



International Strategy for Disaster Reduction



Regional HFA Monitor Template and Guidance

**Regional HFA monitoring and
review in support of regional and
national disaster risk reduction**

2011 - 2013

Progress monitoring and review through a multi stakeholder engagement process 2011 - 2013

Overview of suggested report structure

- Section 1: Executive Summary
- Section 2: Status of DRR in the (Sub-)Region 5 subsections
Subsection 2.1: *HFA Priority for Action 1 / equivalent (Sub-)Regional Priority*
Subsection 2.2: *HFA Priority for Action 2 / equivalent (Sub-)Regional Priority*
Subsection 2.3: *HFA Priority for Action 3 / equivalent (Sub-)Regional Priority*
Subsection 2.4: *HFA Priority for Action 4 / equivalent (Sub-)Regional Priority*
Subsection 2.5: *HFA Priority for Action 5 / equivalent (Sub-)Regional Priority*
- Section 3: Synthesis of national progress in the (Sub-)Region 5 subsections
Subsection 3.1: *HFA Priority for Action 1*
Subsection 3.2: *HFA Priority for Action 2*
Subsection 3.3: *HFA Priority for Action 3*
Subsection 3.4: *HFA Priority for Action 4*
Subsection 3.5: *HFA Priority for Action 5*
- Section 4: Contribution of Inter-governmental and International Organisations to Disaster Risk Reduction in the (Sub-)Region
- Section 5: Gaps and challenges in the implementation of the HFA in the (Sub-)Region
- Section 6: Recommendations for Future Actions in the (Sub-)Region
- Section 7: Stakeholders
- Annexes

SECTION 1: EXECUTIVE SUMMARY

This section summarises the key findings of the multi-stakeholder review of trans-boundary risks and progress in risk reduction efforts at the (sub-)regional level; highlighting gaps and challenges, where relevant, in the context of existing (sub-)regional risk reduction commitments, strategies, frameworks and action plans.

Summary (300 words max.)

Prompted with different large disasters that have affected several countries in Southeast Asia, the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), a proactive regional framework for cooperation, coordination, technical assistance and resource mobilisation in all aspects of disaster management, was signed in July 2009 by the ten (10) ASEAN Member states and entered into force on December 2010. This Agreement affirms ASEAN's commitment to the Hyogo Framework of Action (HFA) and is the first legally-binding HFA-related instrument in the world.

Based on this Agreement, key aspects of disaster risk management were tackled by the ASEAN Member States through the implementation of the AADMER Work Programme 2010-2015. This goal is envisioned to be achieved through actual programmes and activities that cover key aspects of disaster management from risk assessment, early warning, to prevention, mitigation, response and recovery, including institutionalisation, partnerships and knowledge management. The implementation of this Work Programme has paved the way in the substantial achievements of the ASEAN Member States on DRR in the past few years.

Currently, different systems and DRR programmes are already ongoing in the sub-region. Although there are apparent limitations in terms of technical capacities, the prospects for the region are bright in the goal of reducing risks and building resilience in each of the ASEAN Member States.

SECTION 2: STATUS OF DRR IN THE (SUB-)REGION

HFA PRIORITY FOR ACTION 1: DEFINITION AND SIGNIFICANCE

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

Countries and (sub-)regions that develop policy, legislative and institutional frameworks for disaster risk reduction and that are able to develop and track progress through specific and measurable indicators have greater capacity to manage risks and to achieve widespread consensus for, engagement in and compliance with disaster risk reduction measures across all sectors of society.

As per the areas outlined in HFA Priority for Action 1, this subsection has two '(sub-)regional indicators' against which progress and challenges in implementation can be monitored / reviewed:

1. A (sub-)regional framework, strategy or action plan for disaster risk reduction exists.
2. A multi-sectoral (sub-)regional institutional mechanism exists
3. Institutional mechanism in place to monitor risk reduction status and progress at (sub-)regional level.
4. (Sub-)regional training / capacity building programmes and institutions exist to support capacity building for DRR at national / regional levels.

a. (Sub-)Regional Indicator 1: **A (sub-)regional framework, strategy or action plan for disaster risk reduction exists.**

Such frameworks, strategies or action plans can provide the foundation for the development of programmes and institutional arrangements for (sub-)regional disaster risk reduction. Assessing such arrangements can reveal gaps in resources and capacities that were previously underutilised or untapped. A comprehensive disaster risk reduction policy framework can also guide a (sub-)regional organisation in its disaster risk reduction policies and strategies.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- **4 – Substantial achievement attained but with recognized limitations in capacities and resources**
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 1 may be determined by assessing, for example, if a (sub-)regional policy for disaster risk reduction / management is in place, is being appropriately implemented and is sufficiently integrated into sectoral policies and (sub-)regional and national development plans (and not limited to contingency planning and efforts for more effective response).

Means of verification *(Please check the box and upload relevant documentation)*X (Sub-)regional framework, strategy, action planX Resources mobilised for the implementation of the (sub-)regional framework, strategy, action plan**Description** (300 words max.)Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

Prompted with different large disasters that have affected several countries in Southeast Asia, the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), a proactive regional framework for cooperation, coordination, technical assistance and resource mobilisation in all aspects of disaster management, was signed in July 2009 by the ten (10) ASEAN Member states and entered into force on December 2010. This Agreement affirms ASEAN's commitment to the Hyogo Framework of Action (HFA) and is the first legally-binding HFA-related instrument in the world.

Following the ratification of the Agreement, a Work Programme to operationalise the AADMER into concrete outputs and initiatives was developed and adopted during the 15th ASEAN Committee on Disaster Management Meeting (ACDM) on 11 March 2010 as a rolling work plan.

The AADMER Work Programme 2010-2015 is a detailed and time-bound road map that aims to substantially reduce loss of life and damage to economic, social, physical and environmental assets of ASEAN Member States caused by natural and human-induced disasters. This goal is envisioned to be achieved through actual programmes and activities that covers key aspects of disaster management from risk assessment, early warning, to prevention, mitigation, response and recovery.

Along with the AADMER institutionalisation, development of partnership strategies, and mainstreaming and outreach, one of the building blocks of the AADMER Work Programme 2010-2015 resource mobilisation. Among the main achievements in this specific building block is the establishment of the ADMER Fund Financial Rules and the AHA Centre Fund which speeds up the operational readiness of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre).

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Although the ratification of the AADMER and the development of the AADMER Work Programme are among the primary achievement of the ASEAN region in disaster risk management, one major challenge particularly in the implementation of the Agreement is the institutionalisation and internalisation of AADMER at the national level as well as the promotion of cross-sectoral coordination and multi-sectoral partnership. This challenge was mainly identified by the Parties to the Agreement during the first Conference of Parties Meeting in March 2012.

Further, since most of the activities in the Work Programme 2010-2015 need to start at the national level, specific capacities are needed which some countries may be limited of. This therefore requires the countries to rely on technical assistance from partners to implement some components of the AADMER Work Programme.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

b. (Sub-)Regional Indicator 2: A multi-sectoral (sub-)regional institutional mechanism exists.

A multi-sectoral platform for disaster risk reduction can be defined as a (sub-)regionally owned and led mechanism – adopting the structure of a forum or committee (or other), that facilitates the interaction of key players around the (sub-)regional disaster risk reduction agenda and serves as an advocate for adopting disaster risk reduction measures at all levels. Such an entity may include or complement existing mechanisms for disaster risk management at national and local levels.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- **4 – Substantial achievement attained but with recognized limitations in capacities and resources**
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

Means of verification *(Please check the box and upload relevant documentation)*

- X Regional platform and/or equivalent (sub-)regional multi-stakeholder coordinating mechanism for DRR
- X Capacity strengthening of (sub-)regional DRR institution supported.
- X (Sub-)regional DRR body is implementing programme(s) for trans-boundary risk reduction and supporting national DRR integration.

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

The ASEAN Committee on Disaster Management (ACDM) assumes the responsibility for coordinating and implementing regional activities on disaster management. Established in early 2003, the ACDM is composed of the heads of national agencies responsible for disaster management within the ten (10) ASEAN Member States.

As the body responsible for the overall development of DRR initiatives in the sub-region, the ACDM has coordinated and continues to collaborate on a number of trans-boundary issues on DRR in the sub-region through its many sub-committees or components invariably led by a designated country lead shepherd.

The ACDM, supported by the ASEAN Secretariat, also provide the organisational and legal contexts and status for the implementation of the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) and the AADMER Work Programme. It basically provides policy oversight and supervision in the implementation process. At the same time, the ACDM also acts as the governing board of the ASEAN Coordinating Centre for Humanitarian Assistance on disaster management (AHA Centre) which is the main operational engine in executing the activities in the AADMER.

Through the AADMER, the ACDM also supports the enhancement of capacities on DRR of the ASEAN Member States (Article 3 a-c).

More recently, the ACDM is exploring the possibility of establishing a regional cross-sectoral coordination mechanism for disaster risk financing and insurance (DRFI).

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Despite the existence of mechanisms and bodies on DRR within the sub-region, coordination instruments among partners are more challenging than other activities and need to be done carefully due to complexity of the context involved.

Further, along with the development of cross-sectoral mechanisms and platform on DRFI, partnership with the private sectors should also be explored.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

c. (Sub-)Regional Indicator 3: Institutional mechanism in place to monitor risk reduction status and progress at (sub-)regional level.

Institutionalising monitoring and review of DRR efforts at (sub-)regional and national levels provides countries and regional organizations with a regular feedback loop, and in reviewing progress and challenges informs planning and programming for enhanced risk reduction.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- **4 – Substantial achievement attained but with recognized limitations in capacities and resources**
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 6 may be determined by assessing, for example, the extent to which national and (sub-)regional reviews are systematized, truly multi-stakeholder and the outputs of which feed into national development and public investment planning.

Means of verification (*Please check the box and upload relevant documentation*)

X Monitoring, evaluation and reporting framework / systems

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

The ACDM and its Working Groups, supported by the Disaster Management and Humanitarian Assistance of ASEAN Secretariat, are a means of monitoring the progress of DRR implementation at the regional level through the use of HFA Monitor. The ACDM is the regional body that endorses and oversees the implementation of DRR initiatives in the region.

The AADMER Work Programme 2010-2015 as a regional action plan for DRR, serves both as a roadmap for the implementation of the AADMER as well as a mechanism for stakeholders and member nations to provide feedback on the progress and impact of AADMER in reducing disaster losses and building resiliency in the sub-region. A review on the progress of the Parties and the sub-region in implementing the Agreement will be conducted after every phase..

The ASEAN Secretariat is currently in the process of establishing the M&E framework and system for AADMER Work Programme. When completed, ASEAN Secretariat, as secretariat of the Conference of the Parties, will function as the M&E arm for the AADMER Work Programme at the programmatic level.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Duplication in terms of monitoring and reporting has to be avoided in order not to burden the Member States as both the implementation of HFA and AADMER will require a monitoring and reporting system. A thorough study has to be done in order to make sure that the M&E system will be useful and effective as a feedback mechanism to improve both the planning and implementation processes and make DRR projects more effective on the ground, not merely as a compliance due to institutional commitment.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

d. (Sub-)Regional Indicator 4: (Sub-)regional training / capacity building programmes / institutions exist to support capacity building for DRR at national / regional levels.

An investment of time and resources in systematically evaluating and subsequently improving (sub-)regional and national disaster risk reduction capacities and mechanisms ensures (sub-) regional organisations and States can more effectively address risk in a proactive manner, have a substantially greater state of readiness for managing disaster impacts, as well as improving response measures.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- X 4 – Substantial achievement attained but with recognized limitations in capacities and resources**
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 4 may be determined by assessing, for example, the extent to which existing mechanisms for managing disaster risk have or are being reviewed, gaps analysed and capacity development measures have or are being developed and implemented.

Means of verification *(Please check the box and upload relevant documentation)*

- (Sub-)regional disaster DRR capacity building projects and programs
- (Sub-)regional institutions for DRR capacity building / training
- Educational and training materials for DRR developed
- Educational and training materials for DRR are standardised in the (sub-)region.

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

Since one of the main objectives of the AADMER Work Programme 2010-2015 is to enhance the “technical and institutional capacities of Member States through the provision of capacity development and training programmes on disaster management and emergency response,” Training and Knowledge Management (KM) have been identified as among the building blocks of the AADMER. The overall thrust of this cross-cutting element of training and knowledge management is to “strengthen disaster preparedness for effective response at all levels, enhance the technical capacities of Member States in disaster risk reduction, identify gaps in the capacities of each Member States to implement AADMER, and fill these gaps through the support of other Member States and partners.

Several training programmes and initiatives were identified across the different components on the AADMER Work Programme 2010-2015. Among the main achievements of the sub-region in this component are the following:

- ASEAN Training Course on Urban Disaster Risk Reduction and Climate Change Adaptation held in March 2012 in the Philippines
- AADMER Leadership Course held in November 2012 in Thailand
- ERAT Training Courses held several times from 2010 to 2012 in Singapore
- Regional Training and Knowledge Needs Assessment Workshop for AADMER held on 28-29 September 2011 in Jakarta, Indonesia, to clarify, validate, and refine the results of the training and KM survey to serve as a practical basis for planning a training programme and a KM system for AADMER.
- Mapping of Disaster Training Institutions was conducted from August to September 2012.
- Training modules on community-based disaster risk reduction and management have been developed and ready for implementation.

Activities on the pipeline, on the other hand, are the (1) establishment of an ASEAN Network of Disaster Management Training Institutions (DMTI); (2) carrying out a technical study on Certification system on DRR trainings; (3) Conference on DMER Training Certification; and (4) the formation of AADMER trainers’ pool intended to be conducted in 2013.

Currently, the sub-region does not have an official institution for DRR capacity building/training, however, provisions in the AADMER support partnerships and facilitation of the exchange of innovative training methodologies and approaches among DRR training institutions.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

The Regional Training and Knowledge Needs Assessment Workshop for AADMER was recently conducted and the results for the training and KM survey are still being validated and refined. Training needs will then be more comprehensively addressed with the development of new training modules that will complement existing ones.

A study on the training certification system and the formation of AADMER’s training pool will be crucial to gear up the development of a comprehensive training programme on disaster risk management in ASEAN as well as the possibility of accreditation of training institutes and/or training courses in the region.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SUBSECTION 2.2: HFA PRIORITY FOR ACTION 2 / EQUIVALENT (SUB-)REGIONAL PRIORITY

HFA PRIORITY FOR ACTION 2: DEFINITION AND SIGNIFICANCE

Identify, assess and monitor disaster risks and enhance early warning

The starting point for reducing disaster risk and for promoting a culture of disaster resilience lies in the knowledge of the hazards and the physical, social, economic and environmental vulnerabilities to disasters that most societies face, and of the ways in which hazards and vulnerabilities are changing in the short and long term, followed by action taken on the basis of that knowledge.

As per the areas outlined in the HFA, Priority for Action 2, this subsection has two ‘(sub-)regional indicators’ against which progress and challenges in implementation can be monitored / reviewed:

1. Institutional mechanism and procedures are in place to carry out trans-boundary risk assessments
2. (Sub-)regional early warning systems exist

e. (Sub-)Regional Indicator 5: Institutional mechanism and procedures are in place to carry out trans-boundary risk assessments.

(Sub-)regional risk assessments allow national and regional decision-makers to understand the (sub-) region’s exposure to various hazards and its social, economic, environmental and physical vulnerabilities. (Sub-)regional risk assessments allow countries and the relevant regional organisations to take effective action to reduce disaster and environmental risks.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- **4 – Substantial achievement attained but with recognized limitations in capacities and resources**
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 3 may be determined by assessing, for example, the extent to which a standardised risk assessment methodology is being adapted and endorsed by (sub-)regional institutions and national governments and applied as an integral part of the development planning process. Are disaster risk databases developed and updated regularly by (sub-)regional and national authorities?

Means of verification *(Please check the box and upload relevant documentation)*

- X (Sub-)regional hazard, vulnerability or risk atlas
- X (Sub-)regional risk information system

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

One of the strategic components of AADMER Work Programme 2010-2015 is Risk Assessment, Early Warning, and Monitoring. This component aims to reduce loss of life and damage to property from natural and human-induced disasters through the identification of hazards and risks prior to impacts and by increasing warning time. The activities under this component (and sub-components) outlined in the Work Programme will allow for improved regional assessment and early warning activities with a focus on cross-boundary issues that require inter-country collaboration, thereby providing regional benefits, more inclusive disaster planning and mitigation efforts as well as targeted response and recovery activities.

The AHA Centre’s **Disaster Monitoring and Response System (DMRS)**, a GIS-based Disaster information-sharing platform for near-time monitoring of hazards, both national and transboundary hazards, provides essential information to Member States about different the status of hazards in the region.

Currently, the AHA Centre as the operational engine of the AADMER is developing a **Satellite-based Disaster Monitoring System** though the ICT project. This system is expected to help Member States to analyse hazards or impending risks as well as impacts of disasters through satellite-based data and make informed decisions.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Although there were several achievements in the sub-region in the aspect of hazard assessment and monitoring as identified above, existing issues on data sharing between Member States and AHA Centre as well as issues on terminology exist. These issues complicate the full development of the systems and hinder the significant use of the information by the Member States.

At the same time, technical capacities in risk assessment among Member States are still limited. Strengthening disaster risk assessment capacities in the region is essential for effective disaster risk management at both national and sub-regional levels. With this, risk assessment trainings and as well as exploring various tools for risk assessment and collaborating with the scientific and research community may be essential steps in the future to build capacities on risk assessment in the sub-region.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

f. (Sub-)Regional Indicator 6: (Sub-)regional early warning systems exist.

Assessing capacity of the four elements of early warning (risk knowledge, monitoring and warning services, dissemination and communication, and response capabilities) is essential to empowering individuals, communities and nations threatened by hazards to act in sufficient time and in an appropriate manner so as to reduce the possibility of personal injury, loss of life, damage to property and the environment, and loss of livelihoods.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy

- 2 – Some progress, but without systematic policy and/or institutional commitment
- X 3 – **Institutional commitment attained, but achievements are neither comprehensive nor substantial**
- 4 – Substantial achievement attained but with recognized limitations in capacities and resources
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 4 may be determined by assessing, for example, the extent to which early warning systems are in place for all major hazards, with outreach to countries and communities.

Means of verification (Please check the box and upload relevant documentation)

- Protocol for dissemination of early warning information
- X Early warning systems for DRR enhanced at the community and national levels

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level, and describe the purpose for which the early warning system exists.

Currently, AHA Centre still has no early warning system. Early warning system is presently within the realm and responsibility of Member States of ASEAN. However, this said, there are Member States that are tsunami prone that are member of the Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES).

At the national level, all Member States have their respective national forecasting and early warning systems for different hazards such as typhoon, extreme weather events, flood, volcanic eruption, tsunami, etc. That are ably handled by their respective national early warning agencies. Community level early warning systems vary widely and depends on cultural and social traditions and practices.

In the future, ASEAN may have two potential systems that can be used for forecasting or early warning. One of this is the **Disaster Monitoring and Response System (DMRS)**, a GIS-based Disaster information-sharing platform for early warning. The system allows the Centre to monitor and geographically detect essential information on hazardous events or risks in the region allowing the Member States to make informed decisions. Another is the **Satellite-based Disaster Monitoring System** currently being developed by the AHA Centre though the ICT project. This system is expected to help Member States to analyse hazards or impending risks as well as impacts of disasters through satellite-based data.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SUBSECTION 2.3: HFA PRIORITY FOR ACTION 3 / EQUIVALENT (SUB-)REGIONAL PRIORITY

HFA PRIORITY FOR ACTION 3: DEFINITION AND SIGNIFICANCE

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

Disasters can be substantially reduced if people and institutions are well informed and motivated by a culture of disaster prevention and resilience. This requires the collection, compilation and dissemination of relevant knowledge and information on hazards, vulnerabilities, actual losses and capacities.

As per the areas outlined in the HFA, Priority for Action 3, this subsection has three '(sub-)regional indicators' against which progress and challenges in implementation can be monitored / reviewed:

1. (Sub-)regional information and knowledge sharing mechanism available
2. (Sub-)regional research institutions for disaster risk reduction exist

g. (Sub-)Regional Indicator 7: (Sub-)regional information and knowledge sharing mechanism available.

Information on disaster risks and protection options, especially to citizens, local, national and (sub-) regional authorities in high risk areas, should be easily available and understandable to enable appropriate actions to be taken to reduce risk, and build resilience.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- X4 – Substantial achievement attained but with recognized limitations in capacities and resources
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 5 may be determined by assessing, for example, the extent to which (sub-)regional and national information management systems for disaster risk reduction are in place and accessible along with adequate data on disaster loss, impacts and events available to relevant stakeholders.

Means of verification (*Please check the box and upload relevant documentation*)

- X (Sub-)regional web site
- X (Sub-)regional community of practice / network
- X Local to (sub-)regional knowledge sharing on DRR supported
- X (Sub-)regional public awareness strategy

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

Along with Training, Knowledge Management is one of the strategic components and flagship projects of the AADMER Work Programme 2010-2015. The knowledge management component particularly refers to the identification and collection of information, knowledge sharing and enabling the Member States as end users to in making their informed decisions on DRM.

In this regard, AHA Centre as the operational arm of AADMER is in the process of becoming the regional repository of online knowledge and information through the AHA Centre website <http://www.ahacentre.org/>. The website provides both dynamic and static information on various types of hazards, gives alerts and updates on ongoing hazards and disasters. The ASEAN DRR Portal will also be integrated into the AHA Centre website in the future.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

As stipulated in the AADMER Work Programme, knowledge management programmes and activities in the sub-region will be facilitated by the AHA Centre. However, AHA Centre is relatively new and thus is still in the process of setting up and developing most of the systems under its mandate.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

| |
|---------|
| Upload. |
|---------|

Add Related Link.

| |
|-----------|
| Add link. |
|-----------|

h. (Sub-)Regional Indicator 8: (Sub-)regional research institutions for disaster risk reduction exist.

Authorities at the national and regional level have a key role to play in strengthening technical and scientific capabilities for research into multi-hazard risk, underlying drivers of risk and the development and application of methodologies, studies and models to assess and address vulnerabilities and impacts of hazards.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- 4 – Substantial achievement attained but with recognized limitations in capacities and resources
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

Means of verification *(Please check the box and upload relevant documentation)*

- X Research programmes and projects
- X Coordination and collaboration of data gathering and research of DRR stakeholders
- X (Sub-)regional disaster risk reduction centre / centre of excellence

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

The ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre) as the operational engine of the AADMER, is mandated to facilitate data sharing and information exchange and as stipulated in the AADMER. Currently, the establishment of a regional disaster database is being worked on and data gathering and sharing system will be in place to benefit all Member States.

When fully developed, systems in place within the AHA Centre are expected to provide risk analyses and disaster information for both trans-boundary and local risks in Southeast Asia.

There are also two specialized centres in ASEAN: ASEAN Earthquake Information Centre and ASEAN Specialised Meteorological Center, which systematically collect data, analyse, and disseminate the same to ASEAN countries.

The ASEAN regional risk assessment strategy also promotes collaboration with the academic and research community. For instance, national academic and research institutions are collaborating with one another to conduct research such as the ASEAN earthquake modelling project, which involves Nanyang Technological University (Singapore), BMKG (Indonesia) and Phivolcs (Philippines) hand-in-hand with the ASEAN Committee on Disaster Management, ASEAN Secretariat and AHA Centre. AHA Centre in collaboration with JICA has also conducted research on the state of flood risk assessment in the region and has come out with a flood risk assessment guideline.

In the field of risk financing and insurance, the ASEAN Secretariat collaborated with the WB-GFDRR to look into options to deal with the financial impacts of disasters on governments and stakeholders. Two publications came out of this collaboration: ASEAN Strategy on Disaster Risk Financing and Insurance published by ASEAN-UNISDR and Advancing Disaster Risk Financing and Insurance in ASEAN Countries: Framework and Options for Implementation by the World Bank.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Resource constraints hinder collaborative research programmes and projects since most funding agencies prefer to get immediate results and outputs that are highly visible. Setting up centres of excellence also require long-term commitment and funding.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SUBSECTION 2.4: HFA PRIORITY FOR ACTION 4 / EQUIVALENT (SUB-)REGIONAL PRIORITY

HFA PRIORITY FOR ACTION 4: DEFINITION AND SIGNIFICANCE

Reduce the underlying risk factors

Disaster risks related to changing social, economic, environmental conditions and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change, are addressed in sector development planning and programmes as well as in post-disaster situations.

As per the areas outlined in the HFA, Priority for Action 4, this subsection has two '(sub-)regional indicators' against which progress and challenges in implementation can be monitored / reviewed:

1. DRR is an integral objective of (sub-)regional policies and plans
2. (Sub-)regional infrastructure projects (for example, cross border transport networks, dams) have processes to assess disaster risk impacts.

i. (Sub-)Regional Indicator 9: **DRR is an integral objective of (sub-)regional policies and plans.**

National governments and (sub-)regional organisations are unable to maximise the return on public investment without a comprehensive risk management approach. Strategies that anticipate current and future multi-hazard risk should be at the core of every sectoral investment plan, ideally as part of a whole of society risk management strategy.

- The scope of *environment* risk management policies can have major impacts on disaster risk reduction, and should explicitly incorporate risk reduction goals and strategies. When environmental and natural resource policies specifically incorporate disaster risk reduction elements, they can help reduce underlying risk factors.
- The existence and implementation of policies for *social welfare and the provision of basic services*, for example to address issues of food security, public health, risk sharing mechanisms, protection of critical public infrastructure, will address underlying risk factors and reduce the vulnerability of impoverished groups.
- Focusing on the protection of a state's most vulnerable *economic activities and productive sectors* is an efficient strategy to help reduce the overall impacts of disasters.
- Including disaster risk reduction elements in *land-use plans* is an important strategy for reducing the vulnerability of communities to hazards. Land use planning that is carefully designed and rigorously implemented is a useful approach to managing *expanding human settlements* and minimizing associated risks.
- It is essential to consider disaster risk reduction principles when designing *post-disaster recovery and rehabilitation* processes in order to 'build back better' and not recreate risk. There is an identified need for the national and local implementation of international post-disaster recovery and reconstruction norms and standards.
- It is crucial to institutionalise procedures to integrate disaster risk reduction measures into *national sustainable development strategies, plans and programmes* in key areas such as poverty reduction, housing, water, sanitation, energy, health, agriculture, infrastructure and environment to ensure that development does not create further disasters.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- **4 – Substantial achievement attained but with recognized limitations in capacities and resources**
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 8 may be determined by assessing, for example, the extent to which disaster risk reduction is an integral component of policies, plans and programmes for environmental protection and natural resource management, climate change adaptation, social welfare and the provision of basic services, agriculture, economic productivity and output and the protection of existing economic assets, infrastructure, land use planning, public-private-partnerships; as well as within post-disaster recovery and rehabilitation processes.

Means of verification (*Please check the box and upload relevant documentation*)

- X In (sub-)regional environment policy / plan
- X In (sub-)regional climate change adaptation policy / plan
- X In (sub-)regional agricultural policy / plan
- In (sub-)regional infrastructure policy / plan
- X In (sub-)regional public-private-partnerships
- X In other (sub-)regional policies / plans (*please list*)
- X Countries in the (sub-)region have integrated DRR in national legislation, regulation, policies and programmes.

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

At the ASEAN level, many sectors include disaster risk reduction as an integral part of their plans and programmes. These sectors in ASEAN include rural development which promotes micro-insurance for small farmers, agricultural programmes which integrate climate risks, environment which works on climate change initiatives, finance and insurance which work hand-in-glove with the disaster management sector on risk financing and insurance, science and technology which also deals with early warning systems, education which promotes the integration of disaster risk reduction in school curricula, and others.

In June 2012, the ASEAN Cross-Sectoral Coordination and Multi-Stakeholder Consultation Workshop was held at the ASEAN Secretariat and other sectors such as those mentioned above in the ASEAN that have initiatives related to or contributing to AADMER were invited and possible collaboration on DRM-related initiatives were discussed. As a good venue for collaboration and consultation on DRR work in the sub-region, this cross-sectoral workshop was decided to be regularly conducted by the ACDM Chair and ASEC as part of the ACDM or COP events.

At the national level, the AADMER Work Programme has identified the development of regional guidelines on mainstreaming DRR in national and sectoral development plans as an important action. This in particular will help the Member States in integrating disaster risk reduction elements in national development planning processes and functions as a part of the national and regional

development and risk management strategy.

Currently, most of the Member States of the ASEAN have already substantially integrated DRR concerns in their respective national development plans as well as in some related sectoral development plans. Seven (7) out of the ten (10) member states have also developed legal frameworks and institutional arrangements to enable them to manage and reduce risks.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Although there are concrete efforts in incorporating DRR to development policies and plans both in the national and sub-regional level, actual implementation is weak due to the limited capacities (technical and financial) on DRR.

There is also a need to coordinate and harmonize each sectors' efforts for a more efficient and effect DRR in the sub-region.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

j. (Sub-)Regional Indicator 10: (Sub-)regional infrastructure projects have processes to assess disaster risk impacts.

To maximize the sustainability of (sub-)regional infrastructure projects, as well as to minimize potential negative impact that such projects can have on disaster risk for affected populations, business lines in the implementation zone, an inclusive process of disaster risk assessment is required as part of a comprehensive disaster risk reduction strategy. This may include strengthening institutional capacities of implementing line ministries to incorporate disaster risks in development planning and collection of disaster risk data under a technical assistance programme.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- **3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial**
- 4 – Substantial achievement attained but with recognized limitations in capacities and resources
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 9 may be determined by assessing, for example, the extent to which current and probabilistic multi-hazard risk assessment are systematised in both the design and the impact assessment of (sub-)regional infrastructure programmes and initiatives (for example, cross border transport network, dams).

Means of verification *(Please check the box and upload relevant documentation)*

- Standards and procedures for disaster risk impact assessment

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

Although there were numerous different initiatives on multi-hazard risk assessment and infrastructure at the national level, there has been no concrete and systematised multi-hazard risk assessment initiative conducted in the whole ASEAN regional level so far. However, some hazard risk assessment initiatives and hazard mitigation infrastructure projects in some sub-regions of the ASEAN are common. An example of this is the ADB-funded Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project which was initiated by Viet Nam but benefitted other countries in the like Lower Mekong Basin like Cambodia and Lao PDR.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Please use additional space if required.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.



Additional Related Documents.

Upload.

Add Related Link.

Add link.

SUBSECTION 2.5: HFA PRIORITY FOR ACTION 5 / EQUIVALENT (SUB-)REGIONAL PRIORITY

HFA PRIORITY FOR ACTION 5: DEFINITION AND SIGNIFICANCE

Strengthen disaster preparedness for effective response at all levels

At times of disaster, impacts and losses can be substantially reduced if authorities, individuals and communities in hazard-prone areas are well prepared and ready to act and are equipped with the knowledge and capacities for effective disaster management.

As per the areas outlined in the HFA, Priority for Action 5, this subsection has five '(sub-)regional indicators' against which progress and challenges in implementation can be monitored / reviewed:

1. (Sub-)regional response mechanism in place to address disaster preparedness, emergency relief and rehabilitation issues across borders.
2. (Sub-)regional contingency mechanism exists to support countries in post disaster recovery.
3. (Sub-)regional catastrophe risk pooling¹ facility available.
4. (Sub-)regional information exchange mechanism in place for effective communication during trans- boundary disasters.

k. (Sub-)Regional Indicator 11: (Sub-)Regional response mechanism in place to address disaster preparedness, emergency relief and rehabilitation issues across borders.

Trans-boundary relief, rehabilitation and recovery efforts can be severely impaired without well coordinated (sub-)regional disaster preparedness and response mechanisms and planning systems informed by the lessons learned from previous disasters. So that underlying trans-boundary risk factors are not overlooked, disaster risk reduction actions should be incorporated in the design and implementation of planning for disaster preparedness, relief and rehabilitation.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- **4 – Substantial achievement attained but with recognized limitations in capacities and resources**
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 11 may be determined by assessing, for example, the extent to which (sub-)regional institutions, mechanisms and procedures for trans-boundary

¹ A risk pool is one of the forms of risk management most commonly practiced by insurance companies to finance liabilities and provide protection against catastrophic risk. **Inter-governmental risk pools** (IRPs) operate under the same general principle, providing alternative risk financing and transfer mechanisms to their members, through which particular types of risk are underwritten with contributions (premiums), and with losses and expenses shared in agreed ratios. In other words, Intergovernmental Risk Pools are a cooperative group of governmental entities joining together to finance an exposure, liability or risk.

disaster risk management exist and operate effectively before, during and immediately after a regional disaster event.

Means of verification (*Please check the box and upload relevant documentation*)

- X (Sub-)regional coordinating body for disaster management
 X (Sub-)regional response plan
 X Trans-boundary preparedness, response and rehabilitation protocols developed and implemented in priority sectors (*please list*)

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

The AHA Centre's division for preparedness and response is now operational. AHA Centre as the operational and coordinating entity for disaster response was mobilised twice recently in response to the Myanmar earthquake last October 2012 and Typhoon Bopha in southern Philippines.

In terms of response protocol, ASEAN has developed SASOP and AHA Centre is the designated authority to update and administer stand-by arrangements, facilitate and administer the ASEAN Emergency stockpile, as well as maintain the ASEAN-ERAT roster and deploy the team when needed. One of the disaster response mechanisms and planning systems used in the ASEAN region is the Standard Operating Procedure for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations (SASOP). Developed and established through the AADMER, the SASOP calls on Parties, on a voluntary basis, to identify and earmark assets and capacities which may be made available and mobilised for disaster relief and emergency response" in the region. SASOP specifically provides guidance to the actions of Parties and the AHA Centre in implementing the regional standby arrangements for disaster relief and emergency response, the use of military and civilian personnel, facilities and goods as well as the the facilitation of their trans-boundary movement.

Another emergency response tool under the AADMER is the ASEAN Emergency Rapid Assessment Team (ASEAN-ERAT). The primary objective of the ASEAN-ERAT is to gather and analyse assessment finding through field missions and consultations with significant government officials and other authorities, as well as to provide recommendations on support for the Government experiencing the disaster.

The ASEAN Regional Disaster Emergency Response Simulation Exercise (ARDEX) is also a mechanism to support preparedness and response component of the AADMER. This exercise which is conducted annually aims to enhance Member Countries' capacities in joint disaster relief and emergency operations. The lessons learnt from the exercises serve as inputs for review and enhancement of the ASEAN SASOP.

Another AADMER tool for emergency response is the ASEAN regional emergency stockpile (Emergency Logistic System), located in Subang, Malaysia. The ASEAN stockpile was formally inaugurated in November 2012 during the first year anniversary of AHA Centre and went into full operation to respond to the needs of several provinces in Myanmar that was stuck by a magnitude-6.8 earthquake in November as well as those in Mindanao, Philippines that were affected by Typhoon Bopha.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Despite the establishment of relatively successful mechanisms and systems for emergency preparedness and response in the region (i.e. SASOP, ASEAN-ERAT, ARDEX and the ASEAN Emergency Stockpile System), there is still a need to review and update each mechanisms based on lessons learnt from different disaster response operation experienced in the region. More assets should also be earmarked to beef up the systems.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

I. (Sub-)Regional Indicator 12: (Sub-)regional contingency mechanism exists to support countries in post disaster recovery.

It is important for (sub-)regional organizations and national governments to commit resources for early recovery programmes, including quick assessment of damage, needs and capacities, restoration of critical infrastructure and livelihoods, following major disaster events so as to support the resilience of affected communities, until long term reconstruction of assets takes place.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- **2 – Some progress, but without systematic policy and/or institutional commitment**
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- 4 – Substantial achievement attained but with recognized limitations in capacities and resources
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

The level of progress for (sub-)regional indicator 12 may be determined by assessing, for example, the extent to which (sub-)regional DRR coordinating entities have been successful in engineering

multi-country intra-regional contingency capabilities for support to ex post recovery including financing.

Means of verification *(Please check the box and upload relevant documentation)*

(Sub-)regional contingency plan for support to post disaster recovery

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

Currently, the ASEAN region has a multi-trust fund called the **ASEAN Disaster Management and Emergency Relief Fund (ADMER Fund)** which is stipulated in the AADMER. The ADMER Fund which is pooled from the Member States, dialogue partners and donors on voluntary basis aims to support the AADMER Work Programme, the ERAT and other emergency activities.

In March 2012, the COP-1 approved the ADMER Fund with 40% allocation for preparedness and response including ERAT deployment. A discretionary authority for the AHA Executive Director to use 10,000 USD per emergency incident was also approved.

Although there is no concrete fund earmarked for post disaster recovery, the ADMER fund however finance the Emergency Rapid Assessment Team missions which provide recommendations on support to the Government that has experienced disaster.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Although resource mobilisation initiatives within the AADMER Work Programme are geared to support all components of the Work Programme, there is a need to earmark more resources to preparedness and response including recovery particularly for those areas heavily damaged by disasters.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

m. (Sub-)Regional Indicator 13: (Sub-)regional catastrophe risk pooling facility available.

Individuals, local and national governments can absorb only a finite proportion of losses incurred by disaster events. Risk pooling is often a practice pursued to provide alternative risk financing and transfer mechanisms, and is one of the forms of risk management most commonly practiced by insurance companies to finance liabilities and provide protection against catastrophic risk. The ability to quickly provide financial liquidity when a policy is triggered, particularly in high risk (sub-) regions, is of great support to national governments. Many national governments do not have the resources to provide sustainable risk transfer options alone, and so inter-governmental risk pools have been created through which particular types of risk are underwritten with contributions (premiums), and with losses and expenses shared in agreed ratios. Inter-governmental risk pools, such as the Caribbean Catastrophic Risk Insurance Facility, are a cooperative group of entities joining together to finance an exposure, liability or risk.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- **3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial**
- 4 – Substantial achievement attained but with recognized limitations in capacities and resources
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

Means of verification *(Please check the box and upload relevant documentation)*

- (Sub-)regional catastrophic risk pooling facility established
- X DRR capacity of national and (sub-)regional insurance entities, and financial institutions enhanced

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

In November 2011, the ASEAN Member States came up with a regional disaster risk financing and insurance strategy or road map as part of a comprehensive disaster risk management strategy at both regional and national levels. As a follow up to the development of the road map, the establishment of the ASEAN Cross-Sectoral Mechanism for Disaster Risk Financing and Insurance is currently being discussed through the collaborative efforts of three ASEAN sectoral bodies: ASEAN Finance and Central Bank Deputies Meeting, ASEAN Insurance Regulators Meeting and ASEAN Committee on Disaster Management. Risk pooling is one of the options that will be studied in this regard.

At the national level, country-specific disaster risk financing in some ASEAN Member States do exist such as agriculture insurance, property insurance and flood insurance.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Disaster risk financing and insurance are the least explored options for disaster risk management in the ASEAN region. One reason for this is the nature of risk pooling and insurance which requires the collaboration and cooperation of finance, insurance and disaster management agencies of government, not to mention agriculture, private sector, etc. With this, there is a clear need to capacitate the ASEAN Member States and provide them and understanding of risk assessment, risk modelling and various risk financing schemes, facilities, and experiences within and outside ASEAN.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

n. (Sub-)Regional Indicator 14: (Sub-)regional information exchange mechanism in place for effective communication during trans- boundary disasters.

Emergency preparedness and response, as well as planning for recovery and rehabilitation, should be informed by the lessons learned from previous disasters. Well drilled mechanisms for coordination and communication with clearly defined protocols and procedures, are essential, particularly for trans-boundary disasters, if the international and national response is to minimise losses. Disaster risk reduction actions should be included in planning, design and implementation.

Level of Progress

The levels of progress will enable a self-assessment of the extent to which the policies, programmes and initiatives are sustainable in achieving the indicated risk reduction objectives.

- 1 – Minor progress with few signs of forward action in plans or policy
- 2 – Some progress, but without systematic policy and/or institutional commitment
- 3 – Institutional commitment attained, but achievements are neither comprehensive nor substantial
- X 4 – Substantial achievement attained but with recognized limitations in capacities and resources
- 5 – Comprehensive achievement with sustained commitment and capacities at all levels

Means of verification *(Please check the box and upload relevant documentation)*

X (Sub-)regional emergency communication protocols / plans

Description (300 words max.)

Describe some of the *key contextual reasons* for the ranking / assessment at the indicated level

As an operational coordinating body, the AHA Centre is the communication hub in all humanitarian assistance missions and other emergency communications among the Member States and international players. The establishment of the AHA Centre as a premier provider of information and communication services supporting humanitarian assistance missions and disaster risk reduction principles helps ensure the success of AADMER and support the well-being of the people and communities in the region.

The SASOP which is administered by the AHA Centre also contains protocols on communication among ASEAN Member States and other international players during emergencies.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Context and Constraints (300 words max.)

Highlight key contextual challenges encountered by (sub-)regional authorities and partner agencies; and recommendations on how these can / will be overcome in the future.

Since the AHA Centre is relatively new (establishment signed by the ASEAN Ministers in November 2011), it is still currently setting up and developing most of the systems under its mandate.

Optional

The priorities, outcomes, indicators of (sub-)regional frameworks may also be used to complement assessment and ranking. Please specify, and where possible map against the HFA Priorities for Action.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SECTION 3: SYNTHESIS OF NATIONAL PROGRESS IN THE (SUB-)REGION

SUBSECTION 3.1: HFA PRIORITY FOR ACTION 1

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

Summary (from the National HFA Monitor)

Highlight some of the key features of national HFA progress reporting in the (sub-)region.

Substantial progress among the ten (10) Member States of the ASEAN with regards the strengthening of their institutional basis for disaster risk reduction was achieved in the last three (3) years despite recognized limitations in capacities and resources.

Recognising disaster risk reduction as a national priority for development is common in all the countries in the sub-region. However, the status of implementation, capacity and resources available in each country vary according to the political processes and socio-economic context of each country.

Legal instruments, strategies and documents which laid the basis for the shift towards a more proactive approach in disaster management across the sub-region were developed in the last few years in all countries despite varying levels and degree. National DRR bodies (National Disaster Management Offices or NDMOs) and local counterparts have also been established in all the Member States which aim to implement DRR efforts across sectors and levels of government.

Description

Summary of national achievements in the above Priority area.

In **Cambodia**, the National Committee for Disaster Management (NCDM), established in 1995 through a Royal Decree, is responsible for the overall disaster management coordination in the country. Since 2001, the agency has been leading other line ministries in the country in the drafting of a National Emergency Management Policy (NEMC) and a National Disaster Management Bill (NDMB). Expected to be completed and approved late this year (**Need update if the bill was passed later this year**), the draft legal instruments will provide for the strengthening of disaster mechanisms in the country and the enhancement of the NCDM's scope of work and authority from the national down to the district levels.

Along with pushing for the development of national disaster management policies in the country, another significant development in disaster management in Cambodia is the integration of disaster management to the Strategic National Development Plan 2009-2013. Further, the Royal Government of Cambodia has also developed a Strategic National Action Plan for Disaster Risk Reduction (SNAPDRR) 2008-2013 which guides the country in the implementation of the Hyogo Framework for Action.

In **Indonesia**, disaster management continue to be a key priority as identified it is National Middle-term Development Plan 2010-2014. General achievements and progress in disaster management in the country were made possible with the enactment of the National Disaster Management Plan (NDMP) 2010-2014, the National Action Plan for Disaster Risk Reduction (NAP-DRR) 2010-2012, as

well as the national law on disaster management (Law of the Republic of Indonesia number 24 of 2007) and other related rules and regulations. Currently, institutional efforts on DRM are relatively concentrated on the strengthening of environmental regulations at the provincial and district/city levels to promote decentralised risk governance and capacity building. The National Agency for Disaster Management (BNPB) does not have a hierarchical authority over Local DM Agencies (BPBDs), but it supports BPBDs through provision of facilities and infrastructures as well as technical assistance in many aspects of DM and DRR.

Like many other countries in Southeast Asia, significant progress in the institutional aspect of DRM has also been happening in **Lao PDR**. In October 2011, the Lao PDR Government reformed the National Disaster Management Committee which was established in 1999 through the landmark Prime Minister Decree 158. The new committee which was renamed Disaster Prevention and Control Committee, emphasizes the engagement of more key agencies in disaster management. A new Prime Minister Decree on Disaster Risk Management has been developed and will be passed to the Government for approval by the end of 2012 (**need update on this**). Along with this, disaster risk reduction framework and plans were developed both at the national and local levels (National Disaster Risk Management Plan 2011-2015, Provincial Disaster Management Action plan for Saravann, Sekong and Attapeu). Disaster risk reduction has also been integrated into the current 7th National Social Economic Development Plan 2011-2015 as well as in the Annual NSEDP 2012-2013. Strategy note and Guidelines for mainstreaming DRR into public investment planning has been being developed. In addition, the Urban Planning law which is currently being revised is expected to incorporate disaster risk reduction.

In **Malaysia**, the Directive No. 20 on “Policy and Mechanism on National Disaster and Relief Management” issued in May 1997 outlines the policy on disaster and relief management in the country. It is also the same legislation which identifies the National Security Council of the Prime Minister’s Department to lead the disaster coordinates activities that are implemented by the Disaster Management and Relief Committee at the national level.

Currently, the Malaysian government is exploring the formulation of a comprehensive national legislation for disaster management, which is expected to significantly emphasise disaster risk reduction in the country. However, while this is ongoing, disaster risk management continue to be integrated in different national policies and other development initiatives. The country’s primary development plan (Five Year Malaysia Plan) contributes to DRR by reducing underlying risk factors and promoting sustainable development. Poverty reduction is also implemented as part of DRR strategy through explicit policies and programmes that are in line with the MDG target. The National Policy on Climate change which was approved in 2009 also identifies several actions for mainstreaming climate resilient development into different levels of government to address disaster risk reduction directly and indirectly. The “Melaka Declaration on DRR in Malaysia 2011” which was adopted during the Disaster Awareness Day 2011, calls upon national, state and local stakeholders to advocate lead and champion actions on national mechanism for disaster management, role of local authorities for DRR, mainstreaming of DRR in education and keeping schools and hospitals safe from disasters.

Malaysia is also in the process of establishing a national platform on DRR which is expected to gradually advance and coordinate efforts by different stakeholders at all levels to systematically reduce the risks and impacts of disasters faced the country while facilitating sustainable development.

In **Myanmar**, several developments on disaster risk management have taken place in the last few years. In April 2011, the National Disaster Preparedness Central Committee (NDPCC) was reconstituted as Myanmar Disaster Preparedness Agency (MPDA). The MPDA which is chaired by the Union Minister for Social Welfare, Relief and Resettlement, is the highest body for disaster risk management in the country. It is composed of 14 sub-committees with specific roles and responsibilities for different themes of Disaster Risk Management. Along with this the Disaster Management Bill has been prepared by the Ministry of Social Welfare, Relief and Resettlement and is currently being reviewed in the Parliament Session. Responding to the changing context, the Myanmar Action Plan on Disaster Risk Reduction (MAPDRR) was also updated and endorsed by the government in June 2012. The National Planning Law 2012-2013 also indirectly incorporates disaster risk reduction elements in the projects and programs identified in different sectoral plans.

In the **Philippines**, the enactment of the National Disaster Risk Reduction and Management Law (NDRRM Law) (Republic Act 10121) in 2010 and the Climate Change Act (Republic Act 9729) in 2009 laid the legal basis for the shift to a more proactive approach in disaster management in the country. These laws have also laid the bases for the enactment of related DRR laws and for making other institutional achievements on disaster risk reduction possible in the country. Stipulated under the NDRRM Law (RA 10121), the National Disaster Risk Reduction and Management Plan (NDRRMP) 2011-2028 was developed and launched in 2012. The People's Survival Fund (Republic Act 10174) of 2012 serves as an amendment to the Climate Change Law (RA 9729) and provides long term finance streams to enable the government to effectively address the problem of climate change in the country. The implementing rules and regulation for this law is currently being drafted.

In 2011, the Climate Change Commission (created by the Climate Change Act) and the National Disaster Risk Reduction Management Council (established through the NDRRM Law) signed a memorandum of understanding to promote knowledge management jointly and develop local action plans.

Disaster risk reduction has been incorporated into the Philippine Development Plan (PDP) 2011-2016 and the Regional Development Plans (RDPs) 2011-2016. However, it should be noted that multi-stakeholder consultations were conducted by the National Economic Development Authority (NEDA) in 2012 to revise the PDP in mid-2013 particularly to enhance its DRR and CCA content and to include the results to the Public Investment Program (PIP).

In the past five years in **Viet Nam**, a number of important legal documents, strategies, and plans addressing DRR and climate change adaptation (CCA) have been promulgated. These include the development of the National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 (2007) and accompanying Action Plan, the National Target Program to Respond to Climate Change (2007) [NTP-RCC], and the National Climate Change Strategy of 2011. All of which brought a major policy shift in the country towards a DRR approach. Further, efforts to integrate DRR into development processes were not only conducted across sectors but also from the national down to the local provincial and ministerial level.

Other legal documents and strategies that enhanced the institutional achievements on DRR in the country are the Decision 1002/2009/QD-TTg on Approving the Plan for Raising Community Awareness and Community-based Disaster Risk Management (2009), the National Strategy for Hydro-Meteorological Sector Development to 2020 (Decision 929/QD-TTg (June, 2010) as well as a number

of other decrees aimed at strengthening the organization and functions of the CCFSC, the VINASARCOM and its branches at ministries and localities (Decree 14/2010/ND-CP; Decision 76/2009/QD-TTg) and the mobilization, receiving, delivery, and management of relief aid (Decree 64/2008/ND-CP, Decree 67/2007/ND-CP (replaced by Decree 13/2010/ND-CP) and Decision 142/2009/QD-TTg).

In addition, the National Committee for Climate Change was established in 2012 in order to bring coherence to the strategic actions in responding to climate change, including CCA/DRR and climate change mitigation.

Currently, the DRM Law of Viet Nam is under development and is expected to be passed by the National Assembly in 2013.

Context and Constraints

Summary some of the *key contextual issues* and *common challenges* encountered by the countries in the (sub-)region.

Despite substantial institutional efforts on disaster risk reduction were achieved at the national or central level with intentions of implementing them across sectors and levels of government, actual cascading of these initiatives at the local and sectoral level has not been easy in most countries in the Southeast Asian sub-region. The key challenge is the varying levels of understanding and appreciation of disaster risk reduction among sectors and localities. This influences the commitment to action of the stakeholders.

Enhancement of capacities on disaster risk management mostly occurred at the national and provincial levels and its implementation in the district/city/village level has yet to be strengthened, both in terms of technical and institutional context. Dissemination and socialization of key DRR policies from the central government have also not been conducted comprehensively and engaging different sectors and stakeholders particularly at the lower levels of government. Mainstreaming of DRR into local development processes and functions needs to be further disseminated and promoted. Distribution of roles and responsibilities between national or central agencies and local agencies or authorities also needs to be clarified and harmonized.

Other key challenges common in the sub-region include the lack of capacity, both in the technical and financial aspects. Since many local disaster agencies across the sub-region are relatively new or still in their infant years, there has been difficulty in maintaining qualified staff members due to local political dynamics, and lack of local resources allocated for DRR.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SUBSECTION 3.2: HFA PRIORITY FOR ACTION 2

Identify, assess and monitor disaster risks and enhance early warning

Summary (from the National HFA Monitor)

Highlight some of the key features of national HFA progress reporting in the (sub-)region.

Most of the countries in the Southeast Asian sub-region have concrete initiatives and efforts in the aspect of identification, assessment, and monitoring of disaster risks as well as in enhancing early warning systems. Often with the support of different partners, risk assessments are generally carried out across the sub-region. However, while some countries have nationwide multi-hazard risk assessment systems, more Member States have hazard-specific risk assessments carried out in a few selected localities or areas only.

Early warning systems with varying levels of sophistication are generally established across the sub-region. Each country's early warning agency or system commonly have tie-ups with other systems or agencies with neighbouring states to address trans-boundary risks.

Description

Summary of national achievements in the above Priority area.

Indonesia relatively has major achievements with respect to identification, assessment and monitoring of disaster risks. With the support of some partners, multi-hazard risk assessments have been carried out by the government in all the provinces in the country while similar efforts have been initiated at the district/city level. Sectoral ministries and agencies have also conducted risk mapping and analysis in line with their specific responsibilities, e.g. the Agency for Meteorology, Climate and Geophysics for meteorological, climate and geophysical hazards, the Geological Agency for volcanic and land mass movement hazards, the Ministry of Public Works for flood hazards, etc. These risk analyses have been enriched with vulnerability and capacity information of the community, as well as index of potential losses.

The country has also established Early Warning Systems (EWS) for all key hazards such as flood, tsunami, extreme weather, extreme waves, volcanic eruption and forest fires. However, only a few of these systems reach the community level.

In **Cambodia**, on the other hand, although some hazard and vulnerability information are available, data were developed, updated, and disseminated separately by individual national authorities and partner agencies to serve for their own purposes. Often, development agencies conduct surveys or assessments to collect relevant information to design and implement development plans and not necessarily directly to use in an actual disaster risk reduction effort. In addition significant challenges and constraint on this practice is that the methods and approaches do not have mechanisms for maintaining, updating, utilisation, as well as dissemination to local end users.

In **Lao PDR**, a National Risk profile and Hazard maps have been created, officially launched and distributed to DM stakeholders. A disaster information management system was also recently completed under the Laos-Australia NGO Cooperation Agreement Programme. A National Risk Profile was also developed with the support of the UNDP. This include the establishment of a web-based

disaster loss data base system (DESINVENTAR) as well as a capacity building of technical staff for gathering and inputting data to the data base

As for early warning, the Department of Meteorology and Hydrology (DMH) of Lao PDR provides daily weather information through mass media television and radio while the NDMO is responsible for further dissemination of the information to DM committees at all local levels. The early warning information consists of weather forecast (rainfalls, storms, Typhoons) and information on water levels along the main river and tributaries. The DMH also works closely with the Mekong River Commission (MRC) for monitoring and forecasting. The DMH manages five (5) stations along the mainstream of the Mekong river within the Laos territory which are used by the MRC for data collection.

Malaysia also has a number of programmes carried out to assess and mitigate risks for disaster hazards. Among these are the Road Platform Rise Up Study by the Public Works Department which identifies and delineates hazard and risk maps for flood prone areas at network and project levels; the Climate Change Risk and Impacts Studies by the Malaysian Meteorological Department and Drainage and Irrigation Department which provides insight on the level of exposure to hydro-meteorological hazards; and the National Slope Master Plan Study, of the Public Works Department, which establishes an inventory of susceptible areas and different types of landslides hazards and risks.

Further, the risk assessment of earthquake and tsunami on Malaysia had been completed and regularly updated to provide input to the response plan. Localised modelling, downscaled from global climate models, has also been carried out by the National Hydraulic Research Institute Malaysia and Malaysian Meteorological Department to project future climate conditions. Results of the modelling provided inputs for assessing potential implications to several key resource and economic sectors in the country. The Drainage and Irrigation Department conducted the National Coastal Vulnerability Index Study in 2007 to assess vulnerability of coastal areas to sea level rise. There are also a number of R&D initiatives on risks assessment funded by the Science-Fund managed by the Ministry of Science, Technology and Innovation covering issues on flood, landslides and earthquakes.

Flood forecasting and early warning system are put in place in Malaysia to disseminate early warning to the public. The Malaysian Meteorological Department is continuously monitoring seismic waves, sea level changes and severe weather events as well as haze and drought situation in the country. Atmospheric models have been applied for Quantitative Precipitation Forecasting to enhance reliability and accuracy of forecast, and run in three river basins of Peninsular Malaysia (Pahang, Kelantan & Johor River basin) to provide real-time flood warning and emergency responses in a convenient lead time. The Drainage and Irrigation Department's "Integrated Atmospheric and Radar Satellite Model-based Rainfall and Flood Forecasting (AMRFF)" for selected main river basins will be able to provide forecasting and flood early warning. The National Tsunami Early Warning System developed by the Malaysian Meteorological Department allows the government to warn the public of the possible occurrence of tsunami over the Indian Ocean, South China Sea or the Pacific Ocean. Early warnings are disseminated through sirens, short messaging system (SMS), telephone, telefax, webpage, mass media broadcasting system and public announcements.

In **Myanmar**, however, although area-wise multi-hazard risk assessments have been conducted, there is no available comprehensive risk assessment information at the national level yet. Most multi-hazard risk assessments (MHRAs) like those conducted in the Nargis-affected area and the Rakhine State in 2010-2011 respectively, were supported by partners like the UNDP. The Earthquake Risk Assessment in Mandalay Region has been conducted in 2012 by Department of Meteorology and

Hydrology (DMH) with the support of the ADPC, Myanmar Geosciences Society (MGS) and Myanmar Engineering Society (MES).

At the local level, community risk assessments and resource mapping have been conducted mostly as part of Community-based Disaster Risk Management (CBDRM) programmes by different organizations in the disaster prone areas.

The Department of Meteorology and Hydrology (DMH) is the focal agency for generating and issuing early warning in Myanmar. An Early Warning System for cyclone, storm surge and floods is already in place. The DMH is linked with Global Meteorological Telecommunication Network, Global Telecommunication System (GTS) for receiving and transmitting the data, information and warning. DMH also collaborates with regional and international agencies, such as World Meteorology Organization (WMO), Regional Specialized Meteorological Centre, New Delhi, Tokyo, Beijing, Pacific Tsunami Warning Centre and RIMES to receive and issue Tsunami early warning for coastal areas. DMH issues weather forecast, bulletin and early warning on cyclone, storm surge, heavy rain and floods and sends information to national administrative authorities, local governments, concerned agencies and departments.

In the Philippines, vulnerability and risk assessments are generally conducted at different levels of government as inputs to their DRR-enhanced comprehensive land use plans and development plans. Apart from these, several project-based vulnerability and risk assessments supported by various partners are also conducted in selected areas in the country. Among these are the disaster risk and vulnerability assessment implemented by NEDA (funded by AusAID) in 50 provinces in the country to generate risk profiles as input to the provincial development physical framework plan (PDPFP).

At the same time, multihazard assessments are being done in selected parts of the country through the CSCAND READY project and the UNDP/AusAid-funded projects. Using the hazard information and maps from this project, vulnerabilities were assessed in 21 municipalities and seven (7) pilot provinces.

The Department of Environment and Natural Resources – Mines and Geo-Sciences bureau (DENR-MGB) has also conducted around 20 province-wide information and dissemination seminars and workshops and provided around 85,000 geohazard maps to LGUs and other stakeholders and national and local disaster management and planning agencies such as Office of Civil Defense, National Economic and Development Authority. Municipal and Barangay-level information dissemination and disaster awareness and preparedness campaigns were also conducted as well technical assistance to proposed relocation sites of natural disaster-affected areas.

In Viet Nam on the other hand, national level risks assessments were carried out for specific hazards. Among these are the risk assessment for floods and drought (MoNRE, MARD); earthquakes and tsunamis (Geophysical Institute); flash floods (MARD, MoNRE), and storms and typhoons (National Centre for Hydro-Meteorological Forecasting).

In 2012, the MARD supported by the UNDP, implemented a nationwide risk assessment to identify 6,000 vulnerable communes for the national programme on CBDRM. Subsequent research led to the development of a multi-hazard risk assessment including different determinants of vulnerability in the community, e.g. storm shocks, rainfall flood and drought as well as other hazards; demographic indicators, assets and living standards indicators. The risk assessment has resulted in various sets of maps, downscaled to the commune level, for hazard potential, coping capacity and hazard exposure.

An integrated risk index has now been developed for all 11,112 communes/wards in the country.

Context and Constraints

Summary some of the *key contextual issues* and *common challenges* encountered by the countries in the (sub-)region.

Although there is a growing appreciation of risk analysis as basis for disaster risk reduction across the sub-region, capacity for risk analysis still remains to be limited and concentrated to specific group of stakeholders and agencies in a country. There is a need to enhance the capacities at the local level in order to have a more detailed and multi and hazard-specific risk analysis at the smallest area or locality as necessary.

Further, even with the availability of risk analysis and early warning systems, the translation of this information into actual disaster risk reduction actions remains to be limited. Capacitating local stakeholders in utilising risk analysis and information is also very crucial.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SUBSECTION 3.2: HFA PRIORITY FOR ACTION 3

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

Summary (from the National HFA Monitor)

Highlight some of the key features of national HFA progress reporting in the (sub-)region.

Strengthening of the disaster information systems through enhancement of risk assessment models and tools has been common among the countries in the sub-region. This also includes the exploration of different approaches in managing and disseminating relevant information to significant sectors of the population.

Almost all countries in Southeast Asia have also been actively providing public awareness on DRR utilising various communication channels and mass media. Mainstreaming of disaster risk reduction in the education sector, particularly the incorporation of DRR in the school curriculum has also been a popular strategy to promote a culture of resilience as well as inform and raise awareness on DRR to the public.

Description

Summary of national achievements in the above Priority area.

In using knowledge and education for building a culture of resilience, **Cambodia**, primary focuses on the encouragement of the participation of the local communities in DRR efforts particularly in identifying and analyzing problems, needs, decision in planning and implementing disaster risk reduction. In order to actualise this local stakeholders' participation, providing information is crucial. With this, practical and applicable tools for multi-risk assessments were developed and encouraged to be used in the country. Among these tools are Hazard, Vulnerability and Capacity Assessment (HVCA), Vulnerability and Capacity Assessment (VCA), etc. Further, public awareness strategies (i.e. IEC materials, folk songs and shadow dramas, films, radio spots) to raise DRR consciousness in urban and rural communities were also conducted to build a culture resilience.

With the growing recognition of the importance of mainstreaming disaster risk reduction in the education sector, the Cambodian government has also considered incorporating disaster risk reduction into school curriculum, building capacity of education officers and teachers on DRR, organising public awareness activities on DRR to school children as well as the institutionalisation of school disaster safety programmes. A Disaster Risk Reduction Forum (DRR Forum) was also established as a venue for networking and partnership as well as for consultative workshops or forums to share and exchange experiences, lesson learnt, good practices and innovative approaches etc.

Indonesia on the other hand, emphasised the enhancement of its national disaster data and information (DIBI) for building a culture of resilience. Specialized agencies such as the Meteorology, Climatology and Geophysics Agency manages data related to extreme weather, earthquake and

tsunami, while the Geology Agency manages data related to volcanic eruption and land mass movement. Several local governments, together with non-government partners such as the university, have also developed disaster information systems that are specific to their local needs, although such effort has not been widely done.

There is also a commitment from the government, as the Ministry of Education and Culture, Ministry of Public Works, Ministry of Religious Affairs, Ministry of Home Affairs, National Agency for Disaster Management (BNPB) and non-government stakeholders have developed stronger regulatory framework through several DRR in education regulations. Mainstreaming of DRR into school curriculum has been piloted in 100 schools throughout the country, following the completion of modules for the integration of DRR into education.

Several government ministries/agencies have developed research methods and tools for multi-hazard risk assessments. Indonesia has also developed an integrated strategy for awareness building for disaster preparedness, but it is yet to be disseminated to stakeholders. Many campaigns have been conducted to educate the public on disaster preparedness as well as to train local government officials. Guidance and information about risk reduction have also been made available for grassroots communities particularly in hazard prone areas.

Like Indonesia, **Myanmar** also focuses on strengthening and enhancement of the national disaster information system to build culture of resilience in the country. Since national disaster information system in the country is not publicly available yet, there were several initiatives for establishing disaster information system in the country. In general, disaster information is disseminated through different mass media channels. DRR knowledge and concepts are also included in the school curricula and education materials which the Ministry of Education (MoE) has revised. Expecting lesser impacts and losses in case of a disaster, the Ministry of Science and Technology is also undertaking necessary preparations in the field of science and engineering. Further, although there is no formal country-wide public awareness strategy, public awareness activities are taking place under the different projects and plans of the ministerial and international and local agencies. Relief and Resettlement Department organized Disaster Management Courses for township level government officials in states and regions.

In **Lao PDR**, the integration of DRR in its education has been the priority recently in building culture of resilience in the country. DRR is being mainstreamed into primary school and lower secondary school curricula nationwide. Training of Trainers (TOT) for Master Trainers were also conducted based on the new curricula conducted in late 2010 by the Ministry of Education and Sports in cooperation with NDMO and ADPC. The NDMO of Lao PDR, together with International Organisations/INGOs operating in the country, undertake regular awareness campaigns on DRR/DRM at all levels through mass media channels.

In **Malaysia** on the other hand, enhancement of knowledge and information dissemination were emphasised for building culture of resilience. The National Security Council, in collaboration with other agencies, regularly organises events and activities to disseminate relevant information on DRR. Since 2005, the Disaster Awareness Day is organised every year to raise public awareness on disaster risks as well as promote commitment among country leaders, decision makers and local authorities towards government efforts in disaster management and DRR. Numerous awareness programs on specific hazards were also carried out by key agencies in the country.

Several programs have also been implemented to improve the resilience of schools and hospitals against disasters. The Ministry of Education in collaboration with civil societies and UNICEF has derived initiatives such as the Smart Support Team and School Watching Program in schools. Safety Guidelines in Disaster and Crisis Situation has been developed and distributed to schools and community leaders to enable the public to respond accordingly to disasters and crises.

In the **Philippines**, the dissemination of disaster information is done by NDRRMC Operations Center (SMS, telefax, internet, e-mail) to all concerned agencies and sectors. The yearly observance of the National Disaster Consciousness Month has also contributed in the OCD's information and education campaigns, which focused not only on the distribution of IEC materials but also on the conduct of orientations, seminars and fora on RA 10121, NDRRM Framework and Plan, and disaster preparedness measures

Covering climate change, natural hazards, fire, etc., concepts of DRRM have also been integrated in science and social studies in primary and secondary level curricula. At the college level, DRRM has been integrated in NSTP and specific modules subject (according to RA 9163, NSTP Act of 2001).

As for risk assessment, the NDRRMC and other key agencies have conducted several projects. Among these are the digital elevation model (DEM) data using LIDAR and multi-hazard risk maps for the Greater Metro Manila Area. (GMMA), and the "Risk Analysis Project" (Project Enhancing Risk Analysis Capacities for Flood, Typhoon, Severe Wind and Earthquake for Greater Metro Manila Area).

In **Viet Nam**, most of information reaching the sub-national communes and villages comes from Viet Nam television or radio; however, information is also received on an ad hoc basis, depending on circumstances and based upon knowledge of the local reporters, rather than through systematic channels. At the national level, the CCFSC website provides diversified information, including news on recent disaster events (primarily on storms and floods), on DRR, DRM documentation/publications and has the historical disaster damage and loss database.

At present DRR education is not formally integrated nor systematically addressed within any school curricula. However, teaching of DRR has been undertaken as an extra-curricular activity in many disaster provinces through the VNRC (since the late 1990's), Save the Children, PLAN and other I/VNGOs and bilateral donors (notably JICA).

Context and Constraints

Summary some of the *key contextual issues* and *common challenges* encountered by the countries in the (sub-)region.

While information systems are in place, these hardly reach remote areas on time. Information dissemination is also hampered by internet connectivity and communication network that are relatively limited and centred in major urban areas only. There is also a cultural obstacle that many people are not proactive in seeking information about the risks they are facing. Communicating risk information to various stakeholder groups using suitable approaches also need to be enhanced.

With regards to government agencies tasked with conveying disaster and risk-related information to

community at risk, the challenge is lack of coordination between the relevant institutions from the central level down to the district/city level. Moreover, even if disaster information are disseminated at the lower levels, information remain to be underutilised.

Inter-sectoral collaboration and coordination remain weak at all levels, posing challenges to resource sharing or pooling, maximisation of enforcement of some of the policies, duplication and fragmentation of models. Greater advocacy efforts are also needed to attract the participation of the private sector and community as a whole for public awareness campaigns in order to mobilize sufficient resources and build a culture of disaster resilience.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SUBSECTION 3.2: HFA PRIORITY FOR ACTION 4

Reduce the underlying risk factors

Summary (from the National HFA Monitor)

Highlight some of the key features of national HFA progress reporting in the (sub-)region.

Almost all of the countries in the sub-region have initiated considerable efforts in reducing underlying risk factors through mainstreaming in several significant sectors' (Climate Change, Environment, Forestry, Human Settlements, Physical Planning, Economic, etc) functions and process such as planning, monitoring, assessment and investments. With this sectoral approach, the integration will be more grounded and direct, and thus, more effective. The mainstreaming are commonly incorporated in legislations, strategies, action plans and other relevant document developed by the sector..

Description

Summary of national achievements in the above Priority area.

To reduce underlying risk factors, the strategy employed by the national government of **Cambodia**, together with other local, international and regional organizations is to address concerns related to environment, land use, natural resource management and climate change. Examples of these are the development and implementation of the National Adaptation Programme of Action to Climate Change, the MRC-implemented long term Flood Mitigation and Management Programme for the lower Mekong basin which aims to contribute to sustainable development and environment, Land use management law of 2001 and many others.

Indonesia as well links reducing underlying risk factors in the country to environmental management and mainstreamed DRR into development. The ninth priority program in the Middle-term National

Development Plan 2010-2014 combines both these issues. The policy has also been supported by numerous regulations, and the other relevant laws.

At present Indonesia has just upgraded its position from a low income to a middle income country. Several economic development programs and efforts have addressed people's vulnerability reduction. At the same time social development policies and plans have also been implemented for population at risks.

Since 2011 Indonesia has also already possessed policies to mainstream DRR into post disaster recovery and rehabilitation in the form of Chief of the National Agency for Disaster Management (BNPB) regulation No. 17/2011 on rehabilitation and reconstruction. The Disaster Management Plan 2010-2014 and National Action Plan for Disaster Risk Reduction 2010-2012 also contain programs and activities to integrate DRR into recovery. The government, with support from international partners, has implemented "building back better" approach in several post-disaster areas, including in post Yogyakarta and Central Java earthquake of 2006, West Sumatra earthquake of 2009 and post Merapi Eruption of 2010.

Efforts to develop analytical instruments to assess the disaster impacts of major development projects have just been initiated. The country has also made it a prerequisite to conduct Environmental Impact Assessment at the individual project level, and Strategic Environmental Analysis for areas that have many development projects that may potentially damage the environment and the people.

In **Lao PDR**, Disaster Risk Reduction (DRR) is mainstreamed strongly in the 7th National Socio-Economic Development Plan (NSED) as well as in other sectoral development plans like in Agriculture, Forestry and Environment, Human Settlements, Investments, etc. Apart from these, the government of Lao PDR have also initiated some social development initiatives, policies and plans available to reduce the vulnerability of population at risk.

DRR objectives and elements in **Malaysia**, on the other hand, have been progressively achieved through the Five Year Malaysia Plans over the years, which reduce underlying risk factors and promote sustainable development. Like the other countries in the sub-region, Malaysia also relies on mainstreaming disaster risk reduction in different sectors in order to effectively reduce underlying risk factors in the country. Example of this is the integration of DRR in the National Physical Plan and to the Urban Poverty Eradication Programme.

The Government has established several financial mechanisms, including those through public-private partnership, in support of relief and post-disaster recovery. These include the National Disaster Relief Fund to provide financial assistance to disaster victims, the special relief guarantee facility (SRGF) for recovering businesses and rebuilding damaged infrastructure in areas affected by disasters, and Amanah Ikhtiar Malaysia (The Endeavor Trust of Malaysia) to improve resilience of communities previously vulnerable to disasters.

In **Myanmar**, the integration of DRR to different sectoral plans and legislation has opened up options for reducing risks in the country. For example, In February 2012, two new land laws - the Farm Land and Vacant Land Laws are formulated in the parliamentary session and are expected to contribute in the reduction of underlying risk factors in the country. In the same year, the Environmental Conservation law was enacted and the National Plan was created – all of which incorporate DRR elements.

In the **Philippines** as well, the integration of risk reduction elements in different sectoral processes and functions (assessments, regulation, investments, etc) has been considered an effective strategy to reduce underlying risk factors. Projects that seek to integrate DRR and CCA into development plans and land use plans are currently in progress. The principles and concepts are consistent with sustainable development and the Millennium Development Goals which the Philippines is trying to achieve. The HLURB issued a memorandum circular to LGUs aiming for “zero backlog” of new comprehensive land use plans (CLUPs) that are disaster/climate risk-enhanced.

The Environmental Impact Assessment system of the country is also a means to incorporate DRR by the very nature of the government requirement prior to the issuance of an environmental clearance certificate (ECC).

As DRR/CCA are being mainstreamed into national and sub-national development plans, new investments in the economic and productive sectors are also better positioned against exposure to disaster/climate risks. Government development plans are more oriented towards identifying PPAs that are not just relevant to socio-economic development in the regions, but also cognizant of constraints posed by hazards and risks.

As for **Viet Nam**, there has been considerable progress on risk reduction in recent years with respect to the development of environmental policies and legislation in the country. The NTP for RCC was approved in 2009, within which are a significant number of structural and non-structural measures intended to reduce the country’s vulnerability to the projected impacts of climate change and with particular reference to disaster risk mitigation.

In addition, the National Climate Change Strategy (2011) further expounds on issues of food, energy and water security; poverty alleviation, gender equality; social security; public health; improving living standards and conserving natural resources. The strategy considers low carbon economy and green growth as main principles for sustainable development and reducing GHG emission as mandatory in socio-economic development policy. Awareness raising, participation and capacity enhancement are also highlighted as too is international engagement to address climate change.

Context and Constraints

Summary some of the *key contextual issues* and *common challenges* encountered by the countries in the (sub-)region.

Despite the efforts of the governments in the sub-region to reduce underlying risks, many challenges and constraints exist that hinder the success of these efforts. Often, even if laws and strategies exist, enforcement is weak due to the lack of technical DRR capacity of the implementers of the sectoral law or guidelines. There is a need for enhancement of technical capacity and understanding of DRR across sectors and levels. Reducing vulnerability and exposure as significant drivers of risk is also a difficult task for government, both national and local, who are mandated to regulate the use of natural and land resources, proper location and design of public infrastructures, protection of the natural environment, etc.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SUBSECTION 3.2: HFA PRIORITY FOR ACTION 5**Strengthen disaster preparedness for effective response at all levels****Summary** (from the National HFA Monitor)

Highlight some of the key features of national HFA progress reporting in the (sub-)region.

Please use additional space if required. Please add the summary.

Description

Summary of national achievements in the above Priority area.

In **Cambodia**, there are subsistent efforts on strengthening disaster preparedness for effective response considerations from various local, international and regional partner agencies who are working on disaster risk reduction projects in the country. They are mainly aiming at strengthening the institutional capacities and mechanisms of National Disaster Management Offices at all levels - national, provincial, district and commune levels through various programmes. Some of these programmes are enhancement of preparedness and contingency plans through the conduct of regular training drills and rehearsal to test the plans at all levels and through enhancement of institutional capacities and mechanisms for the implementation of the plans as well.

There is also an effort from the national level in developing disaster emergency policies (National Emergency Management Policy). At the same time, there is also a regular allocation of national financial services to serve for disaster response and emergency relief. There are also existing guidelines and strategies in terms of planning to exchange the relevant information during disasters in the country. This include the draft of National Policy for Emergency Management formulated by NCDM; Disaster Emergency Response formulated by the Cambodian Red Cross, Disaster Preparedness Plan formulated by Provincial Committee for Disaster Management in Svay Rieng province, and the Flood Emergency Management Strengthening (FEMS) programme of MRC in provinces of Prey Veng, Kandal and Kratie, among others.

In **Indonesia**, on the other hand, all provinces and more than 80% of districts and cities have established local disaster management agencies for preparedness and response. The technical capacity of these Local DM Agencies (BPBDs) continues to be developed by the National Agency for Disaster Management and the national government. Many areas have also formed their rapid response teams including two specialist rapid response teams set-up at the national level.

Many areas have also developed risk-sensitive spatial planning and implemented programs for disaster preparedness, contingency planning, and response. DRM policy that employs a risk reduction perspective has been in place, but it has yet to be implemented well and throughout all over the country. A number of contingency plans have been developed at different government levels, but with only minimum gender sensitivities.

Disaster funds in the form of on-call budgets have been allocated at the national level by the sectoral line ministries and at the local level by several provinces and district/city governments. The case is also true with rehabilitation and reconstruction funds. However, not all provinces and districts/cities have allocated disaster-related budgets, because the regulations that stipulate this issue have not been clear. Disaster risk insurance, catastrophe bonds and other risk transfer mechanisms have not been developed well in Indonesia.

Systems for information exchange during an emergency situation have also been established in some parts of the country. Indonesia has also developed PDNA (combining DALA and Human Recovery Needs Assessment) and legalized it through the National Agency for Disaster Management (BNPB) regulation. Human resources have also been trained for these purposes.

Like Cambodia and Indonesia, disaster preparedness and contingency plans are also available in **Lao PDR** and are the basis for response and recovery strategies during disasters. However, the preparedness plans are limited to specific hazards. For example, while contingency plans are available, most of them are directed towards flood emergency preparedness and response.

Trainings and drills for emergency response are also regularly conducted throughout Laos. These initiatives are made possible with the combined efforts of the INGO/NGO and PDMC/DDMC/VDPU's all over the country.

Lao-PDR government has an allocation of 1.2 billion LAK for immediate use to respond to a national disaster in the Lao PDR. Some resources have also been allocated at the provincial and district levels for emergencies. Similarly, Ministry of Health, Ministry of Public Works and Transportation, Ministry of Agriculture and, Forestry together and the Ministry of Defense also have some financial reserves for emergencies.

As for data collection of disaster information in pre and post disaster situations, the Disaster Assessment Committee under the NDMO is responsible with the help of local DRR/DRM partners and ministries in Laos.

In Malaysia, the National Security Council Directive No. 20 is the main guideline for disaster management in Malaysia. It is complemented by other sectoral legislations and guidelines that form a comprehensive disaster mitigation framework. The Directive prescribes the management mechanism according to the level and complexity of disaster and determines the roles and responsibilities of various agencies to ensure effective coordination and mobilisation of resources when handling disaster.

The National Security Council (NSC) of the Prime Minister's Department leads the disaster management in accordance to the Directive No. 20 on "Policy and Mechanism on National Disaster and Relief Management". The Council coordinates activities that are implemented by the Disaster Management and Relief Committee comprising various agencies. Since the Directive stipulates three levels of disaster management i.e. district, state and federal levels, the activation of the specific executing committee will depend on the characteristics and scale of event as well as coverage of impacted areas.

Trainings, seminars and drills are constantly organised by the government agencies to both enhance their skills and expertise in disaster management as well as improve communal resilience. In the

effort to establish a sustainable and resilient environment for local communities, the Government of Malaysia has also encouraged the participation and involvement of non-governmental organizations (NGO) in disaster risk reduction programs.

The Malaysian Government has also established the National Disaster Relief Fund to provide financial assistance to disaster victims. Building on the experience of the widespread monsoon flood in 2006, the Central Bank of Malaysia has allocated RM500 million worth of special relief guarantee facility (SRGF) to aid in recovering businesses and rebuilding damaged infrastructure in areas affected by disasters through commercial and other banks.

Post-mortem will be carried out by the District and State Disaster Management Committees after each disaster event. The assessment involves other agencies involved in disaster response and will typically attempt to identify potential cause to the event, estimation of damages and losses, problems encountered and other shortcomings in the Management Committee. Official report is prepared and submitted to the National Security Council. Such experience is occasionally shared in relevant seminars or during training.

As for **Myanmar**, while the disaster management bill is currently being reviewed by the parliament in session, a comprehensive National Standing Order for all government ministries serves as a preparedness plan and a contingency plan in the country. The National Standing Order also dictates that States and Regions are to form Natural Disaster Management Committees and the process is to be replicated at lower level to establish institutional arrangement.

All contingency planning has taken into consideration vulnerable population including women and girls with specific activities focusing on their needs. Inter-Agency Contingency Plan has been reviewed; revised and updated in June 2012 as well Myanmar Contingency Plan has been through the same process this year. Trainings and mock drills have been conducted in disaster prone states and regions. The Myanmar National Search and Rescue Committee was also constituted on 20 April, 2011. RRD as well as UN agencies and INGOs have stockpile of relief supplies including shelters in place in strategic places. Department of Health has secure medical facilities.

National Contingency Fund available amounting to 100 Billion Kyat was set aside by the Union Government of Myanmar to be used in the event of disasters. Relief and Resettlement Department has increased annual budget for relief activities that is available to support emergency response operations. In addition, the RRD has special emergency funds that can be mobilized by the order of Minister to respond to emergencies. Further, the humanitarian community's Inter-Agency Contingency Plan has budgetary provisions (Central Emergency Relief Fund) that can be sought for effective response but not for the recovery activities. Similarly, International organizations can access emergency funds from regional offices and their head offices. Emergency stocks, supply and logistics are in place. The financial reserves are in place and can be requested in the event of an emergency.

Under the Standing Orders, the damage and loss assessment tool is available. A system is already in place to request Emergency Rapid Assessment Team (ERAT) and United Nations Disaster Assessment and Coordination (UNDAC) for post disaster assessment which is identified by Tripartite Core Group (TCG) and re-train human resources for assessment capacity. Standardize Rapid Initial Assessment Form is developed by UNOCHA to be used in country. Consultation with RRD is needed to develop for common need assessment form.

Tarlay earthquake response in March 2011, joint assessment for the affected people was conducted

in an effective and efficient manners thorough coordination with different agencies.

In the **Philippines**, the successful formulation and approval of the National Disaster Risk Reduction and Management Plan (NDRRMP) paved the way for the formulation of Regional and Provincial DRRMPs, which the OCDRCs provided technical assistance with.

At the same time, government agencies, having different mandates, logically employ different programmes to ensure preparedness in the event of emergencies. While the Department of Interior and Local Government conducts monitoring and assessment of LGU's capacity to withstand and cope with the effects of hazards, the Department of Social Welfare and Development on the other hand has the National Volunteer Service Program (NVSP) or also known as Bayanihan Bayan which aims "to build strong partnership between the government and the private sector in delivering faster, better, and smarter services to the community."

The Department of Health also has a program to institutionalize health emergency management at all offices and facilities at all levels. It also developed technical assistance packages for the development of health emergency preparedness, response and recovery plans of health facilities. The Department of Foreign Affairs on the other hand have an existing coordination system with the international humanitarian assistance organizations for the delivery of relief assistance.

Contingency plans are being prepared in the different LGUs upon completion of the training course conducted by OCD. The OCDRCs are actively rolling out the Incident Command System (ICS) to the P/M/BDRRMCs. Fire, earthquake and tsunami drills are also being conducted in different LGUs, schools, and private and public offices. There were also trainings conducted on communication protocol.

The NDRRM Law or RA 10121 provides for all components of DRRM including capacity building and training, procurement of equipment and capital expenditure through the DRRM fund, which is 5% of the IRA of each government unit. Apart from this, the Quick Response Fund (QRF) is available for response and rehabilitation. The 2012 budget provides Php7.5 billion calamity fund, and a balance of Php291.775 million has been carried over from 2011. The 2012 budget QRF separately under the budgets of departments, not into the calamity fund. Another funding source utilized after Typhoon Sendong was a loan from the World Bank for the Disaster Risk Management Development Loan with a CAT-DDO approved in September 2011.

There are provisions in RA 10121 concerning the conduct of damage and loss assessment. DANA should be conducted with a month after the disaster, according to the National Disaster Risk Reduction and Management Plan 2011-2028. More information on PDNA is available under Priority for Action 4.

In **Viet Nam**, the National DRM Strategy includes a DRR perspective. Further, the CCFSC system which is an established institutional mechanism for DRM has recently been strengthened through Decree 14/2010. At national level CCFSC and CCFSR coordinate effectively in emergency response situations. At the provincial levels and below, the two committees are combined to increase the effectiveness and timeliness of operations.

In terms of simulation exercises, mock training and drills for preparedness and response, the country has participated in a few ASEAN orchestrated regional disaster preparedness drills. At the local level,

CFSC and local authorities conduct annual drills and rehearsals which is participated by army soldiers, police, Red Cross and youth volunteers, and community representatives. However, due to funding constraints, the drills are mostly conducted in a few communes only and not frequently. Rarely, the drill is conducted at provincial or national level. Training and mock drills in schools and hospitals for emergency preparedness are likewise carried out sporadically and has not been institutionalised on a national scale.

Annually, all communes, districts, and provinces conduct the disaster preparedness and response planning to review the lessons-learned and prepare for the upcoming disaster season including updates on the disaster situations, strengthening the organizational structure, etc. At the national level, the CCFSC also conducts a review meeting and develops a plan for the whole country while relevant ministries also develop a plan for each sector.

The national search and rescue system in Viet Nam, under the CCFSR is well established and recently equipped with modern technology and facilities to be ready for conducting S&R missions both onshore and offshore. However, at commune levels, particularly in mountainous areas, there is still a further need for improved communication equipment and facilities.

The State Budget Law sets out the financial reserves and the Ordinance on Flood and Storm Control sets out the material reserves for effective and timely emergency response to disasters. According to the Budget Law, 2-5% of annual national/provincial budgets are set aside as contingency funds. Although this fund is not only dedicated to the disasters it is usually mobilized for disaster responses and early recovery. The Ordinance also requires that every government agency and individual must stockpile sufficient material reserves. It also stipulates that the flood and storm control agencies are authorized to mobilize available resources from all sectors to cope with disasters.

One of the most practical procedures for exchanging information during the disaster event is the regular meetings of CCFSC standing members with the presence of a high-ranking government official (such as the Prime Minister or Deputy Prime Minister) to draw the society's attention to the disaster preparedness and response. This mechanism is considered effective for sharing early warning information, initial damage and needs, and to call for relief support. However, the meetings are intensive at the beginning during the response stage, and then become less routine and detailed during the post-disaster time.

In the post-disaster scenario, there is a well-established system for damage inventories carried out by CFSC via local authorities at commune level, whose staff report to provincial and national levels according to the scale of the disaster. Based on these damage inventories that detail deaths, houses damaged, public infrastructure - road, electricity, phone lines, schools, hospitals, irrigation/dyke/dam, etc. damaged, number of hectares of agricultural land destroyed, livestock losses, etc. support is allocated accordingly following CCFSC meetings.

Context and Constraints

Summary some of the *key contextual issues* and *common challenges* encountered by the countries in the (sub-)region.

A key constraint in the aspect of preparedness and response is the weakness in enforcing the relevant laws and regulations. Since the shift of paradigm from response to DRR is relatively new and is not well understood, risk management is often not appreciated. There needs to be synchronization and

harmonization of disaster-related laws and regulations among different sectoral agencies and different government levels. The Local DM Agencies also need to be strengthened in terms of their understanding of policy and regulatory issues.

Lack of technical capacity from the central down to the local level has also become an obstacle. This situation worsen with the quick turn over of government personnel who may have been previously provided with technical training on relevant skills.

Further, while there is a regular allocation of national fund to serve for disaster response and emergency relief, the access to the fund may be very complicated because either there is lack of concrete mechanisms and policies for fund utilisation or there is lack of understanding on the existing financial policies among the authorities or decision-makers.

Additional Related Documents.

Upload.

Add Related Link.

Add link.

SECTION 4: CONTRIBUTION OF INTER-GOVERNMENTAL AND INTERNATIONAL ORGANISATIONS TO DISASTER RISK REDUCTION IN THE (SUB-)REGION

The objective of this section is to promote further reflection on progress in disaster risk reduction in the (sub-)region through the collation and appraisal of projects, programmes and other initiatives in reducing disaster risk being implemented by intergovernmental and international organisations.

By recording current activities, the tool seeks to further support intergovernmental organisations' identification of trends and patterns, gaps and challenges in (sub-)regional efforts to reduce disaster risk and implement the HFA. It also creates an online archive of (sub-)regional activities.

To complete this section, organisations are invited to enter information of specific projects, programmes and other initiatives, describing thematic focus, duration, geographic focus, implementing partner, budget and funding source together with details of the project/initiative.

GUIDANCE FOR THIS SECTION

- A. Complete the data fields provided in the online tool as advised.
- B. Select theme, region, country from the drop-down menus.
- C. Provide a narrative description of the project, programme, initiative.
- D. Organisations are encouraged to appraise current programming in the context of the findings of the (sub-)regional review and national synthesis identified in previous sections to inform the analysis of gaps and challenges, and identification of future priority actions and recommendations of the subsequent two sections.

Regional projects and initiatives in the (Sub-)Region.

Overview of projects, programmes and initiatives of the (sub-)regional intergovernmental and international organisations in disaster risk reduction.

+ Add a project or initiative – Nadia, I can add more online after you're done with the uploading.

| | |
|------------------|-----------------------------------|
| Title | ASEAN Earthquake Modeling |
| Start Date | January 2013 |
| End Date | December 2013 |
| Related to theme | select from drop-down menu |
| Region | select from drop-down menu |
| Country | Indonesia, Singapore, Philippines |

Description of the project / initiative (300 words max.)

The first year of this 3-year project will focus on the characterization of earthquake hazard, particularly ground shaking. Outputs will include a shaking map of the region using the OpenQuake software.

Total Costs (in USD)

USD250,000

Implementing agencies (300 words max.)

ASEAN Secretariat, NTU, BMKG, and Phivolcs

Funding source / agency

ASEAN-Australia Cooperation

Contact Person (300 words max.)

SECTION 5: GAPS AND CHALLENGES IN THE IMPLEMENTATION OF THE HFA IN THE (SUB-)REGION

Informed by the review undertaken in previous sections, the objective of this section is to prompt an analysis of the relationship between trends in addressing disaster risk in the (sub-)region and the patterns of risk, and to identify primary gaps and challenges in (sub-)regional efforts.

GUIDANCE FOR THIS SECTION

- A. Analysis will ideally be structured by HFA priority area.
- B. Supplementary analysis by equivalent Priorities of respective (sub-)regional frameworks, strategies and plans is also encouraged.
- C. Analysis should clearly spell out the bottlenecks in reducing risk and addressing prevailing vulnerabilities.

Gaps and Challenges in the (Sub-)Region.

Analysis of gaps and challenges in disaster risk reduction efforts in the concerned (sub-)region.

Analysis of main gaps and challenges (300 words max.)

Challenges include:

1. Sustaining projects and initiatives that have been started and are already ongoing such as the capacity building in the area of risk assessment, using and applying risk assessment results into actual risk reduction projects, practices and policies, implementing the region's risk financing and insurance strategy including the possibility of having a risk pool, sustaining and levelling up the ASEAN Day for Disaster Management as a major regional advocacy programme for DRR, and others.
2. Strengthening the linkages of disaster risk reduction and climate change adaptation at both national and regional levels
3. Enhancing the capacities of AHA Centre to effectively become the information hub on disaster risk management in the region, not only in disaster response and emergency management, and expand its capacities towards disaster risk management aside from its current focus on disaster response and relief provision.
4. Sustaining support to ASEAN Secretariat to strengthen technical backstopping for the ASEAN Committee on Disaster Management and for individual Member State needing guidance and assistance for DRM planning and implementation, especially under the successor framework or HFA2.
5. Strengthen the Prevention and Mitigation Working Group to form the backbone for DRM network in ASEAN and push for policy reform and development for DRM and champion DRM initiatives in the region.

SECTION 6: RECOMMENDATIONS FOR FUTURE ACTIONS IN THE (SUB-)REGION

On the basis of the review, this section provides organisations the opportunity to describe the priority actions that will need to be undertaken by (sub-)regional intergovernmental and international organisations to more effectively reduce disaster risk.

Additional recommendations to address / overcome the gaps, challenges and bottlenecks in implementing the HFA and respective (sub-)regional frameworks, strategies and plans are also encouraged.

Recommendations for the (Sub-)Region.

Recommendations for enhanced disaster risk reduction and priorities for future actions for (sub-)regional and international organisations in the (sub-)region.

Recommendations (300 words max.)

1. Continue current efforts in strengthening the capacities of AHA Centre to include disaster risk management by mobilising more resources internally and externally.
2. Sustain current cooperation programmes focusing on DRR as most programmes and projects are funded externally by partners.
3. Support the work of the Prevention and Mitigation Working Group of ACDM to champion HFA2 and assist them in policy development and DRM planning.

SECTION 7: STAKEHOLDERS

The objective of this section is to capture the diversity of stakeholders consulted in the (sub-)regional review process. (Sub-)Regional organisations are encouraged to engineer a multi-stakeholder dialogue.

Please include the names of all the institutions, organisations, and where relevant departments, that have contributed to the review process and the inputs to the report.

The names of the departments/ organizations/ institutions will be displayed in the report as 'Acknowledgement'.

| | |
|--------------------------|--|
| Name of the organization | |
| Type of the organization | |
| Focal point details | |

| | |
|--------------------------|--|
| Name of the organization | |
| Type of the organization | |
| Focal point details | |

| | |
|--------------------------|--|
| Name of the organization | |
| Type of the organization | |
| Focal point details | |

| | |
|--------------------------|--|
| Name of the organization | |
| Type of the organization | |
| Focal point details | |

(Add more tables, if required)

ANNEX I

| (Sub-)Region | Organisation | Member states |
|-----------------|--|--|
| Africa | | |
| Africa | African Union (AU) | Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Côte d'Ivoire, Democratic Republic of the Congo, Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Togo, Tunisia, Uganda, Sahrawi Arab Democratic Republic, Zambia, Zimbabwe |
| East Africa | East African Community (EAC) | Burundi, Kenya, Rwanda, Tanzania, Uganda |
| Central Africa | Economic Community of Central African States (ECCAS) | Angola, Burundi, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Republic of the Congo, Rwanda, São Tomé and Príncipe |
| West Africa | Economic Community of West African States (ECOWAS) | Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo |
| South Africa | Southern African Development Community (SADC) | Angola, Botswana, Democratic Republic of the Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Swaziland, Tanzania, Zambia, Zimbabwe, South Africa, Seychelles |
| Horn of Africa | Intergovernmental Authority on Development (IGAD) | Djibouti, Ethiopia, Kenya, Somalia, Sudan, Uganda |
| Arab | League of Arab States (LAS) | Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, UAE, Yemen |
| Americas | | |
| Caribbean | Caribbean Disaster Emergency Response Agency (CDEMA) | (for Caribbean Community - CARICOM countries) - 18 participating states from the Caribbean (English-speaking Caribbean plus Haiti): Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Lucia, St. Kitts/Nevis, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago and Turks and Caicos Islands |

| | | |
|---------------------------|---|---|
| Caribbean | Association of Caribbean States (ACS) | Antigua and Barbuda, Bahamas, Barbados, Belize, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago, Venezuela. <u>Associate Members:</u> Aruba, France (on behalf of French Guiana, Guadeloupe and Martinique), the Netherlands Antilles and Turks and Caicos. |
| Central America | Centro de Coordinacion para la Prevencion de los Desastres Naturales en America Central (CEPREDENAC) | Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama (Dominican Republic as associate member) |
| Andean | Comité Andino para la Prevención y Atención de Desastres (CAPRADE) | Bolivia, Colombia, Ecuador, Peru |
| South America | REHU - Specialized Meeting on Socio-natural Disaster Risk Reduction, Civil Defence, Civil Protection and Humanitarian Assistance (MERCOSUR) | Argentina, Brazil, (Paraguay,) Uruguay, Venezuela |
| Americas | Organization of American States (OAS) | Antigua and Barbuda, Argentina, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica (Commonwealth of), Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, The Bahamas (Commonwealth of), Trinidad and Tobago, United States of America, Uruguay and Venezuela (Bolivarian Republic of) <u>Note: Cuba and Honduras not represented</u> |
| Asia & Pacific | | |
| South Asia | SAARC Disaster Management Centre (SDMC) South Asian Association for Regional Cooperation (SAARC) | Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Srilanka |
| South East Asia | Association of South East Asian Nations (ASEAN) | Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, |

| | | |
|----------------------|---|---|
| | | Singapore, Thailand, Vietnam |
| Pacific | Pacific Islands Applied Geoscience Commission (SOPAC) | Australia, Cook Islands, Federated States of Micronesia, Fiji, Guam, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. American Samoa, French Polynesia and New Caledonia |
| Central Asia | | |
| Central Asia | Economic Cooperation Organization (ECO) | Islamic Republic of Afghanistan, Republic of Azerbaijan, Islamic Republic of Iran, Republic of Kazakhstan, Kyrgyz Republic, Islamic Republic of Pakistan, Republic of Tajikistan, Republic of Turkey, Turkmenistan, Republic of Uzbekistan |
| Europe | | |
| Europe | Council of Europe (COE)/ EUROPA | Belgium, Denmark, France, Republic of Ireland, Italy, Luxembourg, Netherlands, Norway, Sweden, United Kingdom, Greece, Turkey, Iceland, Germany, Austria, Cyprus, Switzerland, Malta, Portugal, Spain, Liechtenstein, San Marino, Finland, Hungary, Czechoslovakia, Poland, Bulgaria, Estonia, Lithuania, Slovenia, Czech Republic, Slovakia, Romania, Andorra, Latvia, Albania, Moldova, Republic of Macedonia, Ukraine, Russia, Croatia, Georgia, Armenia, Azerbaijan, Bosnia and Herzegovina, Serbia, Monaco, Montenegro |
| | European Union (EU)/ European Commission (EC) | Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom |
| South Eastern Europe | Disaster Preparedness and Prevention Initiative for South Eastern Europe (DPPI SEE) | |
| South Eastern Europe | Regional Cooperation Council (RCC) | 46 countries |

ANNEX II

(Sub-)Regional Indicators (Specific to trans-boundary issues)

| |
|--|
| <p>a. (Sub-)Regional Indicator 1: A (sub-)regional framework, strategy or action plan for disaster risk reduction exists.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Sub-)regional framework, strategy, action plan <input type="checkbox"/> Resources mobilised for the implementation of the (sub-)regional framework, strategy, action plan |
| <p>b. (Sub-)Regional Indicator 2: A multi-sectoral (sub-)regional institutional mechanism exists.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Regional platform and/or equivalent (sub-)regional multi-stakeholder coordinating mechanism for DRR <input type="checkbox"/> Capacity strengthening of (sub-)regional DRR institution supported. <input type="checkbox"/> (Sub-)regional DRR body is implementing programme(s) for trans-boundary risk reduction and supporting national DRR integration. |
| <p>c. (Sub-)Regional Indicator 3: Institutional mechanism in place to monitor risk reduction status and progress at (sub-)regional level.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Monitoring, evaluation and reporting framework / systems |
| <p>d. (Sub-)Regional Indicator 4: (Sub-)regional training / capacity building programmes / institutions exist to support capacity building for DRR at national / regional levels.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Sub-)regional disaster DRR capacity building projects and programs <input type="checkbox"/> (Sub-)regional institutions for DRR capacity building / training <input type="checkbox"/> Educational and training materials for DRR developed <input type="checkbox"/> Educational and training materials for DRR are standardised in the (sub-)region. |
| <p>e. (Sub-)Regional Indicator 5: Institutional mechanism and procedures are in place to carry out trans-boundary risk assessments.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Sub-)regional hazard, vulnerability or risk atlas <input type="checkbox"/> (Sub-)regional risk information system |
| <p>f. (Sub-)Regional Indicator 6: (Sub-)regional early warning systems exist.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Protocol for dissemination of early warning information <input type="checkbox"/> Early warning systems for DRR enhanced at the community and national levels |
| <p>g. (Sub-)Regional Indicator 7: (Sub-)regional information and knowledge sharing mechanism available.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Sub-)regional web site <input type="checkbox"/> (Sub-)regional community of practice / network <input type="checkbox"/> Local to (sub-)regional knowledge sharing on DRR supported |

| |
|---|
| <input type="checkbox"/> (Sub-)regional public awareness strategy |
| <p>h. (Sub-)Regional Indicator 8: (Sub-)regional research institutions for disaster risk reduction exist.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Research programmes and projects <input type="checkbox"/> Coordination and collaboration of data gathering and research of DRR stakeholders <input type="checkbox"/> (Sub-)regional disaster risk reduction centre / centre of excellence |
| <p>i. (Sub-)Regional Indicator 9: DRR is an integral objective of (sub-)regional policies and plans.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> In (sub-)regional environment policy / plan <input type="checkbox"/> In (sub-)regional climate change adaptation policy / plan <input type="checkbox"/> In (sub-)regional agricultural policy / plan <input type="checkbox"/> In (sub-)regional infrastructure policy / plan <input type="checkbox"/> In (sub-)regional public-private-partnerships <input type="checkbox"/> In other (sub-)regional policies / plans <input type="checkbox"/> Countries in the (sub-)region have integrated DRR in national legislation, regulation, policies and programmes. |
| <p>j. (Sub-)Regional Indicator 10: (Sub-)regional infrastructure projects have processes to assess disaster risk impacts.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Standards and procedures for disaster risk impact assessment |
| <p>k. (Sub-)Regional Indicator 11: (Sub-)regional response mechanism in place to address disaster preparedness, emergency relief and rehabilitation issues across borders.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Sub-)regional coordinating body for disaster management <input type="checkbox"/> (Sub-)regional response plan <input type="checkbox"/> Trans-boundary preparedness, response and rehabilitation protocols developed and implemented in priority sectors |
| <p>l. (Sub-)Regional Indicator 12: (Sub-)regional contingency mechanism exists to support countries in post disaster recovery.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Sub-)regional contingency plan for support to post disaster recovery |
| <p>m. (Sub-)Regional Indicator 13: (Sub-)regional catastrophe risk pooling facility available.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Sub-)regional catastrophic risk pooling facility established <input type="checkbox"/> DRR capacity of national & (sub-)regional insurance entities, & financial institutions enhanced |
| <p>n. (Sub-)Regional Indicator 14: (Sub-)regional information exchange mechanism in place for effective communication during trans- boundary disasters.</p> <p><i>Means of verification</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> (Sub-)regional emergency communication protocols / plans |

ANNEX III

(Sub-)Regional Assessment Framework of National Progress

Aggregation of relevant national indicators, key questions & means of verification (by HFA PFA)

| |
|--|
| HFA Priority for Action 1: Ensure that disaster risk reduction is a national and local priority with a strong institutional basis for implementation |
| <ul style="list-style-type: none"> ▫ Number of PRSPs that include DRR initiatives ▫ Number of CCA/ UNDAFs that include DRR elements ▫ Number of climate change policy and strategy that include DRR ▫ Number of countries making legislative and/or regulatory provisions for managing disaster risk ▫ Number of countries with published national disaster risk reduction policy frameworks ▫ Number of countries with DRR elements in their national development plan ▫ Number of countries with a specific allocation of funds for DRR in the national budget ▫ Number of countries delegating responsibility and budget allocations for DRR to local governments ▫ Number of operational national multi-stakeholder platforms |
| <p><i>Corresponding to:</i></p> <p>(Sub-)Regional Indicator 1: A (sub-)regional framework, strategy or action plan for disaster risk reduction exists.</p> <p>(Sub-)Regional Indicator 2: A multi-sectoral (sub-)regional institutional mechanism exists.</p> <p>(Sub-)Regional Indicator 3: Institutional mechanism in place to monitor risk reduction status and progress at (sub-)regional level.</p> <p>(Sub-)Regional Indicator 4: (Sub-)regional training / capacity building programmes / institutions exist to support capacity building for DRR at national / regional levels.</p> |

| |
|--|
| HFA Priority for Action 2: Identify, assess and monitor disaster risks and enhance early warning |
| <ul style="list-style-type: none"> ▫ Number of countries carrying out multi-hazard risk assessment ▫ Number of countries having risk information systems in place to monitor, archive and disseminate data on hazards and vulnerabilities ▫ Number of countries having disaster loss databases. ▫ Number of national operational early warning systems in existence. ▫ Number of countries participating in (sub-)regional DRR programmes and projects. |
| <p><i>Corresponding to:</i></p> <p>(Sub-)Regional Indicator 5: Institutional mechanism and procedures are in place to carry out trans-boundary risk assessments.</p> <p>(Sub-)Regional Indicator 6: (Sub-)regional early warning systems exist.</p> |

HFA Priority for Action 3:**Use knowledge, innovation and education to build a culture of safety and resilience at all levels**

- Number of countries having national disaster information system publicly available
- Number of countries including DRR in the national educational curriculum
- Number of countries having professional DRR education programmes
- Number of countries that include DRR in national scientific applied research agenda
- Number of countries conducted studies on the economic costs and benefits of DRR
- Number of countries that have country-wide public awareness strategy

Corresponding to:

(Sub-)Regional Indicator 7: (Sub-)regional information and knowledge sharing mechanism available.

(Sub-)Regional Indicator 8: (Sub-)regional research institutions for disaster risk reduction exist.

HFA Priority for Action 4:**Reduce the underlying risk factors**

- Number of countries where mechanisms are in place to protect and restore regulatory ecosystems services
- Number of countries having social safety nets to increase the resilience of risk prone households and communities
- Number of countries incorporating DRR cost and benefit analysis in public investment planning
- Number of countries investing in retrofitting infrastructure, including schools and hospitals
- Number of countries incorporating DRR in planning and management of human settlements
- Number of countries explicitly incorporating and budgeting for DRR in post-disaster recovery programmes
- Number of countries that are taking measures to address gender-based issues in recovery

Corresponding to:

(Sub-)Regional Indicator 9: DRR is an integral objective of (sub-)regional policies and plans.

(Sub-)Regional Indicator 10: (Sub-)regional infrastructure projects have processes to assess disaster risk impacts.

HFA Priority for Action 5:**Strengthen disaster preparedness for effective response at all levels**

- Number of countries having national programmes or policies for disaster preparedness, contingency planning and response
- Number of countries having national programmes or policies to make schools and health facilities safe in emergencies
- Number of countries conducting training and mock drills in school and hospitals for emergency preparedness
- Number of countries anticipating future risks in scenario development and preparedness planning
- Number of countries with procedures and resources in place to manage major disasters
- Number of countries having national contingency and calamity funds to deal with major disasters
- Number of countries having insurance and re-insurance facilities
- Number of countries with catastrophe bonds and other capital market mechanisms to manage major disasters
- Number of countries with established damage and loss assessment methodologies
- Number of countries with trained human resource capacity for post-disaster damage, loss and needs assessment

Corresponding to:

- (Sub-)Regional Indicator 11: (Sub-)regional response mechanism in place to address disaster preparedness, emergency relief and rehabilitation issues across borders.
- (Sub-)Regional Indicator 12: (Sub-)regional contingency mechanism exists to support countries in post disaster recovery.
- (Sub-)Regional Indicator 13: (Sub-)regional catastrophe risk pooling facility available.
- (Sub-)Regional Indicator 14: (Sub-)regional information exchange mechanism in place for effective communication during trans-boundary disasters.