



4th AMCDRR

Disaster Risk Reduction through
Climate Change Adaptation

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***“Incheon Regional Roadmap on DRR through CCA
in Asia and the Pacific”
(Incheon REMAP)***

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Introduction

Climate change is covered under the Hyogo Framework for Action 2005-2015; Reduce underlying Risks, under its theme of environment and natural resource management, which identifies the importance of climate change adaptation being integrated with DRR. It calls on Governments to,

- Promote the integration of risk reduction associated with existing climate variability and future climate change into strategies for the reduction of disaster risk
- adaptation of strategies to climate change, which would include the clear identification of climate related disaster risks, the design of specific risk reduction measures and an improved and routine use of climate risk information by planners, engineers and other decision-makers' under its environmental and natural resource management activities.

The Delhi Declaration on Disaster Risk Reduction in Asia 2007, signed by participating Governments at the 2nd Asian Ministerial Conference on DRR, in Delhi in 2007 also stressed on CCA and DRR and call on Governments to;

- Encourage all the stakeholders to address the long-term disastrous impact of climate change
- Take effective steps under the principle of common but differentiated responsibilities to integrate disaster risk reduction with climate change adaptation initiatives at all levels in accordance with the UNFCCC and Kyoto Protocol as stated in the HFA.

The Kuala Lumpur Declaration on Disaster Risk Reduction calls for specific areas of action for countries as follows:

- promote innovative partnership with scientific communities and academic institutions to enhance scientifically informed national policies for DRR and CCA;
- develop partnerships between existing regional knowledge sharing mechanisms and networks on DRR and CCA with other information sharing and analysis mechanisms;
- encourage cost-effective and widely accessible technologies in support of early warning at national to local and community levels, multi-hazards risk assessment and disaster risk reduction efforts.

The Kuala Lumpur Regional Action Plan was developed based on the call for action in the Kuala Lumpur Declaration adopted on 4th December 2008 at the 3rd Asian Ministerial Conference in Malaysia which “Invited the Asia and Pacific regional office of the UNISDR in collaboration with members of the IAP to prepare a Regional Action Plan on the Kuala Lumpur Declaration on Disaster Risk Reduction as well as earlier declarations in Delhi and Beijing, and to report on its progress at the Fourth Asian Ministerial Conference on Disaster Risk Reduction”. Preparation of the plan was under the guidance of the Government of Malaysia, Chair of the 3rd AMCDRR, over the period March to June 2009, and a revised version of the plan entitled HFA Implementation Regional Action Plan was tabled at 4th AMCDRR

The HFA Implementation Regional Action Plan calls on action on the following:

- Dialogue and collaboration between ministries and agencies at national level for DRR partnerships with scientific community and academic institutions to enhance scientifically informed national policies for CCA and DRR
- Develop partnership between existing knowledge sharing mechanism and networks on DRR and CCA with other information sharing and analysis mechanism
- Promotion of DRR as an integral component of efforts for CCA at regional and international fora leading to the 15th conference of UNFCCC as suggested in Bali Action Plan.
- Mainstreaming of DRR and climate change adaptation in appropriate policies, strategies and action plans.

The Chair Summary of the second session of the Global Platform (GP2009) concluded that climate change is already dramatically magnifying the disaster risks threatening many developing nations. Some countries reported that an increasing scale and frequency of humanitarian emergencies is stretching both national and international humanitarian capacities. The overwhelming view of the Global Platform is that urgent action is required to harmonize and link the frameworks and policies for disaster risk reduction and climate change adaptation, and to do so within the broader context of poverty reduction and sustainable development. A priority is to incorporate both disaster risk reduction and climate change adaptation as core policy and programmatic objectives in national development plans and supporting poverty reduction strategies and country assistance plans. Better preparedness for the humanitarian consequences of climate change is needed, including through early warning systems and local level adaptation.

GP2009 also noted that disaster risk reduction policies also need to take account of climate change. A number of countries put forward concrete proposals to integrate or coordinate their efforts in disaster risk reduction and climate change adaptation. It was emphasized that ecosystem management approaches can provide multiple benefits, including risk reduction, and thus should be a central part of such strategies. One group of countries proposed that a minimum of 30% of the adaptation finance available to developing countries should be applied to weather-and climate-related risk reduction projects. At the same time, disaster risk reduction policies must not neglect the geological hazards, such as earthquakes, tsunamis and volcanic eruptions, which are responsible for a large proportion of disaster mortality.

More recently, there have also been recent discussions already on ways to promote cooperation on disaster risk reduction and climate change adaptation, including the “Joint Communiqué from Stockholm Policy Forum on Climate Smart Disaster Risk Management,” which was held in Stockholm, Sweden on October 2009 came with the following recommendations for fostering regional cooperation on DRR and CCA:

1. identify actors involved in the regional dimensions of disaster risk reduction and adaptation and work through existing institutional arrangements;
2. strengthen the capacity of regional organizations to coordinate activities;
3. enhance knowledge exchange among stakeholders in DRR and CCA, and inform national policy through the preparation of joint strategies;
4. emphasize the role of technologies to forge regional cooperation activities;
5. stress ecosystem services as an underlying factor to the issue; and
6. encourage bottom-up approaches to inform policies.

Key issues identified in these discussions include the focus on regional partnerships, and the need to build capacity and the information base on disaster risks regionally.

A rich discussion took place during the deliberation of the 4th AMCDRR hosted by the Government of Korea from 26-28 October, 2010. Insightful guidance was provided by the Honorable Prime Ministers of Korea and Bhutan; and by the ministerial statements from Ministers and Head of Delegation of 50 countries from Asia and Pacific. The conference adopted the Incheon Declaration on Disaster Risk Reduction in Asia and the Pacific 2010, which provides direction on the conference theme of ‘disaster risk reduction through climate change adaptation’. The Prime Ministerial Statement; the Statement by the SRSG on DRR and the World Bank Director; as well as the full text of the Incheon Declaration are available at www.amcdrrkorea.org.

What follows is the Incheon Regional Roadmap and Action Plan on DRR through CCA in Asia and the Pacific” (Incheon REMAP) builds upon all of the guidance and discussions above, focusing on the promotion of a comprehensive climate risk management approach.

The road map is divided into initiatives that are of priority and can be achieved in the next 2 years; and initiatives that can be undertaken in the next 5 years. Any of the initiatives can start at any time during the period of the roadmap.

Objective

The objective of the roadmap is:

“By 2015, establish climate resilient disaster risk management (DRM) systems that contribute to sustainable development at regional, national, sub-national and community levels”

With the following proposed indicators of success

National Governments (priority for 2 years)	<ul style="list-style-type: none"> • 5 countries with climate resilient national development strategies (PRSPs, CAS, UNDAF, 5-year development plans, sector plans, post disaster plans), community and local authorities plans, land use plans, city development plans, spatial plans
(for 5 years)	<ul style="list-style-type: none"> • 10 countries with national budget line on DRR system enhancement • Increase by 100% of measured national investments on climate resilient DRR (in development, post disaster, sectoral, private sector, and other investments) • 20 countries using climate change screening tools for national development investments (national, bilateral, UN, etc) • 10 countries with integrated approach/institutional structure to promote synergistic financing between DRM and CCA • 5% of local government budgets allocated for climate resilient DRM activities within local authority and community levels • DRR and CCA investment tracking in place in 10 countries
Partners and Governments (priority for 2 years)	<ul style="list-style-type: none"> • A masters degree equivalent training programme or certificate programme for national and local government officials in place on DRR-CCA provided by partners at the regional level • 10 programmes in place for exchange and sharing technical expertise and technology on building climate resilience
(for 5 years)	<ul style="list-style-type: none"> • 10 agreements between international or regional partners and national governments for supporting climate resilient development investments • 10 countries sharing best practice on DRR investments
Partners (priority for 2 years)	<ul style="list-style-type: none"> • 100% of regional partners have coordinating mechanism in place for joint DRR-CCA programming
(for 5 years)	<ul style="list-style-type: none"> • 100% of regional partners combine DRR and CCA programme or funding

Principles

This road map should be comprehensive, collective, cooperative and anticipatory.

- Comprehensive with the clear outline of the steps that need to be undertaken to reach the overall objectives, and a clear delineation of what is doable based on existing resources and capacity;
- Collective with overlaps minimized, and gaps filled;
- Focus and involve most vulnerable and least capable - It should be focused on promoting efficient and equitable climate risk management, with specific initiatives looking at understanding the hazards, reducing vulnerability, managing exposure and reducing risks with due focus on gender inequalities and social exclusion.
- Cooperative, building on ongoing work by sub-regional inter-governmental organizations, national organizations, and with joint work promoted among various stakeholders in the region, multilaterally, and bilaterally; and
- Anticipatory with advanced prevention and preparation of disaster based on climate change expectation

Main Themes of the Roadmap

The roadmap aims to promote regional cooperation on disaster risk reduction through climate change adaptation in Asia. Taking a climate risk management approach, the three main themes for this road map are:

- Raising Awareness and Building Capacity for DRR & CCA
- Developing and Sharing Information, Technology, Sound Practices, and Lessons Learned in Climate and Disaster Risk Management
- Promoting Integration of DRR & CCA into Development for green growth

I. Raising Awareness and Building Capacity for DRR & CCA

The number of disasters can be considerably reduced if people are well informed and government and technical agencies pay high attention to capacity building at all levels. There are several plans to raise awareness and building disaster risk capacity, which are outlined below

Short term initiatives (two years)

A. Improve understanding of DRR as delivering evidence-based adaptation actions and strengthen knowledge on climate hazards, vulnerabilities, and risks in key socio-ecological system in at least 5 countries

- Establish mechanisms to evaluate the development linkages of long term and short term exposure to climate related hazards
- Develop regional and national capabilities for climate change downscaling and promote the conduct of national level multi-hazard risk assessments, which should be adopted by all national stakeholders
- provide targeted capacity building for data gathering, data processing, information interpretation, and knowledge building and awareness raising products for dissemination
- Promote research of development induced hazards
- Examine the vulnerability of key socio-economic and ecological systems to climate hazards
- Engage existing regional scientific and technical group to focus on understanding identifying risk related to climate change, which will also set the regional research agenda on the topic

B. Promote and support DRR and CCA training for government and other stakeholders

- Deliver training and capacity building programme targeted to various stakeholders, incorporating needs related to vulnerable population and with gender parity, work with relevant training providers in a consortium, including national training centers, and attempt to develop a Masters equivalent degree programme or certificate programme for government officials on climate resilient DRR.
- Regional partners to develop joint course modules dealing with DRR & CCA within newly developed or existing programs.
- Promote training of government officials through existing programmes on the utilization of [space and] information and communication technologies for DRR and CCA
- Promote secondment of staff, peer-to-peer staff exchange among governments, and regional institutions.

C. Implement awareness-raising programmes at all levels on the costs and benefits of CCA options and those provided by ecosystem services for DRR and CCA in at least 10 countries

- Promote partnerships between regional and national partners and media associations like the Asian Broadcasting Union on DRR-CCA awareness raising

- Regional partners to establish or support and expand existing regional website/portal for awareness raising, where DRR and CCA concepts, practices and issues are explained in simple language
- Develop and spread user friendly tools and public awareness materials translated into and delivered in local languages and educate vulnerable groups
- Promote better use of ecosystem services through understanding of environmental friendly land use technology.Promote awareness of disaster and climate risks within communities through appropriate communication approaches.
- Promote research on understanding the benefits and value of ecosystem services for climate change adaptation and disaster risk reduction

D. Develop a strong communication plan on national priorities on DRR and CCA to be reached out to governments at sub-national and local level including cities in at least 5 countries

- Encourage training and capacity building for local stakeholders on HFA and CCA issues.
- Encourage cities to sign up to the global campaign *“Making Cities Resilient- My city is getting ready!”*
- Measure progress of HFA implementation against available set of indicators for measuring local level resilience, along with local stakeholders.

E. Promote child- and people-centered education for community preparedness and risk reduction

- Implement child-focused disaster risk reduction and climate change adaptation related awareness programmes and tools;
- Advocate national government and development partners to include disaster risk reduction and climate change adaptation within the curricula of the formal and informal education systems;

Enhance community preparedness through the participation and contribution of children and young people in initiatives that would reduce disaster risk and enhance climate change adaptation.

F. Strengthen education and training programmes for DRR and CCA focal persons

G. Promote and facilitate the funding of joint DRR and CCA projects from existing and new funding sources

Long term initiatives (5 years)

H. Continue all of the activities above

I. Promote awareness of DRR and CCA for development stakeholders and communities at risk

- Implement awareness programme on DRR-CCA issues that will result in better understanding of climate related risks, costs and benefits by finance, planning and budget related stakeholders
- Advocate development partners for the promotion of national, multilateral and bilateral mechanisms that focus on integrated approaches to DRR & CCA in development programming and investments
- Conduct cost-benefit analysis for key themes, such as ecosystem based adaptation
- Provide training for media and media associations on DRR and CCA integration issues

J. Promote multi-hazard risk assessments and capacities in local settlements

- Invite participatory risk assessments with local stakeholders in a inclusive manner incorporating the concerns of women, and the most vulnerable.
- Identify indigenous practices that may be validated scientifically for replication and up-scaling
- Carry out detailed risk assessments in cities with high risk.
- Assess current state of physical infrastructure for exposure to disaster risks and climate change impacts

K. Build capacity on identifying and protecting local natural ecosystems recognizing their importance as buffers to climate change risks

- Inventorize and secure natural ecosystems within local areas that can counter impacts of climate change.
- Promote conservation of ecosystems specially in areas where livelihoods of local communities areas are dependent on them

II. Developing and Sharing Information, Technology, Sound Practices, and Lessons Learned in Climate and Disaster Risk Management

With the increased disaster risks brought by climate change, many countries in the region are taking actions to alleviate their vulnerabilities to disasters. To achieve development and assistance for the countries in the region better, sharing previous lessons, and cooperating between stakeholders in government, civil society organizations and international or regional organizations is indispensable. Information is indispensable in reducing disaster risk. Timely and

accurate information helps policy and decision makers and local communities and ownership. It improves community and individuals' capacity and resilience in the disasters. Disaster risk reduction knowledge, tools, and good practices can be shared through information sharing system.

Short term initiatives (two years)

A. Collect sound practices and lessons learned in DRR & CCA and Develop a platform for sharing information, technologies and sound practices in DRR & CCA

- Collect sound practices and lessons learned on DRR & CCA integration into development including engendered Community Based Disaster Risk Reduction (CBDRR) and engendered Community Based Adaptation (CBA)
- Establish or support and improve existing data base systems for good and sound practice on DRR and CCA, including supporting the improved collection of national post disaster damage and loss data including sex-disaggregated death toll data.
- Share lessons on projected socio-economic costing of climate change effects in local communities Promote use of space technology for recovery and mitigation activities.
- Develop the platform as a 'platform of platform' ensuring effective links with existing platforms such as Asia Pacific Gateway on Development and DRR, IAP DRR Project Portal, SAARC Knowledge Network, ASEAN Work Programme, Pacific Climate Change and DRR Programs, Adaptation Knowledge Platform, Sentinal Asia, Adaptation Learning Mechanism and similar efforts at the regional and national level.

B. Promote sharing early warning information and systems through existing mechanisms

- Promote and develop feedback on effectiveness of EW systems/mechanisms at National, Sub-National and Community levels (strengthening capacities of national agencies)
- Share early warning systems for short, medium and long term climate variability forecasting
- Improve hydro-meteorological systems and capacities in countries including effective links with civil authorities at all levels and communities in order to improve preparedness, forecasting, risk transfer, early warning and evacuation systems and enable communities to take protective actions.

- Organize periodic multi-stakeholder integrated climate risk management forums to enable greater sharing information and lessons learning processes.
- Promote and expand the coverage of integrated end to end early warning systems that are volunteer-based and backed by protected infrastructure.

Long term initiatives (5 years)

C. Continue activities above

D. Support and facilitate informed actions at all levels (community, city, district, provincial and national) linked to increased availability of user friendly climate information at all scales

- Improve incorporation of climate information into local action planning for urban and rural areas
- Undertake sectoral and area basic adaptation actions in partnership(s) with DRR and CCA stakeholders utilizing user friendly climate information
- Create adaptive learning mechanisms at local level for continuously informed planning and implementation

E. On improved linkages between CCA and DRR institutions at national and regional level

- Facilitate dialogue and effective partnership between national agencies responsible for CCA and DRR as well as their scientific and operational counterparts
- Enable national agencies to mainstream CCA in National Action Plans on DRR and DRR in NAPA/ National strategies for climate change;
- Promote and develop national integrated climate risk management plan where appropriate
- Promote improved understanding on CCA among national DRR agencies, and networks through websites, publications and sharing workshops
- Conduct regional high level regional/sub-regional meetings linked with planned activities under the SAARC, ASEAN and South Pacific Plans of Actions on Climate Change and DRR

F. Collect and share information and technologies on emerging risks and vulnerability

- Share results of research on evaluation of emerging risks due to climate change, environmental degradation, population increase and movement in order to improve current disaster prevention design criteria and DRM systems
- Share risk assessment systems with countries; make them available in an understandable way to local communities.

G. Use South-South Cooperation among countries of the region

- Transfer lessons learned and contribute to develop programs on early warning systems such as, the Cyclone Preparedness Program in Bangladesh
- Establish South-South Cooperation within and between South, South East, South Pacific and Northern and Central Asia.

III. Promoting Integration of DRR & CCA into Development for green growth

Disasters are a big concern for most countries and have great impact on our economy. Disasters can take significant number of lives and leave long lasting negative impact on our properties. Without disaster prevention and reduction, we cannot attain millennium development goal and sustainable development. Disaster prevention is not only environmental and social issue, but development issue as well. As there is a saying “Disasters can be an opportunity,” we need to turn disaster into opportunity and create new type of growth. Thus, ensuring disaster reduction policy is a part of broader economic and development policy in environmentally-friendly way.

Short term initiatives (two years)

- A. Promote the adoption of standard hazard profiles for 20 countries, for use by all national and regional stakeholders in development planning processes**
 - Collect information on climate change-induced, and development-induced hazards
 - Strengthen existing disaster impact assessment systems
 - Develop systematic national hazard and risk profiles of countries by sub-region
- B. Promote integration of DRR & CCA in urban development, land use planning and physical planning in at least 5 countries**
 - Integrate DRR & CCA as components of urban development and land use planning at national and local levels
 - Develop, and promote the use of guidelines for integrating DRR and CCA into urban development and land use planning
- C. Promote the increased investments on DRR & CCA in at least 10 countries**
 - Develop, promote and adopt DRR & CCA resource tracking methodology
 - Develop, collect and disseminate cost and benefit methodologies with regard to DRR & CCA in investment planning
- D. Implement joint DRR & CCA projects in selected countries for selected development sectors promoted by partners in at least 2 countries**

- Regional and national partners will promote joint national projects ready for cohesive DRR-CCA programmes in at least 2 priority sectors. This could be modeled after the flagship programme done by a consortium of partners in Nepal in 2009

Long term initiatives (5 years)

- E. Continue Activities Above**
- F. Promote integration of DRR and CCA into Development Processes in at least 5 countries**
 - Explore the linkages between DRR & CCA and green growth
 - Promote DRR and CCA stakeholders to be represented in each others policy development processes including international negotiations
 - Develop legislations and policies that promote the integrated approaches for DRR and CCA in development planning and investments
 - Widespread knowledge sharing of technical tools which integrate DRR & CCA into Development
- G. Promote the decoupling of the increase of disaster exposure from economic growth**
 - Improve DRR and CCA needs assessments capability for inclusion into future Post Disaster Needs Assessments (PDNAsPromote risk transfer and financing systems (Risk transfer, Risk pooling, Micro finance, etc.)
- H. Promote with local governments to incorporate risk reduction in planning and zoning regulations, building regulations specially for communities at highest level of exposure**
 - **Build awareness and capacities of local governments on risk integrated planning zoning, building codes.**
 - **Identify and facilitate conditions of enabling environment for Local Government engagement**
 - **Make the required resource material available in local languages**
 - **Programmes to build public opinion on risks, safety, and accountability**
- I. Initiate development of guidelines for policymakers for integrating DRR and CCA into development, and to enhance linkages between DRR and CCA institutions at the national level.**

Monitoring and Evaluation

It is proposed that this roadmap be reviewed two years after its adoption at the Fifth Asian ministerial Conference on DRR in 2012.

At which time, it is also proposed that an additional set of proposed prioritized actions be developed for further adoption by Ministers.

It is proposed that a report on the achievements of the road map against the agreed indicators be prepared by the UNISDR Asia Pacific secretariat, supported by partners, to the 5AMCDRR