



United Nations
International Strategy for Disaster Reduction

HFA

PROGRESS in Asia-Pacific

Regional Synthesis Report
2009-2011



Please send your feedback and suggestions to isdr-bkk@un.org
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HFA

PROGRESS in

Asia-Pacific

Regional Synthesis Report

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ACRONYMS

ADPC	Asian Disaster Preparedness Center
ADRRN	Asian Disaster Reduction and Response Network
AMCDRR	Asian Ministerial Conference on Disaster Risk Reduction
ASEAN	Association of Southeast Asian Nations
CBO	Community Based Organisation
CCA	Climate Change Adaptation
DILG	Department of the Interior and Local Government (The Philippines)
DM	Disaster Management
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EIA	Environment Impact Assessment
EOC	Emergency Operation Centre
EU	European Union
FERN	Frontline Emergency Response Network (The Cook Islands)
IFRC	International Federation of Red Cross and Red Crescent Societies
GLOF	Glacial Lake Outburst Floods
HFA	Hyogo Framework for Action 2005-2015
JICA	Japan International Cooperation Agency
LDCs	Least Developed Countries
MOU	Memorandum of Understanding
NAPA	National Adaptation Plans of Action
NCDM	National Committee for Disaster Management (Cambodia)
NDMA	National Disaster Management Authority (India, Pakistan)
NEMA	National Emergency Management Authority (South Korea)
NGO	Non-Governmental Organisation
NSDRM	National Strategy for Disaster Risk Management (Nepal)
NSET	National Society for Earthquake Technology (Nepal)
OSADI	Online Southeast Asia Disaster Inventory
PDRMPN	Pacific Disaster Risk Management Partnership Network
PPCR	Pilot Program on Climate Resilience
READY	Hazard Mapping and Assessment for Effective Community-Based Disaster Risk Management (The Philippines)
SAARC	South Asian Association for Regional Cooperation
SADKN	South Asia Disaster Knowledge Network
SIDS	Small Island Developing States
SMS	Short Message Service
SOPAC	South Pacific Applied Geoscience Commission
UNDP	United Nations Development Programme
UNISDR	United Nations International Strategy for Disaster Reduction
URR	Urban Risk Reduction

EXECUTIVE SUMMARY

INTRODUCTION

The Hyogo Framework for Action (HFA) 2005-2015 was envisaged as a blueprint, adopted by all member states of the UN General Assembly, to guide efforts in the area of disaster risk reduction. Since its adoption, the three strategic goals and five priority areas contained within the HFA have since become a common point of reference for states to systematically track progress in disaster risk reduction efforts that they have undertaken.

The Asia-Pacific region is by far the most disaster-prone region in the world, accounting for approximately 85% of all people reported affected by disasters in the last decade (2000-2009).¹ Progress in the area of disaster risk reduction, as outlined in the indicators of the HFA, is thus critical to the alleviation of suffering and sustainable development in the region.

Considerable emphasis has been placed on reviewing the progress made by states against the HFA. The objective of this process has been to gather continuous feedback from states and assist them in assessing progress, gaps and challenges in disaster risk reduction (DRR). This task has been carried out by means of the 'HFA Monitor', a tool first developed in 2008 and recently revised to include a set of key questions and indicators to guide the review. As part of the review process, countries have ranked their progress against each of the 22 indicators of the five priority areas on a scale of 1 to 5, with 1 representing minor progress and 5 comprehensive achievement.

The current Regional Synthesis Report attempts to provide an insight into HFA implementing progress in the Asia-Pacific region since 2005, with particular focus on the 2009-2011 period. It also seeks to capture progress made against the declarations and outcomes of the four Asian Ministerial Conferences on DRR (AMCDRR) held in Beijing, New Delhi, Kuala Lumpur and Incheon. The report is based on a review and analysis of the national progress reports shared by 27 countries in the region for both the current period as well as previous review periods, progress reports shared by regional organisations such as South Asian Association for Regional Cooperation (SAARC), Association of Southeast Asian Nations (ASEAN) and South Pacific Applied Geoscience Commission (SOPAC), the four AMCDRR declarations and action plans, the Regional Synthesis Report for the period 2007-2009 and interviews with key informants in the region.

The following is a summary of the progress for the region, reported by countries in each of the five HFA priority areas:

Priority 1

The need for legislation and policy frameworks has now come to be widely accepted by governments in the region. Legislations for DRR were introduced by three more countries in the current period. Most countries also reported having dedicated funds for response, but separate budgetary allocations for DRR were limited. Devolution of responsibilities for risk reduction to local levels of governance also continues to pose some challenges. While national multi-sectoral platforms for DRR have been created in several countries, there remains scope for improvement in their functioning and effectiveness.

Funding frameworks are now coming up at national levels and, in some cases, funding commitments have also been made through these.

Priority 2

Hazard risk assessments have been carried out by most countries though, in many cases, these assessments were limited to only a few hazards and to limited parts of a country. The risk assessment of hospitals and schools has received particular attention in some countries. Hazard and risk mapping has figured prominently in national DRR policies, plans or programmes launched by four countries during the current period. Early warning systems have received a boost from advances in communications technology and a number of countries have attempted to develop strategies using mobile phones. Cross-border cooperation in the area of early warning has been significant, though this is limited to a few hazards.

Priority 3

The development of disaster information management systems such as the 'Desinventar' database on disasters has been noted in several countries. However, given the limited internet connectivity, information dissemination among all key stakeholders remains a challenge. DRR is part of the school curriculum in more than half the countries in the region and includes mock drills and exercises in a few. However, similar inclusion in universities and colleges is still not significant. Public awareness campaigns have been launched and met with some success. The biggest challenge noted was in the development and use of tools and research methodologies to support DRR activities and investments.

Priority 4

As in the previous reviewing period (2007-2009), countries have reported comparatively limited progress in this priority area. Bangladesh and the Philippines have developed specific legislation acknowledging the link between environment climate change policy and DRR, though a lot more still remains to be done. Poverty and social development concerns significantly increase the risks in the region. Rapid urbanisation, weak enforcement mechanisms and constraints in capacities and resources have all been cited as factors limiting progress. However, the policy and institutional commitment to address underlying risk factors is clearly evident in the national progress reports.

¹ Source: IFRC, World Development Report, 2010

Priority 5

Disaster preparedness and the preparation of contingency plans have been undertaken in several countries during the current review cycle. Progress in extending the process of contingency planning to cover all sectors (China) and to establish Emergency Operation Centres (EOCs) at all levels of governance (India) has also been reported. The development and use of contingency mechanisms and financial reserves is still in its early stages and largely limited to supporting immediate relief efforts. Institutional capacity building has been taken up in most countries. Aside from training, information management and exchange are a core focus area.

DRIVERS OF PROGRESS

The 'drivers of progress' are a set of six factors identified as catalysts for risk reduction efforts and resilience to disasters. Among the drivers of progress, the adoption and institutionalisation of gender perspectives on risk reduction and recovery stands out as an area in which little has been achieved. Significant achievements have been reported by most countries in other drivers including the adoption of a multi-hazard integrated approach to DRR and development, strengthening capacities for risk reduction and recovery and engagement with non-government actors including NGOs and the private sector at all levels. Clear limitations have emerged in attempts to integrate human security and social equity approaches in to DRR and disaster recovery.

PROGRESS AT THE SUB-REGIONAL LEVEL

The SAARC member states have reported significant initiatives in regional cooperation in the area of disaster information and knowledge management. This has included the initiation of the South Asia Disaster Knowledge Network (SADKN) among some member states and the launch of a process to develop a Digital Vulnerability Atlas for the region. Another significant development has also been the broad agreement on a disaster response mechanism among member states, though this is yet to be adopted.

A number of initiatives to strengthen regional collaboration in disaster risk management (DRM) in the Pacific will be implemented jointly by SOPAC, the Secretariat of the Pacific Community and UNISDR as part of an Memorandum of Understanding (MOU) signed in 2010. SOPAC has also initiated collaboration with the UNDP Pacific Centre to enhance disaster management cooperation between the Pacific and Caribbean regions.

CHALLENGES AND GAPS

Among the challenges and constraints identified by national governments are the limited institutionalisation of DRR as a priority at the national level and the limited progress made at the sub-national levels of governance.

There are a shortage of scientific tools to support gaps in research and a lack of investment in risk reduction. Sustaining public awareness on disaster related issues is another challenge. Finally, there is poor coordination between different government agencies and departments addressing DRR, as well as resource and capacity constraints.

Based on observations and recommendations from past reviews, some changes have been attempted in this review period. These have included attempts at facilitating multi-stakeholder consultations as part of the self-assessment process and pilot reviews that attempted to align these processes at the local and national levels. Wherever such efforts have been taken, it has resulted in substantive improvements in the quality of reporting. These processes need to be standardised and adopted uniformly across all reporting countries. Several country reports still lack rigour and consistency in scoring, making it difficult at times to draw comparisons between them. Others have also missed out on specifically reviewing progress from 2009 to 2011, reporting instead on overall progress and developments in risk reduction. Specific suggestions on possible ways to overcome some of these challenges are discussed in the report.

RECOMMENDATIONS (LINKAGE TO HFA PRIORITY AREA)

- Further demystify DRR as a concept (HFA Priority Area: 1)
- Enhance the role of the private sector (HFA Priority Area: 1)
- Convert knowledge into policy (HFA Priority Area: 3)
- Strengthen linkages between disaster risk reduction and climate change adaptation (CCA) (HFA Priority Area: 4)
- Further invest in tools and research methodologies (HFA Priority Area: 3)
- Train and develop the capacity of government staff and administrators (HFA Priority Area: 3)
- Implement a long term, coherent public awareness strategy (HFA Priority Area: 3)
- Enhance regional cooperation in the area of disasters (HFA Priority Area: 2)
- Pay attention to DRR in complex emergencies (HFA Priority Area: 4)
- Strengthen and expand contingency planning (HFA Priority Area: 5)
- Increase the use of incentives to promote DRR (HFA Priority Area: 4)

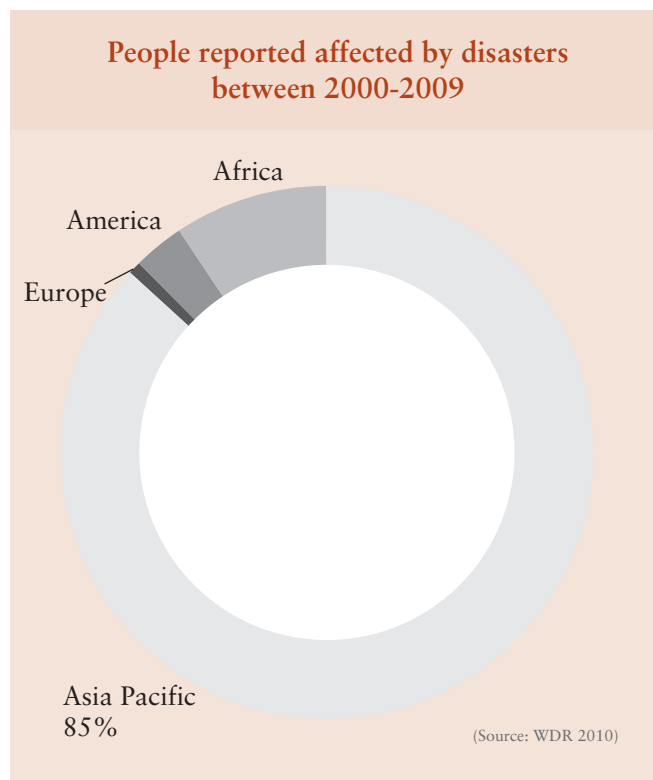
INTRODUCTION

2.1 Disasters in Asia-Pacific

Home to well over half the world's population, the Asia-Pacific region is also the most disaster-prone and vulnerable region in the world. According to recent estimates, both the number of people reported affected, as well as the number of people reported killed, in the first decade of the current millennium have risen significantly for the region, as compared to the preceding period (IFRC, World Disasters Report 2010). This is depicted in the figure below which shows that in the period 2000-2009 as many as 85% of the people reported affected by disasters belonged to the Asia-Pacific region.

Between 2009-2011, countries in the region have had to respond to challenges on an unprecedented scale. Among these were a series of storms which lashed the Philippines in the months of September and October 2009, including the Tropical Storm Ketsana that severely affected the capital Manila and caused severe flooding. In 2010, floods across Pakistan – the worst in the nation's history – affected an estimated 20 million people and inundated close to a fifth of the country.

Just a few months into 2011, the Asia-Pacific region has already been hit by four major disasters: A devastating earthquake in New Zealand, floods which have wreaked havoc in Queensland, Australia, floods across Sri Lanka which have displaced millions and the earthquake and devastating tsunami that struck Japan in the month of March – estimated to be the costliest disaster on record.



2.2 The HFA Progress Review

The Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities was the outcome of the World Conference on Disaster Reduction held in Kobe, Hyogo, Japan from 18th - 22nd January, 2005. A considerable amount of emphasis has been laid on reviewing the progress made by states in disaster risk reduction. Responsibilities for reviewing the HFA are assigned mainly to states, but are also identified for regional organisations and institutions, international organisations and UNISDR secretariat and system partners.



As part of this, HFA Progress Reports are prepared and submitted by member states and inter-governmental organisations on a bi-annual basis.

The objective of the review process is to serve as a mechanism for collecting and receiving continuous feedback from countries. It also serves to assist them in assessing progress, gaps and challenges in their efforts to implement the HFA.

The process of reviewing and self-assessment is done by member states on the basis of a tool known as the 'HFA Monitor'. This was first developed in 2008 and has since been reviewed to include a set of 'key questions' and 'means of verification' to guide those undertaking the review.

In the current review cycle, attempts have been made to bring about several improvements in the review process. These include encouraging the use of multi-stakeholder consultations and a greater involvement of civil society organisations in the review process. Two pilots in Nepal and Indonesia also attempted to align reviews taking place at the local and national levels.

The last review cycle (2007-09) found that there were "pockets of progress" which were concentrated within the first three HFA priority areas. At the same time, however, there were "holes of stagnation" where very little activity was reported. Of particular concern was the slow progress in acting upon the DRR challenges of climate change. Even more surprising was the low scores in priority area 5, disaster preparedness and response.

This report (covering the period June 2009 – April 2011) finds more consistent (though average) progress across the five priority areas.

2.3 Methodology and Structure of the Report

This regional synthesis report seeks to measure progress in implementing the HFA since 2005 and in particular the progress in the Asia-Pacific region during the review period 2009-2011. It also seeks to capture progress made against the four ministerial declarations - Beijing, New Delhi, Kuala Lumpur and Incheon. It uses the HFA, in particular the five priority areas and 22 indicators identified within the framework, as the main frame of analysis. Linkages between the ministerial declarations and the HFA indicators are also brought out in the report.

The report is based on the review of national progress reports shared by 27 countries for the current review period (2009-2011), a progress report and questionnaire by sub-regional organisations (SAARC and SOPAC), national and sub-regional progress reports for the preceding review periods, the Regional Synthesis Report for the period 2007-2009 and the declarations and action plans emerging from the four Asian Ministerial Conferences on Disaster Risk Reduction (AMCDRR). Interviews have also been carried out with key informants.

Under each indicator, the total average score for all countries is graphically represented on a diagram with a scale of 1 - 5. In priority areas 4 and 5 where scores were missing, Vanuatu has not been reflected in the average score. Iran has been reflected in the examples and narrative, but has not been included in the scoring.

Progress on UNISDR's three strategic objectives of Investments in DRR, Urban Risk Reduction and DRR-CCA Integration has been captured separately in the Annexures.





PRIORITY 1

ENSURE THAT DRR IS A NATIONAL AND LOCAL PRIORITY WITH A STRONG INSTITUTIONAL BASIS FOR IMPLEMENTATION

Indicators

1.1

National policy and legal framework for DRR exists with decentralised responsibilities and capacities at all levels

1.2

Dedicated and adequate resources are available to implement DRR plans and activities at all administrative levels

1.3

Community participation and decentralisation is assured through the delegation of authority and resources to local levels

1.4

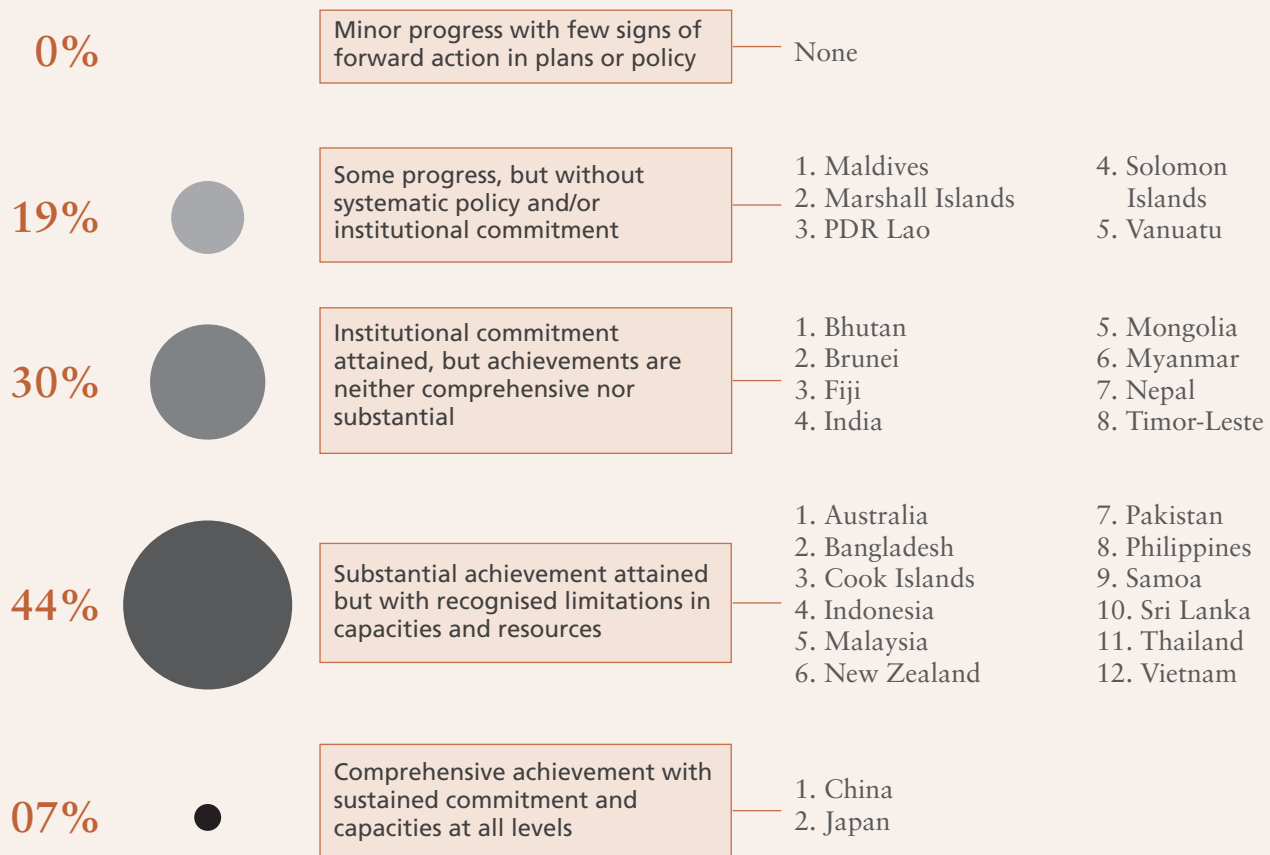
A national multi-sectoral platform for DRR is functioning

Summary of PROGRESS

The average score for Priority 1 is 3.4. Country scores range from 2 to 5, with the maximum number of countries scoring 4, indicating substantial achievement. While China and Japan, with stronger economies, are the only two countries to score comprehensive achievement, most of the Least Developed Countries (LDCs) and Small Island Developing States (SIDS) scored lower levels of progress.

3.4

Average Score



Select Initiatives in 2009-2011

AUSTRALIA: Support has been given to volunteer programmes such as the Australian Emergency Management Volunteer Forum 2011, National Emergency Management Volunteer Summit and Volunteer Leadership Programme.

BANGLADESH: A multi-sectoral National Platform for DRR has been established.

PAKISTAN: The National Disaster Management Act 2010 has been adopted by Parliament.

PHILIPPINES: US\$ 111 million (approx.) allocated to the National Disaster Risk Reduction and Management Fund.

THAILAND: A National Disaster Prevention and Mitigation Plan 2010-2014 and a Strategic National Plan for DRR 2010-2019 have been developed.

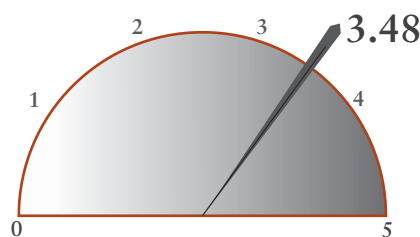
PROGRESS AGAINST INDICATORS

HFA PRIORITY AREAS	INDICATORS	OVERALL ANALYSIS ON THE PROGRESS	PROGRESS MADE DURING LAST REVIEW CYCLE (2009-2011)
1	1.1	Significant progress in adoption and acceptance of legislation and policy frameworks. Institutionalisation and capacity at sub-national levels is still limited.	New DRR legislation / policies in five countries - the Cook Islands, the Marshall Islands, the Philippines, Thailand and Vietnam.
	1.2	There is a region-wide increase in financial commitments for DRR. Some commitments are cross sectoral and not fully captured in the assessment. Resource constraints are reported at sub-national level.	DRR specific allocations were made in four countries and capacity building allocations in three. Bangladesh also made specific allocations for climate change and DRR programmes.
	1.3	The concept has gained acceptability, but in spite of the creation of institutional space, devolution of authority is still limited. Resources and capacity are also limited.	Civil society is playing an increasingly active role in DRR institutionalisation. Their role has reported a significant increase with cases of collaborative programmes.
	1.4	Structures are in place or being established in most countries. Some, however, have limitations in the true representativeness or devolution of authority.	Institutionalisation of National Platforms is reported, with even civil society led initiatives being reported mentioned.

PROGRESS AGAINST DECLARATIONS

BEIJING	<p>Linkages between national governments and local leaders, often facilitated through the involvement of civil society organisations, are reported in most countries.</p> <p>The role of civil society organisations in community-based disaster risk reduction activities has been widely reported.</p> <p>Processes for promoting local ownership are mentioned in some of the national programmes, but reported conditions of inadequately devolved powers to local levels and resource crunches create in limited results.</p> <p>Interdisciplinary coordination remains a major challenge, even though some exemplary National Platforms have emerged.</p>
DELHI	<p>There are several cases of mainstreaming pointed towards in secondary information, but no direct reporting is made. Many sectors have started addressing DRR concerns, but it remains outside the HFA progress review scope. Environment (climate change), urban planning, housing, agriculture and education are some such sectors.</p> <p>Cooperation at the sub-regional level was committed to in the declaration and a number of initiatives have since been taken up, particularly in the areas of knowledge sharing, early warning and capacity building.</p> <p>Partnerships have progressed, but the private sector's engagement is still limited.</p>
KUALA LUMPUR	<p>Corporate social responsibility in DRR and business continuity planning have not made significant progress.</p> <p>Local authority and community based DRR programmes are reported from a number of countries, but resource constraints are also cited as reasons for these remaining limited in scope. Programmes for children are also broadly reported.</p> <p>Setting up of voluntary targets for financial allocations has not been met and there are no reports of the private sector undertaking such exercises.</p> <p>Apportioning 10% of humanitarian funds for DRR has not been achieved.</p>
INCHEON	<p>CCA-DRR initiatives have attracted specific funding allocations, as illustrated in the case of Bangladesh, one of the most climate change threatened countries.</p> <p>The institutional mechanisms for convergence of CCA and DRR are not visible in a significant way. These are two inter-ministerial issues and both are also cross-cutting. Since DRR has made significant headway, CCA is so far being reviewed and reported in a DRR perspective alone.</p> <p>Time bound plans and specific budgetary allocations for short-term and long-term actions was a thrust area of the declaration and no significant progress has been made in this area since its early days.</p>

1.1 National policy and legal framework for DRR exists with decentralised responsibilities and capacities at all levels



In the review period 2009-2011, new legislations and policies for DRR were introduced or adopted in the Cook Islands, the Marshall Islands, the Philippines, Pakistan, Thailand and Vietnam.

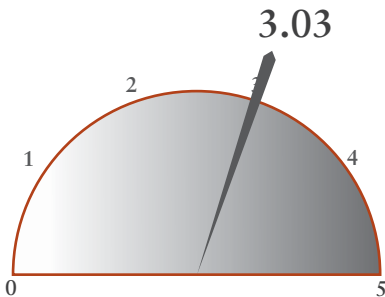
Overall, significant progress has been observed in the area of creating legislative and policy frameworks for DRR in most countries in the region and the necessity for such frameworks appears to have been acknowledged. The creation of institutional structures for DRR is, however, still limited to a few countries, though policies and plans are in place in most.

While the acknowledgment exists at the national levels in most reporting countries, progress in decentralising responsibilities and capacities to lower levels of governance is still limited. However, the need has been recognised in policies and legislation that have been drafted or adopted.

The need for capacity development in the area of DRR at sub-national levels has been identified and widely reported.

1.2

Dedicated and adequate resources are available to implement DRR plans and activities at all administrative levels



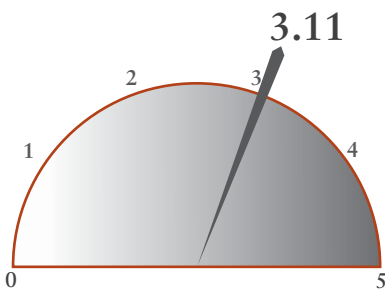
National and State (province) level disaster response funds were created in India during the last review period and now specific budgetary allocations for DRR training and capacity building have also been made. Specific allocations for disaster management activities have also been committed in Bangladesh, the Cook Islands, Malaysia, Pakistan, the Philippines and Sri Lanka. In Bangladesh, provisions for identified climate change adaptation activities will further play a significant part in reducing vulnerabilities.

Most countries in the region reported having dedicated funds or reserves for response. A significant increase in the allocations made for DRR training and capacity development activities were reported (India, Maldives and Myanmar). In some cases, allocations for disaster recovery activities was also reported. Separate budgetary allocations for DRR activities, however, were limited to a few countries (Bhutan, India, Malaysia, the Philippines and Sri Lanka–proposed). Funds for DRR activities are spread across several sectors and included in other programmes and activities as well. Though this makes it difficult to quantify the precise amounts allocated to such activities, it signals a positive step towards the mainstreaming of DRR.

Resource constraints were still identified as the main reason for countries not being able to realise their DRR commitments and implement plans and activities. This was particularly so in the case of lower administrative levels.

1.3

Community participation and decentralisation is assured through the delegation of authority and resources to local levels



Overall, enhanced community participation and decentralisation of authority and resources to local levels has been attempted in the region in a number of ways. This includes through legislative means requiring devolution of power to institutions of local governance (Maldives, Myanmar, Nepal, the Philippines and Sri Lanka), building capacities at the local level through trainings (Bangladesh, Bhutan and PDR Lao) and, in several instances, developing volunteer networks (Australia, the Cook Islands and Japan).

Non-Governmental Organisations (NGOs) and civil society groups are identified as having played a significant part in furthering progress in this area.

Clear limitations have emerged as well, including the lack of capacities for effective devolution of authority and resources. In some countries, administrative devolution was not backed by financial delegation. Community participation in disaster related planning processes was also identified as one of the areas for improvement.

NATIONAL PLATFORMS

A multi-stakeholder National Platform for DRR serves as an advocate across various levels and a coordination mechanism to mainstream DRR into development policies, planning and programmes.

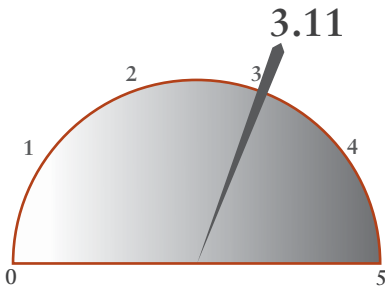
The progress in the creation of such platforms across the region, however, has been extremely varied.

CIVIL SOCIETY AND THE NATIONAL PLATFORM: CAMBODIA

“ESTABLISHING THE NATIONAL DRR & CCA PLATFORM IS A NEED OF THE TIME.”

H.E. Ly Thuch, Senior Minister and Second Vice-President of NCDM

Cambodia today presents a favourable environment for DRR initiatives, combined with a sense of urgency. Concerted efforts have laid a strong foundation to reduce vulnerability and boost socio-economic conditions. However, such initiatives need to be managed more effectively. Responding to the situation, the Asian Disaster Risk Reduction Network (ADRRN) and Save the Earth Cambodia have been supporting the establishment of a National Climate Change Adaptation & DRR Platform. In March 2011, representatives from the Ministry, UN agencies, international and national NGOs, universities, research institutions and the private sector all gathered for a multi-stakeholder consultation. The efforts, facilitated by the National Committee for Disaster Management (NCDM), have sowed the seeds for an active National Platform.



1.4 A national multi-sectoral platform for DRR is functioning

Overall, the progress on the establishment of national multi-sectoral platforms for DRR in countries across the region is mixed. These platforms are also in varying stages of development. Overall, National Platforms are functional in eight countries (Afghanistan, Bangladesh, China, Indonesia, Japan, Philippines, Sri Lanka and Vietnam). Out of these Afghanistan, Bangladesh, the Philippines and Vietnam were formed in the current review cycle.

In some countries where formal forums are not yet in place (Myanmar and PDR Lao), informal mechanisms have emerged that are playing the role of multi-stakeholder platforms.

While structures have been or are in the process of being institutionalised, some countries (Cambodia, Maldives and Nepal) have still noted scope for improvement in the functioning and effectiveness of these platforms.

FUNDING COMMITMENTS

US\$ 310 MILLION FOR CCA DRR: BANGLADESH

So far, much of the emphasis has been laid solely on building institutions and passing legislation. However, importance is now being given to securing committed funds for DRR and climate change projects. Over the last plan period, five countries - Bangladesh, India, Sri Lanka, Pakistan and the Philippines - have made significant progress in this regard.

Bangladesh established three funding mechanisms during 2010 to implement its climate change strategy. At the government level, US\$ 100 million was clearly allocated in Bangladesh's national budget.¹

An agreement signed with the UK, Sweden, Denmark and the EU in May 2010 established the Bangladesh Climate Change Resilience Fund. The initial pledges amount to over US\$ 100 million which will be used to implement the Bangladesh Climate Change Strategy and Action Plan. As Dr. Saleemul Huq, senior fellow of the International Institute for Environment and Development commented, 'This is a path breaking example of an innovative new approach in national climate action'.²

Finally, under the Pilot Program on Climate Resilience (PPCR) of Climate Investment Funds, Bangladesh will receive a total of US\$ 110 million to pilot climate resilience strategies and integrate them into core development planning. Of this, US\$ 50 million will be in grants and US\$ 60 million in near zero-interest credits. Developed in consultation with stakeholders from the village to the national level, the programmes will be implemented with support from multilateral development banks.³



“Since 2006, Korea has made a paradigm shift from recovery to disaster risk reduction. NEMA is now fostering most of the efforts in disaster situation control using information and space technology. We are collaborating internationally and strengthening capacity building. More money is being put into knowledge management to set up web based platforms. At the same time, we have been hosting training and education activities in Incheon where we have established ISDR's Northeast Asia office. Considering climate change as new emerging hazard, the Incheon action plan tries to integrate climate change adaptation with DRR and development.” *Dugkeun Park, Senior Analyst, National Emergency Management Agency (NEMA)*

¹ <http://uk.oneworld.net/guides/bangladesh/climate-change>

² <http://www.climatenetwork.org/blog/bangladesh-launches-climate-change-resilient-fund>

³ <http://climatechange.worldbank.org/blogs/bangladesh-beneficiary-adaptation-funding>

PRIORITY 2

IDENTIFY, ASSESS AND MONITOR DISASTER RISKS AND ENHANCE EARLY WARNING

Indicators

2.1

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

2.2

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

2.3

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

2.4

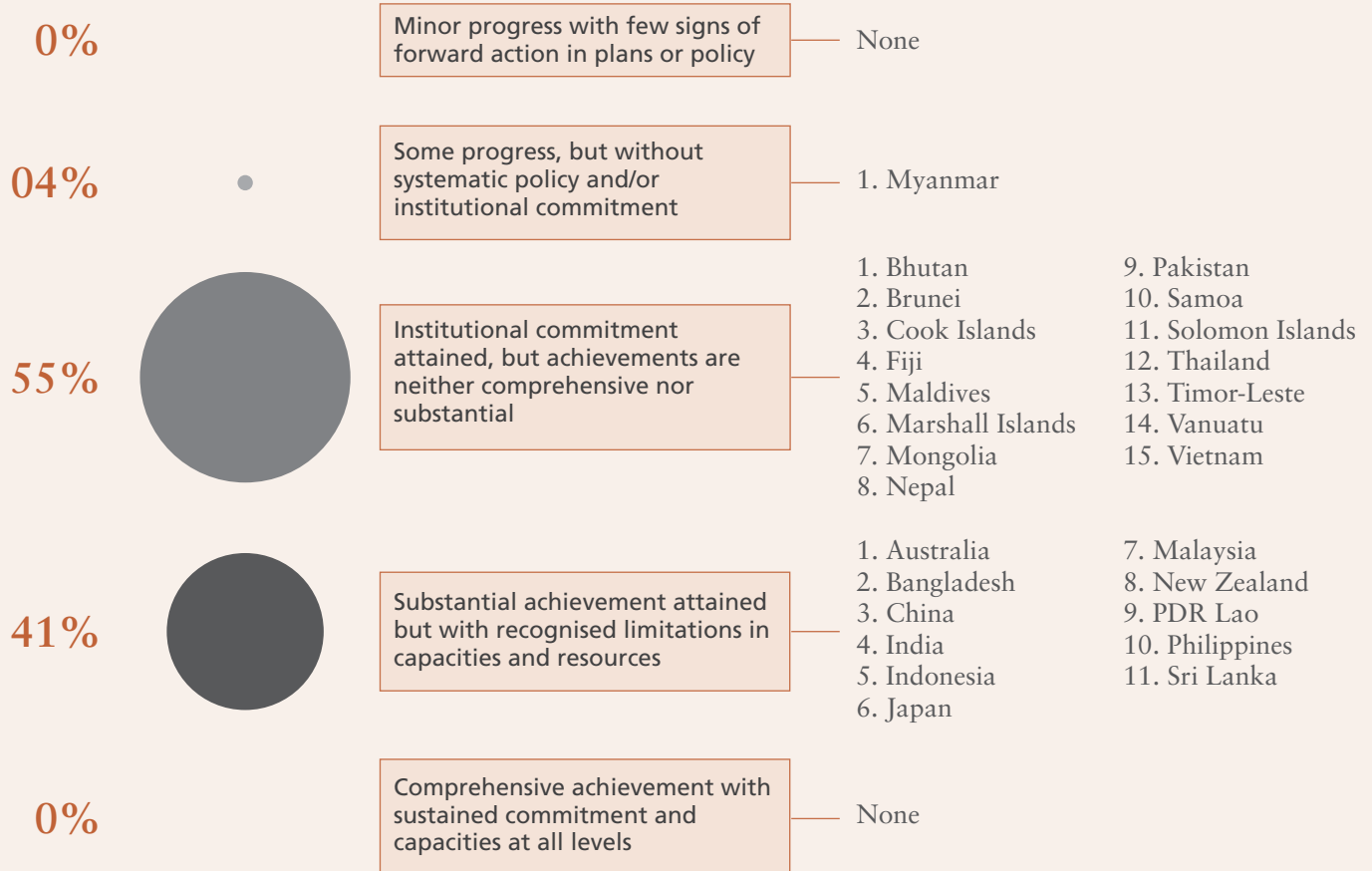
National and local risk assessments take account of regional/trans boundary risks, with a view to regional cooperation and risk reduction

Summary of PROGRESS

The average score for Priority 2 is 3.4. Myanmar being the only country to report lower level of progress, all other countries reported scores of 3 and 4. Achievements in a majority of the countries, including most of the Least Developed Countries and Pacific Island Countries, have neither been comprehensive nor substantial.

3.4

Average Score



Select Initiatives in 2009-2011

- BHUTAN:** Glacial Lake Outburst Flood (GLOF) monitoring systems are being set up in two areas - Punakgha-Wamgdue and Chamkhar Valley.
- JAPAN:** Disaster Information Sharing Platform to help standardise and share information among all stakeholders is being developed.
- NEPAL:** An early warning strategy has been developed and community based flood early warning systems put in place in seven districts.
- NEW ZEALAND:** Memorandums of Understanding, supported by procedures and exercises, have been entered into with major television and radio broadcasters for public warnings.

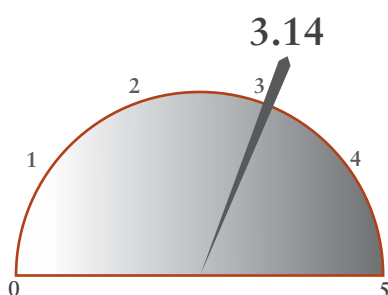
PROGRESS AGAINST INDICATORS

HFA PRIORITY AREAS	INDICATORS	OVERALL ANALYSIS ON THE PROGRESS	PROGRESS MADE DURING LAST REVIEW CYCLE (2009-2011)
2	2.1	Significant overall progress on assessments, also including climate change risks. In some cases, the focus is still on a few hazards, vulnerabilities are missed out and local levels not sufficiently covered.	Bangladesh, Myanmar, Pakistan and the Philippines have taken up specific initiatives on risk assessment. The Philippines completed the Hazard Mapping and Assessment for Effective Community-Based Disaster Risk Management (READY) project.
	2.2	While overall systems are in place in most countries, monitoring and dissemination suffers from limitations due to its multi-agency nature and resource constraints, particularly at local levels.	Bhutan is in the process of setting up a GLOF early warning system. A Frontline Emergency Response Network (FERN) has been initiated in the Cook Islands to better manage DRM data and enhance data coordination.
	2.3	Most countries have harnessed information technology advances to establish mass communication warning systems. They are not all multi-hazard and not all reach remote communities though.	Australia, Nepal, Sri Lanka and Vietnam have made significant progress in establishing and expanding communication technology-based early warning infrastructure.
	2.4	Regional cooperation established as an area of attention, particularly in cyclone, tsunami and flood hazards that are often trans-national.	Bilateral cooperation between Australia and Indonesia and Thailand was reported. Regional consultations have been established.

PROGRESS AGAINST DECLARATIONS

BEIJING	The human dimension of early warning has been addressed in a number of early warning initiatives using socially popular means of communication. Communication of disaster risk assessments has not been reported in any significant way. A number of countries report progress in the actual conduct of risk assessments and preparation of risk maps and risk atlases. The downward communication of these sets of information seems to remain limited. Dissemination of risk assessments takes place at a micro level through locally conducted assessment exercises in local safety programmes.
DELHI	Trans-boundary multi-hazard end-to-end early warning systems have been the subject of significant negotiations and investments among the Pacific and Indian Ocean system members and through the sub-regional institutional mechanisms. Significant progress is not reported on risk transfer and risk financing. One of the underlying reasons could be the limited progress achieved in local level risk assessments and awareness generation. Progress on assessments and mainstreaming of special vulnerable groups such as senior citizens, orphans and socially excluded groups is not reported.
KUALA LUMPUR	Support for cost-effective and widely accessible technologies for early warning dissemination has been achieved in a number of cases, including the use of SMS services. Partnerships at a regional network level for high technology and scientific application and the sharing of information on DRR and CCA have not been reported in a significant way. The role of scientific and academic communities to enhance scientifically informed national policies on DRR and CCA has also not been reported in a significant way.
INCHEON	Actions towards short term goals for CCA-DRR are visible in the form of climate change commitments and assessments being taken up by a number of countries. National action plans on climate change have been prepared or envisioned in a number of countries and these are either based on or recommend detailed assessments and surveillance. Multi-hazard risk assessments in local settlements is not reported in a significant way, although its establishment as a national priority is reported. Resource constraints and lack of institutional capacities at the local level are cited as limitations in a number of cases.

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



The following countries reported significant progress in the area of hazard and risk assessment during the current review period:

Bangladesh updated its National Vulnerability Mapping for earthquakes, floods and cyclones in 2009, while launching the assessment process for tsunamis.

Myanmar launched the Myanmar Action Plan on Disaster Risk Reduction for 2009-2015, which aims at carrying out vulnerability and risk assessments and at producing a hazard and vulnerability atlas of Myanmar.

Pakistan launched a National Composite Risk Assessment and Emergency Response System Project that is expected to be completed by the end of 2011.

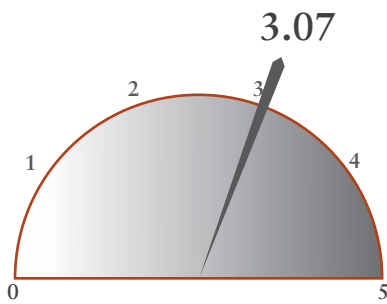
The Philippines completed the Hazards Mapping and Assessment for Effective Community Based Disaster Risk Management (READY Project) in the current review period and has carried out hazard identification and risk assessments across several provinces of the country.

Overall, substantive progress was reported by several other countries in the region, including Australia, China, India, New Zealand and Sri Lanka in the area of carrying out multi-hazard assessments at the national level. Risk assessment is also being linked to climate change adaptation efforts in Australia and Bangladesh, with the aim of better understanding the vulnerabilities due to climate change. Progress in risk assessments of schools and hospitals was reported by Bhutan, PDR Lao and Iran and the process has been initiated in Sri Lanka.

One of the limitations identified in this area by some countries was that assessments were limited to a few hazards and areas of the country.

Several assessments also lack information on vulnerabilities and capacities of people towards hazards.

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

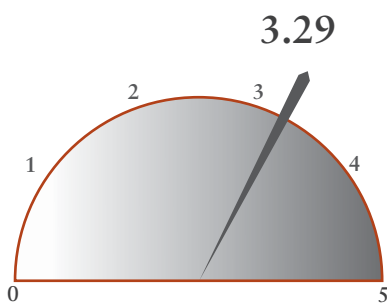


Bhutan is in the process of setting up monitoring systems for GLOF in two vulnerable valleys in the country.

Overall, while systems were in place in the region, most countries reported that responsibilities and the management of systems for monitoring and disseminating data are spread across a range of national agencies depending on the type of hazard. Several countries have noted continuing challenges in the dissemination of information, particularly among local communities (Bhutan, Fiji, India, Myanmar, Nepal, Pakistan, the Solomon Islands, Sri Lanka and Thailand).

Resource constraints were identified as the main reason for countries not being able to realise their commitments and implement plans and activities. This was particularly so in the case of lower administrative levels.

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



Australia has put in place a national telephone-based emergency warning capability for both fixed line as well as mobile phones during the current review period and the system has been put to extensive use.

The Government of Nepal is in the process of developing an early warning strategy for the entire country.

A significant expansion in the number of early warning towers in coastal regions has been planned or is being carried out in Sri Lanka and Vietnam. Bangladesh's cyclone early warning system was updated in 2009.

Overall, countries across the region have sought to harness advancements in communications technology, using mobile phones, television and radio in a significant way to enhance early warning systems.

Early warning systems still need to be extended to all hazards in some countries. Continued efforts are required in reaching communities (particularly those in remote locations with limited infrastructure and communications systems) and ensuring that they are aware of, and act in a timely manner when early warnings are issued.

RISK ANALYSIS/ASSESSMENTS

Risk assessments address hazards and evaluate existing levels of exposure. They evaluate both the magnitude and likelihood of potential losses, as well as provide a full understanding of the causes and impact of those losses. Unequivocally, such accurate assessment of potential risk can save lives and minimise damage.

Across the region, several countries have made significant progress in this area – from a National Composite Risk Assessment and Emergency Response System Project in Pakistan to the launch of the Myanmar Action Plan on Disaster Risk Reduction.

However, such assessments are often still limited to a few specific hazards and certain areas of the country. There is also a gap in terms of including people's own vulnerabilities and capacity to deal with hazards.

RISK 'READY': THE PHILIPPINES

“HAZARD MAPS ARE THE BASIS FOR ALL THE PREPAREDNESS THAT WE MUST BE DOING”

Dr. Renato U. Solidum, Jr., director of the Philippine Phivolcs-DOST¹

The READY project, launched in 2006 and due to be completed this year, is a collaborative effort between the Philippines government, the United Nations Development Programme (UNDP), the Asian Development Bank and AusAID. It covers 27 high risk provinces across the Philippines, aiming to empower the most vulnerable municipalities and cities to prepare disaster risk management plans.

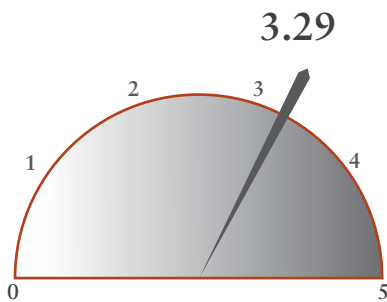
The project covers three main components: (1) scientific multi-hazard mapping as the first step to risk assessment; (2) community based disaster preparedness and (3) mainstreaming disaster risk reduction into the development planning process of local government units.

The project has had intangible benefits in terms of increased awareness and preparedness of these communities and the possible numbers of lives and properties that will be saved as a result.²

¹ http://www.undp.org.ph/?link=news&news_id=200&fa=3

² <http://drh.edm.bosai.go.jp/database/item/5317485453687b8abcca59e9e7c1178fc483c625>

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



Overall, given the significant trans-boundary risks that exist in the region, the need for regional cooperation and risk reduction has been widely accepted. It is an area that has witnessed continued progress. Cooperation has been reported particularly in the areas of tsunami warning, cyclone and flood prediction and warning, as well as information management and sharing in disaster management. Examples of such cooperation have been reported by countries in the Pacific and Bay of Bengal regions, as well as among countries of the Mekong River region.

Progress in bilateral cooperation and support has also been reported (Australia – Indonesia and Australia – Thailand). The ASEAN Agreement on Disaster Management and Emergency Response (AADMER), a binding instrument on DRR in the Asia-Pacific region, has broadened cooperation in this area.

The value of regional and sub-regional cooperation in areas such as knowledge sharing has been significantly recognised, particularly in view of recent trans-national disasters. Initiatives such as the South Asia Disaster Knowledge Network (SADKN) have emerged. They are, however, yet to show tangible impacts.

EARLY WARNING SYSTEMS

Early warning dissemination systems across the region have been enhanced significantly with the use of a range of communication systems including mobile phones, television and radio.

Yet, in most countries, early warning systems still need to be extended to all hazards. The lack of information in local languages, guidance at the local level and the perception of a top-down approach are other issues that need to be addressed. Going beyond technology, we need to ensure that clear warning messages are understood and, most importantly, acted upon in a timely fashion.

“While early warning systems are extremely important, they are not adequate alone. In Japan's March 11th disaster, for example, the tsunami warning and advisory were issued within four minutes after the event. Yet, in several places, people began evacuating only after the first wave struck. Repeated evacuation drills had led to a false perception of safety. The need to break the boundary between information and action is critical.” *Rajib Shaw, Associate Professor, International Environment and Disaster Management, Graduate School of Global Environmental Studies, Kyoto University*

NO LIVES LOST IN CYCLONE YASI: AUSTRALIA

“WHAT PEOPLE BILL AS A MIRACLE COMES DOWN TO UNDERSTANDING RISK AND KNOWING HOW TO REDUCE VULNERABILITY AND MINIMISE EXPOSURE TO RISK”

Margareta Wahlström, Special Representative of the United Nations Secretary-General for DRR

When tropical cyclone Yasi finally made landfall in the early hours of 3rd February, 2011, Queensland had already been on alert for three days. 30,000 people had been evacuated from Cairns alone, including all patients from its major hospitals. Residents across the region were urged to board up their homes or take refuge in evacuation shelters, with warnings that emergency services may not be able to reach them for 24 hours due to the storm's severity. The result was that despite its category five strength, cyclone Yasi claimed no casualties.³

While the emergency response has been unanimously praised, the widespread devastation of property has raised questions about Australia's mitigation measures. As cyclone expert Jonathan Nott, Professor of Geomorphology and Natural Hazards at James Cook University commented, “We're still not thinking seriously enough about where people should live and how to keep them safe and how to keep them out of the road of danger. So this is really the big issue still.”⁴



³ <http://abcasiapacificnews.com/stories/201102/3128232.htm>

⁴ <http://www.abc.net.au/lateline/content/2011/s3129538.htm>

PRIORITY 3

USE KNOWLEDGE, INNOVATION AND EDUCATION TO BUILD A CULTURE OF SAFETY AND RESILIENCE AT ALL LEVELS

Indicators

3.1

Relevant information on disasters is available and accessible at all levels, to all stakeholders

3.2

School curricula, education material and relevant trainings include DRR and recovery concepts and practices

3.3

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

3.4

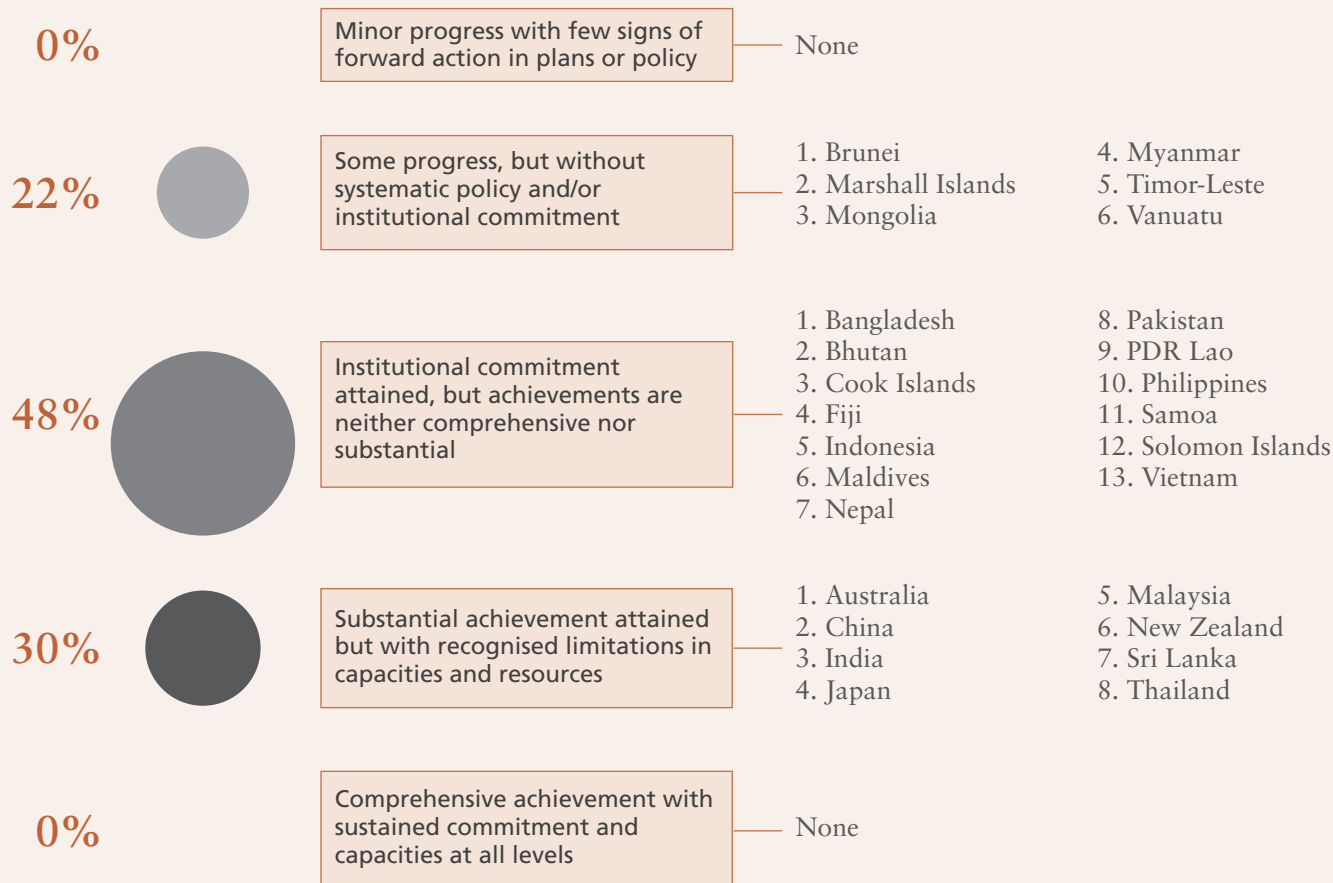
Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities

Summary of PROGRESS

The average score for Priority 3 is 3. All countries have reported scores ranging from 2 to 4, and less than a third of the countries have reported substantial achievements. None of the Least Developed Countries or Pacific Island Countries makes it to the substantial achievement mark.

3.0

Average Score



Select Initiatives in 2009-2011

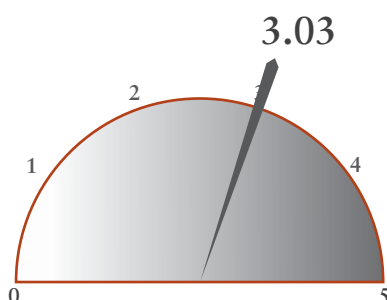
- BANGLADESH:** The Bangladesh Disaster Management Education Research and Training Network of experts established and made functional.
- MALDIVES:** A cost-benefit study of disaster risk mitigation measures in three islands in the Maldives was prepared in 2009 to provide policy makers an overview of the cost effectiveness of three possible mitigation options.
- MONGOLIA:** Researchers from the Disaster Research Institute have helped complete a micro-risk mapping of Ulaanbaatar based on consolidated disaster data. Nine districts of Ulaanbaatar city have been mapped based on satellite images taken in 2010.
- PDR LAO:** A pilot on mainstreaming DRR in education and school curriculum was carried out in five provinces and is now being expanded to cover the entire country, along with a training of Master Trainers for the new curriculum.

PROGRESS AGAINST INDICATORS

HFA PRIORITY AREAS	INDICATORS	OVERALL ANALYSIS ON THE PROGRESS	PROGRESS MADE DURING LAST REVIEW CYCLE (2009-2011)
3	3.1	Most countries have established internet based systems and a number of countries have reported use of the Desinventar database system. Information technology is driving progress in this area.	Australia, Bhutan and Vanuatu have made progress in the areas of development of manuals, training and use of information management systems. However, accessibility / availability of information at the community level is still a major concern.
	3.2	More than half the countries report progress on school curriculum drills and interactive educational material. Resource constraints, particularly at local level, are a limitation.	A number of countries report progress on curriculum, educational materials and drills. Mainstreaming in the education sector and teacher training was also reported.
	3.3	In most countries, lack of standardised tools is a constraint. Research activities are sporadic. Budget constraints are cited. The overall level of progress made is relatively low.	New Zealand established a multi-agency hazard research platform. Australia and New Zealand reported significant progress. Civil society groups from three countries made progress at the community level.
	3.4	Overall, progress is reported. Many countries are using disaster anniversaries as pegs for campaigns. The role of civil society organisations has been recognised.	A number of countries report progress, mainly through campaigns using print and electronic media and activities like mock drills.

PROGRESS AGAINST DECLARATIONS

BEIJING	Integration of DRR in formal and informal education systems has been reported from a number of countries. Formal curriculum integration has taken place both at school and higher education levels. Informal education systems have been more widely used at the school education level. Sharing information and exchanging knowledge has not been reported in clear terms. The specific use of broadcasting and print media as highlighted by the declaration has been made in a number of programmes and campaigns, but does not emerge as a deliberate and institutionalised strategy in the progress reports.
DELHI	The declaration refers to the Bangkok Action Agenda of 2007 and stresses the integration of DRR in school education and making schools safer. Progress on this has been reported by a number of countries in the form of plans and programmes. Financial commitments have also been made in this sector. Though public awareness campaigns and approaches are reported in a number of cases, specific focus on engagement with the media for DRR awareness generation is not reported in a significant way.
KUALA LUMPUR	The declaration delves deeper than mere DRR education in schools and raises the need for regular teachers' training and technological developments such as e-learning, as well as retrofitting schools and education facilities to meet disaster resistant standards. While top-line policies and national programmes on the themes are reported, specific commitments on many of these are largely limited in the region. The declaration also raises the issue of indigenous knowledge, which remains a significant gap. The only visible actions are in the domain of research and documentation.
INCHEON	Inclusion of DRR in formal and informal education systems is widely reported. However, inclusion of CCA, the focus of this declaration, is still limited in outreach. Promotion of child and people centred education for community preparedness and the strengthening of education and training programmes for DRR and CCA is also a commitment on which much needs to be done. This is particularly true of unravelling and integrating the CCA dimension. Similarly, awareness raising on CCA-DRR is a relatively new area and integration of these two cross-cutting themes is yet to take off in a significant way.



3.1 Relevant information on disasters is available and accessible at all levels, to all stakeholders

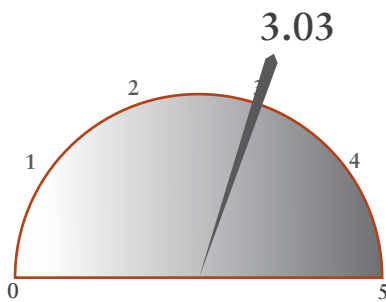
In the current cycle, several countries have reported activities directed at developing capacities of government officials in the area of disaster management. These have included the publication of emergency management manuals (Australia) and training on the operation and use of disaster information management systems (Bhutan and Vanuatu).

Overall, most countries across the region have either already established systems for information management on disasters or are in the process of doing so. These systems are typically in the form of websites or portals that collate and disseminate information on hazards (Australia, Bhutan, India, Myanmar and the Philippines).

Several countries reported the use of the 'Desinventar' database that is used to gather, store and share historical information on disasters in the country (PDR Lao, Nepal and Sri Lanka).

Countries also reported a need to further work on addressing aspects of access and usage of the information. Access is currently limited in some countries, on account of limited internet connectivity and language barriers.

3.2 School curricula, education material and relevant trainings include DRR and recovery concepts and practices

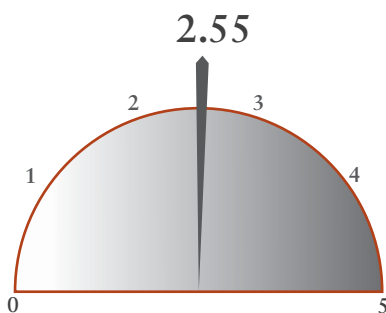


Overall, more than half the reporting countries in the region state that DRR forms a part of the school curriculum or is in the process of being introduced. A number of countries (India, Indonesia and the Maldives) have made significant progress in introducing DRR in school curricula at different levels. In several countries, school mock drills and exercises are also carried out. In many cases, however, the focus is on secondary school level and work with primary levels has not been as considerable. Some countries have developed interactive tools and educational material to help build awareness on DRR issues among children and their families (Australia, New Zealand and Samoa).

Increased emphasis on training of school teachers as part of efforts to mainstream DRR into education has also been reported by a number of countries (Myanmar, New Zealand, PDR Lao, the Philippines, Samoa and Sri Lanka).

Resource constraints were identified as the main reason for countries not being able to realise or implement their DRR commitments. This was particularly so in the case of lower administrative levels.

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



New Zealand established a multi-agency, trans-disciplinary Hazards Research Platform in 2010 to help fund hazard and disaster research over extended durations.

Only three countries – Australia, New Zealand and Thailand reported significant developments or advances in this area. Some progress has been reported in community hazard, risk, vulnerability and capacity assessment and has been carried out primarily by NGOs and civil society groups (India, Maldives and Sri Lanka).

While some countries have been able to develop standardised tools and methodologies (Bangladesh), most cited the lack of standardised tools as a significant challenge. Research activities were also reported to be sporadic and carried out by a range of stakeholders, with little coordination among them. Some international agencies have carried out cost-benefit analysis research of disaster risk reduction efforts. The need for developing similar tools at the country level, which will help make a strong case for risk reduction activities, has also been reported (the Philippines).

Overall, limited progress has been achieved by countries in the development of research tools, methodologies for risk assessment and cost-benefit analyses. This is evidenced by the low average score of the region for this indicator (2.55). Financial and budgetary constraints were identified as the primary reason for the limited progress.

INDIGENOUS KNOWLEDGE

Even before the development of technology based systems, local communities worldwide had developed methods to deal with disasters and climate related threats. Passed from one generation to the next, this indigenous knowledge is a core component of local sustainability and can play a critical role in making DRR and climate change education locally appropriate.

PRESERVING FOOD: SOLOMON ISLANDS

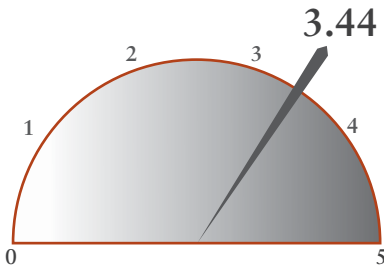
Food security is one of the areas where indigenous knowledge can be extremely effective. Solomon Islands, as stated in their national report, is already implementing two projects that promote the cultivation of disaster resistant foods and traditional food preservation techniques such as 'Nambo' and '6 months pudding'. A new Ministry of Agriculture project on climate change and food security is also slated to begin in 2011.

In the rainforest-heavy islands of Temotu, separated by more than 300 kms of ocean from the other Solomon Islands, such harvesting techniques have survived for generations. The Melanesian people use a unique drying technique to produce nambo - the local term for dried starchy foods with a biscuit-like crunchiness. Produced once or twice a year when breadfruit is in season, the process involves roasting fully mature fruit, cutting it into small chunks, drying and packing it in leaf-based humidity proof packaging to make it last a year.

The Polynesian Islanders produce a fermented food called masi, made from cassava granules fermented in sealed pits. Such measures create a local emergency food support mechanism for these remote communities.

3.4

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



Significant progress has been reported in the area of DRR awareness generation among communities. Commonly used strategies for spreading awareness include the use of coordinated public awareness campaigns through print and electronic media, the development and dissemination of IEC materials and the use of mock drills (Bangladesh, China, the Cook Islands, Fiji, India, the Marshall Islands, Mongolia, Nepal, Pakistan, PDR Lao, Samoa and the Solomon Islands).

In several countries such as Bhutan, Pakistan and Nepal, national governments have adopted a strategy of designating the anniversaries of major past disasters in the country as days for building awareness on disaster related issues.

The role of NGOs and Community Based Organisations (CBOs) in building awareness, particularly at the community level, has been recognised in countries across the region.

INSTITUTIONALISING KNOWLEDGE

Over the years, the goal of spreading DRR awareness has spurred much action. So far, most of these initiatives have had a narrow focus such as school safety, hospital safety, drills or hazard mapping activities at the village level. The sustainability of such initiatives, however, will come from the knowledge domain.

BREAKING NEW GROUND: THE UNISDR INSTITUTE FOR URBAN RISK REDUCTION (URR)

The UNISDR Education and Training Institute for Urban Risk Reduction was inaugurated in August 2009. Built in Incheon, Korea, it is the first facility of its kind in Asia for professional urban planners, city managers and local DRR officials. It will raise, establish and vitalise networks of DRR specialists through extensive education and training. The idea is to leverage the enormous practical experience of city leaders.

The institute will work in partnership with the UNISDR Northeast Asia office, also established in Incheon. Its focus areas include ensuring that technology and science is effectively used to increase disaster resilience; facilitating inter-linked DRR and CCA measures at the local level; strengthening urban risk reduction; safer schools and hospitals; and building capacity to deal with yellow dust and other related hazards. Simultaneously, it is expected to become a stepping stone for Korean high-tech DRR technologies and green industry to reach international levels.

The hope is to foster mutual cooperation among countries and to accelerate the growth of DRR expertise through training, applied research and knowledge sharing.

“For the ASEAN region, one of the noteworthy achievements has been our initiative to mainstream disaster risk reduction in the education sector. Good practices from around the region have been documented. Based on these, standard approaches and guidelines are being developed to help member states scale up and improve mainstreaming initiatives in the school sector. This will be one of the key drivers to further HFA implementation in the region. While there have been varying degrees of progress, Thailand, the Philippines, Cambodia and Myanmar are some of the countries that have taken leaps forward.”

Dr. Marqueza L. Reye, Technical Advisor for Disaster Risk Reduction, ASEAN-UNISDR Technical Cooperation on the Implementation of HFA, ASEAN Secretariat



PRIORITY 4

REDUCE THE UNDERLYING RISK FACTORS

Indicators

4.1

DRR is an integral objective of environment related policies and plans, including for land use, natural resource management and adaptation to climate change

4.2

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

4.3

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

4.4

Planning and management of human settlements incorporate DRR elements, including enforcement of building codes

4.5

DRR measures are incorporated into post-disaster recovery and rehabilitation processes

4.6

Procedures are in place to assess disaster risks of major development projects, especially infrastructure

Summary of PROGRESS

Of all the priorities, Priority 4 scores the lowest average score at 2.8. Even though concerted efforts and committed investments were reported on the strategic objective of linking DRR with Climate Change Adaptation, most of these are still in early stages and only six countries, most of them high on the development index, report substantial achievement under this priority.

2.8

Average Score

07%



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

- 1. Timor-Leste
- 2. Vanuatu

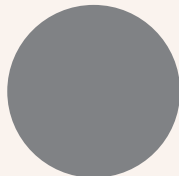
26%



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

- 1. Brunei
- 2. Marshall Islands
- 3. Mongolia
- 4. Myanmar
- 5. Nepal
- 6. Samoa
- 7. Solomon Islands

45%



Institutional commitment attained, but achievements are neither comprehensive nor substantial

- 1. Bangladesh
- 2. Bhutan
- 3. Cook Islands
- 4. Fiji
- 5. India
- 6. Maldives
- 7. Pakistan
- 8. PDR Lao
- 9. Philippines
- 10. Sri Lanka
- 11. Thailand
- 12. Vietnam

22%



Substantial achievement attained but with recognised limitations in capacities and resources

- 1. Australia
- 2. China
- 3. Indonesia
- 4. Japan
- 5. Malaysia
- 6. New Zealand

0%

Comprehensive achievement with sustained commitment and capacities at all levels

None

Select Initiatives in 2009-2011

- INDIA:** The Government of India has introduced a 'Disaster Resilient Audit on Self-Certification Basis' for all schemes that it supports.
- JAPAN:** Regional Spatial Strategic Plans were prepared for eight large areas in 2009.
- MYANMAR:** From 2011, the Myanmar Action Plan on DRR requires a disaster impact study as part of the planning and approval process of development programmes.
- PAKISTAN:** A Gender and Child Cell has been created within the National Disaster Management Authority. It has been active in ensuring that gender concerns are taken into account in recovery efforts following the 2010 floods.
- VIETNAM:** The National Target Programme on Climate Change approved in 2009 aims at reducing the country's vulnerability to climate change and contains particular references to disaster risk reduction.

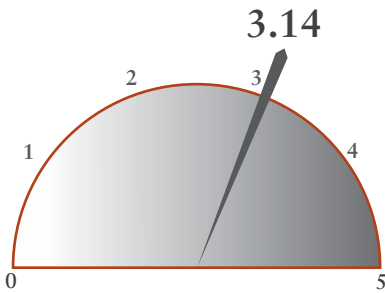
PROGRESS AGAINST INDICATORS

HFA PRIORITY AREAS	INDICATORS	OVERALL ANALYSIS ON THE PROGRESS	PROGRESS MADE DURING LAST REVIEW CYCLE (2009-2011)
4	4.1	National Action Plans, policies, legislation, assessments and development of codes is reported from a number of countries. Implementation and enforcement of regulations remains a challenge.	Significant progress on climate change and environment related actions by a number of countries.
	4.2	The role of risk transfer mechanisms such as insurance have been recognised. The sheer population size, densities and poverty are resulting in considerable challenges.	Social development policies and welfare measures taken up as part of larger developmental plans have been reported.
	4.3	A number of countries have progressed in areas related to the primary sector - agriculture, fisheries and reported initiatives such as drought proofing programmes.	Australia and New Zealand reported comprehensive contingency planning efforts for critical infrastructure.
	4.4	Nearly all countries reported guidelines and building codes, though mechanisms for building awareness and ensuring compliance are lacking.	Some progress made on built environment regulations and urban risk reduction through a range of initiatives.
	4.5	Nearly all countries are incorporating DRR measures into recovery and rehabilitation processes. Countries have built upon lessons from post-disaster reviews.	India, Indonesia and New Zealand have formulated recovery frameworks, guidelines and plans that incorporate DRR measures.
	4.6	While environmental impact assessment systems are in place in most countries, disaster assessment mechanisms are lagging for want of tools and capacities.	Bangladesh, India, Myanmar and Sri Lanka have initiated certification systems for disaster resilience audits of government sponsored schemes.

PROGRESS AGAINST DECLARATIONS

BEIJING	<p>Integration of DRR in socio-economic development policies and programmes and an increase in resilience of assets and development investments is reported indirectly in the form of some national programmes, but not significantly addressed. The reason, in part, could be the cross-sectoral nature of the recommendation and the unisectoral limitation of the reviewing system.</p> <p>The issue of sustainable livelihoods has been addressed in some countries through livelihood support programmes, but these are often not directly linked to DRR policies.</p> <p>Special attention suggested for the fields of environment, infrastructure, shelter, agriculture, land use, water resources management and poverty reduction are too cross-cutting and wide in scope for capture in the existing HFA progress review system.</p> <p>Progress in other areas raised by the declaration is moderate in most cases and illustrated mostly through national programmes.</p>
DELHI	<p>Mainstreaming of DRR into national sustainable development strategies is a major thrust of the declaration, which does not appear in the national reports in a significant way. This could, in part, be due to the limitations in cross sectoral progress assessments and reporting.</p> <p>Technology driven initiatives have been reported in a number of the concerned areas. This includes DRR in post-disaster reconstruction, development of building codes and development regulations for settlements under threat.</p> <p>The reported progress is mostly in areas involving hardware such as buildings and construction of physical structures, while progress in softer elements such as socio-economic development and the impact assessment of developmental projects remains limited.</p> <p>Other than a few isolated programmes focus on gender issues in DRR and recognition of the role women can play as well as other such cross-cutting elements also show no significant progress.</p>
KUALA LUMPUR	<p>Regional cooperation and action planning to address themes of underlying disaster risks appears in ad-hoc initiatives at the regional level, but remains to be addressed in a significant way, particularly around the issue of trans-national disasters.</p> <p>Disaster and climate proofing of the Millennium Development Goals is one of the clear themes of the HFA Implementation Regional Action Plan. Evidence from the region and the national progress reports point to indirect linkages with some of the national DRR programmes. The limitation is three fold: that of limited progress in cross-sectoral DRR planning; limited progress in climate change adaptation integration in DRR as well as developmental domains; and the limitation of HFA progress review in terms of multi-sectoral reporting.</p> <p>Linking CCA to DRR as a new driver has yet to show significant progress as the cross linkages are still to be strongly established in terms of indicators.</p>
INCHEON	<p>It is very early days to report progress on the indicators of underlying risks against the Incheon Declaration of late 2010.</p> <p>Some of the actions that have been put in place regardless, particularly related to the issue of climate change, will directly relate to the short and long term priorities set by the declaration.</p> <p>Within the short term priorities, with a horizon period of two years, climate resilient national development strategies are showing promise of emerging in a number of countries. The declaration sets a target of five countries. Some countries, including Bangladesh, Cambodia, India, the Philippines and Vietnam, are already working towards national instruments for addressing the climate change challenge. The major task will be relating these clearly to the DRR domain. With significant work happening in the DRR field already, this should be a task achievable to a significant level.</p>

4.1 DRR is an integral objective of environment related policies and plans, including for land use, natural resource management and adaptation to climate change



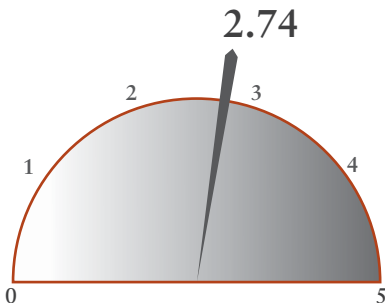
Significant progress in legislative efforts aimed at combating the challenges of climate change, as well as in the area of environment protection, in the current review period.

These have included National Adaptation Plans of Action (NAPA) (Bangladesh, Bhutan, Maldives, Sri Lanka and Vanuatu).

Contingency planning, vulnerability and risk assessments figure prominently in these efforts in most countries (Australia, Bhutan, India, Indonesia, Japan, Maldives Nepal and the Philippines).

While codes, policies and other measures are in place, several countries have also highlighted the challenges they continue to face in enforcing and implementing these.

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



The Asia-Pacific region faces considerable challenges in the area of social development. It has to confront the dual challenges of severity as well as volume, on account of the relatively higher population sizes and densities in several countries in the region.

Countries have reported on policies and social welfare measures that have been adopted as part of larger development plans and policies. The Employment Generation Programme for the Poorest (EGPP) in Bangladesh and the Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA) in India, are two examples of employment guarantee schemes reported by countries in the region, which aim at creating a safety net and reducing the vulnerability of populations most at risk.

The role of risk transfer mechanisms such as insurance and micro-insurance for life, livelihoods (agriculture and livestock) and property as part of disaster risk reduction efforts has been recognised by governments across the region. However, it has been adopted only in limited areas, with further expansion is constrained by limited resources.

URBAN RISK REDUCTION

By 2030, two billion people will live in slums and 60% of the world population will live in urban areas. The unique problems of cities - from urban poverty to infrastructural weaknesses - present extreme risks in terms of disasters. Urban risk reduction provides opportunities for investments through infrastructure upgrades, building retrofits, urban renewal, cleaner energies and slum upgrading. It is a critical priority.

THE “MAKING CITIES RESILIENT” CAMPAIGN

“I CALL FOR THE NEED OF WORLD LEADERS TO ADDRESS CLIMATE CHANGE AND REDUCE THE INCREASING RISK OF DISASTERS- AND WORLD LEADERS MUST INCLUDE MAYORS, TOWNSHIPS AND COMMUNITY LEADERS.”

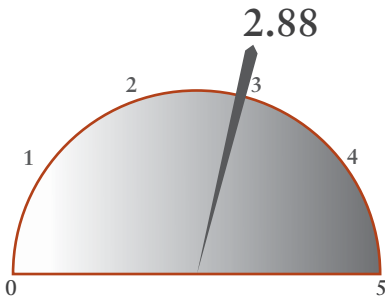
Ban Ki-moon, UN Secretary-General

The 2010-2011 World Disaster Reduction Campaign “Making Cities Resilient” addresses issues of local governance and urban risk. The campaign is driven by Mayors and their local governments who commit to a checklist of “Ten Essentials” that will make their cities more resilient. Among others, the ten actions include organising multi-stakeholder forums; urban risk assessments; reinforcing drainage systems to reduce flood, storm and health threats; safe schools and hospitals; installing early warning systems; and conducting public preparedness drills.

While they must take the lead, making cities safer must involve all segments of society: From governments and regional or civil society organisations to the private sector, academia and even every citizen.

Building on UNISDR’s previous safe schools and hospitals campaigns, the overall goal is to achieve resilient, sustainable urban communities through actions taken by local governments. It aims to create a global network of fully engaged cities of different sizes, characteristics, risk profiles and locations.

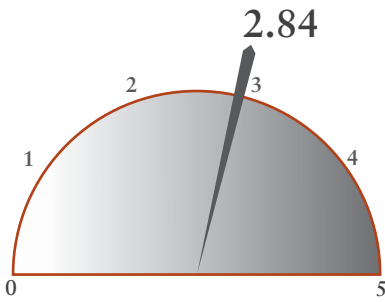
As of February 2011, 583 local governments from 53 countries had joined the campaign.



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

Few countries (Australia and New Zealand) reported on the existence of comprehensive contingency planning efforts for critical infrastructure and essential services such as water, electricity, transport and financial services.

Given the significant position occupied by the primary sector (particularly agriculture and fisheries) in the economies of several countries in the region, vulnerability and risk reduction efforts have been focussed here. These efforts have included watershed developments drought proofing programmes and crop diversification among others (Bangladesh, Fiji, India, Indonesia, Nepal, Pakistan, the Philippines and Vietnam).



4.4 Planning and management of human settlements incorporate DRR elements, including enforcement of building codes

The role of rapid urbanisation and the associated emergence of informal settlements in urban areas has considerably increased risks in several countries in the region. Nearly all countries reported the existence of guidelines and building codes, though mechanisms for increasing awareness of these, as well as to ensure compliance and enforcement are lacking. Japan has reported the development of National Spatial Strategy and Regional Spatial Strategy Plans for eight regions as part of its efforts to enhance disaster resilience.

CLIMATE CHANGE INITIATIVES

Climate change does not only make communities more vulnerable to disasters, but will likely increase the frequency and severity of hydro-meteorological disasters. A new configuration of weather-related hazards, coupled with processes like sea-level rise and rapidly expanding coastal cities, will intensify disaster risk unless prompt action on climate change adaptation and mitigation is taken.

CLIMATE CHANGE ACADEMY: THE PHILIPPINES

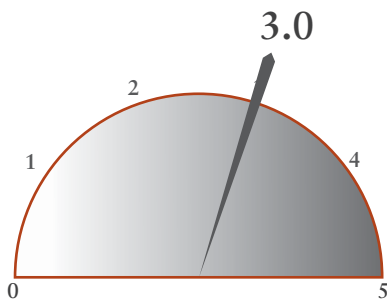
In the Philippines, the National Economic Development Authority is developing training modules. These aim to enhance capacity to develop, manage and administer climate change programmes. In fact, a Climate Change Academy is in the works to ensure sustainability. With the passage of the Climate Change Act of 2009, better integration between DRR and CCA institutions is also expected.

MAPPING SEA LEVEL RISE IMPACTS: VIETNAM

Vietnam, with its high population densities in low-lying areas, is projected to be one of the worst hit by sea-level rise. To this end, a number of climate change models have already been developed. Areas such as Ca Mau and Mekong Delta have mapped the projected impacts of sea level rise on major urban settlements, transport infrastructure as well as rural communities, including the extent and coverage of sea water intrusion.



4.5 DRR measures are incorporated into post-disaster recovery and rehabilitation processes



Nearly all countries reported that DRR measures were being incorporated into recovery and rehabilitation processes. This is being done through formulation of recovery frameworks, guidelines and plans of which DRR forms an integral part (India, Indonesia and New Zealand).

Countries have sought to build on the lessons that have emerged from post-disaster reviews (Nepal and Samoa).

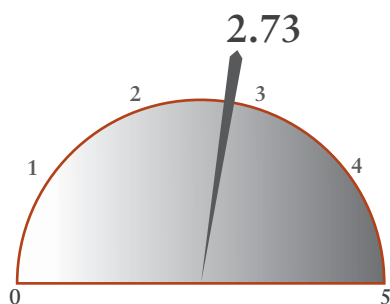
Among the major post-disaster recovery efforts in which DRR was incorporated are the post earthquake reconstruction in Bhutan (2009) and the Wenchuan earthquake in China (2008). Recovery efforts following cyclone Nargis in Myanmar (2008), the series of typhoons that affected the Philippines (2009), the Pakistan floods (2010) and cyclone Pat in the Cook Islands (2010) are also reported to have included DRR measures in a significant way.

CREATING 'SAFE' ISLANDS: MALDIVES

Two 'safe' Islands - Villufushi and Dhuvafaru - were constructed and opened in 2008 and 2009 respectively. Now home to those uprooted by the devastating Indian Ocean tsunami, these islands were developed in partnership with the IFRC and are better protected from natural disasters. Community members have been trained to run and maintain the island's infrastructure, including the state-of-the-art powerhouse, water and sanitation systems. With water scarcity being a problem, each house is equipped with a 2,500-litre rainwater harvesting tank and roof guttering to capture every precious drop of rainfall.



4.6 Procedures are in place to assess disaster risks of major development projects, especially infrastructure



The Government of India has introduced a process of self certification for carrying out a Disaster Resilient Audit of schemes that it sponsors. The Governments of Sri Lanka and Bangladesh have also initiated similar measures.

Environment Impact Assessments (EIA) are mandated in most countries in the region for major development projects. Specific assessments of disaster risks is, however, still lacking or in the process of being initiated. The lack of tools and capacities has been cited as being among the reasons for limited progress in this area. Among the countries that have introduced measures is Myanmar, whose Action Plan for Disaster Risk Reduction has included Disaster Impact Assessments. This will be part of the planning and approval process for development programmes from 2011 onwards.

SAFE SHELTERS

A core underlying risk factor for disasters is unsafe construction. A lack of skill or know-how means that unsafe houses continue to be the norm for people living in disaster prone areas. Addressing this issue in both rural and urban scenarios will be key to building disaster resilience.



BUILDING BACK BETTER: BIHAR, INDIA

Kosi Rehabilitation and Reconstruction Project

The 2008 floods in the Kosi region of Bihar, killed 434 people and forced nearly 3 million from their homes. The majority of those affected were low-income groups, and the poorly constructed houses (300,000 of which were destroyed) played a key role in this devastation.

The massive rehabilitation and reconstruction project is being used as a chance to build back better. Technical guidelines have been developed based on the area's hazards and vulnerability. Bamboo, as a locally available material, is serving as a core construction material and different bamboo artisans are being trained on its treatment and joinery. Local masons and engineers have also been trained. Implemented by a team of national civil society organisations and the Government of Bihar, the project involves house owners at various stages of the construction. This process has ensured not only that safe houses are built, but that large scale awareness about disaster resistant construction can be spread.

“Urban resilience is now an important part of Chennai's development. Among other measures, Chennai Corporation is carrying out vulnerability analysis of 65,000 buildings (of over one storey) across the city. 35,000 have been inspected so far, in collaboration with Anna University and appropriate retrofitting measures are being recommended. We have also created a database of volunteer teams to react to any disaster, including first aid, communications, transportation and rescue and relief.”

N Mathavan, Assistant Executive Engineer, Chennai Corporation

PRIORITY 5

STRENGTHEN DISASTER PREPAREDNESS FOR EFFECTIVE RESPONSE AT ALL LEVELS

Indicators

5.1

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

5.2

Disaster preparedness plans and contingency plans are in place at all administrative levels and regular training drills and rehearsals are held to test and develop disaster response programmes

5.3

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

5.4

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

Summary of PROGRESS

The average score for Priority 5 is 3.4. Almost half the countries report substantial or comprehensive achievement levels. Once again, the Least Developed Countries and Pacific Island Countries remain at the lower end. Higher achievement levels are reported from countries that have also reported specific commitments under the strategic objective of investments in DRR.

3.4

Average Score

04%



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

1. Vanuatu

07%



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

1. Marshall Islands
2. Myanmar

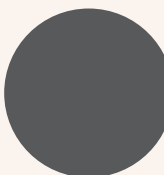
41%



Institutional commitment attained, but achievements are neither comprehensive nor substantial

1. Bhutan
2. Brunei
3. Cook Islands
4. Indonesia
5. Maldives
6. Nepal
7. PDR Lao
8. Samoa
9. Solomon Islands
10. Sri Lanka
11. Timor-Leste

44%



Substantial achievement attained but with recognised limitations in capacities and resources

1. Australia
2. Bangladesh
3. Fiji
4. India
5. Japan
6. Malaysia
7. Mongolia
8. New Zealand
9. Pakistan
10. Philippines
11. Thailand
12. Vietnam

04%



Comprehensive achievement with sustained commitment and capacities at all levels

1. China

Select Initiatives in 2009-2011

AUSTRALIA: Preparedness and contingency plans at the national and provincial level were implemented in response to the bushfires in Victoria in 2009.

MARSHALL ISLANDS: A national Emergency Response Plan was developed in partnership with national stakeholders in 2009.

PHILIPPINES: Sectoral Emergency Response Plans and Standard Operating Procedures are also in place.

SRI LANKA: The Departments of Education and Health pledged to make 100,000 education and health facilities in the country safe from disasters as part of the 'One Million Safe Schools and Hospitals Programme'.

VANUATU: Four national level tsunami simulation exercises were carried out in the current review cycle.

CHINA: A new National Emergency Operations Centre (EOC) was opened. It will also help ensure that all government agencies with functional responsibility for DRR or disaster management (DM) are at a single location.

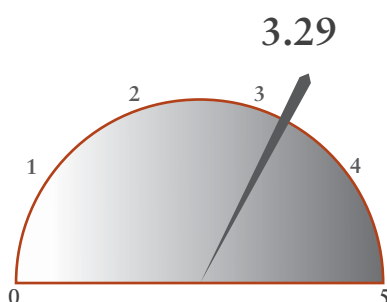
PROGRESS AGAINST INDICATORS

HFA PRIORITY AREAS	INDICATORS	OVERALL ANALYSIS ON THE PROGRESS	PROGRESS MADE DURING LAST REVIEW CYCLE (2009-2011)
5	5.1	Progress in establishment of institutional mechanisms has been reported by most countries. However, implementation and enforcement, particularly at a local level, remains limited.	Ten countries reported progress on school and hospital safety and legislative initiatives for risk management. Sectoral standards and plans have also been reported.
	5.2	Most countries have national level plans for significant hazards and to some extent conduct drills. These need to be expanded to cover all hazards and to include lower administrative levels.	Myanmar and Sri Lanka reported simulation exercises and Nepal reported significant progress in the development of preparedness plans.
	5.3	Financial reserves for relief exist in most countries, but are often inadequate. Small countries and island states face the challenge of small population size while establishing risk transfer mechanisms.	Bangladesh and the Philippines have reported the establishment of funding mechanisms to cover climate change associated risks.
	5.4	Emergency Operation Centres exist in most countries and in some cases at sub-national levels. Nepal and Bhutan have also developed multi-sectoral assessment tools.	Australia and New Zealand are in the process of strengthening their information exchange and coordination mechanisms.

PROGRESS AGAINST DECLARATIONS

BEIJING	Preparation, periodic review and modification of contingency plans at national and local levels is a thrust area of the declaration. While, at the national level, progress has been reported in most reporting countries, local level progress suffers from resource constraints and lack of devolution of authority. At the same time, a number of local level initiatives in terms of programmes and pilot projects have been reported from several countries and even some regional cross country programmes have been taken up. Provision of resources and enhancement of capacities, as highlighted by the declaration, is limited at local levels.
DELHI	Disaster preparedness planning is an area where all countries have been making progress. In some cases, it is still largely limited to the national level in terms of resource allocation and devolution of powers. Even in such cases, there are sub-national programmes addressing aspects of preparedness at local levels. The declaration's focus on community based disaster preparedness and socially inclusive preparedness is similarly reflected in local programmes, but not significantly in policies and devolution of authority. The aspect of public-private partnerships is not reported in a significant way.
KUALA LUMPUR	Protection of critical infrastructure and high technology and scientific applications were part of the declaration and action plan. The rapid pace of developments in the construction and IT sectors in the region has provided the platforms and tools for launching some initiatives in these domains. Recognition of the need to retrofit lifeline buildings and establish preparedness measures around critical infrastructure has been taken up in a number of countries, even if at a pilot national level. Preparedness for climate induced disasters is still to be directly reported in a significant way.
INCHEON	The Incheon declaration specifically focusses on climate change and urban risk, besides other aspects. Urban risk reduction has been a theme for a number of programmes in a number of countries. Some of these also relate urban risk to climate change and address a regional spectrum. The science still being new, initial investments are more in the realm of research and establishment of linkages between DRR and CCA. Preparedness for climate induced disasters, particularly cyclones and in part floods, is an ongoing theme and will carry forward the agenda of this declaration in coming times.

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



School and hospital safety has been the focus of disaster risk management strategies in several countries. Targeted programmes in this area were reported by Bhutan, Iran, Nepal and PDR Lao. Standards and plans for the health and education sector have also been developed in China.

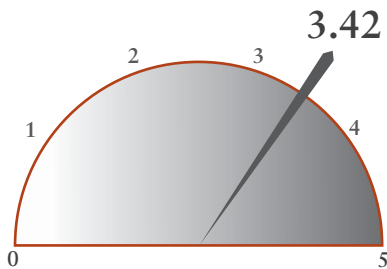
Legislative provisions in the area of disaster risk management and disaster risk reduction have been strengthened or were in the process of being done during the current review cycle in Bangladesh, Fiji, Myanmar, Sri Lanka, Solomon Islands, Thailand and Vietnam.

Countries in the region have reported that institutional mechanisms for disaster risk management are largely in place, though gaps in capacities and in ensuring the proper implementation of measures have been noted.

As has been reported for other Priority Areas, these challenges are more acute at the province or state and local levels.

Indonesia, the Marshall Islands, Myanmar and Timor-Leste reported progress levels below the regional average in this area.

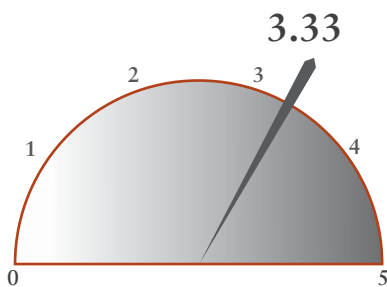
5.2 Disaster preparedness plans and contingency plans are in place at all administrative levels and regular training drills and rehearsals are held to test and develop disaster response programmes



Myanmar and Sri Lanka have reported on tsunami simulation exercises carried out on a significant scale during the current review cycle. Nepal also recorded significant progress in the development of disaster preparedness plans in the current cycle.

Most countries have disaster preparedness and contingency plans in place at the national level, covering at least the most significant hazards. The need to expand existing plans to cover all hazards and at all administrative levels has also been reported. China has reported that it has initiated efforts to expand the coverage of contingency plans to all sectors.

As compared to the development of plans, significantly less progress has been reported in the area of institutionalising regular drills and rehearsals, which are still carried out in a largely sporadic and ad-hoc manner.



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

Financial reserves for immediate relief and response to disasters exist in most countries, though, in some, the funds contained in these reserves are limited. A few countries have also reported on efforts to create reserves for climate change risks, preparedness, mitigation and recovery measures (Bangladesh and the Philippines). While national level commitments are reported, supporting mechanisms to deploy these at sub-national levels are not yet fully developed.

Small island nations have reported on the challenges of introducing and sustaining insurance as a risk transfer mechanism given the small base and size of populations.

CONSOLIDATING PREPAREDNESS MEASURES

Horizontal integration in China

All regions and sectors in China have promulgated disaster and unexpected accident plans to help relevant departments engage in emergency response and rescue work. A number of action, coordination and communication centres have been established including the National Disaster Reduction Centre of China, a public health centre and a rescue centre.

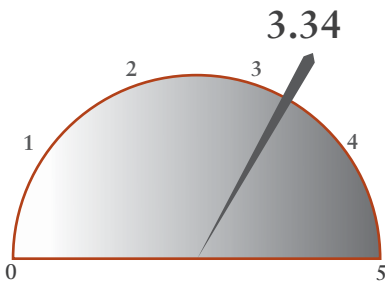
23 central relief material warehouses have been established across the country, with suppliers already contracted to provide urgent life necessities. Communities in both urban and rural areas are also involved in building shelters and stockpiling water, food, blankets and clothes.

Vertical Integration in India

A chain of disaster reduction and response centres run through the Indian system. Starting with the National Crisis Management Committee at the top, Emergency Operation Centres have been established at the national, state and district level. Community based programmes within villages extend this chain further down to ground level. These centres allow for effective dissemination of disaster warnings and other related information, as well as better response coordination post disasters.

However, there is a vital need to strengthen these linkages further and to involve civil society partners in improving community response mechanisms.

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



Australia and New Zealand are currently in the process of strengthening their information exchange and coordination mechanisms to help achieve greater coherence and to better link different administrative levels in the country.

Emergency Operations Centres are in place at the national level in most countries, with a few exceptions. In India, these are reported to have been established at the state (provincial) and district levels as well, though this process is still ongoing in most other countries.

The development and use of multi-sector assessment tools has also emerged as one of the highlights in the region (Bhutan and Nepal).



“Preparedness issues need to be addressed at several levels including education and infrastructure. Most critically, however, the government is yet to come up with an appropriate law to implement the National Strategy for Disaster Risk Management (NSDRM). The passing of this bill is critical. Without this, the country's disaster preparedness efforts cannot move forward.”

Bijay Upadhyay, Earthquake Technology Training Specialist, National Society for Earthquake Technology (NSET)

DRIVERS OF PROGRESS

1 Multi-hazard integrated approach to DRR and development

Most countries report significant and ongoing reliance on adopting a multi-hazard, integrated approach. Progress is reflected in the development of policies, the completion of multi-hazard risk analyses and assessments and the development of multi-hazard disaster management plans in several countries. Initiatives such as the READY Project in the Philippines and the Comprehensive Disaster Management Programme in Bangladesh have sought to emphasise the need for multi-hazard analyses and develop models for replication across their respective countries. Bangladesh has also reported attempts to incorporate the projected impact of climate change in to these.

Japan is currently developing a disaster information sharing system which will be combined with multi-hazard risk assessments. The National Spatial Strategies and legislative framework promote a goal to create a resilient nation, including pushing for comprehensive disaster risk reduction measures.

Among the areas identified for further progress are the need to ensure that multi-hazard analyses and assessments are better reflected in development planning (Maldives and Sri Lanka) and the need to further develop in-country capacities for carrying out such assessments (Fiji, Timor-Leste, Samoa and Solomon Islands).

2 Gender perspectives on risk reduction and recovery adopted and institutionalised

Country reports on the inclusion of gender perspectives in risk reduction and recovery activities clearly highlight the fact that there remains considerable room for improvement. A significant majority of countries in the region reported partial or little to no reliance on progress in this area. While there appears to be some acknowledgment of the different needs of men and women in disasters, progress appears to have been constrained by prevailing social norms and practices in most countries. These largely exclude or undermine the role of women in decision making procedures. The problem is not the lack of a decision making role alone, but the absence of gender and women's aspects altogether: women's participation, access to warning and other information.

However, the need for gender mainstreaming and social inclusion has been recognised in several legislations and policies related to disaster management that have been drafted. It forms one of eight guiding principles of the National Strategy for Disaster Risk Management in Nepal. Similarly, it is one of ten components of a framework put in place by the Climate Change Act of the Philippines. Specific budgetary provisions for gender specific concerns and

needs (but not directed specifically at disaster related issues) have also been reported by these two countries. Japan clearly emphasises the gender equality perspective in its Basic Disaster Management Plan. Pakistan has created a Gender and Child Cell within the NDMA that has been active in ensuring that gender concerns are considered in recovery efforts following the 2010 floods.

3 Capacities for risk reduction and recovery identified and strengthened

Significant improvements have been reported in the area of capacity development in several countries in the region. While the process of capacity identification and strengthening is reported as being at an extremely nascent stage in some countries (Bhutan, Indonesia, Timor-Leste and Vietnam), others are in the process of institutionalising training and capacity building efforts (India and the Philippines). India has reported significant investments in training and capacity building programmes, particularly for government officials, in the current review cycle. The Government of India has even earmarked funds specifically for this purpose over a five-year period. It is also in the process of developing a comprehensive human resource development plan as part of its Disaster Management Programme. In Japan, each local government has been obligated to implement risk reduction activities under the Disaster Countermeasures Basic Act and the relevant ordinances. The formation of community based voluntary disaster reduction organisations, fire-fighting teams and flood-fighting teams has been promoted by local governments and others through training programmes and workshops.

4 Human security and social equity approaches integrated into DRR and recovery activities

While the majority of countries have reported significant reliance on this driver of progress, clear limitations have also emerged on this front. Countries have reported on poverty reduction efforts as well as policies directed at different ethnic, linguistic and indigenous groups. Only the Government of Australia has reported on specific policies and programmes such as the 'Inclusive Emergency Management with Culturally and Linguistically Diverse Communities Program' and the development of a National Emergency Management Strategy for Remote Indigenous Communities.

Sri Lanka is in the process of reviewing and revising its Disaster Management Act in force since 2005, to strengthen provisions in the area of human security and the creation of safety nets for vulnerable groups.

In Japan, changes in social structure, living environment and lifestyles on a nationwide scale have led to an increase in the numbers of elderly people living alone as well as sparsely-settled areas mainly consisting of aging population. To overcome the difficulties in setting up community organisations, the Cabinet Office developed case studies on “How to promote the evacuation support of people requiring assistance in time of a disaster” and conducted briefings across 20 locations.

5 Engagement and partnerships with non-government actors, civil society and private sector, amongst others, have been fostered at all levels

The need for collaboration between various stakeholders has been widely accepted and is being put into practice across the region. The formulation of National Volunteer Strategies (Australia), the existence of multi-stakeholder platforms and consultations comprising NGOs, CBOs and in several cases the private sector and media engagement (New Zealand) and the designation of a disaster reduction and volunteer day and week (Japan) all attest to significant advances in this area. Countries are also exploring and furthering public-private partnerships in the area of DRR (India, Maldives, Sri Lanka). The setting up of the Philippines Disaster Recovery Foundation to encourage private sector funding of recovery processes stands out as a significant attempt at public-private partnerships in the region.

6 Contextual drivers of progress

Countries have reported on a range of contextual drivers of progress. These include: the UN Development Assistance Framework Programme (Bhutan); national legislations and political and executive committees or bodies (China and India); recognition of the linkages between climate change and disaster risk reduction, as well as integrating policies on both (the Philippines); acknowledging and working with local community structures (Samoa and the Solomon Islands); and regional factors and organisations such as ASEAN and SOPAC (Brunei and Fiji).



SUB-REGIONAL PROGRESS

SAARC Report on Progress

Member nations of the SAARC have recognised the regional or trans-boundary nature of several hazards in the region. The SAARC Centre for Disaster Management, based in New Delhi, India, has been in operation since 2007.

A regional framework has been in place since 2007, covering issues of disaster management, preparedness, early warning and recovery, as well as roadmaps for regional cooperation in nine areas. However, the framework is not legally binding on member states.

In the current review period, SAARC has reported an agreement among member states on a 'Natural Disaster Rapid Response Mechanism', which is yet to be signed.

In addition, significant activities and progress have also been reported in information and knowledge management among member states in the area of disaster management. These include:

- Initiation of a South Asia Disaster Knowledge Network (SADKN)
- Initiation of the development of a digital vulnerability atlas for South Asia
- Research projects on seismic vulnerability with a view to addressing trans-boundary risks

On the whole, progress on disaster management has been slow and mirrors the overall slow progress in regional cooperation among SAARC member states.

SOPAC

(Progress is recorded based on an interview with key SOPAC staff)

SOPAC is an inter-governmental, regional organisation. It has a mandate to coordinate regional disaster risk reduction efforts and disaster management capacity building efforts for the Pacific region.

Adapting the Hyogo Framework for Action 2005-2015 to the regional context, leaders adopted a regional framework in 2005. Titled 'An Investment for Sustainable Development in the Pacific Island Countries – Disaster Risk Reduction and Disaster Management: A Framework for Action 2005-2015'. It contains six broad themes, which broadly correspond to the Priority Areas outlined in the Hyogo Framework for Action. These themes are:

Theme 1: Governance - organisational, institutional, policy and decision-making framework

Theme 2: Knowledge, information, public awareness and education

Theme 3: Analysis and evaluation of hazards, vulnerabilities and elements at risks

Theme 4: Planning for effective preparedness, response and recovery

Theme 5: Effective, integrated and people-focused early warning systems

Theme 6: Reduction of underlying risk factors

Among the related initiatives in place is the Pacific Islands Framework of Action on Climate Change 2006-2015 which reflects the commitments made by leaders from the region in the UN Framework on Climate Change. The endorsement of other international instruments such as the Johannesburg Plan of Implementation (which led to the Declaration made at the World Summit on Sustainable Development) and the Mauritius Strategy for Further Implementation of the Barbados Plan of Action also reiterate the significance of disaster risk management as a development concern.

The Pacific Disaster Risk Management Partnership Network (PDRMPN), comprising of 30 regional and international organisations, was formed with the specific objective of assisting countries to implement this framework and other related commitments. Its role includes supporting countries to develop and implement their DRM National Action Plans.

Pacific Disaster Net, a regional information database has been launched to assist decision making on DRR issues and was put to use during the tsunami in Samoa and Tonga in 2009. The creation of a Disaster Risk Reduction Portal for the Pacific has also been completed.

During the current review cycle, a number of Pacific island countries have taken steps towards integrating the cross-cutting issues of disaster risk management and climate change adaptation. This includes the government of Tonga, which has formulated a Joint National Action Plan for both DRM and CCA. Progress in the development and review of legislation and plans in the area of disaster management were reported from Kiribati, Nauru, Palau, the Solomon Islands and Tuvalu.

Significant developments have also taken place at the sub-regional level towards the creation of a 'Pacific Catastrophic Risk Insurance Pool' and a 'Pacific Disaster Reserve Fund', supported by the World Bank. A number of initiatives to strengthen regional collaboration in DRM in the Pacific will be implemented jointly by SOPAC, the Secretariat of the Pacific Community and UNISDR as part of an MOU signed in 2010. SOPAC has also initiated collaboration with the UNDP Pacific Centre to enhance disaster management cooperation between the Pacific and Caribbean regions.

A pilot project – Disaster Information Management Systems in Fiji and the Solomon Islands, supported by SOPAC and a range of other organisations, seeks to develop tools and procedures to guide information management both during response and for DRR.

ASEAN

(This is based on the previous review cycle: 2007-2009)

ASEAN, founded in 1976, identifies and emphasises the need for regional cooperation in the area of disaster management. It adopted the ASEAN Agreement on Disaster Management and Emergency Response in July 2005 with the aim of providing effective mechanisms to reduce in disaster losses. The AADMER incorporated key elements and strategies from the HFA.

ASEAN also outlined a strategy for sub-regional cooperation and promotion of multi-stakeholder partnerships, known as the ASEAN Regional Programme on Disaster Management. The strategy also contained the regional strategy, priority areas and activities for DRR from 2004 to 2010 and is implemented by the ASEAN Committee on Disaster Management.

Progress has also been made in the area of information sharing at the sub-regional level. The Online Southeast Asia Disaster Inventory was launched in 2007 as part of the ASEAN Disaster Information Sharing and Communication Network. Preparedness and response capacities have also been strengthened at the sub-regional level, with the adoption of Standard Operating Procedures and the establishment of a coordination centre. Through the ASEAN Humanitarian Task Force, ASEAN has supported the incorporation of disaster risk reduction strategies into post-recovery planning processes and extended significant support in the recovery and reconstruction phase following Cyclone Nargis.

CHALLENGES & RECOMMENDATIONS

CHALLENGES IN IMPLEMENTATION

The 27 reporting countries (19 from Asia and 8 from Pacific) in the region that have detailed their HFA progress differ significantly in terms of geographical locations, size of population, hazards and risks and levels of economic development. Consequently, the nature of challenges that they face in reducing risks also varies considerably. The following are some of the common limitations and challenges that have been identified.

The need for further institutionalisation of disaster risk reduction as a priority at the national level and limited acceptance and progress at sub-national levels of governance

While there is widespread acceptance and acknowledgment of the need for DRR and risk management at the national level, further efforts are required in this area at provincial, district and community levels. All 27 countries that have reported on progress in the current reviewing cycle have signalled clear intent through the development of plans, policies, guidelines, legislations, programmes and, in some cases, government orders aimed at strengthening DRR mechanisms in their respective countries. However, the enforcement, implementation and specific budgetary provisions for these is still lagging in the region.

A shift away from an understanding of disaster management solely in terms of relief and response towards one that gives due consideration to risk and resilience is evident. However, this process is slow and countries in the region have reported on the need for further efforts in this area and in developing a shared understanding of DRR activities across all levels of governance. The lack of monitoring systems to help track investments in risk reduction has also been pointed out by several countries.

Gaps in research and development of scientific tools

Clear gaps have been identified in the area of research and development of scientific tools. These can aid and facilitate cost-benefit analyses of risk reduction and mitigation efforts, as well as disaster impact assessments for development and infrastructure projects. Countries have, however, highlighted the need for strong scientific evidence to back investments made in risk reduction efforts.

Sustaining public awareness

Public awareness campaigns across the region have met with some success in generating awareness on key disaster concerns. However, sustaining public awareness, particularly on low frequency disasters such as earthquakes, and expanding awareness beyond high risk areas which experience recurrent disasters still remains a challenge.

Intra-government coordination

Disaster risk reduction is an area that cuts across sectors and different levels of administration. Coordination and information sharing between the many concerned individuals and departments addressing DRR therefore remains a challenge.

Resource and capacity constraints

The lack of resources and capacities have been repeatedly cited as the primary reason for limited progress in several Priority Areas by a number of countries. In particular, the lack of capacities at sub-national levels is seen as limiting the devolution of authority and responsibilities for risk reduction activities. However, as highlighted in the previous Regional Synthesis Report, even resource constrained, developing countries have demonstrated that "...a long-term strategy and consistent levels of commitment may generate high levels of progress".

The mismatch between available resources and capacities and needs is likely to remain a challenge. This may be magnified by an expansion of disaster risks in the region given its sensitivity to climate change and the rapid rate of urbanisation.

GAPS AND RECOMMENDATIONS IN THE REVIEW PROCESS

The levels of progress indicated by different countries appear to lack consistency. This compounds the task of reaching conclusions for the region as a whole in the case of some indicators. The reports are prescriptive in several cases and don't necessarily report on progress made during the current review cycle. Instead, they report on any achievements or developments made in the area of DRR and disaster management overall.

Multi-stakeholder consultations have been used by several reporting countries to aid in the preparation of the National Progress Reports. However, this was not the case in all countries and is a practice that needs to be adopted uniformly. In addition to providing a composite picture of DRR efforts of stakeholders other than the national or provincial governments, such a process will also be useful in triangulating claims and observations contained in the report.

Several country reports emphasise the overall achievements in the area of disaster risk management but do not specifically capture and track progress in a given review cycle. A possible way of overcoming this challenge in the next cycle could be by asking countries to list specific activities and achievements identified in the previous review period(s) and the current status or progress of these. Doing so would also help track the sustainability and

challenges encountered in several novel initiatives outlined by countries in their national reports.

Another means of making reporting more objective could be to include provisions for the review of major disasters in a country over the review cycle and comparing these with systems in place as outlined in the HFA.

RECOMMENDATIONS

Further demystify DRR as a concept

(HFA Priority Area: 1)

As mentioned earlier in the report, DRR appears to have gained prominence with governments at the national level across the region. However, a gap in knowledge resources and adaptable solutions still exists at the grassroots. The need for 'localising HFA' has been previously recognised, but has still been specifically reported only in Indonesia and Nepal where it was piloted. Further emphasis on localising HFA is required to take the process to the next level and tools, strategies and advocacy campaigns should be developed to further this.

Convert knowledge into policy

(HFA Priority Area: 3)

Considerable progress has been made in DRR information and knowledge management. With a vast amount of information now available on good practices, greater focus and attention is required on efforts to replicate and scale these up. In the area of school safety, significant knowledge resources have been generated over the past years as also reported in the 2007-2009 Regional Synthesis Report. A number of countries (China, India, Indonesia, Myanmar and Sri Lanka) have implemented pilot project but the impact on policy decisions has been limited. Increased efforts are also needed to recognise and document local and indigenous knowledge and practices in DRR. One such initiative has been taken at the regional level by the SAARC Centre for Disaster Management in South Asia.

Strengthen linkage between disaster risk reduction and climate change

(HFA Priority Area: 4)

Few doubt the need to factor in climate change risks while planning DRR activities. Recent experiences in countries across the region that have had to confront unprecedented challenges have further underlined this need. However, ways in which this linkage is established in practice continue to be unclear. DRR and climate change are typically addressed by different government ministries and convergence in planning and policy in this area requires enhanced coordination. Some examples from the region include Bangladesh and the Philippines where specific legislation and policies have been introduced to address climate change concerns. The inclusion of climate change

considerations when planning and carrying out hazard risk assessments, as in Australia and Bangladesh, could offer some insights for other countries.

Enhance the role of the private sector

(HFA Priority Area: 1)

Multi-stakeholder platforms have been established and are active in eight countries (Afghanistan, Bangladesh, China, Indonesia, Japan, the Philippines, Sri Lanka and Vietnam) of the region. However, these platforms typically have a large role for NGOs and CBOs, with the role of the private sector still limited or negligible. Greater engagement of the private sector is critical to the success of risk reduction initiatives and building resilience. As recognised by some countries in the region such as the Philippines, the private sector can also play a significant role in resource mobilisation to support risk reduction and reconstruction efforts.

Further investments in tools and research methodologies

(HFA Priority Area: 3)

More investments are required in developing tools and research methodologies to support risk reduction measures, helping strengthen the case for prioritisation. This is also an area for increased engagement of academia, universities and research institutes.

Training and capacity development for government staff and administrators

(HFA Priority Area: 3)

Training on terminology, methodologies and the significance of disaster management and risk reduction can go a long way in mainstreaming DRR in development programmes and plans and in sensitising policy and decision makers to key DRR concerns. Bangladesh has reported plans to set up an independent disaster management training and research institute, as well as include disaster management in the degree courses for the armed forces, civil servants and local government bodies. This is a practice that should ideally be adopted by all countries for administrators and policy makers across all levels of governance.

A long term, coherent public awareness strategy

(HFA Priority Area: 3)

Current public awareness campaigns appear to operate on an ad-hoc basis in the region. The strategy of keeping alive the memory of major past disasters to emphasise the need for DRR has been adopted in Bhutan, Nepal and Pakistan and has proved useful. Public awareness campaigns for DRR need to form part of a well thought-out strategy to ensure that they have a greater and sustained impact.

Enhance regional cooperation in the area of disasters

(HFA Priority Area: 2)

Given the trans-boundary nature of disasters in the region, disaster management has been the subject of some attention by bodies facilitating regional cooperation such as ASEAN in Southeast Asia, SAARC in South Asia and SOPAC in the Pacific region. While regional frameworks are in place and some progress has been recorded, there remains immense scope for further regional cooperation in disaster management. This includes expanding cooperation in early warning and monitoring for hazards (currently limited to cyclones and tsunamis and in a few cases floods), joint response mechanisms and regional knowledge and resource transfers.

Attention to DRR in complex emergencies

The current DRR approach and application of the HFA is inadequate to deal with the challenges of implementing DRR in conflict and complex emergency settings. Further emphasis is needed on DRR in such settings and the linkages between risk reduction efforts and conflict management.

Strengthen and expand contingency planning

(HFA Priority Area: 5)

Some countries such as Australia and New Zealand have reported on contingency planning efforts that include critical lifeline infrastructure. While attempts at contingency planning have been reported by other countries as well, these have been limited to sectors such as agriculture.

Increase the use of incentives to promote DRR

(HFA Priority Area: 4)

The use of incentives to promote DRR measures such as following building codes, risk transfer mechanisms and structural mitigation measures need to be further explored. This includes initiatives such as the linking of disbursements of government transfers and subsidies to their incorporation.

Introduction

An estimated 85% percent of people exposed to earthquakes, cyclones, floods and droughts live in developing countries.¹ Investment in disaster reduction efforts and the 'disaster proofing of development' is necessary to protect the hard won development gains in countries across the world and critical to countries being able to achieve the Millennium Development Goals. As has been pointed out by several observers, not only do disasters erode development gains, but disasters themselves are often the result of underdevelopment.

There is considerable evidence to support the conclusion that investments in DRR are extremely cost effective.

The experiences of countries in the region, like Bangladesh and Vietnam, have demonstrated how sustained investments in improved early warning systems, disaster preparedness and other risk reduction methods have considerably reduced the impact of meteorological hazards such as tropical storms and floods.² The 2011 Tohoku Earthquake demonstrated that in areas with high investments in earthquake safety measures, damage due to the earthquake was minimal.

DRR is a cross cutting issue that has linkages with several sectors and investments are typically made in several programmes, agencies or ministries. Countries in the region have reported on the challenges and lack of systems and capacities to track investments made in risk reduction.

HFA specific actions on investments in DRR in Asia-Pacific, AMCDRR

The need for investment in DRR when planning for development goals was emphasised by the Beijing Ministerial Declaration of 2005, which called on national governments to "...invest adequate national resources for disaster risk reduction at all levels of activity and in addition to mobilise external resources through bilateral and multilateral cooperation".³ The Delhi Declaration of 2007 sought to encourage countries in the region to promote public-private partnerships in DRR as a means of increasing opportunities and investment. Risk reduction was further emphasised in the Kuala Lumpur Declaration of 2008, which additionally called on the international donor community to increase funding for disaster risk reduction activities and HFA implementation.

Progress during the current period 2009-2011

A significant development in the region during the current review cycle has been that several countries have backed

legislative and policy commitments to risk reduction efforts with monetary commitments and budgetary allocations. The following are some of the highlights of significant commitments and investments in DRR during the current review cycle:

- **AUSTRALIA:** The Australian Government's recently established Natural Disaster Resilience Program (2010-11) consolidates the existing Bushfire Mitigation Program, the Natural Disaster Mitigation Program and the National Emergency Volunteer Support Fund. Funding commitments total more than US\$ 421 million, which include components for recovery and reconstruction following the bushfires in Victoria.
- **BANGLADESH:** The Government of Bangladesh allocated 4.5% of the national budget to DRR activities.
- **BHUTAN:** The National Disaster Risk Management Framework prepared by Bhutan suggests a national budget for the purpose of disaster mitigation, prevention and preparedness be used to support DRR measures and activities at all administrative levels in the country. A sum of US\$ 0.77 million (34 million Nu) has been allocated from the national budget.
- **CHINA:** A sum of US\$ 8.85 billion has been allocated from the overseas development assistance fund for DRR. Investments have been made in a range of DRR related activities during the current review cycle, including early-warning, emergency response, training of personnel and meteorological monitoring systems, among others.
- **INDIA:** A sum of US\$ 1.2 million (INR 565 crores) has been provided for disaster management training and capacity building of various stakeholders, including communities, over the period 2010-2015. There are also a number of mitigation projects in operation across the country.
- **IRAN:** The equivalent of US\$ 8 billion has been allocated for disaster management in the national budget. Out of this, 4% has been allocated for prevention projects. Allocations have also been made for retrofitting of old buildings.
- **JAPAN:** 1.2% of the national budget is allocated to DRR activities.
- **MALAYSIA:** US\$ 2 billion were spent on DRR related mitigation measures in the plan period 2006-2010 and US\$ 1.7 billion has been allocated in the current plan period (2011-2015) for mitigation, early warning, preparedness and awareness measures.
- **PAKISTAN:** Provisions for dedicated resources for disaster risk management at the federal and provincial levels have been made through legislation. The National Disaster

¹ UNISDR and Inter Parliamentary Union, 2010. Disaster Risk Reduction: An Instrument for Achieving the Millennium Development Goals.

² UNISDR, 2009. Global assessment report on disaster risk reduction, Geneva

³ Beijing AMCDRR, 2005

Management Fund has been established under the NDMA and the federal government has contributed US\$ 3.5 million (PKR 300 million) as an initial grant. Allocations have also been made through other projects, including the World Bank, JICA and the UN.

- **THE PHILIPPINES:** As per existing DRR legislation in the country, specific budgetary allocations are required for DRR. At present US\$ 111 million has been allocated for the National Disaster Risk Reduction and Management Fund. The Strategic Framework on Climate Change also provides avenues for financing DRR activities.
- **SRI LANKA:** The sum allocated for disaster management activities has been raised from US\$ 7 million in 2010 to US\$ 19 million in 2011. The allocation for 2011 includes US\$ 12 million for the construction of a Disaster Management Centre building and strengthening early warning, emergency communication and fire response capacity. A four-year project to strengthen critically weak dams was begun in 2008 with the support of the World Bank, at a total estimated cost of US\$ 70 million. A Disaster Management Fund has also been established.
- **TIMOR-LESTE:** A significant increase (30.4%) of allocation from the national budget for disaster management was reported for the year 2010.

Introduction

More than half the world's population now lives in urban areas. Despite the increased economic and other opportunities available in urban areas, rapid, unplanned urbanisation has also brought with it significant challenges. One of these has been that over a billion people in urban areas across the world, live in informal settlements. This challenge is particularly evident in the Asia-Pacific region, which is home to some of the most rapidly developing cities and urban agglomerations in the world. The increase of disaster risks in urban areas has been termed the 'vulnerability gap'. It has been attributed to both the lack of knowledge and financial capacity (or willingness) of urban authorities to undertake risk and vulnerability reduction activities. At the same time, for a high proportion of urban households and communities, the capacity to reduce risk is constrained by low income levels, limited political influence and high land prices among others, forcing people to live in high risk areas.¹

HFA specific actions on URR in Asia-Pacific, AMCDRR

The increased risk faced by urban areas has been recognised in the HFA, which emphasises the incorporation of disaster risk reduction in urban planning (Priority Area 4) as a means of addressing underlying risks. This commitment was further outlined in the Incheon Declaration of 2010.

As part of efforts to address the issue of urban risk in the Asia region, the UNISDR Hyogo Office along with partner organisations initiated the Asia Regional Task Force on Urban Risk Reduction in January 2008. The task force comprises of 16-22 member organisations and aims at "...strengthening the linkages of the community of urban planners, architects and engineers who are engaged in shaping the future of urban growth to ensure that disaster risk reduction is incorporated in urban development planning as well as that future urban development trends are incorporated in disaster risk reduction strategies." It has produced a regional status report on urban risk reduction in Asia and an inventory of URR practices.

UNISDR has also initiated a 'Resilient Cities' campaign which has registered over 583 governments from 55 countries so far.

Progress during current period 2009-2011

The following are some of the significant developments in urban risk reduction efforts that have been reported by countries in the current review cycle:

- **BHUTAN:** Following an increase in urbanisation in the country, the formulation and implementation of a comprehensive programme to build resilient urban centres and urban communities has been taken up on a large scale.
- **IRAN:** The Disaster Management Coordination Council of Tehran has been formed under the Chairmanship of the Mayor of Tehran to address the disaster risk concerns of the city.
- **JAPAN:** The Central Disaster Management Council examined and publicised comprehensive countermeasures and challenges in the Tokyo Metropolitan area (2006-2008) and large-scale floods (2006-2010). Fiscal incentives have been used to promote retrofitting of old buildings in congested urban areas.
- **MALAYSIA:** A campaign titled 'Resilient City - My City is Getting Ready' was launched in 2011 as part of disaster awareness efforts. Three cities (Kuala Lumpur, Melaka and Putrajaya) have been chosen as 'Role Model Cities' and the Chief Minister of Melaka State has been nominated as a 'Champion'.
- **NEPAL:** Four municipalities (out of 58) have started implementing safe construction practices and have begun implementing provisions contained in the seismic code.
- **PAKISTAN:** Municipal Disaster Management Cells have been established and operationalised in Chitral, Murree, Muzaffarabad and Mansehra.
- **THE PHILIPPINES:** The government has started to invest more in urban risk reduction following their experience with a series of typhoons in 2009. Cities are guided by DILG's programme on Integration of Disaster Risk Management in Local Planning and Budgeting. An Earthquakes and Megacities Initiative is in operation and has implemented a project on risk-sensitive urban redevelopment planning with Makati as a pilot city.
- **SRI LANKA:** The Disaster Management Committee with the assistance of the Urban Development Authority, Practical Action and ADPC has initiated three pilot projects in the southern and eastern provinces to prepare urban development plans for selected towns.
- **VIETNAM:** The Ministry of Construction has created a Master Plan for Urban Planning until 2020. This includes the continuation of a large scale programme being implemented since 2000 to relocate people from flood-prone areas of the Mekong Delta, as well as the resettlement of populations vulnerable to coastal and riverbank erosion.

¹IFRC, WDR 2010

²www.preventionweb.net/english/professional/networks/private/asia-urban-rr

Introduction

Climate change has considerably amplified the disaster risks that countries face. The integration of DRR and CCA efforts can thus be seen as a critical requirement to ensure the sustainable reduction of disaster risks. Climate change is of particular concern to several developing small island states in the region, whose existence is threatened by sea level rise.

HFA specific actions on investments in DRR in Asia-Pacific, AMCDRR

The need for linkages between climate change and DRR efforts figures prominently in the HFA and is highlighted in particular in HFA priority areas 1 (national policy and legal frameworks) and 4 (reducing underlying risk factors). The development of National Adaptation Programmes for Action, as reported by several countries in their HFA progress reports points towards significant progress in the integration of DRR and CCA concerns in the region.

The need to integrate CCA with DRR initiatives has also been a recurrent theme at the AMCDRR. The 4th AMCDRR held in Incheon, South Korea in October 2010, centred on the theme of 'Disaster Risk Reduction through Climate Change Adaptation'. The Incheon Declaration and Regional Road Map and Action Plan further identified three specific themes for action. These were raising awareness and building capacity for DRR and CCA; developing and sharing information, good practices and lessons learnt in climate change and disaster risk management; and promoting the integration of DRR and CCA into development for green growth.

Progress during the current period 2009-2011

- **AUSTRALIA:** The Australian Government prepared a position paper in early 2010 which outlines its role in climate change adaptation. The paper identifies six national priority areas for action, one of which is natural disaster management. Through its Local Adaptation Pathways Programme, it is helping local councils undertake climate change risk assessments and develop action plans to respond to the challenges. Significant investments in research have also been made during this review cycle.
- **BANGLADESH:** The NAPA and the Bangladesh Climate Change Strategy and Action Plan 2009 have been developed in the current review cycle. A Climate Change Fund with an allocation of US\$ 100 million has also been created. Climate Change Cells and focal points in nearly all major departments and ministries have been established and these are linked with the Disaster Management Bureau.
- **BHUTAN:** The Climate Change Council has been constituted under the chairmanship of the Prime Minister. A National Climate Change Policy and a National Adaptation Programme of Action are being formulated.
- **INDIA:** A National Action Plan for Climate Change has been formulated. It emphasises action on vulnerability assessments, preparation of contingency plans, maintenance of critical facilities like water supply and health, the enforcement of building codes and the strengthening of early warning systems, among others.
- **INDONESIA:** DRR and environment management have been integrated into the middle-term National Development Plan 2010-2014.
- **JAPAN:** A task force to review the country's progress in CCA and its inclusion in national policies was constituted in March 2009. In 2010, an examination committee on CCA submitted a report to guide policy in Japan. This report has highlighted DRR as one of the areas to be considered in CCA policy.
- **MALAYSIA:** A National Policy on Climate Change was approved in 2009 and strengthens linkages between climate change and DRR. It aims at mainstreaming climate change resilient development in planning at different levels of governance. A Working Committee on Adaptation was also established in early 2011 and is chaired by the Prime Minister.
- **MALDIVES:** The second National Environmental Action Plan was formulated, which identified environmental management issues to be addressed. The National Adaptation Programme of Action under the Integrated Climate Change Strategy is also being implemented by the government to address current and future effects of climate change.
- **MONGOLIA:** The National Climate Change Programme and Adaptation Strategy are being developed. A 'Climate Change Induced Risk Management Strategy' has also been created. At the same time, initiatives to monitor and measure the impact of climate change have been launched.
- **NEPAL:** Disaster risk management and climate change adaptation are being institutionalised in Nepal in an integrated manner. An attempt is being made to integrate these in all sectoral plans in the next three-year plan. The institutionalisation of DRM and CCA are also proposed through a revision of existing legislation relating to disasters. Currently, these place greater emphasis on rescue and relief rather than preparedness, mitigation and community empowerment. A high level Climate Change Council has been constituted under the chairmanship of the Prime Minister.

- **NEW ZEALAND:** The Ministry of Environment is coordinating central government work on adaptation to climate change, except in the sectors of agriculture and forestry, which are coordinated by the Ministry of Agriculture and Forestry. The government of New Zealand is concentrating its efforts on six identified sectors, which include primary production, bio-diversity, bio-security, water, coasts and infrastructure.
- **PDR LAO:** A National Steering Committee on Climate Change already exists, with seven technical working groups covering the areas of agriculture and food security, forest and land management, energy management, hydrology and water resources, city infrastructure, economic management and financial instruments. These technical working groups are chaired by different ministries.
- **THE PHILIPPINES:** New legislation in the form of the Climate Change Act 2009 has been introduced. It is expected to enhance institutional coordination and programme collaboration between CCA and DRR activities. The Executive Director of the Climate Change Office of the Climate Change Commission is one of the members of the National Disaster Risk Reduction and Management Council and vice-versa.
- **SOLOMON ISLANDS:** The DRR unit will develop a DRR policy in partnership with the Climate Change Office for consideration by sectors and government through the National Disaster Council by June 2011. A climate change database and climate change working groups are also being developed. The Ministry of Agriculture has two CCA programmes currently running and one due to start next year on climate change and food security.
- **SRI LANKA:** Pilot projects have been conducted to identify seed varieties including flood and drought-resistant paddy. Farmers are being trained to cultivate in marginal lands with high saline content as part of the CCA strategy. Special area management plans incorporating DRR concerns have been developed for six locations in the country.
- **THAILAND:** The National Strategy for Climate Change Management 2008-2012 identifies DRR as one of its strategies.
- **VIETNAM:** A number of climate change models have been developed to project the impacts of sea level rise on major urban settlements and transport infrastructure, as well as rural communities.





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