

## Climate Change and Disaster Risk Management: Towards A Resilient South Asia

*This paper is an outcome of the DRR and Climate Change Session Regional Meeting of CANSA*

### Summary

*Natural hazards are no strangers to a majority of South Asians. The region is periodically afflicted by inundated deltas, parched plains, flooded urban sprawl, severe droughts, cyclone-hit crops, and eroding beaches and riverbanks. South Asia experiences every conceivable weather-related disaster. The region is also a melting pot of poverty, wars, accidents, and other natural and man-made hazards that leave lives, homes, and livelihoods of many of its two billion people regularly at risk. Climate change is now adding significant additional risks to this already volatile disastrous situation. The signs are everywhere—in the retreating Himalayan glaciers, the sinking coral islands of the Maldives and the drought-devastated farming lands across the Indian subcontinent. Climate change, born of warming land, sea, and atmosphere, is primed to exacerbate current trends in floods, droughts, and cyclones and introduce new, hitherto unknown challenges to the development paths of every country in the region. This policy brief brings out the fact that climate-induced disasters and its relevance in South Asia also need to have integrated approach to build the resilience of countries in the coming years.*

### SAARC Declaration of Disaster and Climate Change in Thimphu

1. The Leaders welcomed Climate Change as the theme for the Summit and reaffirmed their commitment to address this challenge. In this context, they adopted the Thimphu Statement on Climate Change and directed that the recommendations contained therein be implemented in earnest.
2. The Leaders noted that while climate change impacted every country, the SAARC Member States, as developing countries, were shouldering a major burden, in spite of having contributed least to the problem. They emphasised that global negotiations on climate change should be guided by the principles of equity, and common but differentiated responsibilities, and respective capabilities as enshrined in the UN Framework Convention on Climate Change, and should be conducted in an open, transparent, and inclusive manner.
3. The Leaders, underscored the need to initiate the process to formulate a common SAARC position for COP16 and thereafter, including issues such as separate financing for adaptation and mitigation as well as technology transfer. In this regard, they welcomed Bhutan's offer to host an Inter-governmental Expert Group meeting.
4. In pursuance of the recommendation contained in the SAARC Ministerial Statement on Environment on conservation of aquatic ecosystem, trans-boundary bio-diversity zones, automated network of weather stations, and regular and systematic sharing of scientific data, the Leaders called for a focus on water management and conservation and development of cooperative projects at a regional level in terms of exchange of best practices and knowledge, capacity building, and transfer of eco-friendly technology.
5. The leaders, deeply concerned by the extent of environmental degradation in the region, reiterated the importance of sustainably managing environment and development through adoption of eco-friendly approaches and technologies and that South Asia should become a world leader in low-carbon technology and renewable energies. They welcomed the signing of the SAARC Convention on Cooperation on Environment and called for its early ratification and implementation.

*Panelists for the discussion include Ram Kishan, Bathiya Kekulandala, Practical Action, Nepal, and Sajid M Sajid, Christian Aid UK & India,*

*DISCLAIMER: This document is the result of the Panel Discussion on Disaster Risk Reduction and Climate Change in South Asia held at Kathmandu Nepal, organised by CANSA, in August 2011*

*The views expressed here are that of the panelists and do not necessarily represent the views of CANSA.*

6. The Leaders, concerned by the increasing frequency and intensity of natural disasters, called for effective regional programmes in early warning, preparedness, and management including response and rehabilitation while remaining within their respective national laws and procedures. They called for further negotiations and early finalisation of the SAARC Agreement on Rapid Response to Natural Disasters.



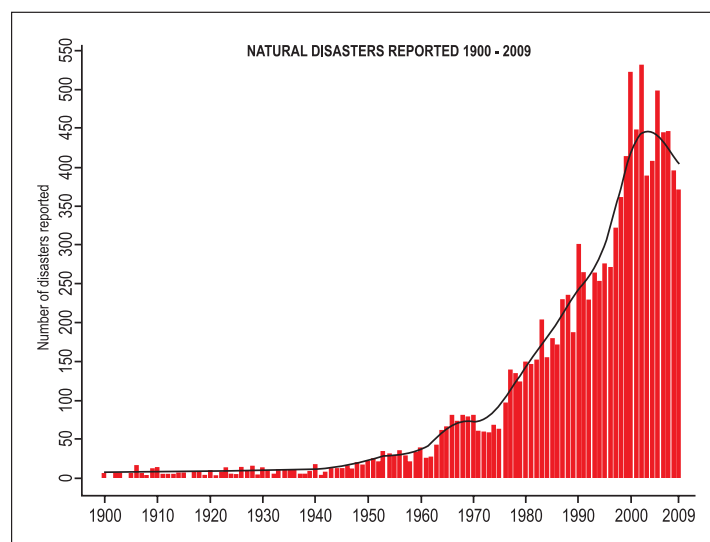
## South Asia: 'hot spot' of climate-induced disasters

Natural hazards are not new to South Asian countries and their people. The region is regularly affected by natural and human-made disasters like flood, cyclones, tropical storms, landslide, droughts, erratic rainfall, river erosion, embankment breaches, and sea

salinity to name some. South Asia experiences every conceivable weather-related disaster. The region is also a melting pot of poverty, wars, accidents, and other natural and man-made hazards that leave the lives, homes, and livelihoods of many of its two billion people regularly at risk. Climate change is now increasing significant additional risks to this already volatile disastrous situation. The signs are everywhere—in the retreating Himalayan glaciers, the sinking coral islands of the Maldives, and the drought-devastated farming lands across the Indian sub-continent. Climate change, born of warming land, sea and atmosphere, is primed to exacerbate the current trends in floods, droughts, and cyclones and introduce new, hitherto unknown challenges to the development paths of every country in the region.

In 2007, the Inter-Governmental Panel on Climate Change confirmed in its Fourth Assessment Report that geographic distribution, frequency, and intensity of regular hazards such as tropical storms, floods, and droughts have already significantly increased, as a result of climate change. Changes are evident in the amount, intensity, frequency, and type of precipitation, which increase the area affected by drought, increase number of floods and the frequency and intensity of tropical storms.

Disasters pose risks to development trajectories at all scales. Disaster risk management (DRM), therefore, describes a suite of strategies for tackling the risks and uncertainties posed by disasters to development processes, recognising that these DRM strategies should be mainstreamed within development processes for development to stay on track. However, the challenge of managing risks posed by disasters to development is becoming more difficult as climate change is affecting the hazard and vulnerability components of disaster risk and increasing uncertainties, as many of the most frequent and wide spread hazards are associated with the weather phenomena. Arguably, DRM has always been 'climate-sensitive' – proactively managing the risks posed by weather extremes and climate variability as well as appreciating the complex processes that produce and reproduce vulnerabilities, but now it needs to respond effectively to changing climate



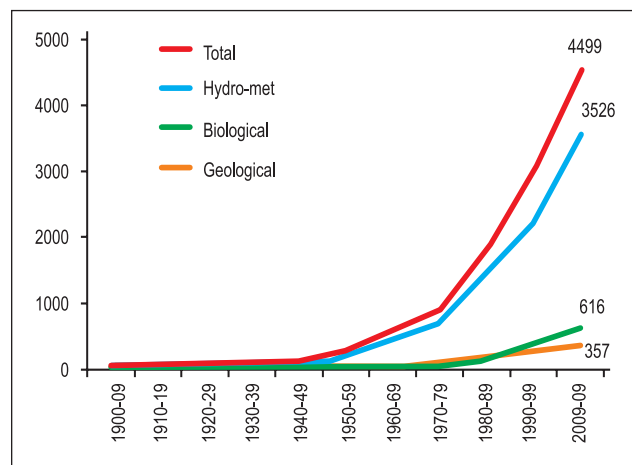
South Asia recorded 128 natural disaster events between 2006 and 2008. Of these, 93% were of hydro-meteorological origin. Eighty-six incidences of flooding were reported, with nearly 8000 lives lost. India has, by far, the highest number of disaster events, but floods in Bangladesh claimed most lives.

South Asia Disaster Report 2008 (1 Duryog Nivaran & Practical Action, South Asia Disaster Report 2008, Available at: [www.duryognivaran.org](http://www.duryognivaran.org)).

extremes and vulnerabilities unless there is a potential for development reverses. To do this, DRM must become climate-smart, rather than just being climate-sensitive, and must be integrated into development processes, an approach that will build the resilience of the development pathway to the impacts of climate change.

## Hydro-meteorological cases outnumber other disasters

Hydro-meteorological disasters far outnumber geological and biological disasters and account for more than 76% of the total natural disaster events and 48% of the total disaster deaths. These include



hydrological events such as floods and droughts, meteorological events such as cyclones, hurricanes, and droughts, and extreme climatological events such as heat and cold waves.

## New Approach to Climate-induced Disaster Risk Management

A new approach is needed to underpin the incorporation of risk management into work on

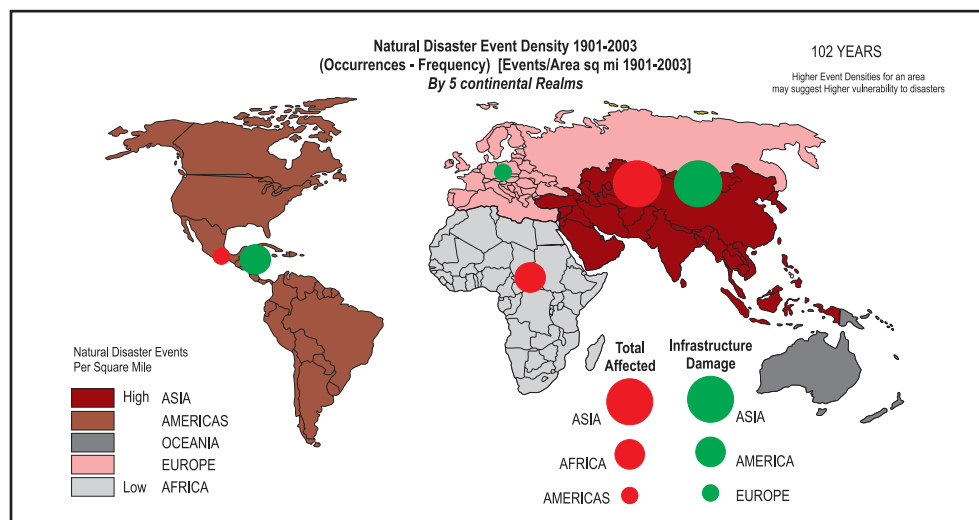
climate change and the integration of climate change into natural-hazards management and development planning. An integrated approach is needed that is capable of dealing with the long-term transformations that climate change poses and is able to keep up with the ways in which people respond, at the national, regional, and local levels. The key priority of the approach should be capacity-building and resilience of the communities, and natural ecosystems.

With experience, it is evident that comprehensive risk management, as it has evolved in the field of natural-hazards planning over the past 20 years, provides the basis for such a new paradigm. A conceptual bridge exists when one considers the shared understanding of risk as a function of hazard and vulnerability, and when, in addition, one considers the conceptual and practical overlap between notions of vulnerability and resilience.

Adaptation to climate change may involve some difficult choices at individual, community, and political levels. For instance, long-term changes to land use are likely to be required (affecting agriculture and forestry, the use of coasts, estuaries and river resources, and settlement patterns and infrastructure). It may be necessary to instigate a process of managed retreats from those areas that will become unusable, involving relocation to areas that offer security and opportunity. To deal with such serious matters, national decision making will require strong, sustainable, and accepted institutional structures and a population and civil society educated in the issues and alternatives.

There are examples of proactive approaches to the long-term challenges that accelerated climate change presents. But least developed countries (LDCs) are unlikely to have the capacity or resources to respond similarly. Risk management in medium developed countries (MDCs) has its focus on

risk reduction and prevention. For LDCs, the focus has generally been on relief that needs to shift to risk reduction and preparedness to achieve resilient capacities to anticipate adversities including uncertainties in climate change impacts. Risk management cannot, by itself, address the underlying causes of poverty. But if



approached from the standpoint of resilience, it can help to build those structures that will enable a greater degree of self-help. It is about helping people to help themselves.

Disaster risk reduction and climate change adaptation need to be prominently integrated in all national planning processes. While the strategic thinking in South Asia, regarding disaster risk reduction, has been initiated and institutional arrangements are being implemented, the ground reality is far from satisfactory. Risk levels and exposure are increasing due to ill-managed development and growth of populous centres in vulnerable locations.

Therefore the region's policy makers, planners and climate negotiators need to endorse effective regional cooperation and move towards a resilient South Asia.

Given below are key recommendations for SAARC from the session at Kathmandu.

1. Natural disasters in South Asia are beyond borders; therefore their solution also lies in the cross-border dialogue and actions. We can only achieve a disaster-resilient region if SAARC makes firm commitment to enhance cross-border cooperation on knowledge sharing such as weather forecasting, financial issues, environmental protection, and technology transfer. These steps will be necessary to develop and deliver on the commitments made for developing inter-governmental cooperation to collectively deal with increased human displacement and increasing incidences of climate refugees in the region. We recommend SAARC states to commission collective research on future impacts and scenarios in the region and evolve a strategy to deal with future climate refugees.
2. South Asia is faced with frequent natural disasters, which compounded with climate change impact millions in the region; SAARC is committed for a rapid response to natural disasters, but it also needs to understand climate-induced disasters. Therefore, we call upon regional leaders to commit towards an integrated strategy for disaster management, so that Climate Change Adaptation and Disaster Risk Reduction can be dealt effectively. We strongly recommend that SAARC commits for new policy framework, which integrates climate change into Disaster Risk Management.

3. For a climate-resilient region, SAARC shall also be conscious of the environment protection and look for development processes concurrent with the no-harm principle. All development projects must have environmental and climate-sensitive approaches to ensure good governance in development and disaster risk reduction activities at all levels. Adaptation cannot work in isolation. National adaptation programmes must be an integral part of development as a whole. South Asia should not be satisfied with adaptation structures that aim to simply return the disaster risk scenario to a pre-climate change level. Adaptation needs to be integrated at a very high level of government planning in order to ensure low-risk, equitable human development, and poverty alleviation.

## **Additional Recommendation for Regional Cooperation in South Asia**

1. Prepare countries for a low-carbon future by looking inward at culturally acceptable models learning from traditional and holistic lifestyles that ensure human development, dignity, and environmental protection. South Asia's development approach needs to make sense locally in order to reduce poverty and vulnerability. Both short- and long-term measures are required to shift towards a better model of governance. Traditional governance systems with devolved and participatory decision making by women and men, capacity enhancement, respect for the environment, and a cautious approach to consumption can serve as a template for addressing the new challenges.
2. Develop, seek, adopt, and share environmentally-sound technologies to skip the traditional development trajectory and allow for faster transition to a modern, low-carbon society.
3. Lobby for a climate adaptation financing framework that is external and additional to regular ODA targets and a mechanism for technology transfer that allows southern countries to decide on access, priorities, and time frames.
4. Place additional pressure on northern countries to agree to legally binding targets on emission reductions based on latest science to prevent catastrophic climate changes.



### **CLIMATE ACTION NETWORK SOUTH ASIA**

C/O VASUDHA FOUNDATION, CISRS HOUSE, 14, JANGPURA B, MATHURA ROAD, NEW DELHI 110014  
SECRETARIAT: BCAS House No 10, Road No. 16/A, GULSHAN 1, DHAKA