboration with government and private sectors regularly conduct research and academic activities on disasters preparedness.

Context & Constraints:

There are 3 key factors that cause ineffective disaster education;

First, policy makers of the Ministry of Education do not take disaster education a priority in education development framework. As a result, respective organizations at departmental level and schools do not take disaster education into account. They usually focus on post disaster activities.

Second, education practitioners do not promote DRR into school curriculum/training on a sustainable basis due to limited budget and competent personnel.

Third, education system has divided schools into two types; one is developing schools which are usually situated in urban area, and the other is underdeveloped schools which are situated in the rural areas. These two types of schools differs from one another in that the first type are not interested in disaster education in school, while the later sees the importance of disaster risk reduction education. This is because most of the rural schools are in disaster risk prone areas.

Priority for action 3: Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

* Is DRR included in the national scientific applied-research agenda/budget? -- not complete --

* No: Research outputs, products or studies

* No: Research programmes and projects

* No: Studies on the economic costs and benefits of DRR

Description:

Research methods have embraced variety of methodology and technology such as geophysics, multi-disciplinary approach, so that research studies are more accurate and comprehensive. Besides, national agency in disaster management also applies automatic electronic devices for conducting research and data collection with high consistency and relevancy. The results of the study are published and updated

through internet which local offices can get access to the results.

Context & Constraints:

Thailand still has insufficient high/advanced technology and experts for the on-going improvement of risk assessment and studies.

Priority for action 3: Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Do public education campaigns on DRR reach risk-prone communities? -- not complete --
- * No: Public education campaigns.
- * No: Training of local government
- * No: Availability of information on DRR practices at the community level

Description:

Safety awareness promotion strategy is exist but not implemented seriously on a sustainable basis. Disaster education programme and training are limited in certain areas. Though we have warning system at local levels, they do not cover all parts of the risk areas. Some risk areas do not undergo CBDRM training to have their awareness improved.

Context & Constraints:

Limitation of resources and competencies of key sectors in DRR is still the major hindrance for Thailand's DRR. To acculturate safety mind and disaster awareness into local context, we require budget and experts to create, monitor and evaluate disaster awareness raising programme at all levels.

Priority for action 4

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 4: Core indicator 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.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

* Is there a mechanism in place to protect and restore regulatory ecosystem services? (associated with wet lands, mangroves, forests etc) -- not complete --

* No: Protected areas legislation

* No: Payment for ecosystem services (PES)

* No: Integrated planning (for example coastal zone management)

* No: Environmental impacts assessments (EIAs)

* No: Climate change adaptation projects and programmes

Description:

DRR is considered as the important part for the completion of environmental related plan and policies, particularly in natural resource management, land use planning, and climate change adaptation. Thailand has adopted National Strategy for Climate Change Management 2008-2012. This national framework clearly identifies DRR as one of the strategies. DRR is in "Strategy 1: building capacity for climate change adaptation and vulnerability reduction, Tactic 1.2.2: development of disaster prevention and impact mitigation measures for natural disaster and human settlements. All concerned agencies have agreed and participated in this framework such as Ministry of Interior. Report of progress are disseminated periodically.

Context & Constraints:

The national framework for DRR and CCA has identified several requirements for successful implementation of the plan, including conducting research and studies to develop forecast capabilities; risk, vulnerability, and impact assessment towards climate change, ecosystem, coastal settlement and so on. However, such requirements have not yet translated into a specific action plan.

Priority for action 4: Core indicator 2

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Do social safety nets exist to increase the resilience of risk prone households and communities? -- not complete --
- * No: Crop and property insurance
- * No: Employment guarantee schemes
- * No: Conditional cash transfers
- * No: DRR aligned poverty reduction, welfare policy and programmes
- * No: Microfinance
- * No: Micro insurance

Description:

Existing social development plans and policies as well as policy on CCA and DRR stress the importance of building self reliance of the local people, through knowledge management, and knowledge/information sharing on disaster risks, impacts and relief.

Context & Constraints:

National DPM plan and local DPM plans identified the procedures and gave priorities for vulnerable people. However, Most of social development policies and plans give emphasis on building capacity of local communities, but not give priorities to the specific needs of vulnerable groups (infants, elders, handicapped people) for emergency time.

Priority for action 4: Core indicator 3

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

- * Are the costs and benefits of DRR incorporated into the planning of public investment? -- not complete --
- * No: National and sectoral public investment systems incorporating DRR.
- * No: Investments in retrofitting infrastructures including schools and hospitals

Description:

DRR concept is not adopted and administered in some productive sectors. Agricultural production sector has taken DRR into account, but other sectors do not have the systematic approach/procedures for DRR in business operation.

Context & Constraints:

Require further study and investigation

Priority for action 4: Core indicator 4

Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Is there investment to reduce the risk of vulnerable urban settlements? -- not complete --
- * No: Investment in drainage infrastructure in flood prone areas
- * No: Slope stabilisation in landslide prone areas
- * No: Training of masons on safe construction technology
- * No: Provision of safe land for low income households and communities

Description:

Department of Public Works and City&Town Planning (DPT), Ministry of Interior as the major national agency responsible for settlement planning and building code has formulated Ministerial Regulation for building construction resistant to earthquake. This framework has identify 3 earthquake risk zones; namely, monitoring zone, risk zone 1, and risk zone 2, which cover 22 provinces. This law is enacted on 30 November 2007. Ministry of Interior, therefore, ordered local officers to strictly enforce building construction in risk zones. In case the province does not have specialized officers, that province can request personnel support from DPT provincial office. Additionally, DPT developed standards for building design for earthquake resistance, which are published in DPT Website and manuals for concerned agencies

Context & Constraints:

Building owners are not aware of risks relating to earthquake and building construction. They usually do not follow the law.

Priority for action 4: Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Do post-disaster recovery programmes explicitly incorporate and budget for DRR? -- not complete --
- * 0 % of recovery and reconstruction funds assigned to DRR

* No: Measures taken to address gender based issues in recovery

Description:

There are two types of DRR measures; structural and non-structural. Structural DRR measures are applied for example dam/dyke constructions, city planning, natural embankment (mangroves), Building Control Acts and etc. Non-structural DRR measures are provided such as employment opportunity, loan, mental rehabilitations, new settlement in safer areas, and livelihood recovery.

Context & Constraints:

There are inadequate resources to vulnerable people. Most people in risk areas do not want to migrate to new areas arranged by the government. Dam/dyke construction has often been protested by local people, conservationists and politicians. Also, it is costly for construction and maintenance. Safety culture thus should be created among local community people, decision makers, politicians and other concerned people.

Priority for action 4: Core indicator 6

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

* Are the impacts of major development projects on disaster risk assessed? -- not complete --

* No: Assessments of impact of projects such as dams, irrigation schemes, highways, mining, tourist developments etc on disaster risk

* No: Impacts of disaster risk taken account in Environment Impact Assessment (EIA)

Description:

Require further study and investigation

Context & Constraints:

Require further study and investigation

Priority for action 5

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 5: Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

* Are there national programmes or policies to make schools and health facilities safe in emergencies? -- not complete --

* No: Policies and programmes for school and hospital safety

* No: Training and mock drills in school and hospitals for emergency preparedness

Description:

Nowadays, the development of disaster management system, the national disaster prevention and mitigation, disaster warning system, emergency relief system have been a part of the 10th National Economic and Social Development Plan and the next national development plan as well. It means that Thailand gave more significance of disaster reduction. The Disaster Prevention and Mitigation Act 2007 is the law mechanism to operate the disaster management of the country. The National Disaster Prevention and Mitigation Committee is national platforms to facilitate disaster risk reduction. Based on the Act, the Department of Disaster Prevention and Mitigation is the main government agency to coordinate and integrate the disaster management with the government organizations, local administration agencies, private sector and various foundations to achieve the disaster risk reduction.

The National Preparedness Policy was developed as a policy frame work for national disaster preparedness and security. The objective is to enable all sectors to achieve an appropriate state of national preparedness for emergencies in managing disaster, security threats and emergencies in a normal state as well as to ensure effective and timely managements and implementations thereof during emergency. The Committee of National Preparedness Policy is the mechanism to drive the policy.

According to the government policy and the law mechanism, various agencies develop the plan and implement the activities on disaster reduction to safe people's life and decrease the damage. To advocate DRR, Department of Disaster Prevention and Mitigation and its stakeholder prepared the Strategic national Action Plan for Disaster Risk Reduction 2010– 2019 and the cabinet approved on 22 March 2009 to mainstream disaster risk reduction into national system.

Disaster Prevention and Mitigation Academy is also established to be the national disaster management training centre. The government and local administration staffs including civil defence volunteers will be trained to develop their capacity in various courses such as community based risk management, fire fighting, search and rescue, incident command system.

Context & Constraints:

In view of main responsible organization for Climate Change Adaptation such Office of Natural Resources and Environmental Policy and Planning, it does not directly precise to disaster risk reduction. However, it mainly focuses on the declaration adoption or carbon dioxide emission which may concern to it organization. Whereas, the knowledge sharing, risk assessment and knowledge sharing or even lesson learned among organizations are the hard works for them to be implemented. The investment for R& D mostly depends on the political policy because it is depleted stability.

Priority for action 5: Core indicator 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.

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

* Are the contingency plans, procedures and resources in place to deal with a major disaster? -- not complete --

* No: Contingency plans with gender sensitivities

* No: Operations and communications centre

* No: Search and rescue teams

* No: Stockpiles of relief supplies

* No: Shelters

* No: Secure medical facilities

* No: Dedicated provision for women in relief, shelter and emergency medical facilities

Description:

The National Disaster Prevention and Mitigation Plan will be formulated by the Department of Disaster Prevention and Mitigation and will be approved by the cabinet. The Provincial Disaster Prevention and Mitigation Plan will be developed and formulated in line with the existing risk in the area and as well as with the National Disaster Prevention and Mitigation Plan. Moreover, the specific types of disaster will be developed to be master plan.

Under the law, Thailand has to conduct the exercise every year to test the plan, monitor and evaluate the efficiency of the process. The simulated exercise can be classified as following:

- National Level: the Office of the National Security in collaboration with DDPM will conduct the exercise every year in specific disaster type for testing and evaluating the efficiency of the procedure and the national plan. In addition, it aims to familiarize the emergency response teams with know – how and to enhance their capacity and skill for the real situation. The exercise will help the people to be well-prepared and help themselves at the onset of disaster.

- Cluster Provincial Level: cluster exercise which Disaster Prevention and Mitigation Center will host the joint exercise with Disaster Prevention and Mitigation Provincial Office. This exercise has the objectives

to integrate resources, tools, equipment and vehicles of the center and provincial offices and strengthen their skills and experiences of collaboration in countering disaster.

- Provincial Level: Every provinces including Bangkok Metropolis Authority are obliged to conduct the exercise at the minimum of 2 types of disaster annually. The Disaster Prevention and Mitigation Provincial Office will support the provincial exercise conducting.
- District Level: This is the joint exercise between district office, local administration organization within the district area and all disaster management concerned agencies.

Apart from national efforts, regional cooperation such as ASEAN Disaster Emergency Response Stimulation Exercises (ARDEX) and ARF DiREx have promoted regional emergency coordination which enable Thailand and member countries to exchange knowledge and experiences for a better preparedness at the national level.

Context & Constraints:

From the previous regarding field training exercises, agencies concerned received abundance comments and recommendation, however, they did not exploit or use these lesson learned effectively to be improved and developed their organizations. They prefer to increase their networking rather than focus on the unified simulation training exercise among related agencies.

Priority for action 5: Core indicator 3

Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

Level of Progress achieved:

5: Comprehensive achievement with sustained commitment and capacities at all levels

Means of verification:

- * Are financial arrangements in place to deal with major disaster? -- not complete --
- * No: National contingency funds
- * No: Catastrophe insurance facilities
- * No: Catastrophe bonds

Description:

According to Ministry of Finance Regulation, victim compensation budget at the national level has already allocated 50 million baht for each kind of disaster, during last flood in October 2010 the cabinet approved to extend the recovery budget up to 100 million baht in some severe flood affected provinces. Moreover, the lost of family member or infrastructure, livestock, fishery and household damages are also received the compensation budget.

Context & Constraints:

The disaster management transparency is a little effectiveness by victims' view, some complaints sent to the media regarding the delayed compensation. From the central government concerned view it tried the best way to expedite the recovery compensation, however, victim database was prepared by local administration organization and it was very difficult to be verified by central government.

Priority for action 5: Core indicator 4

Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews

Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

Means of verification:

- * Has an agreed method and procedure been adopted to assess damage, loss and needs when disasters occur? -- not complete --
- * No: Damage and loss assessment methodologies and capacities available
- * No: Post disaster need assessment methodologies
- * No: Post disaster needs assessment methodologies include guidance on gender aspects
- * No: Identified and trained human resources

Description:

Reference to the National Disaster Prevention and Mitigation Plan, the exchange of relevant information during and after disaster are already mentioned in this plan. For instance, during disaster the emergency center will be established which composed of 8 divisions namely; directing center, disaster early warning center, disaster prevention and operating center, public relations division, communication center, donation, security and rehabilitation center and one advisory team. The members of emergency center are formed from various agencies concerned at all disaster level.

In order to arrange the well order collaboration and avoid duplication during recovery stage among organizations, they will prepare the victim lists as supporting evidence.

Context & Constraints:

The in charge organizations could not really perform their roles and responsibilities during disaster according to the National Disaster Prevention and Mitigation Plan. Even Thailand has National level Plan, however, the implementation of it mostly depend on policy makers.

Drivers of Progress

a) Multi-hazard integrated approach to disaster risk reduction and development

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?:

-- not complete --

Description (Please provide evidence of where, how and who):

The safety culture and awareness are insufficient in the public; therefore, it is necessary to cultivate public awareness. Even now the Climate Change Adaptation and Disaster Risk Reduction including earthquake master plan are under formulating to gather knowledge at the national level, main responsible government concerned is focusing on Carbon dioxide emission rather than the effects of CCA and DRR. Additionally, the Strategic National Action Plan (SNAP) is implemented to reduce disaster in term of multi-hazard integration approach but it will take times to be implemented.

Regarding man-made disaster for instance road safety, Thailand has adopted the Decade for Road Safety from Moscow Declaration to initiate the wearing helmet campaign nationwide. It is also expecting the zero accident even it will carry on for the future achievement.

However, the budget constraint and disaster management expertise are crucial factors to hinder the development for multi-hazard integration. The more intensive research for disaster reduction approach must be obliged as the roadmap of the country.

b) Gender perspectives on risk reduction and recovery adopted and institutionalized

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Thai Constitution B.E. 2550 has depicted philosophy of human rights particularly in anti-unjust discrimination. Accordingly, sequential laws and policies have to take the issue of gender equality into account. The Cabinet's Resolution 31 July, 2001 orders every ministry and department to have one of the executives designated as the Chief Gender Equality Officer (CGEO) and its own resource as Gender Focal Point. This mechanism aims to promote gender awareness into organization's works. In addition, NGOs and government agencies have worked together to develop a Gender-based Post Disaster Response and Recovery Plan.

In 2011 Minister of Human Resource Development has signed MOU with other concerned agencies regarding the Gender Dimension to upgrade the equity in the society.

c) Capacities for risk reduction and recovery identified and strengthened

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

The Thai government has provided information technology knowledge to support risk reduction for instance Ministry of Science and Technology has signed MOU with Ministry of Interior to reduce the impacts of disaster such as warning system to the public.

According to the recovery stage, the Thai government has allocated the compensation budget for victim assistance and vocation training. The budget can be increased up to the severe of disaster.

d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Since the cabinet approved National Disaster Prevention and Mitigation Plan on November 17, 2009, the minority groups have been included into this plan, additionally, Provincial Disaster Management Plan is also take these vulnerable group into account. Besides, the Community Based Disaster Management Approach has also recognized this group and mentioned them at the community level plan.

e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Levels of Reliance:

Significant and ongoing reliance: significant ongoing efforts to actualize commitments with coherent strategy in place; identified and engaged stakeholders.

Description (Please provide evidence of where, how and who):

Partnerships with non-governmental sectors such as private companies, civil society, volunteers and private sector have been more engagement from the national to community level to promote disaster risk reduction approach. Similarity at the same period, learning from both sides such as their need requirement, knowledge and experiences to fulfil lessons learned from each other. In point of view of some company such AP Honda Thailand which is one of the most contribution company to the public activities, it mentioned that the private sectors seem less bureaucratic than government sector. Furthermore, AP Honda has signed MOU with Provincial Administrative Association to disseminate "Drive Safety Training Course" throughout the country. For more than 20 years, AP Honda has promoted road safety with related government agencies concerned for example Department of Disaster Prevention and Mitigation, Department of Land Transportation, Ministry of Education, Royal Thai Police, Provincial Administration Organization, Local Administration Organization, Drink Don't Drive Foundation and Thai Motorcycle Enterprise Association which cause the fruitful accomplishment.

f) Contextual Drivers of Progress

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

Presently, Hyogo Framework for Action, Thailand is adopted the campaign "One million safe school and

Hospital” with the collaboration among UNISDR, Ministry of Interior, Ministry of Public Health and Ministry of Education. This campaign has just launched in Thailand in 2011 and will expand to schools and hospitals nationwide.

In addition, Ministry of Education has provided curriculum for disaster management such as flashflood, Flood and Tsunami. Additionally, some academic institutions has proposed the structure measures for Earthquake resistance to reduce risk from earthquake or tsunami.

Future outlook

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.

Overall Challenges:

The most difficult part is to be linked from community, local administration and national disaster management plan to be combined with National Disaster Management Plan. Whereas most of community disaster management plans are designed by policy makers rather than villagers, therefore, community people have to put more participation to prepare the plan. Like developing country Thailand has many levels of blueprints which comply with 11th National Economic and Social Development Plan such as Climate Change Adaptation, Flood and Drought Management Master Plan. However, the integration among ministries or related agencies are quite low and they mainly focus on their implementing plan. Ministry of Education is not providing adequate disaster management curriculum in school or university, disaster management is an elective subject. From that reasons, people have not well ordered with natural or man-made disaster.

Besides, the academic institution point of view demonstrates that the insufficient expertise information sharing, tools and equipment together with the duplication implementing causing the ineffective collaboration.

Future Outlook Statement:

The improvement national policy should be integrated efforts toward regional and international level in terms of trans-boundary information sharing, public awareness for safety culture in our society and a user friendly early warning system together with a multi hazard risk assessment. The concrete linkage between climate change adaptation and disaster risk reduction would be introduced as a lesson learned for future disaster management.

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.

Overall Challenges:

The local administration organizations have to learn and understand their roles and responsibilities. Community Based Disaster Management Approach is necessary to be trained the local people to ensure their preparedness and involvement in diverting or encountering disaster impacts

The implementation of action plan at all levels during disaster is including in the plan, but it is very challenging for actors or sectors to be performed. Besides the duplication roles during recovery stage causing people seem very confused. Moreover they prefer to depend on the government sector rather than prepare themselves for disaster. Therefore, all sectors have to develop the integrated efforts, lesson learned, expertise, risk assessment and hazard analysis to strengthen sustainable DRR. Moreover they require intensive training, evacuation drill, reliable warning system would help the public to be well prepared.

Future Outlook Statement:

To promote the local administration agencies to realize and aware of disaster preparedness and rely on themselves. The proper budget allocation from central government will be transferred to local together

with the knowledge dissemination.

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.

Overall Challenges:

The all stakeholder participation to emergency response without the duplication is essential. Regarding the law enforcement is not compulsory in some area for instance the residential areas nearby the vulnerability risk prone areas of the waterway or mountainside. Additionally, the database system is fundamental to integrate disaster management preparedness such as resource, tool, equipment and personnel or even expertise available.

Future Outlook Statement:

A collective of lesson learned from community, provincial, national, regional and global level in disaster risk reduction and multi- sector cooperation are the pivotal in building our regional resilience.

Stakeholders

Departments/organizations that have contributed to the report

- * Department of Disaster Prevention and Mitigation (Gov)
- * Department of Public Works and Town & City Planing (Gov)
- * Department of Water Resources (Gov)
- * Royal Irrigation Department (Gov)
- * Thai Meteorological Department (Gov)
- * Department of Mineral Resources (Gov)
- * National Disaster Warning Center (Gov)
- * Department of Medical Services (Gov)
- * Emergency Medical Institute of Thailand (Gov)
- * National Economic and Social Development Board (Gov)
- * Natural Resources & Environmental Policy & Plan (Gov)
- * Basic Education Commission (Gov)
- * Community Development Department (Gov)
- * Department of Marine Coastal Resources (Gov)
- * Department of Skill Development (Gov)
- * Budget Bureau (Gov)
- * Off. Women's Affairs & Family Development (Gov)
- * Bangkok Fire & Rescue Department, BMA (Gov)
- * Faculty of Sci., Kasetsart U. (Acad & Research)
- * Engineering Faculty, Kasetsart U. (Acad & Research)
- * Faculty of Sci., Chulalongkorn U. (Acad & Research)
- * Engineering Faculty, Chulalongkorn U. (Acad & Research)
- * Faculty of Sci., Mahidol U. (Acad & Research)
- * Faculty of Sci., Chiangmai U. (Acad & Research)

* Thai Red Cross (NGO)

* A.P. Honda Co.Ltd., Thailand (Private)