

# SAARC

## Regional progress report on the implementation of the Hyogo Framework for Action (2011-2013)

---

Name of focal point: Dr. O.P. Mishra

Organization: South Asian Assoc for Regional Coop

Title/Position: HEAD, GDD, SAARC Disaster Management  
Centre, New Delhi

---

Reporting period: 2011-2013

Last updated on: 12 December 2012

Print date: 01 May 2013

## Executive summary

The South Asia region is regarded as the hotspot of almost all natural disasters, which showed unprecedented loss of lives, flora and faunas. The disaster scenario in SAARC Member States (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka) became complex due to the aggravated pattern of Climate Change in the region, which showed huge impact on the erratic rate of disaster by influencing the frequency and intensity of natural disasters in the region. This is reflected by South Asia

Disaster Reports (2007 – 2011) as well as in the EM-DAT global database on disasters.

Extensive programs on capacity buildings and advocacy on geological and hydrometeorological

disasters during 2011 – 2013 have yielded impressive results in generating comprehensive awareness programs among the various levels of stakeholders of the society of Member States. There has been a paradigm shift in the approach to disaster management, from one of post disaster relief and rehabilitation to pre disaster prevention and preparedness. Two tier training programs on SADKN for nodal officers and partner organizations in SAARC Member States are completed during 2011 - 2012 for most of Member States. A total of four Expert Group Meetings have been organized by SAARC Disaster Management Centre (SDMC) during 2011 – 2013 to address several pertinent regional issues of data sharing, dissemination of information, and technology transfer for disaster risk management among the SAARC Member States. DVAs are completed for five Member States. In view of effective participation of stakeholders during and post disaster scenario with regional aspiration, SAARC Member States unanimously accepted the idea of adopting a holistic framework on 'Natural Disaster Rapid Response Mechanism (NDRRM)' for the mutual benefit of Member States for tackling various kinds of transboundary disasters. The NDRRM has already been signed by SAARC Member States, which is under ratification by SAARC Member States.

## Subsection 2.1: HFA Priority for Action 1 / equivalent (Sub-)Regional Priority

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

### **Level of Progress achieved**

4: Substantial achievement attained but with recognized limitations in capacities and resources

### **Means of verification**

Yes : (Sub-)regional framework, strategy, action plan

No : Resources mobilised for the implementation of the (sub-)regional framework, strategy, action plan

## **Description**

The SAARC Disaster Management Centre (SDMC) developed as many as twelve SAARC Road Maps for Regional Cooperation up to the year 2012 for disaster risk reduction on the following areas :-

- a) Earthquake Risk Management
- b) Landslides Risk Management
- c) Drought Risk Management
- d) Coastal and Marine Risk Management
- e) Urban Risk Management
- f) Community Based Disaster Risk Management
- g) Applications of Science and Technology for Disaster Management
- h) Integration of DRR with Climate Change Adaptation
- i) Mainstreaming Disaster Risk Reduction in Development
- j) Children Risk Management
- j) Flood Risk Management
- k) Incident Command System

In continuation of development of above roadmaps, SDMC is in process of development of three more Roadmaps (l – o) on several thematic issues of disaster for regional cooperation by the year 2013 on following areas:

- l) Post Disaster Need Assessment
- m) GLOF Risk Management
- n) Avalanche Risk Management
- o) Corporate Social Risk Management

Based on these Road Maps a number of regional projects have been taken up for implementation. SDMC organized following four Expert group meetings during the period of reporting on various themes among SAARC Member States to deal with regional disaster in a comprehensive ways:

- i) Landslide
- ii) Tsunami and Cycone early warning system
- iii) Seismic Hazards
- iv) Drought Risk mitigation

## **Optional**

Member countries usually agree to implement projects derived from these roadmaps and embodied in the Regional Framework of Disaster Management developed by SAARC Disaster Management Centre.

## **Context & Constraints**

The SAARC Comprehensive Framework on Disaster Management and the SAARC

Road Maps on disaster risk reduction are not legally binding instruments although these have been unanimously adopted by the Member States. These have constrained the implementation and enforcement of the Framework and the Road Maps.

Constraints of resources have been another limiting factor implementation of the agreed framework and road maps. The SAARC has been very conservative in receiving assistance from external sources. Almost all the initiatives of the SAARC have been funded by contributions from the Member States, as per the sharing formula worked out on the basis of the size and the population of the Member States. There is always reluctance of the Member States to enhance their contributions, which constraints the implementation of regional projects. However, SDMC has successfully implemented several projects with a part of financial support from outside agencies (e.g., UNISDR; ADRC; World Bank; USFS) on Disaster Management of regional scale in collaboration with partner organizations on approval from the Standing committee of SAARC on recommendation of the Governing Board of SDMC. Member States have also been reluctant to share critical data and information on trans-border hazards and vulnerabilities, particularly on issues like discharge and withdrawal of waters from rivers and reservoirs, rainfall in upper catchment etc which are necessary for developing regional flood early warning systems etc.

### **Optional**

Realizing the importance of developing a legal framework on disaster management, the Heads of the States and Governments decided that a Natural Disaster Rapid Response Mechanism may be developed under the auspicious of SAARC Secretariat. Accordingly the Centre developed through a consultative process of all concerned Ministries and organizations of all Member States a SAARC Agreement on Rapid Response to Natural Disasters. Though the agreement was approved both at the official and ministerial level discussions and it has already been signed during the Summit meeting in Adu city, Maldives in November 2011, which is now with Member States for its final ratification.

SDMC is in process of development of a suitable protocol for data and technology transfer among Member States through common consensus.

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

#### **Level of Progress achieved**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

#### **Means of verification**

Yes : Regional platform and/or equivalent (sub-)regional multi-stakeholder coordinating mechanism for DRR

Yes : Capacity strengthening of (sub-)regional DRR institution supported.

Yes : (Sub-)regional DRR body is implementing programme(s) for trans-boundary risk reduction and supporting national DRR integration.

### **Description**

SAARC Disaster Management Centre (SDMC), New Delhi is the dedicated regional institution created by the Member States for disaster risk reduction and management in South Asia. SDMC has the mandate to 'serve the Member Countries by providing policy advice and facilitating capacity building services including strategic learning, research, training, system development, expertise promotion and exchange of information for effective disaster risk reduction and management'.

SDMC has four multi-disciplinary divisions, namely, i) Geological Disaster Division ii) Hydro-Meteorological Disaster Division iii) Policy Planning Division and iv) Biological and other Man-made Disasters where professionals from the Member States work to assess and analyze risks of various disasters, identify the critical gaps, develop regional projects as outlined in the road maps and implement and monitor the projects as per resources allocated for the same.

### **Optional**

SDMC involves scientific, technical, academic, research and practicing organizations of the member states for implementation of its programmes and activities. The following four fold strategies have been developed for multi-sectoral regional cooperation

- a) Network with the national focal points of disaster management and with the concerned regional and international bodies;
- b) Assist the national focal points of disaster management of Member Countries to develop appropriate models for networking with their research, training and other institutions ;
- c) 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 ;
- d) Use information and communication technologies to develop a virtual resource centre for disaster management in South Asia.

### **Context & Constraints**

Disaster risk reduction has often been defined as ‘everybody’s business’, which include not only the national governments, but also the local level urban and rural governments, private and corporate sectors, scientific, technical and academic organizations, civil society, media, corporate sector, communities, and even the households and individuals. Although SAARC Disaster Management Centre (SDMC), through its networking strategies, has been making efforts to reach out to wider audience, it is essentially an inter-governmental organization which is bound by the rigid rules and procedures of the SAARC. These rules do not always permit it to develop multi-sector regional platform on the pattern of National and Global Platforms.

In South Asia a Regional Platform on DRR involving multiple stakeholders is yet to be established, although a few initiatives have been made in this direction. Several initiatives, like the South Asia Policy Dialogue on Disaster Risk Reduction and hosting of East Asia Summit by India in October 2012, which was organized by the Ministry of Home Affairs, Government of India with ASEAN at New Delhi. The declaration adopted at the conclusion of the dialogue called for development of a multi-stakeholder Regional Platform.

The 5th Asian Ministerial Conference on Disaster Risk Reduction held in Yogyakarta, Indonesia in October 2012, further deliberated on the issue and reiterated that the AMCDRR itself should work as a regional platform for the Asia Pacific region. Although the declaration mandated UNISDR to work for the institutionalization of such a platform, this has not gone much beyond the biennial meeting of the Ministers from the Asia-Pacific which are attended by many scientific, technical and civil society organizations.

### **Optional**

Through these networking strategies SDMC has been able to reach multiple institutions and stakeholders at local, national, regional and international levels to develop South Asia Disaster Knowledge Network (SADKN) and Digital Vulnerability Atlas (DVA).

- SDMC is now in process of establishing linkages with other regional partners through connectivity of SADKN in dynamic mode with available portals of Sub-regional / Regional / Global institutions. In the year 2012, SDMC has successfully organized a Pre-conference event during the 5th Asian Ministerial Conference on Disaster Risk Reduction (5th AMCDRR) held at Yogyakarta, Indonesia in collaboration with UNISDR (A – P), Bangkok, where participants from different sub-regional and regional organizations (e.g., UNOCHA, UNESCAP; ADPC), besides representative of SAARC Member States attended and expressed commitment to foster extensive collaborative activities to address multi-sectoral issues of disaster risk mitigation on regional and sub-regional scale.

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

**Level of Progress achieved**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

**Means of verification**

Yes : Monitoring, evaluation and reporting framework / systems

**Description**

The SAARC Disaster Management Centre (SDMC) has a dedicated multi-disciplinary team of professionals, who have been working with many specialized institutions of the member countries and resource persons in the region and outside to assess trans-boundary hazards, vulnerabilities and risks of disasters.

The SAARC Road Maps on several thematic issues of Disasters, such as Earthquake, Landslides, Drought, Coastal and Marine Risks, Urban Risks, Climate Change etc have identified critical gaps in risk assessment procedures and practices in the member States as also in the region. A number of regional projects have been taken up to meet these gaps and enhance the capacity of the region to address to these gaps.

Research projects on Seismic Vulnerability of South Asia, regional seismic Attenuation model, regional early warning system for Landslide, traditional techniques for earthquake resistant buildings, Coastal zone management, and regional disaster trend under Climate Change have been initiated in collaboration with specialized institutions of Member States as well as with other regional Centres of SAARC (e.g. SMRC, Dhaka; SCZMC, Male) during 2011 – 2013 for the benefit of SAARC Member States. Other projects on “Rapid Structural and non-structural assessment of School and hospital buildings in SAARC region”, and development of Methodology and Guidelines on First- Cut-Seismic Microzonation with spotlight on urban areas of South Asian Countries have been completed during 2011. The guidelines have been circulated to the Member States for conducting first-cut seismic microzonation based on available information in a cost effective manner.

**Optional**

Based on the completed project of “Rapid Visual Screening of School and Hospital Buildings”, SDMC has developed a comprehensive tool for School and Hospital safety under multi-disaster scenario in collaboration with UNISDR for the guidance of the Member States in 2012.

SDMC completed the development of Digital Vulnerability Atlas (DVA), a regional project of integrating layers of data on hazards, vulnerabilities and risks on a WebGIS platform for 5-SAARC Member States (Afghanistan, Bhutan, India, Maldives, and Nepal) in the first phase in the year 2012. Development of the same for other 3-SAARC Member States (Bangladesh, Pakistan, and Sri Lanka) has to be completed in the second phase for which processes have been initiated by SDMC.

### **Context & Constraints**

The main constraints faced for trans-boundary risk assessment in South Asia are three fold.

First, the South Asia region is an extremely data scarce region. The observational network for collection of hazard data are not dense with the result that comprehensive data sets on natural hazards at the micro level are not available. Secondly real transmission of data are mostly non-existent. Historical and time series data on hazards, vulnerabilities and risks are scattered in multiple agencies and very little efforts have been made to digitize the data. The Member States and their specialized agencies have also been very conservative in sharing data with outside agencies including the regional organizations. For example micro level seismic and hydrological data are invariably not shared which makes it extremely difficult to conduct detailed trans-boundary risk assessments of flood, earthquakes and landslides. Secondly, a number of scientific, technical and research organizations are involved with risk assessments. These are under the administrative control of different Ministries and authorities of the Member States. SDMC finds it extremely difficult to network with such institutions. Even the national focal points on disaster management in the Member States have been finding it difficult to coordinate with these agencies for conducting studies or facilitating the SDMC in conducting such studies. Visiting field locations, accessing reports and documents and meeting concerned authorities have been beset with multiple challenges that have hindered the process of smooth conduct of regional and trans-boundary risk assessments.

Thirdly, lack of trained manpower and adequate financial resources with the regional organizations have further constrained the tasks of comprehensive assessments of trans- boundary risk assessment. Scarcity of in house professionals to conduct such studies is another constraints.

### **Optional**

However, SDMC attempted to resolve the issue of data scarce by creating South Asia Disaster Network (SADKN) on which all Member States have option to upload data and information related to disasters on the specific country page of SADKN as per the mutual agreement for conducting further research and analyses.

Outsourcing of professionals for conducting studies on crucial issues has also not

been easy as requisite financial resources are not available for funding such studies. However, SAARC is in process of resolving such issues in consultations with its Member States.

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

**Level of Progress achieved**

5: Comprehensive achievement with sustained commitment and capacities at all levels

**Means of verification**

Yes : (Sub-)regional disaster DRR capacity building projects and programs

Yes : (Sub-)regional institutions for DRR capacity building / training

Yes : Educational and training materials for DRR developed

Yes : Educational and training materials for DRR are standardised in the (sub-)region.

**Description**

SAARC Disaster Management Centre (SDMC) has the mandate to develop regional capacity for disaster risk reduction. SDMC developed a template for conducting Training Need Analysis (TNA) across sectors in each country. The Member countries were advised to identify a leading institute to conduct the TNA and develop Human Resource Plan on Disaster Management.

A number of countries have conducted the TNA and are in the process of preparation of HR Plan. A few countries created specialized institutions for conducting Training Programmes. India has the National Institute of Disaster Management (NIDM) which has a multi-disciplinary team of professionals who conduct several class room based training programmes besides conducting on line and blended training courses on various aspects of disaster risk reduction and management. NIDM has set up 30 Disaster Management Centres in the States to conduct similar programmes for the state and district functionaries. Together as many as 30,000 cutting functionaries of national, provincial and local government functionaries besides non-government organizations are being trained on different aspects of disaster management. Pakistan has also set up its NIDM and other countries have made arrangements for conducting training and capacity development for disaster management.

In order to develop regional capacity and promote understanding among the countries to address the regional issues of risk reduction SDMC conducts regular training programmes in collaboration with leading Centres of Excellence in the Member States.

### **Optional**

Annually about 7-8 training programmes are conducted every year. The themes of some of the recently training programmes include the following;

- Application of Geoinformatics for Disaster Management
- Earthquake Hazard Mitigation for SAARC Region
- Bioengineering Methods for Landslide Hazard Mitigation
- Emergency Relief Management
- Incident Command System
- Climate Change Adaptation and Disaster Risk Reduction
- Early Warning of Hydro-Meteorological Disasters

### **Context & Constraints**

The capacity building programmes of the SAARC Disaster Management Centre are extremely popular and have been huge success. But considering the huge unmet needs of training and capacity building in the region, the annual schedule of only 7-8 programmes are too less. Considering the costs involved, there are limitations for conducting larger number of regional programmes. Therefore efforts are being made to encourage the Member States to develop national level institutions which would lead such capacity development programmes in respective countries as per local needs, languages and ethos. While a few countries have set up dedicated training institutions on disaster management, others are making ad hoc arrangements with support from donors. Public investments for such programmes are far from being adequate.

### **Optional**

There is a need to scale up activities and investment in this sector by the Member States.

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

**Level of Progress achieved**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

**Means of verification**

Yes : (Sub-)regional hazard, vulnerability or risk atlas

Yes : (Sub-)regional risk information system

**Description**

The SAARC Disaster Management Centre (SDMC) has a dedicated multi-disciplinary team of professionals, who have been working with many specialized institutions of the member countries and resource persons in the region and outside to assess trans-boundary hazards, vulnerabilities and risks of disasters.

The SAARC Road Maps on several thematic issues of Disasters, such as Earthquake, Landslides, Drought, Coastal and Marine Risks, Urban Risks, Climate Change etc have identified critical gaps in risk assessment procedures and practices in the member States as also in the region. A number of regional projects have been taken up to meet these gaps and enhance the capacity of the region to address to these gaps.

Research projects on Seismic Vulnerability of South Asia, regional seismic Attenuation model, regional early warning system for Landslide, traditional techniques for earthquake resistant buildings, Coastal zone management, and regional disaster trend under Climate Change have been initiated in collaboration with specialized institutions of Member States as well as with other regional Centres of SAARC (e.g. SMRC, Dhaka; SCZMC, Male) during 2011 – 2013 for the benefit of SAARC Member States. Other projects on “Rapid Structural and non-structural assessment of School and hospital buildings in SAARC region”, and development of Methodology and Guidelines on First- Cut-Seismic Microzonation with spotlight on urban areas of South Asian Countries have been completed during 2011. The guidelines have been circulated to the Member States for conducting first-cut seismic microzonation based on available information in a cost effective manner.

**Optional**

Based on the completed project of “Rapid Visual Screening of School and Hospital Buildings”, SDMC has developed a comprehensive tool for School and Hospital safety

under multi-disaster scenario in collaboration with UNISDR for the guidance of the Member States in 2012.

SDMC completed the development of Digital Vulnerability Atlas (DVA), a regional project of integrating layers of data on hazards, vulnerabilities and risks on a WebGIS platform for 5-SAARC Member States (Afghanistan, Bhutan, India, Maldives, and Nepal) in the first phase in the year 2012. Development of the same for other 3-SAARC Member States (Bangladesh, Pakistan, and Sri Lanka) has to be completed in the second phase for which processes have been initiated by SDMC.

### **Context & Constraints**

The main constraints faced for trans-boundary risk assessment in South Asia are three fold.

First, the South Asia region is an extremely data scarce region. The observational network for collection of hazard data are not dense with the result that comprehensive data sets on natural hazards at the micro level are not available. Secondly real transmission of data are mostly non-existent. Historical and time series data on hazards, vulnerabilities and risks are scattered in multiple agencies and very little efforts have been made to digitize the data. The Member States and their specialized agencies have also been very conservative in sharing data with outside agencies including the regional organizations. For example micro level seismic and hydrological data are invariably not shared which makes it extremely difficult to conduct detailed trans-boundary risk assessments of flood, earthquakes and landslides. However, SDMC attempted to resolve the issue of data scarce by creating South Asia Disaster Network (SADKN) on which all Member States have option to upload data and information related to disasters on the specific country page of SADKN as per the mutual agreement for conducting further research and analyses.

Secondly, a number of scientific, technical and research organizations are involved with risk assessments. These are under the administrative control of different Ministries and authorities of the Member States. SDMC finds it extremely difficult to network with such institutions. Even the national focal points on disaster management in the Member States have been finding it difficult to coordinate with these agencies for conducting studies or facilitating the SDMC in conducting such studies. Visiting field locations, accessing reports and documents and meeting concerned authorities have been beset with multiple challenges that have hindered the process of smooth conduct of regional and trans-boundary risk assessments.

Thirdly, lack of trained manpower and adequate financial resources with the regional organizations have further constrained the tasks of comprehensive assessments of trans-boundary risk assessment. The SAARC Disaster Management Centre does not always have in house professionals to conduct such studies. Outsourcing such studies has also not been easy as requisite financial resources are not available for funding such studies.

### **Optional**

Sharing of authentic data and information for sustainable development of SADKN and DVA are the main yardstick for successful endeavor of making trans-boundary risk assessment on different themes of natural disaster.

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

#### **Level of Progress achieved**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

#### **Means of verification**

No : Protocol for dissemination of early warning information

No : Early warning systems for DRR enhanced at the community and national levels

#### **Description**

1) Over the years, the SAARC member countries have evolved regional mechanisms for early warning of disasters. Under the auspices of WMO and ESCAP, a Regional Meteorological Centre (RMC) had been set up in July 1988 in New Delhi under the India Meteorological Department (IMD) for issuing Tropical Weather Outlooks and Tropical Cyclone Advisories for the Bay of Bengal and the Arabian Sea countries, which include Bangladesh, India, Maldives, Myanmar, Pakistan, Sri Lanka, Sultanate of Oman and Thailand.

Indian National Centre for Oceanic Information System (INCOIS) has developed a state-of-art Tsunami Early Warning System which is available for countries of the region. SAARC Disaster Management Centre (SDMC) has been mandated with the responsibility to develop a SAARC Protocol for Tsunami Early Warning System. A draft Protocol has been developed for the consideration of the Member States. Under this protocol a Regional Emergency Operation Centre is proposed to be set up in SDMC for coordinating early warning of cyclone and tsunami. A regional expert group meeting was also organized by SDMC on Early Warning Systems of Cyclone and tsunamis in New Delhi in December 2011.

A regional early warning system for flood is yet to be developed in South Asia. However the Member States have been sharing rainfall and river discharge data bi-laterally on a regular basis, which has been useful in issuing flood warnings by the Member States.

A regional project thunderstorms in India, Bangladesh, Nepal and Bhutan has recently been taken up by the SAARC Meteorological Centre, Dhaka, which would facilitate development early warning of thunderstorm.

### **Optional**

The country reports from the South Asia provide evidence of overall capacity gaps with regards to access and absorption of these technologies, which undermine the ability to generate, transmit and disseminate data at all levels, particularly at last miles.

South Asia is yet to develop regional early warning systems for flood, drought, landslides, avalanches etc. Each of these disasters have significant trans-border dimensions which should be studied by the concerned agencies and an institutional mechanism developed for facilitating early warning to reduce the risks of disasters. Some of the countries have developed significant capacity for remote sensing through earth observation satellites. The exact location of landslides and avalanches can be assessed and critical information passed on to people through a regional network.

Medium range forecast of weathers make it possible to predict metrological and hydrological droughts with reasonable degree of accuracies.

Similarly a regional flood warning system can be developed through network of regional and national level hydrological and meteorological observation stations.

### **Context & Constraints**

While considerable progress has been achieved for development of early warning of cyclones and tsunami in South Asia, the system suffers from a number of constraints.

First, there are considerable gaps in observational networks of weather systems in South Asia. As per WMO standards, an optimal observation network in the tropics calls for surface observations at every 50 sq. Kms. upper air observations at 100 sq. Kms. and land surface parameters at 25 sq. kms. grids. Such standards are far from being achieved in South Asia. These gaps lead to sub-standard disaster warning and forecasts.

There is a need for substantial augmentation of the present network by using emerging technologies such as Advanced Multi-parametric Satellite Systems from Geo-stationary as well as Polar Platforms, Automatic Weather Stations, GPS Sonde, Wind Profiler, 140 Rain Radar, Doppler Weather Radars, Meteorological Towers, Agromet Towers etc.

## **Optional**

SDMC is in process to share good practices on early warning related to landslide and flood risk management. Efforts are on for facilitating technological data and information sharing for the early warning systems of tsunamis, drought, cyclone and storm early warning among SAARC Member States through Expert Group Meetings by developing a acceptable guideline and modalities of data sharing.

### Subsection 2.3: HFA Priority for Action 3 / equivalent (Sub-)Regional Priority

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

#### **Level of Progress achieved**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

#### **Means of verification**

Yes : (Sub-)regional web site

Yes : (Sub-)regional community of practice / network

Yes : Local to (sub-)regional knowledge sharing on DRR supported

Yes : (Sub-)regional public awareness strategy

#### **Description**

Bi-lateral information exchange mechanism is in place among the countries of the region for communication during trans-boundary disasters.

However no effective regional mechanism is available at present for such emergency communication protocol. Development of regional SOP and Protocol is contingent upon the countries agreeing to the proposed Natural Disaster Rapid Response Mechanism.

Heads of States and Governments have agreed on principle to the proposed mechanism, but this is yet to be formalized by a legal and institutional arrangement.

It may however be mentioned that regional arrangements for sharing early warning facilities for cyclone is available. A similar regional arrangement for sharing early warning for tsunami is under consideration. This has been detailed in Regional Indicator 4.

### **Optional**

SAARC member States share their information through their websites. SDMC transmits information through weekly News Bulletin, Quarterly Disaster Informs, and Annual Disaster Report about trans-boundary and country specific disasters.

SDMC also shares information on disaster through documentation development on good practices among SAARC Member States. Additionally, SDMC has established SADKN as the regional disaster knowledge portal having specific pages for SAARC Member Countries that describe various types of information on different issues of natural disasters. SDMC regularly organizes awareness programs on thematic issues through National Focal Points and their partner organizations.

SDMC regularly involves in publication of bi-annual journals, containing several issues on disasters related to Member States and of globe. SDMC has dynamic portal for real-time information

SDMC actively involves in organizing specific activities for awareness among kids by conducting quiz, essay, painting, and debate competition among students of various categories on various aspects of natural disasters on special occasions, such as International day of disaster, SAARC Chartered Day, etc.

Knowledge sharing through workshop and capacity building programs on various issues in the Member States

### **Context & Constraints**

Countries of the region are yet to reach an agreement on the issue.

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

#### **Level of Progress achieved**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

#### **Means of verification**

No : Research programmes and projects

No : Coordination and collaboration of data gathering and research of DRR stakeholders

No : (Sub-)regional disaster risk reduction centre / centre of excellence

## **Description**

SAARC Disaster Management Center (SDMC) is mandated to conduct research and document the disasters of the region. The Centre documents the disaster events of the region on a regular basis and publishes weekly, quarterly and annual reports on disaster in the region. Besides, the centre conducts research on different aspects of disaster risk reduction in the region.

The Center has completed the research and documentation of Indigenous Knowledge and Coping Mechanism of Different Communities Living in Multi-Hazard Zones of South Asia - based on case studies in India, Nepal and Sri Lanka.

The center reviewed the Seismic Vulnerability of the Himalayan- Hindukush Belt vis-a-vis the Regional Active Fault Zones. The center has also completed the documentation of Best Practices on Community Based Disaster Risk Management in South Asia and developed Templates for the preparation of Coastal and Marine Risk Mitigation Plan.

The center has initiated a project for .Digitized Vulnerability Atlas of South Asia Integrating Spatial Data on Physical, Demographic and Socio-Economic Features of different regions of each country. The Vulnerability Atlas of South Asia is being prepared on a GIS platform using latest remote sensing data showing geo-physical and climatic hazard zone classification on a specific scale and integrating available census data on demography, socio-economic conditions, housing types etc. This would be a pioneering study of its kind in South Asia.

## **Optional**

The center is conducting a feasibility study for development of landslide early warning system using precipitation threshold and numerical weather prediction models.

The center is working towards creating a directory of Government, Private, Non Governmental and other organizations and individuals working on Various Aspects of Disaster Management in South Asia.

Two other inter-governmental regional centres, namely SAARC Meteorological research Centre in Dhaka and SAARC Coastal Zone Research Centre in Male are also involved with a number of research projects that have bearings on disaster risk reduction.

## **Context & Constraints**

Inter-regional Centre coordination among SAARC is needed to conduct collaborative activities related to coastal hazard, Geological, Hydro-meteorological hazards.

### **Optional**

SDMC has already started to collaborate with SAARC Meteorological Research Centre, Dhaka, Bangladesh ; SAARC Forestry Centre, Thimphu, Bhutan; and SAARC Coastal Zone Management Centre, Male, Maldives.

### Subsection 2.4: HFA Priority for Action 4 / equivalent (Sub-)Regional Priority

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

#### **Level of Progress achieved**

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

#### **Means of verification**

Yes : In (sub-)regional environment policy / plan

Yes : In (sub-)regional climate change adaptation policy / plan

Yes : In (sub-)regional agricultural policy / plan

No : In (sub-)regional infrastructure policy / plan

No : In (sub-)regional public-private-partnerships

No : In other (sub-)regional policies / plans

Yes : Countries in the (sub-)region have integrated DRR in national legislation, regulation, policies and programmes.

#### **Description**

The South Asian Associations on Regional Cooperation (SAARC) has been working on a wide range of issues of regional cooperation - agriculture, trade & commerce, transportation, energy, poverty alleviation, human resource developments, science & technology, information & communication, media, social developments including development of children & youth, empowerment of women, health, tourism, culture and environment. Regional policies and plans have been developed on many of these areas. Disaster risk reduction has remained implicit in many of these initiatives.

The Regional Studies on the Causes and Consequences of Natural Disasters and the Protection and Preservation of the Environment which was commissioned in 1987 highlighted the importance of disaster risk reduction for various sectoral development plans. The SAARC Environment Action Plan 1997 identified some of the key concerns of Member States including the increasing incidence of natural disasters in the region.

The Fourteenth SAARC Summit in New Delhi in April 2007 expressed "deep concern" over the global climate change and called for pursuing a climate resilient development in South Asia. The SAARC Action Plan on Climate Change was adopted in July 2008, which identifies seven thematic areas of cooperation related to adaptation; mitigation; technology transfer; finance and investment; education and awareness; management of impacts and risks; and capacity building for international negotiations. As a follow up, a Road Map on Integration of DRR with Climate Change Adaptation was developed by the SAARC Disaster Management Centre in August 2008.

Climate Change was the theme of the Sixteenth SAARC Summit held in Thimphu in April 2010. The Summit adopted the Thimphu Statement on Climate Change which outlines a number of important initiatives to strengthen and intensify regional cooperation to address the adverse effects of climate change in a focused manner. One of these is the SAARC Disaster Initiative which seeks to integrate climate change adaptation with DRR. region.

### **Optional**

SAARC DMC has now actively been engaged in implementing Thimphu Statement on Climate Change and its integration with DRR in collaboration with UNISDR since December 2012.

SAARC has organized meeting of Environmental Ministers of SAARC Countries in 2011 at Thimphu to review the implementation of the Thimphu Action plan.

### **Context & Constraints**

Involvement of different specialized and partner organizations to undertake comprehensive study on Climate change and its integration with DRR in undergoing developmental schemes in SAARC Member States.

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

**Level of Progress achieved**

3:Institutional commitment attained, but achievements are neither comprehensive nor substantial

### **Means of verification**

Yes : Standards and procedures for disaster risk impact assessment

### **Description**

South Asia cannot boast of major regional infrastructure projects. However many mega infrastructure projects like dams, hydro-electric projects and transportation networks have been taken up through bilateral initiatives in many disaster prone areas. Efforts are being made to link national road, rail, river and air transportation systems with regional grid to facilitate rapid movement of goods and persons for faster economic growth.

Major countries like India, Pakistan, Bangladesh and Sri Lanka have developed their own standards and codes for disaster safe construction, which are being followed in regional projects. Smaller countries have adopted international standards and practices for compliance.

Such standards are also followed in all post disaster reconstruction projects, in accordance with the principle of 'build back better', such as earthquake reconstruction projects in Bhuj and Muzaffrabad, Tsunami reconstruction works in India, Sri Lanka and Maldives, and more recently flood reconstruction programs in India, Nepal and Pakistan.

Cross country comparison of construction codes and practices shows wide divergences in risk reduction features, which offers enormous scope of further standardization of codes and practices in the region. The capacity to comply with and enforce the codal provisions is also limited in most of the countries, calling for strengthening of capacity of engineers, architects and masons.

### **Optional**

As the regional cooperation grows to include newer areas of joint regional projects to tap hydel, mineral and other natural resources of the region, the need for common regional standards shall be felt, which have to be developed in a systematic manner as per global best practices. Similarly the region shall be required to develop disaster impact assessment of major projects on the pattern of Environment Impact Assessment, to ensure that these projects are safe from disasters and these would not create any long term impact to create more disasters.

Surely there are lots of works that remain to be done in these areas.

## **Context & Constraints**

Though, SAARC has evolved a good amount of consensus in dealing disaster risk measures among Member States. However, a proper guideline / SOP for data transfer and information related to trans-border areas is still a grave concern for member states.

Confidence building programs among Member States need to be initiated before taking up any project on establishment of vital infrastructures in border areas, especially related to water level in trans-boundary rivers.

### Subsection 2.5: HFA Priority for Action 5 / equivalent (Sub-)Regional Priority

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

#### **Level of Progress achieved**

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

#### **Means of verification**

Yes : (Sub-)regional coordinating body for disaster management

No : (Sub-)regional response plan

No : Trans-boundary preparedness, response and rehabilitation protocols developed and implemented in priority sectors

#### **Description**

In the Fifteenth SAARC Summit held in Colombo on August 2-3, 2008 the Heads of the States/Governments declared that a “Natural Disaster Response Mechanism” shall be created under the aegis of the SAARC Disaster Management Center to adopt a coordinated and planned approach to meet such emergencies. SDMC organized a number of Expert Group Meetings involving representatives from the Ministries of Foreign Affairs, Defense, National Focal Points on disaster management and customs and immigration officials. Various models of regional response were considered and it was decided that a Voluntary Response Model would be best suited in the context of South Asia.

This would be based on the following principles:

- a) Response or relief assistance, civil or military, can only be deployed at the request, and with the consent, of the affected Country.
- b) The affected Country shall specify the scope and type of assistance required
- c) The affected Country shall exercise the overall direction, control, co-ordination and supervision of the assistance within its territory.
- d) The SDMC shall, in consultation with Member Countries, develop strategies and plans in respect of each Country for rapid and efficient response;
- e) The SDMC shall in consultation with Member Countries develop Standard Operating Procedures for regional response
- f) A fast-track mechanism should be built into the existing immigration laws of the Member States to grant special category visa to disaster response teams
- g) Exemption for import/export duty on relief materials should be integrated with the existing National Customs Laws and Regulations of the Member States

### **Optional**

Based on the recommendations of the EGM, the SDMC drafted an agreement on Natural Disaster Rapid Response Mechanism and circulated to the Member States. All the Member States agreed in principle with the draft agreement. It is likely to be signed in near future.

### **Context & Constraints**

The regional response mechanism shall come into force only after the agreement is ratified by the Member States.

### **Optional**

Process of getting NDRRM ratified by SAARC Member State is going on in coordination with SAARC Secretariat

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

#### **Level of Progress achieved**

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

#### **Means of verification**

No : (Sub-)regional contingency plan for support to post disaster recovery

#### **Description**

No such mechanism exists at present. As explained in Regional Indicator 11, a draft

agreement has been developed through a process of consultation and has already been signed by the SAARC Member States. The signed agreement is with Member States for final ratification by the respective Parliament of SAARC Member States, expected to be ratified soon in future.

However, the countries have been assisting each other bi-laterally

### **Context & Constraints**

The regional contingency shall come into force only after the agreement is ratified by the Member States.

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

#### **Level of Progress achieved**

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

#### **Means of verification**

No : (Sub-)regional catastrophic risk pooling facility established

No : DRR capacity of national & (sub-)regional insurance entities, & financial institutions enhanced

#### **Description**

On sub-regional scale, there is no development in this context. However, only subsidy has been provided by some of countries of South Asia. Relief and rehabilitation measures are given during and after disaster to make the situation normal so that victims can start their normal life as early as possible. Disaster risk insurance has very poor penetration in the countries of South Asia. It has been estimated that hardly 3% of the lives and property affected by disasters are covered by insurance.

A few countries of South Asia have tried to develop Crop Insurance with state subsidies, but these have not been successful and sustainable.

There has not been any initiative so far to develop regional risk pooling facility in South Asia.

### **Context & Constraints**

This is one of the areas where inadequate or negligible initiation has been made by the Member Countries as SAARC is so far concerned only with pre-disaster preparedness and prevention scenario. There is no mandate to work during and post disaster scenario.

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

#### **Level of Progress achieved**

3:Institutional commitment attained, but achievements are neither comprehensive nor substantial

#### **Means of verification**

No : (Sub-)regional emergency communication protocols / plans

#### **Description**

Bi-lateral information exchange mechanism is in place among the countries of the region for communication during trans-boundary disasters.

However no effective regional mechanism is available at present for such emergency communication protocol. Development of regional SOP and Protocol is contingent upon the countries agreeing to the proposed Natural Disaster Rapid Response Mechanism.

Heads of States and Governments have agreed on principle to the proposed mechanism, but this is yet to be formalized by a legal and institutional arrangement.

It may however be mentioned that regional arrangements for sharing early warning facilities for cyclone is available. A similar regional arrangement for sharing early warning for tsunami is under consideration. This has been detailed in Regional Indicator 4.

### **Context & Constraints**

Countries of the region are yet to reach an agreement on the issue.

## Synthesis of national progress

---

### Priority for action 1

#### Summary *(from the National HFA Monitor)*

5 (out of 8) countries have completed their interim report

3 with PRSPs that include DRR initiatives

4 with CCA/ UNDAFs that include DRR elements

5 with climate change policy and strategy that include DRR

5 having included DRR in development plans and strategies

4 with DRR elements in their national development plan

Ø with a specific allocation of funds for DRR in the national budget

5 with operational national multi stakeholder platforms

4 having legal responsibilities and budget allocation for DRR at the local government level

#### Description

Seven out of eight countries of the region have submitted their interim report for the reporting cycle 2011-13. Afghanistan is yet to submit its complete report.

Self assessments made by the countries under 4 indicators of Priority Action 1 are:

Bangladesh: 1.1 (4); 1.2 (3); 1.3 (3); 1.4 (3)

Bhutan: 1.1 (3); 1.2 (3); 1.3 (2); 1.4 (3)

India: 1.1 (4); 1.2 (3); 1.3 (3); 1.4 (3)

Maldives: 1.1 (3); 1.2 (2); 1.3 (2); 1.4 (2)

Nepal: 1.1 (3); 1.2 (2); 1.3 (3); 1.4 (3)

Pakistan: 1.1 (3); 1.2 (4); 1.3 (4); 1.4 (4)

Sri Lanka: 1.1 (3); 1.2 (3); 1.3 (3); 1.4 (4)

Considering the interim reports and other sources, specific progress made by the countries of the region during the reporting cycle are summarized below, which are not changed from the previous reporting.

Additional information can be seen in the attached document.

#### Context & Constraints

There are several constraints under Priority for Action 1.

Please see the attachment

## Priority for action 2

### Summary *(from the National HFA Monitor)*

5 (out of 8) countries have completed their interim report

3 carrying out multi-hazard risk assessments

4 with disaster loss databases

5 with national operational early warning systems in existence

5 participating in regional/ sub-regional DRR programmes and projects

5 with a system to systematically report, monitor and analyze disaster losses

4 with communication systems and protocols in place to disseminate early warning information

### Description

Seven out of eight countries of the region have submitted their interim report for the reporting cycle 2011-13. Afghanistan is yet to submit its complete report.

Self assessments made by the countries under 4 indicators of Priority Action 2 are:

Bangladesh: 2.1 (3); 2.2 (3); 2.3 (3); 2.4 (3)

Bhutan: 2.1 (3); 2.2 (3); 2.3 (3); 2.4 (3)

India: 2.1 (4); 2.2 (4); 2.3 (4); 2.4 (3)

Maldives: 2.1 (2); 2.2 (2); 2.3 (3); 2.4 (3)

Nepal: 2.1 (3); 2.2 (3); 2.3 (3); 2.4 (3)

Pakistan: 2.1 (3); 2.2 (2); 2.3 (3); 2.4 (2)

Sri Lanka: 2.1 (3); 2.2 (4); 2.3 (4); 2.4 (3)

Considering the interim reports and other sources, specific progress made by the countries of the region during the reporting cycle are summarized below. Additional information can be seen in the attached Document.

### Context & Constraints

There are several constraints under this Priority Action 2 as given in the attachment.

## Priority for action 3

### **Summary** *(from the National HFA Monitor)*

5 (out of 8) countries have completed their interim report

- 4 with national disaster information system publicly available
- 5 having included DRR in the national educational curriculum
- 4 having included DRR in primary or secondary school curriculum
- 4 having professional DRR education programmes
- 3 having conducted studies on the economic costs and benefits of DRR
- 4 having included DRR in national research agenda
- 5 having a country wide public awareness strategy

### **Description**

Seven out of eight countries of the region have submitted their interim report for the reporting cycle 2011-13. Afghanistan is yet to submit its complete report.

Self assessments made by the countries under 4 indicators of Priority Action 2 are:

Bangladesh: 3.1 (3); 3.2 (3); 3.3 (3); 3.4 (3)

Bhutan: 3.1 (3); 3.2 (3); 3.3 (3); 3.4 (4)

India: 3.1 (4); 3.2 (4); 3.3 (2); 3.4 (3)

Maldives: 3.1 (3); 3.2 (4); 3.3 (2); 3.4 (3)

Nepal: 3.1 (2); 3.2 (3); 3.3 (2); 3.4 (3)

Pakistan: 3.1 (3); 3.2 (3); 3.3 (2); 3.4 (3)

Sri Lanka: 3.1 (3); 3.2 (4); 3.3 (3); 3.4 (4)

Considering the interim reports and other sources, specific progress made by the countries of the region during the reporting cycle are summarized below.

Additional information can be seen in the attached Document.

### **Context & Constraints**

There are several constraints as described in the attached documents.

### **Priority for action 4**

### **Summary** *(from the National HFA Monitor)*

5 (out of 8) countries have completed their interim report

- 5 with mechanisms in place to protect and restore regulatory ecosystems services

- 3 with social safety nets to increase the resilience of risk prone households and communities
- 3 taking measures to address gender based issues in recovery
- 4 investing in reducing the risk of vulnerable urban settlements
- 3 explicitly incorporating budget for DRR in post-disaster recovery programmes
- 2 taking account of the impacts of disaster risk in Environment Impact Assessment (EIA)

### **Description**

Seven out of eight countries of the region have submitted their interim report for the reporting cycle 2011-13. Afghanistan is yet to submit its complete report.

Self assessments made by the countries under 4 indicators of Priority Action 2 are:

- Bangladesh: 4.1(3); 4.2(3); 4.3(3);4.4(3); 4.5(3); 4.6(2)
- Bhutan: 4.1 (3); 4.2 (3); 4.3 (3); 4.4 (3); 4.5 (3); 4.6 (3)
- India: 4.1 (3); 4.2 (3); 4.3 (4); 4.4 (3); 4.5 (4); 4.6 (3)
- Maldives: 4.1 (4); 4.2 (2); 4.3 (3); 4.4 (3); 4.5 (4); 4.6 (3)
- Nepal: 4.1 (3); 4.2 (2); 4.3 (2); 4.4 (2); 4.5 (3); 4.6 (2)
- Pakistan: 4.1 (2); 4.2 (3); 4.3 (3); 4.4 (3); 4.5 (4); 4.6 (4)
- Sri Lanka: 4.1 (4); 4.2 (4); 4.3 (3); 4.4 (3); 4.5 (3); 4.6 (2)

Considering the interim reports and other sources, specific progress made by the countries of the region during the reporting cycle are summarized below. Additional information can be seen in the attached Document.

### **Context & Constraints**

There are several Constraints, which are described in the attached document.

### **Priority for action 5**

#### **Summary** *(from the National HFA Monitor)*

5 (out of 8) countries have completed their interim report

- 4 having national programmes or policies to make schools and health facilities safe in emergencies
- 4 conducting training and mock drills in school and hospitals for emergency preparedness
- 4 having contingency plans and procedures to deal with major disasters

- 4 having financial arrangements in place to deal with major disasters
- 4 having capacity in damage and loss assessment methodologies
- 2 having catastrophe insurance facilities in place

### **Description**

Seven out of eight countries of the region have submitted their interim report for the reporting cycle 2011-13. Afghanistan is yet to submit its complete report.

Self assessments made by the countries under 4 indicators of Priority Action 5 are:

Bangladesh: 5.1(3); 5.2(3);5.3(2);5.4(4)

Bhutan: 5.1 (3); 5.2 (3); 5.3 (2);5.4 (3)

India: 5.1 (4); 5.2 (4); 5.3 (4); 5.4 (4)

Maldives: 5.1 (3); 5.2 (2); 5.3 (3); 5.4 (3)

Nepal: 5.1 (3); 5.2 (3); 5.3 (3); 5.4 (3)

Pakistan: 5.1 (3); 5.2 (4); 5.3 (4); 5.4 (3)

Sri Lanka: 5.1 (3); 5.2 (3); 5.3 (3); 5.4 (4)

Additional information can be seen in the attached document.

### **Context & Constraints**

Several constraints are described in the attached document.

### [Regional projects & initiatives](#)

---

#### **Development of Regional Protocol for Sharing of Tsunami and Cyclone Early Warning:Expert Group Meeting**

**Start Date:** 2011-12-19

**End Date:** 2011-12-20

**Related to theme:** Capacity Development; Disaster Risk Management; Early Warning;

**Region:** Asia;

**Country:** Afghanistan; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri

Lanka;

**Description of the project/initiative:**

Expert Group Meeting held in New Delhi during December 2011.

Recommendations of the EGM has been approved by the Governing Board of SDMC.

Further action is under process.

**Total Costs (in USD):** 25000

**Implementing agencies:**

SDMC in collaboration with its NFP of SAARC Member States

**Funding source/agency:** SAARC

**Contact Person:**

Director, SAARC DMC, NIDM Building, IIPA Campus

M. G. Raod, New Delhi 110002, India

**Digital Vulnerability Atlas of South Asia**

**Start Date:** 2009-08-03

**End Date:** 2012-12-31

**Related to theme:** Capacity Development; Disaster Risk Management; GIS & Mapping; Indigenous Knowledge; Information Management;

**Region:** Asia;

**Country:** Afghanistan; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri Lanka;

**Description of the project/initiative:**

Digital Vulnerability Atlas for five SAARC countries (Afghanistan, Bhutan, India, Maldives and Nepal) has been developed. Remaining three countries (Bangladesh; Pakistan and Sri Lanka) are in process of development in collaboration with SAARC DMC.

Realizing the need to develop regional mechanism to assess the spatial distribution of degree of vulnerability of different natural hazards in the region, the SAARC Disaster Management Centre has started a project for the preparation of a Digital Vulnerability

Atlas of South Asia, which would integrate the spatial data available from the already existing base maps with the physical, demographic and socio-economic and other data available from various sources on a GIS format to facilitate quick assessment of disaster risks at various levels by different agencies working for disaster risk reduction and management in South Asia.

#### Layers of Data

For the time being the following layers of information shall be selected depending on their availability as indicated in the Feasibility Study:

#### A. Natural Hazards

- a) Geological Hazards of earthquakes, landslides and avalanche
- b) Climate and water related hazards of flood, cyclone, drought, heat and cold wave.

#### B. Vulnerabilities

##### (a) Physical vulnerabilities to include

- i. Housing conditions,
- ii. Critical infrastructure like roads, bridges, railways, sea and airports, inland water transport, administrative headquarters, police stations, hospitals, schools etc
- iii. Utilities like water, electricity, telecommunication etc

##### (b) Human vulnerabilities to include

- i. Total population
- ii. Density of population
- iii. Literacy level

##### (c) Social vulnerabilities to include

- i. Gender
- ii. Children (below the age of 14 years)
- iii. Aged (above the age of 60 years)
- iv. Disability, both physical and mental

##### (d) Economic vulnerabilities to include

- i. Occupational pattern like farming
- ii. People below poverty line etc.

Keeping in view the limitations of resources and the initiatives already taken by some of the Member States the project is being implemented in collaboration with specialized agencies of the Member States. For the States that do not have specialized agencies to undertake the project (Afghanistan, Bhutan, Maldives and Nepal), the project has been outsourced to a reputed agency.

**Total Costs (in USD): 320000**

**Implementing agencies:**

SAARC Disaster Management Centre, New Delhi in coordination with respective National Focal Point of SAARC Member States.

India

National Informatics Centre

Afghanistan, Bhutan, Nepal and Maldives

Risk Management Solutions Ltd

Bangladesh, Pakistan and Sri Lanka

Countries have yet to designate their specialized agencies

**Funding source/agency:** Majority by SAARC. A part of the fund of USD 63,000 received from ADRC, Japan.

**Contact Person:**

Contact Person:

Director

SAARC Disaster Management Centre

New Delhi

**Drought Risk Management in South Asia:Expert group Meeting on “Drought Risk Management in South Asia and Early warning System”**

**Start Date:** 2011-12-27

**End Date:** 2011-12-28

**Related to theme:** Capacity Development; Disaster Risk Management; Early Warning;

**Region:** Asia;

**Country:** Afghanistan; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri Lanka;

**Description of the project/initiative:**

Recommendations of Expert Group Meeting have been approved by the Governing Board of SDMC. The follow up action is under process.

**Total Costs (in USD):** 25000

**Implementing agencies:**

SAARC DMC in collaboration with its NFPs of SAARC Member States

**Funding source/agency:** SAARC

**Contact Person:**

Director  
SAARC DMC  
IIPA Campus  
NIDM Building  
New Delhi 110002, India

**Earthquake Risk Management in South Asia:Development of Rapid Structural and non-structural Assessment of School and Hospital Buildings in SAARC Countries**

**Start Date:** 2009-09-01

**End Date:** 2011-05-23

**Related to theme:** Capacity Development; Disaster Risk Management; Education & School Safety; Indigenous Knowledge; Risk Identification & Assessment;

**Region:** Asia;

**Country:** Afghanistan; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri Lanka;

**Description of the project/initiative:**

This template has become a backbone for developing a comprehensive tool kit for the safety of School and Hospitals for Asia – Pacific region, recently developed by SAARC DMC in collaboration with UNISDR and UNHABITAT.

**Total Costs (in USD):** 10000

**Implementing agencies:**

SAARC DMC, New Delhi

**Funding source/agency:** SAARC

**Contact Person:**

Director, SAARC DMC, NIDM Building, IIPA Campus  
M. G. Raod, New Delhi 110002, India

**Landslide Risk Management in South Asia:Development of Numerical Model for landslide Prediction in collaboration with SMRC, Dhaka**

**Start Date:**

**End Date:**

**Related to theme:** Capacity Development; Disaster Risk Management; Early Warning;

**Region:** Asia;

**Country:** Afghanistan; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri Lanka;

**Description of the project/initiative:**

Project is related to numerical modeling for Landslie prediction under varying cloud condition in collaboration with SAARC Meteorological Research Centre, Dhaka. The project is under initiation and delayed because of several constraints

**Total Costs (in USD):** 10000

**Implementing agencies:**

SAARC DMC, New Delhi

**Funding source/agency:** SAARC

**Contact Person:**

Director, SAARC DMC, NIDM Building, IIPA Campus  
M. G. Raod, New Delhi 110002, India

**South Asia Disaster Knowledge Network (SADKN)**

**Start Date:** 2009-02-02

**End Date:** 2012-03-31

**Related to theme:** Capacity Development; Disaster Risk Management; Indigenous Knowledge; Information Management;

**Region:** Asia;

**Country:** Afghanistan; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri Lanka;

**Description of the project/initiative:**

South Asia Disaster Knowledge Network (SADKN) shall be developed which will connect the various participating agencies/ organization /institutions within and outside the government to share their knowledge and experience on disaster management through a world wide web Portal for better management of disasters during the phases of prevention, mitigation, preparedness, response, relief, rehabilitation, recovery and reconstruction.

The objectives of the SADKN would be to

- (a) Create one stop source of information on disaster management in South Asia
- (b) Develop a network of government, research, academic institutions, non-government organizations etc in South Asia on disaster management
- (c) Provide immediate access to documented and published information contributed by the networking organizations in the field of disaster management.
- (d) Establish an environment, which will encourage people of South Asia to create, learn, organize, share and reuse knowledge on disaster management.

When fully operational, the SADKN will connect the governments, research institutions, universities, community-based organizations and individuals of the member countries in a common blackboard in the cyberspace to share and exchange knowledge, information and data on various aspects on natural and manmade hazards, risks and disasters.

The SADKN is being developed in three stages:

Stage I: The member countries shall nominate their National Focal Points (NFC). NFCs and SDMC shall develop their own websites which would be linked with each other.

Stage 2: NFC shall designate a National Focal Point Coordinator who will identify the various scientific, research, technical, academic and other organizations, within or outside the government, which are contributing directly or indirectly to the creation, collation, dissemination or utilization of knowledge on disaster management. He will further hold discussions with these organizations and obtain their general agreement to be partners and share their resources with SADKN. A national portal of Disaster Knowledge Network (DKN) shall be developed in each country.

Stage 3: DKNs of the member countries shall be linked with the SADKN, which would serve as a Network of Networks

**Total Costs (in USD): 275000**

**Implementing agencies:**

The project is being implemented by the SAARC Disaster Management Centre, New Delhi in collaboration with the National Focal Points (NFC) on disaster management of the seven Member States, namely Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Sri Lanka. The NFCs have identified the national level partner institutions who are creating knowledge through their research or action.

Pakistan has joined the project in the beginning of the year 2012.

A comprehensive training Program on operation of SADKN for Nodal officer of all SAARC Member States has been organized by SDMC in collaboration with UNISDR during 2011 at New Delhi. Second phase of training on SADKN operation for partner organizations of SAARC Member States in collaboration with the respect NFPs has also been organized for six SAARC Member States during 2012 except India and Pakistan, which would be completed by the year 2013. The entire cost of these two phase training on SADKN has been funded by UNISDR.

In order to make SADKN popular among regional and global partners, it has been planned to hire up SADKN intern for a total duration of 6-months as per ToR signed between SDMC and UNISDR. The funding for SADKN intern would be provided by UNISDR.

**Funding source/agency:** GFDRR World Bank through UNISDR

**Contact Person:**

SAARC:

Director,

SAARC Disaster Management Centre  
Regional Centre of SAARC Secretariat

IIPA Campus, NIDM Building, 5-B I.P. Estate, New Delhi 110002, India

Afghanistan:

Director General, Afghan National Disaster Management Authority.

Bangladesh:

Director General, Department of Disaster Management

Bhutan:

Director, Ministry of Home and Cultural Affairs

India

Joint Secretary, JS (DM), Ministry of Home Affairs, Government of India

Maldives:

Director General, National Disaster Management Centre

Nepal:

Joint Secretary

Ministry of Home Affairs,

Government of Nepal, Kathmandu

Pakistan:

Chairman

National Disaster Management Authority (NDMA)

Government of Pakistan

Sri Lanka:

Secretary, Ministry of Disaster Management

## **Urban Risk Management in South Asia: SAARC Training Program on “Urban Risk Management”**

**Start Date:**

**End Date:**

**Related to theme:** Capacity Development; Disaster Risk Management; Urban Risk &

Planning;

**Region:** Asia;

**Country:** Afghanistan; Bangladesh; Bhutan; India; Maldives; Nepal; Pakistan; Sri Lanka;

**Description of the project/initiative:**

SAARC Training Program on “Urban Risk Management” for a week has been organized in collaboration with NFP of Sri Lanka during November – December 2011. ToT Program, Respective NFP has to take initiation for conducting training in its own country.

**Total Costs (in USD):** 20000

**Implementing agencies:**

SDMC in collaboration with its NFP of SAARC Member States  
SAARC DMC

**Funding source/agency:** SAARC

**Contact Person:**

Director, SAARC DMC, NIDM Building, IIPA Campus  
M. G. Raod, New Delhi 110002, India

**Gaps and challenges**

---

Consistently high progress is observed for the Europe, Pacific, while consistent but unsatisfactory progress is noted for other regions, such as Asia, Latin America, Pacific. South Asia progress is far below in comparison to global progress. Assessment of Regional report by regional experts for wider acceptability is also a challenge.

Financial constraints and lack of appropriate allocation of budget to implement HFA at the sub-regional and regional level is a great challenge. This gap can be addressed by involving line ministries at every stage from the process of formulating the policy to its execution as per the HFA requirements.

## Recommendations

---

SAARC has constituted several Expert Groups on various themes of disasters, such as Seismic Hazards, Landslide, Drought, Tsunamis and Cyclone etc. These recommendations by experts can be taken as advisory guidelines for SAARC Member States to implement these for making sub-region and region disaster risk resilient as per HFA plan.

The regional Indicators are a set of indicators that deal with trans-boundary and national indicators, which are guidance on measuring the reduction of disaster risks and the implementation of the Hyogo Framework for Action”, which suits to the regional / intergovernmental organizations.

The level of Progress for National and Regional levels is assessed by the same scale of achievement from 1 to 5, which may not give a real picture in reporting. The regional scale of progress should be different than that of National scale of progress. SAARC has developed a dynamic web based system with budgetary support from UNISDR under name of SOUTH ASIA DISASTER KNOWLEDGE NETWORK (SADKN), which can be used for Regional HFA Monitor and Regional Review Process.

Evaluation of the HFA Monitor / regional / Intergovernmental Report should be methodical by involving regional and global experts through Peered review process. A set of lucid guidelines for conducting evaluation process may be issued. SAARC generally sends data and report to the corresponding NFPs for Validation and comments, which ensure authenticity.

Self evaluation should be discouraged. All stakeholders may be involved in the process.

## Stakeholders

---

**Name of the organization:** Afghanistan National Disaster Management Authority

(ANDMA), Government of Afghanistan

**Type of the organization:** Governments

**Focal point details:** National Focal Point of SAARC Disaster Management Centre,

New Delhi, an Inter-governmental organization of SAARC

**Name of the organization:** Directorate of Disaster Management, Government of

Bangladesh

**Type of the organization:** Governments

**Focal point details:** National Focal Point of SAARC Disaster Management Centre,

New Delhi, an Inter-governmental organization of SAARC

**Name of the organization:** Department of Disaster Management, Royal

Government of Bhutan

**Type of the organization:** Governments

**Focal point details:** National Focal Point of SAARC Disaster Management Centre,

New Delhi, an Inter-governmental organization of SAARC

**Name of the organization:** Disaster Management Division, Ministry of Home Affairs,

Government of India

**Type of the organization:** Governments

**Focal point details:** National Focal Point of SAARC Disaster Management Centre,

New Delhi, an Inter-governmental organization of SAARC

**Name of the organization:** National Disaster Management Centre, Government of

Maldives

**Type of the organization:** Governments

**Focal point details:** National Focal Point of SAARC Disaster Management Centre,

New Delhi, an Inter-governmental organization of SAARC

**Name of the organization:** Ministry of Home Affairs, Government of Nepal

**Type of the organization:** Governments

**Focal point details:** National Focal Point of SAARC Disaster Management Centre,

New Delhi, an Inter-governmental organization of SAARC

**Name of the organization:** National Disaster Management Authority (NDMA),

Government of Pakistan

**Type of the organization:** Governments

**Focal point details:** National Focal Point of SAARC Disaster Management Centre,

New Delhi, an Inter-governmental organization of SAARC

**Name of the organization:** Ministry of Disaster Management and Human Rights

**Type of the organization:** Governments

**Focal point details:** National Focal Point of SAARC Disaster Management Centre,

New Delhi, an Inter-governmental organization of SAARC