

Regional Cooperation for Disaster Risk Reduction in South Asia

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South Asia



Hazards of nature

- Largest, youngest and most seismic active mountain system
- Largest non-polar glacial deposits melting due to effects of global warming
- Heavy rainfall and high silt load on water bodies causing recurrent flood over large areas
- Larger area facing droughts due to scanty rainfall and depleting ground water level
- 12000 km coastline and many islands threatened by cyclones, storm surge and sea level rise



Layers of vulnerabilities

- With 23% of world population, South Asia produces only 1.3% of world income
- 40% of world poor (500 million) live in South Asia
- Half of malnourished children belong to South Asia
- 46% of world illiterates also belong to South Asia
- South Asia has the lowest sex ratio reflecting deeply rooted gender discrimination in society
- 1.4 billion people of South Asia is still growing at more than 2% per annum
- Unplanned urban areas growing at faster rate of 4.5% per annum creating further layer of urban vulnerabilities

Recent mega disasters of South Asia

Country	Disaster	Deaths	People affected
Bangladesh	Cyclone 1970	300,000	20 million
Bangladesh	Cyclone 1991	138,000	15 million
India	Earthquake 1993	9475	1 million
India	Cyclone 1999	10086	15 million
India	Earthquake 2001	13805	1.8 million
India	Tsunami 2004	12405	3.5 million
Pakistan	Earthquake 2005	83,000	5 million
Afghanistan	Drought 2000	712	2.5 million
Sri Lanka	Tsunami 2004	35,399	1 million

Approach to disaster management in South Asia

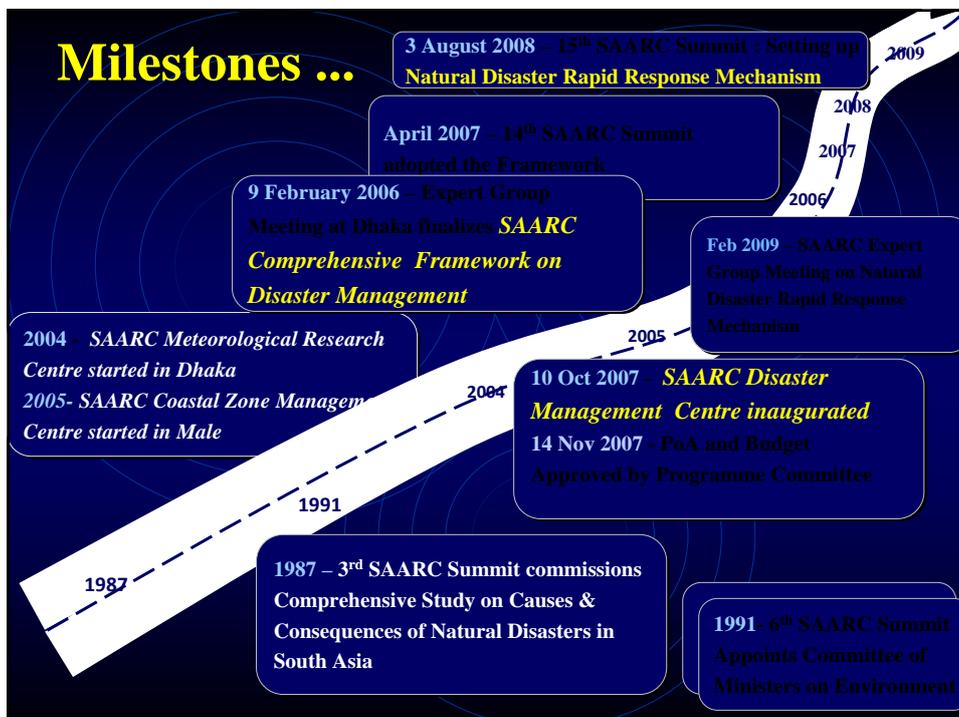
- For a long time public policy on disaster management in South Asia was marked by a sense of fatalism
- It remained focused on post disaster relief and rehabilitation; yet relief management largely remained ad hoc and amateurish
- None of the countries have prescribed minimum standards or norms of relief

Paradigm shift in disaster management

- In recent years there have been a paradigm in shift disaster management in almost all the countries of South Asia
- New legal and institutional system of disaster management have been developed
- Policies on disaster management is shifting from post disaster relief to holistic management of disasters covering all phases
- More emphasis on professionalism in disaster response, relief and recovery

Regional dimensions of disasters

- Natural disasters do not respect national boundaries - countries of South Asia are interlocked by a common geography and geology
- Earthquake – every major earthquake in the Himalayas would always affect more than one country
- Cyclone – every cyclone in Bay of Bengal and Arabian sea has the potential to affect two countries at a time
- Floods – almost every major flood has their origin and consequence beyond one single country
- Tsunami – it would always affect two to three countries
- Climate change would further bring the countries under a common net of disasters
- Therefore regional cooperation is the key to effective management of disasters in South Asia



SAARC Disaster Management Centre

- 13th SAARC Summit approved Indian proposal to set up SDMC at New Delhi
- Concept Plan of SDMC prepared by NIDM and approved by Expert Group and Council of Ministers
- Programme and budget approved by Governing Board and Programme Committee
- Centre inaugurated by Home Minister on 10th October 2006



Vision and Mission

Vision: “ to be a vibrant centre of excellence for knowledge, research, coordination and capacity development on disaster management”

Mission: “ to serve the Member Countries by providing policy advice and facilitating capacity development services including strategic learning, research, training, system development and exchange of information for effective disaster risk response reduction.”

Functions

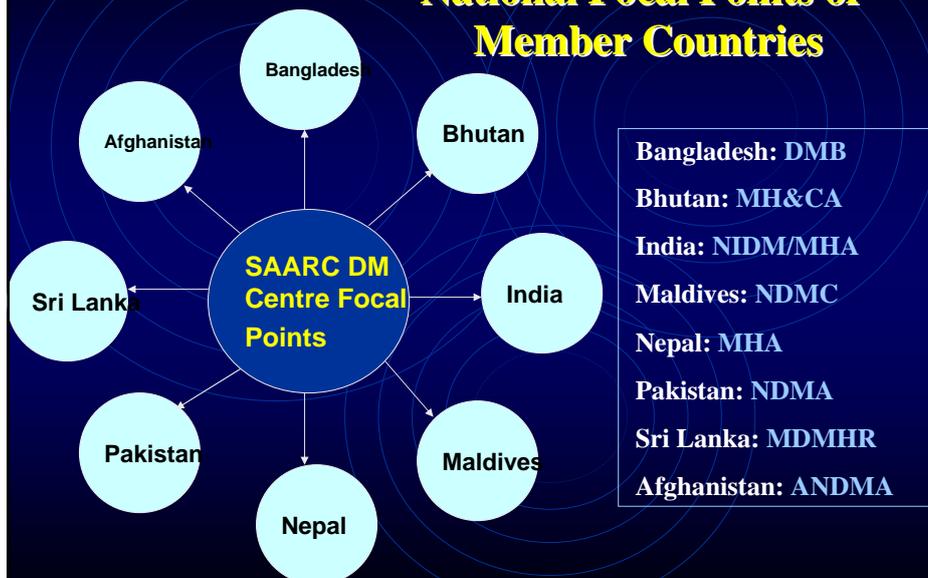
- collect, compile, document and disseminate data, information, case studies and good practices on every aspect of disaster management in the Member Countries;
- analyze information and undertake research on different aspects of disaster management;
- develop educational materials and conduct academic and professional courses on disaster management;
- organize training programmes for various stakeholders on disaster management in the Member Countries;

- Develop training modules and conduct ToT programmes and simulation exercises;
- Provide assistance in the formulation of policies, strategies and framework by the Member Countries
- Organize workshops, conferences, seminars, lectures etc on various aspects of disaster management in the Member Countries;
- Undertake publication of journals, research papers and books and maintain online resource centers in furtherance of the aforesaid objects.

Strategies

- Network with national focal points and with the concerned regional and international bodies;
- Assist national focal points to develop appropriate models for networking with their research, training and other institutions ;
- Develop a network of networking institutions to facilitate quick acquisition, storage, retrieval and dissemination of information, data and knowledge on disaster management including linkages with approved real-time data providers ;
- Use information and communication technologies to develop a virtual resource centre for disaster management in South Asia.

National Focal Points of Member Countries



South Asia Disaster Knowledge Network

- South Asia Disaster Knowledge Network (SADKN) has been conceptualized to develop a Network of Networks of scientific, technical, research and practicing organizations within and outside government at national and regional levels.
- UNISDR providing grant of USD 175,000 for implementation of the network
- SADKN was launched on 4 November 2009

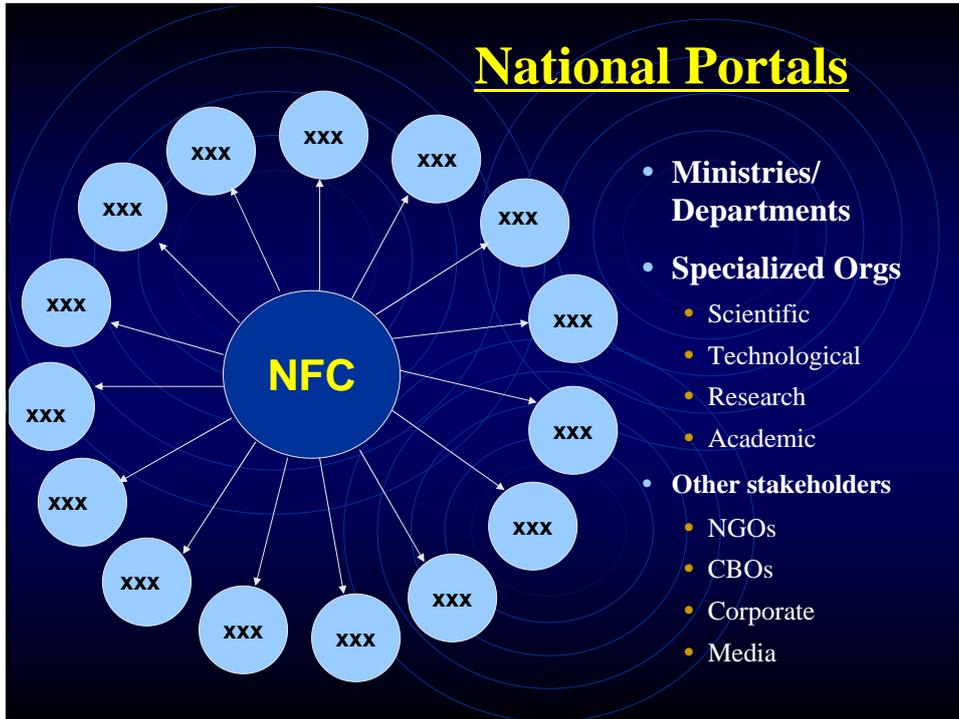
Two pronged Strategies



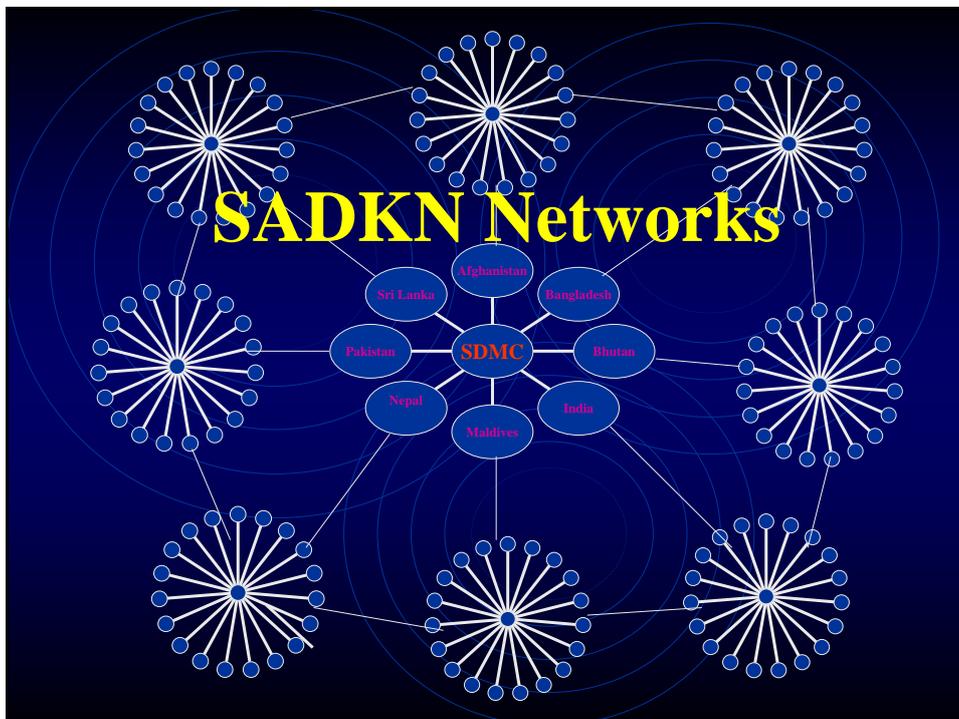
SDMC: Knowledge Management (KM) Strategy

SADKN and a repository of SA Indigenous Knowledge base viz., seismic resilient habitats in Nepal, coping and resilience of coastal hazards in Sri Lanka, Flood and Drought in India..

National Portals



SADKN Networks



Digital Vulnerability Atlas of South Asia

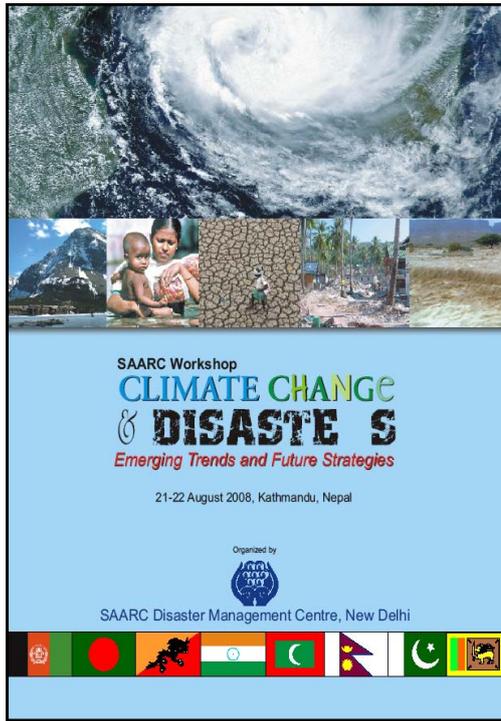
With support from SAARC-Japan Fund SDMC had conducted a feasibility study for preparation of Digital Vulnerability Atlas of South Asia on a GIS Platform integrating physical, social and economic data.

The project has been approved with an estimated cost of USD 310,000

Regional Road Maps

SAARCC Disaster Management Centre has developed Regional Road Maps on certain key areas of disaster management through a consultative process. These include:

- (a) Community Based Disaster Risk Management**
- (b) Application of S&T for Disaster Management**
- (c) Coastal and Marine Risk Management**
- (d) Integration of DRR in Climate Change Adaptation**
- (e) Mainstreaming DRR in Development**
- (f) Earthquake Risk Management**



Integration of DRR with CCA

Programme guidelines for integration of DRR in CCA projects and vice versa in respect of floods, cyclones, droughts and glacial lake outbursts

Technology need assessment - those related to Early Warning Systems

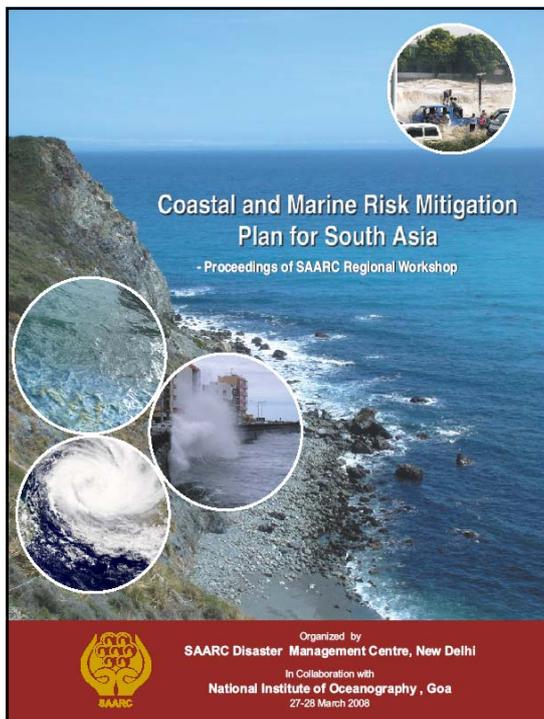
Research study on micro-credit, micro-insurance and crop Insurance

Tool kits for Education and Awareness Building

Training Modules on Climate Risk

SAARC Workshop
CLIMATE CHANGE & DISASTERS
Emerging Trends and Future Strategies
 21-22 August 2008, Kathmandu, Nepal

Organized by
 SAARC Disaster Management Centre, New Delhi

SDMC Road Map

Regional Plan for Coastal and Marine Risk Mitigation (Bay of Bengal & Arabian Sea basins) – Harmonizing Coastal Risk and Coastal Zone Management

Template for National Plan for Coastal and Marine Risk Mitigation

Regional protocols for sharing Early Warning (Cyclone, Storm Surge, Tsunami etc)

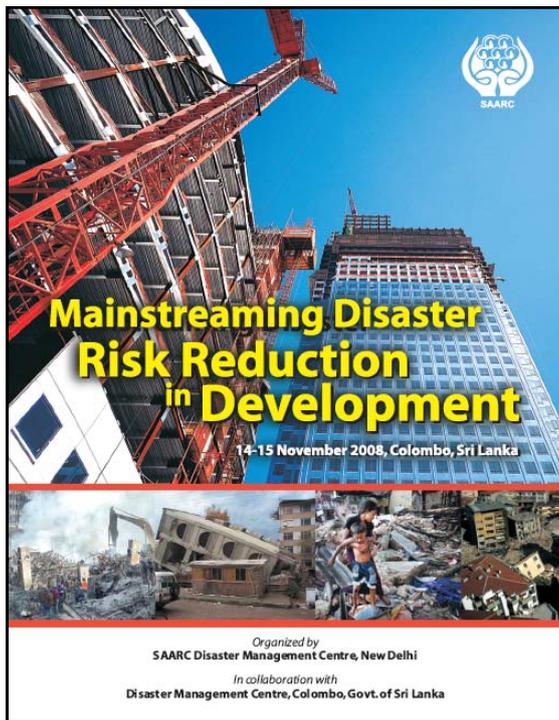
Densification/unification of Early Warning along North Indian Ocean basin

Joint Work Programme of SAARC Disaster Management Centre and SAARC Coastal Zone

Coastal and Marine Risk Mitigation Plan for South Asia
 - Proceedings of SAARC Regional Workshop

Organized by
 SAARC Disaster Management Centre, New Delhi
 In Collaboration with
 National Institute of Oceanography, Goa
 27-28 March 2008





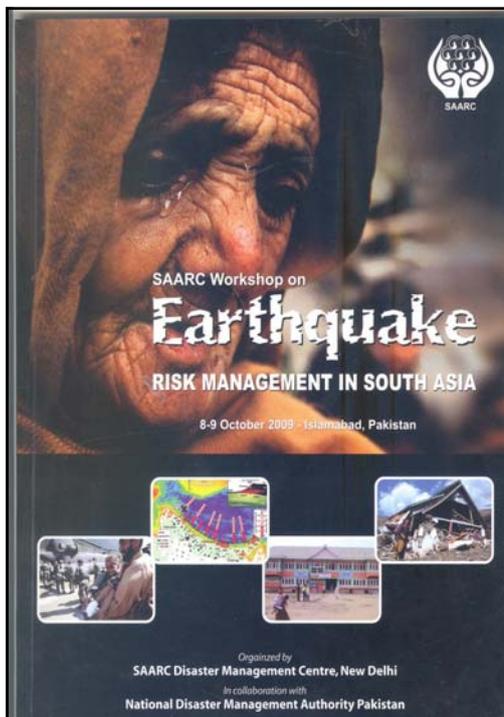
SDMC Roadmap

Development of Toolkits and Methodology in general and specific sectors

The Tool Kits shall, inter alia, spell out multi-hazard specific entry-point activities in specific sectors

Training and Technical Support

Disaster Impact Assessment of trans-boundary development projects



SDMC Roadmap

A Road Map on Earthquake Risk Management has been developed in SAARC Workshop on Earthquake Risk Management in Islamabad on 8-9 October 2009 in Islamabad

Key Products & Services

- Operational Projects**
 - South Asia Disaster Knowledge Networks
 - Digital Vulnerability Atlas
- Research Projects**
 - Indigenous Knowledge
 - Digital Vulnerability Atlas
- Knowledge Management**
 - Dev of Tools, Advisories
 - Policy Notes/inputs..
- Regular Publications**
 - Weekly Disasters Updates,
 - News letters, SA Disaster Report
 - Journal of South Asian Disaster Studies
- Special Publications**
 - SA Regional Study on the Causes & Consequences..

Strategic Pillars

Network with national focal points, regional & international bodies

A network of networks

- Capacity Development**

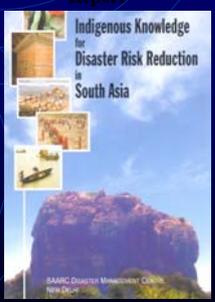
Region specific trainings, modules and plans, Networking for specialized training
- Advocacy/ Alliances**

UN-ISDR, GFDR, UNDP, UN-OCHA, ADRC, ADPC, AMCDRR
- Thematic Regional Workshops**
 - Community Based DRM
 - Application of S&T in DM
 - Coastal & Marine Risk Reduction
 - Climate Change Adaptation & DRR,
 - Mainstreaming DRR in Development
 - Seismic Risk Reduction
 - Minimum Standards of Relief
- Forthcoming Workshops**
 - Flood Risk Management
 - Earthquake Risk Management



Weekly South Asia Disaster News Quarterly SDMC Informs Bi-annual Journal of South Asian Disaster Studies Annual South Asia Disaster Report

A FEW SDMC PRODUCTS



Recent releases



Natural Disaster Rapid Response Mechanism (NDRRM)

“The Heads of State or Government expressed concern at the human loss suffered through natural disasters in the region and stressed the need for the timely provision of relief in humanitarian emergencies. In this regard they directed that a Natural Disaster Rapid Response Mechanism be created to adopt a coordinated and planned approach to meet such emergencies under the aegis of the SAARC Disaster Management Centre”.

15th SAARC Summit Colombo August 2008

Models of regional response

- **Coordination Response Model**
Assistance from member countries are pooled by the regional organisation which coordinates the response. Example: Euro-Atlantic Disaster Response Coordination Centre (EADRCC)
- **Voluntary Response Model**
Each member country, on a voluntary basis, earmarks assets and capacities for regional standby arrangements for response and relief. Example: ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA)
- **Assured Response Model**
Assurance of assistance is arranged by the regional organisation through prior negotiations and commitments which become binding on the member countries. Example: Regional Response Mechanism of Caribbean Disaster Response Agency's (CDERA).

Guiding Principles of Voluntary Response Model

- If a member country needs assistance in an event of a disaster, it may request such assistance from any other member country, directly or through the NDRRM
- Requesting country will specify scope and type of assistance
- Assisting country to notify, directly or through the NDRRM, the scope and terms of such assistance.
- Requesting country to provide, to the extent possible, local facilities and services for the proper and effective administration of the assistance.
- Requesting to exercise overall direction, control and supervision of assistance within its territory.

Organisational Structure of NDRRM

- Regional Emergency Operation Centre
- Round the Clock Operation of REOC
- Disaster Response Division in SDMC

Draft Agreement on NDRRM

- Broad consensus reached on Draft Agreement on NDRRM in two Expert Group Meetings
 - Expert Group Meeting of representatives of Foreign Affairs, Defence and Disaster Management held in New Delhi on 5-6 February 2009
 - Expert Group Meeting of Immigration and Custom officials held in New Delhi on 2 July 2009
- Draft Agreement circulated to Member States for acceptance. Approval from Bangladesh and Afghanistan awaited



THANK YOU