

Chapter 15

Analysis of Regional Cooperation from the Perspective of Regional and Global Geo-Political Developments and Future Scenarios

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Abstract Disasters are not constrained by political boundaries. Most of the natural hazards in Asia are regional in nature. The geological, hydrometeorological, climatic or anthropogenic factors that cause these hazards transcend the political boundaries and can affect several countries simultaneously. The Indian Ocean Tsunami affected as many as eight countries in South and South East Asia. The South Asian earthquake of October 2005 damaged life and property in Pakistan and India. The typhoons that hit the Pacific islands each year affect a number of island countries at the same time. The Koshi river floods devastate parts of Nepal and India every monsoon and the Ganges floods maroon villages in India and Bangladesh. Similarly, when the Indus river floods it affects both Afghanistan and Pakistan and when the Brahmaputra floods it affects both China and India. Prevention, mitigation and resilience to transboundary catastrophes require strong bilateral and regional vision, cooperation and maturity. Past bilateral approaches show that the absence of a regional and multilateral integrated management frameworks poses difficulties for international and regional cooperation in disaster risk management. The Hyogo Framework for Action emphasises the importance of regional cooperation for disaster risk reduction (DRR). Accordingly, this chapter analyses the role of regional and international relations in triggering and reducing hazard and climatic risks, discusses relevant policy, political and institutional frameworks for international, regional and bilateral cooperation for DRR and provides practical guidelines to assist national governance systems to strengthen bilateral and regional approaches to DRR in the Hindu Kush Himalayan (HKH) region.

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15.1 Introduction

The frequency and intensity of disasters is on the rise all over the world. There is an increased recognition that the rapid pace of climate change is also exacerbating the frequency and intensity of disasters. The Intergovernmental Panel on Climate Change (IPCC 2007) concluded that the frequency and severity of hot and cold extremes and heavy precipitation events is increasing and this trend will continue. Data from Center for research on the epidemiology of disasters (EMDATA 2011) shows that in the last century, hydro-meteorological disasters show rapid upward trend over geological disasters such as earth quakes.

It is important to recognize that these disasters are taking place across the societies and nations that are divided by political boundaries. Prevention, mitigation and resilience to these *trans*-boundary catastrophes require strong bi-lateral, regional vision, maturity and cooperation. Most of the natural hazards in Asia are regional in nature. The geological, hydro-meteorological, climatic or anthropogenic factors that cause these hazards transcend the political boundaries of the countries and affect several countries simultaneously. Indian Ocean Tsunami for example, affected as many as eight countries in South and South East Asia. The South Asian earthquake of October 2005 damaged life and property over large areas of Pakistan and India. The typhoons of Pacific Island affect a number of island countries at the same time. Koshi river floods devastate parts of Nepal and India every monsoon, while Ganges floods maroon hundreds of villages in India Bangladesh. Similarly, Indus river floods affect Afghanistan and Pakistan and Brahmaputra floods affect China and India.

In 2013, extensive monsoon rains in northwest India and Nepal, have caused devastating flash floods in the region. The river Mahakali, which flows through India and Nepal bursts its banks causing extreme flooding, claiming 30 lives in Nepal and thousands lives in India, displaced thousands of families and swept away fertile lands, houses, hydro power stations, roads and many varieties of livelihoods resources. Officials on the Nepal side reported that, they received no warning from their Indian counter parts, who are supposed to monitor the flows of the Mahakali river in the upstream side in Uttarakhand state. Similarly, some authorities in Pakistan lack of communication from Afghanistan on the flood levels in the Kabul river contributed to massive loss of lives in Pakistan in 2010. The authorities In Pakistan also feel that, the data sharing by India on Indus river is inadequate form them to develop effective flood forecast products, (JRCC 2013). Such a gap in communication between the official of two countries despite having a treaty in place over Mahakali river raises concerns over the effectiveness of *trans*-boundary cooperation arrangements in managing rivers and reducing flood risk for communities.

Although there has been an increasing realization of the need for hydrological data sharing for flood risk reduction and better water management, there are a number of extraneous factors that inhibit Government authorities in most countries from opening up the hydrological data for better timely flood forecasting in downstream countries. There are a number of factors associated with geo-political dynamics between countries in the Hindu Kush Himalayan (HKH) region that affect their intent and agreement for cooperation for managing *trans*-boundary rivers. The effective implementation of bi-lateral agreements on Indus river is often influenced by deep rooted insecurities and disputes over land between neighboring countries. For instance, the Government of India's National Water Policy of 2012, clearly articulates the importance of *trans*-boundary cooperation in water resource management and flood risk reduction. Accordingly, the Ministry of Water Resources of the Government of India has formulated a National Hydrological Data Sharing Policy. The policy allows data access from Ganga–Brahmaputra–Meghna basin and other rivers and their tributaries discharging into Bangladesh/Myanmar to Indian general, commercial and commercial users. The data from the Indus basin and other rivers discharging to Pakistan remains classified (GoI 2013).

It is clear that, the hydrological data sharing, which is crucial for flood disaster risk reduction in HKH remains a prisoner of bi-lateral and regional political dynamics. Water is seen as a resource to 'own' for one's self and to deprive others of, which prevents countries in the region from uniting and prospering together. The countries in the HKH region are among the most disaster prone with a history of devastating *trans*-boundary disasters. The serious national effort and a plethora of bi-lateral agreements between the countries, notwithstanding, flood risk management in the HKH region remains largely inadequate due to the hesitation of some countries to take part in the stronger collective action in the realms of disaster information, data sharing, early warning and forecasting. This largely due to lack of mutual trust leading to gaps in communication and ultimately diluting the spirit of much needed multi-lateral action. The lack of collective effort and communication results in delayed evacuation procedures that can potentially save lives especially where quick reaction is needed. In this context, it is imperative that, better management of *trans*-boundary water and flood risk management should go hand in hand with improved regional diplomatic environment and leadership.

The Hyogo Framework for Action (HFA) has also emphasized the importance of regional cooperation for disaster risk reduction. Paragraph 31 of the HFA which deals with regional organizations calls up on regional organizations with a role related to disaster risk reduction to promote regional programs, including the ones for technical cooperation, capacity development, the development of methodologies and standards for hazard and vulnerability monitoring and assessment, the sharing of information and effective mobilization of resources, Establish or strengthen existing specialized regional collaborative centers, as appropriate, to undertake research, training, education and capacity building in the field of disaster risk reduction (ASEAN 2007).

15.2 Geo-Political Environment and Disaster Risk Reduction

In 2012 and 2013, large-scale floods, landslides, and earthquakes occurred around the world, including in Nepal, India, China, Afghanistan, Bangladesh and Pakistan . Super Cyclone Sandy in 2012, which demolished coastlines along the eastern part of the United States, is estimated to have caused economic losses of over 50 billion dollars (GHA 2011). Given the increasing magnitude and frequency of natural disasters around the world, there is a need for the countries of the world and donors to look beyond the narrow geopolitical considerations and embrace a broader humanitarian perspective in their response.

Human tragedies and disasters can unite even sworn enemies in grief. Communities and countries at odds for economic reasons or in relation to resource sharing have been known to join forces in their humanitarian response when massive disasters hit. However, geopolitical strategic priorities are not always given pause by countries in humanitarian disasters. For instance, the muted response of the Asian regional superpower, China in the form of a mere USD 100,000, to support the Philippines in the aftermath of typhoon Haiyan is seen by many as due to geopolitical dynamics. Compare to the United States of America's support of USD 52 million, in addition to massive logistics, infrastructure and human resources support, observers feel that the massive difference in humanitarian response by these countries is because the Philippines is considered a strategic ally of United States to counter China's influence in South East Asia (Jayaram 2013).

Such observations can't be over looked, especially in light of the Global Humanitarian Assistance Report, 2012, which states that the top 40 recipients of humanitarian aid between 2000 and 2009 only receive about 30 % of total development aid (\$363 billion out of \$1,229 billion) compared to 90 % of all emergency aid. And, just \$3.7 billion was spent on disaster risk reduction in the 40 countries. The report further states that, these 40 countries account for over half the people affected by disasters and almost 80 % of deaths. Such disparities in funding are attributed to geo-political strategic interests (GHA 2012), comprising of largely of trade, military factors and in some case cultural and historical bonding.

However, the big question is will these donor countries form the North continue to be able to hold their hegemony of charity for too long? how will the new big donors of the future will conduct themselves? Over the last two centuries, Britain (eighteenth and nineteenth centuries), Europe and USA (Twentieth century) have been the dominant powers of the world. They faced no competition until recently in their global economic and military control for a large part of the last 300 years, except from USSR in military terms for a few decades and from Japan on the economic front. A major shift in the global power equations has already taken place with China virtually pushing the Europe aside, marginalizing Japan to a great extent and eroding the dominant space of USA, with its economic and military might.

These changing power equations in the world will have a compelling influence in the way the future humanitarian and disaster risk reduction policies, practices and finances function.

For many decades, the world has not been informed on the international aid focus and priorities of China. Setting aside the criticism of lack of transparency, China in, 2011 released a white paper on its International Aid. According to the white paper, China's budgeted foreign aid swelled by nearly 30 % a year between 2004 and 2009. In total, China spent 256.29 billion Yuan (\$38.54 billion) in foreign assistance from 1950 to 2009. More than 40 % of Chinese aid (106.2 billion Yuan) was spent on grants ("aid gratis"). The remaining 60 % was split fairly evenly between interest-free loans and concessional loans. The vast majority of Beijing's foreign aid is negotiated on a bilateral, country-to-country, basis. The white paper also informs that, majority of China's aid in Africa and Asia is allocated for construction of transportation, communications and electricity infrastructure and about 9 % has gone towards the development of energy and resources such as oil and minerals (The Guardian 2011). From these figures, one can't miss the focus of China's international aid around natural resources, infrastructure and energy, that are also among the key drivers of China's rapidly grown economy.

This approach is not unprecedented. Europe and Britain in its prime, went to the world with a trade and its military followed to conquer. The USA had no inhibitions to use military more openly to negotiate trade in its own favor. By ensuring greater share of the global wealth, both Europe and USA have been able to provide more peaceful, sustainable livelihoods and high quality life for its populous. The peaceful and secure conditions enabled these countries grow as knowledge societies and contributed the new age liberal, democratic, humanitarian and equity principles to the world. Great scholars, activists, thinkers and humanitarian and development organizations have emanated from these knowledge societies, raised funds from the back yard, developed human capacities around the world and spread charity humanitarian and development work. Although, there is a valid criticism that, most of this charity is dedicated to geo-political interests, it can not be denied that, they have also made significant contribution to alleviating poverty and suffering in some of the poorest countries in the world. Most important contribution of these countries has been the ideals of liberty, charity and voluntarism.

It is important to note that, along with China, there are many new countries are rising in wealth, power and military strength. They include, India, Brazil, Indonesia, Mexico, South Africa, Turkey and others. Already developing countries account for around half of global GDP and that will increase very considerably over the next 25 years (Jacques 2012). With the dominance of the traditional Northern powers on the decline in the global geo political domain, there is a nervousness among many development organizations as to how will the new and emerging global powers might conduct their business, what has been their operating values system and development and liberty outlook. Will the new powers erode the old development philosophies and values systems that gave rise to large number of institutions, human resources and academics and will that erode the development

gains made by the world? These questions may sound far fetched, but not understandable.

Most of the emerging powers of the world, except China were once ruled by one or some of the Western countries. Many emerging powers like India are far less aggressive towards their past European masters, thanks to the educational, political and cultural imprints that they are left with. While these emerging power centers challenge the superiority of the West and aspire to become equals. This attitude of the societies in many emerging powers creates a space for negotiated change in the global development and humanitarian landscape. However, China is not among those countries that carries the legacy of past world powers. China prides itself for never being conquered by the West and its sense of superiority is centuries old. The extensive criticism of China by Western scholars for “falling short on liberty and democracy” has never worried China. These differential attitudes certainly play a role in shaping future international relations and the way new global powers will carry forward the development, humanitarian and disaster risk reduction agenda in the coming years.

What can't be over looked is the fact that, the many emerging powers are still mired in poverty and conflict prone regional political environment, that will invariably impact their psyche of engagement in international relations. For instance, the world's second largest economy, China is also home to the world's second largest population of poor people, with more than 200 million living on less than \$1.25 per day (The Guardian 2011). Further, Many of these countries, including, China, carry the baggage of long standing unresolved territorial disputes and a recent history of violent engagements, which make them suspicious and about each other. According to a report by the Stockholm International Peace Research Institute (SIPRI), the Asia Pacific region that is the home of most of the emerging powers, accounts for 44 % in volume of conventional arms imports, compared with 19 % for Europe, 17 % for the Middle East, 11 % for North and South America, and 9 % for Africa. Between 2007 and 2011, India was top weapon importer with 10 % in weapon volume followed by South Korea (6 %), China and Pakistan (both 5 %), and Singapore (4 %) (SIPRI 2012).

The continued investment of these countries in their weapons program is an indication that, they still view each other with suspicion, which comes in the way of transcending their economic and trade bonhomie in to many other essential areas for cooperation such as disaster risk reduction, climate change mitigation, environment security, etc. The big concern from the point of view of the disaster risk reduction is, at a time when the world is in the grip of climate extremes, will the countries with deep rooted poverty and insecurity be able to provide a leadership towards peaceful, stable and secure world order. The silver lining however, is that, many fast developing countries, have developed bi-lateral and multi lateral arrangement for trade and economic cooperation and occasionally joined together as a bloc to protect their collective interests in the international negotiations on trade. Further, there has been an increasing recognition among the big countries like China, India and Pakistan that, continuing conflict over long standing issues shouldn't stop them from cooperating with each other where they can. Continued

engagement for mutual economic development is crucial for the survival of the region's US\$ 20 trillion economy and livelihood security of over three billion population (SIPRI 2012).

15.3 Notable Initiatives of Regional, Sub-regional and Cross-regional Cooperation in for DRR in Asia

Specific and focused regional cooperation in Asia has been taking place on a more compact sub-regional basis that have common geo-physical, geo-climatic and geo-political features in Asia, namely in East Asia, South East Asia, South Asia, Central Asia and West Asia. The South East Asian Nations (ASEAN) adopted the ASEAN Agreement on Disaster Management and Emergency Response, while East Asia Summit has identified disaster risk reduction as one of the activities of cooperation among the member countries. Similarly, The South Asian Association of Regional Cooperation (SAARC) has adopted a Comprehensive Framework of Disaster Management and set up a SAARC Disaster Management Centre in New Delhi.

The Indian Ocean Tsunami of 2004 was a wake up call for countries in Asia and Pacific. This major disaster that killed thousands of people in countries along the Indian ocean prompted the nations of this region to scale up their relations from trade and economics to cooperation in disaster risk reduction, particularly in the area of Tsunami early warning. The countries in the Indian ocean together, have established a joint mechanism of Tsunami early warning. The Indian Ocean countries through organizations like IOR-ARC, have scaled up their cooperation efforts in the areas of maritime safety and security; trade and investment facilitation; fisheries management; disaster risk reduction; academic and Science and Technology cooperation; and tourism promotion and cultural exchanges (IOR-ARC 2013).

Similarly, India has entered in to a strategic partnership and cooperation with ASEAN under ASEAN + 1 arrangement with a view of optimizing on the combined economy of US\$ 3.2 trillion and to serve collective population of 1.8 billion. The key drivers of this cooperation are economic growth, shared prosperity, peace and stability, capacity building and connectivity across geographic corridors, over land, sea and air, between institutions, people-to-people, through the digital space as well as nontraditional security threats such as terrorism, piracy, energy and food security, sustainable development and environmental challenges. This strategic partnership states that focus of this cooperation is not just the economics but the overall safety and security of people in the region from disasters and environmental risks (GoI 2009). These are some big steps in the cross regional cooperation that reflects the thinking of regional powers who are now recognizing the importance of disaster risk reduction with in the over all framework of economic development.

Another significant initiative was the Bay of Bengal initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) comprising of Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand. The major driver of this

collective initiative was the promotion of regional integration and to create a bridge between the countries of South and South East Asia, with a focus on free trade. After the Indian ocean Tsunami in December, 2004, the field of natural disasters was added to the list of BIMSTEC areas of focus, which India had agreed to lead. BIMSTEC has committed it self to strengthen preparedness against natural disasters, with timely warnings to be given to farmers, coastal zone managers and other people and cooperate between countries to minimize human and economic losses (BIMSTEC 2006).

Underlining the importance of regional and cross regional cooperation to deal with disasters at the first ministerial conference of BIMSTEC, in New Delhi, India's then Prime Minister, Dr. Manmohan Singh, said that, "the vagaries of climate and weather in our region concern us all. We have had floods in some places and drought in others. To deal with disasters a regional approach that complements national efforts is very important. A regional approach allows us to pool together our respective strengths and complementarities efficiently and effectively. India would be willing to share its expertise in remote sensing for agriculture, environment and disaster management" (BIMSTEC 2006).

The Enthusiasm of many countries in such cross regional arrangements to deal with common hazard risks tells us that, disasters can be effective drivers of cooperation. It goes to show that, when geo-political dynamics are not in the fray, the countries are willing to extend their economic cooperation in to several other compelling areas of human security. Mekong river commission is one such time tested effective cross regional cooperation arrangement to benefit the up-stream and down stream countries of the Mekong river from East to South East Asia. The Mekong river commission has been successfully implementing several programs in the up-stream and down stream countries focusing on flood risk reduction, environmental security, food security, fisheries, etc. The decades of engagement of up-stream and down stream countries of the Mekong river basin over flood risk management helped them overcome political suspicion through increased integration (Wolf and Newton 2008).

Regional platforms for Disaster risk reduction promoted by the United Nations' International Strategy for Disaster Reduction (UNISDR), provide space for countries to explore cooperation for DRR, outside the political sphere. These regional platforms in Africa, Asia, Americas, Arab state, the Pacific and Europe have been effective in reviewing and guiding the implementation Hyogo Frame Work for Action guidelines for DRR. The ministerial level conferences conducted by these platforms once every 2 years bring together the government delegations, NGOs, think tanks and the UN organizations to discuss the regional DRR issues and explore greater cooperation and collaboration. Recent regional platform meetings focused on the next phase of HFA guidelines (2015–2025) have identified risks and vulnerabilities are *trans*-boundary and need to be addressed with a regional cooperation approach (UNISDR 2013). These regional platforms provide leadership and direction out side formal governmental diplomatic systems and propose solutions to address disaster risk and to build the resilience of communities and nations.

15.4 Regional and Global Efforts for Mountain Disaster Risk Reduction

Just as oil rich seas are vital for global economy, mountains, with their rich natural resources vital for national regional and global water, food and energy security (UNISDR 2003). Although mountain provides vital resources, mountain communities are generally lagging behind in development. At the same time, Because, of their important role in providing food, water and energy across geo-political boundaries and their geo-strategic positioning, mountain regions have been a focus of control of several countries in a competing way. The mountain regions today face the maximum brunt of climate change in the worm of food- and energy-crisis, water scarcity and environmental degradation and increasing hazard risks and vulnerability. These increasing challenges in the last few decades have eroded mountain communities ability to cope with shocks. Therefore, the mountains today need more champions of their cause than the owners who want to exploit them.

The Indian Ocean Tsunami was a major driver in increased mar time cooperation and collaboration among countries in the Asia Pacific. Such collaborative spirit among the mountain countries is fueled in the recent years by the climate predictions and increasing intensity and frequency of climate change induced disasters. On the global scale, United Nations led the process of bringing mountain disaster issues on to the world map by celebrating the year 2002 as a year of sustainable mountain development and by announcing December 11 as International day of mountains. In the same year, UNISDR led a campaign on disaster reduction for sustainable mountain development and along with several regional organizations like ICIMOD (International Center for Integrated Mountain Development) invigorated the global science, policy and academic interest on mountain disaster concerns.

Collaborative efforts for mountain disaster risk reduction have been taking place since many decades. While ICIMOD has been leading the efforts since 1983 in the Hindu Kush-Himalayan (HKH) mountain region, there are a number of United Nations (UN), international and regional organizations that are leading *trans*-boundary approach to disaster risk reduction in the other mountain regions. In the Caucasus, UNDP has been implementing early warning systems, disaster preparedness capacities and environmental protection for DRR in Armenia, Azerbaijan and Georgia since 1997. In the mountain regions of Europe, the European Union and The International Commission for the Protection of the Alps have been promoting advancing the technologies for the quantitative assessment of debris flow. MERCOSUR (A Spanish name meaning Southern Common Market, BBC 2004) in the Andes mountain region has been optimizing on the trade and economic arrangement between Latin American countries to pursue disaster risk reduction as it recognizes that natural hazards in the Andes mountain region is destabilizing the regional economy and affecting over 200 million people. Mountains and high land areas occupy about ten percent of Africa and over 150 million people depend on mountain natural resources for livelihoods. African union along with a number of

research institutions is making efforts to understand and address disaster concerns in the African mountain regions (UNISDR 2002).

On the global scale, the efforts of disaster risk reduction in the mountain regions are driven primarily with the advent of climate science that informs us that mountain regions are among the most vulnerable eco systems to the adverse impacts of climate change (IPCC 2007). The United Nations Conference on Environment and Development (UNCED), 1992, World summit on sustainable mountain development in 2002 and global mountain summit in Bishek in 2002 are the major platforms, where mountain disasters issues were discussed extensively under the larger umbrella of climate extremes. As mentioned in the previous chapters, the UN General Assembly's year 2002 declaration of the "International Year of Mountains" was an important effort to bring in mountain issues in to global development agenda (ICIMOD 2010).

International diplomatic efforts to mitigating climate change have focused on the reduction of carbon reduction (David, et al. 2012). These efforts yielded little success, for those societies who are used to certain unsustainable life styles are unwilling to give them up, while other societies who are too eager to ape those life styles are growing in strength to achieve them. While, one can't deny the fact that, reduction of carbon emission as a lasting solution must be pursued, the economic and geo-political realities that that block them can't be under stated (David, et al. 2012). This realization is dawn on International experts after decades of unyielding efforts to foster global cooperation for reducing carbon emissions. The recent efforts, especially since the second United Nations Conference on Environment and Sustainable Development (UNCED) IN 2012, focused on reducing short lived pollutants that have a local and regional impacts on critical mountain climate hotspots such as glacial lakes. It is believed by many experts, that the efforts of reducing short-lived pollutants can influence countries like China and India along with other neighboring countries to have a regional action to mitigate climate change impacts (David, et al. 2012).

The Himalayan mountain country, Nepal, with technical support of ICIMOD has been championing the cause of mountain countries in the international climate negotiations. At COP 15 in Copenhagen, the Prime Minister of Nepal called on all the mountain countries and stake holders to come together to form a common platform to push for mountain climate issues and concerns and elicit international support. The Nepal Government has been pursuing for Mountain Alliance Initiative (MAI) with the support of ICIMOD and endorsement of SAARC (South Asian Association for Regional Cooperation). The objectives of the MAI are: (1) Initiating the process to develop an 'alliance', (2) promoting specific concerns of the 'mountain states' within the ongoing UNFCCC processes, and (3) drawing the attention of the global community to support mountain countries to initiate long-term climate change adaptation related efforts, regionally and globally. The aim is to see the outcome of these efforts included in the form of a resolution on specific climate adaptation related instruments, mechanisms and programs for mountains that might then be included in the legally binding agreements under the UNFCCC (ICIMOD 2010).

Such efforts by the mountain countries with the support of the regional institutions like ICIMOD yielded in eliciting support for clean development programs, accessing Technological, financial, and institutional support for development funds for adaptation and resilience programs from Global Environment Facility and multiple initiatives around the National Adaptation Programs for Action (NAPA), and local adaptation programs for action, etc. In recent years, many mountain countries and non mountain countries have established have initiated Payment for Environmental Services (PES) program relating to watershed management, water regulation for hydropower and irrigation, biodiversity conservation, and hazard prevention (Kohler and Maselli 2009). A united and stronger coalition of mountain countries have a lot to gain by pushing the concept of PES on a regional and scale in terms of economic benefits and environmental security.

Conclusion and Way Forwards

The relentless pursuit for progress and better life is the driver of progress, innovation and growth of human societies. In just a few thousand years of modern civilization, the human societies have to war on a global scale at least two times and at the national and sub national level for countless times. While, this bloody history of conflicts made human societies inherently distrust each other, they have also infused cooperation and collective action as an intelligent adaptation responses to ensure sustained growth. However, the geological planet of one earth is still a many worlds living in political, cultural, religious and social boundaries. As long as these boundaries exist, the distrust, suspicion and conflict continue to occupy human societies politics and development. At current state of human evolution, it may be utopian to expect that, conflicts will cease any time in near future. Therefore, regional and international cooperation remain important instruments for sustained peace and progress of human societies.

As outlined in the previous chapters, the humanitarian response to disasters has also been more politics and self interest than altruistic. When, large scale tragedies are unable to erase geo-political priorities and self interests from human societies, it may be too much to expect complete altruism from peace time cooperation and collaboration for development and disaster risk reduction. In fact, the world is yet to see a reasonably evolved diplomacy and international relations in the area of disaster risk reduction. What we have been seeing today is a panic coalitions of countries to deal with bigger, common and self created monster called climate change. The threat of climate change also provides an opportunity to foster *trans*-boundary, regional and international cooperation for long term disaster risk reduction and eradication of factors like poverty, inequality and health issues that create deep rooted vulnerabilities.

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The cooperation achieved by the countries in the realm of climate change adaptation need to leap in to long term collaboration for disaster risk reduction. Such collaborative efforts are especially important in the mountain regions of the world, for their vital importance for human water food and energy security. The regional cooperation among the countries that hold world mountains can have a larger positive impact on a global scale in the light of the important upstream and downstream linkages that are given with respect to mountain ecosystem goods and services (Kohler and Maselli 2009). There are many benefits that the countries can enjoy by fostering regional cooperation in controlling natural disasters. For instance, by fostering effective cooperation and collaboration for flood risk reduction, countries can achieve greater bring additional economic, environmental, social, environmental, energy and political benefits through multi-purpose river projects, while reducing flood risks (Crow and Singh 2009).

Elaborating on this wisdom further, regional cooperation analysts Golam Rasool says, that “a cubic meter of water flowing through the Himalayan rivers from upstream Nepal to India and then to Bangladesh can generate hydropower at different dam sites and also add to irrigation values for farmers downstream in India and Bangladesh on its way to the Bay of Bengal. The system value is the sum of benefits to all the riparian in all its uses such as hydropower, irrigation, navigation, fisheries, etc. within a river basin. To achieve the system value that maximizes the benefits of trans-boundary water resources for all the riparian countries, the regional cooperation is imperative” (Rasool 2014). A notable initiative on these lines in the HKH region by ICIMOD has been a regional cooperation for flood information system along five rivers shared by six countries in the region. However, since, HKH region is not politically recognized sub region within Asia, therefore, the cooperation efforts in this region remain largely technical even in the realm of climate negotiations.

What mountain countries need today is transcending this technical collaboration in to a stronger political coalition to strengthen the voice of mountain communities international forums. In the absence of such a coalition, Mountain regions of the world have not been able to get due share of development focus despite making towering contributions and facing unprecedented risks. This invisibility is largely due to insufficient leadership and inadequate political representation from mountains in the regional and global platforms. Therefore, the mountain countries and institutions should use post 2015 agenda for sustainable development and Hyogo Framework for Action (HFA) to bring the attention on specific the geo-physical risks and vulnerabilities of the mountain, coastal and in land eco systems and accordingly

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guide international assistance in terms of policies and finances to address them.

Further, there should be shift from response to a more anticipatory and preventative approach to climate induced disasters. Equally important is the need for embedding risk management in to national development plans and bi-lateral agreements. Bi-lateral and regional cooperation processes for development should not miss the risk perspective that is a common challenge for all governments in the mountain regions. The national governments in the mountain regions need to transcend the political divide, agree on common risk-management and resilience objectives, and to achieve them through joint analysis, planning, programming and funding.

Past bilateral approaches show that the absence of international and multilateral integrated management poses difficulties for efficient and effective international and regional cooperation in disaster risk reduction. Disaster risk reduction strategies should focus on linking specific risk reduction objective/issue with broader goals of regional development due to the nature of *trans*-boundary impacts of disasters and the tendency of ignoring them until they occur. Therefore, in the current context of increasing hazard and climate risks with regional and global spread, a comprehensive policy, political and institutional framework is needed for sustaining and ensuring consistency in regional and global cooperation for disaster risk reduction. Similarly, In order to enhance regional security and cooperation, it is essential to have domestic political ownership.

The HKH region needs a stronger binding agreement among the countries on the use of international river basins, ecosystem management, data sharing, humanitarian responses, and training and capacity building. An ASEAN type agreement on disaster management would be useful, which needs a process of consensus building, and policy advocacy. Recent major disasters [both Koshi flood and Uttarakhand landslide and mudflow] have indicated the need of these types of agreement of multi-lateral collaboration and agreement on disaster risk reduction.

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