

Thailand

National progress report on the implementation of the Hyogo Framework for Action (2013-2015)

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Strategic Goal 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 2013-2015

Disaster risk reduction is being adopted and integrated into national development plans.

Strategic Goal 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 2013-2015

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.

Strategic Goal 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 2013-2015

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.

Priority for Action 1

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

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.

Key Questions and Means of Verification

Is disaster risk taken into account in public investment and planning decisions? Yes

National development plan	Yes
• THE ELEVENTH NATIONAL ECONOMIC AND SC Sector strategies and plans	OCIAL DEVELOPMENT PLAN Yes
Climate change policy and strategy	Yes
<u>Thailand Climate Change Master Plan (Draft)</u> Poverty reduction strategy papers	Yes
CCA/ UNDAF (Common Country Assessment/ UN Development Assistance Framework)	Yes
Civil defence policy, strategy and contingency planning	Yes

Have legislative and/or regulatory provisions been made for managing disaster risk? Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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. Recently, Thailand is on the endorsement process of the new national disaster prevention and mitigation plan which is clearly focusing on DRM.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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 and understanding. 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.

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? 2

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

Key Questions and Means of Verification

What is the ratio of the budget allocation to risk reduction versus disaster relief and reconstruction?

	Risk reduction / prevention (%)	Relief and reconstruction (%)
National budget		
Decentralised / sub-national budget		
USD allocated to hazard proofing development investments (e.g tra agriculture, infrastructure)		

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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 development and plan exercise for the province at least once a year to ensure the effectiveness and applicability of the plan.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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. In fact, DRR has not yet put in provincial development plan.

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.

Key Questions and Means of Verification

Do local governments have legal responsibility and regular / systematic budget allocations for DRR? Yes

Legislation (Is there a specific legislation for local governments with a mandate for DRR?)	Yes
 Disaster Prevention and Mitigation Act Regular budget allocations for DRR to local government 	Yes
Estimated % of local budget allocation assigned to DRR	1-2

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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 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. Each year, DDPM provides training/workshop to local authorities on disaster prevention and mitigation laws and regulations to promote better understanding of their roles and responsibilities. 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 at some certain level.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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.

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.

Key Questions and Means of Verification

Are civil society organizations, national finance and planning institutions, key economic and development sector organizations represented in the national platform? Yes

civil society members (specify absolute number)	0
national finance and planning institutions (specify absolute number)	1

sectoral organisations (specify absolute number)	7
private sector (specify absolute number)	0
science and academic institutions (specify absolute number)	5
women's organisations participating in national platform (specify absolute number)	0
other (please specify)	

Where is the coordinating lead institution for disaster risk reduction located?

In the Prime Minister's/President's Office	No
In a central planning and/or coordinating unit	No
In a civil protection department	No
In an environmental planning ministry	No
In the Ministry of Finance	No
Other (Please specify)	Ministry of Interior

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

By law, National Disaster Prevention and Mitigation Committee presided over by Prime Minister or designated Deputy Prime Minister. This national committee, which comprises concerned 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. More importantly, based on the new national DRM plan which will be endorse in 2015, national platform will be the critical basis for DRM mainstreaming.

Provide an explanation of some of the key contextual reasons for the

country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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

Identify, assess and monitor disaster risks and enhance early warning

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? 2

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

Key Questions and Means of Verification

Is there a national multi-hazard risk assessment with a common methodology available to inform planning and development decisions? No

Multi-hazard risk assessment	No
% of schools and hospitals assessed	
schools not safe from disasters (specify absolute number)	
Gender disaggregated vulnerability and capacity assessments	No
Agreed national standards for multi hazard risk assessments	No
Risk assessment held by a central repository (lead institution)	No
Common format for risk assessment	No
Risk assessment format customised by user	No
Is future/probable risk assessed?	No
Please list the sectors that have already used disaster risk assessment as a precondition for	

sectoral development planning and programming.

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

Some progress is described because we can conduct risk assessment in a more qualitative way by people's self assessment. The data includes event history, losses information and vulnerable groups. A multi-hazard risk assessment can be observed but limited to only in the risk prone communities/areas through CBDRM.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Risk information requires all sectors and stakeholders' commitments. But multihazard risk assessment needs collaboration, times, and expertise to do so. To convince decision makers at all levels, and community members still are the challenging.

Core indicator 2

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

Level of Progress achieved? 2

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

Key Questions and Means of Verification

Are disaster losses and hazards systematically reported, monitored and analyzed? No

Reports generated and used in planning by Yes finance, planning and sectoral line ministries	Disaster loss databases exist and are regularly updated	No
systems)	finance, planning and sectoral line ministries (from the disaster databases/ information	Yes

Yes

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

Thailand has put a great effort to develop and improve "disaster data warehouse", particularly after the 2011 flood.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Risk information is the most concerned issues for disaster management in Thailand. Though we have disaster data warehouse, the challenges still remains. Data collection and updating have not yet been implemented in a systematic way, especially at the local level and many sectors. A more user-friendly and simple approach for risk assessment should be developed and introduced to local partners for they are the frontliner for DRR. In addition, responsible agencies on risk assessment still have limited knowledge, resulting in an ineffective training/knowledge transfer to the local level.

Core indicator 3

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

Level of Progress achieved? 4

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

Key Questions and Means of Verification

Do risk prone communities receive timely and understandable warnings of impending hazard events? Yes

Early warnings acted on effectively	Yes
Local level preparedness	Yes
Communication systems and protocols used and applied	Yes
Active involvement of media in early warning dissemination	Yes

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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 communitybased 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. National Broadcasting and Telecommunications Commission also endorsed national protocol for service providers when a disaster occur.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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.

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.

Key Questions and Means of Verification

Does your country participate in regional or sub-regional actions to reduce disaster risk? Yes

Establishing and maintaining regional hazard monitoring	No
Regional or sub-regional risk assessment	Yes
Regional or sub-regional early warning	Yes
Establishing and implementing protocols for transboundary information sharing	Yes

• <u>Procedure for Regional Standby Arrangements and Coordination of Joint Disaster</u> <u>Relief and Emergency Response Operations (SASOP)</u>

Establishing and resourcing regional and subregional strategies and frameworks

• ASEAN Agreement on Disaster Management and Emergency Responce Work Programme for 2010-2015

Provide description and constraints for the overall core indicator

(not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

At the regional level Thailand is a member of ASEAN and has participated in 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. In addition, we have exchanged hazards information for early warning with warning networks in the asiapacific region.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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

Use knowledge, innovation and education to build a culture of safety and resilience at all levels

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? 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

Key Questions and Means of Verification

Is there a national disaster information system publicly available? Yes

Information is proactively disseminated	No
Established mechanisms for access / dissemination (internet, public information broadcasts - radio, TV,)	Yes
Information is provided with proactive guidance to manage disaster risk	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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. Moreover, indigenous knowledge should be also taken into account when developing an information database or knowledge kits or plan at the local level.

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.

Key Questions and Means of Verification

Is DRR included in the national educational curriculum? Yes

primary school curriculum	Yes
secondary school curriculum	Yes
university curriculum	Yes
professional DRR education programmes	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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. This is because most of the rural schools are in disaster risk prone areas. More importantly, teachers at primary and secondary education should also receive a regular training on DRM to raise their safety awareness and better understanding on the necessity of DRM education.

Core indicator 3

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

Level of Progress achieved? 2

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

Key Questions and Means of Verification

Is DRR included in the national scientific applied-research agenda/budget? Yes

Research programmes and projects	Yes	
Research outputs, products or studies are applied / used by public and private institutions	No	

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

The National Research Institute has provided funding for DRR research studies. Universities and academia also are interested in DRR and HFA implementation in Thailand. Also, Thailand (NDMO and Development Planning Agency) is going to work with UNDP, and ADPC to run the Project on Mainstreaming Climate Change Adaptation and Disaster Risk Redcution in Development Planning (MADRiD), where DRR public expenditure review and disaster risk assessment are the core activities. This project will provide model approach for Thailand to further expand and apply in a wider area.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

But, risk assessment and cost benefit analysis have not yet conducted due to lack of risk awareness in development plans of all sectors. The assessments are usually conducted in a more qualitative way with simple methodology/approach. Therefore, to promote risk awareness to the public and multi-stakeholders and multi-sectors, different approaches for risk assessment varying from very simple to more complex, is highly required.

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.

Key Questions and Means of Verification

Do public education campaigns for risk-prone communities and local authorities include disaster risk? Yes

Public education campaigns for enhanced awareness of risk.	Yes
Training of local government	Yes
Disaster management (preparedness and emergency response)	Yes
Preventative risk management (risk and vulnerability)	Yes
Guidance for risk reduction	Yes
Availability of information on DRR practices at	Yes

the community level

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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. Most important thing is that our instructors or trainers on DRR should have not only knowledge but they also have to have safety mind and awareness on the importance of DRR.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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

Reduce the underlying risk factors

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? 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

Key Questions and Means of Verification

Is there a mechanism in place to protect and restore regulatory ecosystem services? (associated with wet lands, mangroves, forests etc) Yes

Protected areas legislation	Yes
Payment for ecosystem services (PES)	No
Integrated planning (for example coastal zone management)	Yes
Environmental impacts assessments (EIAs)	Yes
Climate change adaptation projects and programmes	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

DRR has becoming an integral part of environmental related plan and policies. Thailand is developing the new strategic framework on green growth and climate change where DRR is put under the scheme of human settlement and human security.

Provide an explanation of some of the key contextual reasons for the

country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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. This can reflect that they may yet have an awareness, but not have clearly understanding on how to integrate DRR and CCA as one development scheme.

Core indicator 2

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

Level of Progress achieved? 4

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

Key Questions and Means of Verification

Do social safety nets exist to increase the resilience of risk prone households and communities? Yes

Crop and property insurance	Yes
Temporary employment guarantee schemes	No
Conditional and unconditional cash transfers	Yes
Micro finance (savings, loans, etc.)	Yes
Micro insurance	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

Apart from conventional scheme initiated by the government, the nature of thai society which still has extended family and Thai culture has effectively strengthen social safety nets, especially in the rural areas. CSO is also another key players in supporting the development social security on a sustained basis.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Micro insurance is usually on a voluntary basis. Most of SMEs, farmers and individuals still consider insurance as useless investment. The government should provide incentives to convince those vulnerable groups to invest on risk transfer through insurance.

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.

Key Questions and Means of Verification

Are the costs and benefits of DRR incorporated into the planning of public investment? No

National and sectoral public investment systems incorporating DRR.	No
Please provide specific examples: e.g. public infrastructure, transport and communication, economic and productive assets	
Investments in retrofitting infrastructures including schools and hospitals	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Further study is required

Core indicator 4

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

Level of Progress achieved? 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

Key Questions and Means of Verification

Is there investment to reduce the risk of vulnerable urban settlements? Yes

Investment in drainage infrastructure in flood prone areas	Yes
Slope stabilisation in landslide prone areas	Yes
Training of masons on safe construction technology	Yes
Provision of safe land and housing for low income households and communities	Yes
Risk sensitive regulation in land zoning and private real estate development	Yes
Regulated provision of land titling	Yes

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Law enforcement is still the issue. In addition, building owners are not aware of risks relating to earthquake and building construction. They usually do not follow the law.

Core indicator 5

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

Level of Progress achieved? 2

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

Key Questions and Means of Verification

Do post-disaster programmes explicitly incorporate and budget for DRR for resilient recovery? No

% of recovery and reconstruction funds assigned to DRR

DRR capacities of local authorities for response and recovery strengthened	Yes
Risk assessment undertaken in pre- and post- disaster recovery and reconstruction planning	No
Measures taken to address gender based issues in recovery	No

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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.

Core indicator 6

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

Level of Progress achieved? 3

Institutional commitment attained, but achievements are neither comprehensive nor substantial.

Key Questions and Means of Verification

Are the impacts of disaster risk that are created by major development projects assessed? Yes

Are cost/benefits of disaster risk taken into account in the design and operation of major development projects? Yes

Impacts of disaster risk taken account in Environment Impact Assessment (EIA)	No
By national and sub-national authorities and institutions	Yes
By international development actors	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

Require further study and investigation

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Require further study and investigation

Priority for Action 5

Strengthen disaster preparedness for effective response at all levels

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.

Key Questions and Means of Verification

Are there national programmes or policies for disaster preparedness, contingency planning and response? Yes

DRR incorporated in these programmes and policies	Yes
The institutional mechanisms exist for the rapid mobilisation of resources in a disaster, utilising civil society and the private sector; in addition to public sector support.	Yes

Are there national programmes or policies to make schools and health facilities safe in emergencies? Yes

Policies and programmes for school and hospital safety	Yes
Training and mock drills in school and hospitals for emergency preparedness	Yes

Are future disaster risks anticipated through scenario development and aligned preparedness planning? Yes

Potential risk scenarios are developed taking into account climate change projections	Yes
Preparedness plans are regularly updated based on future risk scenarios	No

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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 11th National Economic and Social Development Plan and the next national development plan as well. It means that Thailand gave more significance of disaster reduction. 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.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

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.

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.

Key Questions and Means of Verification

Are the contingency plans, procedures and resources in place to deal with a major disaster? Yes

Plans and programmes are developed with gender sensitivities	No
Risk management/contingency plans for continued basic service delivery	Yes
Operations and communications centre	Yes
Search and rescue teams	Yes
Stockpiles of relief supplies	Yes
Shelters	Yes
Secure medical facilities	Yes
Dedicated provision for disabled and elderly in relief, shelter and emergency medical facilities	Yes
Businesses are a proactive partner in planning and delivery of response	Yes

Provide description and constraints for the overall core indicator (not only the means of verification).

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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:

 \cdot National Level: DDPM conducts 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 hazards risk in their area annually. The Disaster Prevention and Mitigation Provincial Office will support the provincial exercise conducting.

 \cdot 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.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Lessons gained from response operations and drills are usually overlooked and not included in planning or improvement of the response and drills.

Core indicator 3

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

Level of Progress achieved? 4

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

Key Questions and Means of Verification

Are financial arrangements in place to deal with major disaster? Yes

National contingency and calamity funds	Yes
The reduction of future risk is considered in the use of calamity funds	No
Insurance and reinsurance facilities	Yes
Catastrophe bonds and other capital market	No

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

After the 2011 flood, the government has reviewed and amended the budget allocation for a more effective disaster management; 10 million baht is for preventive measures when disaster is potentially occur and another 20 million baht is for response and relief. Moreover, the lost of family member or infrastructure, livestock, fishery and household damages are also received the compensation budget.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

Disaster risk governance and transparency is less effective. Many complaints can be found through medias especially on the delayed compensation, incorrect database.

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? 2

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

Key Questions and Means of Verification

Has an agreed method and procedure been adopted to assess damage, loss and needs when disasters occur? 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	Yes

Please describe some of the key contextual reasons for the country's ranking/ assessment for the indicated level of progress.

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.

Provide an explanation of some of the key contextual reasons for the country's ranking assessment at the indicated level. In particular, highlight key challenges encountered by the country/ national authorities and partner agencies; and recommendations on how these can/ will be overcome in the future.

No agreed common methodologies are available yet . All procedures are subject to area and sector context.

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?: Yes

If yes, are these being applied to development planning/ informing policy?: Yes

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

CBDRM is the major policy of the country to promote multi-hazard approach at the local level. Such policy is implemented nationwide by all sector and budget is always available for its implementation. However, at provincial and national level, multi hazard risk assessment is not yet implemented at a systematic and scientific manner.

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.

Is gender disaggregated data available and being applied to decisionmaking for risk reduction and recovery activities?: Yes

Do gender concerns inform policy and programme conceptualisation and implementation in a meaningful and appropriate way?: Yes

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

Gender has not yet been explicitly considered as critical part in DRM. In practice, women are perceived as key player in DRR at local level as men. Their specific needs and of other vulnerable groups are always taken into account. However, at the national level, we still provide universal package for disaster response and relief. Thai Constitution B.E. 2550 has depicted philosophy of human rights particularly in antiunjust 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

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

Do responsible designated agencies, institutions and offices at the local level have capacities for the enforcement of risk reduction regulations?: Yes

Are local institutions, village committees, communities, volunteers or urban resident welfare associations properly trained for response?: Yes

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

Disaster Prevention and Mitigation Academy is the major training agency for DRR. Many training courses and tools by both inter-agency and international support are available. We also are be able to provide neighbor country such as Vietnam, LAOs PDR, and myanmar training package in many areas such as DRR, crisis management, medical emergency management.We also have annually training and drills with Malaysia on disaster prevention and mitigation.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.

Do programmes take account of socio-environmental risks to the most vulnerable and marginalised groups?: Yes

Are appropriate social protection measures / safety nets that safeguard against their specific socioeconomic and political vulnerabilities being adequately implemented?: Yes

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 nongovernmental actors; civil society, private sector, amongst others, have been fostered at all levels

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.

Are there identified means and sources to convey local and community experience or traditional knowledge in disaster risk reduction?: Yes

If so, are they being integrated within local, sub-national and national disaster risk reduction plans and activities in a meaningful way?: Yes

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.

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.

The new national DRR strategic Plan and Development Plan are promising to promote DRR mainstreaming and sustainable development. Yet, great efforts and multi-sector and multi-stakeholder participation are still the challenging that could take resources and times.



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

DRR mainstreaming in the development plan and sector's plan

Future Outlook Statement

DRR is mainstreamed into development and sectors' development plan at national, regional, provincial and local level. Existing mechanisms mandated by law (disaster prevention and mitigation committee) are strengthened. Budget is secured on DRR programmes.

Future Outlook 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

All sectors and stakeholders should share common understanding on DRR to ensure the seamless linkage between global, national and local framework for action in DRR.

Future Outlook Statement

A shared understanding on DRR is promoted through an agreed strategic

communication scheme, including a sets of contextualized and user-friendly toolkits and learning kits for each sectors and stakeholder groups.

Future Outlook 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 systematic and participatory monitoring and evaluation mechanism and tools for DRR in the country in all phases of disaster risk management.

Future Outlook Statement

A systematic DRR monitoring and evaluation mechanism and tools are developed in a participatory manner to ensure the effectiveness of DRR mainstreaming and DRR implementation in Thailand at all levels

Stakeholders

Organizations, departments, and institutions that have contributed to the report

Organization	Organization type	Focal Point
Thai Red Cross Society	Non-Governmental Organizations	
Mahidol University	Academic & Research Institutions	
National Disaster Prevention and Mitigation Committee	Networks & Others	
Thai Chamber of Commerce	Private Sector	
National Security Council	Networks & Others	

