A study on Disaster Management Policy of Bangladesh:

Institutional Capacity Enhancement

Submitted By

Quazi Arefin Rezoane

MPPG Program, 5ᵗʰ Batch

Date 25 December, 2016

ppg

Public Policy & Governance Program
North South University

A study on Disaster Management Policy of Bangladesh:

Institutional Capacity Enhancement

By
Quazi Arefin Rezoane
MPPG 5th Batch

Supervisor

Sk.Tawfique M.Haque

Thesis submitted to the
Public Policy and Governance (PPG) Program
in partial fulfillment for the award of

Master in Public Policy and Governance (MPPG)

December 2016

Public Policy & Governance Program
North South University

Declaration

I declare that the dissertation entitled "A study on Disaster Management Policy of Bangladesh:Institutional Capacity Enhancement" submitted to the PPG Program of North South University, Bangladesh for the Degree of Master in Public Policy and Governance (MPPG) is an original work of mine. No part of it, in any form, has been copied from other sources without acknowledgement or submitted to any other university or institute for any degree or diploma. Viewsand expressions of the thesis bear the responsibility of mine with the exclusion of PPG for any errors and omissions to it.

Signature with Date

Full Name: Quazi Arefin Rezoane

ID No. 1513362085

Acknowledgement

It's a great pleasure for me to express my heartiest gratitude to my esteemed supervisor Dr. Sk.Tawfique M.Haque, Director and Professor, Public Policy and Governance Program, North South University for his heartfelt support and intellectual guidance throughout my whole research work. His prudent and scholarly suggestions minister me to carry out this thesis work. Indeed, his incessant encouragement enhanced me to make the dissertation a success.

I would like to convey my sincere appreciation to Professor Salahuddin M Aminuzzaman , Adviser, MPPG, North South University , Dr Istiaq Jamil , Md Mahfuzul Haq and Dr. Shakil Ahmed for offering their important suggestions and comments at various stages of my thesis work.

I also give my sincere thanks to UNO Sitakundu, Bashkhali and Patharghata for their utmost support and cooperation.

I would like to special thanks to Professor Dr.Mokaddem Hossain, Pro Vice chancellor Open University, Nigar Dil Nahar, Disaster Expert WFP, Shahnaz Sultana of USAID and Md Faruk Hossain , Vice President BGMEA for their valuable time and suggestion.

Finally special thanks to my family members for supporting me all the time.

Quazi Arefin Rezoane

North South University

Abstract

That Bangladesh is a disaster prone country because of her geographic location is known to all. The capability of this country of managing disaster is also noted. The country has achieved profound expertise on disaster management. The government is trying multifold efforts to excel in management. The present Disaster Management Policy 2015 is the epitome of government zeal. This policy is formulated with a vision to enhance the country's capacity in manifold ways addressing all necessary hazards and establishing risk reduction culture. In the fourth section of this policy, illustration of capacity enhancement of Government Organization, Non government Development organization and private business organization is stated. Some visions are expressed for capacity strengthening of these three distinctive entities. The study concentrates with the readiness of these organizations to implement the policy along with the relevance of this policy in accordance with international disaster accord and global goals.

Based on propositions of Charles Lusthaus the study develops a conceptual framework which identifies the factors of capacity assessment of organization .The study is fully qualitative in nature. Content analysis and in depth interview method are used. . Among Government organization Upozila disaster management committees (UDMC) s are purposively selected as unit of analysis , situated in coastal area (Chittagonj and Barishal) and recently affected by cyclone Roanu. Non Government Development Organizations are interviewed in same region and private Business Organization from Dhaka. Thirteen in depth interview is taken from UDMC, Non Government Development Organization, Two private business organization representatives and four key informants on disaster arena. Content analysis reveals that the policy is prepared focusing on Hyogo Framework for Action (HFA) and SAARC Comprehensive Framework for Disaster Management. Every the priority areas and strategic visions are incorporated in this policy along with consideration with MDG, SDG and UNFCCC. From the narration of respondents inferences are drawn about the existing capacity of the organizations. It is interesting that most of the organizations are in dark about the policy although they are managing disaster properly. The present condition of Government Organization (UDMC) is

capable to implement the policy with some arrangement of modifications. They have some strength like effective coordination, leadership, responsiveness also some drawback of resource , poor training and ahead of contingency planning . So, there is some strong feature along with some incapability and constraints. Non Government Development Organizations also operating side by side with government. Although their function is program focused besides their contribution is essential on pre, during and post disaster time. With some exception the capacity of Non Government Development Organization is satisfactory to implement the policy guideline. In case of private business organization, which role is significant ,is in sorry state and away from the vision stated in the policy. Some reformation on work place environment takes place due to buyer's pressure. The urge of dissemination of policy is felt for better management of disaster.

Table of Contents

Lists of Figures

List of Abbreviations

ADB   Asian Development Bank

ADPC   Asian Disaster Preparedness Centre

BSR   Business Social Responsibility

CSR   Corporate Social Responsibility

CDMP   Comprehensive disaster Management Programme

CPP   Cyclone Preparedness Programme

DC   Deputy Commissioner

DDM   Department of Disaster Management

DMS   Disaster Management System

DRR   Disaster Risk Reduction

IFA   Institutions in Flood in Asia

IFRC   The International Federation of Red Cross and Red Crescent Societies

MDG   Millennium Development Goal

NPDM National Plan for Disaster Management

SDG   Sustainable Development Goal

SOD   Standing order on Disaster

UDMC Upozila Disaster Management Committee

UNO   Upozila Nirbahi Officer

UP   Union Parishod

UNISDR The United Nations Office for Disaster Risk Reduction

UNFCC United Nation Framework Convention on Climate Change

HFA   Hyogo Framework for Action

Chapter One: Introduction

1.1 Introduction

Bangladesh and disaster are closely allied. Between 1980 and 2013, the average Bangladeshi was personally affected by two disasters (relief web). Bangladesh has scored on 5 on world risk index ranking out of 173 countries of the world. Floods, earthquake, river erosion, Nor Westar, cyclone etc occurs frequently all the year round and causes a wide spread of losses to the people and property. Amid uncertainty we have something to worthy about. Bangladesh is regarded as a model of disaster management transforming from traditional rescue and rehabilitation to a comprehensive disaster management system. The government of Bangladesh has promulgated the Disaster Management ACT 2012 and Disaster Management Policy 2015. The policy gives a full set of guidelines to disaster management activities. In the fourth section of the policy, it illustrates guidelines to enhance the capacity of the institutions particularly Government Organization, Non Government development organization and private business organization. It expresses some visions and guidelines to strengthen the capacity of these organizations. This study intends to explore the policy on institutional capacity section along with the current institutional readiness.

1.2 Background

Bangladesh is one of the most disaster prone countries in the world. It is estimated that about 10 million Bangladeshi citizens are impacted by one or more natural hazards annually (Ernst, et al., 2007). So, there is a close tie prevails between Bangladesh and disaster. At times it is regarded that disaster is the destiny of Bangladesh. The location and geographic feature make the country prone to disaster. Formed by the Ganges, the Brahmaputra and the Meghna rivers Bangladesh is a low-lying delta in South Asia. The funnel shape geographical location, land characteristics, plenty of rivers and the monsoon climate render Bangladesh highly vulnerable to natural hazards.

Bangladesh is considered as the most vulnerable countries to disaster during 1991 to 2010 in Global Climate Risk Index (Harmeling, 2011).International organization Maplecroft (2011) declared Bangladesh as the topmost vulnerable country due to climate change. Based on future risk and vulnerability, Maplecroft prepared an index on climate vulnerability of 107 countries in 2011.

Floods, cyclone, tidal surges, earthquakes, river erosion, fire, water logging, infrastructure collapse, droughts etc various forms of disaster are occur frequently in all the year round in Bangladesh. The recurring global climate change has added fuel to fume. Climate related disasters are operating in full swing. Fourth Assessment Report of IPCC[1] (Intergovernmental Panel on Climate Change) concludes that global warming and climate change are expediting by human activities. According to the report, human made emissions of greenhouse gases can be blamed for the harmful effects of climate change .Bangladesh is currently ranked as the most climate-vulnerable country in the world. IPCC (2007) in its Fourth Assessment report described following changes in climate trends, variability and extreme events:

> In Bangladesh, the average temperature has recorded an mounting trend of about 1°C in May and 0.5°C in November from 1985 to 1998.

> The amount of annual rain falling is in increasing trend. Decadal rain anomalies are above long-term averages since 1960s.

> The country is followed by serious and recurring rain in 2002, 2003, and 2004. Although the cyclone occurrence rate is decreased but intensity are increased.

---

[1] The Intergovernmental Panel on Climate Change (IPCC) was formed in 1988 by World Metrological Organization(WMO) and United Nation Environment Program(UNEP) for assessing the science related to climate change

The frequency of monsoon depressions and cyclones in Bay of Bengal is increasing.

Water shortages have been attributed to rapid urbanization and industrialization, population growth and inefficient water use, which are aggravated by changing climate and its adverse impacts on demand, supply and water quality.

Saltwater intrusion from the Bay of Bengal is reported to have penetrated 100km or more inland along tributary channels during the dry season.

So, the situation is concerning .But there are some sun lights amid dark bush. And the ray is management of disaster. Previously the activities limited to rescue and relief distribution but now the paradigm shifted to recovery and rehabilitation to risk reduction and comprehensive disaster management. As a consequence disaster occurs frequently but we are now better managing than previous. Bangladesh is noteworthy among the model countries regarding disaster management. General people of our country kept sign of brave, resiliency and restless work in every disaster and also showed countless examples of humanitarian (Mizan and Tapash (2013)

The chart represents the cyclone occurred from 1965 to 2009. In 1965 that cyclone rises the death toll to 19279 people whereas the more dominant cyclone SIDR of 2009, caused death to 3406 people. The comprehensive disaster management is the key to decline the death rate. And that is why it is not a myth that Bangladesh is a role model in disaster management.

Different Types of Natural Disasters Occurred in Bangladesh

Year	Types of Disaster	Number of Deaths
1965	Cyclone	19279
1965	Cyclone	873
1966	Cyclone	850
1970	Cyclone	300000
1985	Cyclone	11,069
1987	Flood	1,657
1988	Cyclone and	7,457
1991	Flood	1 , 38,868
1997	Cyclone	550
1998	Cyclone	1050
2000	Flood	36
2004	Flood	800
2007	Flood	554
2007	Flood	3406
2009	Cyclone	503
	Cyclone	

Source: Bangladesh Meteorological Department 2007

Figure 1: Natural disasters occurrence over time

"Bangladesh has taken holistic approach to disaster management, where stress has been given to working together with all stakeholders to build strategic, implementation partnership with all relevant government departments and agencies along with other Non Government Players including NGO, academic, technical institution and donors. The role of government is mostly to ensure risk reduction and comprehensive disaster management is the focus of all national planning" (NAPA 2010-2015). The ministry is trying keep pace with global and national commitment of comprehensive disaster management and risk reduction culture. Executing the Standing Order on Disaster (SOD),promulgated disaster management Act 2012,Formulating disaster management policy ,drafting disaster management Rule , developing Bangladesh disaster management model, establish Disaster Management Information Centre (DMIC), developing National Plan for Disaster Management are major attainments in this arena.

Institution is key tool to combat disaster. Without effective institutional capacity disaster management initiative will be abortive. During emergency time, if the institutions aren't equipped or trained enough, it itself creates a disaster in disaster management. During disaster a huge range of work has to be done by the local government agencies and NGOs namely evacuating people, move them to shelter house, administering relief work and so on. Their incapability reflects in management activities. Imagine of a weak fire service system in fire outbreak. The outcome is terrible. Today the nature of disaster changes over time. Disaster is not the matter of one country. Beyond national issue it takes the form of regional and global matter. Since a cyclone occurred in Bay of Bengal if the Myanmar, India or Thailand not timely intimidate our forecasting agency and our forecasting agency fail to disseminate due to incapacity, the aftermath is catastrophic. We have some committees ministry level, district level upozila level and union level disaster committees. They have certain duties chartered in Standing Orders of Disaster (SOD). The incapability of these organizations will futile the overall management process. Apart from emergency time, an institution plays a significant role preparedness level. For this reason all national and international accord, frame work for action put strong emphasis on institutional capacity building. In recent Disaster Management Policy 2015, stressed on enhancing institutional capacity encompassing on government organization, Non Government Organization and private business organization.

1.3 Significance

Bangladesh is considered a role model in disaster management utilizing its indigenous knowledge, coping strategy and effective management system viewed by international communities and experts. With the advancement of technology and recurring indiscriminate urbanization and too much pressure on environment make the climate change inevitable which facilitates a diverse effect on environment and causing recurring disaster all the year round in Bangladesh. In the past, the Government of Bangladesh (GoB) had a traditional reactive approach to addressing natural disasters that focused on relief and rehabilitation activities. This

began to change in the 1990s, when the necessity for a more proactive approach that included

"hazard identification and mitigation, community preparedness and integrated response efforts" became apparent (GoB National, 2008, 13) .So Bangladesh has shifted traditional response and rescue based operational system to early management and risk reduction strategies. On regulatory framework Bangladesh has promulgated a Disaster Management Act in 2012 and as per power vested in 19 clause of the act formulated a policy in September 14, 2015 titled Disaster Management Policy 2015.

The policy starts with preamble. First section depicts the background of the policy. It briefly discuss the risk situation, Bangladesh status ,Hyogo Framework for Action(HFA), United Nation Framework Convention on Climate change (UNFCC) ,SARRAC Comprehensive Framework on Disaster Management, Millennium Development Goal(MDG) ,Sustainable Development Goal(SDG),Disaster and Bangladesh Constitution, Disaster Management and Act, disaster and development planning , Perspective Plan 2010 2021, Sixth five year plan, National Planning on Disaster Management and Bangladesh Climate Change Strategy Plan 2009. Section two describes the goals and objectives of this policy, principles, participatory risk management, adaptation and awareness program. Section three focuses on various types of hazard risk management primarily flood risk management, flash flood Management, cyclone and tidal surge risk management, earthquake, landslide, river erosion, drought, cold wave, Nor Westar, saline water intrusion, water logging, fire, chemical and nuclear, biological risk management. Section Four titled Institutional Capacity Enhancement in Disaster Management. In this section disaster a related institution are categorized in three categories and states some direction to enhance their capacity. Section five spotting on Disaster Management education dissemination. Section six focuses on community and urban risk management. Section seven focuses on warning g signals on flood, cyclone, river erosion, Tsunami and land slide. Section eight stresses on mainstreaming of agriculture, education, health, water, sanitation, food security, land using, fisheries and infrastructure. Section nine spotted on poverty, disaster, risk reduction and social safety net. Section ten highlights on embracing socially distressed people. Section eleven

illustrate role of media in disaster management. Section twelve titled as ICT in disaster management. And last section describes implementation, monitoring and evaluation in disaster management.

Institutional capacity is a significant tool to combat disaster. Weak institutional capacity projects exposure to disaster. Enhancing the capacity of both national and local level organizations as well as non government development organization is the prime focus of the institutional capacity enhancement in disaster management. In the fourth chapter of this policy illustrates some visions and outlines to enhance the institutional capacity. To the researchers knowledge, any study have done to review the content of the disaster management policy 2015.Thus from the researcher's view the study potentially contributes to better understanding to existing institutional capacity, lacking and strength. It will be great significance to know the underline story of disaster management. The review of content of this section will be helpful to better understanding the gap of international standard institutional capacity and the policies content as well as expected implementation drawback. In such a context the lessons learnt from this study will also beneficial and useful for the policy makers/planners. This will assist and provoke to further research on this topic furthermore.

1.4 Statement of the Problem

Adequate preparedness planning and risk reduction initiatives help to minimize the scratch of disaster. The impacts of disasters are varied by type and magnitude. Institutional strength and response capacity of different organization impede disaster intensity. Bangladesh has given the highest priority to risk reduction initiatives in disaster management efforts and mainstreaming

it in all development initiatives lead by the government. The disaster management policy has promulgated in September 2015.The content of the policy related to institutional strengthening is very significant to disaster management system. Strengthening the capacity of disaster related institution is an urgent requisite. The study tries to analyze the institutional capacity enhancement section of the policy along with current institutional readiness of implementing the policy.

1.5 Objective

The prime objective of the study is to review the disaster management policy related to institutional capacity enhancement with following specific objective

- To assess the existing institutional capacity of Government Organizations, Non government Development Organizations and Private Business Organizations.

1.6 Research Question

- Whether the existing capacity of GO, NGO and private business organization is capable to implement the guideline of the policy?

- Whether the content of the policy is prepared in the light of national and international framework and accord?

1.7 Scope

This study intends to review the fourth section refer to Institutional Capacity Enhancement which encompasses capacity enhancement of Government organization, Non Government development organizations and private business organization. The scope of the study is limited on some particular issues of institutions. For this a few interviews was taken from some government organization heads, head of disaster management unit of Non government development organization, private business companies and experts in disaster management. To understand existing condition of disaster management committee, interview with upozila disaster management committee of coastal area was conducted.

1.8 Study Methods

The study is based on qualitative analysis. Data was collected from both primary and secondary sources. Primary data was collected by direct interview and secondary data was collected through research report, journals, brochure and websites .In order to review the policy content, content analysis method was used. To overview the existing condition of the institutions, observation and in depth interview method was used. Some disaster expert's interview was a taken also.

Tool	Informant	Number	Total
In depth Inter view		3*1	3
	Upozila Disaster Management Committee		
	Non Government Development Organization	4*1	4
	Private Business organization	2*1	2
	Key informant	4*1	4
Content Analysis			

1.9 Organization of the Study

The thesis is organized in six chapters. Chapter one commences with introduction. It consists of background of the study, significance of the study, research questions, research problem, scope, and finally organization of the study. Chapter two explains literature review and theoretical framework. Chronologically, chapter three disaster management policy and system in Bangladesh. Chapter four reflects the data presentation. Chapter five depicts findings of the study with major inferences derived. The final chapter six consists of conclusion and recommendations of the study.

Chapter Two

Conceptual Framework and Literature Review

2.1 Introduction

This chapter explores the existing relevant literature and frameworks about the disaster management system on institutional perspective of Bangladesh. This literature review chapter aims to give glimpses on conceptual clarification, related literature findings and develop an analytical framework. The contents of the chapter are introduction, definitions, related empirical findings , theory and lastly an analytical framework.

2.2 Definitions of related terms

Disaster

From mythological Noah and its and his ark the first depiction of disaster and management evolved.

A disaster is a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources. Though often caused by nature, disasters can have human origins. (IFRC)

$$(\text{VULNERABILITY} + \text{HAZARD}) / \text{CAPACITY} = \text{DISASTER}$$

When a hazard impact on vulnerable people disaster take place The combination of hazards, vulnerability and inability to reduce the potential negative consequences of risk results in disaster.

Vulnerability

"Vulnerability in this context can be defined as the diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard. The concept is relative and dynamic. Vulnerability is most often associated with poverty, but it can also arise when people are isolated, insecure and defenseless in the face of risk, shock or stress". (IFRC).

Disaster Management

"Disaster Management as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters".(IFRC).

Disaster management can be defined as continuous and integrated process of planning, organizing, coordinating and implementing measures which are necessary expedient for

  ▢   Prevention of threat of disaster

- Minimize the risk of disaster or its intensity

- Capacity Building

- Preparedness planning

- Prompt Response

- Assessing the effects of disaster

- Evacuation, rescue and relief

- Rehabilitation and reconstruction

Recovery
Actions taken after an emergency to restore and resume normal operations

Mitigation
Efforts to reduce the effects or risks associated with hazards

Response
Actions taken during an emergency to save lives, property, and the environment

Preparedness
Actions taken prior to an emergency to facilitate response and promote readiness

Continuity
Actions taken to protect the campus mission from disruption. Continuity inffluences all four planning phases of Emergency Management.

Disaster Mitigation

Disaster Mitigation activities are done for preventing and minimizing the effects of disaster. It encompasses activities to prevent disaster , reducing disaster happening probability and finally minimize the effects of disaster.

Disaster Preparedness

Preparedness is the main approach of reducing the impact of disasters. These activities are imperative to minimize losses of disaster. Disaster preparedness includes wide range of risk reduction activities and preventive measures lessen the effect and damage of potential disaster.

Disaster Response

Response is putting preparedness plans into action Disaster response activities are done to save life, protect property and make an affected area safe. These activities take plane during emergency time. This is done by a number of organizations including disaster management committees, Government Organization and Non Government Organization and others relief organizations

Disaster Recovery

Recovery activities take place after an emergency. The objective of recovery activity is assisting affected community to regain adequate level of functioning.

Resilience

According to the Hyogo Framework for Action (UNISDR, 2005), disaster resilience is determined by the degree to which individuals, communities and public and private organizations are capable of organizing themselves to learn from past disasters and reduce their risks to future ones, at international, regional, national and local levels.
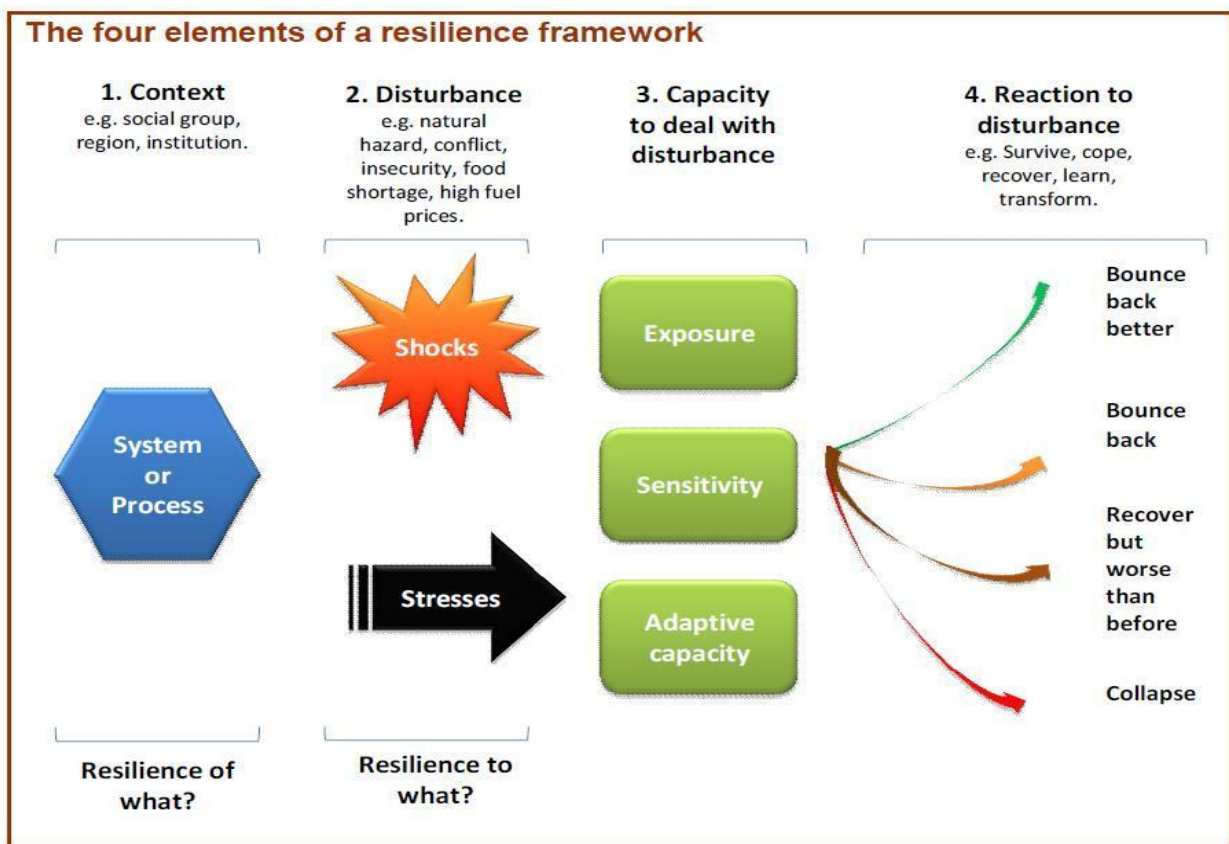
Figure 2 : Resilience Framework

Source :GSRDC

Risk Reduction

The systematic process of defining and re-defining risk and managing risk .The objective of Disaster Risk Reduction (DRR) is to reduce the damage of disaster by an ethic of prevention.

Capacity enhancement

Capacity enhancement is a process of upgrading, recreating environment and reforming the structure towards better output.

Institution

In this study the term institution refers government institution, non government development organization and private business organization.

2.3 Related Empirical Findings

No specific, direct or comprehensive research work has been found neither Disaster management policy of Bangladesh nor institutional capacity .Only very limited and discreet studies have been done in this regard.

C. Emdad Haque and M. Salim Uddin (2013) stated that involving each and every organization and person disaster management is a holistic nationwide affair. As wide range of activities and paucity of resources only Government can't manage it alone. Hence a partnership comprising all stakeholders is required. Developing a network among the GOs, NGOs, researchers, academics, journalists and other professionals in mitigating disaster-related problem is recommended by the researchers. Owing to government's integrated and strategic approach, preparedness and response capacity have increased tremendously. But due to lacking of transparent institution, institutional partnership remains on paper. Individual stakeholders continue to make significant contributions, but synergy and multiplier effects are still far away.

Abu Reza Md. Towfiqul Islam , Anjum Tasnuva , Md. Tanziul Islam , Md. Rezaul Haque(2014) urged for an effective DMS system which can ensure to save thousands of lives and property. The GOB has motivated to establish a sophisticated system from national to local level. The essence of disaster management cycle is the collaboration and coordination of different organization and organized effort to respond against disaster. DMS can handle disaster situation properly. There is a need for effective handling of disaster situation with proper disaster management system (DMS).Strengthening of national institutional structure, firm legal jurisdiction, partnership and communication and also awareness build up at all levels of the community is required for proper disaster management.

Ahsan Uddin Ahmed, Saleemul Haq, Mahbuba Nasreen and Abu Wali Raghib Hassan (2015) in Sectoral inputs towards the formulation of Seventh Five Year Plan (2016 – 2021) CLIMATE CHANGE AND DISASTER MANAGEMENT pointed trainings and skill enhancement are necessary to manage better emergency situation. They recognized a few challenges which needs to be rise above in order to provide sufficient services to the citizens towards reducing risks of hazards and disasters and to steer the country's economy in a low carbon and energy efficient pathway. The report identified current limitations which require immediate attention including limited understanding, knowledge and capacity, inadequate management skills at all tiers, adaptation priorities are yet to be set out, inadequate integration of climate risk with development planning and budgeting, weakness in implementation, monitoring and shared learning, limited financing and weaknesses in institutional coordination.

IFA (Institutions in Flood in Asia) 2005 explained on institutional aspect of river floods risk reduction in the Asian countries along with structural approaches. In Asia region floods are the most common frequent natural calamity. Countries of Asia tend to manage it by indigenous institutional frameworks. It is viewed internal institutional capacities and institutional responses to floods in these countries are still insufficient. The study identified that there is a similarity of institutional framework on flood risk management in these countries But in case of institutional reform related to flood related disaster have largely been unsuccessful. Institutional coordination in flood risk reduction between government bodies was found in most cases inadequate. In capacity building process respective coordination instruments and tools need to be included.

Asian Disaster Preparedness Centre, (2003) Thailand analyzed the current institutional arrangements and potentials for national platforms for disaster reduction in three South (East) Asian countries, namely Bangladesh, Cambodia and Sri Lanka. It viewed that Bangladesh has a strong institutional arrangements on disaster management and adopted a proactive approach regarding DRR, and has the vision to incorporate it into long-term development. It is the first country in Asia which establishes a separate disaster management ministry. This country has an effective cyclone warning system. The study appraised Bangladesh's noteworthy success in preparedness and contingency planning, knowledge and risk management instrument applications.

Dr. Hakikur Rahman (2010) pointed many countries reorganizing government system focused on decentralize state structure for better disaster management system. In Bangladesh, Red Crescent Society and coalition of NGOs have put forward a dependable platform in remote regions for disaster preparedness and management. The study suggested on escalating disaster management activities and involving participation of wider range of stakeholders. It is imperative to reorganizing local government institutions with strengthening capacities to meet the growing demands in the area of disaster management. He suggested enhancing national level institutional mechanism to assist in formulating short and long term disaster planning.

M Aminul Islam, Sifayet Ullah ,Kaushik Das (2009) viewed that tornado is a severe neglecting disaster in existing disaster management framework. By strengthening local level disaster management committees capability tornado risk reduction activities can be boost up .Upozila Disaster management committee and Union Disaster management committee are vital in this regard. Though UDMC s is the first to respond disaster but they are not equipped appropriately. They viewed there is an urgent need and scope to devote further policy and institutional strengthening on is issue.

Bijay and Chakrobarty (2013) in their book An overview on gaps and opportunities of Disaster Management in Bangladesh Managing Climate Induced Disasters focused on disaster framework and climate change related initiatives to find out the opportunities and gaps on linking DRR and CCA. That Bangladesh has done remarkable success in term of institutional reform after the approval of DM act 2012. Despite achievement they viewed much more to be done as local and national level are concerned. Proper training and orientation of DM ACT is required for effective disaster management system. Orientation and continuous training should be arranged at local level committees.

Amirul islam and Göran Jonsson,(2013) finds that after the change of leadership by UP election 2011 new chairmans sworn in. They have little or some cases no orientation with Disaster Risk Reduction and emergency management. In some cases very few previous committees handed over UDMC files and documents to reconstituted committees. So, the new committee has to start working without institutional memory. There is a synergy of improvement of awareness roles and responsibilities of UDMCS as per standing order of Disaster. They stressed for arranging training for UDMCs on preparing risk reduction schemes and how to coordinate with agencies on local level fund creation.

Federica and Baas (2004) examined that locally organized preventive and responsive action could be very potent to bound damage and losses. They are essential to harmonize higher level activities during disasters. They expressed the functioning and comparative strengths of local institutions depend upon the type and scale of natural disasters. Partnerships between local government, the private sector, nongovernmental organizations and community groups are more effective and need fostering than single institutions working independently.

ADPC (2003) shows that Local institutions could demonstrate an efficient disaster preparedness and response delivery through measurable indicators and informal social networks could provide mechanisms to take care of most vulnerable households

Reviewing the above literature it is clear that these studies have been done in different perspective on institutional capacity of disaster management in Bangladesh country perspective and international perspective. These studies echoed that disaster is a frequent event in Bangladesh and it's a nationwide affair, involving each and every organization and citizen of the country. Bangladesh has set up a comprehensive and integrated model of disaster management. As a result notable success takes place in preparedness and contingency planning, knowledge management and risk management instrument applications. Beside this, Bangladesh has strong institutional arrangements on disaster management and adopted a proactive approach regarding DRR, and has the vision to incorporate it into long-term development. The success of Bangladesh in this arena is praiseworthy. Some researcher suggested in developing a network among the GOs, NGOs, researchers, academics, journalists and other professionals in order to enlist their potential roles and contributions in mitigating disaster resilient society. Some studies also stressed that government and NGO collaboration largely on paper. In order to make the system more effective, a strong collaboration between

all related agencies is very essential. Though many of the resources appraised strong institutional strength but some of them depicted the pitfall is loose tie coordination. A study reviews the disaster management Act 2012 and NAPA and projected some gaps and guidelines of implementation. Some focused on local governance institution strengthening.

Although these reports have reflected notable achievement in comprehensive disaster management system and effective institutional capacity, but these studies didn't spotlight on neither disaster management policy content nor current institutional readiness nor capacity. The current disaster management policy gives some course of action to enhance the capacity of institutions related to disaster management. There haven't any research conducted on disaster management policy of Bangladesh particularly institutional capacity yet. So this research will contribute to understand policy content current institutional situation in Bangladesh.

2.4 Theoretical Orientation

In Organizational Assessment: A Framework for Improving Performance by Charles Lusthaus, Marie-Hélène Adrien, Gary Andersons proposed model implies certain contextual forces drive performance of an organization. These are organizational capacity, forces in its external environment, and internal motivation to assess the organizational capacity. A brief explanation of the framework follows.

Organizational Performance

Three ideas capture the performance of most of the organizations with which they worked. First, most non-profit organizations view their performance in terms of how well they meet the mandates of their stated mission, purpose or goals. Effectiveness and efficiency were at one time the standard concepts used for determining organizational performance. However, since the 1970s, many other variables associated with organizational performance have emerged, including morale, innovation, turnover, adaptability and orientation to change. Many new ideas are in circulation, and it is clear that different stakeholders want different types of organizational performance. Many of these ideas relate to ensuring that the organization is able to survive over time. This can be referred to as the "ongoing relevance to stakeholders." This framework defines an organization as a good

performer when it balance effectiveness, efficiency and relevance while being financially

viable.

Organizational Capacity

Organizational capacity is the ability of an organization to use its resources to perform. If the organization itself is the unit of analysis, all of the resources, systems and processes that organizations develop to support them in their work can be assessed. An examination of the systems and management practices associated with human, financial and infrastructure resources helps provide insight into the use of organizational resources.

Within proposed framework, strategic leadership involves the strategies and niche management by the leaders that set the direction for the organization. Program management looks at the ability of the organization to carry out its institutional role, while process management examines the way the organization manages its human relations and work-related interactions. Structure identifies the links between how an organization is governed and its mission, as well as the roles that human resources and finance play in the organization's day to- Day activities. Finally, the framework describes the ability of the organization to manage its external relationships as "inter-institutional linkages."

Organizational Motivation

Organizational motivation represents the underlying personality of the organization. It is what drives the members of the organization to perform. In their framework, they assess organizational motivation by analyzing a number of organizational dimensions.
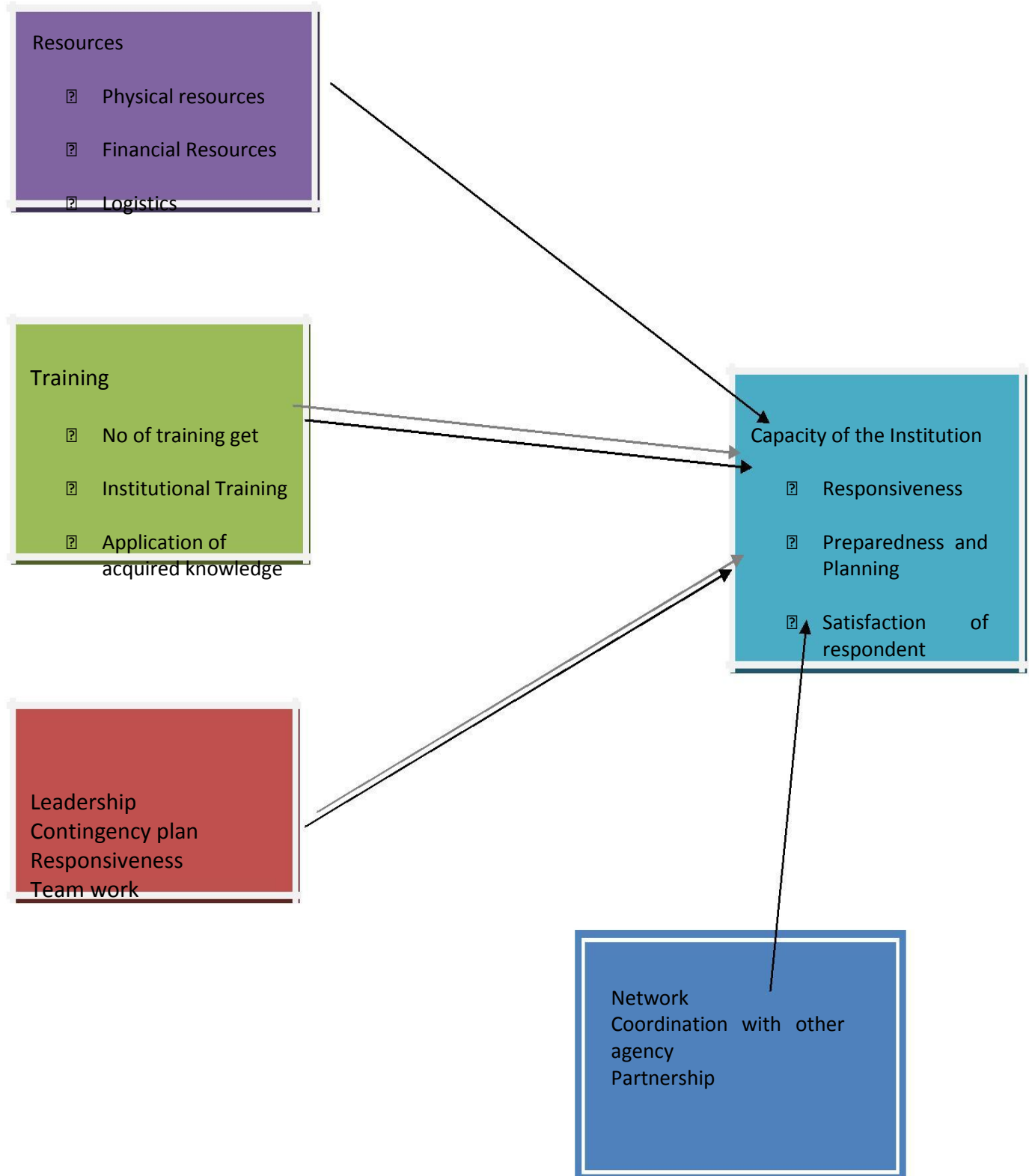
One dimension we examine is organizational evolution and history—that is, how and why the organization got started, what its milestones are, and so forth. In a similar way, the assessment framework explores the organization's mission, values and vision in order to understand the driving forces behind it. The culture operating within an organization, and the incentives it offers, contribute to organizational motivation. Taken together, these factors give the organization its personality and affect its performance and quality of work.

External Environment

Organizations are open systems, and the external environment in which they operate is very important. Organizations need support from their environment if they are to survive and perform well. The environment is the key factor in determining the level of available resources and the ease with which an organization can carry out its activities. Thus, in assessing an organization, attention must be paid to economic, political, socio-cultural, environmental, demographic and technological conditions.

2.5 Analytical Framework

An analytical framework has been developed from the theory containing four independent variables that likely effect only dependable variable Institutional capacity. The independent variables are resources, network, co operation, training and leadership,

Resources

    🞂   Physical resources

    🞂   Financial Resources

    🞂   Logistics

Training

    🞂   No of training get

    🞂   Institutional Training

    🞂   Application of acquired knowledge

Capacity of the Institution

    🞂   Responsiveness

    🞂   Preparedness and Planning

    🞂   Satisfaction of respondent

Leadership
Contingency plan
Responsiveness
Team work

Network
Coordination with other agency
Partnership

Dependent Variable

Capacity can be defined as the ability of people, organizations and society as a whole to manage their affairs successfully. In other words Capacity refers to the overall ability of a system to perform and sustain itself; the coherent combination of competencies and capabilities. Capacity of the institution is the dependent variable. Indicators of dependent variable are

    ▯   Responsiveness

By the term responsive we mean the ability of quick responding. When a disaster occurs the institution has to react promptly to save life and minimize the losses. Responsiveness is a indicator how promptly and skillfully an institution react during disaster.

    ▯   Preparedness planning

Preparedness refers to measures taken to prepare for and reduce the effects of disasters. That is, to predict and, where possible, prevent disasters, mitigate their impact on vulnerable populations, and respond to and effectively cope with their consequences. Preparedness planning is so vital for an institution to prevent disaster.

    ▯   Satisfaction

Here satisfaction denotes the expression of the stakeholder affected by disaster. Level of satisfaction on institutions performance is measured.

Independent Variables

Resources

Measurable indicators of resources

- ▢ Physical resources includes structure, logistics, equipment etc.

- ▢ Financial resources includes budget, delegation of monetary authority etc.

Training and Skill of personnel

Training and skill of the institution play a vital role in disaster management. Trained and skilled personnel strengthen disaster management process.

Measurable Indicators of trainings

- • No of Training get
- • Institutional Training facility
- • Application of acquired knowledge/Skill

Leadership

Leadership is the trait to lead. Leadership plays a vital role in overall process from preparedness to rescue phases of disaster management. The indicators of leadership are

Contingency plan

Responsiveness

Team work

Network

Network. among organization in disaster situation, playing a vital role in all pre, post and during disaster phase.

Indicators

Coordination

Partnership with other organization

Chapter Three

Disaster Management Policy and System in Bangladesh

3.1 Introduction

This Disaster Management Policy and System chapter tries to analysis the policy in light of international documents along with present institutional system in Bangladesh. Firstly a brief description of HFA, SAARC Comprehensive Framework on Disaster Management, Millennium Development Goal, Sustainable Development Goal, UNFCC is given. Than comparison with disaster management policy 2015 is shown in a table. The later part of this chapter describes the current institutional framework of Disaster Management in Bangladesh.

3.2 International goals and accords

The Hyogo Framework for Action 2005-2015

In 2005, Governments around the world committed to take action to reduce disaster risk, and adopted a guideline to reduce vulnerabilities to natural hazards, called the Hyogo Framework for Action (HFA). The HFA assisted the efforts of nations and communities to become more resilient to, and cope better with the hazards that threaten their development gains.

The Hyogo Framework for Action (HFA) is the key instrument for implementing disaster risk reduction, adopted by the Member States of the United Nations. Its overarching goal is to build resilience of nations and communities to disasters, by achieving substantive reduction of disaster losses by 2015 - in lives, and in the social, economic, and environmental assets of

communities and countries. The HFA offers five areas of priorities for action, guiding principles and practical means for achieving disaster resilience for vulnerable communities in the context of sustainable development. (ISDR)

The HFA commits:

- To pursue an integrated multi-hazard approach for sustainable development to reduce the incidence and severity of disasters;
- To place disaster risk at the center of our political priorities and policies;
- To integrate disaster risk reduction in all our development work;
- To strengthen the capacity of disaster-prone countries to address risk;
- To invest substantively in disaster preparedness;
- To reduce the relief-development gap and thereby reduce vulnerability;
- To enable civil society actors and affected communities to strengthen their resilience to disasters
- To reduce the gap between what we know and what we do, with the critical ingredient being political commitment; and
- To build on the momentum of this World Conference to accelerate implementation of the Framework for Action

SARRAC Comprehensive Framework on Disaster Management

The Heads of State or Governments in the 13th Dhaka Summit called for elaboration of a Comprehensive Framework on Early Warning and Disaster Management. In view of the December 2004 Asia Tsunami and the 2005 Pakistan Earthquake, the Heads of State or Governments underscored the urgency to put in place a regional response mechanism dedicated to disaster preparedness, emergency relief and rehabilitation to ensure

immediate response. They directed the concerned national authorities to coordinate their activities in the areas of disaster management such as early warning, exchange of information, training and sharing of experiences and best practices in emergency relief efforts. Following the Dhaka Declaration, a SAARC (South Asian Association for Regional Cooperation) Expert Group was formed to formulate a regional comprehensive framework on disaster management for the SAARC region. The expert group met in Dhaka on 7-9 February 2006. As per the mandate of the Meeting and taking into account the deliberations of the Meeting, Bangladesh circulated a draft Comprehensive Framework on Disaster Management titled "Disaster Management in South Asia: A Comprehensive Regional Framework for Action 2006-2015", for consideration. After detailed discussions and amendments, the Framework was adopted in the meeting. (NAPA 2010-2015)

The Framework is also aligned with the implementation of the Hyogo Framework of Action (HFA) 2005-2015: Building the Resilience of Nations and Communities to Disasters.

Strategic Goals of the framework include the following:

• Professionalizing the disaster management system;

• Mainstreaming disaster risk reduction;

• Strengthening of community institutional mechanisms;

• Empowering community at risk particularly women, the poor and the disadvantaged;

• Expanding risk reduction programming across a broader range of hazards

• Strengthening emergency response systems; and

• Developing and strengthening networks of relevant national, regional and international organizations.

Millennium Development Goal

At the Millennium Summit in September 2000 the largest gathering of world leaders in history adopted the UN Millennium Declaration, committing their nations to a new global partnership to reduce extreme poverty and setting out a series of time-bound targets, with a deadline of 2015 that have become known as the Millennium Development Goals.

The Millennium Development Goals (MDGs) are the world's time-bound and quantified targets for addressing extreme poverty in its many dimensions-income poverty, hunger, disease, lack of adequate shelter, and exclusion-while promoting gender equality, education, and environmental sustainability. They are also basic human rights-the rights of each person on the planet to health, education, shelter, and security.

The 8 MDG Goals

1. Eradicate extreme poverty and hunger

2. Achieve universal primary education

3. Promote gender equality and empower women

4. Reduce child mortality

5. Improve maternal health

6. Combat HIV/AIDS, malaria and other diseases

7. Ensure environmental sustainability

8. Develop a global partnership for development

Sustainable Development Goal

The Sustainable Development Goals (SDGs), otherwise known as the Global Goals, are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

These 17 Goals build on the successes of the Millennium Development Goals, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another. The SDGs work in the spirit of partnership and pragmatism to make the right choices now to improve life, in a sustainable way, for future generations. They provide clear guidelines and targets for all countries to adopt in accordance with their own priorities and the environmental challenges of the world at large. The SDGs are an inclusive agenda. (UNDP)

Seventeen goals of SDG are:

- No poverty
- Zero hunger
- Good health and wellbeing
- Quality education
- Gender equality
- Clean water and sanitation
- Affordable and clean energy
- Decent work and economic growth
- Industry innovation and infrastructure
- Reduced inequalities
- Sustainable cities and communities

- Responsible consumption and production

- Climate action

- Life below water

- Life on land

- Peace and justice strong institutions

- Partnership for the goals

UNFCC

The **United Nations Framework Convention on Climate Change** (**UNFCCC**) is an international environmental treaty negotiated at the Earth Summit in Rio de Janeiro from 3 to 14 June 1992, then entered into force on 21 March 1994. The UNFCCC objective is to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system". The framework set no binding limits on greenhouse gas emissions for individual countries and contains no enforcement mechanisms. Instead, the framework outlines how specific international treaties (called "protocols" or "Agreements") may be negotiated to set binding limits on greenhouse gases.

Climate change is rapidly emerging as one of the most serious threats that humanity may ever face. Global warming threatens the development goals for billions of the world's poorest people. The Convention on Climate Change sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change. It recognizes that the climate system is a shared resource whose stability can be affected by industrial

and other emissions of carbon dioxide and other greenhouse gases. The Convention enjoys near universal membership, with 189 countries having ratified. Under the Convention, governments: Gather and share information on greenhouse gas emissions, national policies and best practices Launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries Cooperate in preparing for adaptation to the impacts of climate change The Convention entered into force on 21 March 1994.

3.3 Comparative analysis with disaster management policy 2015

Hyogo Framework for Action Priority 1 Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation. Countries that develop policy, legislative and institutional frameworks for disaster risk reduction and that are able to develop and track progress through specific and measurable indicators have greater capacity to manage risks and to achieve widespread consensus for, engagement in and compliance with disaster risk reduction measures across all sectors of society	The government of Bangladesh has a strong commitment to implement the Hyogo framework for Action. Commencing on 2005 to 2015 time limits Bangladesh has prepared and circulated a national progress report to HFA implementation The presently formulated disaster management policy also echoed the governments stand on this. Risk reduction is some how reflected in whole policy. In the core objective of the policy the risk reduction is highly emphasized and incorporated. In the principle section it also get prioritized. The policy emphasized disaster risk reduction in first few sections. Separate section indicates and prioritizes risk reduction. Section three depicts the various

Priority Action 2: Identify, assess and monitor disaster risks and enhance early warning.

The starting point for reducing disaster risk and for promoting a culture of disaster resilience lies in the knowledge of the hazards and the physical, social, economic and environmental vulnerabilities to disasters that most societies face, and of the ways in which hazards and vulnerabilities are changing in the short and long term, followed by action taken on the basis of that knowledge.

Priority Action 3: Use knowledge, innovation and education to build a culture of safety and resilience at all levels.

Disasters can be substantially reduced if people are well informed and motivated towards a culture of disaster prevention and resilience, which in turn requires the collection, compilation and dissemination of relevant knowledge and information on hazards, vulnerabilities and capacities.

Priority Action 4: Reduce the underlying risk | types of risk reduction strategy of various types of disaster including flood, flash flood, cyclone, earthquake, land slide, river erosion, drought, cold wave, nor wester, salinity intrusion, water logging, fire, chemical and nuclear hazard. Disaster risk reduction include in all development activities.

In core objective to build a culture of safety and resilience by using, knowledge, innovation and education is in corporate. Section five reflects dissemination of disaster knowledge in general text books. It categorized different versions of education and gives direction to incorporate education in general, vocational, Madrasah, English medium and non government training.

Significance and direction of early warning system of cyclone, flood, flash flood, Tsunami, Norwester, landslides etc are included in policy.

Section five reflects dissemination of disaster knowledge in general text books. It categorized different versions of education and gives direction to incorporate education |

factors. Disaster risks related to changing social, economic, environmental conditions and land use, and the impact of hazards associated with geological events, weather, water, climate variability and climate change are addressed in sector development planning and programmes as well as in post-disaster situations. Priority Action 5: Strengthen disaster preparedness for effective response at all levels. At times of disaster, impacts and losses can be substantially reduced if authorities, individuals and communities in hazard-prone areas are well prepared and ready to act and are equipped with the knowledge and capacities for effective disaster management.	in general ,vocational ,Madrasah, English medium and non government training. Significance and direction of early warning system of cyclone, flood, flash flood, Tsunami, Norwester, landslides etc are emphasized in policy.
SAARAC Comprehensive Framework on Disaster Management Priorities of Action • Develop and implement risk reduction strategies	The SAARAC Comprehensive Framework on Disaster Management is also aligned with the implementation of the Hyogo Framework of Action (HFA) 2005-2015.The disaster management policy also incorporated the spirit of this framework for action. From the first section to last section the whole policy reflects the governments strong stand on risk reduction vision as Bangladesh shifted its paradigm to risk

• Establish Regional and National Response Mechanisms • Establish a Regional Information Sharing Mechanism and Develop Network of Institutions and Organizations • Develop and implement Disaster Management training, education, research and awareness programs. • Apply the ICT for disaster management. • Establish an effective monitoring and evaluation mechanism.	reduction culture from rehabilitation. The objective, principle and a separate section depicts the risk reduction significance and strategies of various disasters. Stress is given on regional sharing mechanisms and network of institutions. Institutional capacity enhancement section also put stress on GO, NGO and private sectors capacity strengthening. Priority is also given on knowledge sharing among different institutions. To raise awareness on disaster and incorporate it on general education curriculum a separate section is incorporated in policy. Stress and high priority is given on disaster research and training. Section twelve is titled as ICT in Disaster Management. This section highlights on remote sensing, IS, GPS, Satellite, Mobile and creation of online database. The last chapter of the policy announces implementation, monitoring and evaluation in grassroots, local and national level.

The Millennium Development Goals (MDGs) are eight goals with measurable targets and clear deadlines for improving the lives of the world's poorest people. To meet these goals and eradicate poverty, leaders of 189 countries signed the historic millennium declaration at the United Nations Millennium Summit in 2000.

The Millennium Declaration of September 2000 identified, among others, the following key objectives:

Protecting the vulnerable "We will spare no effort to ensure that children and all civilian populations that suffer disproportionately the consequences of natural disasters…are given assistance and protection so that they can resume normal life as soon as possible." Protecting our common environment, resolving to "intensify cooperation to reduce the number and effects of natural and man-made disasters".

Closely related to disaster targets closely linked to vulnerability to natural hazards, such as eradicating extreme poverty and hunger, achieving universal primary education,

The disaster management policy of Bangladesh is prepared in a vision of reducing risk of disaster by enabling community people's participation. Disaster risk reduction is the key of this policy. Disaster impedes the development. The policy stressed on disadvantage poor people to transform them as disaster capable population.

In ninth chapter of this policy illustrates on social security programs to reduce the risk and empower the poor people. The policy also highlights special attention for women, disadvantage people, child, elderly person and minority.

The section ten gives direction of inclusion and special concern for these kinds of people.

promoting gender equality, ensuring environmental stability and partnerships for development.	
Sustainable Development Goal is the new inclusive update version of Millennium Development Goal. It has seventeen specific goals to be fulfilled by the states by 2030.Disaster Risk related goals are Goal 1. End poverty in all its forms everywhere 1.5 By 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters Goal 2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture 2.4 By 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality Goal 3. Ensure healthy lives and promote well-	Among seventeen goals nine goals and sub goals are connected with disaster and environment protection. The disaster management policy reaffirms to protect the vulnerable and poor people from all types of disaster. Policy stress on building resilience of poor people and reduce their vulnerability. The principle section illustrates to form a structural risk reduction procedure giving importance on poor vulnerable people. Importance on social safety net program to empower people and build resilience is given significance. With a view to prepare effective disaster management system all stake holders directed to be included. Institutional capacity strengthening gets immense priority. For this section four depicts capacity building for Government organization, Non government development organization and private business development organization. Empowerment of local people through safety net programs and prepare national food security system

being for all at all ages	are highlighted in policy principles. By accelerating and mainstreaming disaster risk reduction and climate change adaptation establishing a effective structure of disaster management is depicted in policy.
3.d Strengthen the capacity of all countries, particularly developing countries, for early warning, risk reduction, and management of national and global health risks	
Goal 4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all	
Goal 6. Ensure availability and sustainable management of water and sanitation for all	This policy mainly concerns about disaster management so protecting water related ecosystem, sustainable industrialization, ocean marine resources and bio diversity etc get fewer attention.
6.6 By 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	
Goal 13. Take urgent action to combat climate change and its impacts*	
13.1 Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries	
13.3 Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning	

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	
United Nation Framework Convention on climate change(UNFCCC) The UNFCCC entered into force on 21 March 1994. Today, it has near-universal membership. The 197 countries that have ratified the Convention are called Parties to the Convention. The UNFCCC is a "Rio Convention", one of three adopted at the "Rio Earth Summit" in 1992. Its sister Rio Conventions are the UN Convention on Biological Diversity and the Convention to Combat Desertification. The three are intrinsically linked. It is in this context that the Joint Liaison Group was set up to boost cooperation among the three Conventions, with the ultimate aim of developing synergies in their activities on issues of mutual concern. It now also incorporates the Ramsar Convention on Wetlands. Preventing "dangerous" human interference with the climate system is the ultimate aim of the UNFCCC. (UNFCCC)	Disaster Management Policy of Bangladesh upholds the ultimate motto of a livable healthy world and stabilizes climate system of UNFCCC. In broad objective they coincide.

3.4 Current Institutional arrangement of Disaster Management in Bangladesh

DISASTER MANAGEMENT VISION

The Disaster Management Vision of the Government of Bangladesh is to reduce the risk of people, especially the poor and the disadvantaged, from the effects of natural, environmental and human induced hazards, to a manageable and acceptable humanitarian level, and to have in place an efficient emergency response system capable of handling large scale disasters.

(NPDM 2010-2015)

Regulatory Framework

The regulative framework for disaster management of Bangladesh provides for the relevant legislative, policy and best practice framework under which the activity of Disaster Risk Reduction and Emergency. The Framework includes

Disaster Management Act 2012

Bangladesh published Disaster Management Act in 2012.

The objectives are as follows

a) To help communities to mitigate the potential adverse effects of hazard events, prepare for

Managing the effects of a disaster event, effectively respond to and recover from a disaster or an emergency situation, and adapt to adverse effects of climate change;

b) To provide for effective disaster management for Bangladesh;

c) To establish an institutional framework for disaster management; and

d) To establish risk reduction as a core element of disaster management

Disaster Management Policy 2015

A National Disaster Management Policy was formulated to define the national perspective on disaster risk reduction and emergency management, and to describe the strategic framework, and national principles of disaster management in Bangladesh. It is strategic in nature and depicts   the broad national objectives, and strategies in disaster management.

Standing Order on Disaster

The Standing Orders on Disaster describes the detailed roles and responsibilities of committees, Ministries and other organizations in disaster risk reduction and emergency management and establish the necessary actions required in implementing Bangladesh's Disaster Management Model
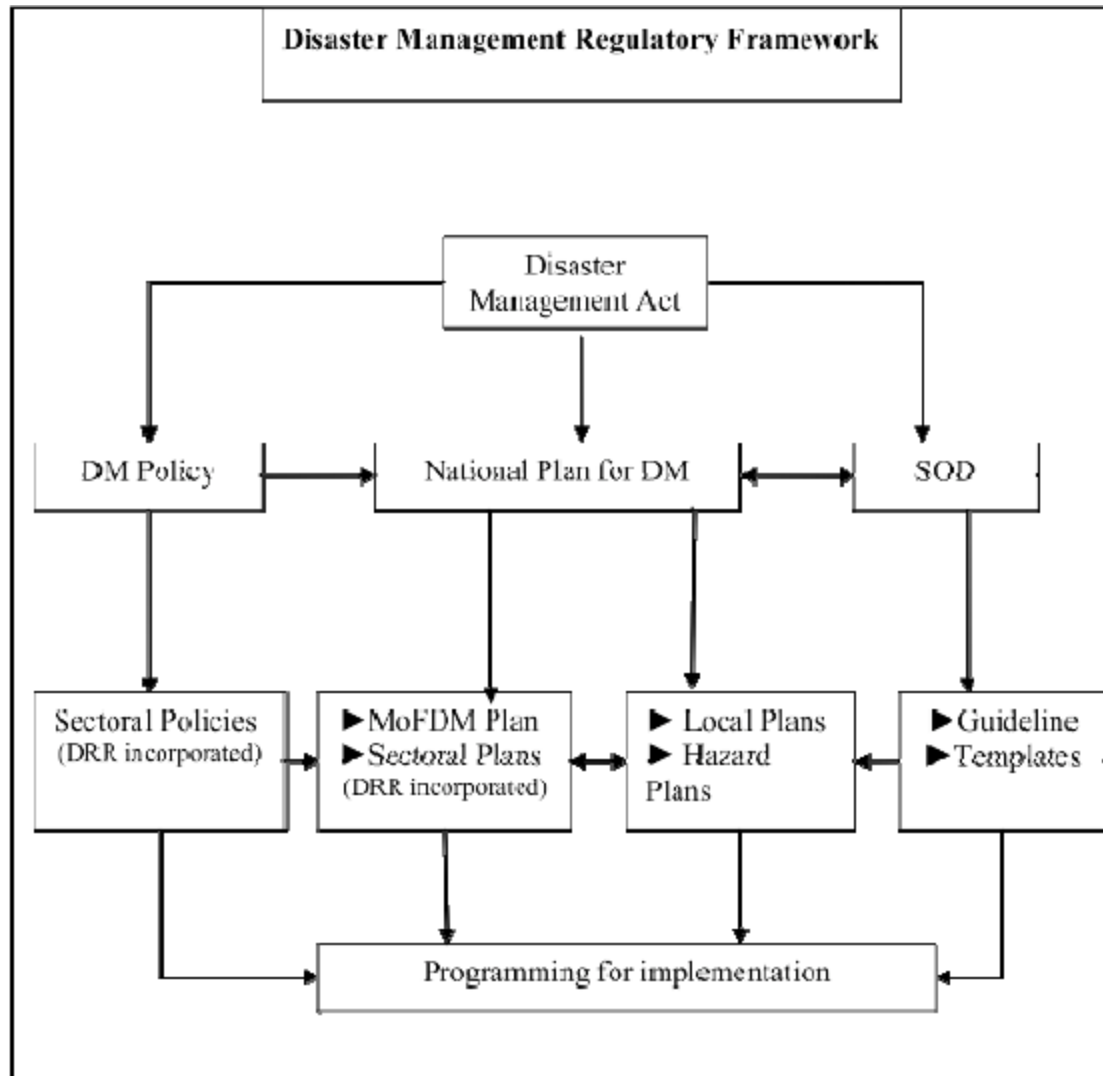
Figure 3 :Disaster Management regulatory framework

The Disaster Management and Relief Division (DM&RD), of the Government of Bangladesh has the responsibility for coordinating national disaster management efforts across all agencies. In January 1997 the Ministry issued the Standing Orders on Disaster (SOD) to guide and monitor disaster management activities in Bangladesh.

In January 1997 the Ministry issued the Standing Orders on Disaster (SOD) to guide and monitor disaster management activities in Bangladesh than it was revised in 2010. The SOD

has been prepared with the avowed objective of making the concerned persons understand their duties and responsibilities regarding disaster management at all levels, and accomplishing them. All Ministries, Divisions/Departments and Agencies shall prepare their own Action Plans in respect of their responsibilities under the Standing Orders for efficient implementation. The National Disaster Management Council (NDMC) and Inter-Ministerial Disaster Management Coordination Committee (IMDMCC) will ensure coordination of disaster related activities at the National level. Coordination at District, Thana and Union levels will be done by the respective District, Thana and Union Disaster Management Committees. The Disaster Management Bureau will render all assistance to them by facilitating the process. A series of inter-related institutions, at both national and sub-national levels have been created to ensure effective planning and coordination of disaster risk reduction and emergency response management.

At the National level

1. National Disaster Management Council (NDMC) headed by the Honourable Prime Minister to formulate and review the disaster management policies and issue directives to all concerns.

2. Inter-Ministerial Disaster Management Co-ordination Committee (IMDMCC) headed by the Hon'ble Minister in charge of the Disaster Management and Relief Division (DM&RD) to implement disaster management policies and decisions of NDMC / Government.

3. National Disaster Management Advisory Committee (NDMAC) headed by an experienced person having been nominated by the Honourable Prime Minister.

4. National Platform for Disaster Risk Reduction (NPDRR) headed by Secretary, DM&RD and DG, DMB functions as the member secretary. This platform shall coordinate and provide necessary facilitation to the relevant stakeholders.

5. Earthquake Preparedness and Awareness Committee (EPAC) headed by Honourable minister for MoFDM and DG, DMB act as member secretary

6. Cyclone Preparedness Program Implementation Board (CPPIB) headed by the Secretary, Disaster Management and Relief Division to review the preparedness activities in the face of initial stage of an impending cyclone.

7. Cyclone Preparedness Programme (CPP) Policy Committee headed by Honourable Minister, MoFDM and Secretary, DM&RD act as member secretary. Disaster Management Training and Public Awareness Building Task Force (DMTATF) headed by the Director General of Disaster Management Bureau (DMB) to coordinate the disaster related training and public awareness activities of the Government, NGOs and other organizations.

8. Focal Point Operation Coordination Group of Disaster Management (FPOCG) headed by the Director General of DMB to review and coordinate the activities of various National Plan for Disaster Management 42 departments/agencies related to disaster management and also to review the Contingency Plan prepared by concerned departments.

9. NGO Coordination Committee on Disaster Management (NGOCC) headed by the Director General of DMB to review and coordinate the activities of concerned NGOs in the country.

10. Committee for Speedy Dissemination of Disaster Related Warning/ Signals (CSDDWS) headed by the Director General of DMB to examine, ensure and find out the ways and means for the speedy dissemination of warning/ signals among the people.

At sub-national levels

1. District Disaster Management Committee (DDMC) headed by the Deputy Commissioner (DC) to coordinate and review the disaster management activities at the District level.

2. Upazila Disaster Management Committee (UZDMC) headed by the Upazila Nirbahi Officer (UNO) to coordinate and review the disaster management activities at the Upazila level.

3. Union Disaster Management Committee (UDMC) headed by the Chairman of the Union Parishad to coordinate, review and implement the disaster management activities of the concerned Union.

4. Pourashava Disaster Management Committee (PDMC) headed by Chairman of Pourashava (municipality) to coordinate, review and implement the disaster management activities within its area of jurisdiction.

5. City Corporation Disaster Management Committee (CCDMC) headed by the Mayor of City Corporations to coordinate, review and implementation of disaster management activities with their specific jurisdiction.
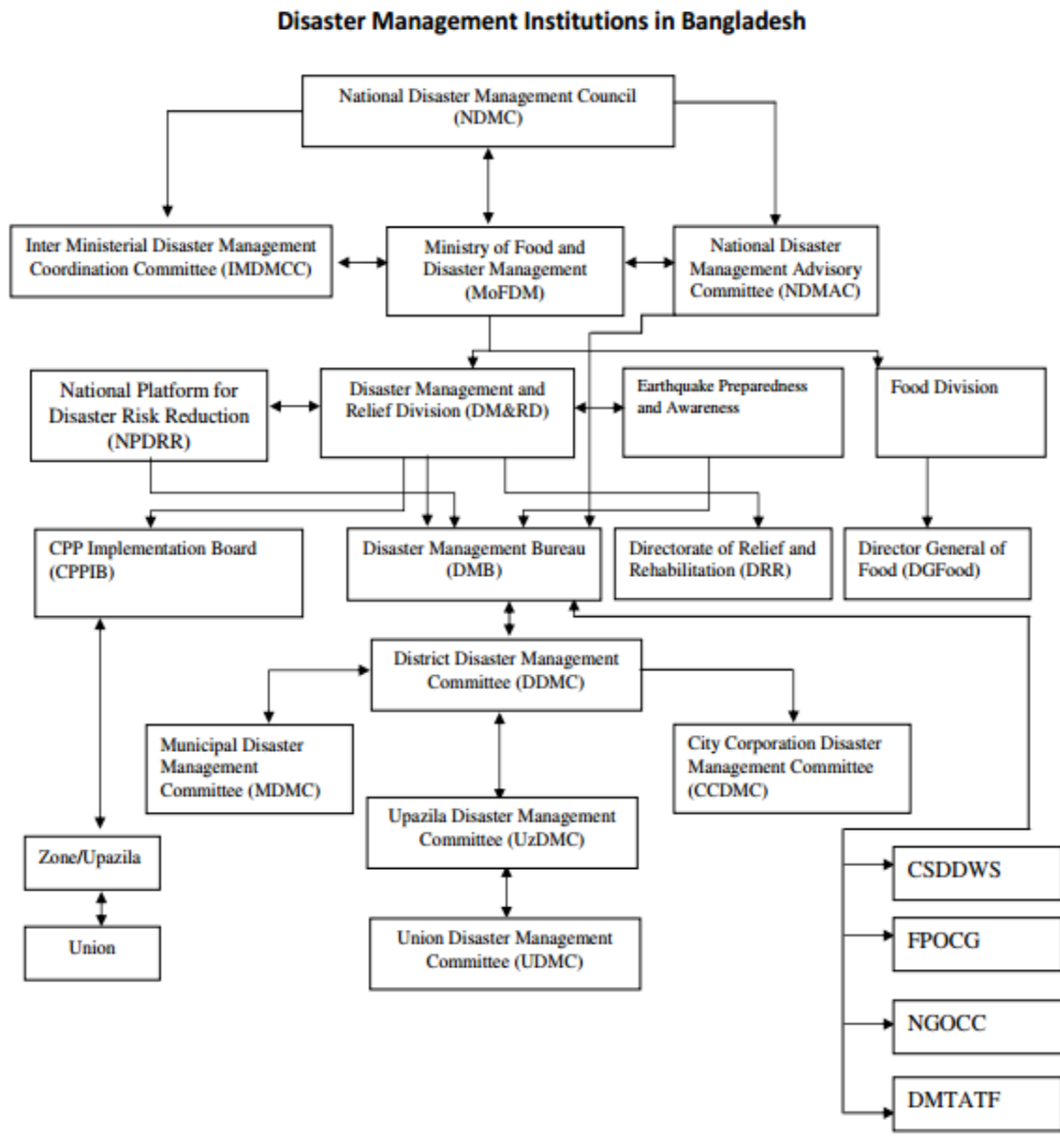
Disaster Management Institutions in Bangladesh

Figure 4 :Institutional Framework

3.5 Conclusion

 The third chapter analyses the content analysis of international disaster documents with the current policy of disaster management. The analysis is mainly done with Hyogo Framework for Action (HFA), SAARC comprehensive framework for disaster management , Millennium Development Goal , Sustainable Development Goals and UNFCC. From the above analysis it is clear that the policy is prepared in the light of HFA and SFA primarily. The main motto of salient global international document MDG, SDG and UNFCC also reflected in this policy. The later part reflects the current disaster management vision along with regulatory and institutional framework.

Chapter four

Data presentation

4.1 Introduction

The fourth chapter is data presentation. Data collected from field are accumulated here. The chapter commenced with the methodology of the study along with the responses of the responded collected by interview. The responses are categorized on the basis of variables. In this study, dependent variable is capacity of the institution and four independent variables are resources, training, leadership and network. Each of the variables has respective indicators. Data are presented in the line of each indicator.

4.2 Methodology

The study is qualitative in nature. As a data collection method both interview and content analysis were used. In depth interviews were taken from Upozila Disaster Management Committee (UDMC)s . Mainly these Upozila were purposively selected. The location of these upozila is disaster prone. Recently these upozilas were hit by cyclone Roanu[2]. The cyclone hit the south and southeast regions of Barisal and Chittagong especially hard damaging hundreds of houses and causing landslides.

Two Upozilas were selected from Chittagong region(Bashkhali , Sitakundu) and one from Barishal region Patharghata. All these Upozilas are situated in coastal belt. The Roanu caused havoc in these area. Sitakundu is the disaster prone area to cyclones and storm surges

---

[2] Cyclone Roanu is the first tropical cyclone in annual cyclone region. Originated in North Srilanka on 17 May hit Bangladesh coastal area on 21 may, 2016 left behind 21 death.

,affected by cyclones in 1960, 1963, 1970, 1988, 1991, 1994 , 1997 and 2016 .The intra-deltaic coastline is very close to the tectonic interface of the Indian and Burmese plates, as well as the active Andaman–Nicobar fault system, and is often capable of generating tsunamis Cyclone. Banshkhali upazila in Chittagong is among the worst affected areas as several unions remained inundated with seawater rushing into the storm-battered villages. Cyclone ravaged the coastal area of this upozila (mainly premasia bazaar) ,leaving seven dead and causing extensive damage to house and crops till yesterday and a 30-kilometre stretch of the 130km long embankment in the upazila was damaged .Pathar ghata ,is a upozila of Barguna district lying beside Bay of Bengal. As a coastal area it is frequently visited by many forms of disaster mainly cyclone. All cyclones of Bangladesh somehow touched this region.

Interviews were taken from UNO and PIO (Project Implementation Officer). Five NGOs working in that coastal area were chosen also for same criteria. As private business organization, garments factory has chosen as it is the largest export industry of Bangladesh and frequently this sector experienced massive disasters. Two interviews were taken from private business organizations head along with top BGMEA[3] representatives. Four in-depth interviews were conducted with Key Informants. One key informant was the member secretary of draft formulation committee of disaster management policy, currently working on United Nations. She has a profound expertise in disaster field. Another key informant is a disaster management education specialist, continuing in teaching in this arena. One key informant has a long working experience in Non Government Development Organization in disaster arena in an International development partner. Another, interview from high officials of Disaster Management Ministry. And finally interviewed key informant is a top notch of BGMEA executive committee.

---

[3] BGMEA is the Bangladesh Garments Manufacturers and Exporters Association. It is the apex garments owners association in Bangladesh.

4.3 Data presentation

4.3.1 Dependant Variable

The dependent variable of the study is capacity of the institution.

Capacity of the Institution

Capacity of the institution measured through responsiveness, Preparedness and Planning and satisfaction. This study aims to review the capacity of the institutions with the guidelines of the policy's fourth section.

Responsiveness

Responsiveness means being able to response quickly. Another way the quality of being responsive; reacting quickly; as a quality of people, it involves responding with emotion to people and events. In this study responsiveness of UDMC denotes how promptly UDMC reacts in disaster.

"UDMC s are responsive and cordial, we have conducted meeting even at night 2 am." viewed by a development worker. After the disaster every NGOs surveyed the area make a list of victims. UDMC verified this and compiled it a unified way to remove overlapping. So that one person can't get twice.

"As soon as we get signal, we warned the people who have key of cyclone shelters (The key of shelters are kept in School headmaster and Secretary of Union Parishad). We disseminate the information to all union chairman and local leaders and school headmasters" viewed by an UNO.

People said they (UDMC) are very responsive in all phases of disaster including disseminating signals, evacuation activities and relief work. They transferred people to shelter house.

Preparedness and Planning

Preparedness and Planning denotes how the UDMC prepared themselves before a disaster event, what necessary actions are taken for preparedness and what is their planning in disaster.

An Ngo named Gharoni, with the assistance of CDMP, made a Disaster Management Plan for Sitakundu upozila.

Upozila (Bashkhali) have no preparedness planning nor Upozila Disaster Management plan.

Upozila Patharghata has planning for each of its six unions respectively.

An expert of Disaster management said indeed generally UDMCs don't formulate disaster management planning. It's generally done by leading NGO working there. In most cases she said NGOs prepared a preparedness planning on behalf of the UDMC. If there is fund availability and project prevails than it is done by a respective NGO.

NGOs are doing preparedness and risk reduction activity before disaster. One respondent of NGO said pre disaster level they conducted yard meeting, tea stall meeting to aware people. He said "we have a radio channel name Sagar giri community radio. Using this we tried to aware people how to go in cyclone centre, water purification system, nearest cyclone centre information, what to do in which signal, how to bear/take pregnant and disable people to centre, who is giving food to shelter house, where to keep their daily deeds of land etc are directed. Even fishermen are going to fetch hearing radio signal. Even toys are given to children for their psychosocial development in shelter house."But not all NGOS didn't took part. Those who have specific funding on disaster they only did these activities.

Satisfaction

Satisfaction is the state of being satisfied, fulfilled or confident acceptance of something as being satisfied. In this study I want to define satisfaction as what is people's reaction about the work of activity of UDMC and NGO on disaster activity.

People are mostly satisfied with some exceptions. People were moved to the cyclone house after getting the signal. All motivational and awareness raising program were held. Mostly affected people were given relief kit. Different NGOS were doing this. "It's hard to satisfy all people. But the after disaster the less death indicates the success of disaster management" viewd by an UNO.

NGOs were working immediately after the disaster in relief and rehabilitation work. One NGO representative said "In time of Roanu 2293 people are given hygiene kit and taka 4000 cash on chanua, gondamara and shekher keri area. We have started our work after the disaster".

Though most of the people were satisfied in evacuating and shifting them to shelter house but they had different views on relief and rehabilitation issue. UDMC members also admitted that they said they just cover only the most affected people for all. So some dissatisfaction prevails.

4.3.2 Independent Variable

Resources

An action or strategy that may be adopted in adverse situation in other words a supply or source of aid or support can be used in time of offend. Resource is the tool can be use in emergency. Resources are very useful in handling emergencies.

Physical Resources

Physical resources play a significant role in disaster management. Generally people take shelter in shelter house during disaster. The more shelter house built the more risk reduction

process enhanced. One Upozila disaster management committee member stated they had cyclone shelter but not adequate and modern. Now a day's cyclone shelters are build school come shelter. Ministry of disaster management should build cyclone shelter more shelters.

Another UNO said they have 59 cyclone shelters in their upozila. Building Embankment is very necessary in his upozila.

One NGO representative suggested the local influential people in the name of building shipyard destroying embankment. It's very significant to build the embankment to protect people from disaster. He stressed on coastal green belt.

One UNO suggested that in his Upozila a lot vulnerable people lives on Embankment. They are highly vulnerable to disaster. This Upozila Parishod have sent a proposal to ministry for asking fund to build them house on khas land. He thought that it will reduce their vulnerability.

Financial Resources

Finance is the pre condition of doing any kind of work. Nothing can be done without financial resources. All kind of work related pre to post disaster activities needs financing. Awareness raising and sensitization activities need finance. During disaster and after disaster rescue and rehabilitation needs financing also.

UDMC has no permanent mode of financing. Some NGOs expressed UDMC meeting is not held due to fund and done along with NGO meeting sometimes. During disaster time an emergency fund is transferred to DC for relief work. Some UDMC member suggested to continuing a regular fund to UDMC.

One UNO reported that in his area they have given 5 lakh taka for disaster relief and rescue. But the upozila chairman during Roanu stayed in Dhaka. So we couldn't use the budget in such emergency and misery prevailed. After coming back from Dhaka he offered me to sign me in

voucher of 5 lakh where actual expenditure is only 1.5 lakh. I refused to sign such anomaly. After having money in my fund I was stuck. Lastly from generosity affluent people came forward.

An expert viewed that government should allocate much money to disaster risk reduction activity than post disaster. She added that more money should be included in budget allocation for DRR. Social Safety Net programs should be wider for DRR. Number of beneficiary should be increased. Social safety net is proven to reduce to risk reduction. So number of beneficiary should be increased. But DRR fund is not up to the mark now. It needed careful attention.

Logistics

Logistics are very significant. In some big tragedy we saw the paucity of logistics hampered the rescue project. In Rana Plaza tragedy we realize our incapability. One KPI opinioned "certainly a big disaster like tampaco or rana plaza needed well equipped machinary and logistics. Now Bangladesh government needs much resource allocation in this arena.Now a days donors funding are decreasing. Government has to play pivotal role in this sector".

In coastal area Coast guard has some equipment whenever they needed assist us viewed by UNO Pathar ghata. Besides Fire service is ready for any emergency.

Stressing on vehicle on relief work will expedite the relief and rehabilitation work viewed by one PIO. He expressed we have to use the jeep of UNO sir to relief work. All the respondents believe more resource on UDMC will strengthen its function.

Respondent from private sector viewed they have following instrument to fight disasters in their organization. Rope, Belcha, Helmet, Blanket, Fire extinguisher(four types),Hose pipe,

hose reel, Smoke detector, Fire alarm, exit mark, Ail mark, arrow(which is seen in dark),High powerful IPS, Hydrant system (it can lift water to upward without electricity) and Mask.

Training

Training is essential element in disaster management. Training is needed to build the capacity of staffs and volunteers with a focus to improving their skill and teamwork. Training encourages an exchange of experience and knowledge and creates a network among them.

Number of Training Get

Consultation with Upozila Disaster Management Committee (UDMC) representatives it is viewed that they have no scheme to train the members. They are given training by different NGOs mainly. But its not a regular basis. One respondent UNO Sitakundu viewed along his duration here (one year) he hasn't get any training yet. NGO arranges training for their staffs and UDMC members. From central level CDMP also conducted trainings.

They couldn't clearly give the reply how much training they get. One respondent said when they are posted here they are given training centrally. Only Disaster related staffs are being trained.

One NGO professional viewed "we have a training centre called Human Resource Development Centre. Trainings are given on leadership, disability and project based. Others NGOs also can avail this facility".

One Ngo professional added we are not given training but we have our own guideline indicating what to do in disaster time. Our organization has three training centre on Chittagong, Bagerhat and Patuakhali. Depend on project training is given.

Respondent from Private sector viewed their labors are getting continuous training on earthquake and fire. He told "Practically we set fire in factory than workers are being trained how to extinguish fire. They are being trained how to use fire fighting mechanisms. We make a team of 20 people and trained how to pour water". He added BGMEA representative s frequently visit their factory and takes part in drills and also conducted drills also on earth quake. Labors are trained What should be done during disaster time and not to make panic and leave systematically in queue.

Institutional Training Facility

UDMC member told NGOs trained their personnel. Sometimes some NGOs also trained members but it depends on their fund availability. He suggested all the members need more training.

One NGO representatives viewed they were given disaster training on Dhaka .They have no training centre in Chittagong. The training was for three days. He strongly felt training is required in this arena.

One NGO reported that they have our own training centre in Chittagong. Its called Human Resource Development Centre. Training is given on leadership, disability and project based. Others NGOs also can avail this facility. Disaster trainings are given on Dhaka and Chittagong centre. Disaster related staffs are being trained. When we had project on disaster we conducted training in Sitakundu.

One NGO respondent told that they have given training on as well as drills. Drills on what to do in emergency time. Now after Roanu their new project has launched and already manpower has given.

One viewed they are given disaster training on Dhaka as they have no training centre in Chittagong. The training was for three days. He strongly felt training is required in this arena.

One key informant viewed training is so crucial to disaster management. Training excels skill of a person and it is very much required to DM. Sometimes it is seen that various NGOS re giving training in different manuals. They themselves prepare their manuals. As such ambiguity and confusion creates. For this reason NARRI creates unique training manuals to be followed by its partners NGOs. CDMP also prepare a manual to give training in DMC, UDMC and Union DMC members through NILG.

Application of Acquired knowledge

There are evidently differences between trained and non trained person. Training sharpens the skills. Most of the respondent stressed on the significance of training. But training should be done in uniformed way.

CPP volunteers and Red Crescent volunteers are very much adroit than other people involved in search and rescue operation. They are making differences in disaster management. Whenever a disaster took place skilled manpower is very much required for operation. In all phases of disaster trained make sense viewed by NGO representatives.

Leadership

In disaster management process leadership is very vital. Lack of leadership, having all necessary arrangements, makes the total process futile. Leadership is measured through contingency planning, risk reduction activity and teamwork.

Contingency Plan

Contingency planning aims to prepare an organization to respond well to an emergency and its potential humanitarian impact. Developing a contingency plan involves making decisions in advance about the management of human and financial resources, coordination and communications procedures, and being aware of a range of technical and logistical responses

No UDMC has filed any contingency planning. But two of the UDMC has prepared a disaster management plan of disaster.

Risk Reduction Activity

The responsiveness of the UDMC is praiseworthy. The UDMC generally they are not doing any risk reduction activities in regular basis. It's mainly done by the NGOs working with disaster. But one NGO representative said they are doing this whenever they have project.

One UNO reported that "Due to our responsiveness and quick evacuation activity no people died in cyclone Roanu in Sitakundu Upozila." It's really great news and satisfaction for UDMC.

NGOS are doing various risk reduction activities to aware people. They have done awareness raising program to sensitize people about disaster. Generally they teach people what to do in emergencies, where to keep their valuable things, what necessary things they take with them, the significance of warning signal etc.

In the time of Roanu UDMC with the help of other NGO they were taking various risk reduction activities including aware them about Roanu, shifting them to shelter house etc.

Teamwork

The teamwork situation is seems pretty good. All works are done synchronically. From pre to post disaster all work are done good. After getting the signal of Roanu UDMC members conducted meeting and set up a control room. Different officers were given duties to various unions. In consulting local Chairman's and NGOs news disseminating kicked off. People were warned about signal and they try to motivate them to take the shelter house. Sometimes peoples were resistant but eventually they shifted to the shelter house. All the works are done because of good supervision.

After disaster phases, relief and rehabilitation work were done in a coordinated way. UDMC and NGOs working together in relief and rehabilitation work.

One UNO viewed "Lastly we faced cyclone Roanu. In our station we worked a lot. Everything is synchronized and well managed. In our upozila Sitakundu none died. After getting the news of cyclone, we disseminated it as soon as possible. Tried to motivate people to take shelter in shelter house. Make prepare the volunteers. After the disaster with the help of the NGOS made a list of victims and verified them for not overlapping and then distributed the most effected people."

Network

Network is the arrangement of connecting people and system. In this study there are two indicators network such as coordination with other agency and partnership.

Coordination with other agency

Coordination with other agency is good. Relation between Government body and NGOs seems positive. All NGOs were accepted the relationship with government body is very good. In every month they conducted NGO meeting. In all their work they continuously take support from the Uno office. One NGO representative said "We have good term with government body. Any time we can reach easily and comfortably."

Our functions are monitored by them. In Roanu time we and local administration jointly addressed the real victim list and distributed as per. The lastly faces disaster their Roanu coordination is proven pretty good. Some said there are problems in other upozila but in their area it is good.

One private business organization reported that they have good tie with the BGMEA and government.

Partnership

Relation among NGOs is also good. They coordinately work with other agency. One respondent said "We have very good relation among ourselves operating in this Upozila. Differ prevails in high level". Now a days NGOs have to take a Government project through bidding. So a competition prevails. When everyone bided problem occurs. But this is not reflected in field level .

Sometimes projects are done in partnership with some agencies. One NGO representative reported that "Relationship is pretty good among us. Tube wail setting, latrine renovation, irrigation in pond etc previously done by BRAC but now Uddipon is operating this on their behalf".

4.4 Conclusion

This fourth chapter primarily concerns with the data collected from the field. This data mainly collected from the interview with the UDMC, Non Government Development Organization and Private business organization and in depth interview with the key informants. This qualitative data is sketched and highlighted in accordance with variables. The later chapter expressed the findings and analysis of collected data.

Chapter Five

Findings

5.1 Introduction

The findings chapter is the fifth chapter of this study. The chapter primarily focuses on answering second research question. The collected data from interview illustrate here. In the first part of this section findings about the existing capacity of Government organization, Non Government Development Organization and Private business Organization is expressed and analyzed.

5.2 Findings

Bangladesh has achieved greater expertise on disaster management. .Upozila disaster management committee plays a pivotal role in disaster risk reduction and overall management in upozila by coordinating the functions of various organizations working on disaster.

5.2.1 Government Organization

Salient findings of this study on government organizations capacity is as follows

Skin deep knowledge about policy

The UDMC member has a slight knowledge about the policy. Most of cases, the researcher found very few of them seen the policy. Most of them urge that they heard about it. The most interesting matter is that although they have a skin-deep idea about disaster management policy but they unknowingly implement various parts the policy.

Responsiveness is spontaneous

Meeting of UDMC generally is not held except the signal. As soon as they get the signal they become aware. Its because of upozila has a lot of meeting to conduct on priority basis. Another problem is resource constraint. Sometimes it's found to conduct the Upozila disaster management committee meetings along with NGO meeting. But whenever disaster comes they even meet at 12 am at night. The effectiveness of UDMC is undoubtedly praiseworthy with some small drawback. Although, the meetings aren't held frequently, but the committee become hyper effective in disaster time. This kind of spontaneous attitude makes Bangladesh is a role model in disaster management. The responsiveness of Bangladesh is highly acclaimed and effective. With the same or more magnitude of cyclones the number of total death is much less.

No fixed resource allocation

Indeed Upozila has no resource has its own on this regard. Their role is primarily coordinating and managing. During emergency time they get emergency fund from the Ministry or district administration. There is also a significant observation here. One case found in coastal area that in time of Roanu the chairman himself stayed in Dhaka and the upozila couldn't disburse the money among dire need. It happened because recently by a circular of Ministry of Disaster Management and relief made Upozila chairman as chair of upozila disaster management committee in lieu of UNO. That respective UNO reported that now Upozila chairman pressured him to sign a false voucher of 1.5 lakh taka but he denied. Sometimes thus resource is unutilized and process is hampered in negligence of leaders.

Unified and continuous training is absent

The training facility of UDMC is not up to the mark. There is no uniform training for UDMCs. Training depends on fund and project. Whenever the NGO gets fund they arranged it. In

government level in some upozila they also conducted some but some UNO s working there for year reported not to take part any training. There is a synergy of arranging a long term effective training for UDMC.

Preparedness and planning

None of the UDMC s visited formulated any preparedness or contingency planning which is vital. This side they have to be upgraded. In some area with the help of CDMP a local leading NGO develops a Upozila Disaster Management Plan. This is a detailed plan. But this needed to be extended and formulated all over the country. But now the CDMP has stopped operating . Coordination between Upozila and Union disaster management committee is indispensable for effective management process as some places this relationship is not well tuned.

Partnership is proven good

It is seen that the relationship with government and other NGOs working in disaster management is pretty well. This is strong success strength of disaster management of Bangladesh. There is a good causal tie between them. In all phases of disasters they are working as a team. From pre disaster to during and after disaster rehabilitation work Government and NGOS are working collaborate. After the Roanu , in order to give relief and avoid duplicity every NGO approved the list form UNO.

Effective Team work

Under the supervision and monitoring of UNO, NGOs worked on various area and check the list to avoid duplicity on relief distribution in Roanu. Sometimes local political leaders influence on NGO officials to give more relief to their area. UNO have to handle the matter on

basis of urgency/and priority. Not only between GO and NGO relationship among NGOS working in grass root level is seen well without some exception. Under the leadership of UNO the all are like a team member. And the teamwork is pretty well. In all phases of emergency management the role of UNO is very crucial.

Not only the government and NGOS has a close relation but they have a causal and effective partnership. And their combination of work made the process successful. Everyone's role is vital and complementary.

Risk reduction activities by UDMC are not prominent except disaster time and NGO driven program based. As soon as , they got news about the signal they become effective and dissemination the news to local people.

Ahead from Contingency planning

The aim of Contingency planning is to respond well to an emergency and its potential humanitarian impact. Developing a contingency plan involves making decisions in advance about the management of human and financial resources, coordination and communications procedures, and being aware of a range of technical and logistical responses. No UDMC has filed any contingency planning. But two of the UDMC has prepared a disaster management plan of disaster.

Leadership seems another key tool to in management process. Weak leadership hampered the overall management. Interviewing with three UDMC, and NGO its apparent that UNO played a crucial role in all(pre, during and post) phases of disaster as he has to play a role of starter and enabler by coordinating all agencies and people.

Satisfaction of respondent is unmixed

People's attitude towards the responsiveness is pretty satisfactory, although it's tough to satisfy all people. In this there is a controversy between victims and UDMC. Some affected people argues not to get proper support whereas UDMC member urged transferring a lot of people to shelter house safely and zero death indicate the success. Both are correct. Indeed in emergency it's really tough job to satisfy all people to scarce limited resources.

From the researchers view the existing capacity of Upozila disaster management committee is capable to implement the policy subject to some small modification of arrangements.

5.2.2 Non Government Development Organization

Bangladesh is sometimes regarded as land of disaster as well land of NGOs. More than 50000 thousands of NGOS are operating all over the country in different issues in different dimensions. They are the partner of development .A lot of NGOs are now working on climate change and disaster management in coastal areas.

Don't aware about the policy

Interviewing with some Non Government Development Organization it reveals that most of NGOs aren't aware of the policy. They heard that a policy has formulated but none have seen it. It is because of lack of their awareness. And the government have-not takes any initiative to popularize it or disseminate knowledge about it. In their training of personnel the head offices also don't make any schedule to get acquainted with the policy.

Activities are program based

NGOs prepared people about disaster by various awareness programs. They are to be aware by various awareness raising program like conducting yard meeting, tea stall meeting. One NGO operated a radio station titled Sagar Giri. This radio station delivered news on disaster. They broadcast the news of general instruction of disaster and signals and what to do in emergency. They also aware the fisherman before going to the deep sea to listen the weather report. This kind of initiatives added a lot to sensitize people. People of coastal area are inherently courageous in nature. Sometimes they ignoring the instructions and goes to the deep sea. For this information and awareness is vital.

Some UNO reported that NGOs are mostly program oriented. NGOs also admit that fact. They only work things within the limit of programs purview. They have strong guidelines and conditions projected from donors. One key informant reported that due to donors strong binding's duplicity arises among the work of NGO. It is seen that various NGOs working in same field with donors   prescription where as many important issues are overlooked.

Sustainability is fund based

The Preparedness and planning initiatives taken by the NGOs are generally fund and program driven. They admit that for this they have some limitation. Some NGOs are now sitting idle on preparedness work as they have no budget allocation on this. After Roanu many NGOs are coming with funds to rehabilitee and support the victims. But during Roanu the number was small. Before Roanu hit all NGOs were disseminating news of disaster to furthest corner by their channels and volunteers.

Political interference and local leaders influence is a great problem for NGO in relief distribution almost all NGOs reported. Immediate after disaster NGOS are making list of

victims for giving supports. The local leaders always try to influence and pressure them to enlist their party man names. Sometimes they try to exclude the opposition party people and make a serious pressure to them. In that cases they takes shelter to UNO. UNO verified the list prepared by NGOs to avoid duplicity and sometimes who are more victimized and affected giving him more aid.

Good tie with Government

The partnership and coordination with government is good and closely tied. From pre to post disaster activities they work very well. There is a very good interaction between them. The relationship among NGOs without some exemption is also seems good.

Intensive training is required

Training is a key factor for skill up gradation. Very few NGOs have setup of training in upozila level Training of the NGO personnel in most cases arranged in Dhaka or divisional regional office. Those who haven't they sometimes use the facility of another by giving a rent. Almost all personnel /staffs are working in this coastal field have training on disaster management. But the period is short and the module is not unified. Again training mostly relies on fund availability and program. Some programs have obligatory training in their TORs. They generally giving training to their staffs, UDMC members, local leaders etc

Political Influence hampered post relief work

NGOS are complaining influence of local leaders in operation. Whenever they prepare a list of flood or cyclone victim, local goons are pressuring them to enter their party men name on list. For this reason the main victims are in problem. They inconsistently pressure to enlist their party man although they are not severely affected .Almost all NGOs complaining about the fact. In that cases they takes shelter to UNO. UNO verified the list prepared by NGOs in order to avoid duplicity. In special cases badly affected people received more aids.

5.2.3 Private Business Organization

Like other economy, Private business organization plays a vital role in ours.   Their investment shapes the economy and helps the GDP goes upward. Along with economic development Private business organization has to play a vital specific role on disaster management. Private sector of our country is flourishing day by day. With the concerning development of this sector they have some responsibility on disaster management.

Dark about Disaster management Policy

Interviewing with them it is interesting to find that they don't know about the disaster management policy and their specific role on policy but they are aware about fire disaster which mainly occurs frequently in garments industry.

Buyer is the main motivation

Our garments industry has experienced some big disaster like Rana plaza , tampaco , Tazrin etc Which are mainly manmade. So with the consistent pressure from the buyer they are committed to make changes to their factories. Talking with BGMEA representatives also reveals the matter .They stressed on working environment of workers.   They have strictly control the monitoring system of BGMEA membership with some specific criteria and inspection system. With the experience of some negative disaster stigma they are now firm for the safety for the sake of their profit.

ACCORD Alliance pressure

Now a day's accord and alliance get attention in this sector. These two are the organization of buyers. They are working for the environment of readymade export oriented garments factories with the consistent pressure of ACCORD, Alliance and apprehension of losing world market takes the matter with great significance. They are now facilitating the Accord and Alliance. They are now providing fire safety training for worker and staffs. They are now arranging regular training program to different factories. Other factories also admitted the BGMEA regular monitoring and supervision on this regard. Interviewing with some factory owners it is evident that they have made a revolutionary change on equipment and environment throughout the year. And its found they are equipped with modern technology devices. But they are mainly concerned about the fire and earth quakes. They not aware naturally but from the consistent pressure from the buyers they trained their personnel. They regularly arrange mock drill for fire and earth quake and trained to fire safety tools.

BSR /CSR is hardly found

The situation of CSR or BSR is not satisfactory in Bangladesh. Bangladesh Bank issued a guideline of BSR for all banks and financial institutions for "humanitarian relief and disaster response; widening of advancement opportunities for disadvantaged population segments with support in areas of healthcare, education and training; 'greening 'initiatives arresting environmental degradation, and so forth" (Bangladesh Bank2008).

A fewer number of corporations are showing commitment to BSR beyond profit making and compliance with regulation. The findings also suggest that most of the business organizations engaged in BSR have designed their BSR initiatives in line with government regulations. The banking and financial institutions follow the regulatory instructions of the central bank. Some business organizations focused mainly on the philanthropic deeds such as distributing, food and clothes to the poor and old-age people, donating some computers to the schools, arranging free health care clinic and the like. The big corporate and export oriented organizations intend to create their reputations among the wider national and international audience through the engagement in popular and visible BSR initiatives. (Sk. Tawfique)

CSR in DRR activities is absent

CSR expenditure in Disaster Risk Reduction is a mandate of Disaster Management Policy of Bangladesh. The factory owners and business leaders hardly expend on it. Consulting with them it reveals that they prefer spend the money on philanthropic   ways (School/College donation, scholarship sometimes in a big disaster happen they prefer to give a handsome amount on prime ministers relief fund). Some arrangement they are compelled to change in their factory for buyer's pressure. Some UNO   viewed that   when big disaster hit the local business some time give alms on their own.UNO sometimes seeks their help therefore they responded.

So there is big room of improvements on this area. This area has so potential and if they properly play the role disaster risk reduction work will enhance hence capability of this sector increases obviously.

5.3 Conclusion

In fine, it is revealed from the research that government organization (Upozila Disaster Management Committee) and Non government development organizations are playing a crucial role in disaster management. Their existing capacity also well enough to implement the policy hence they are unknowingly unconsciously implementing some part of policy. But the role and capacity of private business organization which are complementary yet not functioning acordingly. Though some remarkable improvement achieved in garments industry for working environment and safety but it is not spontaneous rather from the consistent pressure of buyers and apprehension of losing market. But CSR expenditure on disaster risk reduction is not satisfactory.

Chapter Six

Conclusion and Recommendations

6.1 Introduction

The last chapter is titled as conclusion and recommendations. The first chapter commence with introduction of the study along with background of the study research questions, objectives, rationale, methodology and scope. The second chapter depicts literature review , theoretical orientation and analytical framework of the study. The third chapter explore the present disaster management system and policy existing in Bangladesh. Chapter four explores data presentation. reflected data are collected through interviews with GO,NGO ,private business organization and key informants. The next chapter highlights the key findings of the study and lastly this chapter ends with conclusion and recommendations.

The capacity of Bangladesh in disaster management is really remarkable and praiseworthy. The country is may be surrounded by many capacity shortage and resource constraints but in this area her capacity to crisis management is exemplary. This study tries to identify the applicability of this policy in current institutional system and formulation background to follow the international framework and guidelines. It mainly tries to answer two research questions. The policy is a very standard policy preparing in the light of international framework. The policy mainly prepared in the light of Hyogo Framework for Action and SAARAC Comprehensive Frameworkm on disaster management principally. All the priority areas of these frameworks are also encompasses in this policy entirely. Importance is given on Sustainable Development Goal and finished MDG and UNFCCC.

Among current structure of disaster management institutions operating in Bangladesh, the study focused in Upozila disaster management committee's capacity in implementing the

policy along with Non Government development organization and private business organizations. The study finds that the practitioners have skin deep awareness about the policy. The current capacity of Upozila disaster management committee seems good amid various constraints but not up to the mark. Their current structure is capable to implement the policy subject to some modification of arrangements. The Non government development organization is also operating well and capable to implement although their sustainability depends on donor fund. But the private sectors have to walk a long distance. There is a gap here to be filled for better management.

The study mainly focus on Upozila disaster management committee as a unit of analysis as among government institutions. But there are more specific government organizations. The capability of union disaster management committee, district disaster management committee and other government organization are not considered here. The capability of these organizations is also vital for implementation this policy. This area is uncovered too. Besides the among private business sector role mainly the role of RMG is analysed here. There is an opportunity of further implication research on these areas.

6.2 Recommendations

While conducting this research a lot of recommendations have come from the interviewees and from key informants' side which are integrated and accumulated here.

- Regular up gradation/update of this policy is urgently required. This policy was drafted in 2012 and published on 2015. So with this long gap many things has changed .So experts suggesting on continuous update.
- Training form government part should be increased and rigorous. Some UNO working for one year and haven't get training, The same scenario is also for Union Parshid

leaders. There is a synergy of proper and continuous training for UDMC.

- There is lack awareness and training on this policy among the practitioners. Training module should accumulate this policy for disseminating this policy.

- Community based disaster management system should be introduced.

- Role of medical practitioners in overall disaster management process is neglected. Arrangements should be made more room for doctors.

- Disaster insurance which are very much popularized in developed world is absent in our country. Due to disaster a lot of damage took place. But no one to give security. If this system can be introduced loss of poor people can be mitigated. Government cant alone do it without the help of other NGOs and private sectors. So combined effort should be taken to introduce this project at least on pilot basis.

- Most of the NGOs are working in Flood preparedness and cyclone. But earth quake, which can be a vital threat for our country. NGOs have to work in this area.

- Introducing Incident management system is mostly in black and white. This system to should be established and make functional.

- BSR and CSR activities required to be popularized. This can be a great help for risk reduction and to mitigate post disaster rehabilitation.

- Make room and motivation for scientific research on disaster Management.

- Designated post creation in Upozila level for disaster management in lieu of PIO. Besides disaster PIO has to busy with other various developmental works. Disaster background officers should be included here. This will strengthen the overall capacity.

- A committee should be formed by the government to monitor to overview disaster situation like overlapping, corruption, mismatching and effective monitoring.

- Sustainability of the NGOs required to be ensured.

- Volunteer group formation is project based. Initiatives needed to taken arrange training for volunteer.

- Union disaster management committee should be more prioritized and focused.

- Superstation and prejudice among people barred volunteers to shift them to shelter house. Programs should be taken to aware and sensitize people.

- Sometimes its seen that in vacation more than hundreds of people died on road accidents. Political clash also take away a lot of lives. Man made this new but fatal incidents should also be addressed.

- International and regional networks of disaster should be strengthening.

References

Abu Reza Md. Towfiqul Islam, Anjum Tasnuva, Md. Tanziul Islam, Md. Rezaul Haque - Management Approach to Disaster Scenario in Bangladesh: An overview - published at: "International Journal of Scientific and Research Publications (IJSRP), Volume 4, Issue 3, March 2014 Edition".

ADPC. 2000. Community Based Disaster Management. Trainer's Guide. Asian Disaster Preparedness Centre, Bangkok.

ADPC,2007 Current status of disaster reduction, institutional arrangements and potential for national platforms for disaster reduction in 3 South and South East Asian countries, Asian Disaster Preparedness Centre, Bangkok.

Ahmed, A.U., 2008. Assessment of Vulnerability to Climate Change and Adaptation Options for the Coastal People of Bangladesh, Practical Action, Bangladesh, Dhaka, 40 p.

Babu,S.H and Sengupta.D,2006. Capacity Development as a Research Domain: Frameworks, Approaches, and Analytics, 2033 K Street, NW, Washington, DC 20006-1002 USA

C. Emdad Haque and M. Salim Uddin (2013). Disaster Management Discourse in Bangladesh: A Shift from Post-Event Response to the Preparedness and Mitigation Approach Through Institutional Partnerships, Approaches to Disaster Management - Examining the Implications of Hazards, Emergencies and Disasters, Prof. John Tiefenbacher (Ed.), InTech, DOI: 10.5772/54973

CDMP, 2009. Endowed Wisdom: Knowledge of Nature and Coping with Disasters in Bangladesh. Comprehensive Disaster Management Programme, Dhaka.

CEGIS, 2006. Impacts of Sea Level Rise in the Southwest region of Bangladesh, Center for Environmental and Geographic Information Services (CEGIS), Dhaka, p. 90.

DDM, 2013. Disaster Management Act 2013, Directorate of Disaster Management

(DDM), Government of the People's Republic of Bangladesh (GOB), Dhaka.

DDM, 2015, Disaster Management Policy 2015, Directorate of Disaster Management

(DDM), Government of the People's Republic of Bangladesh (GOB), Dhaka.

DDM, 2013. Draft HFA Progress Monitoring Report, 2013. Department of Disaster Management (DDM), Ministry of Disaster Management and Relief, Government of the

People's Republic of Bangladesh, Dhaka.

DFID (2011a). Defining Disaster Resilience: A DFID Approach Paper. DFID. https://www.gov.uk/government/

DMB, 2010. National Plan for Disaster Management, 2010-2015, Disaster Management Bureau (DMB), Ministry of Food and Disaster Management (MOFDM), Government of the People's Republic of Bangladesh (GOB), Dhaka.

Ernst, Michael J., Islam M. Faisa l, Gerard J. Gill, and Muhammad Taher. Bangladesh Comprehensive Disaster Management Programme: Mid Term Review 2007

IFA,2005, Institutional Capacity in Natural Disaster Risk Reduction: A Comparative Analysis of Institutions, National Policies, and Cooperative Responses to Floods in Asia, Japan

ISDR (International Strategy for Disaster Reduction)Living with Risk: A Global Review of Disaster Reduction Initiatives. Geneva; (2004). http://www.unisdr.org/eng/ about_isdr/bd-lwr-eng.htm., 2004.

Haque, C. E. Perspectives of Natural Disasters in East and South Asia, and the Pacific Island States: Socio-economic Correlates and Needs Assessment. Natural Hazards (2003). , 29, 465-483.

IPCC, 2007. Climate Change 2007: Impact, Adaptation and Vulnerability. Contribution of Working Group II to the 4th Assessment Report of the Intergovernmental Panel on Climate Change. Summary for Policy Makers, Intergovernmental Panel on Climate Change (IPCC),Cambridge: Cambridge University Press.

Kay, M., T. Franks, and S. Tota. 2005. Capacity Needs Assessment Methodology and Processes. Paper presented at the Workshop on Capacity Development in Agricultural Water Management, Moscow, 2004. Published by Food and

Agriculture Organization, Rome.

Kelly, P.M. and W.N. Adger (2000): Theory and practice in assessing vulnerability to climate change and facilitating adaptation. Climatic Change, 47, 325-352.

Bijoy, M R and Chakroborty, T ,R 2013 An overview on gaps and opportunities of Disaster Management in Bangladesh managing climate induced disasters, NCC,B Secretariat, 29 Ring Road, Shyamoli, Dhaka-1207.

Maplecroft (2010). Big economies of the future - Bangladesh, India, Philippines, Vietnam and Pakistan - most at risk from climate change [onl ine] . Avai lable at : <http://maplecroft.com/about/news/ccvi.html>

MOEF-UNDP, 2005. National Adaptation Programme of Action, Bangladesh, Ministry of Environment and Forest (MOEF), Government of the People's Republic of

Bangladesh (GOB), and United Nations Development Programme (UNDP), Dhaka.

MOFDM, 2010. Standing Orders on Disasters (revised from 1998 version), Ministry of Food and Disaster Management (MOFDM), Government of the People's Republic of Bangladesh (GOB), Dhaka.

UNFCCC, 2014. COP 20 Outcomes, available at UNFCCC website, accessed in December 14, 2014.

UNISDR (2008). Linking disaster risk reduction and poverty reduction: good practices and lessons learned. UNISDR.http://www.unisdr.org/we/inform/publications/3293

UNISDR, 2011. HFA Progress in Asia- Pacific Regional synthesis Report, 2010-2011, United Nations International Strategy for Disaster Risk Reduction (UNISDR), Geneva.

http://www.wri.org/sites/default/files/uploads/wrr_case_study_bangladesh_comprehensive_disaster_management.pdf

http://www.ifrc.org

Annexure

Annex -1   Interview schedule for Upozila Disaster Management Committee

Name ……………………………………………………………………

Designation……………………………………………………………..

Instructions: The following written interview format contains questions of a research on **"A study on Disaster Management Policy of Bangladesh: Institutional Capacity Enhancement".**The findings gathered from this written type of interview will be incorporated into an academic research paper. Any information provided here will be kept confidential and used only for academic purpose. You are encouraged to provide honest answers. Thank you for your cooperation.

1. How many disasters have you faced during your work here?
2. Have you seen The Disaster Management Policy 2015?
3. How do you evaluate the capability of UDMC?
4. Do you think that UDMCs are well equipped?
5. Please mention the existing resources

   Physical,

   Financial and

   Logistics

   6 . Do you think more resources strengthen its function? If yes, then mention?

   7. Please tell me about the training of the members/stakeholders? /Have they got adequate training   or need more?

8. How do you evaluate role of trained person's capability/performance in disaster management?

9. Have you formulated any preparedness planning? If yes please mention.

10. Have you drafted any contingency planning?

11. Please tell about the coordination system with other agencies?

12. Please mention partnership strategy with other developmental agencies working in disaster.

13. Please mention the team work situation in last faced disasters?

14. How can you evaluate the relationship structure among the stakeholders engaging in this field?

15. Are there any guideline for the volunteers?

16. Do you think that peoples are satisfied with your performance?

17. What risk reduction activities you have   taken?

18. Besides these what constraints you have faced in disaster management?

19. What is your suggestion for better disaster management?

Annex-2 Interview schedule for Non Government Development Organization

Name…………………………………………………………….

Designation…………………………………………………………..

1. Have you seen the disaster management policy 2015?

2. How do you evaluate the role of UDMC is disaster?

3. Please mention your organizations relation with government body/UDMC?

4. Do you think this interaction is effective? if no why?

5. Please tell me about the partnership with GO and NGO?

6. Please mention the training policy of your organization? (training facility, scope..)

7. Please mention the co-ordination system with GO and other NGOs in disaster?

8. Please mention relationship among the NGOs ?

9. How can you mention the overlapping?

10. What risk reduction activities have you taken ?

11. Besides these what constraints have you face.

12. What are your suggestions for better management?

Annexure-3

Annex-3 Interview schedule for Private Business Organization

Name ……………………………………………………..

Organization ……………………………………………..

Designation……………………………………………….

1. Tell me about your risk reduction activities?

2. What existing resources you have to combat disaster?

3. Have you go through   the Disaster Management Policy 2015?

4. What are the guidelines from your trade organizations?

5. Tell me about your CSR program.

6. Does any part of CSR expenditure focus on disaster risk reduction?

Annexure-4

Annex-4 Questionnaire for the Key Informant Interview (KII)

Instructions: The following written interview format contains questions of a research on **"A study on Disaster Management Policy of Bangladesh: Institutional Capacity Enhancement".** The findings gathered from this written type of interview will be incorporated into an academic research paper. Any information provided here will be kept confidential and used only for academic purpose. You are encouraged to provide honest answers. Thank you for your cooperation.

Interview schedule for key Informant

Name ………………………………………………….

Designation……………………………………………….

Organization………………………………………………..

1. Have you read the Disaster Management Policy 2015, particularly the fourth section (institutional capacity enhancement)?
2. How do you evaluate the role of UDMC?
3. What is your view about the role of NGOs?
4. How do you explain the interrelationship between GO, NGO and Private Business Organization?
5. How do you explain the role of training in disaster management?
6. How resources (physical, financial and logistics) are linked to institutional capacity of disaster management?
7. Please tell me about the significance of networking and partnership among the institutions.
8. Is anything missing in this policy related to institutional capacity enhancement?
9. Do you think that this policy is fully implementable?
10. What will be probable implementation challenges?
11. What is your overall assessment about the policy?