

**Responses to Natural Disasters in Pakistan:  
Comparative Study of Earthquake of 2005 and  
Indus River Flood of 2010**

*Thesis submitted to Jawaharlal Nehru University*

*for award of the degree of*

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*Submitted by*

**GEETA**



**Centre for South Asian Studies**

**School Of International Studies**

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Date: 21.06.2019


**DECLARATION**

I declare that the thesis entitled “Responses to Natural Disasters in Pakistan: Comparative Study of Earthquake of 2005 and Indus River Flood of 2010” submitted by me for the award of the degree of **Doctor of Philosophy** of Jawaharlal Nehru University is my own work. The thesis has not been submitted for any other degree of this University or any other university.

  
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We recommend that this thesis be placed before the examiners for evaluation.

  
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\*EADRCC Urgent Disaster Assistance Request, 11 October 2005.

\*Non-Classified- EADRCC Urgent Disaster Assistance Request: Pakistan-Floods, 7 August 2010.

\*Non-Classified, EADRCC Urgent Request For Information Pakistan-Floods, 13 August 2010.

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## ABBREVIATIONS

ADB	Asian Development Bank
Afg	Afghanistan
ANDMA	Afghanistan National Disaster Management Authority
ADMER	Agreement on Disaster Management and Emergency Response
AJ&K	Azad Jammu and Kashmir
ALNAP	Active Learning Network for Accountability and Performance
ASEAN	Association of Southeast Asian Nations
BBC	British Broadcasting Cooperation
BBIN	Bangladesh Bhutan India Nepal
BBB	Build Back Better
BBS	Building Back Smarter
BIMSTEC	Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
BISP	Benazir Income Support Programme
BRICS	Brazil Russia India China South Africa
CARICOM	Caribbean Community and Common Market
CEDMHA	Centre for Excellence in Disaster Management and Humanitarian Assistance
CEPRENAC	Coordination Centre for Natural Disaster Prevention in Central America
CBDRM	Community Based Disaster Risk Management
CERF	Central Emergency Revolving Fund
CRS	Congressional Research Service
CRED	Centre for Research on the Epidemiology of Disasters
CSIS	Center for Strategic and International Studies

DALA	Damage and Loss Assessment
DDRD	District Disaster Risk Reduction
DDMU	District Disaster Management Unit
DDM	Department of Disaster Management
DDMA	District Disaster Management Authority
DFID	Department of International Development
DMA	Disaster Management Act
DMC	Disaster Management Centre
DMC	Disaster Management Committee
DIPECHO	Disaster Preparedness Programme of the Humanitarian Aid Department of the European Commission
DOM	Department Of Meteorology
DRR	Disaster Risk Reduction
DRM	Disaster Risk Management
DRU	Disaster Reconstruction Unit
EADRCC	Euro-Atlantic Disaster Relief Coordination Centre
ECHO	Humanitarian Aid Department of the European Commission
EC	European Commission
ERC	Emergency Relief Cell
ERCC	European Response Coordination Centre
ERRA	Earthquake Rehabilitation and Reconstruction Authority
EU	European Union
EUISS	European Union Institute for Security Studies
EWS	Early Warning System
FAO	Food and Agriculture Organisation of the United Nations
FATA	Federally Administered Tribal Areas

FDMA	FATA Disaster Management Authority
FEMA	Federal Emergency Management Agency
FFC	Federal Flood Commission
FRELIMO	Mozambique Liberation Front
FRC	Federal Relief Commission
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GoI	Government of India
GoP	Government of Pakistan
GoRB	Government of Royal Bhutan
GLOF	Glacial Lake Outburst Flood
HCT	Humanitarian Country Team
HFA	Hyogo Framework of Action
HELP	Health Emergencies in Population
HRCP	Human Right Commission of Pakistan
ICIMOD	International Centre for Integrated Mountain Development
ICM	Internal Climate Migration
ICG	International Crisis Group
ICISS	International Conference of Information Systems Security
IDP	Internally Displaced Person
IFRC	International Federation of Red Cross and Red Crescent Society
ICRC	International Committee of the Red Crescent Society
ICG	International Crisis Group
IDRA	International Disaster Recovery Association
IDRL	International Disaster Response Law

ILC	International Law Commission
INGOs	International Government Organisations
IOM	International Organisation for Migration
IO	International Organisation
IMF	International Monetary Fund
Ind	India
IMDMCC	Inter-Ministerial Disaster Management Coordination Committee
IPCC	Intergovernmental Panel on Climate Change
IR	International Relations
IRBS	Indus River Basin System
IRCRCs	International Red Cross and Red Crescent Society
IRIN	Integrated Regional Information Networks
IUCN	International Union for Conservation of Nature
ISDR	International Strategy for Disaster Reduction
IWT	Indus Water Treaty
JUI	Jamait Ulema-e-Islam
JI	Jamaat-i-Islami
KPK	Khyber PhaktunKhawa
LeT	Lashkar-e-Tayaba
LOC	Line of Control
LTTE	Liberation Tigers of Tamil Eelam
MOU	Memorandum of Understanding
MDM	Ministry of Disaster Management
MDG	Millennium Development Goals
MDMR	Ministry Of Disaster Management and Relief

MoHA	Ministry Of Home Affairs
MoDMR	Ministry Of Disaster Management and Relief
MoFDM	Ministry Of Food and Disaster Management
MMA	Muttahida Majlis-e-Amal
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organisation
NBRO	National Building Research Organisation
NCDM	National Council for Disaster Management
NCDM	Nepal Centre for Disaster Management
NDMA	National Disaster Management Authority
NDMAC	National Disaster Management Advisory Committee
NDMO	National Disaster Management Ordinance
NDMA	National Disaster Management Act
NDMC	National Disaster Management Committee
NDMC	National Disaster Management Centre
NDRF	National Disaster Response Force
NDRF	National Disaster Recovery Framework
NDRF	National Disaster Response Framework
NDMP	National Disaster Management Programme
NDRMF	National Disaster Risk Management Framework
NDRSC	National Disaster Relief Service Centre
NDRRM	National Disaster Rapid Response Mechanism
NIDA	National Integrated Development Association
NGOs	Non-government Organisations
NIDM	National Institute for Disaster Management
NOC	No Objection Certificate



NWFP	North West Frontier Province
OCHA	Office for the Coordination of Humanitarian Affairs
ODP	Office of Disaster Preparedness
OIC	Organisation of Islamic Cooperation
OHCHR	Office of United Nations High Commissioner for Human Rights
PDMC	Provincial Disaster Management Commission
PDMA	Provincial Disaster Management Authority
PCNA	Post Crisis Needs Assessment
PIC	Permanent Indus Commission
PIMA	Pakistan Islamic Medical Association
PRO	Provincial Relief Organization
PDRP	Punjab Disaster Response Plan
Pak	Pakistan
POK	Pakistan Occupied Kashmir
PIDA	Provincial Irrigation and Drainage Authorities
PSDM	Public Sector Development Programme
RA	Reconstruction Agency
R2P	Responsibility to Protect
RDRC	Regional Disaster Relief Committees
RGoB	Royal Government of Bhutan
SAARC	South Asia Association for Regional Cooperation
SAR	South Asia Region
SADC	Southern African Development Community
SICA	Central American Integration System
SOD	Standing Orders on Disaster

SL	Sri Lanka
SC	Steering Committee
SUPARCO	Space and Upper Atmosphere Research Commission
TNSM	Tehrik-e-Nifaz-e-Shariat-e-Mohammedi
UK	United Kingdom
USA	United States of America
UNDP	United Nations Development Programme
UNDAC	United Nations Disaster Assessment and Coordination
UNDEMT	United Nations Disaster Management Team
UNGA	United Nations General Assembly
UNICEF	United Nations International Children's Emergency Fund
UNIFEM	United Nations Development Fund for Women
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNESCAPE	United Nations Economic and Social For Asia and the Pacific
UNHCR	Office of the United Nations High Commissioner Refugee
USA	United States of America
USAID	United State Agency for International Development
WFP	World Food Programme
WB	World Bank
WB	West Bengal
WHO	World Health Organisation
WoT	War on Terror

# **Chapter 1**

## **Introduction**

The word 'disaster' is derived from the Greek words 'dis' (bad) and 'aster' (star), which means a bad star. The Greeks believed that all the environmental and social happenings were affected by cosmological positions. Contrary to our notion of natural disasters being purely dependant on geographical factors, an early 1970s debate among anthropologists and cultural geographers formulated the notion that they are also the outcome of social determinants. Oliver Smith (1999), an American anthropologist, proposed that disasters are characterised by "external variability and internal complexities", while the term "management" has been around since the longest time. Thus, 'disaster management' can be thought of as the collaborative geopolitical processes undertaken to encounter the effects of a natural disaster based on planning, organising and executing.

The concept of a disaster management cycle has begun to influence disaster management efforts since the Yokohama Conference (1994)<sup>1</sup>. A disaster management cycle consists of the measures undertaken by the parts of government, non-governmental units and international governmental agencies towards reducing vulnerability and disaster mitigation in the contexts of the after effects of a disaster. Disaster response is the next step in the cycle which involves an array of activities, including efforts to amplify preparedness and reduce risks. This also requires assessing the scale of damages, preparation for emergency relief and coming up with a long-term recovery. The aim of such an emergency measure is to provide prompt aids to maintain life, improve health, and boost the morale of the afflicted populace. Disaster response therefore, also refers to the decisions and measures taken with respect to the strategic, tactical and operational objectives decided by the emergency responders. Thus, floods can require an extended period of assistance and interventions if renewed rains happen which further implies that a continued presence

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<sup>1</sup> The First World Conference on Natural Disasters in Yokohama, Japan from 23 to 27 May 1994 adopted the Yokohama Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and its Plan of Action, endorsed by the UN General Assembly in 1994. It was the main outcome of the mid-term review of the International Decade of Natural Disaster Reduction (IDNDR) and established 10 principles for its strategy, a plan of action and a follow-up. Furthermore, it provides guidelines for natural disaster prevention, preparedness and mitigation.

<sup>2</sup>Neutrality means that humanitarian aid must not favour any side in an armed conflict or other dispute.

<sup>3</sup>Impartiality means that humanitarian aid must be provided solely on the basis of need, without discrimination.

<sup>4</sup>The former category comprises *rapid-onset disasters* and is characterized by the *sudden* and acute intensity of the impacts during a short period. The severity of *rapid-onset disasters* is usually quantified by the loss in terms of human lives and property for a particular *disaster* event (According to IFRC).

<sup>5</sup> Quarantelli has put forward the notion that the definitions of disasters are heavily influenced by social constructions in his work "What is a Disaster?" (1998).

of humanitarian actors should be required in the affected area till all forms of rehabilitation gets completed in any case of ‘disasters within a disaster’. Certain natural hazards, like earthquakes or volcanic eruptions (which are more unpredictable in nature) can cause sudden variations which may not be influenced by the climate.

A number of bodies can be involved in providing humanitarian assistance for e.g. the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), United Nations Children’s Emergency Fund (UNICEF), Food and the Agriculture Organisations (FAO), United Nations Development Programme (UNDP), International Organisation for Migration (IOM), International federation of Red Cross and Red Crescent Societies (IFRC), the International Committee of the Red Cross (ICRC), Oxfam and so forth. Since the 1990s, there has been a considerable increase in the number of national governmental organisations (NGOs) that work independently or along with the above mentioned organisations in humanitarian disaster management efforts. This has given rise to substantial competition among these humanitarian actors. The Oslo Guidelines formulated in 1994 specify that any kind of humanitarian aid that is being implemented should adhere to the core principles of humanity, neutrality<sup>2</sup> and impartiality<sup>3</sup> (United Nations 1991:2) while fully respecting the sovereignty of the states. Though these guidelines are meant to be implemented in scenarios pertaining to peacetime, several prominent natural disasters in recent times that had invoked an international humanitarian response, have taken place in areas such as Sri Lanka, Kashmir, Indonesia or Haiti which had ongoing political conflicts.

The international communities tend to respond more promptly to massively devastating and ‘rapid-onset<sup>4</sup>’ natural disasters that require immediate humanitarian assistance from many quarters. Prompt media coverage of the disaster sites updates the governments and the international humanitarian communities about the occurrences and helps in ensuring swift responses. However, geographic proximity of

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the site often determines which countries will provide military assets. Governments and international organisations have learned that this is crucial during the responses to a disaster. These demand further introspection of the meaning and the nature of natural disasters, its management, and the relationships the disasters possess with the critical aspects of responses that follows.

Therefore, it is also important to delve into the societal aspects of what causes and follows from natural disasters as has been stressed by many sociologists like Quarantelli<sup>5</sup> and Kenneth Hewitt. Hewitt (1997) believes that social inequalities and power dynamics play a greater role in determining the effects of a disaster rather than accidental geophysical realities of a place. For example, human habitation in disaster prone areas is mostly an outcome of poverty, discrimination, social marginality and dire inequalities. As a matter of fact, Harding Scott argues that disasters are instrumental in creating a sense of hysteria and numbing our emotions amidst arousing our curiosity. Therefore, the Federal Emergency Management Agency (FEMA) has defined disasters as:

“a non-routine event that exceeds the capacity of the people to respond to it in such a way as to save lives, preserve property, and to maintain social, ecological, economic and political stability of the affected region” Pearce cited in 2000 (FEMA 2009, online).

Given that disasters are heavily reliant on sociological aspects, disaster management should be aimed at catering towards the social needs of a population while being aware of the societal conditions that surround it.

Keeping in mind the above definitions, we can say that disasters are the confluence of hazards and vulnerabilities. Statistically speaking, floods and earthquakes have been the most common variant of natural disaster in recent history. Floods tend to affect larger populations but cause lower fatalities as compared to earthquakes. Natural hazards can be distinguished from natural disasters. The former involves geophysical occurrences like floods, volcanic eruptions or earthquakes whereas the latter also pertains to the socio-political effects of these natural hazards. Different societies might be exposed to a similar type of natural hazards but they may experience it differently and have different consequences in the respective aftermath due to the

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<sup>5</sup> Quarantelli has put forward the notion that the definitions of disasters are heavily influenced by social constructions in his work “What is a Disaster?” (1998).

different nature of their social vulnerabilities. Natural hazards are thus external geophysical shocks, but natural disasters are impacts of the specific socio-political vulnerabilities that affect the said region.

According to the ancient theories of disasters, one can categorise three specificities of a society, pertaining to their abilities to respond to weather shocks namely vulnerability, exposure, and resilience. Vulnerability is the expected amount of potential damages and exposure is the probable number of times a shock can occur within a given amount of time. Resilience is the affected area's socio-economic potentialities to respond and recover from the disaster. Understanding these indeed form an important part of the disaster management processes. Meanwhile, the social risk management approach delineates three kinds of policies: prevention, mitigation and coping. These policies aim to reduce vulnerability and increase resilience by enhancing the adaptive capacity. Adaptive capacity, then, can be understood as something which takes into accounts both vulnerability and resilience. It has been defined as "resources, means and strengths which exist in households and communities and which enable them to cope with, withstand, prepare for, prevent, mitigate or quickly recover from a disaster" (Kafle and Murshed 2006:10). They could also be classified into the physical and the socio-economic capacities.

Oftentimes, prolonged periods of disasters can exhaust the coping mechanisms of already impoverished communities and reduce their strength to overcome future disasters. There is always a dearth of humanitarian assistances to communities affected by natural disasters. Realist thinkers such as Morgenthau made an argument that states do not intervene for primarily humanitarian reasons unless they have calculated reasons that are in alliance with their interests. Parekh (1997:56) a political theorist, states that citizens being the exclusive responsibility of their state have their conditions regulated by the vested interests of the government. However, the fact is that states always apply principles of humanitarian intervention selectively because their behaviour is always governed by particular political and administrative interests. A good example of the selectivity of responses can be understood in the initiatives taken by NATO's intervention during natural disasters in Pakistan which could have been driven by more than just humanitarian concerns because although it had done work to address the large humanitarian catastrophe created by the flood, NATO

definitely had ulterior political motives of a larger nature in the given context (which is discussed in details in the 5<sup>th</sup> chapter).

Disaster affected countries usually first ask for assistance from its neighbours because of the convenience of proximity and potentially better understanding of the social, political and geographic intricacies of the place. During the process of disaster relief, the deployment of foreign military in a country usually happens through the bilateral negotiations between respective governments or as a result of existing political relations that involve national and international military. The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) in New York and Geneva rarely get involved in ensuring the same.

Various factors can inspire an affected country to request or accept offers of international assistance after a disaster strikes. These may include: (a) the magnitude of the disaster (b) the humanitarian demands created by it (c) the appropriate preparedness level of the affected country and (d) the overall urgency of certain needs thus created. Most governments are primarily concerned with the welfare of the people and therefore, having already sought international assistance, whether that help is executed by soldiers or civilians becomes relatively immaterial and ideally does not feature as a factor to delay the implementation of the disaster management processes. However, countries facing political instability may not be able to follow this.

### **1.1 The Context of Pakistan**

It is against this back drop, that Pakistan has been taken as an area of study, in which the earthquake of 2005 and Indus River flood of 2010, is analysed in great details. Since Pakistan is a complex state, it is important to define the internal, social, political and geographical factors that shape its vulnerabilities. Pakistan is a disaster-prone country due to extreme climatic condition, rapid geophysical changes and high levels of social and geopolitical vulnerabilities. The peculiarity of the federal structure of Pakistan's government can affect the equal distribution of relief and aid and disaster management efforts that can be implemented by non-governmental actors. The central government often selectively disregards the political sensitivities of the people of different provinces. The frequent authoritative measures executed by the military



regime and the dictatorial government, result in overarching negative impacts for the vulnerable communities. This has led the people of certain provinces to be especially scared and distrustful of the government in times of calamities. It also created an impression that the federal government would rather control the provinces than provide reliefs to them. The government responses also brought out the fact that economic disparities, especially in the moments of crises, have been growing stronger. This disparity is also what constitutes as one of the major grievances of the provinces against the federal government.

Pakistan has been affected by numerous disasters in recent years like earthquakes in 2005 (POK areas) and 2013 (Awaran District, Balochistan) continuous floods in 2007 (Khyber-Pakhtunkhwa), 2010 (in Khyber-Pakhtunkhwa, Punjab, Sindh were highly affected areas), 2011 (Sindh province), 2012 (Khyber- Pakhtunkhwa, Southern Punjab and Upper Sindh), 2013 (Afghanistan-Pakistan areas were affected), energy crisis, security crisis and so forth. In the last fifty years (till 2015), about one hundred sixty two events of natural disasters have occurred in the country. During the post-independence period with the floods of 1950, 1992 and 2010, the country had witnessed the most devastating flood events. Punjab continues to be the most affected province facing nineteen floods since the partition. The Khyber Pakhtunkhwa province has been the second most affected province with thirteen recorded floods.

The drought phenomenon of 1997-2002 incurred massive and sustained damages to Balochistan, Sindh and Southern Punjab provinces. The drought of year 2001 was termed as the worst in the history of Pakistan which decremented the economic growth from an annual average of over 6.0 per cent to 2.6 per cent (FAO 2001). The coastal belt of Pakistan is susceptible to cyclones and associated storm surges. The cyclone of 1999 in Thatta and Badin districts brought devastations upon seventy three settlements and killed about one hundred and seventy nine people and affected about 0.6 million (IFRC 1999, appeal no. 13/99 ).

The 2005 earthquake of a magnitude of 7.4 on Rector Scale struck the northern areas of Pakistan, India and Afghanistan. The epicentre of the quake was about nineteen km northeast of Muzaffarabad while the administrative centre of POK and the surrounding remote with mountain communities and North-West Frontier Province (NWFP) remained most affected. Over 75,000 people in nine districts of NWFP and

Pakistan Occupied Kashmir lost their lives and over 2.8 million people were left shelter-less and public transport, social services like agriculture, industrial sectors, and communication networks were interrupt for a prolonged period of time. The earthquake affected areas were massive, covering over 30,000 square kilo meters of mostly mountainous terrain-foothills of the Himalayas.

Similarly, the 2010 Indus floods submerged one-fifth area of Pakistan with 17 million acres in water including fertile agricultural lands. It killed 200,000 livestock and washed away valuable assets costing millions. A total of 1.89 million homes were destroyed in 82 districts out of 127 districts. Over 1,900 people died and led to the displacement of an estimated 18 million people across Pakistan. The scale and impact of the disaster soon overpowered both the national and international capacity for response. The resilience of the host communities also steadily depleted due to the protracted nature of the IDPs<sup>6</sup> and refugee crisis as well as the fact that many of the hosting areas had also been affected by floods.

The Emergency Relief Cell (ERC) for managing disaster in the Cabinet Secretariat was established by the federal government. Before the 2005 earthquake, policy-makers, NGOs, civil society, media and the UN hardly intervened in disaster management efforts as they preferred to keep out of the system. However, after the earthquake, the state experienced an urgency for a body that would establish policy, planning and institutional arrangements to minimise losses. Because of the graveness of such a need, the National Disaster Management Authority (NDMA) was established as a primary agency for ensuring the functioning and execution of policies, visions and programmes on plans pertaining to disaster risk reductions and recoveries.

There are currently Disaster Management Authorities, functional at provincial, regional, and district levels. In 2006, the National Disaster Management Ordinance was broadcasted and established the National Disaster Management Authority (NDMA) under it, giving the chairmanship to the Prime Minister. This body has been working on national policies and strategies for disaster and crisis management since

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<sup>6</sup> The term 'internally displaced persons' means "persons who have been forced or obliged to flee their homes suddenly or unexpectedly in large numbers, as a result of armed conflict, internal strife, systematic violations of human rights or natural or man-made disasters; and who are within the territory of their own country". This is a widely used working definition set out in a United Nations Commission on Human Rights report issued in 1992 by Secretary-General Boutros-Ghali.

2006. Interestingly, NDMA has been regularly publishing reports on floods and earthquake management in Pakistan, which reveal that the government has only the bare minimum capacity to tackle disaster management in terms of human, technological and financial resources.

Numerous institutions like the Earthquake Rehabilitation and Reconstruction Authority (ERRA), National Institute for Disaster Management (NIDM), Provincial Disaster Management Authority (PDMA) and recently the District Disaster Management Unit (DDMU) were created. The DDMU is responsible for coordinating and implementing policies among the masses of each province. The United Nations Development Programme (UNDP) supports all these endeavours by providing technical support, spreading awareness, monetary aid, livelihood and employment opportunities and other kinds of disaster management trainings which involve developing better infrastructure, skill development, psycho-socio counselling and so forth.

Disaster management programmes in every province of the country began reaching the provinces after the 18<sup>th</sup> constitutional amendment, under the chairmanship of the respective Chief Ministers. The District Disaster Management Unit (DDMU) works alongside PDMA for releasing necessary information regarding the management of potential disasters. It is also responsible for the recovery, rehabilitation and reconstructions that ensue after a disaster. This body maintains a close connection with the locals. Almost one hundred and sixty NGOs (of regional, local and national levels) came to the assistance of the people during and after the 2005 earthquake. They garnered the collective assistance of the local masses and have now established strong holds in the areas. Charitable organisations which collect donations also have a strong hold in Pakistan now. NDMA and a private organisation signed a memorandum of understanding (MOU) to focus on humanitarian assistance at Islamabad in 2013. It aimed at strengthening the NDMA and enhancing human resource capacity for disaster management. However, the disaster management policies of several provinces oftentimes get hampered by the various socio-political and cultural inter-state conflicts that plague Pakistan at the domestic level. There is also a lack of co-operation among other South Asian countries. Despite having functional disaster mechanisms, they have failed to be implemented more than often. It is all the more challenging to garner support from external state and non-state actors

given Pakistan's reputation as a terrorist sponsoring country. In this respect, India and Pakistan's ongoing geopolitical conflicts give rise to a crucial dimension that is also discussed in the current work.

UNISDR report has mentioned that Pakistan lacks local expertise and professional aids in the field of disaster risk assessment which poses a crucial challenge for the country. Lack of adequate resources impact the availing of international professional services which further cause a delay in implementing risk assessment initiatives. Unavailability of reliable data adds another hurdle in the seamless execution of accurate assessment of hazard risks. The available data is unfortunately inaccessible, inaccurate and mostly unreliable. Scant resources (both financial and human) obstruct the improvement and new creations of disaster prone areas. Pakistan is in a great need for an adequate and appropriate multi-hazard recovery system (UNISDR 2014).

The Muslim NGOs groups for e.g. the Muslim aid groups which include Jamaat-ud-Dawa, Al Rasheed Trust, Al-Khidmat Foundation, Al-Akhtar Trust and over a dozen smaller ones that have been banned by the US for potential links with the Taliban and the Al-Qaeda (Sharma and Behera 2014), had played an active role in supporting the victims of the floods of 2010. Consequently, in the aftermath of the various flood catastrophes that occurred in Pakistan, the Muslim NGOs intervened in reaching out to the victims with rescue and relief programmes. Eminent Government officials in Islamabad confirmed the undeniably significant relief work undertaken by the Muslim NGOs in the 2010 flood particularly in Khyber -Pakhtunkhwa and the northern tribal areas. Jamaat-ud-Dawa was not legally banned from Pakistan, but the United Nations had outlawed it for its involvement in the Mumbai attacks and for patronising Lashkar-e-Taiba, an organisation in Kashmir which spread violence in Kashmir. Al-Rashid Trust was banned by the USA for working against their interest in Afghanistan. The Al-Khidmat foundation although not banned by Washington, was still accused of having links with the Islamic militants like that of the Jammat-e-Islami (in depth analysis is dealt in chapter V). Several other regional and intergovernmental donor agencies, state actors and non-state actors have provided aids to the Pakistan government. Organisations like UN, WB, Red Crescent Society, WFP, UNICEF, OCHA, UNHCR, UNDP, FAO, Oxfam, Action Aid, Edi foundation and Czechs had contributed almost CZK 3 million for the rehabilitation of the flood

victims. Saudi Arabia helped in collecting \$27 million for the victims through the Saudi Public Assistance Campaign.

One can argue that sometimes poignant political factors frequently affect the development of an adequate disaster management mechanism. Strained cooperation and lack of international aids due to political conflict intensifies disaster impacts while aggravating political turmoil. The current unfortunate scenario in the national geopolitical situation of the country also does not facilitate for an easy garnering of information between the countries in South Asia. Cross-border cooperation though institutional coordination facilitate rescue and response arrangements such as standardised command systems and arrangements of necessary visa for humanitarian personnel which help in procuring speedy and efficient responses.

The lack of planning for land usage with inadequate enforcement has catered to the growth of informal settlements. The expansion of such settlements makes them more susceptible to exposure and vulnerable to hazards. Social scientific and interdisciplinary perspectives to study the disaster and its management have become much more pertinent because it involves problems at the grass root level and has effects that transcend the cartographical limits of the state.

## **1.2 The Literature Review**

### **Disasters: Theoretical Understanding**

Bapat (2014) in her article discusses Kautilya's views on disaster in ancient times, focussing on the disaster management theories that is present in Kautilya's works. However, it does not mention Kautilya's views on any possible measures that should be taken by the government during natural calamities. Streich and Mislán (2014) have discussed three basic theoretical controversies of disaster that draw upon the various disciplinary traditions of many decades. They seek to understand the intersection of geophysical natural hazards and politics (IR perspectives) to understand what is disaster; and its impact. They highlight the critical approaches of disaster diplomacy.

Wisner and Gaillard (2009) argue that the nature of disasters is currently changing and they are theorised more in the context of development (and vice versa). They call for an analysis of why some cases of human sufferings and social disruptions receive

attention from authorities, donors, researchers and the media, while some do not. Johnson (2006) in their research paper presents five reasons why natural disasters can be thought of as a developmental issue. First, natural disasters affect developing countries disproportionately; secondly, natural disasters affects the poor more; thirdly, natural disasters can disrupt growth by destroying capital for the resources that could be allocated for relief; fourthly, natural disasters harms the general well-being of the public by destroying households' savings and possessions; and finally natural disasters posit a development issue because development policy (both domestic and international) can influence the negative impacts on poverty, growth and welfare.

Alexander (2000) provides insightful knowledge on the theoretical aspects of natural disasters. He discusses holistic approaches to explain vulnerability, hazards and its management and the role of technology to reduce human casualties. Havidan et al. (2007) in their work touch upon a wide range of topics involving research conducted on 'rapid onset disasters' with natural and technological hazards. This work highlights the practical implications of disaster research for decreasing the damages, casualties and disruptions that arise from disasters. Drabek (1986) deals with the core issue of disasters. His book reflects upon cross-national responses and how it affects the victims of disasters in health sectors and elaborates on the organisational behaviour and their structures through various case studies. However, this book ignores the political perspectives.

### **Disaster Management: Theoretical Issues with Examples**

A report published by UNISDR (2014) examined progress reports submitted by countries and provides an informative analysis of the frequent challenges that countries have faced in implementing policies of disaster risk management. It highlights the lesson learned from other countries response that can be used by other countries. O'Sullivan et al. (2013) discuss the complexity of disasters on an empirical level. This work discusses strategies to facilitate appropriate actions that can be undertaken with the collaboration of various sectors to promote benefits like the protection and conservation of health in high risk populations. This article tries to envision a model to identify the appropriate areas that demand interventions for the

promotion of population health. Hence, the article focuses on the effects of the conditions of health care in the social systems during the scenarios of natural disasters. Simonovic (2011) applies system approach in disaster management which allow policy makers and researchers to address the numerous aspects of disasters management. It also illustrates the need for an interdisciplinary approach in the management of the resources. Kleinfeld (2007) discusses Sri Lanka's political landscape post 2004 tsunami. This work analyses the two important assumptions in popular humanitarian discourses which are that the identification and representation of humanitarian space can be separate from the political space, and that humanitarian relations can limit themselves to the places where a disaster has occurred by only catering to its victims. This also problematises the sidelining of politics during times of humanitarian crisis.

Silva (2009) compares the socio-political consequences of the two disasters that struck Sri Lanka 70 years apart, the 1934–1935 malaria epidemic that killed over 100,000 people and the tsunami of 26 December 2004. Khasalamwa (2009) explores how the narrative to 'build back better' is perceived by different agents and how these perceptions affect their operational priorities and programmes. She discusses the relation between the post-tsunami recovery in Sri Lanka, and the interventions of selected humanitarian organisations.

### **Pakistan and Disasters**

Pakistani scholars, Rahman and Khan (2013), analyse the causes, nature and magnitude of the 2010 disastrous flood that severely affected the province of Khyber Pakhtunkhwa (KPK) in Pakistan. Mustafa and Wrathall (2011) argue that the 2010 flood in Pakistan was not a random and accidental episode by contextualising it alongside socio-political scenarios. Halvorson and Hamilton (2010) investigate the regional impacts of the 2005 earthquake. The work involves field research and interviews of about 40 survivors and analyses the disaster to focus on the nature of the risk awareness of the respondents involved. The focus is largely on the areas of "Azad Kashmir" (in India called POK), and North-West Frontier Province. The work encapsulates the prevalent perceptions regarding seismic hazards and exposure and underlines the priorities of the survivors in the issues of rehabilitation.

## **Pakistan and Disaster Management**

Pakistani scholars Rahman et al. (2015) chart out and analyse the balanced theoretical approaches and practices of Disaster Risk Reduction (DRR) in Pakistan. The work discusses the DRR strategies and the national and regional level programmes to deal with hazard experiences and highlights policy options, institutional set-ups, and risk reduction strategies with some key lessons. Pakistani Scholar Naseer (2014) argues that local government needs to be the focal point where goods and services can be delivered to face the consequences of natural disasters. On the other hand, NDMA's (2012), National Progress Report of 2011-13 provides a strategic plan according to the priority for actions. Based on the empirical study of the 2005 earthquake that hit Balakot Town of Mansehra District, Khyber Pakhtunkhwa, during 2012-13, Asad and Hussain (2014) have tried to examine how disasters offer socio-economic, politico-cultural, and environmental development opportunities which can be exploited in the post disaster rehabilitation and reconstruction period.

Yasin et al. (2012) have critically examined how government strategies of disaster management have been rethought of in the aftermath of the earthquakes. They have listed out the possible natural and non-natural factors which influence disaster vulnerability. Swathi (2015) deals with the numerous issues pertaining to the phenomena of emergency and disaster like the study of the risk factors in disasters, disasters' characteristics, patterns of frequency and its distribution, response prevention, mitigation, preparedness,, resilience and policies, standards of intervention, operative research humanitarian aid, recovery, rehabilitation, government strategies and actions to analyse the scenario completely from the angles of risk reduction methods.

Rahim et al. (2012), in their work focuses on the study of a small community like, Nahar Kot in the district of Barkhan, Balochistan (Pakistan), providing a comprehensive understanding of the role of early warning systems in disaster management at the community level. The pivotal role of indigenous knowledge in disaster management (in the absence of the scientific knowledge) is explored in this work. This paper also discusses the role of early warning systems like the weather predictions based on typology of winds and predictions based on animal behaviour.



## **Disaster Management and Humanitarian Interventions**

The two significant natural disasters in Pakistan, the earthquake of 2005 and the Indus river flood of 2010 have raised important questions about 'disaster management' and its relationship with the respective humanitarian assistances. Qureshi and Bamforth (2007) discussed humanitarian intervention in a sovereign state under a military government keeping in mind ethno-regional conflict, political parties and the marginalisation of civil society. They argue that water scarcity and dam projects are the major causes of ethno-regional conflict in provinces where humanitarian agencies have found themselves working in a highly politicised international and domestic environment. Malesic (2011) presents arguments for advocating or rejecting military involvement in disaster management and identifies various controversies linked with military engagement in disaster management. Madiwale and Virk (2011) bring out the interaction between the humanitarian community and the Pakistan military with respect to the 2010 earthquake. Federation of Red Cross and Red Crescent Societies (2012) that surveyed natural disasters in Pakistan from 2005 to 2011, highlighting its objectives, plans and strategies that have been implemented in affected and disaster prone areas.

Aliyu (2015), critiques the management of disasters and complex emergencies in Africa with challenges and constraints that emerge from a weakened health system. The work provides an understanding of management practices where civil conflicts affects policies in long term. Davenport (2012) explores the relationship between western NGOs and the cultural, religious and ideological beliefs of the Pakistani communities who they cater to during disasters. He tries to explain the attitudes that Pakistani locals have towards western NGOs in relation to the colonial history of the country and identifies the tensions that arise between the NGOs, the West and the State. Berrebi and Ostwald (2011) address the impacts of disaster on the growth or control terrorism with respect to information on natural disasters, terrorism and other related socioeconomic and geographical factors involving 167 countries during 1970 to 2007.

Brancati (2007) examines the impact of earthquakes on intra-state conflicts through a statistical analysis of 185 countries over the period of 1975 to 2002. He found that earthquakes can aggravate intra-state conflicts by increasing competition among

groups for limited resources. Nelson (2010) also examined the possibility of interstate conflicts after natural disasters. Disasters make the countries vulnerable which ultimately leads to conflicts. Nelson (2010) studied some critical issues, like the refusal of disaster aid by Myanmar, China and the United States which is significant yet understudied.

### **Political, Socio-Cultural and Strategic Constraints during Responses to Disasters in Pakistan**

Cochrane (2008) discusses the structures of disaster management institutions alongside an overview of Pakistan's history in disaster relief practices. He looks at the nature and efficiency of state institutions and the crucial power plays between the national and local state actors that between the military and civilian authorities. The work sketches an outline for capacities and limitations of existing disaster management practices. It also emphasises on the policy limitations of disaster responses; analyses preparedness level possessed by Pakistani Institutional bodies in implementing reconstruction after providing relief and discusses the two recent natural disasters in Pakistan exhaustively, by doing a comparative study of the responses provided by the national and international bodies, which includes several donors, the UN and other INGOs. Adnan (2014) in his study of Pakistan's disaster (earthquakes and floods) management found that disaster handling plans were incompatible with the requirements (in terms of both timing and initial response). Irshad et al. (2015) focus on the analysis of disaster management system in place in Pakistan and provide a detailed analysis of the organisation and the functioning of various bodies. The work also highlights the scarcity of resources and the shortcomings in the methodology employed in their application. Shah et al. (2010) have tried to review and compare the National Disaster Management Plan with the Disaster and Emergency plans of other South Asian countries.

Javaid et al. (2011) assessed the vulnerability of children in different forms of disasters and the governmental initiatives undertaken to deal with the protection issues of such. Irshad (2012) captures the prolonged impact of the 2005 earthquake in terms of gender disparities on Pakistani women and men who were severely injured with paraplegia and other spinal cord injuries that continued long after the disaster.

Kelman (2011) examines the impact of disaster-related activities on the creation of peace and conflict. He suggests that disaster-related activities can create short term peace processes in situations where there already exists some non-disaster-related aspects reconciliation. Nibanupudi and Shaw (2015) analyse the role of regional and international relations in affecting risks of hazards. They argue that disasters are not limited to political boundaries and the natural hazards in Asia are mostly regional. They discuss that the resilience and prevention of trans-boundary catastrophes demand effective bilateral and regional interventions. They highlight that past approaches between nations in this aspect have indicated a lack of multilateral and regional management frameworks that are integrated in nature. This in turn creates difficulties for the necessary cooperation from national and international quarters to aid in disaster risk management.

After the necessary review of the literatures available, one can conclude that there is hardly any study, conducting a theoretical analysis of the international and national responses to natural disasters in Pakistan. Although, few empirical studies have been done, they do not explain how humanitarian assistance is changing their face in the era of globalisation. The researcher has also not found much work regarding how foreign policy affects disaster management policies and its implementations at the regional and sub-regional level. Much study has been done from social perspective but lot of work needs to be done keeping in mind the international and political dimensions.

### **1.3 Rationale and Scope of the Study**

Centre for Research on the Epidemiology of Disasters (CRED) defines a disaster as “a situation or event which overwhelms local capacity, necessitating a request to a national or international level for external assistance; an unforeseen and often sudden event that causes great damage, destruction and human suffering” (EM-DAT, online)<sup>7</sup>. The more theoretically inclined definitions focus on the scale of impact and asses levels through which external aids are required for coping with these events. Disasters are more than just broad spectrum devastating emergencies requiring different management strategies. Therefore, it becomes important to understand why

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<sup>7</sup> For more detail see [online: web] Accessed 9 February 2015, URL: <https://www.emdat.be/Glossary>

disaster happens, how they affect the whole community, and how responses are made in different systems and situations.

This study proposes a conceptual study of disaster management in a particular socio-political context and juxtaposes it with the two disasters that occurred in Pakistan. How these two disasters in two varying geographical locales with strikingly different socio-cultural settings that have affected both the demography and the geography and how the federal and the provincial governments of Pakistan have responded to these situations are worth studying. This study while examining various disaster management intervention techniques and institutions emphasises on the humanitarian responses from local, national and global viewpoints. The political complexities and challenges faced by humanitarian agencies during these two natural disasters in Pakistan are to be looked at in this regard. This comparative study of the two disasters is also attempted from the perspective of analysing disaster management both at the macro and the very micro levels. How Pakistan has evolved through different phases of disaster management in these two situations and what are the intricacies of such interventions in the overall disaster mitigation practices are also examined in details.

Socio-economic compulsions continually impact the relations between the law, politics and the responses that govern disaster events. Disaster events thus always bear political dimensions that affect the socio-economic cleavages of the society. This is reflected in the constitution of Pakistan and further plays a role in internal politics and international relations. Legal mandates are substantially potent in addressing disasters in all its phases including response, prevention, relief, rehabilitation and reconstruction. It can not only manipulate the socio-economic and political factors that can increase social vulnerabilities but can also prevent processes or settlements that have the potential to put communities at risk. Finally, the democratic framework and the social stability of a country also play a major role in coping with disasters both natural and anthropogenic.

Mismanagement and mishandling of national resources can be caused by poor governance. In case of Pakistan, responses by the humanitarian agencies have had different experiences that are not easily found in other countries with similar disaster situations. This research work, therefore, is delving into the varieties of situational

contexts and constraints experienced by agencies that participate in humanitarian responses in Pakistan. For instance, in Pakistan, one can notice that agencies face complexities trying to navigate through inter-state and intra-state conflicts. This means Pakistan seldom deals with externalities and cross border sensitivities and other difficulties pertaining to ethnic conflicts and regional imbalance. It suffers from accessibility and slow response issues for two primary reasons. Firstly, the mountainous area topography and under developed nature of physical infrastructure constrains the connectivity. Secondly, the conflicts keep arising due to political practices and regimes, ethnic aspirations and borders. The Human Right Commission Report (2013) also reveal that the relief workers sometimes refrain from providing humanitarian assistance to marginalised communities in the country especially in FATA (merged with Khyber Pakhtunkhwa in 2018) and NWFP (merged with Khyber Pakhtunkhwa in 2010 with 18<sup>th</sup> Amendment) as these areas are restricted zone and dominated by military forces. They remain no-go area. Hence, this proposed study is examining several such issues that have the potential to limit the scope of participation, performance and professional efficacy of the humanitarian agencies at local, national and global levels. It is important to analyse the critical issues and challenges for humanitarian responses that emerged due to the complex nature of politics in Pakistan.

#### **1.4 Research Questions**

Some of the research questions that this study will address are mentioned as follows.

1. How disasters have impacted two different geographical locations and what are the potential constraints of managing disasters in a mountainous region?
2. How institutions of disaster management have evolved in Pakistan over the years and how disasters management are undertaken in military or semi-democratic regimes and how do the humanitarian agencies engage with militaries which are the primary responder to disasters in Pakistan?
3. What are the approaches of the institutions of disaster management in two different situations viz., disaster which have no cross border implications and disaster which have huge cross border linkages?

4. What are the issues involved in managing disasters where there are conflicts within the disaster affected region and in the cross border context where there are hostilities based on past conflicts?
5. Why Pakistan government has denied access to affected regions to external humanitarian agencies despite the crisis taking a very catastrophic shape?
6. How foreign humanitarian responders and foreign aids affect the management institution of recipients' country and what was the impact of terrorism on disaster responses?
7. What are the changes in the political approaches and outlook that have occurred in Pakistan since earthquake in 2005 to the flood in 2010 in terms of disaster management and what are the lessons learnt by the humanitarian agencies in Pakistan in the management of disasters.

### **1.5 Hypotheses**

**I)** Pakistan's political system and military culture have severely constrained the efficient disaster management practices.

**II)** Disaster management institutions in Pakistan are conditioned by serious portico-security considerations rather than humanitarian principles.

**III)** More the scientific and technological orientations in the disaster management framework, the wider will be the effective local, regional and global humanitarian participation.

### **1.6 Objectives**

Objectives of the present study are to:

1. Examine the nature, extent and impact of disasters in Pakistan.  
(To assess the varieties and complexities of disaster occurrences and management in two situations where conflicts keep recurring and where geographies remain constrained in terms of connectivity and accessibility.)
2. Understand the legal principles and institutional practices of humanitarian responses in Pakistan.

3. Analyse the complexities in the relationship among the humanitarian relief agencies and the government led disaster management institutions.
4. Assess the military and democratic government efforts to manage the disaster emergencies and their effectiveness.
5. Examine the political impact of flood and earthquake on local communities in the affected areas.

### **1.7 Research Methodology**

The research will be carried on descriptive and analytical framework based on qualitative research methods. The proposed research sources would be based on both primary and secondary sources. Primary sources would encompass various Government Reports, House of Commons International Development Committee Reports, UK, IOMs Reports, UNDP reports, UNICEF reports, INGOs report, NGOs report, United Nations reports, NDMA, PDMA Reports, Stimson Centre Reports, Pakistan's News Paper and speeches, Government of Pakistan Reports and so forth. The secondary sources would include available exiting literatures such as research findings, books, articles, research papers from periodicals, journals and other documents.

Depending upon the permission about field visits, this study have used materials collected and inputs generated in the field visits in the Brussels, Belgium.

### **1.8 Chapter Scheme**

The chapter schemes are

#### **1. Introduction**

The First Chapter is entitled Introduction and after a brief introduction to the theme of research of the thesis, the review of selected literature is given. The scope and significance of the study is then explained before delineating the objectives of the research and the broad hypothesis on which the research is being done. The research methodology for this thesis is then explained in the next section.

## **2. Approaches to Disaster Management: Theoretical Perspectives and Experimentations in other Cases**

The second chapter is based on the theoretical and conceptual studies of responses to disaster management. This chapter primarily focuses on different government policies and their implementation for humanitarian response. International theories for the same are applied for the contextualisation of the proposed theme. In this chapter, detailed analyses of different cases of natural disasters are explained.

## **3. Responses to Disaster Management: Regional and International Dimensions**

Here, the different types of approaches within the International Relations sphere to disaster management are explored. It becomes imperative to study what, where and when they can partner together in disasters emergencies. Researcher has analysed regional co-operational approaches in disaster management and foreign policy as a challenging factor have been explained.

## **4. Natural Disasters in Pakistan: A Comparative Study of Nature, Impact, Response and Disaster Management Practices in Pakistan after Earthquake of 2005 and Indus river Flood of 2010**

This chapter is explaining and analysing historical records of disasters in Pakistan. How disasters have been managed by different governments has been looked at. The Indus River flood of 2010 and earthquake of 2005 including the Internal Displaced Persons crisis of Pakistan have also been analysed. It has also delved into the nature, extent and impact of these disasters events. It also looked at the IDPs factor in natural disaster, especially, what were the impacts of IDPs; and its focal point in terms of it generation and location. The policies of Government that had been made to grapple the IDPs problem during disasters in Pakistan have also been discussed.



## **5. Humanitarian Interventions and Political Dynamics in Disaster Management in Pakistan**

This chapter has critically examined the humanitarian interventions in disasters. It contextualises the political dynamics in disaster management and made a comparative study of provincial and central government's role (with respect to the political structure of Pakistan) in disasters. The critical gaps such as how state actors, military forces and non-state actors coordinate each other during humanitarian crisis on this ground the local government's role, role of Institutions such as Disaster Management in Pakistan) are investigated. The nature of inter-state conflicts factors in disaster response and NATO interventions along with terrorist organisations role in handling and managing for resettlement, rehabilitation of victims have been critically analysed.

## **6. Conclusion**

The conclusion is based on the in-depth study of the proposed theme. The findings and limitations are explained in this last chapter. The bibliography lists number of books, articles, reports and news referred to by the researcher for this work.

## **Chapter 2**

# **Approaches to Disaster Management: Theoretical Perspectives and Experimentations in Other Cases**

There have been numerous natural and manmade disasters in history that have not only affected human life, but also been the reason for destroying various civilisations. Today, the world suffers from conventional and non-conventional security threats. Disasters are one of them which continue to pose serious threats to the general wellbeing of the world. One can say that different forms of natural disasters such as floods, earthquakes, droughts, landslides and so forth have instigated international debates in this field, which require inter-disciplinary approaches to study the disasters.

This chapter would particularly look into the requirement and importance of disaster management as a field. Here, it is important to notice that disaster response is the second phase of the disaster management cycle which requires particular approaches to manage the disasters. The major focus of disaster response is to provide safety and reduce human and economic loss. It also includes the collaboration of the urgent emergency services by the involvement of state actors, non-state actors and private sectors. It has been clear that although disasters are not new in human history, their management has been a relatively new inter-disciplinary subject since the 21<sup>st</sup> century. It is important to see policymaking debates and the criticism of their implementations in the global world, especially in Pakistan. In addition to this, different case studies would be examined in this chapter to explore the possible reasons behind the evolution of the field of disaster management.

It is also justified to say that responding to a specific disaster requires urgency in attention from the academicians, practitioners, legal experts and practical knowledgeable person or groups. It also requires international support and coordination. This chapter will look forward to International Relations (IR) theories within this theme and various perspectives would be dealt in details such as disaster management and climate change perspectives, legal perspectives and geographical perspectives, in a broader theme. Different approaches and theories of IR and its relations with disaster management would also be introduced in this chapter.

The emergence of Pakistan on the bases of ‘two nation theory’ followed by the partition has created a sustained hatred between Indian and Pakistan, thereby forming a cross-border threat. Since partition, the peace-building process has remained unsuccessful. Here, it becomes mandatory to find how historical conflicts are

affecting their relationships during disaster events. Generally speaking, this important nexus aggravated the stress that arose during the devastating disasters events. It has been found that whenever Pakistan or India faces major disasters, both the countries postponed taking help from each other. However, due to historical connections and being a soft power state; India has always tried to offer its helping hand towards Pakistan to maintain the cordial relations. The political gap created by the British is problematising regional co-operation during emergencies at this point. Pakistan's identity as a 'terrorist sponsor' is continuously emerging at international platforms. Pakistan's internal tension between democratic rulers and the military relationship have further worsened the situation. Decision-making process also gets badly affected by the political clashes which need to be addressed during complex emergencies. It can be said that, it would be interesting to conduct this research within the international relation domain; especially with respect to the two very important disaster events and their political aspects.

## **2.1 Global Overview of Natural Disasters**

Sapir et al. (2016:1-2) writes that, in 2016, there were around 342 reported natural disasters in the world. These resulted in 8,733 deaths, and negatively impacted 569.4 million people, and caused damages worth of US\$ 154 billion. The year also experienced the third lowest amount of natural disasters since 2006 which was 90.1 percent below its 2006-2015 annual average (376.4). His 2018 report's database shows that 281 climatic and geophysical disaster events have occurred in the world in which around 60 million people got affected. In addition to this, Munich Re's NatCatSERVICE<sup>8</sup> 2018 records show that around 850 disaster events had occurred in the year. This shows the surge in the recurrence of disasters (Low 2018). Although, it had the second lowest amount of deaths since 2006 which was 87.5 percent below its annual average (69,827), the number of people negatively impacted increased a lot with that being was the highest since 2006 ; 1.5 times its annual average (224 million). Monetary damages from natural disasters reached the fifth highest since 2006 which was almost 12 percent above their 2006-2015 annual average. In 2016,

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<sup>8</sup> *NatCatSERVICE* from *Munich Re* is the most comprehensive natural catastrophe loss database in the world. It has provided comprehensive natural catastrophe expertise for risk management and research. Today, it is one of the most internationally recognised sources of information for the evaluation and analysis of natural disasters.

almost 108 countries and territories were hit by disasters, which correspond to 50.5 percent of all countries affected by disasters since 2006. Most of the countries were hit disasters at a minimum of three times in the last 10 years (2006-2015). The five countries most often hit were India, China, Philippines, United States and Indonesia which accounted for 30.1 percent of total disaster occurrences in 2016. Year after year, these countries remain consistent in the list of the countries experiencing the highest number of disaster events.

Among the top ten countries affected by disasters, seven were located in Asia and suffered thirty one percent of all 2016 disasters, while three countries that are located in North and South America accounted for about twelve percent of all disasters. Analysing their income levels we find that, two countries are largely high income (the US and Japan), two of them mostly have upper-middle income populations (Mexico and China), five of them are mostly lower-middle income (Indonesia, India, Vietnam, Philippines and Pakistan) and one of them, Haiti, is a low income country. Six countries experienced more number of disasters in 2016 than their previous recorded annual average during 2006-2015. Haiti had reported disasters which was highest since 2006 and more than double the amount of its annual average. Pakistan and Vietnam had disaster events 1.6 and 1.5 times their annual average respectively. In 2016, the total number of disasters in Japan, China and USA were 37, 15 and 22 percent (respectively) of their usual annual average. Mexico, Indonesia and India encountered disasters in 2016 close to their respective annual averages. Finally, Philippines had eleven reported disaster events, which were the lowest since 2006, around forty percent below the 2006-2015 annual average (ibid: 3-4).

Since 2006, the number of hydrological disasters were the highest in frequency compared to other disaster each year, the maximum being in 2016 (51.8 percent, for an average proportion of 50.5 percent for the period 2006-2015), followed by meteorological disasters (28.1 percent versus a decadal average of 32.4 percent), while other climatological disasters (11.1 percent versus an annual mean proportion of 8.7 percent) overtook geophysical disasters (9.1 percent for a 2006-2015 average of 8.4 percent) (ibid: 4).

Casualties by disasters included 8,733 deaths in 2016. Although, this includes two years of more than 200,000 reported casualties, mainly due to two specific massive

catastrophes which were the 2008 cyclone, Nargis, in Myanmar (138,366 deaths) and the 2010 earthquake in Haiti (222,570 deaths). However, even if we exclude these disasters, deaths in 2015 remained substantially lower than the 2006-2015 annual average of 33,733 deaths (ibid: 4).

In South Asia, the number of flood victims (6 million) is the second lowest since 2006 which is close to one-third of the annual average. A population of two million people affected by the 2016 in India, Assam flood is lesser than the twenty million victims of a single Indus River flood in Pakistan in 2010. South Asia experienced climate related disasters like floods, droughts, forest fires and so on with reported damages; while in 2018, India has recorded nearly half of the total number of the disaster affected people (total is 60 million at the global level, India recorded around 24 million). The earthquake in India cost 75 million US\$ in 2016, while the earthquake in Nepal caused 5.2 billion US\$ of damages in 2015. It also had damages from floods accounting for about 2.86 billion US\$, lower than the annual average of damages worth 5.4 billion US\$. Sri Lanka experienced a flood costing 1.2 billion US\$, which would be the eleventh most costly flood for this region, yet not exceeding a flood incurring 16 billion US\$ of damages in India in 2014 (ibid: 4).

## **2.2 Natural Disasters in South Asia**

Majority of the population in South Asian Countries constitute of younger generation of citizens nations. Countries like Bangladesh, India, Pakistan, Bhutan and Nepal have more than half of their citizen populations that are under fifteen years of age, forming a group most vulnerable to natural disasters. According to President of American Association of Retired Persons (AARP) foundation L.S. Ryerson, 2 billion people of adult age would increase by 2050 (United Nations 2019). Unlike other regions, the amount of annual deaths, annual number of victims who have been negatively impacted by natural disasters and the number of deaths per million of the population have been increasing in most countries of South Asia. In the last thirty years, the occurrences of natural hazards and disaster impacts have increased subsequently in this sub-region. Specific countries like Bangladesh, Maldives, and Nepal have been the major victims of the impacts and have witnessed a rise in disaster risks.

Urbanisation, climate change and environmental degradation can be the leading causes that have been affecting the nature of the natural disasters and their impacts. Oftentimes the events and the impacts of disasters are not contained within a country's political boundaries leading to 'trans-border or cross-border vulnerabilities'(Hamdani 2014:2)<sup>9</sup>. Cross-border vulnerability is crucial and directly related to Disaster Risk Reduction (DRR)<sup>10</sup>. The earthquakes of 1923 and 1934 (killing thousands in Nepal and India), the 2005 earthquake in the Kashmir area (Pakistan and India), the 2008 Koshi flood in Indo-Nepal border areas, the 2004 tsunami in Indian Ocean affecting of about twelve countries or more, the tropical cyclones in countries like Bangladesh, Maldives, Sri Lanka and India and GLOF in Nepal which affected India, Bangladesh, Maldives are some of the known instances of cross-border vulnerabilities (Kafle 2017).

Pakistan can be termed as a young nation among the world's ten largest countries with the highest percentage of its population falling in the 15–29 age groups (64 percent) (UNDP 2017:5). This might be crucial for us to understand the weaknesses and aspirations of Pakistan as a nation. There are some other features of Pakistan that should be kept in mind. For example, it has a sensitive security which caters to the country being vulnerable to frequent terrorism onslaughts. The 2010 flood it experienced is remnant of the large-scale global effects of natural disasters and climate change. The floods affected a considerable section of the country's land mass with a rainfall that remains the highest in about the last nine years. The 2010 floods instigated the Pakistani government to provide flood relief which was rather insufficient and catered to a limited section of the affected population.

The 2010 Pakistan floods constituted as a perfect natural experiment to assess and study the impacts of calamities like these on governmental aims and endeavours and the ways in which they can execute the same. The 2010 rainfall data was collected after one and a half years to analyse and study the medium-term effects of the floods. The study has found that the negative impacts of extreme rainfall do not just contribute to rapid destruction of property but result in long term social damages.

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<sup>9</sup> Khalil Hamdan in his article *Trans-border Vulnerabilities*, defines cross-border vulnerabilities as the "the component of total vulnerability that can be attributable to external events and actions."(pg.2)

<sup>10</sup> UNISDR defines Disaster Risk Reduction (DRR) as that which "aims to reduce the damage caused by natural hazards like earthquakes, floods, droughts and cyclones, through an ethic of prevention" (UNISDR Online).

Even years after the actual disaster event, individuals affected by the same may have limited aspirations for the future, which can be linked with less productive behaviour and a compromised political engagement. It can be said that the effects of the same can be found in the more vulnerable sections of the society which include poor people depending on agriculture and those who do not have relatives or acquaintances who live outside the affected locality.

Responses to disasters perceived as “Acts of God” might differ from disaster responses to events that are thought to be the results of human beings (Katrina and HyunjungMo 2017). However, there can be similar responses for both if individuals tend to submit to fate, accepting their assumed lack of agency. A more detailed critical enquiry of the same can conclude what aspects of a disaster inspire differential responses from the ones affected. It can also provide an improved understanding of the nature of policies pertaining to government responses that are triggered by these disasters.

The Watan Card program can be thought of as one of the best post-disaster endeavours that have been implemented thus far (World Bank 2013). However, in contrast to this, the Pattan Development organisation report suggests that the card scheme was not adequate for reconstructing damaged houses and mostly cards were given to men and not to women (Semple 2011:78-79). This program provided the district governments with flood relief funds which were sufficient for the number of victims dwelling in heavily affected villages, (those who suffered at least fifty percent of housing and agricultural damages). Initial findings (Fair et al. 2017) in Pakistan show that there was an increase in political engagement following the 2010 floods, and more potential research can examine the relationship of an increased political engagement with the governmental social welfare programs that aim to protect the aspiration levels of citizens (Katrina and HyunjungMo 2017:62).

### **2.3 Theoretical Study: Approaches of Disasters**

This thesis proposes few theories which would help in understanding the context of disaster management in the International Relations (IR) environment. Theories provide the background to understand and interpret in analysing the context in details.



### 2.3.1 Definitional Approaches

Recently, there have been several definitions of disaster which have entered academic consciousness. The Tampere convention (a multilateral treaty) of 1998, (Tampere 1998:7)<sup>11</sup> and a universally acknowledged definition by the UN (UNDHA: 2001), define disasters as a large-scale event that causes serious disruptions hampering the normal functioning of society, posing threats and incurring “widespread human, material and environmental losses” that exceed the coping ability of the affected society. Several other regional and international documents have tried to define disaster and hazard along similar lines encompassing a legal framework, like the ASEAN Agreement (2005)<sup>12</sup> and the article 1(3) of a SAARC agreement.<sup>13</sup> The Hyogo Framework of Action (HFA), 2005-2015 defines a ‘hazard’ as a ‘potentially damaging physical event, phenomenon or human activity’ that brings about the loss of life or injury, property damage, social and economic disruption or environmental degradation (United Nations 2015). All these definitions, identifies the causal and the legal aspects of disaster and perceives of them as events capable of bringing out social changes which demand governmental intervention. Hence, the very definition of disasters provide for an already existing social and political dimension, making the socio-political enquiry to study disasters indispensable.

However despite the legal aspects present in the very definitions of disaster, legal scholars do not believe in a definitional clarity of disaster from the legal point of view (Aronsson-Storrier 2017:506). As far as the International law in natural disasters

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<sup>11</sup> Tampere (1998), ‘Tampere convention on the Prevention of Telecommunication Resources for Disaster Mitigation and Relief Operations’ June 18, 1998, Article 1, p.7. The Tampere Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations is a multilateral treaty governing the provision and availability of communications equipment during disaster relief operations. This convention was forcefully entered on 8 January 2005. This convention was attended by the delegates of the 75 countries in 1998. This was ratified by 30 countries, India, Pakistan, Nepal and Sri Lanka is also signatories this convention.

<sup>12</sup> This agreement was ratified by all ten members of the ASEAN as per the Article 33. It was necessary to enter forcefully in this convention. This was adopted on 26 July 2005. ASEAN (Association of South East Asian Nations) was formed in 1967 by Indonesia, Malaysia, the Philippines, Singapore, and Thailand to promote political and economic cooperation and regional stability through multilateral cooperation. It’s all ten member states are working together to promote stability and economic growth in the region).

<sup>13</sup> SAARC (2008), “Agreement On Rapid Response To Natural Disasters”, definition was adopted in the Declaration of Fifteenth SAARC Summit which was held in 2-3 August 2008 in Colombo, Sri Lanka, [The South Asian Association for Regional Cooperation (SAARC) is the regional intergovernmental organization and geopolitical union of nations in South Asia. Its member states include Afghanistan, Bangladesh, Bhutan, India, Nepal, the Maldives, Pakistan and Sri Lanka. Available at [Online: Web] Accessed 24 March 2015 URL: [http://saarc-sec.org/uploads/digital\\_library\\_document/28\\_Rapid\\_response\\_to\\_Natural\\_disasters.pdf](http://saarc-sec.org/uploads/digital_library_document/28_Rapid_response_to_Natural_disasters.pdf)

field is concerned, the Kelsenian framework has remained to be the most befitting method to analyse the situation of large-scale natural disasters. Therefore, mainly four major Kelsen's<sup>14</sup> norms have been addressed by legal scholars, which have influenced the field mostly during the 1920s- mid-1930s and continue to be the most implemented approach in the laws of disaster relief (Caron et al. 2014:8).

International Law Commission (2016) came up with a new definition which appeared in the ILC'S Draft article 3 on the Protection of Persons in the event of Disasters, where it says that a disaster is "a calamitous event or series of events resulting in widespread loss of life, great human suffering and distress, or large-scale material or environmental damage, thereby seriously disrupting the functioning of society (ILC 2016:2)"<sup>15</sup>.

Thus, it can be said that definitions of disaster has been formulated differently in different places. It has been defined according to the approaches undertaken by the defining body keeping in mind the needs of their societies. It appears that every part of the nation does not get affected by the same disaster in a similar way. Keeping in mind the available literatures, it can be justifiably concluded that disasters pose serious disruptions in the functioning of the human and social life. It also severely affects political, cultural, economic and environmental functions. Disasters might also be rapidly increasing due to climate changes or might be conversely triggering the same. However, to arrive at a valid conclusion through these arguments, existing literature is insufficient and it demands more social scientific enquiry and research.

Disaster management comprises of systematic approaches to deal with catastrophic events that are sporadic, infrequent and unexpected. The unexpectedness is because of the peculiarity in the timing of the event which remains largely unpredictable. This further affects the knowledge to prepare for it and therefore, the rehabilitation and re-establishment of the affected area/state becomes incredibly difficult. A scholar named Hollnagel, who focuses on the 'surprise element' of the events, has classified them, and said that 'surprise' can be divided into two kinds: one is 'the situational surprise'

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<sup>14</sup> According to Kelsen's theory every legal rule should be regulated within the sphere of temporal, territorial, personal and material. These are applicable to large-scale natural disasters. He has mentioned *ratione materie* (to what situations would these rules apply), *ratione temporis* (rules would be applicable on pre-disaster, during disaster and post-disaster), *ratione persone* (to whom are these rules addressed) and *ratione loci* (what are the applicability of international rules).

<sup>15</sup> International Law Commission Draft (2016) Article 3 "Definition of Disaster" was provisionally adopted by the International Law Commission in 2017.

and another is ‘the fundamental surprise’ (Hollnagel 2015:21-24). He proposes that a disaster is a situational surprise if it is completely unexpected (mostly related to the geophysical nature of the disaster). This concept can be understood through an example where if one says that there has been a flood at the India Gate in New Delhi, India, it will be thought of as a situational surprise as the India Gate is not surrounded by any water body. Whereas, fundamental surprise is when one already speculates the nature of the event before it occurs. For example, if someone says that Gateway of India is damaged due to a cyclone in Mumbai, it won’t be of much surprise because the Gateway of India is located at the Apollo Bunder Area in Mumbai which overlooks the Arabian Sea.

Westrum (2006:56-57) talks about three types of threats in his work namely regular threats, irregular threats and unexampled threats. Masys has also discussed the same in his book to explain the potential threats in disasters (Masys 2015). These classifications help us in understanding the nature of a disaster and thereby assessing the protocol that needs to be implemented for the response. It can be established that natural disasters are an onset sudden event and it occurs not only in the least developed and developing countries but in developed countries as well. Throughout history, disasters have increasingly gained more attention at the global level because of the precariousness to prepare for them, given their unexpected nature. The difficulty of preparedness increases manifold for developing and developed countries. Moreover, such countries are dependent on the western world and international organisations for logistical and non-logistical support. Therefore, most of the disasters pose serious disruptions in the most vulnerable parts of the society which calls for mandatory global attention. However, each disaster also provides an opportunity to recreate and reframe new disaster law and strategy thereby creating more possibilities of renewed disaster management approaches.

### **2.3.2. Legal Approaches**

The scales of natural disasters are relevant in each stage of the disaster cycle. The mega-disasters tend to pose unique challenges to the legal system calling for an improved decision making process in disaster management at the global level. This is because the failure of national or local governments to respond to mega-natural disasters requires international non-state actors to come forward for help and

response. Therefore, international responses make the legal system in disaster management to be relevant at the global level. Thus, the role of the international disaster response law has been an important contributor to disaster management systems in ensuring the efficiency and effectiveness of the responses. Whenever and wherever a disaster strikes, laws help the state and non-state actors to control the unnecessary delays and difficulties during co-ordinations. The paragraph 373 of ILC draft, 2010 emphasise that the states' own domestic laws and mechanisms decide the delivery and distribution of disaster relief across national and international borders. Alongside this process, various bilateral, regional and multi-national agreements also play important roles. A sovereign state possesses the sole responsibility to provide immediate relief assistances in its affected territories. It is also largely established that other state-actors and non-state actors cannot intervene in affected territories without governmental consent (International Law Commissions 2010:200). This doctrine of the international law applies to large scale-natural disasters such as floods, earthquake, volcano, cyclone and so forth. They are also applicable in all the phases of disaster (pre-disaster, in disaster and post-disaster period). It can be said that international laws aim to address and cater to victims, state-entities and non-state entities.

### **2.3.3. Environmental and Scientific Approaches**

Presently, a rampant notion still exists that disasters purely emerge out of environmental and climatic changes. However, this has been a matter of numerous debates and discussions. Author Goudie (1992) in his writings has adopted a geographer's perspective. He is of the opinion that prolonged environmental changes like changes in sea level, desert limits, lake levels, river discharges, hurricanes and tornados might influence the developmental measures undertaken by a society. Weart (2003) in his book *The Discovery of Global Warming* highlights two interesting facts that firstly, our knowledge about natural disasters have become less uncertain and secondly, the relationship of environmental changes to human affairs have become conspicuous due to an exponential growth of human population. The Science policy experts of global bodies like IPCC, NASA have tried to explain the relationship between global warming and climate change with various speculative examples about the future of the earth's atmosphere. Weart (2003:46) also emphasised on Tyndall's

views<sup>16</sup> on how the change in the atmosphere might affect our global temperature. He tried to evaluate the significance behind this and how it could influence global warming.

Braasch (2009:8-15) in his book studied and reported all the geophysical changes that have happened in the world and have given equal importance to the nature of these changes. He assessed the climate changes, tracked down Alpine glaciers, observed the receding Greenland glaciers and the slow changes on the Tundra. He describes how Chinese farmers have been facing drought and how many Alaskan villages have been washed away in recent times. He has also traced the history of the displaced birds and animals in specific places to understand how global warming affects different parts of the world. He concluded that the whole world is under the influence of global warming, spanning from the tiniest ocean to human civilisations, cities, flora and fauna, the rivers and mountains. Through these available literatures' arguments and findings, it cannot be denied that climate change is happening and it has prolonged impacts on the earth's environment.

Climatological texts have examined current practices and applied methodologies to explore climate-environment responses and how it relates to the present scenario. They elaborate that 'climate consciousnesses might emphasise the vulnerability of the present society due to climatic instability. However they also suggest that human activities can ruin the global climatic atmosphere in different ways, such as: through pollution, gas emission, deforestation and the combustion of fossil fuels. At the same time they can potentially modify the climate by applying various schemes, like, forest protection scheme, cloud seeding, hail suppression and fog dispersal. Huntington and Visher (1922:52) deliberates that within climactic sequences, the glacial epochs have eliminated numerous species and gave rise to new varieties of plants and animals. Even historically, it might have eradicated entire civilisations while allowing the growth of new ones. These kinds of radical changes have created a strong impression that climate change is irrefutable and in future, it would garner more attention.

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<sup>16</sup> John Tyndall was a scientist. Through his experiments he had shown that water vapor is the strongest absorber of radiant heat. According to him, it is the most important gas which control earth's surface temperature.

Ellsworth and Visher (1992:36) in their book find difficulties in separating the solar and geological effects in climatic changes. He adopted the “Carbon Dioxide theory” which has had a great influence in geological thoughts. All evidences indicate that the presence of the carbon dioxide gas can heat up the earth surface and subsequently cause climate changes. “The volcanic hypothesis”<sup>17</sup> proposes some other causes for the changes in terrestrial temperature. A close scrutiny and examination of the effects of volcanic dust demonstrated that low temperature is indicative of the presence of volcanic dust (ibid: 45). “The thermal solar hypothesis” explains that majority of earth’s climate changes are because of the alterations in the sun’s emitted heat and, therefore, it affects the terrestrial temperature. This theory also presents an idea which explains that solar conditions produce climatic changes which leads to the redistribution of the atmospheric pressure of the earth. Therefore, it can change the ocean currents, winds and cause storms (ibid: 44-51).

This framework helps us to understand the impact of the relationship between human actions and extreme weather episodes in the new kinds of geophysical and social risks that can affect us. Climate research in this aspect has proven that issues like the deforestation, inconsiderate land use, over combustion of fossil fuels and an increase in urbanisation aggravates the warming of the atmosphere and oceans. These cater to the change in the rise of sea-level and also influence the degrees of cyclone activities and resulting precipitation (UN-Habitat 2011; IPCC 2012). It has also been found that the rise in sea level can also trigger ill effects like flooding and coastal drainage. The Special Report of the IPCC (2012) indicates that human activity that leads to pollution can affect a huge percentage of the existing global issues like the percentage of greenhouse gases in the atmosphere. Therefore, it becomes clear that disasters of the present day have acquired a new kind because even most of the geophysical events have anthropogenic origins (ibid: 444).

#### **2.3.4. Sociological Approach**

Quarantelli’s opening remark, in his work ‘Disaster Studies: An Analysis of the Social Historical Factors Affecting the Development of Research in the Area’ (1987)

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<sup>17</sup> According to the volcanism hypothesis, this global-scale volcanic activity spewed so much gas, ash, and dust into the atmosphere that it kept sunlight from reaching Earth’s surface; available at [online: web]. URL:<https://www.pbs.org/wgbh/evolution/extinction/dinosaurs/volcanism.html>

suggests that studies pertaining to the sociological impacts and causes of disasters remain lacking. Sociologists believe that disasters are part of the society because it imposes the risk for the people, environment, economy and stability. The intensity of disasters are continuously increasing day by day, due to this, affected people are compelled to migrate from their location. They are compelled to live in vulnerable areas. Affected people are constructing houses and huge buildings in hazardous areas; as a result, the ecological imbalance is now very prominent in the society. Thus, the sociological theorist argues that disasters are purely social events. Governmental intervention can influence not only the impacts of natural disasters but also the general social perspectives regarding disasters as such. Dyer and McGoodwin (1999:215), suggests that governments often remain ignorant of the needs of various sections of the society therefore, are not able to pay heed to their needs. They also believe that it is the decision-making authority that determines the impact of disasters on marginal communities. Other writers like Stallings (1991) investigate that disaster has functional and dysfunctional consequences.

### **2.3.5. Modern Political Approach**

A crucial question of cosmopolitics is the fundamentals of the composition of the world. It focuses on the sovereign state as a legitimate actor. It looks for its response capacities. They propagate their theoretical understandings around two way responses and its affects. They examine how the state's behaviour affects disaster responses and also how disasters affect state behaviour. A cosmopolitan ideally does not disassemble politics and disasters but tries to probe into their similarities and interdependences in constituting a social scenario. It is important to re-evaluate the effects of politics on disasters to understand the policies that determine governmental endeavours after any calamity. Author Schmitt proclaims that the "state of exception is a sign of sovereignty" (Guggenheim 2014:9) and this argument can work in different ways. Through this "idea of the state of exception", we arrive at an understanding that a disaster, far from being an isolated event, aligns with the political decisions undertaken by a state. A disaster is, consequently, an event outside the state, but (usually) within its territories, which is manoeuvred to do something that would not have been done otherwise. This include actions like the desire to change laws, to

make experts produce reports, send recovery organisations (Easthope and Mort, in Guggenheim 2014:4), and control the movements of people and things.

Disasters are an outcome of political decisions (Tierney and Bevc 2007). However, there is another perspective to understand the impact of political interference on disasters. One can strictly opine that natural disasters followed by anthropological disasters are the consequences of political decisions. Further, it can be argued that when a natural disaster reoccurs at the same place, it can be the effect of the mismanagement of previous disasters. Various studies of Foucauldian perspectives here imply that disasters which have political control are the outcome of politics only. These studies indicate the failure of governments to assess the impacts and nature of risks accurately and their inability to provide the right remedies at the right time. They also point to the fact that disasters are manipulated by governments to produce militarised control over the people which results in the annihilation of the citizen's agencies to control their own fate. As Tierney and Bevc says:

“Politics as disaster research also points to the fact that the state and its disaster organizations use disasters for a militarization of response and for taking responsibility out of citizens' hands ( in Guggenheim 2014:11).

Through the above approach, the interdependence of politics and disaster can be discussed and analysed from two perspectives. Firstly, it can be said that the politics that surrounds disasters, decision making capacities and poor governance are responsible for increasing the risk of disasters. Secondly, disasters provide chances of potential political reformations.

For instance, Donini et al. (2008:17-28) in their report have come out with various in-depth case studies where the case study of Pakistan's earthquakes raised new issues for the function of militaries (both domestic and foreign) in their responses to non-conflict related disasters and what it implies for the overall nature of disaster management. They have highlighted the importance of the role of the military role in humanitarian interventions and the acceptability of other actors in the affected zones. The report examined that initial earthquake rescue and relief efforts were not only led by the Pakistan Army but the citizens and other organisations were the first to respond, which created a philanthropic response by the citizens that the country has never experienced. Several international organisations have participated in the rescue



and relief efforts, like the United States and the NATO military forces. The report also raised the concern of security “issues and cultural insensitivities” of aid workers (Humanitarian Policy Group 2006).

Radical approaches of disaster studies explain that “disasters are an outcome of poverty” (ReliefWeb 2011). According to this approach, the socio-political and economic relationship should be restructured to reduce vulnerabilities (online)<sup>18</sup>. Hewitt applying a Marxist approach to disaster emphasises- “disasters are not necessarily the unpredictable and unexpected outcome of powerful physical systems; instead, it is human beings’ activities that play the diverse role in natural calamity” (Hewitt 1983:22). He also vouches for social changes to prevent disasters. Poverty, illiteracy and health unawareness are also deemed to be the leading causes for disasters (Junjiro 2017). Meanwhile, the Conservative approach remarks that usually, lack of economic resources during disaster, pushes people towards marginalisation. In Pakistan’s context; their government had provided the Disaster Response Plan in 2010 which had not mentioned special sections of religious minorities, caste based groups and transgender communities. These communities are groups who do not have even the basic political rights. Due to the shortcomings of the mandate, many communities could not get relief items in flood and earthquake disasters (International Dalit Solidarity Network report 2013:2-3; PDSN 2010:1-2; International Gay and Lesbian Human Right Commission 2010:9)<sup>19</sup>.

## **2.4 Disaster Response and International Relations: Theoretical Linkages**

This study proposes to establish theoretical linkages between disaster and International Relations (IR). Few studies have been done till now to do an in-depth study. Disasters have not only affected the major sections of the society but have also raised the security concerns within and outside of the borders. Disasters posit a threatening call for all living and non-living creatures. Sadly, individuals and society

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<sup>18</sup> *Development, disasters and vulnerability: A discussion of divergent theories and the need for their integration (PDF Download Available)*. [Online: Web] Accessed Dec 16, 2017, URL:[https://www.researchgate.net/publication/239549822\\_Development\\_disasters\\_and\\_vulnerability\\_A\\_discussion\\_of\\_divergent\\_theories\\_and\\_the\\_need\\_for\\_their\\_integration](https://www.researchgate.net/publication/239549822_Development_disasters_and_vulnerability_A_discussion_of_divergent_theories_and_the_need_for_their_integration).

<sup>19</sup>The International Gay and Lesbian Human Rights Commission (IGLHRC) is a leading international organization dedicated to human rights advocacy on behalf of people who experience discrimination or abuse on the basis of their actual or perceived sexual orientation, gender identity or expression. <https://www.outrightinternational.org/sites/default/files/505-1.pdf>

are playing with nature which never hesitates to punish us back. Now, the question is how to save the planet? What can be done to stop the recurrence of natural calamities? There are several other questions which need answers and solutions. If one looks into the historical linkages of international relations and disasters, it reminds us of World War I and II. Though both wars were largely inspired by human actions and were not natural calamities, still they have a strong link with disaster studies.

Many studies have been done by western scholars (mentioned in the literature review section of chapter one) to investigate the political aspects of a disaster, but not much to deal with the problem of natural disasters in the globalisation scenario by Asian Scholars. Before the 21<sup>st</sup> century, researches were paying more attention to the traditional security threats rather than looking into the non-traditional ones. Many subjects were left out which have now become the non-traditional security threats, such as, environment issues, civil-conflict, natural disasters, non-institutional threat (like non-state actors) and so on. If one looks into the historical writings of International Relations studies, only human security theories stressed on the possibility of natural disasters being security threats. Human security theories explain the traditional security threats as well as non-security threats. Human security approach is closely connected to studies which describe that global and regional stability have close linkages with non-security issues, such as; natural disasters, climate change issues etc.

Many scholars and academicians have agreed upon these theories and explain that 21<sup>st</sup> century would change global politics due to four important factors:

“The rise of emerging powers followed by a global power shift; (II) The increasing importance in global affairs of non-state actors, such as international organizations, non-governmental organizations (NGOs), multi-national corporations (MNCs), ethnic minorities, and terrorist groups; (III) Power itself, both hard and soft, taking new forms; and (IV) The rising importance non-traditional security issues including humanitarian assistance and disaster relief (HA/DR), maritime law enforcement, and energy security” (Muhittin 2003:52-59).

He also explained that globalisation of disasters are not a new phenomena. He opined that absolutism in modern age might have disappeared although this has been replaced by oligarchies. Hence, it has been already envisaged that disasters can play a deciding role in shaping foreign policy in the coming centuries.

According to proposed hypotheses, the researcher has found some relevant theories in IR which can provide a contextual framework for this study. These theories and approaches in disaster studies are relevant and would help us for appropriate socio-political understanding as disaster events give a different perspective to understand the national and international political structure. This situation provides opportunities for researchers to examine the state's and the international community's behaviour. For example, when disasters occur, many state actors and non-state actors and stakeholders get involved in providing their logistical and non-logistical support to the affected state. During this response process, one can examine the state behaviour through their way of handling the chaotic situation like the natural disasters. Therefore, in order to understand the international system, a strong theoretical framework would be needed; so that the whole situation could be presented adequately. The researcher has found that 'power and security concept within foreign policy sphere' is very closely connected to natural disasters because it has been observed that institutions, state governments, international governmental and non-governmental organisations are directly involved in 'pre, during and post-disaster response' phases (Messer 2003; Behera 2002). To understand the dynamics of political interventions in disaster, an international theoretical approach needs to be applied.

#### **2.4.1. Realist Approach to Disaster Response**

A state that constitutes as a focal-point of discussion uses military power to show its utilisation in the anarchic international world system. International politics aims at a struggle for power and to realise this, they may even use non-political means, such as technical co-operation with other nations or international organisation (Morgenthau 1948:31). Disaster management is also an emerging field where technical co-operation has become one of the important aspects of pre and post-disaster phases. When a said nation is affected by disasters, it is selectively approached by external agencies and other nations to provide relief based on the relationship it shares with the nation. Furthermore, the nation chooses to accept or deny the help pertaining to similar power relations. This opens up new inquiries as to what kind of political relationships are formed during crisis moments. Moreover, the state itself manipulates its relief programmes depending on the community they are targeting and the political

positioning of the said communities. Hence, this kind of a theoretical framework is crucial in determining the power plays that surround a disaster.

#### **2.4.2. Neo-Realist Approach to Disaster Response**

This approach believes that the state's main goal is to survive. Neo-realists had emphasised more on a structural level explanation rather than an old realist premise which gave importance to the unit level explanation that talks about the survival and the security of the state from other powerful states. This is important in understanding the peculiarities that surrounds Pakistan's political location. It can be said that Pakistan in the international system has been considered as an anarchic nation. Due to political instability, Pakistan's validity as a state itself has been put to question. Pakistan has been making alliances with the superpower states to strengthen their presence on the international platform to assure their survival. It is to be noted that powerful states can also take advantages of military and economically weak states by capturing their resources, or by using different measures of influencing leaders and communities; for instance, Chinese influence is increasing in Pakistan which is now criticised by political experts. They believe that China is trying to colonise Pakistan by making huge investments on technology, military, infrastructure (Jamal 2018). Conversely, the weak states can gain maximum advantages in their vulnerable situation through the alliances with developed countries like South Africa, Nepal are getting benefits from the developed countries. Natural disasters therefore, can provide a new perspective of International political strategy.

#### **2.4.3. Neo-Liberal Approach to Disaster Response**

Disaster management theorists have paid insufficient attention to a variety of normative issues of disaster management because they have accepted the conception of the world developed by Hobbes rather uncritically which has been taken over by many recent writers. Neo-liberalists broaden the horizon of this particular research because it combines the motives and initiatives of both the non-state actors and institutions. They believe that they play very crucial role in determining international security. Therefore, it becomes very important to understand the effects of the non-state actors and institutions to study international politics and its implications in

disaster fields where cooperation plays an important role in management. Institutions are playing larger role and they are becoming deciding agencies. Governments are inspired to involve more private sectors and international agencies.

#### **2.4.4. Constructive Approach to Disaster Response**

According to Holloway (2008), since the 9/11 terror attack, the priorities of national securities have been changed. After 9/11 incidents two types of understandings have been developed. One was when natural threat like floods, earthquake etc. occur and other was when teleological means of deliberate harm were implemented. Different schools of thoughts have explained such man-made disasters in several contexts but very little had been addressed on people's mindset. Here, one might contemplate that disaster events are either defined by the media or by the victims. Both can have their own perceptions and experiences of a particular disaster (David 1993). Thus, it can be said that disaster theories and approaches are not permanent and events or phenomena are highly constructed according to the particular situations which are susceptible to peoples' perceptions. Consequently, the constructive approach helps us to understand the socio-cultural perceptions that surround a disaster event. For instance, the Nepal earthquake got noticeable media attention due to India's humanitarian intervention which was seen from both positive and negative perspectives by the Nepalese populace.

#### **2.4.5. Institutional Approach to Disaster Response**

Many regional bodies have functions pertaining to disaster responses and many of them have operational hold in their respective areas such as the Monitoring and Information Centre of the European Union or the ASEAN Coordinating Centre for Humanitarian Assistance. They perform the responsibilities of data collection, ensuring and monitoring rehabilitation and relief processes and the accurate assessment of disaster conditions and locations. Certain organisations function as training and research institutions like the SAARC Disaster Management Centre. The International humanitarian community has realised the importance of institutional set ups for disaster management and DRR. States have realised that institutional mechanisms help in maintaining international order. Since, an institution does not require to be maintained like international organisations, they can help in solving the co-operation and co-ordination issues by following the prior available norms,

techniques, rules and principles. Thus, the institutional approach has significance and importance in disaster management.

#### **2.4.6. Co-operational and Treaty-Based Approach to Disaster Response**

There are regional co-operational organisations which strive to address issues like policies and strategies pertaining to response, preparedness and co-operation, which are of the Association of Southeast Asian Nation (ASEAN), the South Asian Association for Regional Cooperation (SAARC) and the Caribbean Community and Common Market (CARICOM) and African Union (AU). These organisations signed treaties to combat problems together at the regional level, however all treaties do not have any strict basis for compliance. Whenever a nation seeks international assistance in disaster response they frame it in terms of “requests” and use certain mandatory official languages which roughly align to the dictums of these treaties. Since these organisations have no standard norm of enforcement, they mainly focus on providing a supporting and organising framework. For example, the agreement of the Caribbean Disaster Emergency Response Agency (CDERA) strives to create coordinating units which are quasi-autonomous in nature. On the other hand, SAARC’s treaty adheres to the mandates of the SAARC Disaster Management Centre and mostly relies on the same to garner prompt responses. The treaty based method as opposed to a standardised institutional framework is responsible for instilling state and regional bodies with more authority and autonomy which remain susceptible to changes depending on the context.

#### **2.4.7. Community Based Disaster Risk Management Approach to Disaster Response**

This approach emerged during the community development movement in Africa and Asia in the response of colonisation. It involves local populations in different schemes and activities of disaster management. During the colonial periods, community participation was taken as a tool for the upliftment of the locals. As per the United Nations definition, this method consists of “the creation of opportunities to enable all members of a community to actively contribute to and influence the development process and to share equitably in the fruits of development (United Nations 1981:5)”. Other authors such as Krummchar (2014), Murshed and Nurul (2002) defines

community participation as an educational empowering process and as a powerful tool for information sharing among state and non-state actors (Khan and Jan 2015:361). It can be thus said that community participation is an important tool for mobilising people in disaster management activities. Through this approach human casualties, environmental problems and awareness towards natural phenomenon can be minimised with the help of local people.

#### **2.4.8. Geopolitical Perspectives in Natural Disasters Response**

Geopolitical literatures are extremely relevant to understand how a country's natural resources and liabilities determine its potential national power. Pertaining to geopolitical points of views, natural disasters can provide for a constructive assessment of how the methods of monitoring and dealing with our environment can influence our susceptibility and resilience to natural disasters.

Research which delves into the nuances of the security systems in the post-Cold War scenario highlights the structural determinants that prevent the emergence of consistent and approachable disaster responses. They have also showed us the interplays of humanitarian instincts and interventions and exclusionary and self-interested considerations of foreign policy, and how they subsequently affect the nature of international disaster management. Some studies in this field have delved into how natural disasters test both the practical validities of policies and the efficacies of rapid deployment systems to respond promptly to unforeseen and dangerous threats. This relatively novel analysis is especially effective in identifying the effects of using conventional military intervention for relief work and the relationships between disasters with the tactics of disaster management deployed by states. Therefore, such approaches concentrate on the rare kinds of dangers that ensue once the action is taken. All the perspectives discussed above in this section, indicate that an adequate and timely nature of international disaster management is rather complicated (Natsios 2006 in Coppala 2006:533).

The nature of disasters has also changed of late. Beck (2006: 332) recently has argued that disasters appear less randomly now and to a certain extent, seem relatively independent of purely geophysical shocks. Studies have shown that growing pollution, deforestation, urbanisation, climate change and coastal erosion catalyse

disaster occurrences. Parthasarathy (2013:43) has argued that Asian cities are becoming prone to climate-change related disasters as a result of increasing “urbanisation, high settlement density, especially in coastal areas, heterogeneity, migration flows and poor housing”. IPCC (2014a) reveals a concerning image of the region in terms of potential climate change. Deforestation and deterioration of mangroves and coral reefs can firstly hamper root and soil systems, increase erosion and the probability of flood reoccurrences and secondly, can reduce immunity from high tidal waves and flood thereby magnifying the impact of tsunami events. The recent acceleration in temperature rise (0.14- 0.20 degree Celsius) across Southeast Asia also is a potential threat for disaster occurrences.

Overall, it can be said that, these theories provide a guideline for pursuing the analysis of the impact of natural disasters on the complete security of a region. These theories explore the diversity and nature of natural disasters themselves. They have tried to identify the triggers for security disruption which cause the varying ranges of human vulnerabilities to elaborate on the trends in disaster relief for the assistance of the affected populations. They also scrutinise the domestic and international security management responses in the wake of a disaster. Finally, these theoretical approaches will help us in understanding the overall security impacts that influence and result from internal and external tactics of natural disaster management responses.

## **2.5 Security Issues and Natural Disasters in the Vocabulary of International Relations:**

Natural disasters in many ways serve to illuminate our understanding regarding security issues of national and international nature, focussing on the role and positions of the relief actions and the victims, to create newer understanding of what constitutes as a “security”. Firstly, disasters can provide instincts into the levels of preparedness that surrounds the affected society. It elaborates on both the adherence by the people to the norms of sound building and land use and the inabilities of the government pertaining to corruption and vested interests. Secondly, disasters can shed light on the limitations and capacities of affected countries to cope with the crisis.

Lindell (2016:814) explained that governmental responses to natural disasters may be one of the few ways available to determine the extent of-



“(i) the regimes willingness or unwillingness to compromise with national pride to accept offers of outsiders for help in disastrous situations; (ii) their capability or incapacity to rely on their own resources to manage a crisis; (iii) their attempts during and after a catastrophe to implement adequate technological remedies and (iv) the rate of rehabilitation and reconstructions in the aftermaths of the calamities (Lindell 2016:814).”

The 1990s, which were a decade ironically elected by the United Nations as the ‘International Decade for Natural Disaster Prevention’, had issued upon the world the “most costly outbreak of storms, floods and fires in history”. Since then, the costs of natural disasters to the global economy have been radically accelerating with 50,000 million dollar per year, killing an average of 1, 40,000 people most of them who resided in the Third World (Mandel 2002). The pattern of disaster relief has become disorganised and irregular. The aids received are being deemed as “highly variable and follows no logic of need and cost-effectiveness” (Wijkman and Lloyd 1988:112). NGOs have acquired a more crucial role in recent times and the military has emerged as the most determining body in governmental relief programmes.

Natural disasters first throw light on the governments’ internationalist commitments to burden-sharing and their potentially underlying altruism and compassion. They highlight the initiatives of aid providers to provide resources for others’ problems, not taking into consideration an assurance for some recognisable returns and to overlook past rivalries with the affected populations. Secondly, disasters may assess the speed and effectiveness of the donors’ capacity to employ their security forces to manage complex humanitarian emergencies overseas. In totality, natural disasters bring forward the actual scope and limitations of any country’s global or regional security doctrines.

The International Union for Conservation of Nature (IUCN) study proposes the importance of policy making and decisions undertaken in the scenario of an earthquake for the efficient execution of all the phases of disaster management. Essentially, the success of post-disaster management depends entirely on the processes of pre-disaster management. It became important in the scenario of the Indian Ocean tsunami of December 2004. The measures undertaken by the Indian Government in this aspect highlighted a lack of coordination among agencies to come up with an integrated approach that could be used for assessments on all grounds (including biodiversity, ecosystem, livelihood and economic valuation) during the

disaster management cycle. It shed light on the awareness that it is only through a holistic approach can one aim at reducing all types of vulnerabilities (physical, environmental, social and attitudinal vulnerability) and eradicate risks. A holistic approach also highlights gaps in the disaster management cycle, paving way for further improvements. Therefore, it can be said that an integrated approach to disaster management is impossible without the involvement and collaboration not only among local sectors but also the humanitarian commitments at national and regional levels (Kallesoe et al. 2008:29, 33).

Disasters exist in a correlation with globalisation, legitimacy, regime transformation, and perceptual trust/distrust. The most important theoretical perspectives place disaster management in the realm of geopolitics and eco-politics, by contextualising the connection of disaster impacts to security concerns. This work therefore, employs descriptive and analytical approach to understand the response to natural disasters by the government on porous borders. This would also help us to understand the nuances of the post-disasters changes in border security considerations and the adjoining policies to manage complicated emergencies (for example- Afghanistan-Pakistan border, India-Pakistan border and India-Nepal border security concerns). The emerging issues related to climate induced migration, disaster induced migration and conflict induced migration; therefore, provide a context for evaluating how human responses to disruptions are related to broader security priorities and the disaster management mechanism. In addition to this, there are few case studies which the researcher has found important. These cases are important because they have occurred in porous borders which are considered as threat to regional and national security. Thus, this would help us in understanding the need of disaster management and its relationship with security concerning issues.

## **2.6. Case Studies of Natural Disasters and their Response Experimentations**

Disaster response can be thought of as a group of “endogenous and exogenous” reactions. The measures and policies of such are aimed towards effective mitigating and preventing the impacts and effects of natural and anthropogenic disasters. The response part of the natural disasters situation can be understood as follows: if a natural disaster occurs, the impact and its effects inspire the methodologies of

systemically governed relief policies and pave way for and the creation of specifically designed measures (Bertrand 2000:216).

If natural disasters are unplanned emergencies, then their responses are likely to have high levels of situational interventions which can be related to general institutional stress. However, it has been noticed that sometimes disastrous situations provide space to stimulate political interference, which might connect to the division of the state machinery and potential intra-state activities of cultural and political identity groups. This is however highly dependent on societal pre-disaster conditions.

This could have probably been the case during the 1970 secession of Bangladesh from Pakistan after a major cyclone and the abolition of the Ethiopian monarchy in 1974 following a draught and war induced famine (Bertrand 1993; Chakrabarty 1978). This is mostly a result of some incidental effects of physical demands rather than institutional ones. However, in some exceptional cases, like that of the Sahelian drought based famine of 1974, the very nature of the emergency response emerged as an obstruction for long-term recovery. It ended up making the nation highly dependent on foreign assistances, thereby, paralysing the domestic capacity for autonomous social and economic recovery (Lateef 1982, Bertrand 2000).

U.S. disaster researchers have postulated two seemingly contradictory approaches to disaster response management, usually referred to as ‘command-and-control’ and the ‘emergent human resources’, or ‘problem-solving’, models (Dynes 1993). The command-and-control model proclaims three basic things. Firstly, government agencies and other responders need to be prepared to manage and control disaster situation to showcase their efficiency and to ward off potential panic. Secondly, disaster response activities need to be executed through centralised control, direction, and decision making and thirdly, effectiveness of response activities demand a hierarchical order regarding who should be in charge.

The emergent human resources, or problem-solving, model is based on the assumption that communities and societies are themselves usually self sufficient and can rely on local help and resources even during truly trying times. The model also recognises that flexibility is indispensable for responding entities and is best achieved through a decentralised structure that seeks to solve problems depending on when

they arise without the need of a hierarchical body (Dynes 1993; Kreps and Bosworth 1994).

For the Hurricane Katrina disaster<sup>20</sup>, the need for disaster management by the ‘command-and-control-oriented model’ gained prominence. It gave primary importance to the military. However, giving a larger role in disaster management to the military was rejected following the Hurricane Andrew (Fosler 1999:518). Post-Katrina debates on needed policy and programmatic changes began focussing more on how to effectively deploy military assets while giving primacy to disaster management being mostly undertaken by civilian institutions. Therefore, it can be said that disaster management currently focuses on arriving at a combined approach that includes both the ‘command-on-control’ and ‘problem-solving’ models.

### **2.6.1. Nargis Cyclone in Myanmar**

Cyclone Nargis<sup>21</sup> is one of the best examples to understand the governmental responses in countries where military has the utmost power on people. Myanmar can be considered as an outlaw state<sup>22</sup>, in which state violate basic human rights. This poses national and international threat to peace and security. On 3<sup>rd</sup> of May, 2008, Cyclone Nargis affected the country, bringing destruction to about fifty townships (in the Ayeyarwaddy division including Yangon (Rangoon)). It caused immense destruction, loss of life and internal displacement. It has been deemed as the worst natural disaster to hit Myanmar and the most devastating cyclone in Southeast Asia since 1991<sup>23</sup>. The Tripartite Core Group (comprising of the UN, the Association of South-east Asian Nations (ASEAN) and the Burmese Government) claim that the official death toll as of 24 June 2008 was 84,537 with 53,836 missing and 19,359 injured, though other agents claimed that the actual death toll might be closer to

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<sup>20</sup> Hurricane Katrina was an extremely destructive and deadly Category 5 hurricane that caused catastrophic damage along the Gulf coast from central Florida to Texas, much of it due to the storm surge and levee failure. The storm was the third most intense United States land falling tropical cyclone, behind the 1935 Labour Day hurricane and Hurricane Camille in 1969. Information gathered from National Hurricane Centre, URL: <https://www.nhc.noaa.gov/outreach/history/>

<sup>21</sup> According to Tropical cyclone category system, there are 5 categories of Cyclone for assessment. A Category 3 cyclone’s strongest winds are very destructive winds with typical gusts over open flat land of 165 - 224 km/h. These winds correspond to the highest category on the Beaufort scale.

<sup>22</sup> It is them applied in International relation theorist to the state whom they consider threat to international peace (ibid).

<sup>23</sup> Tripartite Core Group (2008), Post Nargis Joint Assessment, Comprised of representatives of the Government of the Union of Myanmar, the Association of South-east Asian Nations and the United Nations.

140,000<sup>24</sup>. Moreover, around 2.4 million people were at risk from severe sufferings (Than 2009:197).

The international community (UN humanitarian bodies, individual governments and a plethora of NGOs) provided immediate support and relief to the victims. The ruling junta of Myanmar however, was mostly unwilling to accept aid. It refused to accept the presence of foreign personnel in the country and only agreed to accept relief supplies if transported through civilian ships. It was because the junta found that the international community's intentions were rather unreliable and suspicious (Martin and Margesson 2008:5).

International Crisis Group (2008) Report explained that the nature of the Myanmar state complicated the eagerness to accept overseas aid. Firstly, the people experienced perpetual alienation from the state given the frequent application of brutal violence by security forces against pro-democracy demonstrators and undemocratic decisions involving the moving away of the capital from Rangoon to an isolated. Secondly, precedence given to self-preservation of the regime created an unbridgeable gap between the military elite and the common people. Lastly, the state displays an isolationist persistence in being self-reliant curtailing the political rights of the citizens and forcing them to have unquestioned faith and loyalty to the state.

These kinds of problematic state-civil society relationships play a defining role in disaster management in countries like Iran, India, Pakistan and Turkey (Ozerdem 2006: 398). This explains Myanmar's reluctance to avail overseas aid in the wake of Nargis cyclone as the same might hamper the authoritative role of the government exhibits over its people. This might indicate the possible instances where a government prioritises in the conservation of the status quo rather than the needs of its helpless citizens. For example, India declined external help in the wake of the 2004 tsunami (Bagchi 2004), Kerala flood (2018) and Uttarakhand Flood (2013) (Kashturi 2013) being adamant of its capacities to look after its citizens. In other words, states might believe that a need to accept external help is remnant of charitable intensions of

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<sup>24</sup> The majority of those missing people are now considered as dead, bringing the death toll to 140,000.

others and can be perceived as a sign of weakness. Therefore, the junta's claim to be self-sufficient in providing relief was built on flimsy tactics of diplomacy.

Even after the meeting of UN Secretary-General Mr. Ban Ki-moon with the Head of State of Myanmar, General Than Shwe<sup>25</sup>, on 23 May 2008 to coax Myanmar into unquestionably accepting foreign aids, the actual implementation of the same was still internally discouraged. It is considered that aid workers were able to improve situations but ongoing diplomatic complications hindered the progress (United Nations 2008).

A representative from the World Food Programme (WFP) reported that aid workers' mobility underwent restrictions. Most were allowed to access Yangon but the delta region that was most severely affected was denied access (BBC News 2008). The BBC also reported that the junta being hostile and uncooperative to the masses taking charge of urgent supplies by ordering them to return home.

### **2.6.2. Nura, Kyrgyzstan Earthquake 2008**

As discussed above, geopolitical factors play a larger role in International Relation. It becomes more complicated when controversial borders get affected by natural disasters. The Kyrgyzstan is a landlocked mountainous republic country; it is severely affected by disasters due to its geographic location. In this row, Kyrgyzstan earthquake in its southeast region too has cross border implications. On 5<sup>th</sup> October 2008, near the China and Tajikistan border there was a strong earthquake of 6.6 magnitudes. It took the lives of 74 people and injured 157; destroyed 20,000 houses in this region. This region has felt many earthquakes previously (The Nation 2008). Same year Sichuan earthquake of 7.9 magnitudes in China, hit the China and Kyrgyzstan both.

According to IFRC 2008 report, this region is prone to mega earthquakes. There is a possibility for earthquake of 8-9 magnitude. The Nura earthquake attacked the Osh region of the country which has been controversial for a long time. The country has

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<sup>25</sup> Senior General Than Shwe is also Commander-in-Chief of the Tatmadaw and Chairman of the State Peace and Development Council (SPDC) since 23 April 1992.

faced ethnic conflict between Uzbek and Kyrgyz communities for power. This region is suffering from corruption and lawlessness since 2001 this region's stability has been under threat which has affected political functions. During 2001, due to crisis of legitimacy, political leaders had become authoritarian which provoked the crisis in political system (International Crisis Group 2002). The head of the Republic is responsible for playing a leading role in managing disasters and donation related strategy. This country has suffered from shortage of resources and low skilled professionals and most of the region is surrounded by hilly areas which throw challenges in front of agencies during response. Almost seven Kyrgyz has been the gateway for USA after 9/11 attack. It holds strategic position in Central Asia. Russia and China being the foreign donors both have had strategic interest in the country. China has initiated a project for building construction in response to Nura earthquake (International Crisis Group 2017).

The country has signed major agreements with western and European countries for coping up with natural disasters. The Government of the Kyrgyz Republic signed the United Nations Development Assistance Framework for 2005-2010 (UNDAF) with United Nations country team. DIPECHO (The Disaster Preparedness Programme of the Humanitarian Aid Department of the European Commission) has implemented Disaster Preparedness Action Plan. It has also realised a need for strong regional cooperation in the disaster field. After an agreement in Delhi on Nov 6, 2007, they had signed the protocol for establishing a regional centre, Central Asian Coordination Centre for Disaster Response and Risk Reduction (UNISDR 2010:43-44). Despite all the agreement and policies, the country has protected itself from becoming colonised. It follows the Disaster Response Law (IDRL). Part IV of this legal document gives power to the affected state to determine whether international humanitarian organisation is eligible to provide humanitarian assistance or not (IFRC 2013; IFRC 2013a; IFRC 2013b). It is important to notice that, this law can be misused by any government. Once the state gets an authority to provide legal facilities to an organisation, it can use them according to their own political interest.

### **2.6.3. Malawi and Mozambique Floods 2010**

Malawi and Mozambique share a lacustrine border with each other on the lake of Malawi (also known as Lake Nyasa)<sup>26</sup>. Both the countries are having a long dispute over Malawi since the water body contains larger possibility to harness natural resources. Due to the porosity of the natural border, Malawi has provided shelters to Mozambican refugees during civil war and natural disasters events. This region is also significant because of oil resources. The next flood of 2015 displaced around 8,463 people (online)<sup>27</sup>.

The local Muslim leaders of the country are often the members of Mozambique Liberation Front (FRELIMO) who mostly adhere to the party mandates for kinds of social, political and personal successes. The rural populations tend to depend on FRELIMO members regarding any concerns. This reliance on FRELIMO members exclusively has negatively affected the quality of relief work that ensues after a disaster and the demands of the populations remain unrequited. Mozambique also has ineffective democratic institutions in all spheres plagued by low literacy rates in the electorate and ignorance about the rights and duties by the officials. Deplorable quality of governance creates unreliable security provisions and “no-go areas” where violence erupts after any kinds of emergency situations. In this scenario, the traditional responses which involve military intervention, crack-downs and imprisonment tend to be ineffective and aggravate risks and vulnerability rather than reducing it (Brown and Weimer 2010).

### **2.6.4. Nepal Earthquake 2015**

April 25, 2015 was a dark day for Nepal when a mega earthquake of 7.8 magnitudes, struck the country in the morning. It was estimated that 22.8 million people and 2,228 settlements had been affected. It was also calculated that 3.5 million became homeless. Reports show that 57,700 people died (Lord and Moktan 2017:128). The epicentre of earthquake was Barpak, Gorkha district; however, the continuous

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<sup>26</sup> *Lake Malawi, also known as Lake Nyasa in Tanzania and Lago Niassa in Mozambique, is an African Great Lake and the southernmost lake in the East African Rift system, located between Malawi, Mozambique and Tanzania. It is the ninth largest lake in the world and the third largest and second deepest lake in Africa*(<https://clubofmozambique.com/news/mozambique-malawi-border-reaffirmation-at-an-advanced-stage/>)

<sup>27</sup> Mozambique vs. Malawi, Online Accessed 13 March 2016, URL:<https://www.indexmundi.com/factbook/compare/mozambique.malawi>



aftershocks had brought more damage. It caused huge human and property losses. Sunkhani and Dolakha districts were affected the worst. Almost all the houses collapsed. The earthquake induced several mass movements in hilly areas. This caused deforestation, soil erosion and avalanches in Himalayan regions. This earthquake was not only limited to Nepal but also affected China, India and Bangladesh. This has damaged 31 districts out of 75 in Nepal. Additionally, five UNESCO world heritage cultural sites were also destroyed (Benfield 2015:3).

India was the first responder in the South Asia region that sent rescue teams to Nepal. It was an optimistic approach to cooperate with its neighbour country during the disaster. China has also provided massive support to Nepal. It had extensively worked in long-term rehabilitation which was initiated between the screen survey team and local people. It was however found that there was politicisation involved in the rescue, relief and rehabilitation process. According to the local people they had to suffer from discrimination by the government team. On one hand, they were providing relief fund to anyone who was living in the tent just to gain popularity, while on the other hand they took money from the victims to lure them in the name of providing them with a better place (MoPE 2016).

After the earthquake, the government of Nepal had declared national emergency and requested for international help for providing urgent rescue and relief support in affected regions to victims. The government has divided areas into eight clusters like Pakistan. Nepal government had followed the United Nations (UN) Mandate. Almost 160 organisations were involved in three clusters in Sindhupal Chawk. It has somewhere complicated the agencies involvement in rescue, relief and rehabilitation works because they had no information of the UN model. During the response, different types of relief items were distributed to the victims. They were provided with monetary help and compensations for the families who had loved ones that died (Wendelbo et al. 2016:25). This case was similar to Pakistan's disaster response.

On one hand, few groups of people could not get relief funds because they could not provide national identity proofs, while on the other hand the screening survey team found that rich people were also getting relief funds for building their homes through they were not eligible to get it. Due to this approach, the economic disparities increased. The institutional framework of disaster management was formed to help

people. Subsequently, it could not be completely effective according to locals' narratives (MoPE 2016:61). According to the local people, the government, international organisations and political parties played a crucial role in relief distributions. Locals claim that relief packages were distributed to those groups who have been vocal and had more reach. In fact, the identity cards were distributed to specific communities as per the recommendations of political parties. Rural communities (Brahman, Kumal, Rai, and Sherpa) had complained against governments and NGOs behaviour towards them. They got poor quality of goods. Relief packages could not be provided to them because of poor infrastructure. The Gorkha and Rai communities felt that NGOs were distributing government relief packages at night so that the deprived communities cannot complain against their discriminatory behaviour (ibid: 4). Apart from the political issues within the country, it had cross border implications as well.

The worst part of the Nepal earthquake was the vacuum in governance. Nepal was facing political transition from a long time which left the government unprepared for any kind of disaster. They were failed in making the draft for their constitution due to disagreement among leaders. Due to a lack of structural equality among the ethnic communities, the government institutions who were responsible for disaster management also responded in different manners (ibid: 24).

From the above discussion, it can be said that the role of the government, NGOs and political parties play an important role in managing disasters. Long and short term preparedness is mostly dependent on the nature of government response. It is the duty of the welfare state to protect the human rights of the citizens but what if state behaves as an authoritarian regime? Such situation creates the background for a civil war due to ethnic disparity and which can be turned to rebel against the government. Apart from the shortcomings, Nepal government however tried to balance their mismanagement efforts by drafting Post-disaster Needs Assessment. They conducted International donor conference for collecting relief aids. In this process, India and China came forward as leading donors. Norway, USA, WB and ADB also promised to provide aid for reconstructions. These efforts also increased the need for political stability or one can say that the earthquake has provided an opportunity to move faster towards stability and peace in the country for a resilient Nepal.

### **2.6.5. Bosnia- Herzegovina Floods 2014**

A devastating flood affected Bosnia and Herzegovina in May, 2014. Heavy rainfall affected both the countries due to having the highest rate of precipitation in last 120 years. The floods were caused by deforestation, soil erosion and constructions in vulnerability areas. The River Sava and its tributaries (largest river in the country) were at their peaks which brought larger destruction in the region. It formulated natural border between two countries. It displaced around 90,000 people and more than 40,000 people became refugees (European Union 2014:8). The total economic impact of the disaster on infrastructure, property, goods and livelihood reached around 2.4 billion EUR. It is estimated that the flood has mostly impacted agriculture sectors, private sectors, families, small and medium business and municipal buildings (Ibid:16).

The country Bosnia and Herzegovina is bordered by the three countries of Europe namely Croatia, Serbia, and Montenegro. These countries situated on the western part of the Balkan Peninsula are surrounded by mountains with thick forest. During the war, the internal flood protection system got damaged. The country fought civil war which has affected political stability and development of the region. The country did not have a disaster management plan (UNISDR 2008:10-12). The 1990s war of Balkan triggered larger political consequences. It displaced thousands of people in the region. It caused highest demographic changes in the villages and towns. As a consequence, it created mistrust and intolerance among the community. It brought failure in reconciliation efforts at community and nationals level. A minimal community level integration fragmented the society and caused the emergence of a small separate political identity and instigated political instability in the region (Pasic 2015:7-8).

Hence, it can be said that disasters are not the outcome of physical movements only but occurs due the failures of the political authorities. The nature of disaster management processes are a result of the amalgamation of many theoretical approaches of International Relations. As per the demand of the thesis to study and analyse the factors that shape disaster management in today's world, adequate theoretical perspectives have been found to aid us in the process. These theories have provided the background to understand how the international political scenario and

political structure of the country affects the strategies implemented by governments to address disaster management and the nature of institutional responses. Therefore, the next chapter will look deeper into the international political scenario and existing disaster management institutions in the South Asian countries to understand the nature of disaster response within the given theoretical framework.

# **Chapter 3**

## **Responses to Disaster Management: Regional and International Dimensions**

### **3.1 Regional Context**

The term 'South Asia' is not that old as it originated in the 1960s. It is a confluence of eight sovereign countries of the world named India, Pakistan, Sri Lanka, Bangladesh, Nepal, Bhutan, Maldives and Afghanistan. These independent countries are also the members of the SAARC organisation. SAARC, an inter-governmental organisation was founded in December 1985 for regional cooperation on various aspects of international politics. The political and social environment of South Asian Region (SAR) has always been in the discussion of international political sphere, which has made important impacts in the eastern, western and European foreign policies. However, South Asia as a region is debateable issue among the political thinkers. According to Cohen (2013) South Asia as a region has been known to be the least politically and economically integrated region. It is also known as one of the most violent regions due to the history of colonial imperialism. The world's most populated region is dealing with extreme poverty, malnutrition, poor infrastructure, illiteracy, gender inequality, wage gaps, labour migration, climate change, ill health and finally natural disasters, which is continuously hampering the overall development of the region (World Bank reports 2007, 2008, 2009, 2010, 2011, 2012, 2013,2014, 2015, 2016,2017).

Meanwhile, the present scenario of world politics where geography prevails in every matter, shows that the relationships between the states are generally transforming due to traditional security, political, economic or cultural issues and so on. On the other hand, it can also be due to non-traditional or non-military security issues such as environmental degradation, climate change, technology or the recent emergent issues of disaster emergencies.

After the huge crisis of tsunami 2004, disaster management institutions started evolving in the South Asian countries. Only Nepal which is the most disaster prone region for earthquakes and floods, has established the Nepal Centre for Disaster Management (NCDM) in February 2002 to deal with the effects of disasters in the country. The National Disaster Management Authority (NDMA) was consequently established in 2007 in Pakistan, in line with the Act, at the national level. India and Sri Lanka both have formulated National Disaster Management Act(s) in 2005. Bangladesh (which falls under the top ten vulnerable countries to various disasters)

has established the Department of Disaster Management (DDM) and associated it under the Ministry of Disaster Management and Relief after the Disaster Management Act 2012 (Online data, NDMA's websites of each countries).

The perceptions about the cause of disasters have still not undergone drastic changes but the management approach towards disasters have definitely got better with time. Humanitarian response towards disaster is the result of catastrophes which have happened in the world till now. Simultaneously there is another notion of humanitarian emergencies which does not specifically talk about Natural Disaster emergencies but talks about the Conflict Induced emergencies. It mainly talks about man-made disasters. Here, the perception of the humanitarian agencies to cope and manage the disaster emergencies, arises. It finally led towards co-operational approach in disaster field.

The motivation for formulating regional forums to co-operate with each other is not a very complicated idea. The motives behind this are to resolve disputes and to build conducive environment to sustain and develop peacefully. Mostly regional forums make compulsions for discussion on controversial things which makes things problematic in long run .

### **3.2 Complexity in Regionalism**

The region of South Asia could not come out as a strong neighbouring region due to many prevailing insecurities. The countries lack trust among each-other which leads to conflict. The region is struggling with the growth of terrorism and social pressure which takes the form of religious, ethnical, linguistic, cultural and other kinds of conflicts related to nation-building struggles. South Asia is regarded as a 'region' in specific terms, because of the shared colonial legacy of its nations. Most of the countries in this region were colonised under the British empire. This region can also be considered as Indo-centric if we combine the principle elements of national power such as geography, population, trained man-power, natural resources, economic power, nuclear capacities and stable democracy (Harshe 1999:1100).

The issue of terrorism in South Asia has highly affected the political relations in the region. As of now, most of the terrorism and other related conflicts in the region have their origin in the nation building dilemma faced by the sovereign countries. India

being a prominent country of South Asia, formulates strategies that are deemed low by many other countries of this region. What further complicates the situation is the vital importance that religion enjoys in nation-building and co-operative strategies (ibid:1102).

India makes active political considerations to separate religion from politics, which is an important precedent in its constitution. The merits and demerits of India's secularism have often created difficulties for the state by giving rise to problems such as social conflicts (intra and inter-state and international conflicts), terrorism, violence, ethnic conflicts, migration and refugee problems. These conflicts that feature in the inter-state relations in the region, get deteriorated by the external intervention, like Tamil issues between India and Sri Lanka, Kashmir issue between India and Pakistan and Maoist insurgency in Nepal by the intervention of India and China.

In this row, Indo-Pak-Bangladesh relationship has always been unpredictable and unfortunately controversial. In addition to unsettled territorial matters including Kashmir issue and Chakma refugee crisis and water sharing-disputes on Indus River and Teesta river, their political and economic relations have often affected the domestic developments. In past years, the countries have blamed each other for water scarcity, Kashmir turbulence, terrorism and illegal migration (ibid:1102). The present scenario of South Asian foreign policy has underwent various changes after 2014. Indian Prime Minister Narendra Modi, decided to invite all the members of South Asian Association for Regional Co-operation (SAARC) in the swearing in ceremony as the PM of India, creating hope for more regional engagement. However, this effort could not sustain for a long time because within three months India ruled out dialogues with Pakistan. Instead, India started focusing on developing better relations with Bangladesh and Nepal. Price (2016:1) asserts that Mr. Modi's 'neighbourhood policy' is less inclined towards cultural similarities and are more into economic development. India has witnessed political instability in abundance in neighbouring countries in the recent years. In this situation, India could be in a unique position in promoting stability in the region. Instead, its initiatives have suffered because its neighbours have perceived it as a dominant power. Meanwhile, regional political parties also play an important role in changing the equations between the countries. For example, due



to federal set up in India, politicians of West Bengal state have thwarted the water sharing proposal on the Teesta river with Bangladesh (ibid:2).

In 2018, the increase in terrorism inflicted by Pakistan in India, affected the SAARC summit. All the South Asian countries condemned the Uri attack in Kashmir and boycotted the SAARC summit which was supposed to happen in Islamabad. It again destabilised the regional stability by the soreness of the Indo-Pak relations. They are experiencing mistrust and communication gap with each-other. If we look into the recent pros and cons of regional co-operation, we can analyse, how the regional efforts that have been made by India and its neighbouring countries have affected disaster management efforts in long term.

The above discussion shows that political relationship of South Asian countries are not very friendly. Despite sharing of common borders and similar cultural understanding, this region faces ethnic problems, internal conflicts, inter-state disputes and absence of similar regional strategic consensus. All these have led to negative effects in the progress of the regional disaster response strategy. To promote peace, stability and growth in South Asian countries, various lessons can be and should be taken from European Union Countries.

Barring the political conditions, mutual suspicion presents difficulties for regional co-operation among South Asian countries. The huge differences in geographical sizes, populations, natural resources, political and economic positions among the members within the group can potentially create some fear of domination towards the stronger units. Such differences among members pose significant obstacles for regional co-operation in disasters.

South Asia remains to be highly prone to the impacts of the climate change, which includes natural disasters occurring from the same and a rise in the sea level. Development in South Asia is mostly dependent on reducing carbon emissions and mitigating climate change effects (World Bank 2007:52-56; IPCC 2018:9).

### **3.3 Trends of Disasters in the Region**

The last three decades have indicated towards a rise in the frequency and adverse effects of natural disasters in South Asia. As mentioned in the previous chapters, the rise in the events however also brought about a relative decrease in the number of

human casualties in recent times as compared to earlier times. Towards the later years of the 1990s there have been disasters which had different triggers ranging from being industrial to agrarian and also ranged from unpredictable earthquakes to relatively deductible flood events or storms (UNISDR 2004:1).

If we look at other parts of the world, there were eighty four natural disasters recorded in the 1990s. Countries like Germany, Switzerland and Austria suffered floods in the 1990s where a disaster insurance was implemented to cover about forty percent of the damages and Venezuela on the other hand in the very year had barely four percent of its damages covered through insurance (UNISDR 2004:9-10). In the year 2002 , there was a total of five hundred disaster events worldwide which incurred 55 billion dollars of damages of which 13 billion was insured in total damages. The huge amounts of financial damages can also imply that the amounts are being inadequately implemented where larger concerns of poverty remain overlooked (UNISDR 2004:3). During the years of 2005-2014, there were 1,625 disaster events reported in Asia Pacific region where half a million of people perished and almost two million remained adversely affected. This available data shows that Asian countries get affected by natural disasters more than European countries (United Nations ESCAPE report 2015:22). A CRED (2014) data involving the frequency and nature of disaster events show that floods top the charts in terms of recurrence as being the most common type of disaster. This shows that the disaster frequency has increased rapidly after globalisation (online: EM-DAT)<sup>28</sup>. EM –DAT data records also demonstrates that the occurrences of hydro-meteorological disasters have increased with the time, whereas the number of geo-physical events has remained rather consistent (CRED Annual Reports 2010, 2016).

Prof. G Sapir in his ‘2018 Review Of Disaster Event ‘said that India is the top most country in 2018 where 23,900,348 people got affected by disasters and Philippines is second highest disaster affected country where around 6,490,216 people were affected and China stands third largest affected country with 6,415,024 casualties. Here, it can be said that there is need to analyse the total population verses affected pollution ratio of the country. Here, one can also find the research gaps in data collections. However, the data only provides the number of affected countries, and does not explain that

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<sup>28</sup> The available data is collected from provided link [Online: web] Access 13 November 2018 URL:<https://www.emdat.be/>

whether number of disasters and its magnitude is similar or different because India and China both are highly populated country in the world. Through the analysis of affected population ratio in comparison to total population, here Chinese government is in much better position than India in handling the effect of disasters.

The impact of human actions, climate change and environmental deterioration and the rise of disaster risks have been becoming more significant by the day. It is also to be noted that disasters do not adversely affect just the vulnerable sections of the society and poorer countries but also those areas which have commendable amounts of development and means. Countries like Czech Republic, the USA, France, Canada and Italy in recent years have witnessed huge losses of life and property due to some magnanimous floods in recent years which have brought existent norms of protection and rehabilitation under question (UNISDR 2004).

The unwanted event of the tsunami took place in South Asia in 2004-05, in which Sri Lanka, southern parts of India, Maldives, Indonesia and few others of the south and south eastern region faced major devastations. Apart from this, there have been significant socio-political changes in the region in the past couple of years which are worth mentioning. Bangladesh experienced continuous floods in recent times which catalysed political strife and hence allowing the violent situations to persist. Nepal faced damages from various disaster events where the volatility of its political situation increased. Political transformations in other South Asian countries involved a change in the electorate in countries like India and Sri Lanka where policy considerations were pledged to be addressed benefiting the poor and rural masses more. Pakistan was facing commendable development in most sectors which was hampered in the following years of the 2005 earthquake which devastated areas of India and Afghanistan as the 2010 mega flood disaster was soon to follow.

The tsunami brought in unprecedented amount of damages in all sectors. Sri Lanka experienced the death of almost thirty thousand of its citizens and experienced about a billion dollar of costs for the rehabilitation. In parts of India, the tsunami caused high amounts of casualties and an immense loss of livelihood especially affecting the fishing community the most. External agencies like the World Bank (WB), Asian Development Bank (ADB), the Japan Bank and the United Nations (UN) extended their help in covering damages and assisting in relief and rehabilitation work. Apart

from events like tsunamis, the region is also prone to rapid temperature variations which cause adverse effects. The World Bank's Annual report (2018) recorded 2017 as the hottest year this far which has catalysed several disaster-like events like flooding. Slow-onset impacts of climate change like sea level rise, crop failure and water scarcity can also lead to dwelling losses for many sections of the population (World Bank 2018:32). The WB report indicates that Groundswell has been anticipating the Internal Climate Migration (2018) by 2050. According to the same, more than one hundred and forty million inhabitants of South America, Sub-Saharan Africa and South Asia, face possibilities of migrating to lesser vulnerable regions to mitigate the effects of climate change. In South Asia alone, the number of "internal climate migrants" could be of about forty million which is around 1.8 percent of total population in the region. The WB report suggests that by the year 2030, forty to sixty percent of the world's poorest populations will be dwelling in conditions marked by extreme fragility and vulnerability where they face adversaries of violent extremism, climate change, insecurity and pandemics (World Bank 2018:31).

Despite being one of the fastest growing regions in the world, South Asia is plagued with various social and political problems with huge amounts of social exclusion and inadequate infrastructure. The region faces issues like high rates of migration influxes like the recent influx of over six hundred thousand refugees of Rohingya Muslims escaping Myanmar to seek asylum in Bangladesh (World Bank 2018:66). The rise in conflict and fragility has aggravated cases of displacement and tensions in the border areas. These can be absolved through adequate regional cooperation and integration; on the contrary, South Asia remains to be one of the "least integrated regions in the world" (ibid:66).

The sub regions also experience natural hazards such as glacial lake outburst floods, storm surges, droughts, cyclones and heavy precipitation. It is associated with disaster displacements where thousands of people every year are forced to leave their original places. It is regularly making South Asia as one of those regions with the largest numbers of people displaced. The population is projected to increase by 25 percent. It is expected to increase to about 2.3 billion by 2050, presenting challenges for both livelihoods and urban areas. This region would have to face the largest numbers of food insecurity by 2050 (World Bank 2018:3). It is estimated that by 2030, Asian and

pacific regions need to increase their food supply by fifty percent. Since the region is already exhausting the usages of existing arable land, crop production can be increased by relying on water based resources and finding alternate measures (UN ESCAPE Report 2015:27).

Many of the disasters in Asia and the Pacific are of a trans-bordering kind. The regions have seismically volatile frontiers that transcend borders of several countries. South Asia three ocean basins which serve as passages for cyclones to travel to other countries. The sharing of river basins by many of the countries lead to the transfer of flooding events. Additionally, excessive snowfall and glacial melting can bring about flooding and draught simultaneously in various countries (UNESCAPE Report 2015:25). Countries of South Asia are connected by a common geography where most disaster events of all kinds pose cross border impacts. Some examples of such include Koshi flood in Indo-Nepal border (2008), the Kashmir earthquake (2005), the tsunami (2004), and recurring tropical cyclones in India and Bangladesh. The ways to eradicate the same would include regional stability, good governance, economic development and effective environmental management. The occurrence and impact of disasters due to natural hazards are not confined to a country's political boundary. Consequently, natural disaster do not respect national boundaries.

### **3.4 Existing Institutional Arrangements in South Asia at the Countries Level**

Due to the severity of natural disasters followed by man-made disasters, many South Asian countries have followed Hyogo framework and implemented institutional set up for disaster management and DRR in their countries. These initiatives have helped South Asian countries in minimising the human casualties up to some extent. In this section, reseacher shall be dealing with the regional and sub-regional efforts to implement institutional set up in their respective countries. Through these Institutional arrangements details, one can easily understad that why disaster management institutions needs to be an autonomus body rather than working under central governments.

#### **3.4.1 India: Organisational structure of Disaster Management**

India is among the top ten most disaster prone countries in the world. India is vulnerable to geographical, geological (economic loss) and climatic conditions. India

is prone to disasters for many other reasons such as environmental degradation, population growth, and rapid industrial development after globalisation due to economic growth, deforestation, mismanagement of river system, non-structural unsystematic development. The major rivers (Ganga, Brahmaputra, and Indus) flow through the Himalayan region which makes it vulnerable to disasters.

The country can be divided into different regions:

- i) Himalayan region- it is prone to earthquake and landslide
- ii) Alluvial plain region- it is prone to severe flooding and drought.
- iii) Hilly part of peninsular region-it is prone to earthquake.
- iv) Coastal region- it is prone to cyclones and heavy storms.

Western part of India is prone to drought, cyclone, and urban flooding while eastern part of India hugely gets affected by monsoon flooding. The southern part of India is affected by cyclone, tsunami and coastal erosion. It also affects neighbouring countries. Due to calamities, it faces huge amount of economic loss, property and human loss (Centre for Excellence in Disaster Management and Humanitarian Assistance, 2018). After observing the continuous losses, the Indian Government came up with major changes in the Disaster Management approach. The government adopted a pre-disaster pro-active holistic approach from post-disaster reactive approaches for minimising risk, which started focusing on preparedness, mitigation and prevention. Only after the tsunami of 2004, the Indian Government proposed the Disaster Management Act in 2005, following which, in December 2009, the National Disaster Management Policy was adopted by the Indian government. After passing the 2005 Act, a three-layered institutional body was set up. First, the National body for disaster management was set-up under the chairmanship of Indian Prime Minister which is known as National Disaster Management Authority (NDMA). Second, the State level body under the Chief Minister of the state and district level body under the Collector, and third, DM/ Deputy Commissioner were set up (NIDM 2011:55).

This Act also provided the authority to set up National Institute for Disaster Management for providing support to the government in policy making and capacity building. The National Disaster Response Force (NDRF) was another important professional body which provides backup for response purpose. Within this Act, financial mechanism has been set up for centralised distribution of disaster funds.

This fund mechanism provides support to all the three layer bodies for quick responses to calamities. The 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendment also ensured the role of local bodies in managing disasters (Ibid: 57).

### **3.4.2 Nepal: Government Organisational Structure and Policies**

Nepal is highly vulnerable to disaster due to its geographic location. It gets affected by earthquakes, floods, landslides and drought. Nepal is a land locked country which has eight out of ten highest peaks including the Mount Everest. Responsibility to manage disasters in Nepal is a decentralised process. There are different Regional Disaster Relief Committees (RDRC) in all the seventy five districts of Nepal. Ministry of Home Affairs (MoHA) is the key agency which is responsible for implementing the disaster policies in the country, like India. There has been political instability in Nepal which has affected disaster management structure for a long time. Nepal's disaster response structure and its mechanism can be analysed through the 2015 earthquake response efforts. The 2015 earthquake's response efforts show that civil-military efforts were affected by existing national disaster response structure and local disaster preparedness and response capacity. National strategy for Disaster Risk Management (2009), National Disaster Response Framework (2013) and Disaster Management Act (2015) frameworks provide detailed guidelines and policies and laws to the active actors and non-state actors. The leading agency (MoHA) has been criticised for not being effective during earthquake responses.

### **3.4.3 Sri Lanka: Organisational Structures and Disaster Policies**

The upper body of disaster management in Sri Lanka is chaired by the President of the country and vice-chaired by the Prime Minister. It also involves different ministers in various phases of management sectors. The Ministry of Disaster Management and Human Rights is the main council which is responsible for implementing the policies in the country. The Parliament Select Committee has been formed to define an institutional and legal structure in 2005, recommending National Disaster Management Act No. 13. There are ministries in the country which are working in the disaster management field that include National Council for Disaster Management, Ministry of Disaster Management, Department of Meteorology, Disaster Management Centre, National Building Research Organisations, National Disaster Relief Centre, along with other international agencies. Decision making in

Sri Lanka is centralised like other South Asian countries and they maintain hierarchy within disaster management system (Sri Lanka, Disaster Management Reference Handbook 2017:26-27).

#### **3.4.4 Bangladesh: Organisational Structure of Disaster Management**

Bangladesh has started paying attention on disaster issues after facing two destructive natural disasters namely the 1991 cyclone and the 1998 floods. Disaster management in Bangladesh has undergone a lot of changes since 2009. Due to a shift in Government administration, disaster management focus shifted from relief and rehabilitation activities to DRR activities. There are different leading government agencies which are working to facilitate their help in policy guidance and co-ordination. The Bangladesh government has developed a five year National Plan for disaster management. Firstly, it was developed for the years 2010-2015, and then for the years 2016-2020. The country has also stipulated Standing Orders on Disaster (SOD) (redrafted in 2010) to outline each agencies and sectors' duty and their responsibilities for co-ordinating during joint operations and collecting the logistical and non-logistical resources in order to support disaster management.

The official enactment of disaster management in Bangladesh has taken place in 2012. It provides the information regarding the new legislative framework and disaster management institutional set-up in the country. The head of the NDMC is the Prime Minister of the country, under whom disaster management policies are formulated. Under this apex body, the Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC) is the responsible body for implementing important policies and decisions. This body is assisted by the National Disaster Management Advisory Committee (NDMAC). Presently, the Ministry of Food and Disaster Management (MoDMR) is the focal government body for disaster management and co-ordination. Apart from the national agencies and government bodies, numbers of International organisations are other participants who are working in the country from a very long time in different phases for disaster management structure (Bangladesh, Disaster Management Reference Handbook 2017: 34-35,47-48).



### **3.4.5 Bhutan: Organisational Structure of Disaster Management**

Bhutan is a small country in South Asia and gets affected by multiple natural hazards. Due to its geo-physical structure, it is prone to earthquake, glacial lake outburst flood, fire, droughts and landslides. As per the UNDP data facts, according to Bureau of Indian Standards, Bhutan comes under either Zone IV or V (Project Facts-Bhutan, UNDP 2009). Historically, Bhutan has faced several natural disasters which fallen under 4-8 on rector scale. In 1897, 1905, 1934, 1950, 1980, 1988, 2006, 2009 earthquakes were recorded as major disasters. According to ICIMOD publications, out of 2794 glacial lakes, around 25 lakes have been noticed as potentially threatening lakes. In 1957, 1960 and 1994 Bhutan has faced glacial lake outburst floods. This country is also vulnerable to flash floods; its eastern and southern regions are the most prone to frequent floods (RGoB 2011).

Even though Bhutan has faced several natural disasters in the past, it had never thought of forming a law or guideline for disaster management until 2006. Before the Disaster Management Act of 2013, NDRMF (National Disaster Risk Management Framework) which was taken by Hyogo framework of 2005-2015, was drafted and adopted by the government in 2006. It was the 2009 earthquake which has compelled the Royal Government of Bhutan to frame a legal system of disaster management in the country formally. In 2009 the Bhutanese government started framing the drafts for Disaster Management Act; where 2011 earthquake has played a turning point. It speeded up the process and therefore after holding up ten parliamentary sessions, the Disaster Management Act on 27 February 2013 was officially enacted. Like the other South Asian countries, NDMA is the apex body for decision making on disaster management in Bhutan. It works under the Prime Minister, as the ex-official Chairperson, helped by the Ministry of Home and Cultural Affairs as the ex-official Vice chairperson.

NDMA is responsible for giving approval to strategies, policies, contingency plans, making risk zone mapping, for taking structural and non-structural measures during floods and other natural disasters. It also sets guidelines, standards and procedures for disaster management. This institution also takes the responsibility of resources allocations. It directs other government and non-government agencies to include and implement the DRR related plans, policies and related projects into mainstreams. It

also ensures to establish an Inter Ministerial Task force in the disaster prone regions. Department of Disaster Management is responsible for making Preparedness and overlooking the Mitigation Division. It also heads over Response and Early Warning Divisions along with Recovery and Reconstruction Division. Bhutan's disaster management is also centralised. It has organisations at the local level. According to Disaster Management Act of 2013, it is mandatory for each Dzongkhag Administrative Authority to establish Dzongkhag Disaster Management Committee (DDMC) under the head of the Dzongkhag who will be the Chairperson of the committee (Disaster Management Act of Bhutan 2013; National Disaster Risk Management Framework 2006; Royal Government of Bhutan report 2009).

#### **3.4.6 Maldives: Organisational Structure of Disaster Management**

The Republic of Maldives, a small island country is one of the highly vulnerable countries in the world. It has two seasons in particular; December to April (the dry season which is called Iruvai) and May to November (rainy season is called Hulhangu). This country has been facing multi prone risks; global warming and climate change induced threats continuously. It is enclosed by the coral reefs surrounded by water-filled lagoons and natural water channels. This country is under threat because it is made up of ninety-nine percent sea water. Due to this, it is highly vulnerable to beach erosion. In past years, 1812, 1955 and in 1987, it was flooded by strong storm surge (ADRC, Maldives Country report FY2014B:5-8).

This country has Presidential form of Government. The President appoints the cabinet with the consent of the People's Majlis (Parliament). People in Maldives live closer to sea; even major important buildings like hospitals, airports, schools etc. are located near coastlines. Urban and Rural both are coastal communities near shorelines is highly prone to natural disasters due to close human settlement. Maldives has not faced many mega disasters before the 2004 Tsunami, which was an eye opener for the local people and government (ibid: 10).

The President of the country declared to establish the NDMC (National Disaster Management Centre) post 2004 Tsunami in Indian Ocean. Later, NDMA (National Disaster Management Authority) was created with the Disaster Management Act 28/2015. It serves the purpose as a leading Institution for disaster management and DRR. It provides a central place for coordination among different sectors and

agencies. Being a small country, Maldives has very few national organisations, apart from NDMC. Thus, it is mostly depended on international organisations like United Nations, UNDP, Red Crescent society and so forth. NDMC is the responsible authority which conducts workshops and awareness programmes with the help of National Defence Force (ibid: 16-18).

### **3.4.7 Afghanistan: Organisation Structure of Disaster Management**

Afghanistan is a landlocked country that shares borders with Pakistan in the east and the south, Iran in the west, China to the northeast and Turkmenistan, Uzbekistan, Tajikistan in the north. Afghanistan is considered as a country rich in mineral resources. The country is also invaded by Soviet Union from 1979-89. The Soviet Union could not defeat the Mujahideen which ultimately led to a civil war in the country; and as a result Taliban regime was established in the country in 1996 and remained till 2001. After signing the Bonn Agreement (an interim power sharing agreement from Burhanuddin Rabbani to Hamid Karzai after USA intervention) a democratic government was formed under elected President Hamid Karzai. It should be noted that Afghanistan has suffered continuous civil wars due to which it remained a political instable country. The economic development was hampered by wars, natural and man-made disasters, extreme weather and geo-physical locations (Afghan Red Crescent Society and International Federation of Red Cross and Red Crescent Societies 2013:13). It is recorded by the World Disaster report (2016) as the most vulnerable country in the world. This country is highly prone to earthquake because it lies along the Indo-Eurasian tectonic plates (ibid: 14). In addition to this, the country is recorded to have formed the second largest refugee group after Syrian refugee crisis.

Due to several years of wars, people of Afghan fled to neighbouring countries. Presently 6.3 million Afghan refugees are living in Pakistan which has created another security dispute between Afghanistan and Pakistan. According to UNHCR only 2.5 million (till 2018) are registered refugees in Pakistan (UNHCR 2018, Online)<sup>29</sup>. The document of Red Cross also reveals that since 1980-2010, due to earthquakes, around 8,500 people has been died. It caused extreme infrastructure and

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<sup>29</sup> The data is available on the provided link [Online:web] Accessed 4 October 2017,URL:<https://www.unhcr.org/afghanistan.html>

property damages in the country. Moreover, it has also faced severe flash flooding. According to ANDMA, almost 220,000 people got badly affected by the flash flooding between July and August 2010 and left thousands homeless. Pakistan was also affected by Indus river flood during the same period (it will be discussed in chapter four in detail). According to Disaster Risk Profile report of 2015, since 1980, earthquake has killed 10,000 people, and other forms of natural disasters have affected 9 million people. It caused around 20,000 fatalities. Floods, which are the most frequent natural hazards, caused \$54 million annual damage every year. The mega floods caused \$500 million damages till 2015 (World Bank report 2017:5)

Afghanistan National Disaster Management Authority (ANDMA) is the leading institution at the national level. It is responsible for managing and co-ordinating all related aspects of disaster management cycle. Disaster Response Law of Afghanistan defines the guidelines and rules for the state to respond in the emergencies. Article 6 of the chapter says that National Disaster Management Commission will see all type of disaster related issues. Article 7 in Chapter two has distributed the responsibilities among NDMC. The President will be the head of the Commission and Vice-President will be the Deputies head of the Commission. The other involved ministries will work with the Ministry of Defence during disasters. Article 8 has given clear guideline to executive authorities to follow the duties. Article 10 says that the Office of Disaster Preparedness (ODP) will manage and co-ordinate all man-made and natural disasters related affairs in the country. Article 13 says that ODP can establish disaster offices at the provincial and district level if needed (Relief Web, online)<sup>30</sup>.

### **3.4.8 Pakistan: Evolution and Practices of Disaster Management**

An Emergency Relief Cell (ERC) was built up to oversee disaster in the Cabinet Secretariat under government of Pakistan. The role of the government of Pakistan, NGOs, media, civil society and the UN was limited before the 2005 earthquake of Pakistan as they were kept out of the framework of disaster management. Subsequently, after the devastating earthquake of 2005, the state wanted to strengthen and strategise the institutions to minimise the losses caused by disasters in Pakistan. As a result, the National Disaster Management Authority (NDMA) was built in March

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<sup>30</sup>[Online: web] Accessed 13 March 2017

URL:[https://reliefweb.int/sites/reliefweb.int/files/resources/Afghanistan\\_DM\\_Law\\_%20Englsih\\_Versi\\_on.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/Afghanistan_DM_Law_%20Englsih_Versi_on.pdf)

2010. It was realised that having NDMA programme would not be much effective unless there is pre-disaster arrangement and management in the form of DRR (Malik and Cruickshank 2016).

From that point onwards, a progression of organisations have been set up that incorporated Earthquake Rehabilitation and Reconstruction Authority (ERRA), National Institute for Disaster Management (NIDM), Provincial Disaster Management Authority (PDMA) and District Disaster Management Unit (DDMU). The DDMU facilitates or executes the strategies at grass root level of every region. United Nations Development Program (UNDP) is supporting governments of these activities by giving technical help, learning to share, and money for work, livelihood opportunities and help in creating infrastructure, aptitude for development, psycho-socio guiding and disaster management trainings (Adam 2014).

The 18<sup>th</sup> constitutional amendment (April 2010) stretched out disaster management to the regions led by the Chief Minister of each region. The District Disaster Management Unit (DDMU) facilitates with PDMA for giving data and management of the disaster. It is additionally in charge of recovery, rehabilitation and reconstruction after any disaster and has an immediate connection with the people. In the aftermath, of the 2005 earthquake, nearly 160 local regional and international NGOs responded to the disaster. They have the western countries and number of Islamic neighbouring countries supports (Crisis Group report 2005). They are building strong regional forum to handle disasters apart from South Asia. This is worth to say that Pakistan is also looking for SAARC alternatives by signing memorandum of understanding (MOU) with Islamic countries on disaster management after cancellation of 19<sup>th</sup> SAARC summit. They have also built-up their strong strategic connections with China and USA. Recently, Pakistan and CUBA signed MOU for disaster management on July 2017. They are also strengthening their disaster capacities by launching joined programmes with ASEAN countries. Pakistan is providing its assistance to the Islamic countries like Turkey, Iran and other Organisation of Islamic Cooperation (OIC) member countries (Alpay 2014:51).

MOU was signed among NDMA and private associations focussing on humanitarian assistance at Islamabad in 2013. The point was to fortify NDMA and increase institutional capacities to oversee disasters. At the local level, Pakistan is experiencing

inter and intra-state disputes on various social, political, economic and cultural issues, which are hampering disaster management activities at the domestic level. There is absence of provincial co-operation among provinces and local disaster management institutions due to ethnic diversity at the different structural level. Pakistan's picture as a terrorist supporting country is most significant factor in getting assistance from external humanitarian agencies at the international level. The trans-boundary water and political clash between India and Pakistan is considered as another rising measurement in disaster management at the regional level (Adnan 2014).

The establishment of autonomous Disaster Management Institutions to manage trans-boundary disasters has become a necessity both at global and regional level. It is required for effective regional methodology for risk and damage assessment, combined institutional framework to minimise future disasters. With extreme changes in institutional setup, the Government of Pakistan has started focusing on climate change policies after establishing NDMA, National Disaster Risk Reduction (DRR) Policy and Community Based Disaster Risk Management (CBDRM) approaches to address DRR based on the Hyogo Framework of Action (HFA). The National Calamities (Prevention and Relief) Act of Pakistan 1958 was the oldest legal instrument to direct the prevention and relief. Under the Calamity Act, in every area, there were relief commissioners, who administered and facilitated the relief and rehabilitation efforts. Provinces have additionally created a Disaster Management Plan, for example, NWFP Disaster Plan 1978 (Rahman 2010). The Provincial Board of Revenue has been made in charge of gathering information about the damages caused by a disaster and furthermore to keep a record of payments made to the people.

The UNISDR aims to incorporate the three main strategic goals mandated by Hyogo Framework for Action. These include, involving "DRR into sustainable development policies and planning, developing and strengthening institutions, mechanisms and capacities to build resilience and incorporating Risk Reduction approaches into emergency, preparedness, response, and recovery programmes (UNISDR 2009)". The UNISDR also wants to make a transfer from "reactive to a proactive approach" (2005–2015) which inspired Pakistan to be a signatory of the Hyogo Framework of Action (UNISDR 2009). In Pakistan, National Disaster Management Authority (NDMA) is the focal body for assessing the HFA's progress. Pakistan has been fairly consistent in submitting progress reports which include the 2007–2009 HFA progress

report 2009–2011, HFA progress report 2011-2013 and the recent interim report of 2013–2015.

The HFA progress reports of 2014 brought out key challenges which have helped in bringing consciousness towards disaster emergency among the South Asian Countries. However, they have identified certain areas in implanting the policies of DRR. These areas can help in learning lessons from each countries short coming.

### 3.1 Key Challenges in Policies Implementations

<b>Bangladesh</b>	<b>Nepal</b>	<b>Sri Lanka</b>	<b>Pakistan</b>
Capacity challenges like-inadequate staffing, financial bottlenecks and a lack of technical resources such as space-based technology	There is a need to develop and implement a financial tracking system to monitor all DRR related expenditures for mitigation, preparedness and emergency response	Waning interest in information and data sharing systems is a huge challenge to completing the country's risk profile	Institutional mindsets based on conventional emergency management approaches are the main stumbling block
legal frameworks are outdated and have a limited focus on DRR	Need for development of decision-making, impact evaluation and monitoring tools for local user groups	Disaster management is not a subject of decentralized to provincial governments	Need a separate and dedicated budget line for DRR be created at federal, provincial and district levels..
Limited awareness	Multi-sectoral forums need to be developed	Limited legal framework	*Limited human resources *Limited financial resources *Limited awareness *Availability of reliable data is another challenge in carrying out the accurate assessment of hazard risks
Limited human resources	Absence of a standard risk assessment and analysis approach has been the most limiting factor.		The foremost challenge is the scarcity of local expertise and professionals in the field of risk assessment
Limited financial resources			There is a need for a forum with formalized membership across all sectors.
Adolescents, women who marry young and people with disabilities need to have access to a specialized education on DRR survival and safety measures	Inter-governmental cooperation for common transboundary issues and the mobility of people during disasters needs to be strengthened	Local authorities in disaster vulnerable areas are financially weak and need outside assistance to implement DRR	Lack of awareness amongst local communities and departments about the importance of investing in preparedness, prevention and DRR is another challenge

Source: By Researcher based on HFA Progress Report OF UNISDR (2014).

### **3.5 Disasters Framework Adopted by South Asian Countries: International and Regional Dimensions**

The above descriptive analysis shows that South Asian countries have regional dimensions of disasters because they share common political boundaries. Therefore, it is imperative for the countries to have regional co-operation to encounter and ward off the impacts caused by disasters. Thus, it requires proper planning, strong policy and strategic partnerships with different stakeholders and private and government agencies. However, despite the need, regional co-operation among South Asian countries on disaster issues could not be successful due to mutual political conflicts. Apart from the differences, international inter-governmental organisations like WB, and regional organisation like SAARC, ASEAN and so forth have tried to provide guidelines for the countries to think about the future of the world by following and implementing these guidelines. These are as following:

#### **3.5.1 The Yokohama Strategy 1994**

This framework provides a guideline, especially to developing and least developed countries so that they can achieve a safer world in the future. In order to achieve this goal, United Nations and other International community would provide support to reduce the suffering from disasters. It poses the responsibilities on each sovereign country to protect their citizens from natural calamities. All the signatory countries would have to develop and strengthen their national capacities building and increase capabilities. They would also have to promote and strengthen sub-regional, regional and international co-operation. The co-operation at different levels will be promoted and strengthened to prevent, reduce and mitigate disasters through resource mobilisation, use of technology and strengthening human and institutional capacities (Yokohama strategy report 1994).

This strategy is mainly focused on human safety and prevention of property. It calls for prevention activities as a significant step for the Integration approach in DRR. Spreading awareness through education and training programme is another essential component of this strategy. For better results, research and development institutions should be established. It also emphasises on promoting community based-approaches in disaster mitigation for spreading awareness in vulnerable and marginalised sections of the society. This strategy aims to improve risk assessments before the disaster



occurs. It also aims to monitor better communication for forecasts and early warnings (ibid).

Though, this framework clearly mentions to promote regional co-operation, it seems difficult in South Asia. Except the Pakistan earthquake in 2005 and the Nepal earthquake in 2015, this region lacks co-operation in disaster emergencies. There is no compulsory legal agreement which can bring out every country under an umbrella.

Thus, all the countries who are experiencing severe disasters at the regional and sub-regional level in South Asia should promote disaster co-operation. To improve the nature of co-operation, they should implement and promote policies for disaster reduction activities. Countries should promote co-operational attitudes between people to people response approaches. Government should establish institutional and inter-governmental co-operative approach beyond the territory. There should be more disaster management centres like SAARC in other South Asian countries as well as a mutual responsible co-operative approach can be established among the SAARC countries.

Though, this framework has provided a better approach on reducing risk and impacts of disasters at different levels; however, it is not a sufficient framework. It has specific gaps and challenges which has been identified as the followings:

- a) It has identified governance issues such as organisational issues, legal framework issues, and policy framework shortcomings which need to be improved.
- b) It also identified the scarcity of resources allocation aspects.
- c) It also identified risk identification issues, risk assessment issues, monitoring issues of upcoming threats and s implementation issues.
- d) It highlighted the disaster awareness and knowledge management issues and disaster education related problems in the common people.
- e) It identified the reduction of risk factors issues.
- f) It identified the disaster preparedness for effective response and recovery issues in the framework (World Conference on Disaster Reduction report/ A/CONF.206/6).

In addition to this, this framework realised the importance of more pro-active approach towards DRR. It stresses in involving communities in all aspects to DRR. It also stressed on developing better financial mechanisms at the national, regional and international levels. It brought attention to sustainable development issues and on building resilience<sup>31</sup> through developing and strengthening the capabilities of the national, local and regional government's capabilities. This framework has also included applied scientific approach and it shows that proper research and consistent generation of adequate information along with proper technology is crucial to mitigate the effects of natural disasters. These should also have to be cost effective and in the developing countries, proper technology and data coupled with appropriate training needs to be accessible (UN World Conference 1994).

### **3.5.2 Hyogo Framework for Action 2005-2015**

The Hyogo Framework was brought to fill the gaps which emerged from Yokohama Strategy framework of 1994. Disaster Reduction strategy was needed to be “integrated into national and local level development planning and objectives” (United Nations 2004). The Priority for Action includes three areas which are “(i) environmental and natural resource management, (ii) social and economic development practices and (iii) land-use planning and other technical measures” (ibid).

This framework has included eighteen (18) activities for reducing the risk of disasters. It has prescribed the major prioritised areas, although UNISDR 2005 report shows that developing countries and least developed countries are still lagging behind. They are facing difficulties in tackling the mentioned risk areas. They have been proved to be the most difficult and slowest in the developing and least developed countries. “One of the reasons attributed for this lack of progress was the disproportionate emphasis on disaster response and preparedness, with limited effort on mainstreaming DRR across all sectors of development” (UNISDR reports 2011, 2013, and 2015:9).

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<sup>31</sup>Resilience: “the capacity of system, community and society who are exposed to hazards to adopt by resisting or changing in order to reach and maintain an acceptable level of functioning and structure. This is determined by the degree to which the social system is capable of organizing itself to increase this capacity for learning from the past disasters for better future protection and to improve risk reduction measures”,-UN/ISDR, Geneva 2004.

Hyogo Framework has identified the tasks for implementing and following-up by State, regional organisations and international organisation in association with the private stakeholders and civil society. The framework has distributed tasks to minimise the risk. State is responsible to designate co-ordination mechanisms for seamless execution. National baseline assessment has to be done by the state for DRR. State is also responsible for update and publication of national programmes. It has to develop procedures for the analysis of cost benefits and monitor risk. Welfare State has also provided guidelines for approving and ratifying updated international legal instruments for risk reduction and they are responsible for implementing the laws in the concerned places. State is subjected to promote the integration of DRR policies with climate change (UNISDR 2005).

This framework also provides clear understanding for regional organisation and institutional role in adopting this framework. It aims for the promotion of regional programme at a larger level. Regional organisations and institutions have to facilitate and release the results of regional and sub-regional baseline assessments. They should try to collaborate and release reviews on annual progress and should support needs. They will have to assist countries in preparation of national summaries. This framework strongly recommends establishing specialised regional collaborative centres. It also supports the development of regional mechanisms and capacities for DRR. Hyogo framework is popular to provide guidelines not only for the state and regional organisations but also for the International Organisations (IO) including United Nations. This framework encourages integrating DRR into humanitarian and sustainable development fields. Like regional organisations, it also guides IO to develop the capacity of the United Nations to provide assistance to developing countries, also ensures integration, sufficient funding, and setting up national strategies and programmes for DRR. It provides suggestions for integrating actions into co-ordinating mechanisms. This framework also demands in collaborating with different networks and platforms to support data collection and forecasting on national hazards and risks. This framework focuses on strengthening international mechanisms to support disaster affected states in post-disaster recovery with DRR approach. It has facilitated inter-agency disaster management training for DRR and capacity building (ISDR report summary/ A/CONF.206/6: 21-34). It can be said that on paper there are several mechanisms to cope up with disasters. This framework

however only talks about how to deal with natural disasters, but lacks in providing guidance during man-made disasters. It has been seen that man-made and natural disasters are inter-connected issues and both the disasters have severe impacts on the society and economy. Yet, we need to adopt a collaborative approach to build a connection between them during responses. This can solve the funding allocation issues.

### **3.5.3 Sendai Framework 2015-2030**

This framework is a successor of the Hyogo Framework for Action [HFA] 2005-2015: Building the Resilience of Nations and Communities to Disasters. This framework was adopted in the Third UN World Conference in Sendai, Japan. It was framed to ensure continuation in the work which was done by the States and other stakeholders. HFA only focused on natural disasters issues while Sendai tried to cover all kind of disasters. It provides the non-binding guidelines to the governments, stakeholders and private sectors. It is based on a more collaborative approach. It targets DRR approaches. According to UNGA (2015) Art 35 “commitment, knowledge, goodwill, experience and resources” for all stakeholders are key words in implementing Sendai framework at global, regional and local level. This framework has adopted an approach which has positive effects on DRR activities by taking care of climate change and Sustainable Development Goals (SDG) together (UNISDR report 2009).

### **3.5.4 SAARC's Role in Disaster Management**

The regional organisations started emerging after the Second World War with the League of Arab States (1945) and Organization of American States (1948). The growth of these organisations was pushed forward as a result of decolonisation, which urged the countries to come together in solidarity and work on the noticed threats. Witnessing the 2004 Indian Ocean tsunami the regional organisations in South Asia set up the regional forums for natural disasters indicated by the Hyogo Framework for Action (HFA). Agreement on Disaster Management and Emergency Response (ADMER) of ASEAN was established in 2005 followed by the Disaster Management Centre by SAARC after a year. Similar actions were taken by the African Union (AU), ECOWAS (Economic Community of Western African States), SADC (Southern African Development Community), the Arab League, the Organisation of

Islamic Cooperation (OIC) and others<sup>32</sup>. Other bodies of humanitarian purposes were also established like the OAS' 1965 Inter-American Emergency Aid Fund, the Central American Integration System (SICA)'s Disaster Coordination Centre (known as CEPREDENAC) and the South Asian Association for Regional Cooperation (SAARC)'s Food Security Reserve (ibid).

SAARC was formed with certain objectives. It aimed for the welfare of people, speeding the economic growth in the region and focused to work on social and cultural progress. Its objective was to strengthen the collective mutual trust. Despite the optimistic approach, SAARC could not fulfil its main objectives. Numerous agreements could not be implemented because of lack of mutual trust. For example, SAARC Satellite Project was abandoned because of Pakistan's objection in 2016 (Joyeeta 2018). Theoretically, regionalism is feeling of belongingness with each other on several fronts. The basic aim is to promote economic prosperity and establishing mutual trust among countries.

The SAARC comprehensive framework on disaster management was established by the South Asian countries to address the issues related to disaster management. This framework was associated with Hyogo Framework of 2005-15. Three thematic centres were selected that shared equal responsibilities:

- 1) SAARC Disaster Management Centre, New Delhi. (Recently shifted to the Gujarat Institute of Disaster Management, Gujarat).
- 2) SAARC Coastal Zone Management Centre in Male.
- 3) SAARC Meteorological Centre in Dhaka (Online)<sup>33</sup>.

Apart from this, SAARC has also initiated Natural Disaster Rapid Response Mechanism (NDRRM) that was to be legally bound for the South Asian countries. However, it was not ratified due to disagreement among the member countries. There are other agreements created to strengthen regional co-operation in other fields, such as environment, climate change and natural disasters:

- a) SAARC Environment Action Plan,

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<sup>32</sup> Available on the provided link [Online: web] Accessed 18 July 2017  
URL:<https://www.cbd.int/financial/regional/g-humanitarian-odi.pdf>

<sup>33</sup> Available on the provided link [Online: web] Accessed 3 April 2018,  
URL:<https://core.ac.uk/download/pdf/36740616.pdf>

- b) Comprehensive Framework on Disaster Management,
- c) Dhaka Declaration and SAARC Action Plan on Climate Change,
- d) Thimphu Statement on Climate Change,
- e) SAARC Conventions on Cooperation in Environment.

There are different approaches required to handle disaster management in the region. It should have an autonomous body and political interference should be minimal. It should have autonomous disaster management centres where political and historical conflicts should have negligible influence on the disaster management policies during their implementations. It should adopt technological support bases and a more humanistic approach. A region or country exists because of the human existence and to save the lives, the government should prioritise its policies. A bilateral relation also affects the policies and its implementations.

### **3.5.5 Rise of other Regional Institutions in Disaster Management**

After observing the SAARC's ineffectiveness, the question arises as to why South Asian countries should adopt sub-regional arrangement in disaster management field? Bangladesh was the first to raise the concept of adopting sub-regional co-operational mechanism but it was not supported by its own opposition. Bangladesh has to face a lot of criticism in its own country. Sri Lanka, Maldives and Pakistan had also objected in forming sub-regional group. According to these three countries, forming such separate groups will create hurdles in smooth functioning of the SAARC. They raised their concerns that there would be clash of interests among the countries because they might give preferences to that group during implementing the policies and programmes. Though, despite these concerns, India, Nepal, Bangladesh, and Bhutan is continuously trying to move forwards in adopting sub-regional mechanism. BIMSTEC and ASEAN is one of the examples (Pandian 2002: 340). It can be said that BIMSTEC is emerging out as an alternative option after SAARC. It has provided an opportunity to fill the gaps among nations who are willing to make progress by joining the different regional platforms. Indo-Pak rivalry is one of the biggest reasons for looking at an alternative platform after SAARC. Through adopting this mechanism, SAARC countries (except Pak, SL and Maldives) believe that they can share their resources and technical expertise to each other. As have been already discussed, the regional context of South Asia is important to explore the scope of sub-

regionalism in the disaster management field. As have been discussed before, there are a lot of differences at the political level, however, this mechanism benefit the promoting of technological support to each other. Disaster management field requires technological support to find out the risk and helping each other during crisis. Presently, the world is heavily depended on s. It cannot be effective until we are willing to share cross border data. Technical support can be helpful in avoiding security concerns among the countries. It can be also helpful in making successful regional to institutional setups. Previously, Nuruzzaman (1999:312) argued that by creating sub-regional group, interested countries tend to boost economic trends. It is based on localisation of economic zones, socio-cultural patterns and political systems which seek to integrate parts of their territory for mutual gains. He talked about three basic components of sub-regional approach: “(a) development of the private sector (b) development of the regional communication infrastructure and (c) equity in development co-operation” (ibid: 313). It was Bangladesh’s delegation who set out the Concept Paper on sub-regional co-operation. The focus area of co-operation was:

“natural resources including water resources, promotion of trade and development, development of hydropower and energy, expansion of telecommunication network, improvement of economic development, and development of tourism industry (Nuruzzaman 1999:313)”.

Here, it should be noted that disaster management and risk reduction approaches were never its main objectives for cooperation earlier. Presently, several other sectors have been integrated for mutual gains and climate change environment protection programmes have also been included to eliminate risk. SAARC, ASEAN, BIMSTEC, BRICS has initiated several programmes for DRR however the programmes are not mandatory in nature.

### **3.6 Foreign Policy as a Challenging factor in Regional Cooperation and Implementing Disaster Management Policies**

Disaster management institutions works under the head of the state. In every South Asian countries, either it is headed by the Prime Minister or the President of the state. The political system has a larger role to play in disaster management. When the country faces mega disasters, the roles of the central government in national disaster management determine the course of the actions. It requires the government’s consent

to plan and ask for the funds and relief supply. The central government needs to play an important role even when the country faces devastating cross-border and trans-provincial disasters. In addition to this, it can be said that foreign policy factors play a prominent role in implementing the disaster management policies. It is the head of the state (Prime Minister or President), who takes the final decisions. It gives scope to understand the South Asian political scenario and its relation with disaster management. There are large amount of publications and documentations available on foreign policy and its various aspects; nonetheless, the published literature shows that the regional co-operation in disaster management aspect is absent. This aspect has not been dealt much by political scientists. There are shortcomings of how bilateral relationship or shared neighbourhood aspect affect disaster management policies. This work is an effort to fill this gap. The researcher is putting India in the central focus and analysing the external factors which choked the co-operation opportunities among other South Asian countries. There are basically two factors in choosing India as the central focus; one because India is the regional hegemony in South Asia and the second is, India shares its border with five neighbouring countries and no other South Asian countries has that for more than two countries (Chaudhury 2018:99).

Present political situation of the South Asian region shows that regional integration among SAARC countries is unpredictable. It can be seen from current Indo-Pak situation. Chaudhury posits that “soon after sworn in as PM in 2014, Modi officially announced a “neighbourhood first foreign policy” (Bhatnagar and Pass 2016:3). Due to his neighbourhood policy, Modi’s government has persistently preferred dealing with other countries on a bilateral basis rather than a multilateral one. The government also gives precedence to aspects like “connectivity, transportation and infrastructure linkages” and has endeavoured to improve the conditions of regional connectivity among SAARC countries. Whenever there is developmental hindrances due to political differences, this government focuses on various trade related cooperation bases like the creation of the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and the Bangladesh, Bhutan, India, Nepal (BBIN) Initiative, both excluding Pakistan and China. He also argues that this attempt however has not garnered as much dominance as India had hoped for. On various instances since its independence, India has possessed complicated relationships with the neighbouring countries which had adversely affected the intended nature of



bilateral relations. All this is remnant of India's complicated nature of policy considerations and occasional insistence ethnic politics with a persistent suspicion of Pakistan's terrorist activities. All these have had ill effects on the disaster related impacts in the region.

However, these efforts could not turn out to be blissful for South Asian regions. Firstly, Modi invited all the South Asian heads in his swearing-in-ceremony during his first tenure of PM, however, eventually cancelled ministerial-level talks with Pakistan. As a consequence of the attack of 18th September 2016 on an army camp Uri in Jammu and Kashmir (J&K) by Pakistan-based militants, India backed out of the SAARC summit that was soon planned to happen in Islamabad. This stress flared up after Pakistan based Jaish-e-Muhammed (JeM) attack on CRPF jawans on 14 February 2018, in which 40 jawans were killed. During his second oath ceremony Indian Prime Minister Narendra Modi in fact left out Pakistan Prime Minister Imran Khan, and strategically invited BIMSTEC countries, which clearly shows that India refuses to improve this strain in bilateral relations and resume talks unless the Government of Pakistan takes legal action against the militants involved in the attack. This also indicates that SAARC would not be much effective in coming future. In comparison to previous leaders, India showed elements of 'hard power'. It can be said that Modi is using 'carrot-and-stick approach'<sup>34</sup> with Pakistan. India's diplomacy indicates a willingness to teach a lesson to stop terrorist activities in the border areas. India has also raised its voices in UNSC against Pakistan (Tandon 2016). Here, it can be said that the change in regime does affect the bilateral relations. This has major consequences in non-military issues like disaster management.

Tandon (2016) argued that Modi has not neglected South Asian countries in pursuing the great power diplomacy. He has visited most of the South Asian countries in his first year as the Indian Prime Minister; his visit to Bangladesh was a fruitful one as he was able to instil harmony and hope by strengthening bilateral relationship. He even attempted to make new friends and tried to make cordial relationship by visiting neighbouring countries (ibid: 344). This effort has initiated a positive impact in disaster management as well, for instance, India offered humanitarian help to Nepal during earthquake 2015.

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<sup>34</sup>This approach is used by realist scholars as a tool to explain hard power in International Relations. Hard power actors use the 'carrot and stick approach' to make other actors do what they want.

Price (2016) writing explains that Modi's attempts to provide humanitarian assistance to Nepal during earthquake of 2015 became problematic due to the over enthusiastic and jingoistic news reporting in the affected region. The Madheshis problem is still a controversial factor which perceives India as a suspicious agent in Nepal. It is considered that India's relation with Nepal now stands at the lower end for the years to come. Nepal, which is a landlocked country protested against the country's new constitution which led to a de facto blockade in 2015. The blockade stopped petroleum supplies, medicines and earthquake relief supplies. Due to undeclared blockade, Nepal has started doubting India's intentions. They thought that India did it intentionally for political reasons as India had done in 1989-90. At that time Nepal and China had signed a secret intelligence-sharing agreement. China supplied arms to Nepal which could have been used against anti-India activities. During this time, Nepal government was mostly pro-Chinese. This recent economic blockade has again raised insecurities in Nepal.

Mishra (2004:128-129) explicitly explained the small state concerns affecting Nepal. He argued that Nepal's geo-strategic location in South Asia plays an important role in great powers and regional power's foreign policy. It shares its border with China and India. China wants strong strategic and political control over Nepal because it constitutes as an inner security ring. Due to this, it would not be possible for any global or regional power to breach that security ring. Tibet and Nepal's geo-strategic location is also the major factors for holding strong control. The primary objective of China is to stop anti-Chinese activities in Nepal by Tibetan refugees. After cold war, China started taking interest in competing with USA. USA also started expanding its reach to the South Asian countries like maintaining its relationship with India. By maintaining relationship with them, USA wanted to control China and its communist ideology by promoting democratic values. However on the other hand, China too wants to control USA and Nepal and other South Asian countries. Consequently, the power equation between countries shows that there is always third party who takes the opportunity to fill the vacuums. It can be substantiated by the example of Afghanistan-China-USA; in which China has tried to replace US by building strategic partnership with Afghanistan in the aftermath of U.S. war.

Another objective of China is to minimise India's influence in the South Asian region, especially in Nepal and Bhutan. The Chinese annexation of Tibet led to the rise of insecurity in the Indian side too. India wants to control Chinese activities (because China supports anti-India activities in the Nepal region). India's gangetic region has human and economic resources. The other factor which created tension for India was Pakistan's support to Nepal. Pakistan's interest in Nepal lays on anti- India activities. Henceforth, the security dimensions of its neighbouring states were having many inter-related linkages with India's own security issues. It can also be said that China is taking advantage of Nepal for its own national interest. On one side, it is countering Tibetan refugees from creating any problem, while, it is also providing aid to the country to gain Nepali government's support to counter India's great power presence in the region. China has also manipulated Nepal time to time for maligning the Indian image in the region. By using this strategic approach, China wants to isolate India in South Asia (Dabhade and Pant 2004:160-163).

It can be further argued that Nepal's stand is also important to understand the power politics among nations which affect other policies including disaster co-operation, climate change and so forth. States exist independently because of their strategic moves and pragmatic approach in dealing with other states. In addition, Nepal too wants to secure its position strategically. In order to protect their territory and national interest, it tries to maintain balance in its relationship with India and China and with other great powers. Nepal's historical foreign policy shift shows that it knew that they can't rely on China completely because once China has tried to capture Mount Everest as its own territory. India has imposed economic blockade (Thapa 2016:2) on Nepal twice although the country denies it. Pakistan and India are both nuclear powers in the region. Thus, it is hard for Nepal to trust neighbouring states, being a small state. It can be said that Nepal has however always taken an advantage of insecurities among the great and regional powers like USA and China, India-Pakistan in pursuit of becoming a powerful country as it strengthens Nepal's economic status.

If we look at the regional power structure, we can see that despite various differences among Asian periphery, sub-regional aspects for development have been the factors for promoting economic and connectivity expansions in the region. Here, the above discussed South Asian political scenario shows that the bilateral relations get affected

by the strategies of the third party. The diplomatic considerations of international politics keep affecting the policies of as was the case with the blockage incident in Nepal due to the power balances of China and India. What can be further said in this aspect is that China and India's relations that both the countries are competitive in nature. They had fought war in 1962; both the country are having long dispute over border issues and maritime border security. However still, both the countries are having strong economic partnership. They haven't stopped building trust after war. It shows the willingness of both the partners. This could be a lesson for other South Asian countries.

From the above sections, we found that the nature of the regime is one of the main reasons in international politics that affects the policies. The change in government brings out their own way of pursuing the foreign policy and is the deciding factor in making relations with other nations. The change in regime affects the equations between countries. The institutional head's decision making power has long term impacts on policies. Poor governance in developing and least developing countries is another factor that determines the implementing of the policies, treaties and conventions within the state. South Asian regions are facing similar kind of problems. Due to poor governance, this region cannot become prosperous. Lack of institutional quality is one of the parts of poor governance. It has played a major role in forming and implementing the government's policies. Shift in political ideology has a role to play in bandwagoning and containment in global politics. Government's will to form policies and implementing and distribution of resources determine the success and failure of the programme. South Asia faces lot of criticism for not following transparency in implementing the programmes. It has also seen that the democratic government follows a tough and long process of passing any proposal which affects the whole process. It has been felt that there should be a separate channel for passing the judgment on quick decisions. Above all the problems in the region, political instability is the biggest challenge in South Asia regions. It has major impacts in the cycle.

The decentralised and centralised systems have also hampered disaster management planning. It is mostly a politically motivated activity. Due to these factors authorities do not pay attention to every community and ignore conflicted areas. Difficult

geographical terrains are one of the reasons in the slow development rate in most of the regions. They do not have the proper distributive mechanism till now. Most of the centres in South Asia are established after 2004 tsunami.

Despite similar kind of disasters, there are differences too. Many South Asian countries are more affected by man-made disasters every year. It is adding extra burden on humanitarian agencies and governments in making plans and in co-ordinating. There are different seasons in South Asian countries. They have different ways of living together. Some are surrounded by the water bodies, some are surrounded by the hilly and land areas. The geography of South Asia is more complicated than any other regions in the world. They all need different special task forces in all the countries. Security is one of the major concerns in some countries.

Governance remains one of the major challenging factors which create issues in co-ordinating with other government bodies as the procedure includes a number of ministries, departments and technical institutions. The government has established committees / council / commissions in recent decades to assist the intra-governmental co-ordination and policy-making. National platforms have been created by some countries for DRR and to maintain co-ordination between various stakeholders which also includes the government and non-government organisations.

By establishing the focal organisations and coordination committees, the countries in positions have been able to synchronise the efforts to achieve prominent results in terms of disaster mitigation. For instance, the Afghanistan National Disaster Management Authority (ANDMA) plays the major role in Afghanistan at national level in order to deal with the issues and manage every aspect associated with disaster mitigation, preparedness and response in coordination with its national and provincial offices. State Minister for Disaster Management and Humanitarian Affairs was appointed with a dual role of Chairman of ANDMA by the government of Afghanistan. Countries such as Indonesia and Turkey have managed disaster over the years by accumulating good experience and benefiting through bilateral technical co-operation (SESRI: 22).

### **3.7 Role of European Union in Natural Calamities**

European Union is the largest humanitarian donor in the world. In fact, EU which is comprised of the European Commission (EC) and member states as a whole, have benefitted many countries by providing large amount of humanitarian assistance in the past. According to European Commission report (2013), it has helped more than 100 countries outside Europe by financing and coordinating mega humanitarian operations since 2012. All the humanitarian activities are funded by the European Commission. All the ongoing operations get implemented by the help of humanitarian partner agencies. It includes United Nations agencies, Red Cross agencies, and other non-government relief organisations. The commission has specific departments which pay attention to humanitarian operations in the world. They are the Humanitarian Aid and Civil Protection Department; ECHO (European Commission Report 2018:1). It provides direct humanitarian relief to the victims in affected places without being biased towards their nationality, ethnic origin, gender and political affiliations. ECHO believes in vigorously following humanitarian principle in implanting their policies. They believe in “humanity, impartiality, independence and neutrality”. The main purpose is to “relieve and prevent the suffering of crisis victims” (ibid: 2). European Commission also gives importance to the role DRR and Disaster Preparedness. EU emphasis that disasters are not preventive; though its impact can be minimised by establishing effective and evacuation plans. The effects can also be minimised by giving training in earthquake resistance building techniques, by using water quality control and disease preparedness (ibid:2). The EU mandate also shows that developing countries are those who lack the resources in minimising the disaster impacts.

Therefore, EU is working as a helping agency. It provides funds, take initiatives for DRR projects and proving basic facilities to needy people in disaster prone regions on a global level. ECHO has also established permanent network of humanitarian field experts who works in different crisis regions around the world. ECHO has extensively supported South Asian countries during various disasters till now. Number of projects of EU is still going on in Nepal, India, Bangladesh, Pakistan and Myanmar (ibid: 4).

EU is also trying to strengthen their Civil Protection ability by adopting the pooling system. The countries (Liechtenstein, Norway, Iceland, and the former Yugoslav Republic of Macedonia) try to pool resources together, so that they can provide resources to disaster hit countries in Europe and outside Europe. EU has also established a separate centre for enhancing better co-ordination and quick response capability, the centre is known as Emergency Response Coordination Centre (ERCC). It has adopted approach called Linking, Relief, Rehabilitation, and Development (LRRD) to deal with future shocks (ibid: 4).

Few case studies have been taken to show how ECHO is helping developing countries that are in high risk zone of disasters. European Commission report (2018), “Evaluation of the European Union’s humanitarian interventions in India and Nepal, 2013-2017” reveals many issues during their response. This report is based on field visits by expert teams in Nepal and India. The report shows that both the country has learned many lessons after Nepal earthquake of 2015. They are specially paying attention on resilience issues in past years. Asia’s regional meeting on Sendai framework was hosted by India in 2016. It offered an opportunity to strengthen their concerned resilience issues at one platform. ECHO has supported resilience project activities in affected areas like the 2013 cyclone of Phallin in India and the 2015 Nepal earthquake along with the 2014 and 2017 floods. ECHO evaluation team reached Nepal for field visit immediately after flood that has affected 1.7 million people. The observation states that 2017 flooding response was much better than 2014 flood response (EC report 2018:70). In terms of policy framework in Nepal, 2015 earthquake has showed the gap in Natural Calamity Act 1982. Nepal also got an opportunity to restructure their policy framework during 2015 earthquake because Sendai framework was already launched. It has provided guideline for enhancing their institutional capacities.

### **3.7.1 Challenges faced by ECHO during Project implementation in Nepal, India and Pakistan**

The Indian government has supported ECHO’s project activities in affected areas however; they were not given complete freedom due to ethnic conflicts, caste issues and territorial disputes. They have experienced that both the countries’ government was feeling insecure on their presence in their lands. They were suspicious about their

activities. Due to their insecurity, both the countries' government have limited the national and international civil society activities (EC report 2018:87). They have faced challenges in fulfilling humanitarian principles. They could reach in conflict zones by negotiating with Government of India (GoI). It should be noted that ECHO's challenges were more related to the access in Pakistan during floods response (European Commission report 2016:39). The report also reveals that governance issues were one of the most challenging aspects in Nepal including civil unrest. Nepal was going under political transformation during the 2015 earthquake. There was unrest due to launch of Nepal's Constitution. There was a lot of confusion and mess among the government personnel and agencies because of national and local elections and decentralisation of reform process. Due to outdated disaster management structure and policy, there was another drawback which created a large amount of tensions among agencies. It has really slowed down the recovery process of repair and reconstruction of the official building of sand houses after the earthquake.

Another case study of Pakistan floods experience of ECHO (EC report 2016:125) presents few more problem areas. It reveals that the biggest challenges for humanitarian organisations were posed by the Pakistan government. It has found that the government of Pakistan did not recognise 'humanitarian crisis as a crisis' in the country. Therefore, non-recognition of humanitarian crisis or emergencies in the country by the government, it restricts the need of humanitarian agencies in the affected country. The report also shows that humanitarian access to the politically sensitive and historically conflicted areas were denied by the government of Pakistan. It is not only in cases of natural disasters when government has denied access, but it has also restricted access for the Internally Displaced People (IDP) during the crisis in North-Waziristan in 2008-09 and 2014. Similar kind of response was displayed by the government in the 2013 Balochistan earthquake. These regions are politically sensitive and falls amidst the conflict ridden areas. These obstacles were created by the government authorities due to their security concerns. In such positions, the government tried to possess complete command over the response activities. The report says that "obstacles to the delivery of principled relief assistance by recognised humanitarian actors accentuate the risk that the most vulnerable groups will be excluded and will not receive assistance" (EC report 2016:125-126).



More about this can be explored through the EU efforts towards South Asian countries in managing disasters. Therefore, it can be said that though EU has worked extensively in South Asian countries, however, both Indian and Nepalese governments had suspicion on their activities due to historical experiences. It can perhaps be justified by looking at the colonised history of the South Asian countries. The major European powerful countries have been known for establishing their colonial states in the different part of the world, named: France, Britain (separated from EU now after Brexit), Spain, Italy, Belgium, Netherlands, Portugal and the United States. Many of them had tried to colonised South and Southeast Asian countries.

Thus, it can be said that that historical records can affect the efforts of contemporary times. It can also be argued that the regime and leadership role play important factors in responding to disasters in conflict zones. The role of government and administrative behaviour also affects the whole cycle of disaster management. The flexibility in humanitarian principle is the most important aspect in combating with mega disasters and risk reduction activities. The collaboration and co-ordination, communication, information exchange system among private sector, NGOs, international organisations, government institutions, stakeholders and inter-governmental agencies have significant effects for long-term recovery, rehabilitation and reconstruction activities.

ECHO's experience in Nepal shows that political instability in any country affects the reconstruction, recovery, and rehabilitation work to a great extent. It leads to mismanagement of financial resources. It also works as a de-motivating factor among relief workers. Pakistan's case study experience shows that if a government does not want to declare humanitarian crisis, it leads to the violation of fundamental rights of the affected people. It gives no space for the humanitarian agencies to work in affected countries. It can be seen as an unethical stand by the sovereign government. The government is supposed to play a welfare role in treating the people equally and impartially. Such responses from the government raised the questions on their credibility as a responsible authority among the citizens. These situations can lead to separation movements in the country and can pose future threats. If a number of crisis or emergencies and disasters (man-made and natural both) keep recurring, then it affect the other ongoing projects at the same time. It leads to imposing extra burden

on humanitarian agencies in managing the situation (financial, logistical and non-logistical challenges) especially where porous borders exist. It leads to influx of IDPs and refugees crisis. The higher number of refugees and IDPs in affected countries, higher is the need of humanitarian assistance in the affected regions. It also shows the failure of the government in handling historical humanitarian crisis in affected countries.

### **3.7.2 Lesson Learned from European Union**

The lessons that can be learned from the intervention of the European Union in the SAARC countries:

- a) Long coherent management investment plan.
- b) Channelising the fund on the plan basis not on ad hoc basis.
- c) Collaboration based work with neighbouring countries.
- d) Rather than establishing number of monitoring station fewer reliable stations are better option for saving the maintenance cost. It can install lower cost maintenance stations for improving monitoring networks.
- e) Transnational operational modelling can be fostered for meteorological and hydrological forecasting. Joint projects can be beneficial for forecasting modelling. It can benefit the co-operation and information exchange between nations.
- f) Same standardisation in exchanging information and intelligent use of equipment and sharing of data.
- g) Those countries suffering from risk of flash floods can install rainfall radars. It can build a network or collaboration with neighbouring countries to provide access and share the relevant radar information.
- h) Simple model for many watershed can give good result rather than looking for high complex models.
- i) SAARC countries can also develop SAARC Flood Awareness System like European Flood Awareness System.
- j) South Asian countries can also form Collective fund mechanism like EU Solidarity Fund.
- k) Flood Risk Mapping is an important tool to prevent larger flooding or for flood protection. Automatic measurement of metrological variables per 1000

km square for different regions. Because it transfers data immediately while manual data transfers less frequently.

- l) EU countries that are below sea level, for example Dutch countries like Netherlands have polder system for managing floods. South Asian countries can also maintain land by dikes, windmills and pumping system. Recently, Bangladesh has started adopting this system. This can be good example to learn because Netherlands is surrounded by three large rivers, Rhine, Meuse and Schelde. It brings floods in low laying coastal areas around the North Sea. Belgium, England and Scotland too suffered in history. To cope up with these repetitive flooding issues, Netherlands government recommended a large engineering project Deltawerken (delta works) which took 50 yrs to complete but this project has been successfully implemented. This project strengthens its levee system.
- m) Precipitation and rainfall patterns should be recorded properly. It helps in forecasting the major threats, like many European countries have record of more than 100 years.
- n) Joint data portal can benefit in better co-operation among South Asian countries.
- o) SAARC countries reports are not based on proper methodology. SAARC countries documentation on disasters and other crisis is a major problem. They can learn a lesson from EU.
- p) Town planning system can be adopted in managing floods like developed countries.

### **3.8 Role of United Nations in Disaster Management**

The United Nations plays a significant role in bringing the nations together along with the international humanitarian providers in emergencies and ensures consistent response to the calamities with the help of the Office for the Coordination of Humanitarian Affairs (OCHA) collaborating with the Inter-Agency Standing Committee (IASC). The OCHA tries to establish a framework to ensure a proper response effort and contribution by the providers. It also tries to spread awareness about preparedness and provides sustainable solutions along with advocating for the people in need. The United Nations extend its support through many other organisations as follows:

1. Early warnings of potential food crises and global food supply are provided by the Food and Agriculture Organization (FAO) of UN.
2. The intergovernmental organisations like the International Organization for Migration (IOM), looks into the internal displacements and helps transfer refugees in need of migration services both internally and internationally.
3. The Office of United Nations High Commissioner for Human Rights (OHCHR) helps with assistance to the government on human rights issues and tries to set standards monitoring human rights violation.
4. Contingency planning in disaster mitigation, prevention and preparedness measures are provided by the United Nations Development Programme (UNDP).
5. International protection and assistance to refugees, stateless and displaced people especially in conflict related emergencies is provided by the United Nations Commission for Refugees (UNHCR).
6. The United Nations International Children's Emergency Fund (UNICEF) helps with upholding children's rights, development and protection in health, education, water, and sanitation.
7. The major supply of relief food aid is provided by the World Food Programme (WFP) of UN.
8. The World Health Organization (WHO) sets standards and monitors health trends and helps in emergency health issues by providing global public health leadership. Along with this it also tries to reduce avoidable loss of life and burden of diseases. It provides training in courses like technical guidelines for

health action in crises and pre-deployment along with other significant information of earthquakes, drought, flood, and landslide (Online).<sup>35</sup>

9. UN has extended its support to Pakistan in various ways through its different agencies. Humanitarian agencies of Pakistan are funded by the CERF and managed by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). Pakistan was the tenth country in the world to receive the most major funds from the CERF by being allocated 59.9 million dollars during its flood disaster in 2010 (OCHA 2010).

The above mentioned agencies' response to disasters in the two natural disasters cases of Pakistan can be seen. UN agencies majorly tried to assist the areas in the past which were hugely affected by flood and tried to cater to the urgent needs of the children in the affected areas. It also tried to prevent the areas from any massive diseases and provided relief material worth 360 thousand dollar. In the flood of 2010, nearly 3.5 million children were found to be under the risk of having diseases (Geeta 2014). UNICEF helped Pakistan by providing vaccinations for polio and measles (Pruthi 2010) in the three affected districts of Baluchistan Sibi, Jafarabad and Naseerbad. Three shelter relief hubs were being operated by United Nations High Commission for Refugees (UNHCR), in the district of Charsada, Peshawar and Nowshera, providing help and shelter in villages including the Afghan refugees. Along with it, UNHCR extended its help towards women, elderly and those who were vulnerable to the effects of flood (Geeta 2014).

### **3.8.1 The International Federation of Red Cross and Red Crescent Societies**

One of the largest humanitarian societies of the world is the International Federation of Red Cross and Red Crescent Societies which includes 190 members. It helps in improving the lives of the people who are vulnerable by organising the power of humanity. It also tries to assist the victims of both natural and man-made disasters along with the refugees and health emergencies on an international level. By combining the relief activities and development work it strengthens the capabilities of National Societies which also help in developing the capacity of the individual

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<sup>35</sup> [Online: web] Accessed 8 July 2017, URL:<https://www.wcpt.org/disaster-management/Organisations-involved-in-disaster-management>

people. It presents itself as the official representative of the members of these societies and work towards strengthening the capacity of effective disaster preparedness, health and social programmes by promoting co-operation between National Societies.

### **3.8.2 The International Committee of the Red Cross**

The Swiss- based humanitarian organisation, the International Committee of the Red Cross (ICRC) is one of the founding members of the International Red Cross and Red Crescent Movement in 1863. It acts as the guardian and advocate of the international humanitarian laws and provides assistance to the victims of violence around the world. It also provides rehabilitation to the victims who have been injured and affected by explosive weapons or are involved in other types of incidents; to better its professionalism and reach in humanitarian assistance programmes, it collaborates with the WHO to organise the Health Emergencies in Population (HELP) course. ICRC supports the development of physical therapy education by running programmes and also encourages physical therapy institutions or individuals who support these developments. Another humanitarian fund ‘Central Emergency Revolving Fund’ (CERF) was established on 2005 December 2005 (Online)<sup>36</sup>. It supports the OCHA by providing major funds and advocates supplying immediate humanitarian relief to the countries facing any natural disaster.

The UN held its first General Assembly on the subject of natural disaster response and passed a resolution in 1965. The importance of member state accord to natural disaster response was proved by establishing a body of soft law which is building up since 64 years with the consensus among the member states (United Nations General Assembly Resolution, “Assistance in Cases of Natural Disaster”, A/RES/2034 (XX) (1965). The major themes of the General Assembly resolutions are as follows:

1. The main responsibility of the natural disaster response remains on the affected country itself, while the assistance and support from the international community would provide aid according to the request of the government.

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<sup>36</sup> Available [Online: web] Accessed 22 March 2018, URL:<https://cerf.un.org> .

2. It is mandatory for the Emergency Relief Coordinator of the UN (earlier known as the UN Disaster Relief Coordinator) to coordinate and facilitate all the international responses to a disaster.
3. The need to work with the International Red Cross and Red Crescent movement in natural disaster response was recognised by the UN.
4. To improve the capacities of the international system for disaster response, consistent efforts should be made (Shodhganga, Online)<sup>37</sup>.

The major equivalent of international organisations in a country is the government in the disaster and emergency operations. Special ministries and bodies are formed by the government in most of the countries with full co-ordination by the governmental and international humanitarian assistance units. Foreign Affairs, Interior (including police and security forces, and occasionally military) and Defence are included by the government ministries as the co-ordination staff. The UN also acts according to the lined ministries by the government, for instance, the UNICEF and WHO works with the Ministry of Health. Along with this, the co-ordinating bodies formed by the government, UN agencies and the NGOs meet to share information and co-ordinate in various projects when some countries divide the co-ordinate according to sectors.

The United Nations Disaster Management Team (UNDMT) is formed and led by the UN Resident Co-ordinator in every disaster or emergency prone country. The composition of the UNDMT is dependent on the type of disaster/emergency faced by the country along with the organisations already present in the country. A team is formed with a core group which includes the representatives of FAO, UNDP, UNICEF, WFP, WHO, and UNHCR of the country. It acts as a platform for co-ordination along with the exchange of information and maintains harmony.

The United Nations Disaster Assessments and Coordination System (UNDAC) (formed in 1993) under the OCHA is designed in a way to meet the international

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<sup>37</sup>[online: web] 2 August Accessed 2015, URL: [http://shodhganga.inflibnet.ac.in/bitstream/10603/71640/9/09\\_chapter%203%20united%20nations%20and%20natural%20disaster%20management.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/71640/9/09_chapter%203%20united%20nations%20and%20natural%20disaster%20management.pdf)

needs as early as possible with qualified information in a sudden emergency situation, in the co-ordination of international relief operations. It tries to increase the response capacity in the disaster prone countries. The UNDAC works under the United Nations Resident/Humanitarian Co-ordinator and help in reinforcing the UN Disaster Management Teams (UNDMTs) in the country when requested by the government of the affected country. The UNDAC team is self-reliant when it comes to basic telecommunications, office and personal equipments. It also helps in reinforcing expert covering specialised fields of disaster management when required (Online)<sup>38</sup>.

The UNDP offices were responsible for setting up the UN Disaster Management Teams (UNDMTs) since 1989. The composition of the teams has come a long way since its formation in terms of its leadership structure. The other bodies remain active in the preparedness stage, while the UNDMTs only form after the disaster struck the country (ISDR 2009:27).

#### **3.8.4. Criticism of Role of International Institutions**

After the emergence of international organisations, they have been criticised for their structure and functions. It has been felt that the international organisations are majorly influenced by the major powers. One can argue that International agencies work in those strategic locations where conflicts keep occurring and they always look for the vulnerable countries where natural resources possibility exists. In the name of establishing peace and democratisation, western countries try to colonise (directly or indirectly) the countries and that is why most of the developing and least develop countries do not feel secure by the presence of external agencies. The role of the United Nations has always been very critical. The United Nations was made by Western countries for their own benefits after the end of World War II, though it expanded its presence in the world later on. In this organisation, majority of the decision is dependent on permanent members of UNSC and not a single developing country is a permanent member of UNSC. It still believed that developing countries should also be given permanent representation but hegemonic powers do not need reform in the organisation. The political, economic and military powerful countries of UN keep trying to oppose the reforms. Today, the complexity in global institutional

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<sup>38</sup> [Online: web] Accessed 12 July 2017 ,URL: <https://www.unocha.org/our-work/coordination/un-disaster-assessment-and-coordination-undac>



structure can only be removed by equal representation in the organisations because non-military problems are becoming global which need involvements of national and international governments equally. Disaster management structure is based on the involvement of the international organisations for numerous roles. It faces criticism for their policies, their biased ideology, representations, and for many administrative structural issues.

We can conclude that this chapter dealt with the burning issues related to lack of regional co-operation during disasters in South Asian region. This chapter has mainly focused on the challenges in disaster management which occurred due to lack of trust and historical conflicts within the inter-state; and the foreign policy impact on disaster management policies. Now the next chapter will look for detailed study of specific countries of South Asia. The chapter will deal with nature, impact, response and disaster management practices in Pakistan of 2005 earthquake and 2010 flood in comparative framework.

## **Chapter 4**

# **Natural Disasters in Pakistan: A Comparative Study of Nature, Impact, Response and Disaster Management Practices in Pakistan after Earthquake of 2005 and Indus River Flood of 2010**

Pakistan is known to have the seventh largest standing armed forces in the world. It has always remained vulnerable to climate change and catastrophic events (European Commission report 2016a:7). The period between the years 2005-2015, was especially devastating for Pakistan, as it encountered numerous both man-made (terrorism-related) and natural (e.g., floods, an earthquake, drought, and heat waves) catastrophic events. Until the devastating earthquake of October 2005, all ideas of hazards in Pakistan had centred exclusively on the recurring floods. From that point onwards, there has been a growing acknowledgment that Pakistan is prone to a wide range of disasters that are happening with expanding frequencies and intensities.

It has been evident from the disaster profile of Pakistan, that it is a disaster-prone South Asian country which suffers enormous losses of property, verdure, and faunas on a regular basis. The remarkably different terrain and climatic conditions make it vulnerable to different types of disasters. Its mountainous areas in the north make it prone to earthquakes, snowstorms, landslides, and torrential slides. Beachfront areas attract dangers of flooding and violent winds. Pakistan keeps on experiencing plenty of natural and human prompted hazards that undermine the safety of the lives and livelihood of its subjects. It has become common for a flood to cause serious disasters in Pakistan, trailed by a tropical tornado, earthquakes, and landslide.

Pakistan is a South Asian country where it shares border with China in the north, Afghanistan in the north western side, India in the east, Iran in its west and finally touches the Arabian Sea in the South. It has an aggregate total area of about 796,095 square kilometres. Pakistan has five territories to be specific which involves Sindh, Punjab, Khyber Pakhtunkhwa, Balochistan and a recently settled region of Gilgit-Baltistan, a capital domain and Federally Administered Tribal Areas (FATA)<sup>39</sup> (Khan 2010:476). Notwithstanding these, there is the region of Pakistan occupied Kashmir. These are further divided into districts and then the districts are classified into smaller units called tehsils or taluka. Broader physiographic classifications will include four main divisions: namely, mountains, plains, deserts and plateaus.

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<sup>39</sup> Presently, the administrative Units of Pakistan consists of five major provinces: Balochistan, Gilgit-Baltistan, Punjab, Sindh and Khyber Pakhtunkhwa. FATA was formed after separation from Peshawar and Dera Ismail Khan districts in 1975, however it was merge in Khyber Pakhtunkhwa on 31 may 2018 as President Mamnoon signed 25<sup>th</sup> constitutional amendment bill to law. It is known as FATA Merger Bill.

The IPCC<sup>40</sup> fourth assessment (A4) report (2007) has claimed that the accelerating rate of climate change can trigger and worsen the effects of events such as heat waves, floods, storms and drought. In the list of most affected countries (2013) Pakistan was ranked fifth (CRED 2014), and German Watch ranked it as third for the same thing (Kreft et al. 2015:7). The country has extreme levels of vulnerability<sup>41</sup> which is not just influenced by geophysical specificities; however also because of consistent political turmoil. It encounters rapid rates of population growth and has more than fifty percent of its total population facing extreme poverty. The institutional mandates and frameworks that can successfully eradicate the effects of disasters have remained lacking in the country. In addition to that, factors such as inadequate execution of awareness and training about disasters, economic oppressions, total dependence of agriculture and slower rates of development keep aggravating the said vulnerability (Atta-Ur-Rahman and R. Shaw 2015:39). The IPCC fifth Assessment (A5) report (2014a:4) further reveals that currently the highest emission of green house gas has recorded in the history is due to human influence. This will further lead to long lasting impacts on the human and climate cycles. The report has warned global societies that if human influence will continue to affect the emission of greenhouse gases at present rates, the average global temperature could rise by 2.6–4.8 degree Celsius by 2100. IPCC A5 report (2014b) also shows that the South Asia Region (SAR) has already started experiencing the adverse effects of climate change. It shows that since 2000-2008, due to extreme rainfall events SAR endured the second highest economic losses of a total global economic loss of around 27.5 percent (ibid:11). The report also shows that Pakistan has suffered from waterborne diseases due to extreme flooding events in past years. Along with Pakistan, other South Asian countries like Nepal, India, Bangladesh has extensively suffered from mental disorders, chronic diseases, illness, deaths and displacement. These are prevalent in disaster affected areas (ibid: 11-12).

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<sup>40</sup> The Intergovernmental Panel on Climate Change (IPCC) is the UN body for assessing the science related to climate change. It was set up in 1988 by the World Meteorological Organization and United Nations Environment Programme to provide policymakers with regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation. The IPCC does not conduct its own research. It identifies where there is agreement in the scientific community, where there are differences of opinion and where further research is needed. It is a partnership between scientists and policymakers and it is this that makes its work a credible source of information for policymakers.

<sup>41</sup> Vulnerability is defined in the Hyogo Framework for Action as: “The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards”.

#### 4.1 Geographical Features of Pakistan

The country is surrounded by mountains on the northern and western sides. It has long stretches and areas that are highly mountainous with the ranges of Karakoram, Himalayas and Hindu Kush. It also has the second highest glacial heaps aside from the poles which remain as the dominant bodies for the supply of fresh water (Khan 2013). Pakistan experiences varying kinds of disasters which include floods, landslides, earthquakes, extreme weather phenomenon, glacier lake outburst floods (GLOF) and snow avalanches etc. The natures of the floods vary according to geographical factors. In the Indus plain which has a flat terrain suffers from fluvial floods<sup>42</sup> that have been found to be the most devastating. Hill torrents (flash flooding) are another kind of floods, which is a prominent factor for unleashing devastations (Kafle 2017:2).

As have been remarked previously, the country's extreme vulnerability to climate change is a result of the peculiarities of its geographic location, elevation and demographics. The three types of weather systems that affect precipitation levels and bring about flooding are the monsoon depressions which originates from the Bay of Bengal (the most important system), westerly waves comes from the Mediterranean Sea (winter rains) and the seasonal lows from the Arabian Sea (cyclones)" (Awan 2003; Rasul 2005; Wang et al. 2011).

The four distinctive seasons of Pakistan are the hot and humid stretches of April, May, and June; the hot monsoon with sporadic and heavy rainfall of July, August, and September; the dry and cooler October and November and finally the cold winters of December, January, and February. It has three main hydrological units which are the Indus Basin, Kharan Basin, and Makran Coastal drainage area (Wang et al. 2011:4).

According to Pakistani scholars Iqbal and Hyder (2015), Pakistan has more than seventy percent of its populations which are highly vulnerable to floods as they dwell in plains that have a high probability of flooding occurrences. The country is also vulnerable to earthquakes as it lies in areas susceptible to high seismic activity and the two major earthquakes of 2005 and 2013 have further deteriorated the situation. According to their study, over 40 percent of landmass of Pakistan is vulnerable to

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<sup>42</sup> Fluvial floods or river flood occurs when excessive rainfall cover an extended period of the time causes a river to exceed its capacity. It can also be caused by heavy snowmelt and ice jams.

earthquakes, 6 percent to cyclone, 60 percent to floods and 25 percent of the Barani land under cultivation is vulnerable to drought.

Thus, it can be said that hazard<sup>43</sup> expand vulnerability and add to the seriousness of disasters in Pakistan are:

- (i) Poor framework and constrained implementation of existing construction regulation;
- (ii) Lack of Early Warning System.
- (iii) Limited awareness and training on disasters and its response.
- (iv) Limited labour and co-ordination among different governmental disaster organisations.
- (v) Large numbers of ruined communities being vulnerable to disaster.

#### **4.2 Political Development in Pakistan**

The first model for the constitution of Pakistan was based on the Government of India Act of 1935 with certain alterations. The military plays a crucial role in the political scenario of Pakistan and remains to be the prime responding body owing to the long history of military rule in the country, especially from 1970 to 2008. During that period, six civilian governments were elected but none of them could complete the term being either overthrown or dismissed. The country began encountering considerable amounts of political transformation in the period of 2008 to 2010 where the Eighteenth Constitutional Amendment was a key factor in improving governmental role in the social and economic sectors (Augilar 2011). The political condition in this period indicated that a democratically elected government can ensure better prospects of necessary social changes and suitable policy measures. This also presents opportunities for large scale betterment of the population which is highly different from the exclusionist and despotic endeavours of the military rule (International Bank for Reconstruction and Development and World Bank 2010).

On October 12, 1999, General Pervez Musharraf, previously the Chief of the Army Staff, gained control of the Presidency as the Chief Executive after his army personnel overthrew Nawaz Sharif, the elected non-military leader. He nullified the constitution and enforced military guidelines under his command. The Constitution of Pakistan

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<sup>43</sup> A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

underwent numerous amendments and re-establishments in its history, so it does not bear much likeness with the one that was initially received. Since 2011, the security conditions of the country started to undergo unwelcome changes. This was because of being in close proximity with Afghanistan and suffering the consequences of the war of 2001 (with the US invasion of Afghanistan) which unleashed violent ramifications within Pakistan. Moreover, the war in Iran alongside other domestic political issues mobilised various Taliban factions within the country. From around 2007, all these Taliban groups joined together to form the Tehrik-e-Taliban-e-Pakistan (TTP) which soon gained massive control of the areas of Khyber Pakhtunkhwa (KP) and Federally Administered Tribal Areas (FATA) and kept imposing frequent terrorist onslaughts, jeopardising the security of Pakistan to a greater degree. To counter that, in 2009, the government issued high levels of military operations to eliminate militant activity in various areas, mainly the Swat Valley, in Malakand Division (European Union 2015:107). The operation was successful in displacing militants and halting potential terrorist activities to a good extent but conversely created the problem of rendering about 3 million people as Internally Displaced Persons (IDP). As a consequence, the remnant damages of the conflict driven military operations and the management of the IDPs created further political concerns for the government. However, this also indicates an assertion of the state over the sporadic expansion of terrorist activities and a control over the country's security concerns (International Bank for Reconstruction and Development and World Bank 2010).

During the period of the earthquake of 2005, Pakistan had federal Parliamentary Islamic Republic system; while during the 2010 flood, Pakistan had already acquired a democratic status (since 2008) with a transfer of the prime power from the President to the Prime Minister. Currently, it is a federal Islamic Republic with a bicameral elected parliamentary system of governance. Following the 18<sup>th</sup> Amendment and the devolution of political power around 2010; a longstanding demand for equal share of power among the constitutional units led to the transfer of about seventeen federal ministers to provincial levels. Despite these relatively positive changes in recent times, many scholars continue believed that the country would not gain complete political stability. Aziz (2007) remarked, "...the Pakistani military has become a parallel state, and given the extent of its influence, will continue to define the nature of governance within the polity". Previously after the earthquake, Pakistan fell among

the lists of the world's twenty most fragile nations in 2007<sup>44</sup>. However, the political transformations in the following years created a possibility of hope. The country has encountered various constitutional amendments which in an otherwise scenario would entail the constitution adapting itself with the growing demands of the public, but in Pakistan's case, it was mostly done to suit the fancies of people and authorities in power. This has led to the devaluation of the constitution as a sanctified document among the people. Remarking on the polemic and peculiar condition of Pakistan, journalist Naipual said, "...everybody...civil servants, politicians, the military, etc.-tries to fool everybody else but in fact nobody is really fooled in Pakistan (Naipual 1982:123)."

### **4.3 Nature of the 2005 Earthquake**

Pakistan's history and topography is characteristic of numerous earthquakes and high levels of seismic activities. It has one of the most active seismic belts and studies (Atkinson 2004) estimates that a majority of the world's seismicity take place in the seismic belt zones of the country with tectonic plates sliding and colliding into one another. Jan and Kazmi in their tectonic map zone (Zare and Paridari 2008) showed that northern parts of Pakistan consists of medium and high levels of metamorphic rocks and the Himalayan areas have low levels of metamorphic rocks. These varying structures influence seismic activities in the Indus plain (Kazmi and Jan 1997).

Before the 2005 earthquake, Pakistan's history regarding natural disasters mainly consisted of floods and the collective death toll of all the floods (prior to 2005) was around 6700 people (GFDRR, online)<sup>45</sup>. However, the 2005 earthquake was so massive that it incurred an unparalleled amount of damages. Around 73,000 people perished, 780,000 buildings were ravaged and other establishments were left unusable for many years to come. A substantial chunk of the damaged buildings were schools (around 17,000) and many hospitals which were close to the epicentre were also affected severely.

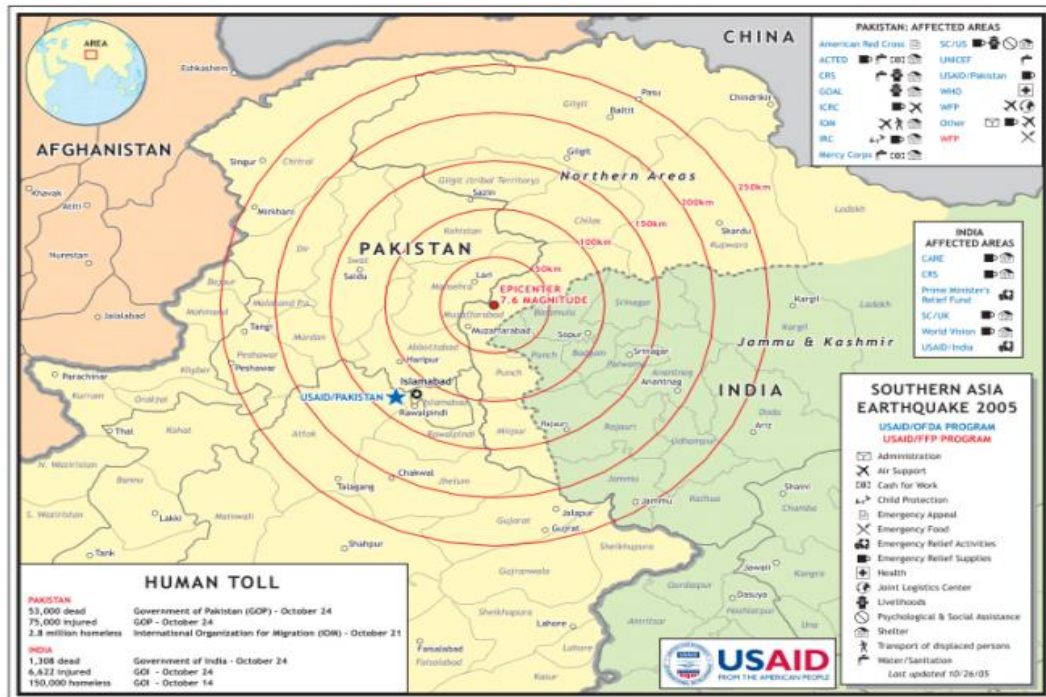
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<sup>44</sup> In 2007, Pakistan was ranked among the world's 20 most fragile states globally by the Fund for Peace's Fragile States Index, the World Bank's Country Policy and Institutional Assessment, the Brookings Index of State Weakness in the Developing World, and the Carleton University Country Indicators for Foreign Policy. Moreover, Pakistan has been on the European Commission's Crisis Declaration list at least since 2012.

<sup>45</sup> GFDRR, Pakistan, the given information is available on this provided sites page [Online: Web] Accessed 16 June 2017, URL:<https://www.gfdr.org/en/pakistan>



**Map 4.1: Map of the Epicentre of the Earthquake 2005**



Source: US agency for International Development (Published on 26 October 2005) [Online: Web] URL:<https://reliefweb.int/map/pakistan/pakistan-southern-asia-earthquake-2005-26-oct-2005>

The country has encountered several disastrous occurrences, the most prominent being earthquakes, floods, droughts, and landslides. Some events like the Ziarat earthquake on 28 October 2008 of Magnitude (M) 6.4, Awaran locale Balochistan earthquake on September 24, 2013 of M 7.8 and Awaran region Balochistan earthquake on September 28, 2013, M 6.8 and on 26 Oct 2015 of M 7.6 have been the most destructive ones (Sarwar et al. 2016; Boon 2013). Earthquakes mostly take place along the Himalayas, the Karakorum and the Hindu Kush, following which they precede towards the north. It moves towards Koh-e-Sulaiman heading west following Thar Chaman blame line along Quetta, and Makran blames line following the ocean drift. Their events are usually connected with the Indian plate applying constant pressure on the Eurasian landmass. In 1935 an earthquake of above 6.5 on Richter scale shook Quetta leaving 35,000 dead. There was also a critical earthquake that happened in February 2004, in NWFP bringing about 24 deaths and more than 129,000 people were affected (SAARC 2009:2,6,12, 82,93).

An earthquake of magnitude 7.6 on the Richter scale affected South Asia on 8<sup>th</sup> October, 2005, bringing about massive devastations in some parts of North West Frontier Province (NWFP; currently which is known as Khyber Pakhtunkhwa (KPK)

and Pakistan Occupied Kashmir (POK) in Pakistan. According to the Pakistan Meteorological Department and Geological Survey of Pakistan, more than 900 aftershocks have been recorded for about two weeks following the earthquake (Relief web 2005). According to the NDMA of Pakistan, it was estimated that an area exceeding thirty thousand square kilometres was severely affected, 3.5 million people suffered shelter and property damages, over 58,000 people were killed and more than 77,000 were severely injured (IUCN Field mission Report 2005:2-4). Landslides obstructed the access to the important roads which happened to fall in mountainous areas. Despite the army restoring major roadways, numerous settlements remained unreachable. The already agonising conditions of the victims were aggravated by a winter rain in the lower elevations, cold temperatures and snowfall in some parts of the mountains. An IUCN mission consisting of Mahmood Akhtar Cheema, Karl Schuler and Ahmad Saeed surveyed certain severely affected areas, to comprehend the disaster and determine its potential after-effects and the level of its impacts, from October 16 to 18. They included Abbottabad, Battagram, Oghi, Balakot, Galiyat (Dalola) in NWFP and Muzaffarabad in POK in their survey (ibid: 6).

**Table 4.1 Earthquake Nature**

Area most affected	Pakistan Occupied- Kashmir; North-West Frontier Province (now Khyber-Pakhtunkhwa)
Affected Population	130,000 injured and 3.5 million homeless
Number of fatalities	73,000 dead
Most affected sectors (based on needs)	Housing; Education; Transport
Estimated overall damage (US \$)	US\$3.5 billion
Estimated overall impact (% GDP – based on damage)	2.91% (includes Damages & losses

Source: GFDRR (2014), Country Case Study Series, Disaster Recovery Framework Guide, May 2014.

The given table 4.1 shows that earthquake of 2005 affected the socio-economic sectors of Pakistan severely. As mentioned above, the main areas of devastation were the NWFP (presently, KPK) and POK which had around eight districts in total. A total of 8 districts across the two administrative entities bore the brunt of the earthquake. The earthquake had consequences which made relief and rehabilitation work quite difficult. Major lifelines like roadways leading up to the affected areas were obstructed by landslides, bridge failures and harsh terrain. Landslides were in fact a major event with some exceeding the lengths of 0.1 km. Essential services like

power and water supplies and telecommunication services were jeopardised for long periods of time even though in some areas they were restored within few weeks. The complexities of the situation obstructed a lot of reconstruction endeavours and the difficulties increased considerably as a harsh winter was soon to follow. The terrain was not easily navigable for reconstruction. The earthquake however led to the establishment of a reconstruction agency called the Earthquake Reconstruction and Rehabilitation Authority (ERRA) to facilitate, lead, co-ordinate and manage rehabilitation and reconstruction works.

**Table 4.2 History of Major Earthquake in Pakistan**

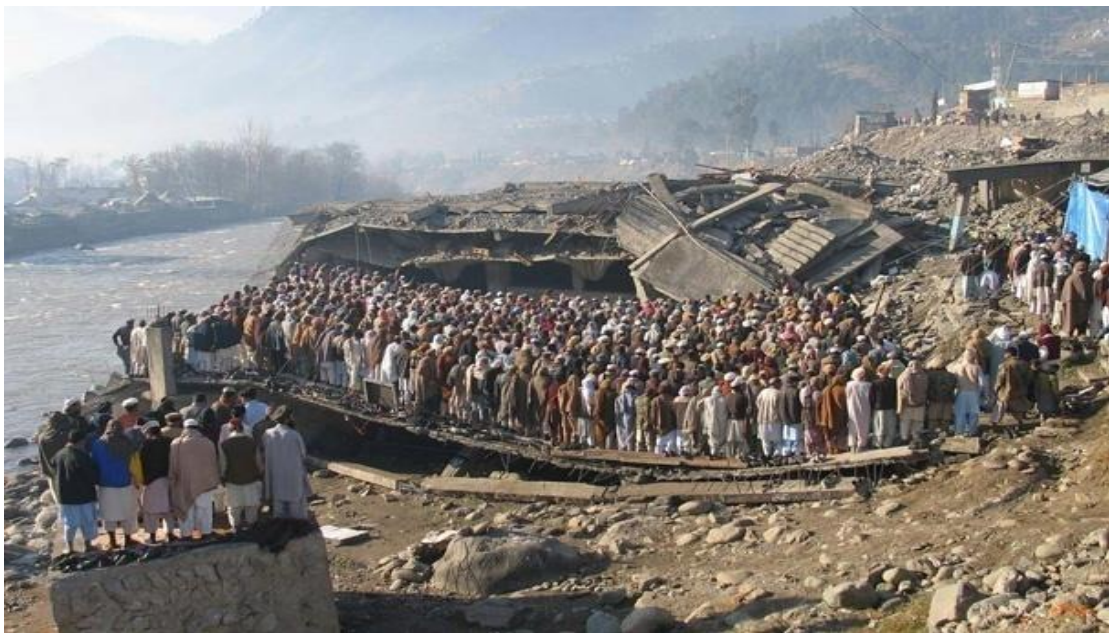
Year	Area	Loss/ Injured/Houses Damages	Regime
<b>1971, September</b>	Gilgit	100/NA /1000	Yahya Khan
<b>1974, December</b>	Hazara, Hunza, Swat, KP	<b>5300/17000/4400</b>	Fazal Ilahi Chaudhry
<b>2001, January</b>	Sindh	15/108/NA	Pervez Musharraf
<b>2002, October</b>	Northern Area	17/ NA/ 1500 Homeless	Pervez Musharraf
<b>2004, February</b>	KPK	24/40/NA	Pervez Musharraf
<b>2005 October</b>	Northern Area, Afghanistan, India, China	<b>80000/200000/NA</b>	Pervez Musharraf
<b>2008 October</b>	Quetta	160/370/NA	Pervez Musharraf
<b>2011 January 18</b>	Southwest	NA/NA/200	Asif Ali Zardari
<b>2011 January 20</b>	Northwest	NA/NA/200	Asif Ali Zardari
<b>2013 April 16</b>	Pak Quetta, India, Iran	<b>34/80/10,000</b>	Asif Ali Zardari
<b>2013 September</b>	Balochistan (Southwest)	800/NA/NA	Mamnoon Hussain
<b>2015, October 26</b>	GB &KPK	<b>363/1200/NA</b>	Mamnoon Hussain
<b>2016 April 10</b>	KPK, Punjab	6/27/20	Mamnoon Hussain

Source: Dawn News, 31 January, 2018; \*NA-Not Available

Table 4.2 shows that 2005 has been one of the deadliest earthquakes in the history of the Pakistan. The given table also shows that earthquake was not a new phenomenon in the country. Previous government has also seen the devastating nature of natural

disasters like Pakistan, though government had done nothing to handle such disasters in future. This shows the lack of willingness of the government in Pakistan. After 1971 and 2005 earthquake events, Pakistan again faced sever disasters in 2015, in which government could not minimise the death loss and damages, however, the table clearly shows that Pakistan's northern and southern areas have always been disasters prone since independence. This shows that government policies could not be implemented successfully after establishment of NDMA.

**Figure: 4.1 Earthquake Effects on Locals**



Source: International Institute of Earthquake Engineering and Seismology [Online: web] Accessed 18 March 2018, URL:<http://www.iiies.ac.ir/en/balakot-pakistan-earthquake-of-8-october-2005-mw7-6/>

Damages caused by the earthquake highlighted the fact that existences of environmental resources that are sustainable in nature contribute to economic growth, development of infrastructure, improvement of socio-cultural capital and preserving and enhancing the quality of living for a particular region. It also caters to economic growth and the accumulation of human capital. The main affected areas of the earthquake; POK and the northern areas of Pakistan, are significant areas which contribute to ecological balance and enhancement of the overall developmental parameters of the country. These areas are rich in forests, wildlife and varieties of vegetation that cater to regulation of temperature, control of pollution, promotion of eco-tourism and many other benefits. Destruction of these crucial areas not only

wreaked environmental damages but also ruined cultivable lands, quality of water and its sources and public infrastructural facilities like healthcare, sanitation, nutrition and water supply. In doing so, this catastrophe has not only distorted the environment but has created deterrents for the re-conservation and rehabilitation of crucial life-giving facilities by incurring losses in stocks and obstructing the flow of human capital (Hamdani and Shah 2005).

**Table 4.3 Total Damage Assessment: Post Earthquake (2005)**

Indicators	Latest estimate	Sources
Area affected	30000 sq. Km	FRC 2005
Population affected	Between 3.2 and 3.5 million	FRC 2005
Deaths	87,350	FRC
Injured	138,000	FRC
Houses	400153 (damaged and destroyed)	ADB/WB 2005
Families affected	500000 (seven people per family on average)	UNOCHA
Number of food insecure	2.3 million	WFP/UNICEF
Latrines needed	160000	UNICEF
Number of school children affected	955000	UNICEF
Number of women affected (age 15-49)	800000	UNFPA

**Adopted from:** Pakistan 2005 Earthquake Early Recovery Framework (November 2005), United Nations System, Islamabad, Pakistan.

#### **4.4 Impacts of the 2005 Earthquake in Pakistan Based on the ERRA Assessment Report**

As the table 4.3 shows that after the calculating estimated cost of the damages, the government tries to make the policies and strategy to recover the damages caused by earthquake. They realised that the general basis for the assessment of damages requires sectors for better classification like social and ecological sectors, housing, livelihoods, agriculture, transport, training, wellbeing, water supply and sanitation, energy, administration and organisations, the business and service industries etc (Asian Development Bank and World Bank 2005). The impact of the earthquake on every sector of the economy incorporates the following three costs:

- (i) Direct Damage;
- (ii) Indirect Losses
- (iii) Reconstruction Cost.

Direct Damage refers to the total or partial financial estimation of destroyed resources like the social, physical and economic infrastructure, immediately following an earthquake. Indirect Losses are those that may not have immediately resulted from the disaster itself but are due to the extended ramifications of the Direct Damages for example, increased costs, curtailed production, decrease in income etc. Reconstruction Costs are the expenditures generated in the rehabilitation and reconstruction procedures (World Bank and ADB 2005).

**Fig 4.2 Earthquake Affected Areas of Pakistan**



Source: Destructive image of Balakot (10<sup>th</sup> October 2005) BBC NEWS, [Online: web] Accessed 5 June 2018, URL: <https://www.bbc.com/news/world-asia-34464815>

Here, figure 4.2 shows the devastating impact of earthquake. Kashmir earthquake of 2005 caused thousands of landslides. Due to extreme impact, it has made the region more vulnerable by cracking down the earth and mountain surfaces. It poses potential threat for future disasters. The figure also depicts that earthquake affects the social life of the people by damaging the houses. It poses economic burden on the government and common people. It also shows that the country lack earthquake resilience buildings which could have minimised the economic loss and human loss as well. Through the figure, it can also be interpreted that such damages takes longer time than

flood to relocate the people after disasters. The infrastructure damages also create hurdle in the overall development of the country.

**Table 4.4 Preliminary Estimate of Total Losses and Reconstruction Costs as of 2005**

Sector	Direct damage (Rs. Mill.)	Indirect loses cost (Rs. Mill.)	Reconstruction costs (Rs. Mill.)	Reconstruction cost (US mill)	Share of total reconstruction Cost (%)
<b>1. social infrastructure</b>					
Private Housing**	61,220	7,218	92,160	1552	44
Health	7, 1 14	1,378	18,012	303	9
Education	19,920	4,133	28,057	472	13
Environment	12		8,985	151	4
Public administration	2,971	687	4,254	72	2
<b>2. Physical infrastructure</b>					
Transport***	20,165	4,061	24,699	416	12
Water Supply and Sanitation	1, 165		1,900	32	1
Irrigation	324		623	J O	0
Energy, power and fuel	744	1,561	2,377	40	
<b>3. Economic sectors</b>					
Agriculture and livestock	12,933	6,770	17,846	300	9
Industry and Services	8,578	8,379	9,178	155	4
<b>4. Total =1+2+3 (in Rs. Millions)</b>	<b>135,146</b>	<b>34,187</b>	<b>208,091</b>	<b>3,503</b>	<b>100</b>
<b>o/w :</b>	POK	76,375	1 7,671	116,625	1,963
	NWFP	58,771	16,516	91,467	1,540
<b>o/w :</b>	Public Assets	48,131	12,175	82,1 87	1,384
	Private Assets	87,015	22,012	125,904	2,120
<b>o/w :</b>	Urban Areas	26,490	1 3,675	46,163	777
	Rural Areas	108,656	20,512	161,928	2,726

Source: Asian Development Bank and World Bank, 2005<sup>46</sup>

<sup>46</sup>Notes:

\* Includes the cost of reconstruction of fixed effects and renewal of public services.

\*\* Includes the value of household contents such as consumer durables; reconstruction costs exclude the replacement of these assets.

\*\*\* Includes roads and bridges.

\*\*\*\* Total losses and reconstruction costs in agriculture, industry, and services are over and above what is accounted by the sectors listed above.

As interpreted from the table 4.4 above, it can be deduced that the earthquake that housing sectors, especially the private housing sectors suffered maximum damages as around 44 percent of the governmental expenditure was on the reconstruction of the houses. Besides the sectors of health, education and environment; public administration sectors are relatively less affected. With respect to expenditure, the social loss in these sectors is greater than the financial damages. Coming to the physical infrastructure, apart from transport, there are no damages to be seen. Transportation covered around twelve percent of government's treasury. In the economic sector, the industrial sectors required reconstructions which were estimated to be only four percent. Therefore, it is quite evident that the effect of the earthquake is majorly on the residential and other private households. Physical damages outweigh the social damages in the affected areas.

#### **4.4.1 Impact of Earthquake on Socio-Environment Sector**

The earthquake of 2005 has severely affected the primary source of survival of the local population. Pakistan's rural population is mostly associated with agriculture and animal husbandry which remain to be the main sources of their employment and livelihood. Around seventy percent of the country's aggregate household income comes from agricultural sectors. In POK, areas around twenty percent of the houses are headed by women where male labour migrants are high in numbers. Around eighty eight percent of the people live in mountainous regions. The 2005 World Bank report also reveals that Pakistan's environmental conditions have deteriorated since the earthquake. However this was not just affected by the earthquake and was a consequence of deforestation, mismanagement of agriculture land, encroachment, excessive rubble and disposal in mountainous region. In totality it can be concluded that the earthquake has negatively impacted the rural livelihood of the country to a great extent and had given rise to the possibility of more disasters to come in the form of landslides.

#### **4.4.2 Impact on Aid Relief and Reconstruction Cost**

The humanitarian activities on the ground records for the nature of relief are quite unclear. Specifically, tents and plastic sheeting (the most basic form of shelter) were conveyed considerably more quickly in Pakistan than in a similar disaster situation in



Haiti<sup>47</sup>. After the initial three weeks of relief work, the Haitians had got just 10,545 tents, whereas Pakistan had managed to distribute around 109,500 tents. Notwithstanding this contrasts, other distinctions are also critical: 1.2 percent of Haitians had received tents following three weeks, compared to around 3 percent of Pakistanis in a similar amount of time. It ought to be noticed that in the two cases the percentages are low, particularly when you consider the vast quantities of damages and the number of disaster victims (Ferris 2010). Pakistan government has also faced funding issues which had hampered the recovery, rehabilitation and reconstruction process to some extent. It was noted by several newspapers that Pakistan’s disasters had got much lesser global attention compared to the other natural disasters that the world had witnessed elsewhere thus far. The given table shows the disparity faced by the Pakistani disasters:

**Table 4.5 Disparity between Pledging and Delivery of Aid after Disasters**

<b>Crisis</b>	<b>Amount pledged (\$)</b>	<b>Amount delivery(\$)</b>
<b>Cambodian war Rehabilitation</b>	880m by June 1992	460m by 1995
<b>Rwandan genocide</b>	707m in January 1995	<71m by July 1995
<b>Hurricane Mitch Central America</b>	\$9billion in 1998	<4.5bn, December 2004
<b>Bam earthquake, Iran</b>	One billion in January 2004(UN Appeal)	\$410 , January 2004
<b>Haiti earthquake</b>	508 m in August 2010	134.2 m August 2010
<b>Pakistan floods [Flash]</b>	\$460, 3 august 24 2010 UN appeal)	2010 \$45 million, Till 9 august

**Source:** Walker, P., et al. (2005).

The table 4.5 shows that different part of the world has been affected by natural disasters where the respective governments and the United Nations had appealed for funds from the international community. However, the table shows that fundraising has mostly been one of the biggest challenges. Few countries had received responses from the international communities, way faster than some other countries. This can be one of the reasons for hampering the relief distribution processes in the aftermath of the disasters in these countries receiving a slow response. There can be another theory behind this slow response from international relations. The countries who have been declared as a threat to international peace due to the record of some violent activities

<sup>47</sup> The 2010 Haiti earthquake was a catastrophic magnitude 7.0 Mw earthquake, with an epicentre near the town of Leogane and approximately 25 kilometres west of Port-au-Prince, Haiti's capital. The earthquake occurred on 12 January 2010.

perpetrated by its government or people have received a slower response or it can be said that those countries who have been blacklisted in world power foreign policy, could not receive enough donations from the international community. It means that their global image also affects the disaster response they receive. Here, media also plays an important role in constructing the global image of the country. The media coverage of the disasters also affects the responses at the international level.

**Table 4.6 Estimated Costs for the Recovery, Reconstruction and Rehabilitation**

Category	US \$ million
<b>Relief</b>	1092
<b>Death and injury compensation</b>	205
<b>Early recovery</b>	398
<b>Livelihoods: non-grant portion</b>	12
<b>Other sectors</b>	288
<b>Restoration of livelihoods</b>	97
<b>Reconstruction</b>	3503
<b>Short term reconstruction</b>	450
<b>Medium and long-term reconstruction</b>	3053
<b>Total</b>	9,098

\*An additional \$576 million were estimated as indirect income losses

**Source:** As reported by UN Agencies Recovery Needs Assessments and ADB/WB Preliminary Damage and Needs Assessment, November 2005.

The given table 4.6 is based on the Damage and Needs Assessment Report organised by the Pakistani Government and its collaboration with the Asian Development Bank and the World Bank. This was released five weeks after the earthquake. The records showed that an approximate aggregate of relief, early recovery and reconstruction costs were calculated at around USD 5.2 billion and an extra USD 576 million was estimated to be due to indirect salary losses. Such an initiative on the part of the government was one of its kinds in the country where such a systematic and collaborative approach was taken, while extracting active cooperation from important international sectors. This Damage and Needs Assessment helped the Government of Pakistan to arrive at a farsighted estimation report of the needs and appropriate recovery measures catered to each affected section. The necessary information was

presented at a donors' gathering that took place and was pursued promptly. This endeavour brought in adequate calculation of losses that helped in planning out appropriate rehabilitation programs that was beneficial to a great extent (ADB and World Bank 2005).

#### **4.4.3 Earthquake Impact on Health and Other Sectors**

The earthquake caused severe damages to healthcare related sectors, collapsing major hospitals and clinics. The Combined Military Hospital (CMH) in Muzaffarabad collapsed completely and 782 other healthcare institutions were damaged. This not only killed and injured the patients and workers present inside but also made relief work pertaining to medical emergencies incredibly difficult and many had to only rely on the NGOs for assistance. Aside from some base and field hospitals, medical professionals could not be arranged for prompt attendance and affected areas which had damaged routes and rough terrains could not be accessed. Maternal health was damaged due to the death of several traditional birth attendants and the relocation of some. Multiple cases of patients requiring pre and post natal care got jeopardised. The government and international agencies tried to arrange for psychiatrists and mental health professionals (arranging up to 5 million USD for the cause) to oversee necessary treatments for shocks and post traumatic stress (GFDRR 2014). Other related problems involved the management of the displaced population in shelters and the control of diseases in the relief camps. Diseases like respiratory infection, scabies and diarrhoea were rampant in the relief settlements. The government tried to control the situation by propagating the information for hygiene measures among the people living in shelter camps. Other problems due to unfamiliarity with the situation also arose among the affected population. A relief worker reported that problems relating to comfort and modesty instigated many women to use the communal toilets only after dark (EERI 2005). High priority was given to services such as winterised tents and other protective shelter against severe cold weather conditions, blankets /sleeping bags, sanitation, fuel and kitchen sets (especially latrines), food, tarpaulins, delivery of safe water, shovels / ploughs, water bladders for hospitals, ground sheets, stoves, generators and diesel, and snow chains and antifreeze (ADB and WB 2005). Mobile medical teams, medical personnel with expertise in surgery and volunteers capable of attending to medical emergencies were organised by the government. Major kinds of emergencies that were reported were of severe trauma (44 percent of the total amount

of treatments), Acute Respiratory Infections (25 percent) and acute diarrhoea (17 percent). The widespread disease reported 107 tetanus cases which killed around 19 people, the Mansehra Government hospitals reported six cases of jaundice and 14 cases of measles were reported from Balakot and Battagram (WHO 2005 in ADB &WB 2005).

#### **4.4.4 Responses to the Earthquake Disaster of 2005**

Pakistan is prone to an extensive range of natural and anthropogenic disasters; however, the October 2005 earthquake was the most horrendous catastrophic event that the country has encountered in its history. Post-October 2005 earthquake, authorities were continually distressed about the potential of vulnerability and risk in the affected areas (Ferris 2010). The response in Pakistan can be divided into four parts: (a) The Government of Pakistan's response; (b) Civil society's response (c) Private sectors' response and (d) International response.

The Pakistani government responded promptly but faced many challenges. The government found reaching the victims in the affected areas difficult because as mentioned earlier, the communication network and the difficult mountainous regions were totally destroyed. The government took the help of national and international military organisations including the North Atlantic Treaty Organisation (NATO) in relief work. This led them to face criticism and other related socio-political problems (to be discussed in detail in the next chapter). Relief and rehabilitation work of this nature and magnitude was something the government was completely unfamiliar with and was unprepared to tackle and manage properly. They lacked a central fund mechanism through which they could collect and distribute the relief funds to the provincial and local authorities. This led to the creation of the 'President Fund Relief' (World Bank and ADB 2005). The then Prime Minister of Pakistan, Shaukat Aziz, appointed a Federal Relief Commission (FRC) to distribute the relief goods items. The major goals were to issue and distribute food, water, shelters, and medical care.

Following this, the President established the Earthquake Rehabilitation and Reconstruction Authority (ERRA) on the 24<sup>th</sup> of October with the help of International organisations like the World Bank. Pakistan's civil society also responded to disasters proactively by mobilising and arranging for relief items and forming online portals to collect relief funds. The role of the civil society in Pakistan

is also controversial because the terrorist organisations that were banned or black-marked by the President also helped in the relief work adequately. It was difficult to find out who was legally authorised to be a part of the response teams. The private sectors role also played a significant role in providing telecommunication services in the affected regions for the smooth functioning of response teams for relief operations smoothly. A major role was also played by the international humanitarian response agencies, institutions and organisations. They helped in providing monetary help, logistic and non-logistics services and technical assistance for short and long term reconstruction and rehabilitation activities (World Bank and ADB 2005).

#### **4.5 Nature of Indus River Flood 2010 in Pakistan**

The river systems have been structurally affected by human exploitation and additional climate changes. As an outcome of climatic changes and the magnanimous intensity of grievous floods, the Himalayan rivers have expanded in the past two to three decades (Dutta and Heradth 2004; Shrestha 2008).

##### **4.5.1 Geographical Propensities**

In 2010, overwhelmingly uneven precipitation during the rainstorm period brought about floods in different parts of Pakistan. Substantial precipitation in the Indus River's upstream reaches (for example, in the Khyber Pakhtunkhwa province of Pakistan) followed by breaks of embankments and river channels along the stream's course ravaged many parts of Pakistan. Flood in the Indus River began in mid-July of 2010 and proceeded till early September affecting more than 14 million people in Pakistan. As indicated by EM-DAT database report (2010), this flooding episode slaughtered around 1,961 people. It damaged properties worth US \$ 9,500, 000. Flood control techniques on Himalayan Rivers are fundamentally embankments and barrages, which have not just destroyed the stream courses of the rivers but also intensified the flood power and frequency. As a result, quick siltation of stream bed, seepage clog, and channel restriction were recorded for affecting these areas (Kumar, et al. 2011; Jain and Tandon 2010).

#### **4.5.2 Effects of 2010 Flood**

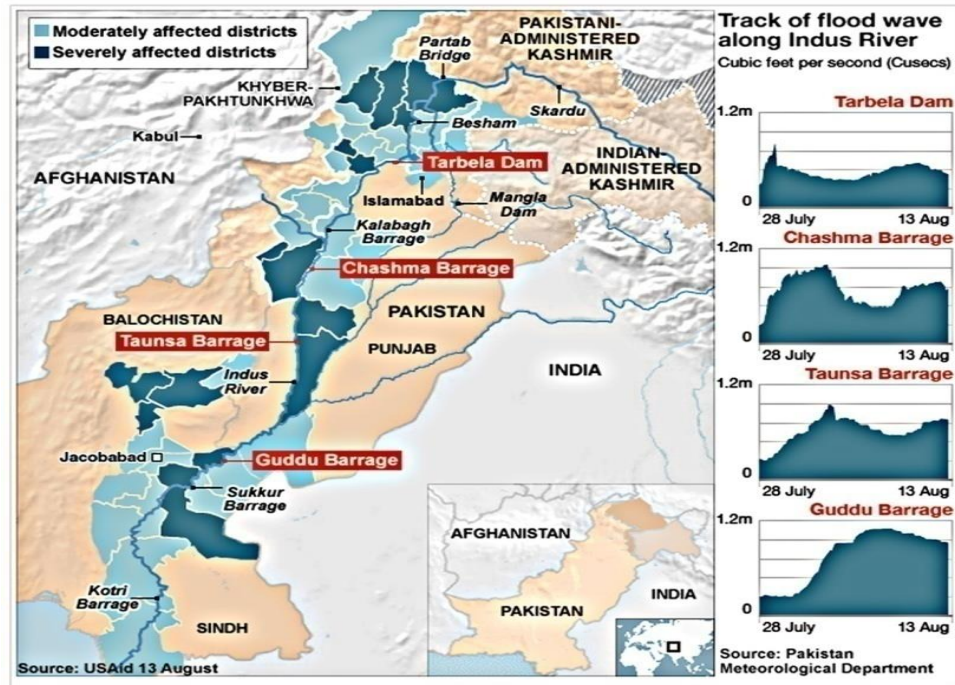
In July 2010, the monsoon brought heavy destructions in many areas of Pakistan. It destroyed infrastructures and halted communication with the death toll rising great heights and leaving the victims in unending distress. According to a 2010 UN report, the flood rendered around 8 million people in Pakistan homeless. A minimum of 1985 people died and brought hardships to the lives of 18 to 20 million with rampant diseases and food shortages. More than three million children faced high risks of diseases like cholera, typhoid and dysentery. Almost a million homes and roadways, agricultural lands, public buildings and forms of livelihoods were destroyed.

Various political and social issues came to the limelight because of the flood. Farooq Tariq, the spokesperson for the Labour Party Pakistan (PPP) in an interview said that the flood revealed the true nature of various aspects of Pakistan's government. The flood proved that the government's claim that poverty had declined in the country was in fact untrue as countless people were extremely poor with less than one hundred rupees of total assets. Many levels of backwardness and oppression in the society gained notice. The military who had always been an authoritative entity in the country tried to win public affection and reinstate their hold in the newly established democratic structure. Meanwhile they also propagated nepotistic tendencies by giving privileges to army families. All these while, the Pakistani President infamously went for a vacation in Paris. Corruption was also prevalent with cases of bribery affecting the survivors in government institutions being common (Taraqee foundation 2010; SAARC Workshop Report 2012; NDMA Pakistan report 2010; Ferris and Petz 2012; 65-66).

The flood followed its course to the "Darya-e-Talli" (Talli river) destroying the riverside boundaries and reached the Talli village and the adjoining areas like the village of Sultan Kot, killi Saveri Sabrani of union council Talli. It affected schools, houses, public offices, roadways and systems of water supplies & sewage control. Dominant forms of livelihoods involving agricultural fields and livestock were also ruined. The flood flowed from Sibi by hampering small dams and overflowing small rivers, to head towards District Naseerabad, Jafferabad and Jhal Magsi. Meanwhile, flash floods in northern areas of Balochistan brought destruction to around eleven districts and displaced around one million people. They took shelters in other

neighbouring districts. The government announced and established several camps in different areas of Balochistan (Taraqee Foundation 2010).

**Map 4.2 Indus River Drainage System Affected by Flood in 2010**



Source: provided by Pakistan Metrological Department 9 (online: web] Accessed 4 June 2018  
 URL:<https://www.dawn.com/news/1130060>)

The monsoon rains also ravaged the Khyber-Pakhtunkhwa province because of the rise in the level of river water. This entered the region from the provinces of Afghanistan and northern parts of Kashmir. There were floods in almost all the districts of this province. The worst affected districts by floods were Mardan, Nowshera, Charsadda, Swat, Peshawar, Upper and Lower Dir districts. The downpour constituted the maximum recorded rainfall in the region over the last 35 years. Districts of Kohat, Bannu, Dera Ismail Khan and Tank received sustained rains and also experienced heavy flash floods. Along with the banks of the Indus, Kohistan, Sangla Hill, Battagram and Mansehra districts also experienced heavy downpours and flash floods. Consequently, the Kabul River which is highly susceptible to floods, overflowed in the low lying adjoining regions of Charsadda and Nowshera districts; completely sweeping away many Union Councils (Taraqee Foundation 2010).

**Table 4.7 Drainage Basin Characteristics and Hydrology of Important Himalayan Rivers**

Parameters	Indus	Ganga	Koshi
Catchment area (10 <sup>3</sup> km <sup>2</sup> )	960	1073	101
Total length (km)	3180	2700	1216
Average annual discharge (m <sup>3</sup> /s)	7610	15000	2236
Annual sediment load at river mouth (million tonnes/year)	291	1670	43
Discharge/area	8	14	20
Sediment yield (million tonnes/year/km <sup>2</sup> )	0.3	1.56	0.43

Source: Hovius (1998); Sinha et al. (2012).

The above table 4.7 shows the Indus (Indo-Pak), Ganga (India-Bangladesh), Koshi (India-Nepal) River characteristic and its expansion within the South Asian region. These three rivers play an important role in bringing prosperity and deconstruction both. The major economy and growth of civilization has been always dependent on the river system of these rivers in the region.

#### **4.6 Analysis of Historical Data of Floods**

Pakistan has faced flood issues consistently in the recent past. Flood events of 1950, 1992 and 1998 made numerous deaths and losses to the national economy. Floods cause immense loss of infrastructure, life, and land. In Pakistan, poor management of water resources and the absence of viable water strategy have aggravated the flooding issue (Jha 2011:16, 62; ADB and World Bank 2010:43). It has been noted that Pakistan is at the fifth place among South Asian countries that are repeatedly influenced by flooding (Gareth and Sonali 2016:10).

Pakistan has encountered 25 most mega flood events between 1947-2017 periods (Federal Flood Commission 2015). During this period, floods harmed vast tracts of terrains in Gilgit-Baltistan, FATA (Federally Administered Tribal Areas), Pakistan Occupied Kashmir, KPK (Khyber Pakhtunkhwa), Punjab, Sindh, and Balochistan. The 2010 flood in Pakistan was one of the biggest riverine waterway floods in the history (Syed and Gonzalez 2014: 146). The given below 4.7 table also showing the historical pattern of floods in Pakistan.



**Table 4.8 Historical Floods and Damages Distribution**

<b>N o.</b>	Presidents	Year	Financial Loss (US\$ Million)	Human Deaths (Number )	Damaged Villages (Number )	Inundate d Area (km <sup>2</sup> )
1		<b>1950</b>	488	<b>2190</b>	<b>10000</b>	17920
2		1955	378	679	6945	20480
3	Iskander Mirza (elected democratically)	1956	318	160	<b>11609</b>	<b>74406</b>
4	Iskander Mirza	1957	302	63	4498	16003
5	Ayub Khan (military dictator)	1959	234	88	3902	10424
6	Zulfikar Ali Bhutto (elected democratically)	<b>1973</b>	<b>5134</b>	474	<b>9719</b>	<b>41472</b>
7	Fazal Ilahi Chaudhry (elected democratically)	1975	685	126	8628	<b>34931</b>
8	Fazal Ilahi Chaudhry	<b>1776</b>	<b>3485</b>	425	<b>18390</b>	<b>81920</b>
9	Fazal Ilahi Chaudhry	1977	338	848	2185	4657
10	Fazal Ilahi Chaudhry	<b>1978</b>	<b>2227</b>	393	<b>9199</b>	<b>30597</b>
11	Mohammad Zia-ul-Haq (military dictator)	1981	299	82	2071	4191
12	Mohammad Zia-ul-Haq	1983	135	39	643	1882
13	Mohammad Zia-ul-Haq	1984	75	42	251	1093
14	Mohammad Zia-ul-Haq	1988	858	508	100	6144
15	Ghulam Ishaq Khan (elected democratically)	<b>1992</b>	<b>3010</b>	<b>1008</b>	<b>13208</b>	<b>38758</b>
16	Farooq Leghari (elected democratically)	1994	843	431	1622	5568
17	Farooq Leghari	1995	376	591	6852	16686
18	Asif Ali Zardari (elected democratically)	<b>2010</b>	<b>10000</b>	<b>1985</b>	<b>17553</b>	<b>160000</b>
19	Asif Ali Zardari	<b>2011</b>	<b>3730</b>	516	<b>38700</b>	<b>27581</b>
20	Asif Ali Zardari	<b>2012</b>	<b>2640</b>	571	<b>14159</b>	4746
21	Asif Ali Zardari	2013	<b>2000</b>	333	8297	4483
22	Mamnoon Hussain (elected democratically)	2014	440	367	4065	9779
23	Mamnoon Hussain	2015	170	238	4634	2877
24	Mamnoon Hussain	2016	NA	153+	NA	NA
25	Mamnoon Hussain	2017	NA	23	NA	NA
<b>T o t a l</b>			<b>31658</b>	<b>12353</b>	<b>197230</b>	<b>616598</b>

**Source:** Compilation by Researcher; Data has been taken from Aslam, M. (2018).

The data from the period 1947-2017 has been exhibited in this table 4.8 which demonstrates that 1950, 1973, 1976, 1978, 1992, 2010, 2011 and 2012 floods have

been enormous in nature. Broadly speaking, it had made budgetary losses and had affected thousands of individuals. It had influenced two thirds of the towns in Pakistan. This table additionally demonstrates that Pakistan needed to bear \$38165 million US dollars of expenditure since 1947 as a total of 12,353 thousand people had lost their lives. Alongside that 1, 97,230 towns have been affected until now, and 6, 16,598 land areas got submerged into overflowed water.

The table additionally gives a more extensive picture of the nature and example of floods in Pakistan. This demonstrates that the flood issue is not new in Pakistan. It was the characteristic procedure of streams which get overwhelmed in the monsoon season. This information also mirrors that Pakistan government is still unfit to control the seriousness of flood in the country. It also demonstrates that even though human lives have borne the maximum losses, economic losses would have topped the priority list for the Pakistan government.

Here, it should be noted that during 1971-1978, Pakistan was going through immense social and political turmoil since this was the time when Bangladesh was separated from Pakistan and emerged as a new country. This was the period when a parliamentary form of government was established by the constitution of Pakistan. President Zulfikar Ali Bhutto had resigned from the presidential post to become the Prime minister of the country. Soon, he was deposed by the Army chief Zia- Ul- Huq in 1977. Therefore, Pakistan has not only faced higher economic losses but also has been under prolonged and severe political turmoil most of the time in its history. The economic losses could have been due to corruption as well. During the Liberalisation period (1992), it massively faced loss of human lives and economic loss with majorly affected villages and land areas. During 2010-2013 periods, a similar kind of problem can be noticed. It is also visible from the table that Mr. Asif Ali Zardari tenure has been worst in terms of natural disasters in the history of Pakistan. Now, it can be predicted that Pakistan's disaster management system was relatively better under the military regime rather than under the democratic regime. It can be said that whenever there was military regime, they had better control in responding towards natural disasters in comparison to that of democratic regimes.

The National Disaster Management Authority (NDMA), following the flood of 2010, made the Government of Pakistan accountable to disaster management. It

endeavoured to arrange and facilitate adequate efforts. However, difficult issues arose concerning its job versus that of other governmental establishments like the Economic Affairs Division, key line departments, and the Provincial Disaster Management Authorities (PDMAs). The limit of the PDMAs varied from province-to-province, for example, KPK performed much better because of its commitment in the response of vast scale Internally Displaced Persons in the province.

Nonetheless, in 2010, the government was working as a team with the NDMA and PDMA at the National and provincial level. With 60,000 troops utilised during rescue and relief work, the army rescued more than 800,000 people, provided 68,000 and built up more than 100 relief camps in the affected regions (The Wire 2010; NBC NEWS 2010). One essential connection that appeared to be inadequate was the DDMA. These agencies should be the central disaster administrators in the field, yet stayed inadequate because of different variables that included the absence of elected local government bodies, institutional incapacities like the NDMA and PDMA, and the shortage of required disaster-management resources (White 2011).

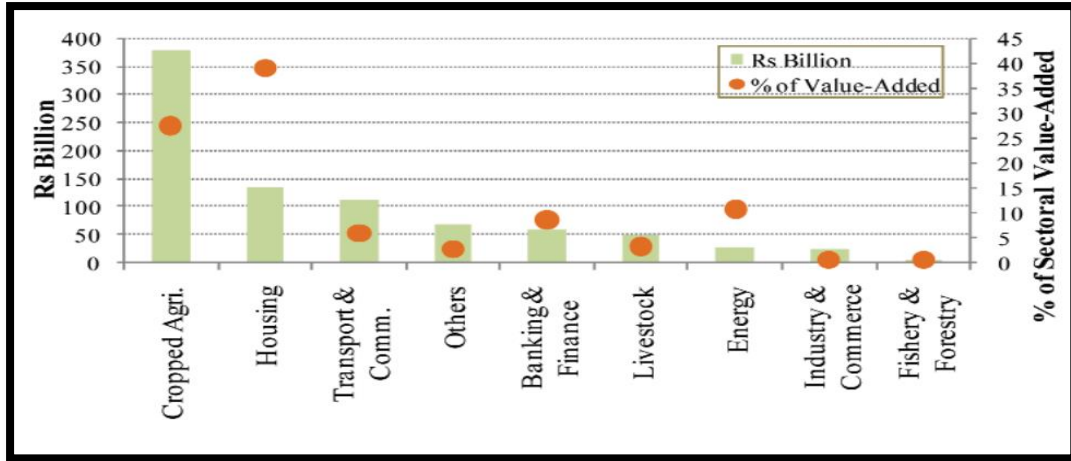
#### **4.7 Impact of Flood on Pakistan's Major Sectors**

Floods are thought to have significant unfavourable effects on the economy. Since the impact on different major economic sector is mostly dependent on the governmental strategies that take place in a post-flood situation, it would be troublesome at this point to provide a cohesive quantitative analysis of the economic impact of the flood. The government ideally needs to be engaged with macroeconomic exchanges and adequate strategies that aim to cover for the impacts of flood in the shortest amount of time while creating long-lasting changes that account for a steady future development. An example of such would be a strategy ensuring quick responses to the flood affected regions which can lessen both the growth and social impact of the flood. The direct impact of floods on the economy however can be evaluated in most cases.

The Indus River flood of 2010 severely affected the market sectors in Pakistan. The consequences included drying up of supplies and an increment in prices. Materials which constituted for relief aids faced price hikes in substances like construction materials while the prices of other stuffs like staple foods were dropped. This strained trade relations among businesses and mending them took some time. These effects could have been countered with better preparedness and understanding of disaster

consequences in industrial sectors. In recent times, Pakistan has been cultivating an improved knowledge of the same.

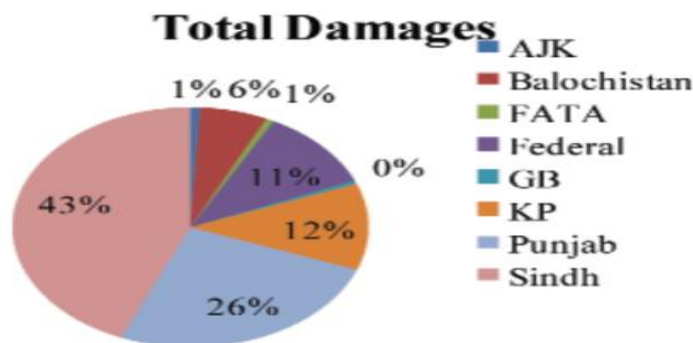
**Figure 4.3 Flood Damage by Sectors**



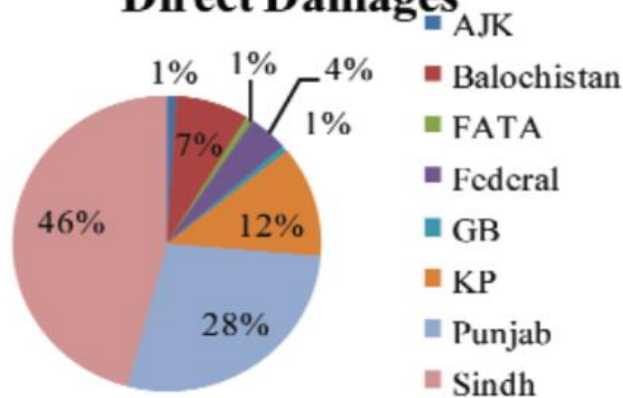
Source: Adopted from World Bank and ADB (2010)

The above given figure 4.3 shows that agriculture was a highly affected sector. Housing, transport and communication sector were the second highest affected sectors recorded. It can be assumed that general population has to face food crisis and Pakistan government is majorly dependent on agriculture sectors which means it has slowed down their economic growth. Pakistan's economy has been attempting to recover their strength since bearing the domestic imports and foreign export shocks in 2007/08.

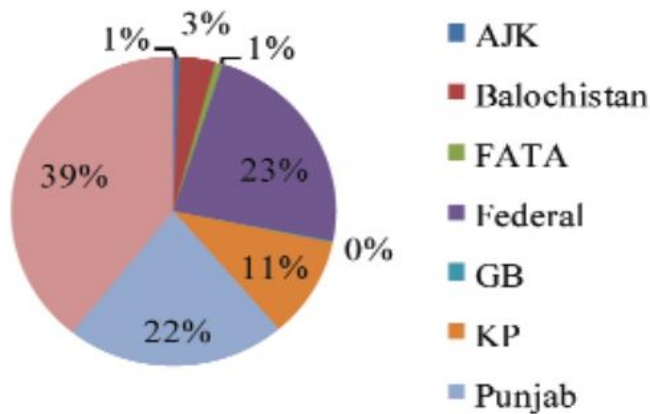
**Figure 4.4 Geographical Distributions of Flood Damages**



### Direct Damages



### Indirect Losses



**Sources:** Adopted from ADB and World Bank (2010) Pakistan Floods 2010 Preliminary Damage and Needs Assessment (Note- “AJ&K” used by Pakistani Government, Indian Gov called it POK)

The figure 4.4 shows that Punjab, Sindh, and KP provinces were majorly damaged. These are the important provinces of Pakistan for economic development. It should be noted that Punjab and Sindh share natural border and face ethnic conflict and have been battling over water sharing issues for a long time. KP province is a mountainous region which could not assimilate itself with the mainstream developments. Due to the difficult terrain, the government could not reach out to the people. It is also considered as a high security region in Pakistan due to terrorist activities. It could be one of the reasons for being declared as a ‘no-go area’ for INGOs during the earthquake and food responses. Pakistan military has taken complete control of this region during responses.

**Table 4.9 Province/Area-wise Distribution of Flood Damages**

SECTORS	Direct Damage	Indirect Losses	Total		reconstruction Cost (PKR Million )		
			(Rs mil)	(US\$ mil)	option 1	option 2	option 3
<b>Agriculture</b>	315,547	113,257	428,805	5,045	21,879	56,925	89,134
<b>Crops</b>	289,823	92,917	382,740	4,503	--	--	--
<b>Livestock</b>	27,815	20,341	48,155	567	--	--	--
<b>Others</b>	380	0	380	4	--	--	--
<b>Private Sector</b>	14,463	9,468	23,931	282	8,636	8,636	10,923
<b>Transport &amp; Communication</b>	62,491	50,420	112,911	1,328	200,260	200,260	200,260
<b>Energy</b>	13,184	13,116	26,300	309	9,038	9,038	9,038
<b>Banking &amp; Finance</b>	110	57,141	57,251	674	39,358	39,358	39,358
<b>Housing</b>	91,843	43,171	135,014	1,588	126,075	143,676	187,491
<b>Irrigation &amp; Flood management</b>	23,600	0	23,600	278	36,294	36,294	83,499
<b>Education</b>	22,047	4,418	26,464	311	42,907	42,907	42,907
<b>Health</b>	1,562	2,661	4,222	50	4,151	4,151	4,151
<b>Water Supply &amp; Sanitation</b>	3,194	6,112	9,306	109	6,292	6,292	7,982
<b>Governance</b>	3,141	2,835	5,976	70	4,900	4,900	4,900
<b>Environment</b>	992	0	992	12	17,746	17,746	17,746
<b>Disaster and risk management</b>	0	0	0	0	2,295	2,295	2,295
<b>Livelihood</b>	0	0	0	0	58,076	58,076	58,076
<b>Total</b>	552,173	302,599	854,771	10,056	577,908	630,554	757,761
<b>Percent of 2009/JO GDP</b>	3.8	2.1	5.8	5.8	39	4.3	52

Source: World Bank (2010); authors compilation based on World Bank report on flood in Pakistan 2010.

According to the data presented in table 4.9 (along with figure 4.3 and 4.4), it can be seen that Punjab, Sindh and KP provinces faced major losses. In the chart, both the agriculture and private sectors are seen to be the most affected since the sectors are mainly land related. The affect is seen to be major as compared to the other sectors as crops, livestock and others are also severely affected by the floods. The second most affected areas are the housings and transportations which took the highest expenditure in the reconstructions. Apart from these sectors, all the other sectors had quite less governmental expenditures. Also, if compared to the damages caused by the earthquake, floods damages are more harmful to the economy than the earthquake

(also see Table 4.1, 4.9; figure 4.5, 4.6). As the Pakistan economy majorly depends on the agriculture, earthquake damages are not seen much in irrigation areas as compared to 2010 floods. The cost incurred from the damages does not have much difference however the long term effect on the economy is more from floods.

According to Pakistani Scholars Khan, Rahman and Shaw (2015), the Federal Flood Commission (FFC) along with the Provincial Irrigation and Drainage Authorities (PIDA) and Pakistan Meteorological department has been coming up with strategies to reduce flood risks. However, despite investing huge amounts of financial resources for the same, Pakistan is yet to overcome its propensities to flooding disasters (Rahman and Shaw 2015:86). In 1841, a glacier blockage in the Shyok River in Karakorum Himalayan region caused heavy flooding in the Indus basin. Again in 1929, the moraines near Roykot (Diamir district), Gilgit-Baltistan Province (Khan 2003:260) choked the Indus river causing heavy flooding. Since 1947, Pakistan has experienced severe flood events with various magnitudes and frequencies. All the four provinces including FATA, Gilgit-Baltistan and POK has been hit by riverine, flash, urban and coastal floods. The major river system including Indus, Chenab, Ravi, Sutlej, Kabul and Swat rivers have a long history of flood events with resultant damages (Khan 2005:50, Rahman and Shaw 2015:84-85).

#### **Figure.4.5 Flood Affected Areas of Pakistan**



Source: THE HINDU 2010.



Source: NOAA (2010), The picture shows the dislocation of the people due to flood.



Source: BBC NEWS 2010; The pictures show the devastating impact on different sections of the society.

In the upper Indus basin, the flood water after overflowing in the affected areas often returns to the main river. However, the lower Indus plain (Sindh province), where the water flows at a relatively higher elevation than the adjoining lands, the spilled water does not return to the main river channel (Federal Flood Commission 2012). This causes heavy flooding in the area. Flood protective embankments have been constructed along the major section of the river in the Sindh province and in many other locations in the upper parts of the country (Government of Pakistan 2012). Hence, one can find that, Pakistan persists to be one of the flood prone countries, because of the peculiarities of its physical and climatic characteristics. Indus and its



tributaries have discharges that encounter seasonal fluctuations. It is higher in summer due to the melting of snow, glaciers and the summer monsoon rainfall (Rahman and Khan 2013:889) and the discharge remains lower in winter due to the slow melting of glaciers and precipitation (in the shape of snow) in the catchment areas of Indus river system. Records show that Pakistan, in the last twenty major flood disasters has faced the loss of 11,239 human lives, among which 1,985 is singlehandedly from the 2010 flood (UNDP 2012; Tariq 2013). The 2010 flood affected around twenty million people, damaged more the 100,000 square km of area and suffered around ten billion US dollars of economic losses (FFC 2012). Scientific evidence indicates an increase in precipitation levels, signalling the possibility of more frequent future events (Government of Pakistan 2013). Some important raw numbers to feature the losses and damage caused by the floods include:

- Population affected: 20,184,550 (around)
- Deaths: 1,985
- Injured: 2,946
- Households Damage: 1,744,471
- Area Impacted: 150,000 sq. Km.
- Seventy-eight of the nation's 141 districts was affected.
- 3.4 million Children under five years old were among the affected.
- 600,000 expectant or lactating mothers were affected.
- 6.2 million counsels by September 20, 2010, for skin ailments, intense respiratory diseases, intense diarrhoea, suspected malaria, and bloody diarrhoea.
- 12,516 school offices either partially or completely damaged
- Out of 2,957,500 health facilities, 500 were damaged or annihilated
- 1.66 million homes were damaged or wrecked
- 17 million acres of land (out of a total of 43 million acres) of farmland were affected
- 9 million acres of standing crops lost
- 1 million tons of standing crops lost
- Planting of winter crops ended up troublesome in affected regions given water logged soil, the absence of seeds and fertilisers.

- More than 1.2 million extensive and small animals killed and 6 million poultry lost.
- More than 5,000 miles of streets and railways were washed away (All the information is gathered from WB and ADB report 2010; UNICEF 2010; UNICEF 2011).

Statistically speaking, during the span of 66 years (1947–2012), an average of one severe flood every four years had hit the country (Rahman 2010:192). Hence, because of its geographical propensities and structural inabilities, Pakistan continues to be extremely vulnerable to recurring flood based disasters.

#### **4.8 Impact Assessment of the 2010 Flood**

An unmatched scale of damages affecting Pakistan due to flood alone called for a method of standard data collection that spanned more than seven districts and seventy-five or more regions. The standard of Building-Back-Smarter principle (BBS) was applied for figuring out reconstruction costs. The BBS guideline has reinforced the need for an upgraded multi-hazard system that connects all sectors. This approach has also introduced methods for “right sitting and right-sizing” and strategies to enhance food protection procedures (The World Bank and ADB 2010:22).

There was a central DNA Data Team with adequate statistical skills for the assessment of damage and needs. This team worked in collaboration with the field data specialists, sector groups and the provincial governments. In order to streamline the flow of information, an internet based group room was created for data management based on exact methods for data refreshing, filtering, cleaning and collation functions (Amin and Goldstein 2008).

The World Bank’s Global Facility for Disaster Reduction and Recovery (GFDRR) for the distribution of right practice sector assessment notes, and arrangement of expounding were prepared in the Damage and Loss Assessment (DALA) methodology by the sector groups and experts.

#### **4.9 Flood 2010: Government and Public Response**

During the 2010 flood, the NDMA of Pakistan has overlooked the disaster management issues. Following are a portion of the issues recognised by the NDMA:

- Lack of disaster management capacities and scarcity of resources.
- Lack of administered authority to control exercises of PDMA and DDMA's, and so forth.
- Lean pre-disaster authoritative structure and small budgetary distributions (\$74 million)
- Presence of parallel decision-making bodies with layered orders. With the section of the eighteenth Constitutional Amendment, Council of Common Interest and National Disaster Management Committee have included another layer in the National Disaster Management System (Ullah 2014:36).

During the field work, a Pakistani local citizen of Lahore, Ali Mahmood<sup>48</sup> has explained the current situation of the flood of 2010 from his perspective. He spoke about the rumours of releasing extra water in the monsoon season. He says “this happens every time when the valley overflows with flood water; India released more water in Pakistan during monsoon season, however India secures water during summer season. Our agriculture and stored food materials was spoiled. We were relying on government response but they were also corrupt like the previous government”. When asked about the IWT of 1960, he did not seem very aware about it. It shows that such rumours are widespread which convince local people that India is going out of its way to hamper their lives. People believe what their media and government propagates and they end up perceiving India as their enemy. Accordingly ‘India can control water anytime to take revenge from Pakistan’ is the common perspective on water release.

When the opinion on the terrorist response during both the disaster event was sought, it was found that it was difficult to find victims who will speak about it. Even if one did come across such victims, their memories were vague. It was hard for them to recall every incident and it sufficed as a major limitation during conducting the field work. When their opinion was sought after, they had rather unexpected viewpoints on this subject. According to another local from Islamabad (Tahir Mohammad)<sup>49</sup>, it was true that the known terrorist organisations have helped the survivors during catastrophes and he believes that they must have done it being a Muslim, because the Quran taught them to help others. This can lead to another perspective about terrorist

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<sup>48</sup> Ali Mohammad (2019), Personal Interview, Schaerbeek, Brussels, Belgium, 8 February 2019.

<sup>49</sup> Tahir Mohammad (2019), Personal Interview, Groot Market, Brussels, Belgium, 11 February 2019.

organisations which are contrary to popular notion. Terrorist groups can have humanitarian approaches too. If all terrorist organisations solely believed in humanitarian approaches, the world would not have suffered the explosive attacks in different parts of the world. These narratives can have different psychological and individualist discourses in the International debate.

Few Pakistani people, while conducting interviews about this research; believed that the 2005 earthquake and the 2010 flood have both left a huge impact. Few people were moved to another country for jobs, so that they can help their family members. When the researcher tried to get their opinion on government response they believed that the government had tried to do what they could do after catastrophes, however, they were selectively available. According to another Pakistani citizen, Taheer Hussain<sup>50</sup> from Islamabad, “The government has distributed relief materials to the affected people but it was not sufficient. Some people could get materials but many could not avail the governmental facilities. If you will ask my opinion about Musharraf’s efforts in Pakistan development, I can say that he tried to manage disasters with the help of external agencies, but I can also say; there was lot of corruption at every level. Mr. Musharraf has not only done some good works but also few bad works too”. According to Arfan Qaisar<sup>51</sup>, a Pakistani Citizen government were distributing money in Kashmir (POK). He said, “My wife has informed me that the army was calling out our names. They reached at our doors to give money. She also informed me that if nobody was available at homes, they never came back to redistribute the money”.

Despite substantial efforts, there is yet to achieve a lot for Pakistan in terms of adequate methods of disaster management. There remain shortcomings in every sector right from, prevention, adaptation, mitigation, preparedness, efficient emergency responses and early recovery. Despite ongoing scientific research that has been trying to build better mechanisms, it is the governmental and the national disaster management authoritative bodies who need to be more invested in deploying effective disaster management practices. During the field work, the researcher has found that people themselves were not aware about the disaster management institutions in their country. Neither were they aware about the government policies or the schemes for

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<sup>50</sup> Taheer Hussain (2019), Personal Interview, Groot Market, Brussels, Belgium, 11 February 2019.

<sup>51</sup> Arfan Qaisar (2019), Personal Interview, Schaerbeek, Brussels, Belgium, 24 February 2019.

flood affected people, during the disasters. It was the military persons who have to go door to door to provide Watan card scheme to the victims. The table 4.10 shows the comparison of government and international actor's response. It also shows the similarity and dissimilarity between both the disasters. The table reveals that people were in dire need of help during 2010 flood more than earthquake disasters, because flood has affected almost entire sectors of the country.

**Table 4.10 Comparison: Earthquake of 2005 and Indus River Flood of 2010**

<b>Earthquake</b>	<b>Flood</b>	<b>Earthquake Response By Government</b>	<b>Flood Response By Government</b>	<b>International Response in Earthquake</b>	<b>International Response in Flood</b>
Cause- Eurasian and tectonic plates collisions cause earthquake	Heavy rainfall, Flash flood, Riverine flood	2 Army divisions in NWFP & "AJ&K" for facilitation and distribution of goods	NDMA- worked at federal level and provincial level	US. \$2.5 billion by 83 bilateral and multilateral donors	US \$1870.2 million by 68 bilateral and multilateral donors;
Affected areas Northern Pakistan, Western & Southern valley- POK, Muzaffarabad , Balakot in NWFP, of Kashmir, Indian Borders affected- Afghanistan, China and India Kashmir	North and North western regions- KP, GB, "AJ&K", Balochistan, Punjab, Sindh, Kotri barrage, Chasma and Tausna Barrages, Irrigation canals flooded agriculture lands.	125 Helicopters and aviations vessels(both foreign and domestic)  5000 sorties from affected areas	Pakistan governments including United Nations	Logistical And Manpower Assistance	*Financial and Technical Assistance  *Logistical and Manpower Assistance

*80,000 Deaths	*19,80 deaths	*PMO established Federal Relief Commission President established Earthquake Reconstructio n and Rehabilitation Authority to facilitate building and repair of damages infrastructure	*20000 Army Troops  *Medical teams  *Dozens of helicopters  *C-130 Aircraft	World Bank- US\$200 million	*UN launched appeal for \$459.7 million  *Un launched largest humanitarian appeal for US \$ 2 billion to finance Projects in important sectors.
*138,000 Injured	*29,46 injured				
4 million homeless	20 million homeless	Cash distribution 100,000 Lakh for family;  50,000 for severe injury;  25,000 for minor injury.	*Cash distributions with NADRA distributed 977,570 Watan Cards  *20000 per family	UNDAC team provided Technical Assistance to access the scale of disaster and help to manage the international response	Needy sectors-  Shelters, Food, Water, Sanitation Hygiene, Agriculture for 12 months
	100000sq/k m area submerged	*Distributed 350,000 tents  *3.2 million blankets  *3000 tonnes of medicine	*Call Centre were established *1.1 Million Blankets *184,035 tons of food items	UNDP helped in management local and national levels	NATO

	1.6 million home destroyed	*President Relief Funds for resource mobilisations	Rescued 1.4 million people	UNICEF WFP UNFPA Worked extensively	
	Property damage- \$43 billion	*12 points National Strategy for Reconstruction & Rehabilitations  *13 Stations of Medical Officers & Paramedics in NWFP and "AJ&K"	NATO	Efficient Donors- Saudi Arabia, USA, Japan, Turkey, Kuwait, UAE, UK, Canada, Iran, Norway	USA, Saudi Arabia, EU, UK, Australia, Canada, Germany, Denmark, Japan, Norway, China, Sweden, Turkey

**Source:** Compilation by Researcher (Data collected from WB and ADB 2005; WB and ADB 2010).

#### 4.10 Shortcomings during Responses to Disasters

In the global dimension, between 2000 and 2009, 2 billion people were affected by disasters; 44 percent of those were affected by floods, 30 percent by drought and only 4 percent by earthquakes. Since 2000, almost 60 percent of those killed in disasters, perished in earthquakes (IRIN 2010). In the examination of hydro-meteorological disasters, earthquakes pose some particular challenges (ALNAP 2008):

- Risk of aftershocks, damaging population, and convoluting relief endeavours.
- Damage to infrastructure, fallen buildings and a lot of rubble which should be removed for relief endeavours.
- Large quantities of injuries.
- Difficulties in preparing support to diminish future risks, as earthquakes are less inclined to happen than other disasters.

Evidently, earthquakes happen all of a sudden with little cautioning. People cannot be evacuated in advance from an earthquake and endeavours to relieve the risks of earthquakes centre around making buildings more secure and instructing the population on the most proficient method to react when the earthquakes strike. Conversely, flooding can happen all of a sudden too, for instance after a particularly substantial rain or the crumple of a dam. Vast scale flooding is usually the result of overwhelmingly heavy rains over some undefined time frame which makes streams to swell and overflow their banks. That is what has occurred in Pakistan since July 2010. As broadcasted by the media, this is what is happening in China too, where flooding of the Yangtze, Yellow and Songhua Rivers have constrained the departure of a considerable number of people, affected more than 120 million people and annihilated over 600,000 homes (International Federation of Red Cross 2010). All urban centres in Pakistan have borne the brunt of terrorist attacks since September 11, 2001. Since 2009, the Pakistan Army has been battling the terrorists and has carried out successful operations in Swat (KP) and Waziristan (FATA), but at a high cost. Between Financial Year 2004/05 and 2008/09, Pakistan's economy endured direct or indirect losses adding up to PKR 2.1 trillion (US\$ 24.3 billion) (World Bank and ADB 2010)

Major urban centres in Pakistan have seen regular citizen casualties because of terrorist attacks over the last few years. The Pakistan Army has done active counter-militancy activities in the north-western parts of the nation. In any case, the expense of this has been high and Pakistan has seen 2.5 million clashes affecting internally displaced persons. Educational organisations in KP and FATA have continuously been confronting terrorist threats (Mohsin 2013).

A greater emphasis on disaster mitigation ultimately saves efforts required for disaster management, relief, and rehabilitation. In the context of Pakistan, although the universal disaster-management laws affect the execution of all developmental endeavours, they are not thoroughly rehearsed. Regarding rehabilitation and reconstruction endeavours, the international actors and the Pakistan government should-

- Work with common humanitarian partners in Pakistan's NGO sector that have a demonstrated reputation;



- Develop mechanisms to provide local communities with a role in decision making on relief, reconstruction and rehabilitation;
- Empower elected authorities and organisations by guaranteeing their full participation and building civilian disaster reaction limits;
- Major donors and UN offices ought to make and work through an independent mechanism to guarantee help accountability and transparency;
- UN missions in Pakistan and INGOs should continue independently to survey the government's reconstruction needs, recognise proper systems and targets and exercise oversight over central regions, for example, shelter and reconstruction of the educational sector (Wilder 2010).

The catastrophic event constrained the government to redirect resources for the rehabilitation of Internally Displaced Pakistanis (IDPs) and reconstruction of necessary infrastructure. The reconstruction cost appraisals by province are given in the Table below which uncovers that Sindh has endured the most losses followed by Punjab.

**Table 4.11 Flood Damages and Reconstruction cost**

Province/Area	Damages (in millions)	Reconstruction (in millions)
<b>AJK</b>	<b>7</b>	<b>13</b>
<b>Balochistan</b>	53	27
<b>FATA</b>	6	8
<b>Federal</b>	93	96
<b>Gilgit Baltistan</b>	4	7
<b>Khyber Pakhtunkhwa</b>	100	106
<b>Punjab</b>	219	93
<b>Sindh</b>	373	228
<b>Total</b>	855	578

**Source:** ADB &WB 2010, National Plan, Reconstruction Plan 2010

The table 4.11 clearly shows that the reconstruction cost is less than the damages cost. It can be said by interpreting this table that government of Pakistan could not collect the sufficient amount for reconstruction work in comparison to that of damages. It could be because of the consequences of the corruptions and the lack of integrity of the government at the international level. Here, it can be also interpreted that the

Pakistan government was facing three continuous disasters namely the earthquake of 2005, IDP crisis 2008-09, and the flood of 2010 which could have resulted in the possible shortage of funding.

#### **4.11 Other Issues Pertaining to Disasters in Pakistan**

##### **1) Gender Issues**

The Preliminary Gender Needs Assessment report by the United Nations Development Fund for Women (UNIFEM) 2010; states that women tend to be neglected in the remuneration procedure as their financial commitments are largely imperceptible (Rubian 2010). Land rights which pose difficulties for poor men are significantly all the more difficult for women since they are often denied the rights based on the inheritance of property. The decimation caused by the floods wrecked their restricted resources, intensified their security situation, and changed their obligations as they were compelled to react to crisis conditions. While the women's wellbeing is fundamental to the prosperity of their families, after disasters, generally as guardians, they are likely to place their needs last. In specific provinces, social standards, for example, the 'purdah' limits women from having the capacity to verbalise their needs even when they are forced to stay in camps and the public spaces. However, changes that occurred in the rehabilitation period which enhanced the public mobility and flexibility of women, like the free access of women to natal care, cooperation and involvement in relief work, greater access to public welfare; created a potential for the involvement and representation of women in social sectors increasing employment opportunities (ibid).

The floods in Pakistan in the recent period have caused a distribution of collective assets amounting to 2.5 million in cash to affected Internally Displaced Persons (IDPs) (PCNA 2010)<sup>52</sup> but have not catered a lot towards aiming the distribution of resources towards women. Relief endeavours focussing on issues of economic oppression and social depravity need to be catered towards the most vulnerable sections of the population, women being one of them. These endeavours ought to involve social and vulnerability analysis, focussing majorly on gender oppressions.

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<sup>52</sup>[online: web] Accessed 17 May 2016, URL:<https://www.pakistanmdtf.org/post-crisis-needs-assessment.html>

## 2) Labour Issues

**Table 4.12 Civilian Labour Force, Employed and Unemployed for Pakistan**

Year	2003-04 (In Millions)	2005-06 (In Mill.)	2006-07 (In Mill.)	2007-08 (In Mill.)	2008-09 (In Mill.)	2009-10 (In Mill.)
<b>Labour force</b>	45.5	50.05	50.33	51.78	53.72	54.92
<b>Employed</b>	42	46.95	47.65	49.09	50.79	51.87
<b>Unemployed</b>	3.5	3.1	2.68	2.69	2.93	3.05

Source: Ahmad, R., and Azim, P. (2010).

The table 4.12 shows the increase in the labour force from the year 2003 to 2010. The employment rate is seen to be increasing each year; however, the unemployment rate is increasing relatively more progressively from 2006-07 onwards. The earthquake of 2005 can be considered to be one of the reasons for such increments. The physical damages of the earthquake led to the increase in unemployment. This reason could be related to the mobility of the people in Pakistan during 2005 to 2010.

## 3) Minorities Issues

Since independence, several ethnic communities are echoing their voices for their political rights. In the 1953 Lahore riots, 1974 anti- Ahmadiyya communities had violent confrontations with each other which resulted in the largest number of killings of the Ahmadis. Anti-Ahmadiyya parties were never ready to accept them as Muslims. Subsequently, Zulfikar Ali Bhutto passed the second amendment to the constitution on Pakistan, declaring them ‘non-Muslims’ rather than considering their demands. During Musharraf’s period, the Christian community had to face discriminations during the earthquake (Zaigham 2010:8; Malik 2011). It was estimated that this community was largely impacted by the war on terror policies and Pakistan’s alignment with the Western allies (Specially USA). Pakistani non-Muslim religious groups are not allowed to hold Presidential and Prime Ministerial positions in the country. This is why these religious communities are not fully involved in the political process (ibid: 5). It is worth noticing that the Articles 41(2) and 91(3) of the Constitution does not allow them to hold important political positions. Similarly, the Pashtun tribes and Hindu communities are often denied political rights. In the 2005 earthquake and the 2010 flood, caste discrimination was also recorded to prevalent in relief distribution by several news papers. Thus, Pakistan’s minority groups lack their

representatives in the parliament which affect their state after a disaster adversely affects them (Malik 2011:71).

#### **4.12 Relief Policies of Disasters in Pakistan during the Post- Earthquake and Post-Flood Period**

Numerous governments, eminently the US, made quick commitments to be involved in Pakistan's flood relief in the 2010 flood while several other governments took time to react. In particular, the commitments from the other Muslim nations have been slow to arrive. However, Saudi Arabia, after a specific postponement, turned out to make outstanding liberal donations (OCHA Financial Tracking service 2010). The disasters in Pakistan have received lesser attention collectively compared to disasters elsewhere as \$31 million were contributed to the Haitian Earthquake relief from various sectors of the world using content informing whereas only \$10,000 were raised through this mechanism for the casualties of Pakistan's floods (Fisher 2010).

Pakistan government was going through an economic crisis in the 2007-2008 periods. Following this, the government tried introduce strategies and policies which would combat the fiscal damages thus caused. However, the flood of 2010 brought about severe economic damages which created far reaching problems for the government. Keeping that in mind, the government had difficulties to recuperate the loss and come up with cost effective relief actions (World Bank and ADB 2010).

The Pakistani military regime was not adequately prepared to manage the massive impacts of the 2005 earthquake and struggled to manage it efficiently. While the military could not react adequately, it demanded added governmental intervention for better management. On 10 October, 2005 the government made a Federal Relief Commission that aimed to streamline relief endeavours with effective assistance from the provincial governments and the NGOs. It was set under the Prime Minister's secretariat and further consolidated the relief operations under the management of the military which did not prove to be much beneficial (Khan 2006). "It is not the military's job to lead such a reaction however it is something this military regime declines to comprehend", said Ayub Tanoli of the Human Rights Commission of Pakistan (Wiharta 2008).

The procedures of disaster management in order to be effective needs to align themselves with the municipal regulations pertaining to building by-laws and structural and non-auxiliary security highlights to recognise:

- a) Major security issues in connection to real hazards including earthquakes, landslides, and flames and flooding
- b) Proper and reasonable measures to fortify the implementation regime and consistency mechanisms (Khan 2008).
- c) Refreshing of building codes every three years in connection to hazard and vulnerability laws which need to be propagated to the concerned offices and departments and the public (NDMA 2013).

The Pakistan Government took initiatives to create programmes to address recurring disasters after realising the graveness of the need. It can be said that in accordance with the estimation of the total damages and recuperation needs emerging from the disaster through the DNA, the Government of Pakistan had created and set up a vital vision for the general reconstruction program. This included

“articulating the key targets for overall reconstruction and recovery, articulation of policy standards; stipulation of a potentially staged program and authoritative period for its implementation, identification of partners and improvement of accord over vital needs for a multi-sectoral extent of work, geographic delineation, and assurance of managerial and functional jurisdictions”(GFDRR 2014).

The disasters created a need for intra-sectoral reconstruction plans for every affected territory. The following principles were kept in mind for ensuring an effective implementation of these plans (GFDRR 2014).

- **Broadest Impact:** The structures that can uplift people from the worst kind of impacts were arranged for. Schools which could teach the most number of understudies and medical facilities that could cater to the maximum number of people were arranged for.
- **Building Most-Accessible Structures First:** Availability and accessibility are crucial aspects that need to be catered for. The disasters rendered a lot of areas inaccessible and the government aimed for fast recovery. The reconstruction was therefore, facilitated in the accessible areas were arranged for first and the ones in the difficult areas were postponed.

- **Avoiding Legal Disputes:** This was relevant for land debates that ensued after the disasters. Land proprietorship in the aftermath of an earthquake was a taxing affair since the number of land deeds that were destroyed because of the disaster and there arose contending claims on new lands. Demarcating lands either as private or open was also difficult. The government focussed on avoiding legal complications and arranged for legal insurances for vulnerable sections of the affected people.
- **Maintaining a Gender Balance:** For each initiative that would benefit men, an equal section of the same was organised catering to an equivalent population of women. For example, for each school accommodating 500 young men, a young women's school of similar limits was created (World Bank and Asian Development Bank 2005; 2010).

Despite the recurrence of disasters in Pakistan, there have been some obstructions in carrying out an effective disaster management programme at the governmental and administrative level. In this section, we shall explore the historical, persisting and potential problems that have and continues to halt efficient and appropriate disaster management initiatives. We shall also see how these resistances can be overcome and the crucial interventions that it had made for the future.

#### **4.13 IDPs Factors in Natural Disaster Response**

One of the most challenging aspects to address in disaster management is the agony of displaced individuals and families. Natural disasters result in adding to the populations of displaced persons. The expression “displaced person” applies in a few settings. These incorporate people who were forced to leave their homes because of drought, starvation, or another disaster, more often than looking for nourishment, water, and safe house (Deng 1995:47). They are however the people that are ultimately forced to stay inside the nation. There might also be people who even though are not captured in conflict areas, might be in spots that are difficult to reach in light of some political or other incidental security reasons. This population group may wind up experiencing a considerable lot of same issues from those affected by detachment from a national support structure or access to international mitigation assistance.

A report commissioned by European Commission covered interventions under 6 financial decisions. The decision was made by the European Commission's Directorate-general for Humanitarian Aid and Civil Protection (ECHO) during the period of 2010-2014. This report showed that the number of IDPs amounted to around 1.5 million in Pakistan. ECHO has classified IDP crisis as a forgotten crisis along with Afg-Pak border region because of lack of media interest. This area could not receive much international aid and gained less attention due to the unwillingness of the government. The country was already suffering from extreme poverty, illiteracy, refugee crisis, ethnic conflicts, and hike in population growth, corruption level and international terrorism. Apart from these crises, Pakistan hosted around 15, 00000 registered Afghan refugees since 1979 after soviet intervention. Overall this situation has aggregated difficulties for humanitarian agencies (ECHO report 2016:5-6). An efficient surveillance network was created covering all the working health offices in the affected districts. By the December of the same year, the quantity of detailing locales in the 2005 earthquake-affected areas had expanded from 19 to 133. A similar Drought (DEWS) network was created in every subsequent disaster to come, for example, the 2008 earthquake in Baluchistan and the 2008– 2009 emergency involving Internally Displaced Persons (IDPs) in FATA and KPK.

KPK and FATA were the regions where military has limited the access for the humanitarian workers and agencies due to security reasons. These regions have already suffered a lot due to terrorism and due to its geographical structure. An Humanitarian Aid Department of the European Commission (ECHO) report shows that ECHO too had limited access in these areas due to two main reasons. Firstly, because of the Para-military escorts, it was compulsory for the agencies to be accompanied by the military force. Agencies' free movement in this area were limited. In this case ECHO had to prioritise independence of their humanitarian actions over the humanitarian imperative and its scope of assistance to the affected people in conflict affected regions. The second reason was the existing security concern. Due to security reasons, many agencies who were willing to work and provide disaster relief to affected people could not reach them. As a result, the severely affected regions could not be covered by humanitarian agencies, ECHO being one of them (ECHO Report 2016:45). According to an Internal Displacement

Minority Centre (IDMC) report, around two million relocations because of tragedies were recorded in 2016.

**Table 4.13 Internal Displacement due to Disasters: Ranking of the countries**

RANKING	COUNTRIES	AFFECTED POPULATIONS
1 <sup>st</sup>	China	7,434,000
2 <sup>nd</sup>	Philippines	5,930,000
3 <sup>rd</sup>	India	2,400,000
4 <sup>th</sup>	Indonesia	1,246,000
5 <sup>th</sup>	United States of America	1,107,000

Source: IDMC GRID (2017).

The table 4.13 shows that IDP problem is common all around the world. The ranking of the countries shows that the top four countries happen to be Asian countries. Asia is majorly prone to disasters but it is also affected by Internally Displaced People. There can be various reasons for displacement. Disaster is one of the most contributing factors for the mobility of the people within the provinces.

According to the data of IDMC report, in 2017, around 18.8 million people were displaced by disasters. While in 2018, number of IDPs increased by 3.8 million due to disasters in South Asia. At the global level 61 percent displacement is triggered by disasters only in 2018.

A military operation against Talibani militants in the north western tribal areas, especially North Waziristan since the June of 2014 rendered thousands of Pakistani civilians homeless. The state did not do much to get them accommodation. Pakistani children who were internally-displaced and whose families fled the military operation, lined up at the tribal office for a food distribution point. The Pakistani military reported on 3<sup>rd</sup> September, 2014 that it had executed more than nine hundred Talibani terrorists and had lost eighty two of its fighters. The military had started a highly anticipated mission to disperse the radical bases from the North Waziristan district, after a nasty attack on the Karachi airport had failed to ensure harmony chats with the renegades (Younus 2015, online). This operation had created a huge population of IDPs and they moved to Bannu (a residential community 115 miles southwest of



Peshawar) looking for food and shelter. As per the FATA Disaster Management Authority (FDMA), more than ninety thousand North Waziristan families have been enrolled and marked as “displaced”. Reports have recommended that nearly one million IDPs have fled North Waziristan and a considerable number have not enrolled with the FDMA. Thousands of families have fled to Afghanistan, to look for safe dwellings, unable to find them in the settled areas of Pakistan (ibid).

Pakistan government since the beginning of this operation had refused to garner international help despite a huge ongoing crisis. Ignoring any possibilities for donating a good sum of money as aid for the IDPs, the government just allocated 5 million USD for the cause (contrary to a sum of around \$500 million dedicated to the Islamabad-Rawalpindi Metro Bus venture). Countless IDPs were left helpless due to mismanagement and poorly executed relief measures. The poorly thought out ramifications of this operation has left numerous youth unfit to register them as IDP and gather ration or financial aids. The FDMA hardly did anything to cater to these people (ibid).

Recurring disasters leave lasting effects that cause major systemic changes in the social, political and economic sectors of a country. Malnutrition in Pakistan was identified as a major challenge by humanitarian agencies which proved to be beyond their capacities. It was felt in both the 2005 earthquake and in the 2010 flood. If we look at the economic growth of the Pakistan from 2005-2010, it clearly shows that the situation got worse during this period due to world recession and political transformation. Earthquake, IDP crisis and flood disasters have affected economic growth. The government had to face fiscal deficiency during this period which had led to negative effects on the development of the country. This also shows the inefficiency of government in coping with the disasters. The present government began its term with an acquired backlog of problems including deficiencies, for instance, electricity deficiencies, security, food consumptions, relocation of IDPs, low progression and deep-rooted inflation. The year under review brought new and utterly unforeseen difficulties like the increase in the cost of oil and the overwhelming floods that made tremendous losses of crop, livestock, physical infrastructure, and the GDP. The government has indicated to proceed with making plans to take troublesome choices and pursue a path of changes (Wasti et al. 2013; World Bank and ADB 2010; Younus 2015).

#### 4.13.1 Disaster management and National Plans

Disaster management largely refers to the systematic management of institutional roles and duties to manage and mitigate crises (Quarantelli 1988; Wisner 1993; UNISDR 2009). This may include plans, policies and actions charted out from before, during or after a disaster with the collaboration of many agents like NGOs, sections of the civil society and private sectors (Quarantelli 1997). Disaster management practices are mainly divided into four phases namely, “mitigation and prevention, preparedness, response and recovery” (Noji 2005). Applying this on the context of Pakistan, the important points that arise are:

- Pakistan is vulnerable against a range of hazards-both natural and anthropogenic.
- Reactive crisis management (Calamity Act of 1958) approach rather than ‘pro active approach’ was the principle method for managing disasters in Pakistan till 2005.
- The earthquake, 2005 featured the requirement for building up proper approach and institutional arrangements.
- The National Disaster Management Ordinance (NDMO) of 2006 empowers the Federal Government to set up a comprehensive system of disaster management at the national, provincial and district level.
- The new system is based on the comprehensive way to deal with Disaster Risk Reduction through adopting ‘systematic approach’ by identify assessment and reduction of the disaster risk.
- By the arrangements of National Disaster Management (NDM)-Act, the Government of Pakistan has endorsed the following DRM structure at the National, provincial and district levels with essential capacities:
  1. Ministry of Climate Change prior called as Ministry of National Disaster Management. This ministry was working at the federal level.
  2. National Disaster Management Commission (NDMC) is an apex leadership body for disaster risk management (DRM) which is headed by the Prime Minister of Pakistan.

3. NDMA is the official arm of the NDMC and it implements, coordinates and monitors disaster management rules and techniques. The office is based in Islamabad.
4. Provincial Disaster Management Commission (PDMC) is working in every province which is based on the 2006 NDMO. It formed the legal base for implanting National Disaster Management Framework (NDRF).
5. Provincial Disaster Management Authority (PDMA) has been set up in every province headquarter. PDMA and PDMC both have been establish to promote and enhance disaster management and preparedness mandates in a professional manner at the provincial level.
6. The lower tier District Disaster Management Authority (DDMA) has been established at the district level. It is the first responder for rescue operations in disasters affected region. It is the DDMA's responsibility to inform and coordinate with national and provincial disaster management authorities.

The framework, objectives and strategies of the National Disaster Recovery Plan (NDRP) reflect the apathy of federal government towards disaster management with persistent losses because of floods and landslides in the previous years (before 2019). However, it joins the environmental issue in a more harmonised way when contrasted with the past accomplishments at the provincial level. Pakistan government for the first time emphasised on water resources management in the Ninth Five-Year Plan of (1998-2003). After analysing implementation indicators, gaps and weaknesses of the Eighth Five-Year Plan, the government have followed particular targets for water sector development in next five year plan (Cheema et al. 2016:453) which include:

- i. To make more compelling utilisation of the surface and groundwater.
- ii. To accomplish impartial and guaranteed dispersion of water.
- iii. To store and utilise river water flood surpluses through capacity/extend dams.
- iv. To diminish the degree of waterlogged lands.
- v. To conduct water-related researches.
- vi. To use flood flows including harnessing of hill downpours for increasing water accessibility for the water system.

- vii. To enlarge interests in flood control management, including flood cautioning and estimating efficient frameworks.

Some of the existing institutional frameworks to address disaster management endeavours are:

a) **Perspective Development Plan (2001-2011):** By receiving methodologies to achieve the Millennium Development Goals (MDGs), it focuses on flood protection and control measures, land and salinity, water logging and soil erosion management. Its aggregate size has been settled at Rs. 11, 287 billion in current prices out of which Rs.8,747 billion have been visualised as the venture of the private sector and Rs.2,540 billion as Public Sector Development Program (PSDP) (Khan and Khan 2008:14).

b) **Water Resources Development:** The Plan perceives the seriousness of drought in Sindh and Balochistan and the ensuing deficiency of water that had been disturbed the progressing water emergencies. The important objective of strategy formulation and sectoral planning in water resources sector during the Ten-Year Perspective Development Plan is to elevate the agro-constructed economy in light of the National dimension by boosting crop production. This will be accomplished through dynamically expanding surface water supplies utilising the most recent technologies accessible and shielding land and infrastructure(ibid:14). The system to accomplish these goals, which includes:

- Growth and preservation measures to beat the shortage of water
- Drainage and recovery program to secure affected zones
- Flood Control and Protection
- Rehabilitation of water system arrangement

The Plan prioritises the development of medium and huge dams and canals to meet water necessities in the future. The government additionally took early proprietorship and the President's office was effectively engaged with setting fundamental recuperation rules. A portion of the critical arrangement goals explained by the

political initiative included: (a) building back better, (b) Converting adversity into opportunity, and (c) pro-poor recovery from earthquake (ADB & World Bank 2010).

The government additionally set-up consultative procedures and discussions for comprehensive recuperation planning at different levels, for example, the broad partner groups on lodging sector approaches and operational viewpoints. For lodging, three discussions were fruitful in ensuring constant and proactive multi-partner considerations. Standard procedures and groups set up for lodging sector counsel included:

- a) Completing mapping activities to distinguish, and guarantee consideration of every key partner,
- b) Formation of intergovernmental groups that create both flat and vertical lines of communications, to ponder benefits, cons and risks related with different institutional alternatives for lodging sector planning and its implementation
- c) Production of more extensive discussions and interfaces where partner discourses encouraged an accord building process for operational viewpoints specifically through national, local, and regional dimension workshops including sub-National governments, collective society, specialised organisations and the scholarly community, private sector, community delegates, and so on.

The Government of Pakistan additionally took early and auspicious choices towards setting-up the institutional plans for undertaking and addressing the difficulties of the reconstruction program that lay ahead. This comprised of the following procedures:

- a) A fast review and elucidation of the previous, multi-layered and multi-sectoral institutional mandates;
- b) Creating comparable institutional structures for overseeing and executing the reconstruction program;
- c) The creation or correction of enactment for the proposed adjustments to pre-disaster courses of action, and;
- d) Distinguishing and activating the imperative limits, skills and different resources to be appointed to staff from numerous dimensions of government, semi-government offices, different specialised foundations, celestial development bodies, and the private sector.

Principles of governing and the recovery program (GFDRR 2005) include:

- Recovery program depends on necessities and demands
- To Support Earthquake Reconstruction and Rehabilitation Authority's (ERRA) mandate to direct and screen the general reconstruction program
- To strengthen responsibility for and against KPK without trading off implementation effectiveness
- Complete reconstruction in the most limited conceivable time with high calibre. To take a stab at the economies of scale, which pulls in firms with great management rehearses
- To simplify and speed up the endorsement and implementation methods and set up fitting limits at District Reconstruction Unit (DRU), Reconstruction Agency (RA), and Steering Committee (SC) levels for endorsement of plans and contracts
- Reconstruction will comply with fitting seismic security, quality, mechanical, and environmental standards.
- To Strengthen long-term limit working in reconstruction and risk management.

#### **4.13.2 Disaster Risk Management in Pakistan after the Earthquake**

Flood and drought management garners substantial institutional and financial consideration due to their socio-economic impact and political significance. Seismic risk reduction is however less perceived and henceforth, receives consideration. The National Calamities Act (1958) gives a framework for governmental reaction and planning for disasters across the nation. The Local Government Ordinance (2001) incorporates arrangements for a neighbourhood organisation to create and authorise disaster management and risk relief measures. There are systems set up for giving relief following a disaster through the Emergency Relief Cell that coordinates general response to disasters and directs federal relief funds. In large-scale disasters, the military is the primary organisation which mobilises logistical actors to respond quickly (NDMA 2011).

In light of the devastation caused by the 2005 earthquake, it is essential to consider a portion of the elements that could have lessened the damages in the affected areas. These include:

1. Risk identification,
2. Emergency preparedness and response,
3. Investment in Risk Reduction,
4. Capacity building, and
5. Mechanisms for risk exchange and financing

These aspects need to be included in the designing of all efficient policies of disaster management practices to successfully counter hazard risks and ward off the impacts.

#### **4.14 Lesson Learned**

By analysing large natural disaster events through different case studies, ten premises regarding disasters and political change have been identified:

1. Natural disasters are the outcome of man-made disasters and poor governance.
2. Disasters often last long in a politically vulnerable country which can channelise regional political tensions.
3. Disasters are a product of development policies and can be open to scrutiny for dominant political and institutional systems.
4. Existing inequalities among the communities can be aggravated by post-disaster governmental manipulation.
5. The way in which the state and other sectors act in response and recovery phase, is largely dependent on the kind of political relationships that existed between national, international government with private economic institutions and civil societies before the catastrophes.
6. Regimes are likely to interpret spontaneous collective actions by nongovernmental organisations in the aftermath of a disaster as a threat and respond with caution. They can become authoritarian by ignoring existing political processes during the created political vacuum following crisis.
7. In the aftermath of disaster, political leaders may regain or even enhance their popular legitimacy by provoking and appeasing different ethnic communities.
8. Political actors in the aftermath of a disaster reposition themselves at multiple scales. They are the main players to determine the nature of responses. In

addition to this, cross- border policy implications and post-disaster response co-operation is in the hand of the political actors.

9. Government response is precisely depending upon the national security concerns. If governments do not allow intervention of the external agencies in a particular area, there can arise (or sometimes prevent) some serious domestic security concerns.
10. The disasters provide an opportunity to external agencies to use the vulnerability of the affected state to enforce the humanitarian mandate in the country by using soft power. For instance, like the World Bank has done in Pakistan during the earthquake, by convincing the Pakistan government that the three tier political systems could have been more effective in managing disasters. It is clear from World Bank reports that they have faced massive challenges in coordinating with Pakistan authorities during the earthquake; however, they have cited the example of their experience of the Bhuj earthquake (India 2001). They have introduced the three tier political system which beneficial during disasters. This can be taken as a positive indication of the humanitarian efforts undertaken by external agencies.

This chapter elaborated on the vulnerability that Pakistan bears towards natural disasters. Findings reveal that it is because of the lack of planning, policy gaps, geographical propensities and other man-made reasons. Pakistan is continuously becoming vulnerable to non-military security threats like disasters because of climate change, global warming and also the lack of good governance. Pakistan government's negligence towards the vulnerability has increased mismanagement in the country. The Pakistan government made insufficient and misdirected efforts to provide relief to the victims of the 2005 earthquake and 2010 flood. This chapter has partially discovered the different sides of the complex security issues within the provinces after the two natural disasters. This will be discussed and analysed further in the next chapter.



**Chapter 5**

**Humanitarian Interventions**

**and**

**Political Dynamics**

**in**

**Disaster Management in Pakistan**

The discussions of the nature and impacts of disaster management efforts in the previous chapters have exposed the intrinsic nature of the humanitarian interventions by international organisations that Pakistan had to witness during natural disasters. This chapter will delve deeper into the nature of these humanitarian interventions and try to assess the limits of the claim that humanitarian organisations are predominantly apolitical and altruistic bodies whose motives are hardly influenced by the political motivations. The debate which surrounds the motives of international organisations as being focussed on altruistic endeavours as opposed to being the collective strategic outcome of their vested political interests deserves scrutiny in the fields of disaster management. This chapter will analyse the political considerations that affected the nature of humanitarian interventions by international bodies to arrive at an understanding of the nature of the efforts that followed and the larger implications that they have in the field of disaster management.

Given the history of disaster management efforts, there have been many examples which indicate that the interventions by humanitarian organisations have been far from being mere neutral, apolitical efforts and have been the results of the direct political demands and implications that have been deemed relevant by the organisations. For example, in the case of the Nargis cyclone disaster of Myanmar, the government of Myanmar refused to receive international aids, as per the authoritative nature of the government and many other political considerations that catalysed their reluctance to receive international assistance (discussed in chapter 2). Despite the lack of consent showcased by the country's government, the international bodies under the UN, decided to invoke the Responsibility to Protect (R2P) law under the mandate of the UN's Security Council to facilitate an intervention in the affected areas. The R2P law does not usually cover the repercussions of a natural disaster and exists to sanction international intervention during ethical conflicts like genocide, ethnic cleansing, war crimes and crimes against humanity. The concerted efforts by the international organisations, governed by the UN, however made an exception to manipulate the implications of the existing law to foster interventions in Myanmar despite the wishes of its government. This is indicative of how the international humanitarian organisations can choose to implement norms with little to no heed to the wishes of the country's government in question. This is further supplanted by the fact that developing countries have no direct representation in the UN and their

consent for international humanitarian intervention is always prone to the decisions undertaken by these international organisations as per their own political standpoint. Bamforth (2006) in their article says that relief actions in countries like Darfur, Bosnia, Kosovo etc, where there is an absence of a recognised and well defined state or judicial structure, can be executed “under the principle of an a-political humanitarian imperative with comparatively little concern for state structures or the political impacts of humanitarian intervention”(Bamforth 2006:4). However, in sovereign states like Pakistan which is always under the throws of persisting political conflicts that keep complicating the nature of humanitarian interventions, such is not possible.

During the 2005 earthquake in Pakistan, the response of the UN bodies was invoked in a rather polemical manner where the invocation of NATO was mostly administered by General Musharraf, without the sanction of the federal parliament (International Crisis Group 2006). Even though, the military is considered to be the first responder in any given crisis pertaining to natural disaster, Musharraf’s insistence to maintain a suitable global image for his Western allies resulted in a delayed or complete non-involvement by the military. The people in the afflicted areas had to wait till the international organisations intervened with the necessary relief measures. It is interesting to note that, unlike Myanmar, in this case, R2P was not invoked by the UN in Pakistan. The disaster management efforts were largely carried out with the collaboration with the military and those areas which were restricted by the military as “no access zones”, was not accessed by the international humanitarian agencies invoking the very R2P that the UN had invoked in Myanmar under similar circumstances (see case study in chapter 2). This indicates the effects of the collaborative efforts and relationships shared by the agencies and respective governments in the subsequent disaster management efforts. Meanwhile some critics also believe that while several of the earthquake responses were mostly motivated by humanitarian considerations, it was also influenced by the War on Terror (WoT) motivations of the Western donors to present an altruistic image in countries dominated by Islamic organisations to attain counter terrorism objectives. They say that,

“The instrumentalization of humanitarian action to achieve counter-terrorism objectives by rewarding strategic allies and winning hearts and minds raises serious questions about the future of principled humanitarian assistance. Pakistani earthquake

survivors benefitted from the country's front-line status in the WoT, but there are profoundly negative implications for those affected by crisis and conflict in countries or regions not perceived to be of strategic importance (Wilder, A. 2008:5)".

Bamforth and Hussain (2007) stress that humanitarian agencies, whenever they strive to carry relief actions in countries like Pakistan, they end up surrounding themselves in a highly politicised environment, where their actions get affected by and end up influencing the political complexities of the nation. These get reflected in the nature of humanitarian assistances received by those sections of Pakistan's populations that are victimised by the socio-political conflicts that exist in the country.

In this chapter, researcher is dealing with the nature of the military in Pakistan, conditions of the religious and ethnic minorities in crises situations and the complicated nature of humanitarian assistance played by the so called terrorist organisations in disaster management to understand the influence of national and international politics in seemingly apolitical and altruistic humanitarian endeavours, in totality. An interesting question worth exploring is that if disasters can prompt long-term participation between conflict-prone bodies. Researches on disasters and struggles have advanced in three generations of research. A rising assemblage of work in human science beginning in the late 1950s (Rayner1953) shaped the first generation of disaster scholarship in the sociologies. Studies emerging from this cohort on disasters' impact on aggregate activity, (Weller and Quarantelli, 1973) authoritative conduct and change, (Dynes 1968) social systems, (Mileti et al. 1975) and civil-military relations, (Anderson 1970) delivered ends that were appropriate for the investigation of governmental issues. However, political researches were rather limited.

The second generation of scholarship on disasters and struggle came at the turn of the millennium with the attention on the idea of 'disaster strategy'. According to this idea, attempts to frame a research program concentrating on the connection between disasters and struggle were initiated. The previous researches remarked that natural-disasters of extraordinary magnitude can conceivably prompt long-term, non-disaster related participation between adversaries or warring groups. This literature was exceptionally pertinent to the interests of political specialists and interdisciplinary researchers. Motivated by prominent disasters, for example, the 1999 Izmit earthquake (Kelman and Koukis 2000) and the 2004 Indian Ocean tsunami, (Billon

and Waizenegger 2004) this cohort concentrated essentially on compromised disasters with inductive researches dependent on single-contextual investigations. While it gave rich depictions of legislative issues after the disaster, this cohort did not expand upon the work amassed by the original. In one precedent, propositions by Kelman concerning the constrained and interceding impacts of disasters on struggle rehashed the ones made more than three decades sooner (Dynes 1977).

The current third generation of research on post-disaster legislative issues expands on the exercises of its predecessors with multi-methodical work. These ongoing works have embarked to answer substantive and hypothetical inquiries that are of major significance to political theory. By illustration on earlier achievements, this cohort has made gains in our comprehension of the relationship among disasters and interstate conflict, (Mandel 2002) intrastate conflict, (Brancati 2007) political distress, (Drury and Olson 1998) and remote guide (Drury et al. 2005).

Along these lines, the way from early recounted work to later generalisable work on post-disaster legislative issues has taken a straightforward way with certain uniqueness. The first generation coordinated a common methodology and presented built up hypothesis; the second generation's inputs on catastrophe tact grew freely from the first but however expedited a concentrated amount of new inquiries that intrigue international relations (IR); the third and latest generation is pluralistic and hypothesis based and possibly an orderly research program. We currently focus on these last two generations of scholarship in tending to the subject of how disasters influence interstate question, beginning with the disaster discretion research.

### **5.1 Humanitarian Intervention: Political and Legal Concept**

Whenever there is a need for humanitarian intervention in a disaster response scenario by international actors, oftentimes it involves the deployment of military assets. A research project on the effectiveness of foreign military assets in disaster response by Wiharta et al. (2008:6-8), opined that any decision to provide military assets to another country becomes inevitably political because it requires a direct involvement with the intricacies of state power. Countries undertake decisions to provide assets (military or otherwise) as a result of historical, political and strategic considerations which are at par with their own national interests and can also rely on the potential of suitable reciprocity from the recipient countries. It therefore, becomes important to

understand the political and legal implications that surround humanitarian interventions by international agents (especially the deployment of military operations) to analyse the political nature of disaster responses that the affected countries witness during crisis situations.

The decision to offer military assistance is usually a result of a combination of many factors which include:

- a) The nature of the need for humanitarian assistance based on the scale and impacts of a disaster.
- b) The policies related to the deployment of international military assistance held by the affected country in question.
- c) The consent of the affected country in the deployment of foreign military assistance.
- d) The efficiency and flexibility of available military resources to attend to the affected areas.
- e) The strategic national interests and the corresponding diplomatic relations that exist between the responding and the recipient countries.
- f) The media coverage of the disaster in question and the ethical and political pressures that arise from the scenario (ibid: 10).

Usually, a country tries to involve its own military and non-military resources as the first responders to provide aids in a disaster scenario. The inability to limit the relief actions to such, along with some crucial political considerations result in the need to seek international assistance of any kind. As indicated in the factors stated above, an affected country's willingness to request or accept military assistance is usually dependent on the scale of the disaster and the humanitarian need that is generated. However, what comes up as being of primary significance is the policies that the affected country has regarding the involvement of foreign forces (for example, countries like China, India and North Korea possess policies that discourage foreign involvement in their territories in totality) and the political considerations made by the responding country to provide assistance. Historically speaking, military assets deployed in disaster relief operations globally in the period of 1997-2006, had been in the form of air transport, medical assistance and recruitment of expert personnel. Statistically speaking, the USA has come forward as one of the most prominent

contributors of military assistance (15 times between 2003 and 2006 for relief operations). This has been so because the USA possesses remarkable resources and networks of overseas military bases and has policies which explicitly stress on the need to make forces available for humanitarian purposes. The country also strives to maintain “an active international role for its military” (Ibid: 14). The efficiency of their military resources to provide prompt responses in affected countries also aids their involvement in affected region in addition to the political considerations they make to maintain an overall powerful global image. However, other countries who act as active responders in providing humanitarian assistances have varying strategies and political considerations which influence the impacts that they make in disaster management efforts. Most countries align themselves with the requirement of the IDRA (International Disaster Recovery Association) to foster international assistance in affected areas abroad.

According to SIPRI Report (2008) European countries tend to deploy military resources with respect to IDRA, exclusively in countries outside of Europe. The Netherlands has by far deployed military assets most frequently for natural disasters, reportedly 18 times since 1997 to countries such as Suriname and Pakistan. On the other hand, countries like Finland and Norway, have exhibited complete unwillingness to provide military assistances to countries abroad. Norway, aligning themselves with the “last resort” principle of the Oslo guidelines (to be discussed in details later on), maintains an approach to provide military assistance only when there exists no other foreseeable options to meet the humanitarian needs in question. Countries like Finland and Norway instead focus on providing civilian resources or cash contributions to humanitarian agencies for dealing with assistances. United Kingdom (UK) on the other hand, having relatively stronger military actors, has provided military assets overseas, seven times in the last ten years. The memorandum of understanding (MOU) drafted between UK’s Ministry of Defence and the Department of International Development (DFID) states that military assets can be issued as per the requests and considerations made by the DFID. France maintains a rather selective approach in terms of military deployment where despite stressing an overall advocacy for civil protection mechanisms over military assets, they have provided military assistances several times in various parts of the world (SIPRI Report 2008: 44). This includes the 2003 earthquake in Iran, the 2004 tsunami and the

2005 earthquake of Pakistan. Other countries like Belgium and Germany have reportedly provided military support overseas in some cases of extremely large-scale disasters.

Most Asia-Pacific countries have reportedly deployed military assets mainly to the countries of their own region and have rarely done it outside that region. In this respect, especially in Asia, India has emerged as a major regional power in terms of providing assistance for disaster management operations. India deploys military assets mainly in South and East Asia and has also increased the assistances to neighbouring countries. Recently, the Indian government has recognised an increasing demand among other South Asian countries for seeking its aids (for example, the Nepal 2015 earthquake). The Integrated Defence Staff was formed in 2001 by bringing all the three branches of its military to enhance its preparedness and capacities to respond in affected areas by Indian Government. However, it is interesting to note that Pakistan in both the incidents of its major disasters (the 2005 earthquake and the 2010 flood) have declined taking help from India despite the graveness of its needs. This indicates the significance of the political relations that exist between nations that play a major role in the disaster management efforts that ensue.

Japan, following the 1992 amendment in its Law concerning the Dispatch of Japan Relief Teams, has decided to deploy military forces abroad when it is considered indispensable and absolutely necessary. They have provided military assistances to Central America in 1998 following hurricane Mitch and to Turkey in the aftermath of the earthquake in 1999. Japan's overall efforts to deploy military assets have been focussed mostly in Southern and Eastern Asia, highlighting their emergence as a regional player not unlike India (SIPRI report 2008:45).

Singapore also actively provides military assistance, and has been an important contributor in Indonesia after the 2004 tsunami. The country emphasises in providing assistance in expertise and manpower mainly in the areas concerning medical care and logistics. Statistics indicate that Australia has been the most consistent and proactive in terms of providing military assets in the Asia-Pacific region. They follow a policy to send in assistances even if the scale of the disaster is comparatively smaller but have been known to intervene only when there is a large demand of humanitarian



action. For example, they made ample contributions in the 2003 earthquake in Bam, Iran (ibid: 5).

It is to be noted that on one hand despite an overarching need for countries to provide regional assistances in neighbouring countries, some areas of the world have remained an exception because of the policy considerations made by respective nations involved. For example, South Asia, being a relatively less integrated region, does not encounter substantial intervention from its countries in times of crises. Despite the emergence of India as the sole regional power to provide assets to its neighbouring countries, its efforts have been denied several times by Pakistan because of their ongoing tumultuous political relations. The complicated political relations among the neighbouring countries of South Asia also affect the efficacy of disaster responses that follows. On the other hand, as have been discussed above, some countries have policies that either prevent them from making military contributions as is the case with Finland and Norway or they tend to intervene selectively as is the case with France. Therefore, the policies of military intervention, the nature of adherence to the Oslo guidelines and ultimately the strategic immediate political considerations made by nations determine the nature and impacts of the military assistances that will be provided to the afflicted regions during a natural disaster.

### **5.1.1 The Oslo Guidelines**

In the instances of a natural disaster, the levels of social, political and economic development upheld by the affected countries become an important factor because it determines the nature of civil defence (which comprises of national military and civilian actors), that will be deployed as the first course of action. In certain cases, however, the state's capacities to rely on its own civil defence are not adequate for the humanitarian demands that arise. In those cases, the country seeks international assistance, primarily through the United Nations. Keeping such scenarios in mind, there was a need to create an organised framework to determine the principles and standards that govern the deployment of military and civil assets in natural, technological and environmental emergencies in foreign countries. This led to the formulation of the Oslo Guidelines in 1994, which were to function as the main referral document by the members of the UN to determine the nature of providing

assistances to disaster affected countries. The guidelines were formed keeping in mind the principles of “humanity, neutrality and impartiality” while respecting the sovereignty of the states in question. The guidelines aim to address interventions mainly in areas which are not wrought by political conflicts. However, several humanitarian assistances from foreign nations have been invoked by the countries which have been in politically tumultuous situations. This includes the cases of Indonesia, Haiti, Kashmir and Sri Lanka. The nature of implementing these guidelines also vary from country to country as we have seen that Norway, follows them more arduously making military interventions extremely rarely and only when it is “the last resort” whereas UK despite claiming to follow the guidelines make more frequent military interventions. The principles of this guideline therefore, should be open to further examination as to verify its relevance in affected regions globally. As per the report of Office for the Coordination of Humanitarian Affairs (OCHA 2007) the main principles of the guidelines are:

- The deployment of foreign military and civil assets should be undertaken only when all the possibilities of equivalent civil alternatives have been exhausted. Foreign military assets should be implemented as a ‘last resort’ and therefore, needs to be specifically suited for the humanitarian needs in question.
- The requests for foreign military assets should come from the Humanitarian Coordinator and not from political authorities, purely in terms of a humanitarian criterion (here, it is important to note that in 2005 earthquake, political authority has called the NATO not by any humanitarian organisations).
- Humanitarian operations involving military assets should strive to maintain a civilian nature and character. The entire operation should follow the command of the responsible humanitarian organisations.
- Military organisations should only play a complimentary role to humanitarian organisations and should refrain from taking a direct control over all relief operations.
- The intervention of foreign military assistances should be restricted to the time and space in question and attempt to present an example of how to emulate their functions in future by civilian personnel.

- Countries providing military assistance should adhere to the UN codes of conduct and the humanitarian principles.

The principles indicate that the reliance on military operations should always be secondary to the deployment of civil resources. Furthermore, the guidelines also give primacy to the affected nation's own capacities to implement domestic measures before invoking the need for foreign intervention. Despite the existence of a guideline as such, the non mandatory nature of them, makes countries to interpret them as per the convenience of their own policies regarding foreign involvement. It is because of this, the US, in spite of being a major player in the actions of the UN, believes in consistent military deployment as opposed to its acclaimed status of being a "last resort" option. The involvement of the military in IDRA has opened up several global debates regarding the nature of disaster management. It can be argued that a constant involvement of the military in humanitarian actions can hamper the "humanitarian space" in question where the principles of "humanity, neutrality and impartiality" can be compromised as the consent of the national government can be subsumed under the presence of foreign military organisations giving rise to further conflicts. On the other hand, the efficiency of the military to meet humanitarian needs have also been commended globally which gave rise to a growing acceptability of the involvement of military assets in foreign disaster management operations.

Pakistan, in the wake of its 2005 earthquake and 2010 flood, invoked the "last resort" principle of the guidelines to seek foreign military and civil aids. The World Food Programme (WFP) used military assets for delivering food to certain inaccessible areas. Pakistan's government further invoked the support of NATO for an air bridge to deliver goods from contributing countries. This sparked a debate among UN agencies whether the implementation of the NATO air bridge is valid and at par with the "last resort" principle. The Humanitarian Country Team (HCT)<sup>53</sup> weighed the

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<sup>53</sup> When a Humanitarian Coordinator has been designated, he or she is responsible for initiating requests for UN MCDA or approving the use of other military and civil defence resources. If a HC has not been appointed, the decision to request UN MCDA or use other military and civil defence resources rests with the Resident Coordinator, after consultation with the UN Humanitarian Country Team. The individual charged with coordinating the UN effort will ensure that Affected State clearance is obtained prior to processing the request at the country level. Before requesting these assets the HC/RC will

situation and declared that this does not constitute as a “last resort” situation as other civilian alternatives could be thought of. In the case of the 2005 earthquake, President Musharraf himself invoked NATO without the consent of the federal parliament which resulted in foreign interventions co-operating with the national military personnel. This has caused criticism among the local populations and Islamist organisations already working for relief functions because of their suspicion regarding the philanthropic nature of NATO. This indicates a selective nature in the procedures for the implementation of NATO in disaster management efforts.

### 5.1 NATO and Pakistan Government Meeting (2005)



Source: NATO (2005); NATO Deputy Assistant Secretary General for Operations Maurits Jochems meets with the Prime Minister of Pakistan, Shaukat-Aziz.

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consult with the appropriate authorities of the Affected State and the Emergency Relief Coordinator (ERC), as appropriate. If the Affected State is capable of and willing to provide the coordination structure for a natural disaster, this arrangement should be used (UNOCHA 2007,pg 20).

## 5.2 Humanitarian Intervention in Disaster field including Responsibility to Protect (R2P) Approach in Intervention

Humanitarian interventions from the international community which involves the use of force or coercion of any kind, is mostly carried out by the emerging doctrine of the Responsibility to Protect or R2P<sup>54</sup>. The invocation of the very premise of R2P, as a global agreement between the members of the UN to posit justified humanitarian intervention in countries undergoing crises, where the populations are facing major human rights violation by International standards was first posited by the UN general secretary Kofi Anan<sup>55</sup> following the political atrocities that were occurring in Srebrenica and Rwanda. This was followed by the creation of the International Conference on Information Systems Security (ICISS) by the Canadian government in 2001 which explored the possibility of a “Responsibility to Protect” method of humanitarian intervention which would aim to protect vulnerable populations facing atrocities of any kind while protecting the sovereignty of the state in question. The implications of the ICISS underwent some major transformations till the World Summit of 2005<sup>56</sup> which proposed new definitions and limits for R2P and gave rise to a newer understanding of a state’s sovereignty. However, the practice of implementing R2P persisted to be plagued with certain ambiguities, especially in

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<sup>54</sup>According to United Nations Regional Information for Western Europe (UNRIC) the responsibility To Protect doctrine is the enabling principle that first obligates individual states and then the international community to protect populations from genocide, war crimes, ethnic cleaning and crimes against humanity. R2P, as it’s commonly known, is a set of principles based on the idea that sovereignty is not a privilege, but a responsibility. R2P was universally endorsed at the 2005 World Summit and then re-affirmed in 2006 by the U.N. The modern turning point for the notion of “Responsibility to Protect” (R2P) came out of the Rwanda genocide 1994 experience.

<sup>55</sup>After the NATO intervention in the former Yugoslavia in 1999 there was a lot of debate on the legality of the intervention and so two years after, in 2001, the idea of R2P was first voiced, as a reaction to former UN Secretary-General Kofi Annan’s initiative. In late 2001 the Canadian government created the International Commission on Intervention and State Sovereignty (ICISS), that released its report *Responsibility to Protect* which advocated that state sovereignty is a responsibility, and that the international community could, as a last resort use military intervention to prevent “mass atrocities”. The African Union (AU) later endorsed the idea and put in its founding charter of 2005 that the “protection of human and people’s rights” would be a principle objective of the AU and that the Union had the right “to intervene in a Member State pursuant to a decision of the Assembly in respect of grave circumstances, namely war crimes, genocide and crimes against humanity.” Available on URL: <https://www.unric.org/en/responsibility-to-protect/26981-r2p-a-short-history>

<sup>56</sup>At the World Summit in 2005 the member states included R2P in the Outcome Document. The next year, in April 2006, the UN Security Council formalized their support of the R2P by reaffirming the provisions of the paragraphs from the World Summit document. Finally the UN Secretary General, Ban Ki-moon released a report the same year, *Implementing the Responsibility to Protect*, which argued for the implementation for R2P and its arguments were subsequently discussed at the 2009 UN General Assembly, resulting in Resolution (A/RES/63/308) which acknowledges the debate and Ban Ki-moon’s report and proposes the General Assembly to continue its consideration of R2P.

terms of invoking the same in cases of natural disasters which is of relevance in the field of disaster management.

Kofi Annan, following the atrocities faced by the populations of Srebrenica and Rwanda, posed the question about the inevitability of humanitarian intervention in conjunction with the principles of a state's sovereignty and said,

“But to the critics I would pose this question: if humanitarian intervention is, indeed, an unacceptable assault on sovereignty, how should we respond to a Rwanda, to a Srebrenica – to gross and systematic violations of human rights that offend every precept of our common humanity?...We confront a real dilemma. Few would disagree that both the defence of humanity and the defence of sovereignty are principles that must be supported. Alas, that does not tell us which principle should prevail when they are in conflict (Kofi Annan; in Kleine2015)”.

Annan's concern was the paradox that surrounds humanitarian intervention if it tries to respect the sovereignty of the state completely since a foreign intervention would in any case be violating the authority of the state's supremacy over its populations. This however also formulated the belief that the sovereignty of a state should not be viewed as an excuse or a shield against the atrocities that were being perpetrated with the knowledge or agency of the state (Kleine 2015: 1178). The resolution of this ethical dilemma gave rise to a newer definition of sovereignty where the focus shifted from authority to responsibility. This would entail that if an otherwise sovereign state was unable to protect or displayed a lack of responsibility to protect its populations, it might be considered as grounds of human rights violation where the sovereignty of the state has either been unsuccessful or needs to be questioned. An intervention by the international community can then be a justified measure to ensure the protection of the populations in crisis.

The main ideas, around which the doctrine of R2P was established in ICISS, despite undergoing changes in the final World Summit of 2005, have laid down the fundamental rationale behind the implementation of R2P which continues to exist and lays the basic ground surrounding its potential criticisms. The 2001 ICISS Report mentions the following principles as the grounding of the R2P:

- A state's sovereignty is equivalent to responsibility which is primarily vested in the state itself towards its populations.

- When a population is the victim of some serious atrocities pertaining to the onslaughts of “internal war, insurgency, repression or state failure” and the state is “is unwilling or unable to halt or avert” the same, it invokes an international responsibility to protect (ICISS Report 2001:13).

As is evident in the above principles, the R2P formulates justifications of intervention which would not undermine the sovereignty of the state in question, by articulating logic that the state is already failing in its alleged sovereign status by either denying or being unable to perform the very responsibilities that its sovereignty dictates. Other than the principles justifying its existence, the R2P also assumes three inviolable responsibilities which entail:

- The responsibility to prevent: to identify the direct and indirect causes of a crisis those are responsible for victimising the populations.
- The responsibility to react: to address the crisis with adequate measures “like sanctions and international prosecution, and in extreme cases military intervention.”
- The responsibility to rebuild: to assist in the rehabilitation and rebuilding measures that arises in the aftermath of any crisis.

These principles and responsibilities bind the international community in a global contract to not only consider humanitarian intervention but encourage them to practice it as a result of the ethical need to protect vulnerable populations. The ICISS report follows the “last resort” principle like the Oslo Guidelines in the deployment of military assets in a foreign land and also works on the principle of a “just cause threshold” where all the existing means to ensure safety and protection of the populations have already been exhausted and the humanitarian need thus created has exceeded the threshold of only applying civilian means (ICISS 2001:14).

The ICISS report included the rationale for R2P being applied in the scenarios of natural disasters where natural disasters would be considered as a possible cause of atrocity. Kleine (2015) says that whenever a natural disaster of a massive scale suffices,

“It goes without saying that such scenarios invoke the responsibility of the respective state to protect its population. The scenario becomes one of international responsibility and potential coercive measures when the respective state is unable or

unwilling to protect its population and unwilling to accept help to do so from the outside (Kleine 2015: 1184)".

However, the inclusion of natural disasters in the realm of R2P underwent many political debates and finally led to the exclusion of the same from the scope of R2P in 2005 which laid down the cause for intervention only to "genocide, war crimes, ethnic cleansing and crimes against humanity"<sup>57</sup>.

The criticism of R2P, especially with respect to the scenarios of natural disasters was soon to follow because the same was implemented to bring in foreign intervention in Myanmar in 2008 following the Nargis cyclone. The cyclone occurred after the limiting of the areas of intervention for R2P and by that time it was established that invoking R2P for natural disaster scenarios would undermine the basic premise that were agreed upon in the 2005 summit. Many individual states like China made it explicitly clear that they would not support the involvement of R2P in anything beyond the likes of the four situations mentioned. Furthermore, then the president of Myanmar expressed his objection in the deployment of foreign forces in his land. When the R2P was invoked despite all these practical and theoretical objections, it highlights the possible ambiguities and a lack of universality in the very doctrine. The involvement of the R2P in Myanmar in 2008 neither expressed respect in the sovereignty of the state nor did it technically pertain to its own principles of "just cause threshold" and "last resort".

After the explicit refusal of Myanmar's junta leader General Than Shwe to accept foreign aids, a General Assembly meeting was held in the UN where Jean-Maurice Ripert, the French Ambassador to the UN, suggested that Myanmar's current situation "could lead to a true crime against humanity" (Ozerdem 2010:699). The intervention sanctioned by the UN in this case was based on the assumption that the very negligence of the government to protect its citizens by denying foreign aids constitutes as a "crime against humanity" because it would further lead to the loss of lives. Ozerdem (2010) in his article says, "after all, if disaster-affected people are dying simply because they cannot get any relief aid due to their state's political

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<sup>57</sup>Definition of the Responsibility to Protect: "The State carries the primary responsibility for the protection of populations from mass atrocities such as genocide, war crimes, crimes against humanity and ethnic cleansing". Accessed Online, 14 August 2017, URL:<https://www.unric.org/en/responsibility-to-protect?layout=default>



decisions, then should not that also be considered as a ‘crime against humanity’? (ibid: 696)”.

The acceptance of Myanmar as positing an exceptional situation for the application of R2P in natural disaster scenarios however does not justify the selectiveness of such. There have been numerous disasters elsewhere with far more devastating consequences where the R2P was not applied (IDP crisis in Pakistan, 2008-09) keeping in mind the policy considerations and the consent of the state (as is evident in terms of countries mentioned in the previous section that despite falling in disaster prone areas have policies against the deployment of foreign forces in their territory. Myanmar’s suspicions regarding the motives of international agencies is very much in alignment with the reservations held by countries like India who stress on its own powers to protect its populations. In the wake of the 2008 tsunami, India too refused foreign aids as it would be detrimental to its national pride and present them as mere recipients of a charity (ibid:698). The criticism of R2P therefore, persists in the suggestion that the doctrine lacks a universal validity and suffers from ambiguity in its selection of the areas for intervention. It chooses to view certain states as being incapable of protecting their own masses and denies their consent in the matter whereas it accepts the policy considerations of other relatively stronger states and opts for non-interference in their domestic political matters. The ambiguity in the implementation of R2P, hence, posits a need for the political analysis of disaster management efforts that are carried out in the garb of neutral humanitarian interventions but is an outcome of insidious political power plays.

### **5.3 The Political Implications of the NATO intervention in Pakistan’s Disaster Management**

Aside from the involvement of the R2P in Myanmar in 2008, a possible site for the criticism of military involvement in a foreign country in the name of disaster management is NATO’s intervention in the disasters of Pakistan. As mentioned earlier, during the 2005 earthquake, President Musharraf called in the help of NATO after claiming to be unable to cope with the effects of the earthquake without the sanction of the federal parliament. In 2010, President Asif Ali Zardari also invoked the “last resort” principle to seek the help of NATO with the collaboration of WFP.

This was also a result of the opinion of the Pakistani government that its own disaster management institution, NDMA was rather new and inexperienced in handling disasters without any help. In this instance also, the international community (including other humanitarian organisations of Pakistan, UK, USA and ECHO) put forward some disagreements regarding the validity of the last resort option in this particular instant. The demand for NATO in 2010 was made for flying in goods from Pakistan's donors to the affected regions via an air bridge from Europe. Finally, the HCT in alignment with the concerns raised by organisations like ECHO, ruled out the usage of the NATO air bridge, arguing that it did not feature as a "last resort" option as other civilian options were available (ECHO Report 2016:6; Weijers 2015:67; Humanitarian Practice Network 2006:18). However, the WFP and UNHCR went ahead to use the air bridge anyways along with several other NGOs. Meanwhile, the NATO planes did not fly to the affected areas as was originally intended and supplies were transported from Europe directly to an airbase outside Islamabad. Therefore, it can be noted that in both the instances of the 2005 earthquake and the 2010 flood, the intervention of NATO was met with certain disagreements which have invoked further suspicion about the political implications of such. It brings up crucial questions about the political relationship between the Pakistan government and NATO and how that had affected the disaster management efforts.

During the 2005 earthquake, President Musharraf's efforts to provide reliefs was met with criticism from various sectors from the local people to the opposition parties to some militant organisations working as relief providers to many parts of the international community. Kronstadt et al. (2010) for Congress research report, it was remarked:

"Pakistan's opposition parties also criticized President Musharraf and the army for their slow response and alleged mismanagement of the relief operation. They launched a motion shortly after the earthquake calling on the government to "give a full accounting of the relief efforts to Pakistan's parliament. 'The government has failed to organize the crisis management,' their motion stated. 'The matter is very serious and needs to be discussed on the floor of the house.'" So far, nothing has reportedly come of this effort. Some opposition members have complained that General Musharraf has used the crisis to aggrandize his own power" (Kronstadt et al. 2010:8).

Musharraf in response to the criticism accepted that the relief efforts by the government and the military might not have been ideal but they were commendable nonetheless. Accepting a slow progress in the relief and rehabilitation efforts,

Musharraf decided to ask for intervention from the international community, especially the NATO. On 10<sup>th</sup> October, 2005, Musharraf's government made a formal request from the 26-nation NATO military alliance for assisting the country in disaster assistance. NATO responded rather promptly and decided to build an air bridge for transporting supplies and aids from Germany and Turkey to Islamabad (Reliefweb 2005a). NATO's intervention in Pakistan for relief activities was primarily based on:

- Organising donations from NATO and other countries with the help of the Euro-Atlantic Disaster Relief Co-ordination Centre (EADRCC) in Brussels.
- Building an air bridge from Turkey and Germany to fly in relief goods to the affected areas in Pakistan.
- To issue five helicopters for transporting supplies to remote mountainous villages and assisting in the evacuation of victims in the affected areas.
- To mobilise medical teams that would reach the affected areas swiftly.
- Assist in rehabilitation facilities which would include the repair of roads and the building of shelters, schools and clinics (NATO 2010).

The intervention of NATO in Pakistan did catalyse some relief and rehabilitation processes but did not bring in extraordinary results which would deem the intervention to have been obligatory. This was because the NATO did not reach some affected areas which were rather inaccessible or were denied access by the Pakistani government and a substantial chunk of the relief work was also carried out by local NGOs and militant organisations whose efforts were appreciated more. The question therefore, arises that despite the not so remarkable results of the NATO intervention, why the Pakistani government kept calling it for other disaster instances and what does it indicate about the mutual understanding shared by the GoP and NATO.

MK Bhadrakumar, a former Indian diplomat, in his article has remarked that “fortuitously, the earthquake in Kashmir has speeded up the process of forging a very crucial segment of the chain -- formalised partnership links between NATO and Pakistan (Bhadrakumar 2005).” He is of the belief that it was a known fact for Pakistan that NATO was keen on establishing its hold in Afghanistan for their motives of confronting the Taliban rule and demolishing the terrorist bases there

(ibid). Pakistan, because of its important and strategic location could have been an important ally with the powerful countries if the relief works in Pakistan were made for an opportunity for the NATO to gain further access to Afghanistan. The American ambassador to NATO stressed on the significance of Afghanistan by saying that the region holds the “most important mission for the foreseeable future”. The interest of NATO to forge important and determining public relations among the Pakistani population to help their cause of ‘war on terror’ (WoT) initiatives is also something that comes up in the criticism of NATO’s involvement in Pakistan. The Congress report mentions that

“This issue is seen as important because President Musharraf’s government is a key U.S. ally in the global war on terror. Many high-ranking members of Al Qaeda and the Taliban are believed to remain in the rugged regions of northwest Pakistan, and the ability of the United States to locate and capture them likely depends on Pakistan’s cooperation...The degree to which the United States receives positive press for its contributions to the earthquake relief effort may make it easier for Musharraf to support U.S. anti-terror activity in the region (CRS 2006:19; Kronenfeld and Margesson 2005: 20).”

One can opine that the efforts to create a favourable public image among the Pakistani locals were important for NATO and this was achieved by ensuring appropriate media coverage of their relief actions in Pakistan’s disasters. How disaster management efforts become a result of existing political relations and conflicts can be understood by the fact that Pakistan’s neighbouring countries like India and Bangladesh have also experienced several mega disasters as of now but there have been little to no co-operation among the countries in their mutual assistance despite having a disaster management institution in South Asia like the SAARC. It can be argued that this is because the continuous political conflicts among these countries which render them incapable of overcoming differences even during the times of disaster assistance and enforces the intervention of western humanitarian agencies. Therefore, it can be concluded that super power countries are using disasters as opportunities to fulfil their foreign policy interests in the region for expanding their influence. Natural disasters hence, can create a situation for the expansion of neo-imperialism by playing on the strategic political locations of vulnerable countries like Pakistan.

#### **5.4 Intra-state Conflict Factors in Response to Disasters in Pakistan**

As have been evident in the previous sections, the impacts of disasters and the management efforts that it fosters are hardly apolitical and become examples of the

existing power order in the society. Especially, for a country like Pakistan which in any case is riddled with social inequalities in terms of class, gender, religion and ethnicities, the disaster management efforts also play into further intensifying the social divisions in a crisis scenario. On one hand, the government continues to exhibit the political stances it has over certain communities through relief measures and on the other hand, formulating purely apolitical relief efforts which do not address the social inequalities that exist (not acknowledging that a disaster affects different sections of the populations differently) will ultimately deem inadequate results. Therefore, it is important to understand the existing socio-political intricacies of a society in the context of disaster management efforts to identify the potential causes of intra-state conflicts that can erupt in the aftermath of a disaster.

Arai (2012) , who conducted a survey of the relief measures undertaken by the Pakistani government after the 2010 flood, mentions three kinds of scarcities that affect a society after an environmental disaster (as found by a study by the Toronto group) which intensifies the existing socio-political inequalities. The three types of scarcity are 1) “supply-induced scarcity” which occurs from a decline in the amount of available resources; 2) “demand-induced scarcity” resulting from the increased growth of disaster affected populations and 3) “structural scarcity” resulting from the inequalities for the access and distribution of resources (ibid:54) Arai mentions that all the three kinds of scarcities came into existence in the case of Pakistan post the 2010 flood as the affected victims repeatedly complained about the inadequacy of the governmental relief efforts which in turn also worsened the levels of social oppression that they were already facing.

The floods most severely affected the farmer communities who are in any case diversified by geographical and ethno-linguistic differences. The flood had washed down their savings of livelihood, crops and the rent they reserved for their landlords. Arai (2012) explained that government relief efforts did not focus on the levels of oppression that operate in the farmer community and all the meetings addressed for relief efforts focused purely in an analysis of the loss of bare necessities only. Aside from that the government could not address the concerns of the farmer community who dwells in the bottom rung of the social order. The flood intensified the feudal order that existed in the society, where the landlords who were in urban areas

remained relatively unaffected and had better access to relief measure while the rural tenant community, who were rendered landless by the devastations caused by the flood, had to still worry about paying their rents over their concerns about getting disaster aids. There were two community meetings conducted in Charsadda, Khyber-Pakhtunkhwa regarding the issue. The concern that came up from this meeting was that the landlords far from visiting the flood destroyed farmlands, remained comfortably indifferent from the effects of the flood and spared no leniency in collecting rents and revenues. In another meeting in Muzaffargarh, farmers complained about the local banks' refusal to grant them debts to ease the process of the repayment of their debts or rents which were now excruciatingly difficult given the devastations incurred by the floods. The inefficiency of the governments to address these financial concerns of the farmer community reflects the negligence of the relief measures towards the problems of the existing feudal order. The rehabilitation measures undertaken by the government continued to play into the class inequalities that existed in the society by aiding the rich and privileged way more than the oppressed classes.

Aside from the social hierarchies that exist in Pakistan, the country is also characterised by ethnic conflicts between the Sindh and the Punjab provinces with Punjab dominating the governmental, administrative and military positions. The power disparity between the communities have resulted in many ethnic conflicts which affected the disaster management efforts directed towards them post any natural disasters with Sindh being at a disadvantageous position. For example, southern Sindh districts like Badin, Mirpur Khas, and Umerkot, with lower developmental statues were severely affected by a flood in August, 2011. They faced substantially larger damages than the Northern provinces but faced lower rates of relief measures. Since, humanitarian organisations, both national and international, focussed on the northern areas more, the residents of the southern affected areas alleged this as "political neglect" since there is only one representative from southern Sindh in the political cabinet. It is interesting to note that a substantial part of the southern Sindh region is populated by Hindu communities and this negligence towards relief operations in the region can be a sign of religious discrimination (International Crisis Group Report 2012:12).

The International Crisis Group Report also mentions that a member of the Pakistan Fishers Forum said, “the 2011 floods did not get the same level of attention as the 2010 floods did because [the former] affected Sindh the most (ibid:13)”. This indicates the suspicions regarding the preferential treatments towards Punjabis over Sindhis by the Pakistan government. If such grievances are left unaddressed then the conflicts between the Sindhis, the Mohajirs (another ethnic minority in Pakistan) and the Punjabis, would likely increase. The 2010 and 2011 floods resulted in Sindhis to migrate to more ethnically ambiguous cities like Karachi and Hyderabad. In this regard, the Crisis report says,

“Several NGO workers claimed that the Mohajir-dominated Muttahida Qaumi Movement (MQM), although a coalition partner of the Sindhi-dominated PPP, pressured Sindhi IDPs out of Karachi and Hyderabad to offset the potential political impact of larger Sindhi populations in the traditionally Mohajir-dominated cities. Such an influx is likely again, as farmers in the flood-hit areas have no recourse other than to migrate to urban centres (ibid: 14)”.

The selectiveness of distributing resources also features in the Pakistani government’s treatment of the Afghani refugees. The National Disaster Response guideline of Pakistan in terms of distribution of relief aids does not recognise ethnic minorities like Hazara and Pashtuns since they do not count as legal citizens. Pakistan’s strenuous relationship with Afghanistan, followed by its newfound ally-ship with NATO, has affected its treatment of Afghani refugees who were either neglected in the aftermath of the disasters or had been denied relief measures in lieu of their questionable citizenship status.

Brancati (2007) in his article argues that, in the scheme of political disasters, earthquakes pose the maximum threat for intensifying political conflicts in the state given the unpredictability and graveness of its impacts. He highlights the examples of the effects of the 2004 earthquake in Indian Ocean in Sri Lanka where the natural disaster intensified the effects of the existing political conflicts. In the initial stages of the aftermath of the disaster in Sri Lanka, there were no visible sign of conflict and it was expected that the relief efforts might foster cooperation between the local militant group, LTTE and the Sri Lankan government. That was soon to change as the situation worsened with LTTE perpetrating violence and hampering the cease-fire agreement that was decided upon. Already preoccupied with relief efforts, the government found it difficult to combat the onslaughts of LTTE. The LTTE incited

the Tamil population by suggesting that majority of the relief distribution was directed towards the southern region dominated by Sinhalese population even though the South was affected less. The LTTE gained the confidence of their directed population by performing better in the relief work than the government and took advantage of the situation by recruiting orphaned and homeless children affected by the disaster as their potential soldiers. It was also assumed that the LTTE smuggled war supplies in the garb of relief aid to the country and manipulated donations to benefit their militant purposes (ibid: 726).

Some other examples where existing intra state conflicts and social hierarchies got intensified after a disaster include the 2014 flood in Kashmir and the 2015 earthquake. Nepal before the 2015 earthquake, was already witnessing protests and armed revolts by several minority groups which prompted several amendments in the constitution. Addressing the same in rehabilitation efforts, the government thought about processing a “blanket approach” where every community would receive equal amounts of relief measures. This was thought of as a stabilising stance that would resolve the ongoing political crises. However, because of the existing social insecurities among various groups, the effects of the disaster affected everyone differently and a neutralised blanket approach in fact intensified the vulnerabilities of the community. Therefore, far from stabilising political differences, the inequalities became aggravated (Harrowell and Ozerdem 2018). In case of the 2014 Kashmir flood, the Kashmiri locals already harbouring disapproval of the Indian government noticed that majority of the relief measure were addressed towards non-Kashmiri tourists, political officials and the elite sections of the society. Reports have claimed that initially relief measures were directed towards the locals but they got jeopardised and were withdrawn after incidents of stone pelting (Venugopal and Yasir 2017).

Therefore, the above-mentioned instances point towards the fact that relief and rehabilitation efforts can neither be motivated in a direction which already plays on the existing political hierarchies nor can it turn a blind eye towards the existing social inequalities and conflict to create a purely neutral approach. Disaster management hence, needs to be politically informed but not selectively directed towards the already privileged sections of the society in order to create a conflict free environment in the aftermaths of any disaster.



## **5.5 Role of Terrorist Organisations in Disaster Management in Pakistan**

Berrebi and Ostwald's paper (2011) indicates that terrorism neither arises out of vacuum, nor does natural disasters only lead to apolitical geographical effects and hence, they have the capacity to influence each other. This is more so because it is thought that the very social vulnerabilities that disasters expose, are the ones played on by terrorist groups to substantiate their power. In the previous section, it can be seen that was perhaps what happened in the aftermath of the 2004 tsunami in Sri Lanka, with the rise of the LTTE attacks that followed. However, one cannot simply hold certain militant organisations responsible for having straightforward intentions to just benefit out of natural disasters and expand their power. One of the most important reasons against such simplistic analysis is that oftentimes it is the insufficiency of the government's disaster management endeavours which pursues militant organisations to enhance their relief efforts and ultimately enforces the vulnerable and affected sections of the populations to accept help from whichever direction it is coming from. Sometimes, the sustained inefficiency and negligence of the government coupled with the unfamiliarity with foreign intervention on the ground (as was the case with NATO in Pakistan's disasters) provokes suspicion in the minds of the people to the ones in authoritative positions. Moreover, in a country like Pakistan, the situation is far more complex since the very distinctions between Islamist political organisations of who counts as militant or "terrorist" is rather ambiguous and the government also maintains complicated and perplexing relations with the supposedly terrorist outfits, banning them and supporting them in an undecided manner as per the convenience of the situation. The International Crisis Group report (2006) on the 2005 earthquake of Pakistan says,

"These distinctions are frequently not clear-cut in Pakistan where, aside from some missionary groups that have no political agenda, many of the country's Islamic political movements, including its Islamic political parties, have generally maintained close links with jihadi organisations or even have jihadi wings. This difficulty in distinguishing between political and jihadi strains of Islamism in Pakistan has complicated efforts to find appropriate Islamic entities with which to work in response to the earthquake (ibid:9)."

It then makes sense to look into the relief efforts made by terrorist organisations following the inefficiency of the government to understand how the relationship of the government with these organisations affect the disaster management efforts that take place.

According to the International Crisis Group Report (2006), there are 58 Islamic political parties in Pakistan with 24 militant groups that are known. These parties sometimes have militant wings and maintain connections with the regional jihadi networks. Two of the most prominent Pakistani religious parties are the Jamiat Ulema-e-Islam (JUI) and the Jamaat-i-Islami (JI) who are also among the major partners in Baluchistan's and NWFP's political alliance called Muttahida Majlis-e-Amal (MMA).

Both these parties have known to have jihadi links in Kashmir and Afghanistan where they contribute to and support the efforts of the jihadi militant outfits like the Hijbul Mujahideen, which is a prominent militant organisation in Kashmir. The JUI have known to support Taliban leaders who have studied in their Madrasas. Both the JUI and the JI, despite their reputations of being jihadi contributors, have been the major players in the relief work in Pakistan through welfare networks of the Al-Khair Trust and the Al-Khidmat Foundation respectively.

In the aftermath of the 2005 earthquake, around seventeen militant organisations (which were either banned by Musharraf's government or were put on a watch-list for terrorist activities) were reported to have carried out extensive relief actions. They "openly operate relief camps, distribute relief goods and advertise their presence through banners and billboards at their camps and along the main streets of earthquake-affected cities (ibid:14)".

Aside from the inefficiency of the government and the effects of international relief, what catalyses the involvement of terrorist organisations in disaster relief is also the dubious stance that government maintains on them, especially in a country like Pakistan. Anatol Lieven, in his book *Pakistan a Hard Country* (2011), says that despite Musharraf administration's official ban on groups like Lashkar-e-Taiba and Jaish-e-Mohammed, the groups maintained their presence on ground under different names. Jamaat-ud-Dawa, which is the parent organisation of Lashkar-e-Taiba, was able to expand its influence with a broad network of school and charitable organisations, and was influential in helping the victims in Kashmir during the 2005 earthquake (Lieven 2011:411). A local Islamist group called Tehrik-e-Nafaz-e-Shariat-e-Mohammadi (TNSM) which also experienced a rather feeble ban in 2002 by the Musharraf government, gradually gained its power by making use of many

individual emerging revolts (in regions like the FATA). Their influence was effective in the 2005 earthquake because of their relief work and also because they propagated that the earthquake was God's punishment for Pathan sins (ibid: 465). The actual ineffectiveness of the bans aside, the Pakistan government has also in many occasions come forward to applaud the involvement of these militant groups in providing aid and suggested that such involvement was appreciated. During the aftermath of the 2005 earthquake, Pakistan government was reported to have portrayed the jihadi groups as "the prime contributors" as opposed to many non-religious and non-sectarian NGOs and humanitarian organisations (Crisis Group Report 2006:10). The then interior minister of Pakistan, Aftab Ahmed Khan Sherpao, went ahead to say, "...they (the Jihadis) are the lifeline of our rescue and relief work in Azad Kashmir right now" (ibid: 10)

There are other factors which govern the efficiency of the militant organisations efficiency in providing aid. One of the reasons being their continuous presence in mountainous areas, disregarding the ban which give them better access to reaching the affected areas much faster. Training camps of Jihadi organisations have remained intact in NWFP and "AJK" (POK) following the official ban. This has improved their knowledge of the area drastically better than governmental and external agencies that had to make extra efforts to reach the affected areas. A Jamaat-ud-Dawa volunteer claimed,

"We know these mountains like the backs of our hands after more than a decade of fighting Indian rule in occupied Kashmir, but now we are engaged in a new holy war by helping victims of the earthquake" (ibid: 11)

The militant organisations therefore, utilised their geographical benefits coupled with better technology to reach the affected areas much faster. On the other hand, religious parties and organisations who remain the foremost sponsors of these militant organisations sustained their influence through their wide functioning networks of charity and welfare methods. For example, the JUI made use of their wide networks of mosques and Madrasas in the country to conduct relief actions using volunteers which included students, doctors, teachers, lawyers and labour leaders. Needless to say, these organisations have surpassed the effectiveness of governmental organisations and despite their assumed problematic political stances have garnered recognition among the masses because of their accessibility and appeasement of disaster affected victims.

The major party affiliated organisations who have remained crucial players in providing relief measures in Pakistan are the Al-Khair Trust and JI's Relief Network. The Al-Khair Trust as mentioned earlier is the welfare wing of the JUI and it has a dominating presence in the MMA governmental coalition in NWFP. It recruits workers from Harkatul Mujahidin, which is a group that has jihadi bases in the districts like Mansehra and Kohistan. It was responsible for building survivor houses in some affected areas of Garhi Habibullah after the 2005 earthquake. The JI's Relief Network is functional through the Al Khidmat Foundation and because of their links with other organisations such as "Pakistan Islamic Medical Association (PIMA), Islami Jamiat-e- Talaba, the JI's student wing, and the Tanzeem-e-Asatiza (JI's teachers union)" (ibid: 9), they are capable of providing efficient relief organisations and also conduct the spreading of Islamist education in relief camps. The individual militant groups who acquire new identities or collaborate with other organisations to promote relief work are Al Rasheed Trust, Jamaat-ud-Dawa, Al- Safa Trust, Al-Rehmat Trust and Al-Akhtar Trust. The Al-Rasheed Trust is a Deobandi organisation which was banned by the Musharraf government in 2002, following which they renamed themselves as Khuddam-ul-Islam. They publish two of the most widely circulating Jihadi journals in Pakistan namely *Islam* and *Zarb-e-Momin*.

Barring their initial ban and despite the UN's insistence that this organisation maintain ties with the Al-Qaeda, they were not completely banned and were only put under the terrorism watch list by the government. Al-Rasheed Trust was one of the most efficient and fastest relief groups to reach the Balakot region after the 2005 earthquake. Jamaat-ud-Dawa is the renamed organisational offshoot of the infamous Lashkar-e-Tayaba (LeT), who because of their powerful presence in areas of the Pakistan administered Kashmir, can usually make swift access to the area whenever a disaster strike. Al- Safa Trust is mainly active in areas from Abbottabad to the Line of Control in Kashmir. They have a parent organisation called Al-Badr, Hizb-ul-Mujahideen, which is functional in the non-Pashtun speaking areas of the NWFP. While conducting relief work, they were known to recruit militants from the earthquake hit areas of NWFP. Al-Rehmat Trust (ART) is the forum used by the banned terrorist organisation Jaish-e- Mohammed to conduct relief work. They were not active during the 2005 earthquake but had made their presence felt in the relief operations of other disasters. Al-Akhtar Trust is a Deobandi organisation who

functions through a Madrasa in Karachi and is known to raise funds for militant recruitments for various jihadi groups in Afghanistan and Kashmir including the Taliban, Harkat-ul- Mujahideen-al-Islami and Harkat-ul- Jihad-e-Islami (HuJI).

Following the aftermath of the 2010 flood, the relief aid undertaken by the government and International organisations was unable to reach certain areas and sections of the society and official reports claimed that even then, the militant organisations came to the rescue of a substantial number of victims. A report published in the Congressional Research Service (Kronstad et al. 2010:22) following the 2010 flood in Pakistan stated that,

“Some extremist-run charities have undertaken relief efforts in areas where government aid has been lacking. By providing food, shelter, and other benefits to desperate victims, such organizations may win sympathy and even (additional) future support from affected residents. Of potential concern, especially from a U.S. perspective, are the activities of the Falah-i-Insaniat and Jamaat-ud-Dawa (Kronstad et al. 2010:22).”

Sometimes, terrorist organisations become functional due to a rampant fear of the intervention of western organisations. Occasionally, such suspicions are utilised by the terrorist organisations themselves to influence public opinion. For example, post 2010 flood, Tehrik-i-Taliban Pakistan declared a total boycott of all western aids and even threatened to attack western humanitarian workers (ibid: 22). Although no instances of violence were reported, it was influential in diverting public opinion towards being more receptive of aids by the local militant organisations. The ongoing dynamics of international politics, especially Pakistan’s complicated relationship with the USA and UN, also play a role to the potential of either accepting or refusing international aids thereby determining the propensity of the victims to turn towards the militant organisations. Fair in her article (2011) states that both, the U.S. have come to realise that Pakistan will only provide minimal support in their demands regarding “war on terror” and Pakistan have only strengthened their suspicion towards the U.S. over the years. Americans believe that the risks undertaken by the U.S. officials in Pakistan have resulted in the loss of lives of American men while Pakistanis continue to feel that they have received inadequate funds for disaster relief actions and in turn have incurred serious risks becoming nothing but a pawn for the U.S to fulfil their diplomatic actions in dismantling terrorist wings in Afghanistan. Fair remarks that,

“Pakistanis have also been less than moved by American humanitarian and developmental assistance programs in part because they perceive U.S. assistance as advancing its own strategic interests and purchasing acquiescence to policies that Pakistanis loathe, rather than seeking to genuinely help them and their country. Thus, even though the U.S. has been the largest national provider of flood relief, anti-Americanism soars in Pakistan (Fair 2011:107).”

The involvement of terrorist organisations in disaster activity raise numerous political and humanitarian concerns, the primary of which remains to be the organisations enhancing their strength and support to benefit them in potential violent actions in the future. Many reports claim that relief actions are one of the foremost excuses to recruit more workers for the organisations as they directly appeal to the vulnerabilities of a population suffering devastating consequences. There have been claims of taking in newly orphaned children (affected by disasters) under the care of these militant organisations to train them for future. For example, Farhad Burney of Ansar Burney Welfare Trust (a non-religious local NGO of Pakistan), in the aftermath of the 2005 earthquake said,

“we have heard from very reliable sources and seen with our own eyes that orphaned and lost children are being taken by jihadi organisations in northern Pakistan to be trained” (International Crisis Group 2006: 13)

Despite the problematic repercussions and indications of the involvement of militant organisations in the process of disaster management in Pakistan, it is evident that their existence is highly dependent on the stances taken by the Pakistani government as well as the nature of international politics that come into play in determining the course of disaster management actions. The government of Pakistan has persisted to maintain ambiguous and polemic ties with these militant organisations where they were occasionally banned and simultaneously encouraged to participate in relief actions. The official bans also seem to be more symbolic than pragmatically effective as most militant organisations have maintained ties with the mainstream political parties or have efficiently changed their names to carry out their work. Finally, their undeniable efficiency in accessing affected areas and carrying out necessary rehabilitation work has further catalysed their popularity among the Pakistani masses. Therefore, in order to seriously think about curbing the involvement of terrorist organisations completely, the Pakistani government needs to rectify and advance their disaster management efforts and take a clear stance in determining the nature of ban incurred on the militant organisations. On the other hand, international agencies should also strive to appeal to the disaster victims more efficiently and keep their

ulterior political motives (like the demands of “war on terror” by NATO) secondary to the overall humanitarian concerns of disaster management.

In conclusion, it can be said that in consideration of Pakistan’s earthquake and flood events within the framework of international humanitarian actors’ intervention, international politics was affected by earthquake and floods in 2005 and 2010 continuously; both the disasters had occurred in two different political environments which had different political implications as discussed in the previous chapters. In this chapter, researcher has investigated various political complexities in both the disasters. Now, the finding and research questions of this study will be discussed in the final chapter.

# **Chapter 6**

## **Conclusion**



The proposed theme “Responses to Natural Disasters in Pakistan: Comparative Study of Earthquake of 2005 and Indus River flood of 2010” has certain objectives behind conducting this research which have been discussed in the first chapter in the context of this work. Further, Chapter two dealt with different case studies of natural disasters which have cross border implications. The nature of disaster management processes are the result of amalgamation of many theoretical approaches of International Relations. As per the demand of the thesis to study and analyse the factors that shape disaster management in today’s world, adequate theoretical perspectives have been found to aid us in the process. These theories have provided the background to understand how the international political scenario affects the strategies implemented by governments to address disaster management and the nature of their outcomes. The diplomatic relationships shared by countries and their adjoining political climate are important precedents in ensuring the efficacy of disaster management programmes. Theories help us dig deeper in unravelling the intricacies of these diplomatic relationships and the nature of governments. Pakistan being a rather complex state plagued by the effects of complicated inter-state and intra-state relations, it is only justified to apply relevant theoretical approaches of International Relations to understand the nature of disaster management processes that governed two of its biggest natural disasters in totality.

The case studies discussed in the chapter two shows that the political structure of the country plays significant role in disaster management. Disasters do not only affect the economy of the country but they shake the entire system of the country. They also give the impression that fractured political system also affects disaster management policies. One disaster event brings along with it, various other connected issues with it. It affects demographic distribution in terms of the economy and political behaviour. It increases ethnic conflicts, refugees and internally displacement people. It severely damages the economy, ecology and the environment. The countries’ development and its international ranking are dependent on the growth of the economy which gets affected by the mega disasters.

The chapter three discussed that South Asian countries form the least integrated region. This chapter dealt with the burning issues related to non-regional co-operation during disasters in South Asian region. This chapter has mainly focused on the challenges in disaster management which occurred due to lack of trust and historical

conflicts within the state. As researcher has already discussed that 2005 earthquake and 2010 flood has provided an opportunity to find out the possibility and non-possibility of disaster management in South Asia. South Asian Countries are confluence of eight countries divided into developing and least developed countries. These countries do not only share physical border but also natural borders. They are most prone to disasters in the world. Though, South Asia has always been affected by natural disasters, however, disaster management system evolved as an institution, it only after 2004 tsunami crisis which has badly affected and killed thousands in many countries.

The given arguments in this chapters show that South Asian countries could not come out as a strong neighbouring region that is why it is known as a least integrated region. However, share common cultural, historical and political struggles during colonial period. The present scenario of international politics also shows that today the world is moving towards larger economic co-operations. During this liberalisation process, we are facing the consequences of over exploitation of natural resources. To combat the future problems, the world is moving towards multi-cooperation on various emerging issues like climate change, global warming issues, environment security and so forth. The world is willing to work together for sustainable development at the global level. In order to achieve this, we need to build trust among each other.

This region has also suffered mistrust among each other due to external actors' interventions. USA's, Russia's, and China's influence in this region played an important role in shifting the foreign policy of this region. The alliance between individual South Asian countries, western and European alliances with South Asian countries created more stress rather than solving bilateral relations. This has increased insecurities among South Asian countries. This insecurity is creating hurdle in bringing out together to south Asian countries for disaster response and its management. It generated dependency on external actor's interventions for disaster response.

Apart from political challenges, this region is facing conflicts over natural resources. South Asia has highest population density in the world. Due to that, the demand for natural resources has increased with the time. This has created hustle bustle among

the countries. The trends of the disasters in this region also show that since globalisation period, the numbers of disasters are continuously increasing. This region is also suffering climate change issues which are affecting agriculture patterns in this region. It is the biggest source of the economic growth of the South Asian countries.

South Asian countries are interconnected by common geography. They face similar kinds of disasters almost every year. Unfortunately, after tsunami crisis, developing countries of South Asia had started establishing disaster management institutions under the central government control. In this chapter, researcher has discussed the existing institutional bodies of each country which provides an understanding that the central government exercises control over the activities undertaken under disaster management and the relevant policies. It also shows that central government and local government bodies are responsible authority in South Asia. This perspective has reveal two sides of this provision. Firstly, it shows that the central government which holds the supreme authority over unitary states can takes decision on national interest. If head of the state or head of the government decide to provide assistance to its neighbouring country, only then disaster management rapid response team can take participation in affected country. Secondly, if central and state government at the domestic level do not share cordial relations because of two different political parties based on two different ideologies rule; these two conditions do hamper the disaster response policies. Therefore, it is important to setup an “autonomous Disaster Management Institutions” so that countries can take advantages of each other’s experiences on grounds. It should be absolute free from political interference at every level of disaster management structure.

Third aspect which is dealt in this chapter is that the role of the intergovernmental institutions and INGOs in the South Asian region after disasters has found both positive and negative response. Few examples have been provided in this chapter which clearly show that due to colonial experience and new imperialism trend in disaster management field, governments of the South Asian countries could not come out of that fear. They still see external agencies involvement in disaster response with the eye of suspicion. Moreover, it has been found that all the South Asian governments are not capable enough in handling mega disasters without help of external agencies like Red Cross, UN. They lack funding to provide reliefs goods to

the affected people on time. They even lacking expertise in disaster management fields.

The fourth aspect which researcher has tried to bring out through this thesis is that Pakistan government got lot of support from United Nations, USA and by other intergovernmental organisations of the world during both the natural disasters. In addition to this, major news papers and channels have covered and highlighted the role of these organisations and countries prominently; however, the role of European Union and Indian government efforts could not get significant credits and attentions at the regional and international levels. Though, it can contribute significant role in sharing their experiences in handling disasters with neighbouring countries. For example, India has faced several mega disasters from past ten years; however, it has managed almost every disaster by their own efforts. In addition to this, there are many lessons which can be learned by India. Cyclone Fani is one of the best examples of effectiveness of Indian disaster management. The Indian government has adopted “zero casualty” policy for natural disasters. It got noticed for the quickest response by volunteers and the government.

Presently, around a hundred countries share boundaries with each other and facing conflicts too. Natural disasters do not respect boundaries. They do not care about the cultural differences. It is human responsibility to efface all the differences among each other to bring the peace, prosperity and stability in the world. Disaster management needs community based approach for implementing the programmes in the vulnerable country and especially, in those regions which are prone to mega disasters and have cross-border impact. Mutual exchange of the information and mutual sharing of technology requires post- disaster responses to protect their people, for saving the civilisations and the environment. The world needs mutual co-operation and understanding. Substantial amounts of sincerity and trust can be achieved by political leaders by showing their political willingness.

The analysis of fourth chapter shows that the vulnerability that Pakistan bears towards natural disasters. Pakistan is continuously becoming vulnerable to non-military security threats like disasters because of climate change, global warming and also a lack of good governance. Pakistan government’s negligence towards the vulnerability has increased mismanagement. The Pakistan government made insufficient and

misdirected efforts to provide relief to the victims of the 2005 earthquake and 2010 flood. The government had initially delayed providing relief and then reacted hastily and rushed to provide relief and restore basic services. However, within a few days of the earthquake the Pakistan President Mr. Musharraf had established a Relief Fund to mobilise resources for relief efforts; and an Earthquake Reconstruction and Rehabilitation Authority. The Pakistan Prime Minister Shaukat Aziz appointed a Federal Relief Commission and Relief Coordinator for: shelters, food, clean water, and medical care. Additionally, the government set up a Steering Committee for Recovery and Reconstruction consisting of the Ministries of Finance, Economic Affairs, Planning and Foreign Affairs, as well as called in representatives from UN, World Bank and the Asian Development Bank (ADB). It is interesting to note that the Pakistan government stated that one of the reasons for lack of an “initial response” was that they had no detailed plan for a disaster response. Due to the magnitude of the earthquake, political tensions between India and Pakistan over the Kashmir region were temporarily put aside with the Indian PM Manmohan Singh offering assistance. Here, one can say that natural disasters can be helpful in distracting the go-going war and tensions between countries for some time. This way major human and economic losses due to war can be saved.

On the basis of exiting literatures and its analysis it can be concluded that continuous natural and man-made disasters lead to ethnic conflicts, human displacements, increased refugees and opened windows for terrorist activities which can further lead to external interventions in Pakistan to restore the democracy and stability. The findings show that earthquake has major impacts on urban regions while floods have greater impact on rural as well as urban areas. There is need for a comprehensive approach to eliminate the sufferings of the affected people in both the regions. Flood has affected all four provinces of Pakistan and has revealed to the government and other agencies yet again (after the earthquake) that disaster management institutions of Pakistan were still not sufficient to handle mega disasters. The lack of planning, policy gaps, geographical propensities and other man-made reasons are making the country vulnerable continuously.

The earthquake and flood disasters both have affected land property, infrastructures, destroyed houses, created unemployment and destroyed government buildings, hospitals, agriculture, and livestock. The mitigation and relief efforts provided by

governments with the help of terrorist organisations, national and International NGOs during the earthquake and flood disasters were weakened by many factors. The Pakistan NDMA and military were not experienced in managing huge disasters like earthquakes and floods. The Institutional Framework was not sufficient for disaster management. Several reports show that there was a lack of communication and coordination among government agencies and external agencies. The rampant corruption and religious politics has also hampered the management. The findings also reveal that news papers articles related to earthquake and floods seems biased in telling the true pictures of the disasters. Majority of the news papers has covered US and Islamic countries help in disasters. They presented India's image in negative way. This chapter has partially discovered the different sides of complex security issues within the provinces which are discussed in the fifth chapter.

The researcher has investigated various political complexities in both the disasters in the fifth chapter. This chapter's arguments show that United Nations led response activities along with the Pakistani government. The descriptive analysis shows that it was not regarded as a breach of sovereignty of the state because external agencies were called by the Pakistan government in both the situations. However, it is worth noting that it was never regarded as a collaborative response to invoke the 'Responsibility to Protect (R2P) doctrine'. This remains as an equivocation in the present nature of humanitarian response teams who only selectively follows the Oslo guidelines. Firstly, there was a lot of confusion regarding the 'last resort' norm. Many important humanitarian agencies did not agree with the NATO intervention in Pakistan on the basis of last resort because there were civilian response teams that were already available. Secondly, the guideline, clearly say that the requests for foreign military assets should come from the Humanitarian Coordinator and not from political authorities, purely in terms of a humanitarian criterion (OCHA). Here, it is important to note that in 2005 earthquake and 2010 flood, the political authority (President of Pakistan Mr. Musharraf and Asif Ali Zardari) has called the NATO not through any humanitarian organisations. Generally, the affected country invites relief agencies to help its population during natural calamities. These interventions are regarded as being 'apolitical responses' in the host country. It is considered as purely altruistic in nature on the behalf of the international humanitarian organisations. However, in Pakistan's case it shows the dimensions of national security issues. This

analysis also supports the first proposed hypothesis which has been discussed further in this chapter.

It was seen that Pakistan, USA and NATO were fulfilling their interest in the name of the humanitarian response. At the regional level, Pakistan was already facing charges for promoting terrorism in India after the Parliament attack on 13 Dec 2001 from Indian government. At the global level, the 9/11 man-made disaster in the same year has invoked the USA's security concerns. After the 9/11 attack, the USA president has declared the war on terror. Pakistan has been trying to find shelter under humanitarian activities. The Government of Pakistan knows that if they do not help USA in their international military campaign against global terrorism, they themselves might be declared as a terrorist sponsored country and eventually would fall under the 'axis of evil' category. In diplomatic terms, it can be said that losing USA would have been the biggest mistake of the Pak government who has been its biggest donor and sponsor of military suppliers till now. It is also worth saying that the NATO intervention in Pakistan was not completely humanitarian approach based. They too have been selective in responding to natural disasters at the global level till now which shows the duality in their activities and norms. USA wanted to gain Pakistan government's support to access Afghanistan through the gateway of Pakistan and Afghanistan border. Pakistan and USA both has been criticised allowing working Jihadis and religious militant groups in disasters. There were ambiguities in finding the difference between national response teams and Jihadis response groups. Interestingly, many groups were banned by the governments but applauded for their charity works in natural disasters later on.

Thus, it can be opined that governments get opportunities to fulfil their foreign and national interest when a disasters strikes in the country. It can be argued that neither all humanitarian agencies follow the "neutral, impartial, humanity and non-discriminatory" approach during disasters, nor all the humanitarian intervention can be justified as 'last resort' options.

It has also been found that IDPs and refugee crisis has also hampered the humanitarian response in affected provinces. IDPs and refugee crisis created ethnic conflicts in provinces. Many Afghanis were living in Pakistan borders after US

invasion of Afghanistan in 2001. It created political tensions between Afghanistan and Pakistan government; it is reported that Pakistan government has adopted selective distribution approach against them during earthquake and floods disasters. Subsequently, this has created burden on government and humanitarian agencies because funds were not sufficient. Hence, lack of co-ordination among the government and locals has also been experienced. It is also seen that religious and minority communities had to face discrimination in the Sindh province who were politically neglected because in comparison to Punjab province, Sindh is Hindu dominated region. Rural farmer sections and other religious and cast based minorities could not get relief aids which show the empathy of the Pakistan governments towards local communities.

The arguments in the chapters show that Pakistan is located in a strategic location. It is surrounded by different terrains in its provinces. Pakistan's earthquake and the Indus river flood occurred in two types of geographical locations. When the earthquake occurred, it affected Pakistan due to its movement of the Eurasian plates under the earth. It had severe impacts in the Indo-Pak-Afghanistan border regions. There was difficulty to access affected victims in providing relief work due to it being a conflict zone. When the Indus River flood occurred, blame was put on the Indian government for violating the Indus Water Treaty (IWT) of 1960 though; the flood was brought by the Indus River and its tributaries due to heavy monsoon. Being a lower riparian, the Pakistan government could not control the flow of the excess water in its provinces. The embankments were destroyed and flood mechanisms were not in good positions to handle the flow of the rainy waters. It got expanded in different regions within a short span of time. It submerged two thirds of the land in Pakistan. It affected economic and agricultural sectors and killed thousands of livestock creating social unrest in the country.

The major constrains for responding to disasters in Pakistan were due to the difficult terrain of the mountains. Firstly, it was a no access zone and was heavily restricted by the Pakistan military. Secondly, these regions were still underdeveloped because they have been a conflict zone from a long time and these mountainous regions were known for terrorist activities. The FATA and KPK areas were especially under the military control. The Line of Control regions were under military control because of



the conflict between Indo-Pak. People were in great need of relief aids but despite the NATO interventions, disaster affected victims could not get relief aids on time in the mountainous regions. The relief response was very slow and many areas remained inaccessible for several days due to the lack of transport connectivity.

It has been found that during the earthquake of 2005, the Pakistan government was yet to form disaster management protective mechanism for earthquake like disasters. During the floods, local disaster management institutions were underprepared and not well equipped to manage such massive natural disasters. Even, the Pakistan military, which is known as the first responder in these circumstances, was not efficient enough to reach out to the victims in the affected regions. It is also found that floods are a continuous phenomenon in Pakistan and almost every year it faces flood like situations. Despite such severity, the Pakistan government has never paid enough attention to develop legal guidelines and response mechanism to respond to mega disasters. The government has relied mainly on its traditional flood control mechanism (Federal Flood Commission, a ten year project based national plan) which was not enough. Here, it can be said that the 2005 earthquake alarmed the government to establish the National Disaster Management Act and the 2010 flood forced the government to improve its expertise in handling disasters by following international guidelines and creating many other national guidelines and plans for various kinds of disasters with the help of international agencies. With the help of these endeavours, they have tried to reconstruct embankments and barrages which were wiped out during the floods. This analysis support the third hypothesis according to which, more the scientific and technical orientations in the disaster management framework, the wider will be the effective local, regional and global humanitarian participation.

It has also been found that only after the 2005 earthquake, President Pervez Musharraf (military regime head) with the help of Sendai framework, enacted disaster management institutions under his control in Pakistan. Due to the lack of experiences and ill equipment, the Pakistan's military chief and the President called NATO to intervene in the earthquake response phase to provide relief goods provided by humanitarian state actors and humanitarian agencies to the victims in mountainous regions. The NATO intervention not only took place during the 2005 earthquake but was also called for the later floods which took place in 2010 flood and 2011, respectively due to ineffective responses from the government.

Pakistan government itself invoked humanistic approaches to call humanitarian agencies in disaster response with the help of United Nations for which it faced criticism from the local community. The common masses have negative perceptions about receiving help from USA and NATO due to the impact of 'war on terror'. The government of Pakistan had to be selective in allowing humanitarian agencies in the conflict zone due to its inner security issues. Only few selective agencies and state actors were allowed to access conflict zones during the rehabilitation phase. The major shift in Disaster Management has been seen after the 2005 earthquake. During this time, major decision making powers were vested under the military regime. The self-elected President was the highest authority who was responsible for the welfare of the people. However, after the earthquake, once Pakistan had adopted the democratic system in the country, the powers were divided between the President and the Prime Minister. The disaster management institutions also expanded themselves after the floods. District and local governmental bodies also became a part of the disaster management cycle. This is how a centralised process in Pakistan's disaster management has evolved since 2005.

As it has already been discussed in chapter four, this thesis is focused on the specific types of floods and earthquake related issues in countries like Pakistan. The researcher has specifically focused on the military government's response to the earthquake and the flood events and has undertaken a comparative study because of the difference in the political environment in the country. These two comparative studies of disasters have provided an opportunity to look into the management approaches in two different regimes which have cross-border impact as well. As discussed above, Pakistan majorly suffers from the long-rain flood, flash floods and snow melting. After digging into the nature of floods and earthquakes and its management practices in the country, the researcher has found that neither the military government nor the democratic government was completely successful in mitigating disasters impacts without the help of NATO and other humanitarian agencies. In both the situations, the regional co-operation in disaster situations was minimal and the differences between Pakistan-India and other South Asian countries persisted to jeopardize cooperative potentials. It is found that the implementation of disaster management policies is not only dependent on the geographical and demographic structure of the country, but also on the political and economic

conditions. The economic conditions decide the external agencies' interventions in the affected state. Disaster management policies also get affected by the political interferences in implementing the management practices. The presence of an undemocratic regime has had both a negative and a positive impact in a country like Pakistan. This is because, it has been found that the military government was relatively more organised and effective (if not successful) in responding to the disasters in Pakistan.

This work has also found that the South Asian countries 'together' could not bring out major differences in the disaster response field because of being the least integrated region. The countries have trust issues because of historical experiences. In addition to this, the researcher has found that the foreign policy of South Asian countries have affected the possibility of regional cooperation in the field of disaster management. It was seen that the countries do not come forward in helping each other during disasters, being unable to resolve their political conflicts. Even if countries like India tried to provide its assistance in Pakistan, in several instances the affected country has denied taking any humanitarian help. India too denied Pakistan assistance during Bhuj earthquake in 2001. This work has also found that disasters are increasing internal climate migration in the search of less vulnerable areas to live. Climate change is causing an increase in the number of disasters all over the world. It is not only affecting vulnerable countries like that of South Asia but also making those countries prone to natural disasters that have never witnessed mega disasters before. Moreover, countries have also experienced larger disaster displacements that could present challenges for livelihood and the use of urban lands in the future. The South Asian region might also experience issues of food insecurity by 2050. The impacts of the Pakistan earthquake indicate that unemployment rates can also increase due to natural disasters in the coming years. Disasters have posed to directly impact the economic growth of the affected countries. However, this issue still calls for the future research within South Asian context by Asian Scholars.

South Asian countries are interconnected by common culture, history and geography and disasters have affected them collectively. Natural disasters do not respect political boundaries and thus the impacts do not confine themselves to a particular country's political borders. The approaches that have been applied by the South Asian countries so far in managing disasters are by following the existing international institutional

frameworks; that is by implementing the guidelines of the Yokohama strategy of 1994, the Hyogo framework and the Sendai framework. These guidelines have provided a common strategy for mitigating prevalent disaster problems in the region. This evolution has inspired the regional organisational forums to start emerging and led to the creation of bodies like the SAARC Disaster Management Centre, ASEAN, and BIMSTEC. All these developments have played a strategic important role in the domain of international politics. The present political scenario of South Asian shows that India is moving forward for an alternative of SAARC; while Pakistan is looking forward towards Islamic Organisations.

The findings also give an impression that a disaster is an outcome of hazard and vulnerability when the measures are lacking to diminish the potential odds. Any kind of risky events, floods, earthquakes or typhoons which can pose as activating events alongside more prominent vulnerabilities (deficient access to assets; wiped out and displaced populations, an absence of awareness and so on) can create long-lasting impacts and bring about misfortunes for life and property for an extended period of time. For example; an earthquake in an uninhabited desert cannot be viewed as a disaster, regardless of how powerful it was. An earthquake is devastating only when it affects people, their properties and exercises. Along these lines, a disaster happens whenever hazards and vulnerabilities coincide. In any case, it is likely to be noticed that a decrease in the limitations for individuals, governments and other active bodies to confront these disasters with effective prevention and mitigation techniques, entails a decrease in the impacts of a disaster. Therefore, it can be concluded that in order to successfully implement efficient disaster management practices, one has to be well acquainted with the three basic components of a disaster namely hazard, exposure and vulnerability, because they are intricately connected with each other.

This work has proposed three main hypotheses; where in the first hypothesis says that Pakistan's political system and military culture have severely constrained the efficiency of disaster management practices. This hypothesis is valid to a great extent and Pakistan's political system was not very efficient in managing the impacts of natural and man-made disasters. The Pakistan government could hardly complete their 5 years tenure before 2010. Pakistan has encountered two political transformations in its history of which the 1973 and 2008-10 political reform is

considered to have posed a historic change in its constitution. After analyzing several events that occurred in the post disaster phases, it was found that many a times the political system has been inept and had created obstructions in the management of disasters. In majority of the cases, they relied on seeking external help. The Pakistan government failed to handle the fiscal deficit they were undergoing, which compelled them to borrow from Central Banks and International banks like the World Bank (WB) and International Monetary Fund (IMF) to balance and reverse the fiscal deficits.

There was a major lack of coordination on the part of the government in handling the disasters in the 2005 earthquake and the 2010 flood. Pakistan government being the sole responsible authority did not propose any strong mechanism to handle the variety of disasters that struck Pakistan before the 2005 earthquake. The government adapted the three tier political system only after 2010 when the WB pointed out their weaknesses and the absence of an adequate local system.

The Pakistan military has also influenced political decision-making by demolishing the democratic processes in the country. Due to the persistent military interventions, the country was facing political fragility for a long time which in turn, had adversely affected Pakistan's judiciary, executive and legislative functions. Pakistan's military government supported terrorist organizations during the disaster response following the 2005 earthquake, due to the acknowledgement of the insufficiency of their own relief responses. It had two implications; the first of which is that the Pakistan military wants to share a cordial relation with terrorist organizations and secondly they want to garner their support for perpetrating the strategic political activities against India. Political systems in Pakistan had failed many a times. It had faced corruptions in every level. All these have hampered disaster management activities to some extent.

The second hypothesis states that the disaster management institutions in Pakistan are conditioned by serious portico-security considerations rather than humanitarian principle. This is to be held as partially true. Pakistan has been suffering from serious domestic and international security issues in its provinces especially in the KPK and POK regions. Sindh and Punjab also undergo constant intra-state conflicts mainly in the form of ethnic conflicts while Balochistan suffers from the brunt of the ongoing separatist movement. Pakistan's own security considerations on the IDPs and Afghan

refugee crisis have posed the worst kinds of security threats in its history. Pakistan is also facing terror attacks in the country by their own partially protected terror organizations. In this situation, Pakistan depends on the support of the international organizations continuously for economic benefits and creating a stable democratic scenario. Pakistan is also bound to follow international norms on climate change, disaster management and Disaster Risk Reduction. Moreover, Pakistan's geographical location makes the country vulnerable to disasters. It has been realized by the Pakistan government several times when the recurrence of disasters started to show the worst impacts on the economic growth of the country.

The country has faced international criticism for the alleged misuse of funds for military and anti-India activities. This coupled with Pakistan's international image as a terrorist sponsor country had affected the earthquake response from the international communities. It was shown in the 4<sup>th</sup> chapter that Pakistan had received lesser funds in comparison to that of other affected countries. Since these are ongoing issues that constantly plague the country, perhaps it can be said that Pakistan realizes that if they want to compete with India and ensure their own survival as a democratic and stable country, they will have to focus majorly on humanistic approaches too.

The third hypothesis states that the wider the scientific and technological orientations in the disaster management framework, the more will the local, regional and global humanitarian participations be effective. This was also found to be partially true. If we look at the disaster management practices in some countries, we can see that the Yokohama framework, Sendai framework and HFA framework have been adapted by the global communities, which are primarily based on technical cooperation. However, technical cooperation on its own is hardly ever adequate as it often gets hampered by the bilateral relations between the countries. The foreign policies of the countries affect the mutual efforts. We have seen in chapter 3 and 5 that Pak-India is suffering from mutual mistrust. The bitterness in their relationship has affected the SAARC's disaster management efforts. Now both the countries are looking for alternatives. However, the above mentioned frameworks can be beneficial for the countries that have cordial relations and are not haunted by the ill effects of their shared historical experiences. They can help those countries, to come and share each other's experiences of disaster management by promoting technological support and innovative and efficient socio-political procedures. Therefore, it can be said that

appropriate political scenarios involving suitable foreign policy considerations along with technological advancements can help counter disaster impacts in the future.

It can be concluded that the focus of this thesis is on the earthquake of 2005 and the Indus River flood of 2010 in Pakistan. This work has addressed several research questions, its objectives and hypothesis in details. However, there were certain limitations which the researcher faced while conducting this research. The problem in the data access on Pakistan and finding victims after a long time was major hurdle which has to face to finish this work. The security concerns due to political tension between India and Pakistan was one of the major factors for not visiting Pakistan for conducting the field work is definitely a drawback.

## REFERENCES:

\*ADB and WB (2010), *Pakistan Floods 2010: Preliminary Damage and Needs Assessment*, Asian Development Bank & World Bank, Islamabad: Pakistan.

\*ADB and WB (2005), *Pakistan 2005 Earthquake: Preliminary Damage and Needs Assessment*, Asian Development Bank & World Bank, Islamabad: Pakistan.

Adnan, Mubeen (2014), "Pakistan's Crisis Management: Examining Proactive and Reactive Strategies", *Journal of Political Studies*, 21(1):161-171.

Ahmad, R. and Azim, P. (2010), "Youth Population and the Labour Market of Pakistan: A Micro Level Study", *Pakistan Economic and Social Review*, 48(2):183-208.

Akram, Tanweer (2003), "The International Foreign Aid Regime: Who Gets Foreign Aid and How Much?," *Applied Economics*, 35(11): 1351-1356.

Albala-Bertrand, J M (1993), *The Political Economy of Large Natural Disasters*, Oxford: Clarendon Press.

Alexander, David (1993), *Natural Disasters*, London: UCL Press.

Alexander, David (2000), *Confronting Catastrophe: New Perspectives on Natural Disasters*, New York: Oxford University Press.

Alexander, David (2004), An International Interpretation of Disaster in Terms of Changes in Culture, Society and International Relations, [Online: Web] Accessed 6 April 2016, [URL:http://www.saarcsadkn.org/downloads/what%20is%20disaster.pdf](http://www.saarcsadkn.org/downloads/what%20is%20disaster.pdf)

Aliyu, A. (2015), "Management of Disasters and Complex Emergencies in Africa: The Challenges and Constraints", *Annals of African Medicine journal*, 14 (3):123-31.

\*ALNAP (2010), Active Learning Network for Accountability and Performance in Humanitarian Action Responding to Earthquakes 2008 -Learning from Earthquake Relief and Recovery Operations, July 2008, [Online: web] Accessed 5 March 2016, [URL:http://www.alnap.org/pool/files/ALNAPLessonsEarthquakes.pdf](http://www.alnap.org/pool/files/ALNAPLessonsEarthquakes.pdf)

Alpay, Savas (2014), *Managing Disasters and Conflicts in OIC Countries*, The Statistical, Economic and Social Research and Training Centre for Islamic Countries (SEERIC), Ankara: Turkey.

Amin, Samia and Goldstein, Markus (2008), *Data against Natural Disasters: Establishing Effective Systems for Relief, Recovery, and Reconstruction*, World Bank: Washington DC.



Anderson, William A. (1970), "Military Organizations in Natural Disaster Established And Emergent Norms", *American Behavioral Scientist*, 13(3):415-422.

Annan, Kofi (2000), "We the peoples", Millennium Report, New York: United Nations.

Arai, Tatsushi (2012), "Rebuilding Pakistan in the Aftermath of the Floods: Disaster Relief as Conflict Prevention", *Journal of Peacebuilding and Development*, 7(1): 51-65.

Aronsson-Storrier, Marie and Costa, Karen da (2017), "Regulating Disasters? The Role of International Law in Disaster Prevention and Management", *Disaster Prevention and Management*, 26(5):502-513.

Asad, Amir Zada and Hussain, Basharat (2014), "Disaster, Development, Good Governance and the Time Frame Nexus: A Case Study of Balakot, Hazara, Pakistan", *Journal of Humanities and Social Sciences (Pakistan)*, 22(3):53-66.

\*ASEAN (2005), Association of Southeast Asian Nations Agreement on Disaster Management and Emergency Response, Jakarta: Indonesia [Online: Web] Accessed 29 September 2016 URL: <https://asean.org/wp-content/uploads/2018/01/41.-November-2017-AADMER-11th-Reprint.pdf>

\*ASEAN et al. (2008) Association of Southeast Asian Nations, "Post-Nargis Joint Assessment"; A report prepared by the Tripartite Core Group comprising Representatives of the Government of the Union of Myanmar, the Association of Southeast Asian Nations and the United Nations (July 2008).

\*Asian Disaster Preparedness Center (2002): Lessons Learned From The Asian Urban Disaster Mitigation Program And Other Initiatives, 24–26 September 2002, Bali, Indonesia. Asian Disaster Preparedness Center, Pathumthani: Thailand.

\*Asian Disaster Reduction Centre (2015), Visiting Researcher Program-FY2015B, Country Report: Republic Of Maldives [online: web] Accessed 4 October 2017, URL:[https://www.adrc.asia/countryreport/mdv/2015/mdv\\_cr2015b.pdf](https://www.adrc.asia/countryreport/mdv/2015/mdv_cr2015b.pdf)

Atkinson, G.M. (2004), "An Overview of Developments in Seismic Hazard Analysis", *Proceedings of the 13th World Conference on Earthquake Engineering*, Vancouver: Canada, Paper No. 5001.

Augilar, Francisco et al. (2011), *An Introduction to Pakistan's Military*, Belfer Center for Science and International Affairs, Cambridge: Harvard Kennedy School.

Awan, Shaukat Ali (2003), "Flood Forecasting and Management in Pakistan, *Water Resources Systems-Hydrological Risk, Management and Development*", IAHS, 281:90-98.

Aziz, Mazhar (2007), *Military Control in Pakistan: The Parallel State*, United Kingdom: Routledge.

Bagchi, Indrani (2004), 'Govt Refuses Foreign Aid to Fight Disaster', *Times Of India*, 28 December 2004, New Delhi.

Bamforth, Thomas Qureshi and Jawad Hussain (2007), "Political Complexities of Humanitarian Intervention in the Pakistan Earthquake", *The Journal of Humanitarian Assistance*, [online: web] Accessed 25 August 2017, URL: <https://sites.tufts.edu/jha/archives/12>

Bamforth, Tom (2006), "Humanitarian intervention in a sovereign state: the political fault-lines of the Pakistan earthquake", Number 34-Humanitarian Exchange, *Overseas Development Institute*, Humanitarian Practice Network: United Kingdom.

Bapat, Asawari (2014), "Disaster Management in Kautilya's Arthashastra", *A Peer Reviewed Research Journal*, 17(1):13-21.

BBC (2005), "Kashmir Earthquake: Broken City, Broken Promises", *BBC News*, 8 October 2010.

BBC (2008), "UN Head Pressures Burma's Leader", *BBC News*, Friday, 23 May 2008.

Beck, Ulrich (2006), "Living in the World Risk Society", *Economy and Society*, 35(3): 329- 345.

Behera, Mr. Aurobindo (2002), Government - NGO Collaboration for Disaster Reduction and Response: The India (Orissa) Experience Orissa State Disaster Management Authority, *Regional Workshop on Networking and Collaboration among NGOs of Asian Countries in Disaster Reduction and Response*. [Online: web] Accessed 19 May 2017, URL: [https://www.adrc.asia/publications/ngo\\_workshop/6.pdf](https://www.adrc.asia/publications/ngo_workshop/6.pdf)

Benfield, Aon (2015), "Nepal Earthquake Event Recap Report 2015", Impact Forecasting, [Online: web] Accessed 1 March 2017, URL: <http://thoughtleadership.aonbenfield.com/documents/201509-nepal-earthquake.pdf>

Berrebi, Claude and Jordan Ostwald (2011) "Earthquakes, Hurricanes, and Terrorism: Do Natural Disasters Incite Terror", *Public Choice*, 149 (3/4):383–403.

Billon, Philippe Le and Waizenegger Arno (2007), "Peace in the Wake of Disaster? Secessionist Conflicts and the 2004 Indian Ocean Tsunami", *Transactions of the Institute of British Geographers, New Series*, 32 (3): 411-427.

Bertrand, J. M. Albala- (2000), "Responses to Complex Humanitarian Emergencies and Natural Disasters: An Analytical Comparison", *Third World Quarterly*, 21(2): 215-227.

Bhadrakumar, M. K. (2005), "NATO arrives in Kashmir", *Rediff.com*, Mumbai, 27 October 2005. [Online: Web] Accessed 26 April 2017, URL:<https://www.rediff.com/news/2005/oct/27guest.htm>

Bhadrakumar, M. K. (2010), "Understanding the Pakistani Floods", *The Hindu*, Chennai, 23 August 2010.

Bhatnagar, Aryaman and Pass, Ritika (2016), "Neighbourhood First: Navigating Ties under Modi", *Observer Research Foundation and Global Policy Journal*, [online: web] Access 29 June 2018, URL: [https://www.orfonline.org/wp-content/uploads/2016/03/GP-ORF\\_Indias-Neighbourhood1.pdf](https://www.orfonline.org/wp-content/uploads/2016/03/GP-ORF_Indias-Neighbourhood1.pdf)

Bhattercharjee, Joyeeta (2018), "SAARC vs. BIMSTEC: The Search for the Ideal Platform for Regional Cooperation", *Observer Research Foundation (ORF)*, Issue Brief, Issue no. 226, New Delhi.

Boone, John (2013), "Pakistan Earthquake: Hundreds Feared Dead In Remote Baluchistan Province", *The Gaurdian*, United Kingdom, 25 September 2013.

Braasch, Gary (2009), *Earth Under Fire*, Berkeley, CA: University of California Press.

Brancati, Dawn (2007), "Political Aftershocks: The Impact of Earthquakes on Intrastate Conflict", *Journal of Conflict Resolution*, 51(5):715-743.

Brown, Jeremy Astill and Weimer Markus (2010), "Mozambique Balancing Development, Politics and Security", *The Royal Institute of International Affairs*, Chatham House: London United Kingdom. [Online: web] Accessed 18 March 2016, URL:[https://www.chathamhouse.org/sites/default/files/public/Research/Africa/0810br\\_own\\_weimer.pdf](https://www.chathamhouse.org/sites/default/files/public/Research/Africa/0810br_own_weimer.pdf)

Caron et al. (2014) (eds.), *The International Law of Disaster Relief*, United Kingdom: Cambridge University Press.

Carlin, Ryan E. et al (2014), Natural Disaster and Democratic Legitimacy: The Public Opinion Consequences of Chile's 2010 Earthquake and Tsunami, *Political Research Quarterly*, 67(1):3-15.

\*CERF (2011), *5-Year Evaluation of the Central Emergency Response Fund Synthesis Report: Final Draft*, an Independent Evaluation Commissioned by OCHA, Office for the Coordination of Humanitarian Affairs, Draft of 25 July 2011, *Channel Research*, Ohain: Belgium.

\*CERF, "Who We Are", Central Emergency Response Fund, *United Nations*, [Online: Web] Accessed 2 December 2019, URL:<https://cerf.un.org/about-us/who-we-are>

CFE-DM (2017), *Bangladesh, Disaster Management Reference Handbook 2017*, Centre for Excellence in Disaster Management and Humanitarian Assistance: United States of America.

----- (2017), *Nepal: Disaster Management Reference Handbook 2017*, Centre for Excellence in Disaster Management and Humanitarian Assistance: United States of America.

----- (2017), *Sri Lanka: Disaster Management Reference Handbook 2017*, Centre for Excellence in Disaster Management and Humanitarian Assistance: United States of America.

----- (2018), *India: Disaster Management Reference Handbook 2018*, Centre for Excellence in Disaster Management and Humanitarian Assistance, United States of America.

Chakrabarty, S K (1978), *The Evolution of Politics in Bangladesh 1947-1980*, New Delhi: Association Publishing House.

Chaudhury, Rahul Roy (2018), “India’s Perspective towards China in their Shared South Asian Neighbourhood: Cooperation Versus Competition”, *Contemporary Politics*, 24(1):98-112.

Cheema, Abdur Rehman et al. (2016), “Learning from the past”, *Disaster Prevention and Management*, 25(4): 449 – 463.

Cochrane, Harriet (2008), “The Role of the Affected State in Humanitarian Action: A Case Study on Pakistan”, Humanitarian Policy Group Working Paper, *Overseas Development Institute*, United Kingdom: London.

Cohen, Stephen P. (2013), “The World View of India’s Strategic Elite”, in Bajpai, K. P., Pant, H. V. (eds.), *India’s Foreign Policy: A Reader*, New Delhi: Oxford University Press.

Cohen, Stephen P. (2010), “Lessons From Pakistan's Latest Catastrophe”, *The Brookings Institution*, Washington DC, 17 August 2010. [Online: web] Accessed 10 February 2015, [URL:http://www.brookings.edu/research/opinions/2010/08/17-pakistan-floods-cohen](http://www.brookings.edu/research/opinions/2010/08/17-pakistan-floods-cohen).

Coppala, P. Damon (2006), *Introduction to International Disaster Management*, Netherlands: Elsevier.

Dabhade, Manish & Harsh V. Pant (2004), “Coping With Challenges to Sovereignty: Sino-Indian Rivalry and Nepal's Foreign Policy”, *Contemporary South Asia*, 13(2): 157-169.

Davenport, Meghan (2012), "Historical Complexities of NGO Relationships in Pakistan", McGill University: Graphite, [online: web] Accessed 3 June 2015, URL: <http://graphitepublications.com/wp-content/uploads/2013/04/Historical-Complexities-of-NGO-Relationships-in-Pakistan.pdf>

Deng, Francis M. (1995), *War of Visions: Conflict of Identities in the Sudan*, The Brookings Institution: Washington DC.

Daniel, Kronenfeld and Margesson Rhoda (2005), "The Earthquake in South Asia: Humanitarian Assistance and Relief Operations", CRS Report for Congress, *Congressional Research Service*, Order Code RL33196, United State of America.

Dawn (2018), "Timeline of Major Earthquakes in Pakistan: 1971-2018", Dawn.com, Pakistan, 31 January 2018.

\*Disaster Management Centre of Sri Lanka, *Disaster Management Act*, Ministry of Public Administration and Disaster Management, Sri Lanka [online: web] Accessed 4 March 2017, URL: [http://www.dmc.gov.lk/index.php?option=com\\_content&view=article&id=28&Itemid=188&lang=en](http://www.dmc.gov.lk/index.php?option=com_content&view=article&id=28&Itemid=188&lang=en)

Donini, A. et al. (2008), "Humanitarian Agenda 2015: The State of the Humanitarian Enterprise", *Feinstein International Center*, 2008: 1-42, Tufts University.

Drabek, Thomas (1986), *Human System Responses to Disaster: An Inventory of Sociological Findings*, New York: Verlag.

Dutta, D. and Heradth, S. (2004), "Trend of Floods in Asia and Flood Risk Management with Integrated Rivers Basins Approach", International Conference of Asia-Pacific Hydrology and Water Resources Association, Singapore, 1: 55-63.

Dyer, Chistopher I. and McGoodwin, James R. (1999), "Tell them we're Hurting: Hurricane Andrew the Culture of Response and the Fishing Peoples of South Florida and Louisiana", In Oliver-Smith and Hoffman (eds.), *The Angry Earth Disasters in Anthropology Perspective*, New York: Routledge, pp.213-232.

Drury, Cooper and Richard Stuart Olson (1998), "Disasters and Political Unrest: An Empirical Investigation", *Journal of Contingencies and Crisis Management*, 6(3):153-168.

Drury, A. Cooper et al. (2005), "The Politics of Humanitarian Aid: U.S. Foreign Disaster Assistance, 1964-1995", *The Journal of Politics*, 67(2):454-473.

Dynes, R.R. and Quarantelli, E.L. (1968), "Group Behavior under Stress: A Required Convergence of Organizational and Collective Behavior Perspectives", *Sociology and Social Research*, 52: 416-29.

Sharma, Surinder Kumar and Anshuman Behera (2014), *Militant Groups in South Asia*, Institute for Defence Studies and Analyses, New Delhi.

\*EERI (2005), *Learning from Earthquakes the Kashmir Earthquake of October 8, 2005: Impacts in Pakistan*, Special Earthquake Report -February 2006 [Online: web] Accessed 13 July 2016, URL: [https://www.eeri.org/lfe/pdf/kashmir\\_eeri\\_2nd\\_report.pdf](https://www.eeri.org/lfe/pdf/kashmir_eeri_2nd_report.pdf)

\*EM-DAT (2010), List of Top Ten Natural Disasters in Pakistan, Brussels [Online: Web] Accessed 6 November 2016, URL: <https://www.emdat.be/>

\*European Commission Report (2013), *Annual Report 2013 On the European Union's Development and External Assistance Policies and Their Implementation In 2012*, European Union, Brussels: Belgium.

\*----- (2016), European Union, *Evaluation of the ECHO's interventions in Pakistan 2010-14*, Brussels: Belgium.

\*----- (2016a), European Union, *Evaluation Of The European Union's Cooperation With The Islamic Republic Of Pakistan (2007-2014)*, Volume II – Annexes, June 2016 , Brussels: Belgium.

\*----- (2018), European Union, *Evaluation of the European Union's Humanitarian Interventions in India and Nepal, 2013-2017: Final Report February 2018*, Brussels: Belgium.

\*European Union (2014), “*Bosnia And Herzegovina Floods, 2014: Recovery Needs Assessment*”, The Ministry of Foreign Affairs of The Grand Duchy of Luxembourg, European Union, Brussels [Online: Web] Accessed 19 July 2018, URL: [https://ec.europa.eu/fpi/sites/fpi/files/pdna/pdna\\_bih\\_2014\\_-\\_final\\_report\\_0.pdf](https://ec.europa.eu/fpi/sites/fpi/files/pdna/pdna_bih_2014_-_final_report_0.pdf)

\*----- (2015), EASO Country of Origin Information Report- Pakistan Country Overview, *European Asylum Support Office*, Valletta: Malta.

Fair, C. Christine (2011), “Pakistan in 2010: Flooding, Governmental Inefficiency, and Continued Insurgency”, *Asian Survey*, 51(1): 97–110.

Fair, C. Christine et al. (2017), “Natural Disasters and Political Engagement: Evidence from the 2010–11 Pakistani Floods”, *Quarterly Journal of Political Science*, 12(1):99-141.

\*FAO (2001), *Special Report: FAO/WFP Crop and Food Supply Assessment Mission to Pakistan*, FAO Global Information and on Food and Agriculture, World Food Programme, [online: web] Accessed 4 May 2015, URL:<http://www.fao.org/3/y1260e/y1260e00.htm>

\*FAO and RGoB (2013), *Disaster Management Act of Bhutan 2013*, Royal Government of Bhutan, [online: web] Accessed 16 August 2017, URL: <http://extwprlegs1.fao.org/docs/pdf/bhu129922.pdf>

Farooq, Hassan (2006), “Relief Work after the Earthquake in Pakistan: A Pakistani-American Physician’s Perspective”, *Baylor University Medical Centre Proceedings*, 19(3):250–256.

\*FEMA 2009, Federal Emergency Management Agency, U.S. Department of Homeland Security, [online: web] Accessed 3 August 2015, URL: [www.fema.gov](http://www.fema.gov)

Ferris, Elizabeth (2010), “Earthquakes and Floods: Comparing Haiti and Pakistan”, *The Brookings Institution*, Washington DC, [online: web] Accessed 12 August 2015, URL: [http://www.brookings.edu/~media/research/files/papers/2010/8/26%20earthquakes%20floods%20ferris/0826\\_earthquakes\\_floods\\_ferris.pdf](http://www.brookings.edu/~media/research/files/papers/2010/8/26%20earthquakes%20floods%20ferris/0826_earthquakes_floods_ferris.pdf)

Ferris, Elizabeth and Daniel Petz (2011), “The Year That Shook the Rich: A Review of Natural Disasters In 2011”, London School of Economics Project On Internal Displacement, *The Brookings Institution* [online: web] Accessed 14 December 2016, URL: [https://www.brookings.edu/wpcontent/uploads/2016/06/03\\_natural\\_disaster\\_review\\_ferris.pdf](https://www.brookings.edu/wpcontent/uploads/2016/06/03_natural_disaster_review_ferris.pdf)

Financial Tracking Service, Pakistan - Flood – July, 25 August 2010, [online: web] Accessed 3 April 2015, URL: [http://fts.unocha.org/reports/daily/ocha\\_R24\\_E15913\\_1008251843.pdf](http://fts.unocha.org/reports/daily/ocha_R24_E15913_1008251843.pdf)

Fisher, Max (2010), “4 Reasons Why Americans Aren't Giving for Pakistan Flood Relief”, *The Atlantic*, 23 August 2010, [online: Web] Accessed 26 May 2015, URL: <http://www.theatlantic.com/international/archive/2010/08/4-reasons-why-americans-arent-giving-for-pakistanflood-relief/61898/>

Fosler, R. Scott (1999), “A Framework of Governance: Guiding the National Academy of Public Administration”, *Administrative Theory and Praxis*, 21(4): 516-519.

Ganapati, N. Emel and Kelman Ilan (2010), “Analysing Greek–Turkish Disaster-Related Cooperation: A Disaster Diplomacy Perspective”, *Cooperation and Conflict*, 45(2):162–185.

Gaudie, Andrew (1992), *Environment Change*, Clarendon: Oxford Press.

Geeta (2014), *Disaster Management in Pakistan: Case Study of Indus River Flood of 2010*, New Delhi: Jawaharlal Nehru University.

\*GFDRR (2014), Pakistan Earthquake 2005 The Case of Centralized Planning and Decentralized Implementation through ERRA, Country Case Study Series, Disaster Recovery Framework Guide / May 2014 [Online: web] Accessed 17 September 2016, URL: [https://www.gfdrr.org/sites/gfdrr/files/documents/docs/Pakistan\\_April%202014.pdf](https://www.gfdrr.org/sites/gfdrr/files/documents/docs/Pakistan_April%202014.pdf)

\*GFDRR, Pakistan, [Online: Web] Accessed 16 June 2017, URL:<https://www.gfdr.org/en/pakistan>

\*Government of Bangladesh, Creation of Department of Disaster Management, [online: web] Accessed 5 May 2017, URL:[http://www.ddm.gov.bd/site/page/48e43e67-78e6-428f-9be1\\_584e9f93446d/-](http://www.ddm.gov.bd/site/page/48e43e67-78e6-428f-9be1_584e9f93446d/-)

\*Government of India (2013), *Report of the Task Force: A Review of the Disaster Management Act 2005*, Ministry Of Home Affairs, New Delhi.

\*Government of Nepal, *NDMC on Disaster Management*, National Centre for Disaster Management, [online: web] Accessed 3 August 2018, URL:[http://www.ncdm.org.np/home\\_aboutus.php](http://www.ncdm.org.np/home_aboutus.php)

\*Government of Pakistan (2010), *Annual Flood Report 2010*, Ministry of Water and Power, Federal Flood Commission, Islamabad: Pakistan.

Guggenheim, Michael (2014), “Introduction: Disasters as Politics-Politics as Disasters”, *The Sociological Review*, 62(1):1-16.

Guha-Sapir D. et al. (2013), *Annual Disaster Statistical Review 2012: The Numbers and Trends*, Brussels: CRED (Centre for Research on the Epidemiology of Disasters).

Guha-Sapir D. and Hoyois, Ph. (2015), “Below. R. Annual Disaster Statistical Review 2014: The Numbers and Trends”, Brussels: CRED (Centre for Research on the Epidemiology of Disasters).

Guha-Sapir D. (2018), *2018 Review of Disaster Events*, Brussels: CRED (Centre for Research on the Epidemiology of Disasters).

Gul, Nabiha and Sanam Noor (2006), “Disasters and International Cooperation: Case Study of the October Earthquake”, *Pakistan Horizon, Pakistan Institute of International Affairs*, 59(4):69-87.

Gurung, Deo Raj et al. (2017), “Glacial Lake Outburst Flood (GLOF) In Bhutan: Cause and Impact”, *Journal of Environmental Risk Assessment and Remediation*, 1(1):7-15.

Guzder, Deena (2010), “The Great Flood of 2010 and the Future of Pakistan”, September 20, 2010, *The Pulitzer Center*, Washington DC. [Online: Web] Accessed 28 November 2017, URL: <https://pulitzercenter.org/reporting/great-flood-2010-and-future-pakistan>

Halvorson, S. J. and J. P. Hamilton (2010), “In the Aftermath of the Qa'yamat: The Kashmir Earthquake Disaster in Northern Pakistan”, *Disasters*, 34(1):184–204.



Harrowell, Elly and Ozerdem, Alpaslan (2018), “The Politics of the Post-Conflict and Post-Disaster Nexus in Nepal”, *Conflict, Security & Development*, 18(3):181-205.

Hamdani, Dr. Syed et al. (2005), “Earthquake 2005: Some Implications for Environment and Human Capital”, *Pakistan Institute of Development Economics Islamabad*, Pakistan, Munich Personal RePEc Archive, Islamabad: Pakistan.

Hamdani, Khalil (2014), *Trans-border Vulnerabilities*, UNDP Human Development Report, Occasional Paper, [Online: Web] Accessed 4 March 2016, URL: [http://hdr.undp.org/sites/default/files/hdr\\_2014\\_hamdani.pdf.pdf](http://hdr.undp.org/sites/default/files/hdr_2014_hamdani.pdf.pdf)

Harshe, Rajan (1999), “South Asian Regional Co-Operation: Problems and Prospects”, *Economic and Political Weekly*, 34(19):1100-1105.

Havidan, Rodriguez, et al. (2007), *Handbook of Disaster Research*, Springer: New York.

Hewitt, Kenneth (1983), “The Idea of Calamity in a Technocratic Age”, In Hewitt, K. (eds.), *Interpretations of Calamity: From the Viewpoint of Human Ecology*, Allen and Unwin: Boston.

Hewitt, Kenneth (1997), *Regions of Risk: A Geographical Introduction to Disasters*, Harlow, Longman: Essex.

Hollnagel, Erik (2015), “Disaster Management, Control and Resilience”, in Anthony Mays (eds.) *Disaster Management: Enabling Resilience*, Switzerland: Springer International Publishing.

Holloway, David (2008), *9/11 and the War on Terror*, Edinburgh: Edinburgh University Press.

Hovius, N. (1998), “Controls on Sediment Supply by Large Rivers: Relative Role of Estuary, Climate and Tectonism in Continental Rock”, SEPM Society for *Sedimentary Geology*, Special Publication No. 59: 4-15.

Hussain, Taheer (2019), Personal Interview, Groot Market, Brussels, Belgium, 11 February 2019.

Huntington, Ellsworth and Stephen Sargent Visher (1922), *Climatic Changes: Their Nature and Causes*, New Haven: Yale University Press.

\*Humanitarian Practice Network (HPN) (2006), The Pakistan Earthquake Response Humanitarian Exchange, *Overseas Development Institute*, 34 No. June 2006, United Kingdom.

\*ICIMOD (2011), *Glacial Lakes and Glacial Lake Outburst Floods in Nepal*, International Centre for Integrated Mountain Development, Kathmandu: Nepal.

\*ICISS (2001), International Commission on Intervention and State Sovereignty, *The Responsibility to Protect: Report of the International Commission on Intervention and State Sovereignty*, Ottawa: IDRC Books.

\*IDNDR (1994), *Yokohama Strategy and Plan of Action for a Safer World Guidelines for Natural Disaster Prevention, Preparedness and Mitigation*, International Decade For Natural Disaster Reduction, United Nations, World Conference on Natural Disaster Reduction Yokohama, Japan, 23-27 May 1994, Geneva: Switzerland.

\*IDSN (2013), *Annual Report 2013*, International Dalit Solidarity Network, Copenhagen N Denmark [Online: Web] Accessed 21 April 2016, URL: <https://idsn.org/wpcontent/uploads/2014/11/AnnualReport-2013-web.pdf>

\*IDMC GRID (2017), "IDMC with UN Population Division data", Global Report on Internal Displacement 2017, [Online: web] Accessed 23 January 2018, URL: <http://www.internal-displacement.org/global-report/grid2017/>

\*IFRC (1999), *Pakistan: Cyclone*, Appeal No. 13/99, Situation Report No. 1 (Revised Budget) Period Covered: 26 May - 5 June 1999, 11 June 1999.

\*----- (2008), *Kyrgyzstan: Earthquake*, Disaster Relief Emergency Fund (DREF), DREF operation n° MDRKG004, GLIDE n° EQ-2008-000181-KGZ, Update n° 01, International Federation of Red Cross and Red Crescent Societies, Geneva: Switzerland, 25 November, 2008.

\*----- (2010), International Federation of The Red Cross, "China-Worst Flooding in Decades Leaves Millions In Need", 23 July 2010, [Online: Web] Accessed 14 January 2017, URL: <http://www.reliefweb.int/rw/rwb.nsf/db900sid/ASHU87MS36?OpenDocument&rc=3&cc=chn>

\*----- (2012), "Final Report Pakistan: Earthquake", Emergency Appeal n° M05EA022 GLIDE n° EQ-2005-000174-PAK, 23 July 2012, International Federation of Red Cross and Red Crescent Societies (IFRC) [Online: web] Accessed 1 March 2017, URL: <https://www.ifrc.org/docs/Appeals/05/M05EA022FR.pdf>

\*----- (2013), *Afghanistan Annual Report*, Monthly Humanitarian Bulletin, International Federation of Red Cross and Red Crescent Societies, MAAAF001, April 2013; UNOCHA, Afghanistan.

\*----- (2013a), *International Disaster Response Law (IDRL) In Afghanistan: A Study For Strengthening The Legal And Policy Framework For International Disaster Response In The Islamic Republic Of Afghanistan*, International Federation of Red Cross and Red Crescent Societies, Geneva: Switzerland.

\*----- (2013b), *Legal Preparedness for International Disaster Response in Kazakhstan*, International Federation of Red Cross and Red Crescent Societies, Geneva: Switzerland.

\*International Bank for Reconstruction and Development (2010), Document of The World Bank, Report No. 53553-PK, Pakistan Country Management Unit South Asia Region.

\*International Gay and Lesbian Human Rights Commission/ SEROVIE (2010), *The Impact of the Earthquake, and Relief and Recovery Programs on Haitian LGBT People*, New York [online: web] Accessed 26 August 2017, URL: <https://www.outrightinternational.org/sites/default/files/505-1.pdf>

\*International Crisis Group (2002), *Kyrgyzstan's Political Crisis: An Exit Strategy*, ICG, Asia Report N°37, Osh/Brussels, 20 August.

\*----- (2006), *Pakistan: Political Impact of the Earthquake*, Policy Briefing Asia Briefing N°46, Islamabad/Brussels, Accessed 15 September 2016, URL: <https://d2071andvip0wj.cloudfront.net/b46-pakistan-political-impact-of-the-earthquake.pdf>

\*----- (2008), *Burma/Myanmar after Nargis: Time to Normalise Aid Relations*, Report No. 161/Asia, Brussels, 20 October 2008.

\*----- (2012), *Pakistan: No End To Humanitarian Crises* Asia Report N°237 – 9 October 2012 [online: web] Accessed 14 June 2017, URL: <https://d2071andvip0wj.cloudfront.net/237-pakistan-no-end-to-humanitarian-crisis.pdf>

\*----- (2017), *The Domestic Challenge to Kyrgyzstan's Milestone Election*, Central Asia, Crisis Group Commentary, 10 October 2017, Brussels.

\*International Law Commission (2010), *Yearbook of the International Law Commission Volume II, Part two, Document A/65/10, Report of the International Law Commission on the work of its sixty-second session (3 May–4 June and 5 July–6 August 2010)*, United Nations: New York and Geneva.

\*International Law Commission (2016), “*ILC Report Containing The Draft Articles On The Protection Of Persons In The Event Of Disasters And Commentaries*”, UN Doc. A/71/10, United Nations, New York, [Online: web] Accessed 22 October 2018, URL: [http://legal.un.org/ilc/reports/2016/english/a\\_71\\_10.pdf](http://legal.un.org/ilc/reports/2016/english/a_71_10.pdf)

IPCC (2007), *Climate Change 2007:Impacts, Adaptation and Vulnerability*, Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, Geneva: Switzerland.

----- (2012), *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*, A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change [Field, C.B., V. Barros et al. (eds.)], Cambridge, UK, and New York, NY, USA: Cambridge University Press, 582 pp.

----- (2014a), *Climate Change 2014: Synthesis Report*, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. Intergovernmental Panel on Climate Change, Geneva: Switzerland, 151 pp.

----- (2014b), “*The IPCC’s Fifth Assessment Report: What’s in it for South Asia?*,” in IPCC, 2014. *Climate Change 2014: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros et al. (eds.)]. Cambridge University Press: Cambridge, United Kingdom and New York, NY, USA.

----- (2018), *Summary for Policymakers, In: Global Warming Of 1.5°C, An IPCC Special Report On The Impacts Of Global Warming Of 1.5°C Above Pre-Industrial Levels And Related Global Greenhouse Gas Emission Pathways, In The Context Of Strengthening The Global Response To The Threat Of Climate Change, Sustainable Development, And Efforts To Eradicate Poverty* [Masson-Delmotte, et al. (eds.)], World Meteorological Organization, Geneva: Switzerland.

Iqbal, Dr. Nasir and Ameer Hyder (2015), “Households Losses in 2014 Floods and Coping Strategies A Study of Chiniot, Punjab”, *Working Paper*, Pakistan Institute of Development Economics, Islamabad, [online: web] Accessed 4 August 2016, URL:[https://www.pide.org.pk/pdf/Seminar/Households\\_Losses\\_WorkingPaper.pdf](https://www.pide.org.pk/pdf/Seminar/Households_Losses_WorkingPaper.pdf)

IRIN (2010), “Earthquakes: The Decade’s Deadliest Killer,” *Integrated Regional Information Networks*, Switzerland, 28 January 2010, [Online: web] Accessed 15 February 2016, URL:<http://www.irinnews.org/Report.aspx?ReportId=87908>

Irshad, Humaira et al. (2012), “Long-Term Gendered Consequences of Permanent Disabilities Caused By the 2005 Pakistan Earthquake”, *Disasters*, 36(3): 452–464.

Irshad, Muhammad et al. (2015), “Disaster Management System of Pakistan”, *Acta Technica Corviniensis - Bulletin of Engineering*, 8(2):125-131.

\*IUCN [International Union for Conservation of Nature] (2005), *Preliminary Environmental Assessment of the Earthquake in Pakistan IUCN Field Mission Report*, October 16-18, 2005, International Union for Conservation of Nature, Gland: Switzerland.

Jain, V and S.K. Tandon (2010), “Conceptual Assessment of Disconnectivity and Its Application to the Ganga River Dispersal System”, *Geomorphology*, 118:349–358.

Jamal, Nasir (2015), Mother China: A 'Chinese Revolution' Sweeps Across Pakistan, *The Herald*, Zimbabwe, 15 July 2018.

Jared, Ferrie (2009), Pakistan: Minorities at Risk in the North West Frontiers Province, Minority Rights Group International.

Javaid, Dr. Zahid et al. (2011), "Child Protection in Disaster Management in South Asia: A Case Study of Pakistan", *A Research Journal of South Asian Studies*, 26(1):191-202.

Johnson, Jeff Dayton (2006), "Natural Disaster and Vulnerability", *OECD Development Centre Policy*, France, Brief No. 29, [Online: web] Accessed 13 August 2015, URL: <https://www.oecdilibrary.org/docserver/202670544086.pdf?expires=1559808076&id=id&accname=guest&checksum=DA0867D887C3B0EB13B88DA0AC9E362D>

Junjiro, S. (2017), Japan's Realism and Liberalism Myanmar, the United States, and Regional Peace in Southeast Asia, Sasakawa Peace Foundation, Forum issue no.6, Washington DC., [Online: Web] Accessed July 2017, URL: <https://spfusa.org/wp-content/uploads/2017/03/Shida-Japan-realism-liberalism.pdf>

Kafle, Shesh Kanta (2010), "Disaster Risk Management Systems in South Asia: Natural Hazards, Vulnerability, Disaster Risk and Legislative and Institutional Frameworks", *Journal of Geography and Natural Disasters*, 7(3):1-10.

----- (2017), Disaster Risk Management Systems in South Asia: Natural Hazards, Vulnerability, Disaster Risk and Legislative and Institutional Frameworks, *Journal of Geography & Natural Disasters*, Natural Disaster, 7(3):1-10.

Kafle, Shesh Kanta and Zubair Murshed (2006), "Community-Based Disaster Risk Management for Local Authorities: Participant's Workbook", *Asian Disaster Preparedness Center (ADPC)*, Thailand [Online: Web] Accessed 20 January 2015, URL: [https://www.unisdr.org/files/3366\\_3366cbdrmsshesh.pdf](https://www.unisdr.org/files/3366_3366cbdrmsshesh.pdf)

Kallesoe, M. F. et al. (2008), *Linking Coastal Ecosystems and Human Well-Being: Learning from Conceptual Frameworks and Empirical Results*, Colombo: Ecosystems and Livelihoods Group, Asia: IUCN.

Kasturi, Sudan Charu (2013), "Foreign Aid? No, Thanks", *The Telegraph*, 7 July 2013.

Klose, Fabian (2015), *The Emergence of Humanitarian Intervention: Ideas and Practice from the Nineteenth Century to the Present*, Cambridge University Press.

Katrina, Kosec and Cecilia HyunjungMo (2017), "Aspiration and Role of Social Protection: Evidence from Natural Disasters in Rural Pakistan", *World Development*, 97:49:66.

Kazmi, A.H. and M.Q. Jan (1997), *Geology and Tectonics of Pakistan*, Pakistan: Graphic Publishers Karachi.

Kelman, Ilan (2011), *Disaster Diplomacy: How Disasters Affect Peace and Conflict*, London: Routledge.

Kelman, Ilan and T. Koukis (2000), "Disaster Diplomacy", *Cambridge Review of International Affairs*, 14: 214–94.

Kleine, Konstantin (2015), "Will R2P Be Ready When Disaster Strikes?-The Rationale of the Responsibility to Protect in An Environmental Context", *International Journals of Human Rights*, 19(8):1176-1189.

Khan, Amir Nawaz and Mushtaq Ahmad Jan (2015), "Community Based Disaster Risk Management in Pakistan", in Atta-ur- Rahman, Amir Nawaj Khan and Rajib Shaw, *Disaster Risk Reduction Approaches in Pakistan*, Japan: Springer.

Khan, Feisal (2007), "Corruption and the Decline of the State in Pakistan", *Asian Journal of Political Science*, 15(2): 219-247.

Khan, Major-General Farooq Ahmad (2006), "The Response to the Earthquake in Pakistan: The View from the Federal Relief Commission", Humanitarian Practice Network at ODI, *Overseas Development Institute*: United Kingdom.

Khan, N.A. (2013), *Pakistan Geographic: Exploring Diversity and Promoting Sustainability: an Illustration of Geographical Cross Section of Pakistan* [Online: web] Accessed 2 Dec 2013, URL:<http://www.pakistangeographic.com/mountains.html>.

Khan, Himayatullah and Khan, Abuturab (2008), "Natural Hazards and Disaster Management in Pakistan", Munich Personal RePEc Archive, MPRA Paper No. 11052.

Khasalamwa, Sarah (2009), "Is 'Builds Back Better' A Response to Vulnerability? Analysis of the Post-Tsunami Humanitarian Interventions in Sri Lanka", *Norwegian Journal of Geography*, 63(1):73-88.

Kleinfeld, Margo (2007), "Misreading the Post-tsunami Political Landscape in Sri Lanka: The Myth of Humanitarian Space", *Space and Polity*, 11(2): 169-184.

Kreft, S. et al. (2015), "*Global Climate Risk Index 2015 Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2013 And 1994 To 2013*", Briefing Paper, GermanWatch: Berlin.

Kronenfeld, Danie and Rhoda Margesson (2005), "The Earthquake in South Asia: Humanitarian Assistance and Relief Operations", *CRS Report for Congress*, Congressional Research Service: United State of America.

Kronstadt, K. Alan et al. (2010), “Flooding in Pakistan: Overview and Issues for Congress”, *CRS Report for Congress, Congressional Research Service*, Order Code 7-5700: United State of America.

Krummacher, A. (2014), Community Based Disaster Risk Management (CBDRM), 22nd OSCE Economic and Environmental Forum, Vienna.

Kreps, Gary A. and Susan Lovegren Bosworth (2007), “Organizational Adaptation to Disaster” in *Handbook of Disaster Research*.

Kumar, Gaurav et al. (2011), “The Indus Flood of 2010 In Pakistan: A Perspective Analysis Using Remote Sensing Data”, *Natural Hazards*, 59:1815–1826.

Kumar, Sumita (2005), “The Earthquake in Kashmir”, Institute for Defence Studies and Strategic Analyses, *Strategic Analysis*, 29(3):508-513.

Lamichhane, Sharad (2016), *Enhancing SAARC Disaster Management: A Comparative Study With ASEAN Coordinating Centre For Humanitarian Assistance On Disaster Management*, Monterey, California: Naval Postgraduate School.

Lateef, N. V. (1982), *Crisis in the Sahel: A Case Study in Development Cooperation*, Boulder, CO: Westview.

Lieven, A. (2011), *Pakistan: A Hard Country*, New York Public: Affairs.

Lindell, Michael K. (2016), Recovery and Reconstruction after Disaster, Texas A and M University, College Station, TX, USA [online: web] Accessed 2 October 2018, URL:<https://pdfs.semanticscholar.org/c48f/662c2183af686016a9f8dbbdf50cbaf92e4.pdf>

Lord, Austin & Sneha Moktan (2017), “Uncertain Aftermath: Political Impacts of the 2015 Earthquakes in Nepal”, in Alexander Ramsbotham and Deepak Thapa: *Two Steps Forward, One Step Back: the Nepal Peace Process*, Issue 26, Publisher: Conciliation Resources.

Lotay, Yeshey (2015), *Country Report Bhutan: Disaster Management, Visiting Researcher Program (FY2014B)*, Asian Disaster Reduction Center: Bhutan.

Low, Petra (2018), “The Natural Disasters Of 2018 In Figures Losses In 2018 Dominated By Wildfires And Tropical Storms”, *Munich Re NatCatSERVICE*, [online: web] Accessed 18 February 2019, URL:<https://www.munichre.com/topics-online/en/climate-change-and-natural-disasters/natural-disasters/the-natural-disasters-of-2018-in-figures.html>

Lund, Ragnhild and Piers, Blaikie (2013), *The Tsunami of 2004 in Sri Lanka: Impacts and Policy in the Shadow of Civil War*, Routledge: United Kingdom.

Madiwale, Ajay and Kudrat Virk (2011), “Civil–Military Relations in Natural Disasters: A Case Study of the 2010 Pakistan Floods”, *International Review of the Red Cross*, 93(884):1085-1105.

Mahmood, Irfan et al. (2015), “Analysis of Landslides Triggered by October 2005, Kashmir Earthquake”, *PLOS Current Disasters*, 26 August 2015.

Malesic, M. (2015), “The Impact of Military Engagement in Disaster Management on Civil–Military Relations”, *Current Sociology*, 63(7): 980-998.

Malik, Atif M. (2011), “Denial of Flood Aid to the Ahmadiyya Muslim Community in Pakistan”, *Health and Human Rights*, 13(1):70-77.

Malik, Iftikhar H. (2014), “The Politics of Ethnicity in Pakistan: The Baloch, Sindhi and Mohajir Ethnic Movements”, *Contemporary South Asia*, 22(2): 217-218.

Malik, M. and Cruickshank, H. (2016), “Disaster Management in Pakistan”, *Institute of the Civil Engineering*, 169(2):85-99.

Mandel, Robert (2002), “Security and Natural Disasters”, *The Journal of Conflict Studies*, 22(2):118-143.

Martin, F. Michael and Margesson, Rhoda (2008), “Cyclone Nargis and Burma’s Constitutional Referendum”, RL34481, *Congressional Research service Report* for Congress: United States of America.

Masys, Anthony (eds.) (2015), *Disaster Management: Enabling Resilience*, Switzerland: Springer International Publishing.

Maynard, Kimberly A. (1999), *Healing Communities in Conflict: International Assistance in Complex Emergencies*, New York: Columbia University Press.

Mehran, Muhammad Aslam (2018), “Flood Management Current State, Challenges and Prospects in Pakistan: A Review”, *Research Journal of Engineering & Technology*, 37(2):297-314.

Messer, Norman M. (2003), The Role of Local Institutions and their Interaction in Disaster Risk Mitigation: a Literature Review, *Food and Agriculture Organisation*, [Online: web] Accessed 4 July 2017, URL: <http://www.fao.org/3/a-ad710e.pdf>

Mileti, D.S. et al. (1975), *Human Systems in Extreme Environments: A Sociological Perspective*, Institute of Behavioral Science, University of Colorado: Boulder.

\*MHCAU (2009), Inter-Agency Standing Committee, *Meeting Humanitarian Challenges in Urban Areas (MHCUA)*, Draft Assessment, Geneva, 2 October 2009.



Misra, Amalendu (2004), “An Introduction to the ‘Small’ and ‘Micro’ States of South Asia”, *Contemporary South Asia*, 13(2): 127-131.

Mohammad, Ali (2019), Personal Interview, Schaerbeek, Brussels, Belgium, 8 February 2019.

Mohammad, Tahir (2019), Personal Interview, Groot Market, Brussels, Belgium, 11 February 2019.

Mohsin, Z. R. (2013), “The Crisis of Internally Displaced Persons (IDPS) In the Federally Administered Tribal Areas of Pakistan and Their Impact on Pashtun Women”, *Tigah: A Journal of Peace and Development*, 3(2): 92-117.

\*MoPE (2016), The Ministry of Population and Environment, *Nepal Earthquake 2015: A Socio-Demographic Impact Study (with Reference to 14 Most Affected Districts)*, A Study Conducted by the Central Department of Population Studies (CDPS) Tribhuvan University Kirtipur, Kathmandu, Nepal Kathmandu.

Morgenthau, Hans J. (1948). *Politics among Nations: The Struggle For Power And Peace*, New York: Alfred A. Knopf.

Mozambique vs. Malawi, [Online: web] Accessed 13 March 2016, URL:<https://www.indexmundi.com/factbook/compare/mozambique.malawi>

Muhittin, Ataman (2003), “The Impact of Non-State Actors on World Politics: A Challenge to Nation-States”, *Alternatives: Turkish Journal of International Relations*, 2(1): 42–66.

Murshed, M. and Nurul H. (2002), Community Participation in Urban Flood Mitigation under Bangladesh Urban Disaster Mitigation Project (BUDMP): Regional Workshop on Best Practices in Disaster Mitigation, Bali: Indonesia.

Mustafa, D. and D. Wrathall (2011), “The Indus Basin Floods of 2010: The Cost of Agricultural Development?” [Online: web] Accessed 24 October 2014, URL:[http://www.sivi.org/documents/Resources/Best/2010/2011\\_OTWF\\_Daanish\\_Mustafa.pdf](http://www.sivi.org/documents/Resources/Best/2010/2011_OTWF_Daanish_Mustafa.pdf)

Naipaul, V. S. (1982), *Among the Believers: An Islamic Journey*, New York: Vintage Books.

Naseer, Sajjad (2014), “Disaster Management in Pakistan: A Case Study”, *New Horizons*, 8(2):1-9.

Nasir, Iqbal and Ameer Hyder (2015), “Households Losses in 2014 Floods and Coping Strategies: A Study of Chiniot, Punjab”, *Institute of Development Economics*, Islamabad [online: web] Accessed 18 November 2017, URL: [https://pide.org.pk/pdf/Seminar/Households\\_Losses\\_WorkingPaper.pdf](https://pide.org.pk/pdf/Seminar/Households_Losses_WorkingPaper.pdf)

\*NATO (2010), “Pakistan Earthquake Relief Operation”, Brussels, Belgium, 27 October 2010.

\*NATO (2005), “Deputy Assistant Secretary General Maurits Jochems meets with the Prime Minister of Pakistan” Brussels, Belgium, 17 October 2005.

\*NATO (2010), NATO Responds to Pakistani Request for Relief Assistance, Press Release (2010)-106, Brussels, Belgium, 07 August 2010.

Natsios, Andrew S (1997), *U. S. Foreign Policy and the Four Horsemen of the Apocalypse: Humanitarian Relief in Complex Emergencies*, Westport, CT: Praeger.

Natsios, Andrew (2006), “NGOs and the Humanitarian Impulse: Some Have It Right”, *Ethics and International Journal*, 11(1):133-136.

\*NDMA (2007), *Annual Report 2007*, National Disaster Management Authority, Islamabad: Pakistan.

\*----- (2010), *Pakistan 2010 Flood Relief – Learning from Experience, Observations and Opportunities*, Prime Minister’s Secretariat, Islamabad: Pakistan.

\*----- (2010-2014), *Annual Reports (2010-2014)*, National Disaster Management Authority, Government of Pakistan, Islamabad: Pakistan.

\*----- (2012), *National Progress Report on the Implementation of Hyogo Framework for Action (2011-13)*, National Disaster Management Authority, Government of Pakistan, Islamabad: Pakistan.

\*----- (2013), *Annual Report 2011*, National Disaster Management Authority, Prime Minister’s Secretariat, Islamabad: Pakistan.

\*NDRMF (2006), *National Disaster Risk Management Framework Reducing Disaster Risks for a Safe and Happy Bhutan*, National Disaster and Risk Management Fund, Department of Local Governance, Ministry of Home and Cultural Affairs, Royal Government of Bhutan.

\*NIDM (2012), *India Disaster Report 2011*, National Institute of Disaster Management, Islamabad: Pakistan.

Nelson, Travis (2010), “Rejecting the Gift Horse: International Politics of Disaster Aid Refusal”, *Conflict, Security & Development*, 10(3): 379-402.

----- (2010a), “When Disaster Strikes: On The Relationship Between Natural Disaster and Interstate Conflict”, *Global Change, Peace & Security*, 22(2):155-174.

Nibanupudi, Hari Krishna and Rajib Shaw (2015), Analysis of Regional Cooperation from the Perspective of Regional and Global Geo-Political Developments and Future Scenarios”, in Nibanupudi, Hari Krishna and Shaw, Rajib (2015), *Mountain Hazards and Disaster Risk Reduction*, Springer: Japan.

Noji, Eric K. (2005), “Public Health Issue in Disasters Critical Care Medicine”, *Journal of Lippincott Williams & Wilkins*, 33(1):29-33.

Nojavan, Mehdi et al. (2018), “Conceptual Change of Disaster Management Models: A Thematic Analysis”, *Journal of Disaster Risk*, Jamba, 10(1): 451.

NOAA (2010); National oceanic Atmospheric Administration (2010), National Centre for Environmental Information, [online: web] Accessed 3 February 2018, URL:<https://www.ncdc.noaa.gov/sotc/hazards/201008>

Nuruzzaman, Md. (1999), “SAARC and Subregional Co-Operation: Domestic Politics and Foreign Policies in South Asia”, *Contemporary South Asia*, 8(3):311-322.

Naru, Faran (2012), “Punjab Disaster Response Plan: Provincial Flood Contingency Plan 2012”, *Provincial Disaster Management Authority*, Government of Punjab, Lahore.

O’Sullivan, Tracey L. et al. (2013), “Unraveling the Complexities of Disaster Management: A Framework for Critical Social Infrastructure to Promote Population Health and Resilience”, *Social Science and Medicine*, 93:238-246.

\*OCHA (2007), Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief, Mark Lowcock, [Online: Web] Accessed On 20 January 2017, URL:[https://www.unocha.org/sites/unocha/files/OSLO%20Guidelines%20Rev%201.1%20-%20Nov%202007\\_0.pdf](https://www.unocha.org/sites/unocha/files/OSLO%20Guidelines%20Rev%201.1%20-%20Nov%202007_0.pdf)

\*OCHA (2010), Pakistan: *UN Fund Provides Us\$27 Million For Floods Response*, United Nations Office for the Coordination of Humanitarian Affairs (OCHA), Mark Lowcock, 17 Aug 2010.

Online, *Development, disasters and vulnerability: A discussion of divergent theories and the need for their integration* [Online: Web] Accessed 16 December 2017, URL:[https://www.researchgate.net/publication/239549822\\_Development\\_disasters\\_and\\_vulnerability\\_A\\_discussion\\_of\\_divergent\\_theories\\_and\\_the\\_need\\_for\\_their\\_integration](https://www.researchgate.net/publication/239549822_Development_disasters_and_vulnerability_A_discussion_of_divergent_theories_and_the_need_for_their_integration).

Ozerdem, Alpaslan (2006), “The Mountain Tsunami: Afterthoughts on the Kashmir Earthquake”, *Third World Quarterly*, 27(3): 397-419.

Pandian, S.G. (2002), “Moving South Asia’s Economies beyond the Indo-Pakistan Paradigm in the South Asian Regional Association for Cooperation”, *Contemporary South Asia*, 11(3):329-344.

Parekha, Bhikhu (1997), "Rethinking Humanitarian Intervention", *International Political Science Review*, 8(1):49-69.

Parthasarathy, D. (2013) 'Risk, Vulnerability and Resilience: Climate Change and the Urban Poor in Asia', In Lorraine Elliott and Mely Caballero-Anthony (eds) *Human Security and Climate Change in Southeast Asia: managing Risk and Resilience*. Oxford: Routledge.

Pasic, Lana (2015), "Political and Social Consequences of Continuing Displacement in Bosnia and Herzegovina" Bosnia and Herzegovina twenty years on from the Dayton Peace Agreement FM Review [online: web] Accessed 27 August 2018, URL:<https://www.fmreview.org/sites/fmr/files/FMRdownloads/en/dayton20/pasic.pdf>

\*PDSN (2010) Pakistan Dalit Solidarity Network, Karachi: Pakistan [Online: web] Access 18 June 2016, URL: <https://idsn.org/wp-content/uploads/2015/01/2010-Pakistan.pdf>

Perkovich, George (2011), Pervez Musharraf on U.S.-Pakistan Relations, 26 October 2011, Carnegie Endowment for International Peace, Washington, D.C. [online: web] Accessed 22 March 2016, URL:<https://carnegieendowment.org/files/1026carnegie-musharraf.pdf>

Perry, R.W. (1979), "Evacuation Decision-Making in Natural Disasters", *Mass Emergencies*, 4(1):25- 38.

\*Post Crisis Needs Assessment, Khyber Pakhtunkhwa and Federally Administered Tribal Areas, Pakistan, September 2010 [Online: web] Access 17 May 2016, URL: <http://lgkp.gov.pk/wp-content/uploads/2014/03/10.-Consolidated-report-on-the-Post-Crisis-Needs-Assessment-for-KP-and-FATA.pdf>

Price, Gareth et al. (2014), "Attitudes to Water in South Asia", *Chatham House Report*, The Royal Institute of International Affairs: United Kingdom.

Price, Gareth (2016), "South Asia Integration: Prospects and Pitfalls", *European Union Institute for Security Studies*, Brussels: Belgium.

Price, Gareth and Mitra, Sonali (2016), "Water, Ecosystems and Energy in South Asia Making Cross-Border Collaboration", Work Research Paper Asia Programme, *Chatham House Report*, London: Royal Institute of International Affairs.

Pruthi, Priyanka (2010), *In Flood-Devastated Pakistan, 3.5 Million Children Are at Risk of Disease*, United Nations Children's Fund (UNICEF), 17 Aug 2010.

Qaisar, Arfan (2019), Personal Interview, Schaerbeek, Brussels, Belgium, 24 February 2019.

Quris (2013), "South Asia & Recurring Natural Disasters", *Quris*, India, 27 August 2013, [Online: web] Accessed 5 December 2016, URL:<https://qrius.com/south-asia-recurring-natural-disasters/>

Quarantelli, E. L. and Russell R. Dynes (1977), "Response to Social Crisis and Disaster", *Annual Review of Sociology*, 3: 23-49.

Quarantelli, E.L. (1987), "Disaster Studies: An Analysis of the Social Historical Factors Affecting the Development of Research in The Area", *International Journal of Mass Emergencies and Disasters*, 5(3):285:310.

----- (1988), "Disaster Crisis Management: A Summary of Research Findings", *Journal of Management Studies*, 25(4):373-385.

----- (1997), "Ten Criteria For Evaluating The Management of Community Disasters", *Disasters*, 21(1):39-56.

Rodriguez, Havidan et al. (2009), *Handbook of Disaster Management*, New York: Springer.

Rafique, Zain and Muhammad Azfar Anwar (2014), "Insurgency in Afghanistan: Implications for Pakistan's Internal and External Security", *Defense & Security Analysis*, 30(3):266-282.

Rahim, Bakhsh Khetran et al. (2012), "Indigenous Knowledge, and Disaster Management: A Case Study of Khetran Community in Balochistan, Pakistan", *Journal of Gender and Social Issues*, 12(1), [online: web] Accessed 15 July 2015, URL:[https://www.academia.edu/8177419/Indigenous Knowledge Early Warning System and Disaster Management A Case Study of Khetran Community in Balochistan Pakistan](https://www.academia.edu/8177419/Indigenous_Knowledge_Early_Warning_System_and_Disaster_Management_A_Case_Study_of_Khetran_Community_in_Balochistan_Pakistan)

Rahman, Atta-ur- and Amir Nawaz Khan (2013), "Analysis Of 2010-Flood Causes, Nature And Magnitude In The Khyber Pakhtunkhwa, Pakistan", *Natural Hazards*, 66:887-904.

Rahman, Atta-Ur- and Rajib Shaw (2015), "Hazard, Vulnerability and Risk: The Pakistan Context", in Atta-Ur-Rahman et al. (eds.), *Disaster Risk Reduction Approaches in Pakistan*, Springer: Japan.

Rahman, Atta-Ur et al. (eds), (2015), *Disaster Risk Reduction Approaches in Pakistan*, Kyoto: Springer.

Rasul, Ghulam (2005), "A Diagnostic Study Of Heavy Rainfall In Karachi Due to Merging of A Mesoscale Low and A Diffused Tropical Depression During South Asian Summer Monsoon", *Advances In Atmospheric Sciences*, 22(3): 375-391.

Rayner, J.F. (1953), "The Role of the Military in the Waco Tornado Disaster", In Committee on Disaster Studies, *Studies of Military Assistance in Civilian Disaster: England and the United States*, Washington: National Academy of Sciences-National Research Council.

Reis, Flavio Americo dos (2018), "Military Logistics in Natural Disasters: The Use of the NATO Response Force in Assistance to the Pakistan Earthquake Relief Efforts", 40(1):73-95.

\*Reliefweb (2005), "Pakistan: Aftershocks May Scar Children Forever", *The New Humanitarian Report*, United Nations, [Online: web] Accessed 18 November 2017, URL:<https://reliefweb.int/report/pakistan/pakistan-aftershocks-may-scar-children-forever>

\*Reliefweb (2005a), "NATO Faces Challenge in Pakistan Earthquake Response", *US Department of State*, 16 November 2005, [Online: web] Accessed 2 March 2018, URL:<https://reliefweb.int/report/pakistan/nato-faces-challenge-pakistan-earthquake-response>

\*Reliefweb (2011), "Poverty Causes Disasters and Disasters Cause Poverty", *CARE*, 6 May 2011, [Online: web] Accessed 30 December 2017, URL: <https://reliefweb.int/report/world/poverty-causes-disasters-and-disasters-cause-poverty>

\*Reliefweb, Afghanistan Disaster Management Law, [Online: web] Accessed 13 March 2017, URL:[https://reliefweb.int/sites/reliefweb.int/files/resources/Afghanistan\\_DM\\_Law\\_%20Englisih\\_Version.pdf](https://reliefweb.int/sites/reliefweb.int/files/resources/Afghanistan_DM_Law_%20Englisih_Version.pdf)

Rigaud, Kanta Kumari et al. (2018), *Groundswell: Preparing for Internal Climate Migration*, World Bank, Washington DC: United States of America.

Riccardo, Polastro et al. (2011), *Inter-Agency Real Time Evaluation of the Humanitarian Response to Pakistan's 2010 Flood crisis*, DARA: Madrid, Spain.

\*Roles and Responsibilities of the United Nations System in Disaster Management, [online: web] Accessed 19 March 2018, URL:[http://legal.un.org/ilc/sessions/61/pdfs/english/pop\\_ocha.pdf](http://legal.un.org/ilc/sessions/61/pdfs/english/pop_ocha.pdf)

Rubian, Renata (2010), UNIFEM Releases Rapid Gender Needs Assessment of Flood Affected Communities in Pakistan [Online: web] Accessed 2015, URL:[http://www.unifem.org/attachments/products/PakistanFloods2010\\_RapidGenderNeedsAssessment\\_en.pdf](http://www.unifem.org/attachments/products/PakistanFloods2010_RapidGenderNeedsAssessment_en.pdf)

\*SAARC (2009), *SAARC Workshop on Earthquake Risk Management in South Asia*, 8-9 October 2009, National Disaster Management Authority, Islamabad: Pakistan.

\*SAARC (2012), *Flood Risk Management In South Asia*, South Asia Association For Regional Cooperation, SAARC Disaster Management Centre (SDMC), New Delhi, [online: web] Accessed 14 October 2015, URL:[https://www.preventionweb.net/files/31327\\_31327floodrm.pdf](https://www.preventionweb.net/files/31327_31327floodrm.pdf)

\*SAARC, “SAARC Agreement on Rapid Response to Natural Disasters”, [Online: Web] Accessed 24 March 2015, URL: [http://saarc-sec.org/uploads/digital\\_library\\_document/28\\_Rapid\\_response\\_to\\_Natural\\_disasters.pdf](http://saarc-sec.org/uploads/digital_library_document/28_Rapid_response_to_Natural_disasters.pdf)

Sapir, Debarati Guha (2016), *Annual Disaster Statistical Review 2016: The numbers and trends*, Brussels: CRED (Centre for Research on the Epidemiology of Disasters).

Sapir, Debby Guha et al. (2010), *Annual Disaster Statistical Review 2010: The numbers and trends*, Brussels: CRED (Centre for Research on the Epidemiology of Disasters).

Sarwar, Farhana et al. (2016), “Earthquake Statistics and Earthquake Research Studies in Pakistan”, *Open Journal of Earthquake Research*, 5: 97-104.

Schmitt, C. (2005), *Political Theology: Four Chapters on the Concept of Sovereignty*, Chicago: University of Chicago Press.

Semple, Michael (2011), “Breach of Trust People’s Experiences of the Pakistan Floods and Their Aftermath”, *Pattan Development Organization*, Islamabad: Pakistan.

\*SESRIC (2015), ‘*Managing Natural Disasters in Afghanistan: Risks, Vulnerabilities and General Guidelines Organisation of Islamic Cooperation*’, Statistical, Economic and Social Research and Training Centre for Islamic Countries, Ankara: Turkey.

Shah, Attaullah et al. (2010), “Comparative Analysis of the National Disaster Management Plan of Pakistan in the Regional Context”, *Journal of Himalayan Earth Sciences*, 43:80-80.

Shih-Yu-Wang et al. (2011), “Pakistan’s Two-Stage Monsoon And Links With The Recent Climate Change”, *Journal Of Geophysical Research*, Vol. 116, D16114, USA.

Shrestha, MS (2008), “Impacts Of Floods in South Asia”, *Journal South Asia Disaster Studies*, 1(1):85–106.

Silva, Kalinga Tudor (2009), “Tsunami Third Wave and the Politics of Disaster Management in Sri Lanka Kalinga”, *Norwegian Journal of Geography*, 63(1):61-72.

\*SIPRI (2008), *SIPRI and the SIPRI Yearbook: Armaments, Disarmament and International Security*, Summary, Stockholm International Peace Research Institute: Sweden.

Simonovic, Slobodan P. (2011), *System Approach to Management of Disaster: Methods and Applications*, John Wiley and Sons: New Jersey.

Sinha, Rajiv et al. (2012), "Large River Systems of India", *Proceeding of the Indian National Science Academy*, 78 (3):277-293.

Smith, Oliver and Hoffman (1999), *The Angry Earth Disasters in Anthropology Perspective*, New York: Routledge.

Sodhganga, "Chapter 3- United Nations And Natural Disaster Management", [Online: web] Accessed 3 August 2015, URL:[http://shodhganga.inflibnet.ac.in/bitstream/10603/71640/9/09\\_chapter%203%20united%20nations%20and%20natural%20disaster%20management.pdf](http://shodhganga.inflibnet.ac.in/bitstream/10603/71640/9/09_chapter%203%20united%20nations%20and%20natural%20disaster%20management.pdf)

Stalling, Robert A (1991), "Disasters as Social Problems?: A Dissenting View", *International Journal of Mass Emergencies and Disasters*, 9(1):69-74.

Streich, Philip A. and David Bell Mislán (2014), "What Follows The Storm? Research on the Effect of Disasters on Conflict and Cooperation", *Global Change, Peace & Security*, 26(1):55-70.

Swathi, Javed Majeed (2015), "The Profile of Disaster Risk of Pakistan and Institutional Response: Monographic Issue", *Emergency and Disaster Reports*, 2(1):2-55.

Syed, Sayeeda A. and Pedro Arcos Gonzalez (2014), "Flood Disaster Profile of Pakistan: A Review", *Science Journal of Public Health*, 2(3):144-149.

Tandon, Aakriti (2016), "India's Foreign Policy Priorities and the Emergence of a Modi Doctrine", *Strategic Analysis*, 40(5):349-356.

\*Taraqee Foundation (2010), *Disaster Response in Pakistan*, Taraqee Foundation Emergency Relief Response Cell, Quetta, Pakistan [online: Web] Accessed 4 August 2015, URL:[https://www.iucn.org/downloads/pk\\_taraqee\\_found\\_flood\\_reponse.pdf](https://www.iucn.org/downloads/pk_taraqee_found_flood_reponse.pdf)

\*Tempere (1998), Intergovernmental Conference on Emergency Telecommunications, Tempere Conventional on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations.

Than, Tin Maung (2009), "Myanmar in 2008: Weathering the Storm", *Southeast Asian Affairs*, 195-222.

Thapa, Manish (2016), "The Great Himalayan Game: India and China Rivalry in Nepal", *Contemporary South Asia* [online: web] Accessed 21 September 2018, URL:[https://www.researchgate.net/publication/294260264\\_The\\_Great\\_Himalayan\\_Game\\_India\\_and\\_China\\_Rivalry\\_in\\_Nepal/download](https://www.researchgate.net/publication/294260264_The_Great_Himalayan_Game_India_and_China_Rivalry_in_Nepal/download)



\*The New Humanitarian Report (2006), “Pakistan: The Role of the Military in the Pakistan Earthquake”, *ReliefWeb*, United Kingdom, 29 Jun 2006, [online: web] 3 JUNE 2016, URL:<https://reliefweb.int/report/pakistan/pakistan-role-military-pakistan-earthquake>

\*The Royal Government of Bhutan (2009), *Bhutan Earthquake 21 September 2009: Joint Rapid Assessment for Recovery, Reconstruction and Risk Reduction*, The World Bank and the United Nations.

The Wire (2010), “U.N. Pleads For More Helicopters to Help Devastated Pakistan”, *CNN Staff*, India, August 26, 2010 [online: web] accessed 1 January 2016, URL:<http://edition.cnn.com/2010/WORLD/asiapcf/08/25/pakistan.floods/index.html>

The Nation (2008), “Earthquake kills 72 people in Kyrgyzstan”, *The Nation*, Pakistan, 6 October 2008.

Tierney, K. and Bevc, C. (2007), “Disaster as war: militarism and the social construction of disaster in New Orleans”, in D. Brunson, D. Overfelt and S. J. Picou (eds), *The Sociology of Katrina: Perspectives on a Modern Catastrophe*, 35–49, Lanham, MD: Rowman & Littlefield.

Ullah, Habib (2014), *Comparative Analysis of Immediate Response by National Disaster Management Systems of the U.S., Pakistan, and Turkey*, Naval Postgraduate School Monterey: California.

\*UNESCAP (2015), *The Asia-Pacific Disaster Report 2015 – Disasters without Borders: Regional Resilience For Sustainable Development*, UN Economic and Social Commission for Asia and the Pacific (ESCAP), Bangkok: Thailand.

\*UNISDR; Online, International Strategy For Disaster Reduction, Geneva: Switzerland [online: Web] Accessed 14 November 2018, URL:<https://www.unisdr.org/who-we-are/what-is-drr>

\*----- (2004), *Living With Risk- A Global Review of Disaster Reduction Initiative*, United Nations Inter-Agency Secretariat of the International Strategy For Disaster Reduction, Geneva: Switzerland.

\*----- (2005), *Disaster Management Policies and Systems in Pakistan*, United Nations International Strategy for Disaster Reduction, Geneva and Islamabad.

\*----- (2006), *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters: Extract From the Final Report Of The World Conference On Disaster Reduction (A/CONF.206/6)*, United Nations International Strategy for Disaster Reduction, Geneva: Switzerland.

\*----- (2008), *South Eastern Europe Disaster Risk Mitigation and Adaptation Initiative: Risk Assessment for South Eastern Europe Desk Study Review*, United

Nations, International Strategy for Disaster Reduction [Online: web] Accessed 4 June 2017, URL: [https://www.unisdr.org/files/1741\\_SouthEasternEuropeDRMitigation.pdf](https://www.unisdr.org/files/1741_SouthEasternEuropeDRMitigation.pdf)

\*----- (2009), *Global Assessment Report on Disaster Risk Reduction*, United Nations International Strategy for Disaster Reduction Secretariat, United Nations, Geneva: Switzerland

\*----- (2009), *Disaster Risk Reduction in the United Nations 2009: Roles, Mandates and Areas of Work of Key United Nations Entities*, International Strategy for Disaster Reduction, Geneva: Switzerland.

\*----- (2010), *In-depth Review of Disaster Risk Reduction in the Kyrgyz Republic*, Secretariat of the United Nations International Strategy for Disaster Reduction Sub-Regional Office for Central Asia and Caucasus, Geneva: Switzerland.

\*----- (2011), *Annual Report 2011 UNISDR secretariat Work Programme 2010-2011*, Invest Today for a Safer Tomorrow: Increased Investment in Local Action. United Nations International Strategy for Disaster Reduction, Geneva: Switzerland.

\*----- (2013), *Annual Report 2013: Final Report on 2012-2013 Biennium Work Programme*, United Nations Office for Disaster Risk Reduction (UNISDR), Geneva: Switzerland.

-\*----- (2014), *Progress and Challenges in Disaster Risk Management: A contribution towards the development of policy indicators for the post-2015 framework for disaster risk reduction*, United Nations Office for Disaster Risk Reduction (UNISDR), Geneva: Switzerland.

\*----- (2015), *Sendai Framework for Disaster Risk Reduction 2015-2030*, United Nations International Strategy for Disaster Reduction (UNISDR), Geneva: Switzerland.

\*UNDHA (2001), United Nations Department Of Humanitarian Affairs, Internationally Agreed Glossary of Basic Terms Related to Disaster Management, United Nations International Strategy for Disaster Reduction.

\*UNDP (2007), “*Project Facts – Bhutan, Earthquake Risk Reduction and Recovery Preparedness Project in Bhutan*”, Disaster Risk Reduction and Recovery (2007-2009), United Nations Development Programme: Bhutan. [Online: web] Accessed 12 August 2017, URL: [http://www.undp.org/content/dam/undp/library/crisis%20prevention/disaster/asia\\_pacific/Bhutan\\_Earthquake%20Risk%20Reduction%20and%20Recovery%20Preparedness%20.pdf](http://www.undp.org/content/dam/undp/library/crisis%20prevention/disaster/asia_pacific/Bhutan_Earthquake%20Risk%20Reduction%20and%20Recovery%20Preparedness%20.pdf)

\*UNDP (2017), *Pakistan National Human Development Report*, United Nations Development Programme, Islamabad, Pakistan.

\*UNGA (2016), “Protection Of Persons In The Event Of Disasters, Resolution 71/141”, United Nations General Assembly, Doc. A/71/141, 13 December”, [Online: web] Accessed 28 July 2017, URL: <http://legal.un.org/docs/?symbol=A/RES/71/141>

\*UN-Habitat (2011), *Cities and Climate Change: Global Report on Human Settlements 2011*, *United Nations Human Settlements Programme*, London and Washington DC.

\*UNHCR (2018), United Nations, United Nations High Commissioner For Refugees, *Afghanistan*, [online: web] Accessed 26 February 2018, URL:<https://www.unhcr.org/afghanistan.html>

\*United Nations, Disaster Management Training Programme, *The Role and Responsibilities of the United Nations Disaster Management Team*, Online Accessed 12 July 2017, URL: <https://www.unocha.org/our-work/coordination/un-disaster-assessment-and-coordination-undac>

\*United Nations (1981), *Popular Participation as a Strategy for Promoting Community level Action and National Development: report of the Ad Hoc Group of Experts held at United Nations Headquarters from 22 to 26 May 1978*, ST/ESA/114, New York.

\*United Nations (1991), United Nations General Assembly, United Nations Resolution 46/182: A/RES/46/182, 78th Plenary Meeting, 19 December 1991, [Online: Web] Accessed 13 June 2015, URL: <https://www.un.org/documents/ga/res/46/a46r182.htm>

----- (2008), *Myanmar: Aid Reaching Cyclone Victims Falls Far Below Requirements On The Ground Highlights Of The Noon Briefing*, UN Headquarters, New York, Tuesday, May 13, 2008.

----- (2015), “2015-2030 Sendai Framework for Disaster Risk Reduction, adopted by Third UN World Conference on Disaster Risk Reduction”, A/CONF.224/CRP.1.

----- (2019), *Impact of Natural Disasters Increasingly Affecting Those Most Vulnerable, Speakers Say as Commission for Social Development Continues Session*, SOC/4876, February 13, 2019.

----- (2019), *Remarks by Lisa Marsh Ryerson: AARP Foundation*, United Nations New York.

\*UNICEF 2011, “One Year after the Floods-Turning towards a Brighter Future A Progress Report on the Children of Pakistan”, July 2011, [Online: web] Access on 15 April 2017, URL:<https://www.unicefusa.org/sites/default/files/assets/pdf/Pakistan-one-year-report.pdf>

\*United States agency for International Development (Published on 26 October 2005) [Online: Web] Accessed 1 November 2016, URL:<https://reliefweb.int/map/pakistan/pakistan-southern-asiaearthquake-2005-26-oct-2005>

Venugopal, Rajesh and Yasir, Sameer (2017), “The Politics of Natural Disasters in Protracted Conflict: The 2014 Flood in Kashmir”, *Oxford Development Studies*, 45(4): 424-442.

\*WHO (2005), World Health Organisation, *Inter-Agency Standing Committee, Pakistan Earthquake October 2005 Consolidated Health Situation Bulletin #2*, 27 October 2005, [online: web] Accessed 18 August 2017, URL:[https://www.who.int/hac/crises/international/pakistan\\_earthquake/Bulletin2.pdf](https://www.who.int/hac/crises/international/pakistan_earthquake/Bulletin2.pdf)

Walker, P., et al. (2005), “Smoke and Mirrors: Deficiencies in Disaster Funding”, *Journal of British Medical*, 330(7485): 247-250.

Weart, Spenser R. (2003), *The Discovery of Global Warming*, Cambridge USA: Harvard University Press.

Weijers, Britta (2015), NATO Disaster Relief Operations: An Analysis of an Underexposed Field of Activity of The Alliance, *Catholic University of Portugal, Institute for Political Studies*: Lisbon.

Weinbaum Marvin G. (1996), “Civic Culture and Democracy in Pakistan”, *Asian Survey*, 36(7): 639-654.

Welsh, Jennifer et al. (2002), “The Responsibility to Protect: Assessing the Report of the International Commission on Intervention and State Sovereignty”, *International Journal*, 57(4):489-512.

Wendelbo, Morten et al. (2016), “The Crisis Response to the Nepal Earthquake: Lessons Learned”, *European Institute for Asian Studies [EIAS]*, Brussels, Belgium.

Westrum, Ron (2006), “A topology of Resilience Situation”, in Erik Hollnagel et al. (eds.) *Resilience Engineering: Concepts and Precepts*, Ashgate: Aldershot.

White, Stacey (2011), “The 2010 Flooding Disaster in Pakistan: An Opportunity for Governance Reform or another Layer of Dysfunction”, *Center for Strategic and International Studies*, [online: web] Accessed 10 August 2013 URL: [http://csis.org/files/publication/110930\\_White\\_2010FloodDisasterPakistan.pdf](http://csis.org/files/publication/110930_White_2010FloodDisasterPakistan.pdf)

Wiharta et al. (2008), “The Effectiveness of Foreign Military Assets in Natural Disaster Response”, Stockholm International Peace Research Institute (SIPRI), [online: web] Accessed 4 September 2016, URL:<https://www.sipri.org/sites/default/files/files/misc/FMA/SIPRI08FMAprelims.pdf>

Wijkman Anders and Lloyd Timberlake (1988), *Natural Disasters: Acts of God or Acts of Man?* Philadelphia, PA: New Society Publishers.

Wilder, A. (2010), “Aid and Stability in Pakistan: Lessons From the 2005 Earthquake Response Disasters”, *Overseas Development Institute*, 34(3): 406–426.

Wilder, Andrew (2008), “Perceptions of the Pakistan Earthquake Response: Humanitarian Agenda 2015 Pakistan Country Study”, Feinstein International Center, Tufts University, [Online: Web] Accessed 17 July 2016 URL: <https://fic.tufts.edu/assets/HA2015-Pakistan-Earthquake-Response.pdf>.

Wisner, Ben (1993), “Disaster Vulnerability: Scale, Power and Daily Life.” *Geo Journal*, 30 (2): 127-140.

Wisner, Ben and Gaillard, JC (2009), “An Introduction to Neglected Disasters”, *JAMBA: Journal of Disaster Risk Studies*, 2(3):151-158.

\*World Bank (2007), *Annual Report 2007*, Washington DC: United States of America.

\*----- (2008), *Annual Report 2008: Year in Review*, Washington DC: United States of America.

\*----- (2009), *Annual Report 2009: Year in Review*, Washington DC: United States of America.

\*----- (2010), *Annual Report 2009: Year in Review*, Washington DC: United States of America.

\*----- (2011), *Annual Report 2011: Year in Review*, Washington DC: United States of America.

\*----- (2012), *Annual Report 2012*, Washington DC: United States of America.

\*----- (2013), *Annual Report 2013*, Washington DC: United States of America.

----- (2014), *Annual Report 2014*, Washington DC: United States of America.

\*----- (2015), *Annual Report 2015*, Washington DC: United States of America.

\*----- (2016), *Annual Report 2016*, Washington DC: United States of America.

\*----- (2017), *Annual Report 2017*, Washington DC: United States of America.

\*----- (2018), *Annual Report 2018*, Washington DC: United States of America.

\*----- (2009), *South Asia: Shared Views on Development and Climate Change*, Sustainable Development Department, Washington DC: United States of America.

\*----- (2013), *The Indus Basin of Pakistan: the Impacts of Climate Risks on Water and Agriculture*, International Bank for Reconstruction and Development/World Bank, Washington DC: USA.

\*World Disaster Report (2012), *Focused On Forced Migration and Displacement*, International Federation of Red Cross and Red Crescent Societies, Geneva: Oxford University Press.

\*----- (2016), *Resilience: Saving Lives Today, Investing for Tomorrow*, international federation of Red Cross and Red Crescent Societies

\*----- (2016), *Resilience: Saving Lives Today, Investing For Tomorrow*, International Federation of Red Cross and Red Crescent Societies, Geneva: Oxford University Press.

Yashin, Ahmad et al. (2012), Disaster Risk Management in Pakistan Before and After the 2005 Earthquake, *Journal of Himalayan Earth Sciences* , 45(2):156-163.

Yeshey, Lotay (2015), Country Report, Visiting Researcher (FY2014B), Bhutan Disaster management, Asian Disaster Reduction Center, pg.1-26.

Younus Uzair M (2015), *Pakistan's IDP Problem*, The South Asia Channel, January 16, 2015 [online: web] Accessed 23 September 2017, URL:<https://foreignpolicy.com/2015/01/16/pakistans-idp-problem/>

Zaigham, Neha M. (2010), "Advocating for Inclusive Electoral Processes, For Minority Rights and for Rule of Law in South Asia: Report on Issues Faced by Minorities in Pakistan", *South Asia for Human Rights* [Online: Web] Accessed 22 April 2016, URL: <http://www.southasianrights.org/wp-content/uploads/2009/10/IEP-Pakistan-Final.pdf>

Zare, M. and S. Karimi Paridari (2008), "*Balakot, Muzaffarabad Earthquake Of 8 October 2005, Mw 7.6; Field Observations On Geological Aspects*", The 14th World Conference On Earthquake Engineering, October 12-17, 2008, Beijing: China [Online: web] Accessed 4 November 2015, URL:[https://www.iitk.ac.in/nicee/wcee/article/14\\_01-1044.pdf](https://www.iitk.ac.in/nicee/wcee/article/14_01-1044.pdf)