
DISASTER MANAGEMENT AT THE LOCAL LEVEL IN BANGLADESH

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INTRODUCTION

Cyclone cause extensive human, economic or environmental losses. This loss and damage in manifolds exceed the ability of the affected coastal community. Therefore, it is argued that it is a function of the disaster risk process and results from the combination of disaster, conditions and insufficient capacity to reduce the potential negative consequences of natural disaster.¹

Therefore, it is advised that understanding a coastal community's perceptions and assessments are important in creating successful implementation of coastal disaster management programs. Keeping this mind, Mitchell (1988) also suggested that the development of effective disaster management programs requires cooperation and exchange of experiences between disasters affecting the community (Marfai et al. 2007, cited by Gulsan, 2008).² Hence, community-coping methods should be supported and guided by local governments to make disaster management effective. Also, it is stressed that providing easy accesses to disaster relief and rehabilitation by local governments should be made a priority consideration.

In this article I am going to discover how local government and community affect implementation of disaster management in the coastal areas in Bangladesh.

Why Bangladesh as a Case in my Research?

Bangladesh is the country fighting against different kinds of natural disaster since its independence in 1971. The country has been subjected to frequent natural disasters in many forms, particularly cyclonic disaster.

¹ International Strategy for Disaster reduction (ISDR) (2004). Terminology of Disaster Risk Reduction; the Millennium Ecosystem Assessment (2005). Ecosystems and Human Well-Being: Current State and Trends: Findings of the Condition and Trends Working Group, Island Press: Washington, D.C.; and United Nations Environment Programme (UNEP). 1996. Glossary of Environmental Terms.

² Gulsan Ara Parvin, Fumito Takahashi and Rajib Shaw (November, 2008). "Coastal Hazards and Community-Coping Methods in Bangladesh" Journal of Coastal Conservation, Vol. 12, No. 4, pp. 181-193 Published by: Springer Stable, URL: <http://www.jstor.org/stable/40301488> (Last accessed on: 24/08/2013 08:38).

The coastal zone of Bangladesh is covering 47,211 km². The length of the coastal area is 710 km. in size and this is of recent origin formed out of the process of sedimentation.³ According to Miyan (2005), most parts of the coastal areas are low lying which can be subject to inundation even with low intensity of the cyclone.⁴ However, there are some reasons for devastating cyclone in the coastal areas in Bangladesh. These contributing factors are such as; shallow coastal waters, high tides, favorable cyclonic track, and densely populated low-lying land in the country.

A high number of casualties in Bangladesh take place during the cyclone. It is worth to mention that 70 million people live in areas where just below 10 meters above the sea level.⁵ Ali (1999) observed that the coastal region of Bangladesh is characterized by: (i) a vast network of rivers, (ii) an enormous discharge of river waters heavily laden with sediments, (iii) a large number of islands in between the channels and rivers, (iv) Northward converging Bay of Bengal towards Bangladesh, (v) a very shallow area all along the coast, particularly in the central region, and (vi) a submarine canyon, named Swatch of no Ground, in the western region.⁶

It appears that geographical location and geomorphologic conditions of the coastal areas have made Bangladesh as one of the most vulnerable cyclonic disaster country in the world. On the other hand, the coastal region is associated with high economic value with income generation. Furthermore, it is also an attractive place for the whole world because of the coastal areas that is endowed with the largest mangrove forest Sundarbans with rich biodiversity.

Furthermore, a frequent natural disaster like cyclone is the key factors to the incidence of poverty in Bangladesh. The protection of vulnerable people is a legal responsibility of any government, but with limited resources and poor capabilities, it becomes a big challenge in the country. Therefore, I was encouraged to identify some major challenges of disaster management at the local level in Bangladesh.

³ PDO-ICZMP (2004). *“Living in the Coast: Problems, Opportunities and Challenges”* Working Paper WP011, Dhaka. PP. 13-15, Cited from *“Climate Change: Global Risks, Challenges and Decisions”* IOP Publishing, IOP Conf. Series: Earth and Environmental Science 6 (2009) 352029 doi:10.1088/1755-1307/6/5/352029

⁴ Miyan, M. Alimullah (no date). *“Cyclone Disaster Mitigation in Bangladesh”* Available at www.fao.org/.../11285-03611be0ad43d80eefb3de4a8ee2e1fd0.pdf (Last accessed on 10 May, 2013).

⁵ Brahic, Catherine (28 March, 2007). *“Coastal Living – a Growing Threat”* New Scientist Environment.

⁶ Ali, A. (1999). *“Climate change Impacts and Adaptation Assessments in Bangladesh”* Climate Research, Special 6, 12(2/3), PP. 109-16.

Theoretical Framework

Communities need to be prepared for natural disasters because these can strike anywhere, regardless of location. Communities that are well trained culturally socially and psychologically are better prepared and effective in responding to the aftermath of disasters. However, the previous research in this area indicates that community capacity building through effective utilization of social capital is crucial in disaster management programs (Mathbor, 1997, 1999, 2004; Mathbor et al., 1993).⁷

Community-led disaster management may be regarded as part of a broader shift from government to governance.⁸ However, governance is the term given to ‘*the structures and processes by which societies share power*’.⁹ A key feature of the governance approach is the political decentralization of decision-making downwards to local institutions. In principle, this ensures accountability as it gives a voice to local people and their representatives.¹⁰ Rajan (2002) points out with respect to environmental governance, a variety of actors have begun to strengthen capacity in sectors where it has been absent traditionally. The purpose is to promote transparency and accountability, and to promote governance frameworks in which decision-making power is democratic and where possible power is delegated to local contexts and institutions.¹¹

Although many sectors are undergoing decentralization in these days, structural transition in disaster management in the developing world can pose particular challenges. For example, under the governance agenda, it is assumed that power and capacity should be held by the state. Keeping in mind, Veron et al. (2006: 1937) argue that ‘effective decentralizations paradoxically

⁷ Mathbor, Golam M. (2007). “*Enhancement of Community Preparedness for Natural Disasters: The Role of Social Work in Building Social Capital for Sustainable Disaster Relief and Management*” International Social Work, 50 (3): 357–369, Sage Publications: Los Angeles, London, New Delhi and Singapore.

⁸ Herbert-Cheshire, L. and V. Higgins (2004) “*From Risky to Responsible: Expert Knowledge and the Governing of Community-led Rural Development*” Journal of Rural Studies, 20(3). pp. 289–302.

⁹ Lebel, L. et al. (2006) “*Governance and the Capacity to Manage Resilience in Regional Socio-ecological Systems*” Ecology and Society 11(1). Available at- <http://www.ecologyandsociety.org/issues/view.php?sf=22> (Last accessed on 11 February 2013).

¹⁰ Batterbury, S.J. and J.L. Fernando (2006) “*Rescaling Governance and the Impacts of Political and Environmental Decentralisation: an Introduction*” World Development, 34(11). pp. 1851–1863.

¹¹ Rajan, S.R. (2002) “*Disaster, Development and Governance: Reflections on the Lessons of Bhopal*” Environmental Values, 11(3). pp. 369–394.

depends on strong centralized government institutions'.¹² As Johnson and Nelson (cited by Coombes, 2007) observed in a research findings that where local institutions have been successful, it is usually because they are working within the supportive framework of the state.¹³ Elaborating the idea, King (2008: 488) argues that 'a greater emphasis on community risk management and mitigation inevitably requires a much fuller engagement of government at the local level'.¹⁴ When it comes to disaster management at local level, Rajan (2002) believes that disaster management in most parts of the Third World countries are characterized by lack of expertise within the state.¹⁵

Decentralization is found in almost all countries irrespective of the form of government. Smith (1967) pointed out that decentralization, in a unitary form of the government, contains two complementary and interrelated practices. One is devolution, which is known as political decentralization. Under this system, the authority to make certain decisions in some spheres of public policy is delegated by law to the local level government.¹⁶ Hence, the term local government is a by-product of decentralization.

Another is deconcentration within the bureaucracy. This is called as administrative decentralization. Administrative decentralization is something delegated to the public servants working in local areas scattered across the country. The purpose is to make administrative decision on behalf of central administration and responsible in varying degrees for government policy within their respective areas.¹⁷

As an example from the developed world, Italian Law No. 142/1990 empowers regional governments to produce plans and programs for disaster risk management. It is a process in the country's disaster management procedures, which are known as the 'Augustus System.' Article 12 of the country's basic Emergency Preparedness Law, No. 225/1992, instructs regional

¹² Veron, R., G. Williams, S. Corbridge, and M. Srivastava (2006) "Decentralised Corruption or Corrupt Decentralisation? Community Monitoring of Poverty Alleviation Schemes in Eastern India" World Development, 34(11). pp. 1922–1941.

¹³ Coombes, B (2007) "Defending community? Indigeneity, self Determination and Institutional Ambivalence in the Restoration of Lake Whakaki" Geoforum, 38(1). pp. 60–72.

¹⁴ King, D. (2008) "Reducing Hazard Vulnerability through Local Government Engagement and Action" Natural Hazard, 47(3), pp. 497–508.

¹⁵ Rajan, S.R. (2002) "Disaster, Development and Governance: Reflections on the Lessons of Bhopal" Environmental Values 11(3), pp. 369–394.

¹⁶ Smith, Brian C. (1967). "Field Administration: An Aspect of Decentralization" London: Humanities P.

¹⁷ Ibid

governments to set up administrative units and structures for the coordination of emergency work. On the other hand, devolution legislation was enacted over the period 1997–2003 that charges the regions to coordinate and support local civil protection efforts at all stages of the ‘disaster cycle’.¹⁸

As a result of the legislation, the government of Lombardy in Italy has developed a sophisticated emergency management and civil protection structure. Its headquarters is located in central Milan. It maintains a state-of-the-art emergency operations center and real-time links with a wide variety of Italian and European hazard monitoring agencies. The regional civil protection organization works closely with other emergency commands.¹⁹

Lombardy has both passed and subsequently refined its own regional civil protection law. Article 9 of the Law No. 16 of May 22, 2004 charges the regional government to institute, promote and support emergency preparedness training and education. The law also offer courses and by assisting other bodies; schools, training institutes, universities, provincial administration, local government, and volunteer associations to set up their own training schemes.²⁰

On the other hand, local administration refers to administration away from the capital city of a country and scattered throughout the country. Local administration refers to a bureaucratic form of decentralization in which the authority to make administrative decisions are delegated to the civil servants working in the field (Smith: 1967: 1-3). In addition, the local level of an administrative agency refers to “*the personnel stationed away from its headquarters in the country, to carry on its work of the numerous sub-centers within the easy reach of the people*”.²¹ However, disaster management activities of government are the tension that arises between central control and devolution. The balance between these two opposing tendencies varies considerably from one country to another.²²

¹⁸ David Alexander; Luca Bramati; and Massimo Simonetta (2009). “*Emergency Preparedness Training and Education in Lombardy Region, Italy: Survey of Supply and Demand*” Natural Hazards Review, Vol. 10, No. 3, August 1, 2009.

¹⁹ Ibid

²⁰ Ibid

²¹ Obaidullah, A. T. M. (1999). “*Bangladesh Public Administration*” Dhaka, Bangladesh: Academic Press & Publishers Limited, p. 96.

²² Alexander, David (2007). “*Disaster Management: From Theory to Implementation*” JSEE: Spring 2007, Vol. 9, No. 1 / 39.

The local government has a vital role in tackling disaster management problems. It is an essential ingredient for sustained disaster management efforts. Hence, disaster management should be dealt with as policy issues across a relevant field of government in any country. On the other hand, subsidiarity theory points out that an effective local government is needed for the best way of achievement of success in any public policy. So, the idea of subsidiarity model on the role of local government can be a solution for disaster management in the coastal area.

Hypothesis: Effective role of the local government and community participation may foster to the implementation of disaster management.

RESEARCH APPROACH

The study used the qualitative approach to ensure an in-depth analysis of how the implementation of disaster management system working at the local level in Bangladesh. It is a logical model that enables the researcher to make conclusions about relationships between variables in the study. In my study, I used a qualitative approach because only qualitative study gives me a comprehensive description of disaster management at the local level in Bangladesh.

Yin (2003) stresses the multiple sources of data collection to establish a chain of evidence. For my study, therefore, I used a mixed sources; documentation and interviews; to gather relevant data and support statements. So, both primary and secondary sources were used for data collection.

I used field data as a unique opportunity of the primary sources of data collection. In my study I used interviews as primary sources. According to Yin (2003), an interview is an essential source of information. And it guides conversations rather than structured queries. For conducting a case study research, interview serve as an important and relevant source of information. In the interview I used an open-ended questionnaire for my research, since I was needed qualitative data from the study area. Interviews enable the respondents to express their views and ideas how disaster management in the local areas are working in Bangladesh.

As the first group of respondents, I talked with the officials from government organizations such as Department of Disaster Management (DDM), Division of Environment (DOE), and National Environment Management Council (NEMC). These groups of respondents allowed me to get detailed information on the Cyclone Disaster Management (CDM). These respondents were

selected, because they are working for disaster assessment to the government. The second group of respondents was from representatives of local government and field level government officials such as Upazila²³ Nirbahi Officer (UNO), Upazila Agriculture Officer, Upazila Fisheries Officer, Upazila Statistical Officer. In fact, they are the local stakeholders working under the direction of central government during the period of disaster. These were selected because they are the members of committees for disaster management in their respective area. The third group of respondents was communal people. They were selected randomly from the population from the six (6) western coastal zone in Bangladesh. These categories of respondents were selected because participation of local communities is important in achieving successful disaster management in the coastal areas in Bangladesh.

Table-1: List of Interview Respondents in My Study

Category of Respondents	Number of Respondents	Level of Interviewees
Government Officials at Field Level and Representatives from Local Government	24	Representatives of Local Government (5), Upazila Nirbahi Officer (3), Upazila Agriculture Officer (5), Upazila Fisheries Officer (5), Upazila Statistical Officer (6),
People from Coastal Area	40	Who have experiences of cyclonic disaster
High level officials of Disaster Management in Central Level	14	Officials from Disaster Management Bureau (5), Officials from Division of Environment (6), Officials from the National Environment Management Council (NEMC) (3)
Professional Expertise	27	Officials from Voluntary and Non-Government Organizations (10), Union Disaster Management Council (UNDMC) (10), Employees of the Cyclone

²³ The districts of Bangladesh are divided into sub-districts called Upazila.

		Preparedness Program (CPP) (7),
Total	105	

Source: the Author

I also collected data from secondary sources as supplements to primary data. So, this source of data also plays a crucial tool in cross checking primary data. Furthermore, this source helped me to gather background and general information about various aspects of cyclonic disaster management in the local areas in Bangladesh. Secondary sources for my research basically include the documentary sources such as disaster reports, related books, newsletter, journals, thesis and relevant publications on cyclonic disaster and disaster management in Bangladesh. I also consulted annual reports of different disaster related NGOs, electronic and print media, public documents and relevant websites. Furthermore, I also analyzed National Environment Policy (1992); Disaster Management Act, 2012; Comprehensive Disaster Management Programme (CDMP) report; International Strategy for Disaster Reduction (ISDR) report and Integrated Coastal Zone Management (ICZM) report in Bangladesh. On the other hand, I consulted the Lombardy and subsidiarity model of Governance in the context of Italy.

Disaster Management at the Local Level in the Coastal Areas in Bangladesh

Due to climate change in Bangladesh, most of the coastal areas are at risk from natural disasters. These areas are ecologically sensitive and climatically vulnerable because a process of erosion and accretion is continued.²⁴ The vulnerability of coastal population to cyclones called for various disaster management programs. However, structural mitigation measures like cyclone shelters, killas, coastal embankment, improving housing conditions and non-structural mitigation measures like coastal afforestation, public awareness, community preparedness, local level

²⁴ Islam, Md. Rabiul (2012). “*Vulnerability and Coping Strategies of Women in Disaster: A Study on Coastal Areas of Bangladesh*” Bangladesh Journals OnLine, Arts Faculty Journal July, 2010-June, 2011, Vol. 4 Available at http://www.bdresearch.org/home/attachments/article/nArt/A2_12938-47251-1-PB.pdf (Last accessed on 10 May, 2012).

contingency planning, social mobilization, emergency response, relief, and rehabilitation etc are included during cyclonic disasters.²⁵

It is important that the causes of vulnerability of cyclone are fully discussed in the local level and addressed in the disaster action plan that determines vulnerability. Over the last decade, it is found that disaster management in Bangladesh has experienced new concepts and approaches. Major concepts and approaches have switched from technology-based hazard control to community-based disaster risk management, which aims to reduce human vulnerability and build resilient communities at the local level.²⁶

Cyclone as natural disaster is always a local problem. It is felt that it is an axiomatic principle is that the remedy in terms of protection and relief must be applied at the local communities.²⁷ Recent decades have seen significant increases in the number and severity of cyclone in Bangladesh. Community, therefore, deems it necessary to devote greater attention to disaster management and in particular to the process of planning to manage disaster at the local level.

It is now generally agreed that coastal areas which are significantly at risk of cyclone should be required disaster plans at the local level. Some experts argue that all local government must have such plans irrespective of whether or not they have endured natural disasters in the past.²⁸

The following section discusses to analyze the role of local community and/ or government to cope with cyclonic disaster in the coastal areas in Bangladesh.

Top-Down Management Approach

Local level disaster management is found to be the most effective ways of reducing vulnerability of cyclone. It is commonly perceived that the first line of disaster response should be at the local level, where preparedness measures can substantially reduce the impacts of cyclonic disaster. In reality, local government efforts in Bangladesh lack effectiveness, since they are not supported

²⁵ Sarkar, M.A Quaiyum (Fall, 2009). “*Assessing the Efforts of NGOs in Cyclone Disaster Management in Bangladesh*” A Dissertation for the Degree of Master in Disaster Management, Postgraduate Programs in Disaster Management (PPDM), BRAC University, Dhaka, Bangladesh.

²⁶ Ministry of Food and Disaster Management (2005), Government of Bangladesh.

²⁷ Thomas E. Drabek and Gerard, Hoetmer, eds., (1991). “*Emergency Management: Principles and Practice for Local Government*” (Washington, DC: International City Management Association, 1991).

²⁸ Alexander, David (2005). “*Towards the Development of a Standard in Emergency Planning*” Disaster Prevention and Management, Vol. 14, No. 2, pp. 158-175, Emerald Group Publishing Limited.

and treated as an important part of any integrated disaster management strategy.²⁹ If there is a monitoring plan that should be implemented with close observance at the local level. Hence, bottom-top approaches seem applicable in local coastal communities in the country.

Recognizing the need for effective disaster management, the failures of a top-down management approach have become evident in Bangladesh. This approach has been unsuccessful in addressing the needs of vulnerable coastal communities at the local level. A better understanding of natural disaster might bring the fact that cycloner-related damage and loss has been due to the exponential increase in the coastal areas. Therefore, numerous scholars and stakeholders feel that it is important to adopt a new strategy at the local level that directly involves vulnerable coastal people in the planning and implementation of disaster mitigation, preparedness, response, and recovery measures.³⁰

Now it seems clear that the bottom-up approach has received wide acceptance because it considers local coastal people. This approach promotes local coastal people as the judges of their own risks and vulnerability and capable of making their own decisions regarding their well-being.

Therefore, looking for a new approach led to the Community-Based Disaster Management (CBDM) program to the coastal areas in Bangladesh. The aim of CBDM is to reduce vulnerabilities and to strengthen people's capacity to deal with cyclonic disasters. A thorough assessment of the coastal community's exposure to cyclone and an analysis of their specific risks and vulnerabilities are the basis for disaster policy and programs that can reduce disaster risks. Because a coastal community is involved in the whole process. Therefore, there is a greater likelihood that policy and programs will be addressed with appropriate interventions at the local level.

²⁹ Rahman, Hakikur (no date). "Community Based Disaster Information Management System: Perspective Bangladesh" General Papers, the Regional Workshop on Best Practices in Disaster Mitigation, Sustainable Development Networking Programme, Bangladesh. Available at- <http://www.adpc.net/audmp/rllw/themes/gen-bd.pdf> (Last accessed on 10 May, 2011).

³⁰ Haque, Emdad and Uddin, Salim M. (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.), ISBN: 978-953-51-1093-4, InTech, DOI: 10.5772/54973, Available at- <http://www.intechopen.com/books/approaches-to-disaster-management-examining-the-implications-of-hazards-emergencies-and-disasters/disaster-management-discourse-in-bangladesh-a-shift-from-post-event-response-to-the-preparedness-and> (Last accessed on 13 June, 2012).

Community participation at the local level is not focused on disaster management processes in the coastal areas in Bangladesh. Therefore, it is argued that the local coastal community should be able to gain directly from improved disaster management. This in turn will contribute to a progression toward safer conditions and to the improved security of livelihoods and sustainable disaster management in the coastal areas in Bangladesh.³¹

Lack of Interest and Capacities of Local Government

An initial challenge is often the lack of interest and capacities for disaster management by local governments in Bangladesh. This is often found a reflection of weak local government capacities in the country. It has already been mentioned that decision-making process in the case of disaster management follows top-down approach. Hence, the challenge here is to build up a disaster management process where coastal people could participate, decide and plan their own actions together with the local government authorities based on their local capacities and resources.

Experts argued that that roles and responsibilities of the local government in the coastal areas in Bangladesh is not enough as what it should be. People working with local government only know that their responsibility is to distribute relief and some rehabilitation work after a cyclone. Furthermore, in most cases they do not have any knowledge or training on the activities of disaster management process. It is also observed that local government does not have any idea about how to involve the coastal people and to utilize the local resources for disaster management.

Therefore, it is difficult for local government to have any pragmatic plan for disaster management after cyclone. They are also not able to take the long term initiative to solve the problem. As a consequence, they cannot reduce the vulnerability among the coastal community caused by cyclone. Furthermore, in a study it is found that local government does not have enough information regarding the population like as how many are elderly, pregnant women, children ill people and disable people are in their areas.³²

³¹ Ibid

³² “Disaster & Disability: The Role of the Local Government to Minimize the Community Risk during the Disaster” Shahidul Haque, Chief Executive, Social Assistance and Rehabilitation for the Physically Vulnerable (SARPV), 3/8/, Block-F, Lalmatia, Dhaka-1207, Available at- http://www.bezev.de/fileadmin/Neuer_Ordner/Literatur/Bibliothek/Tagungsdokumentationen/Humanitaere_Hilfe/Role_of_the_local_governmetn_on_disaster.pdf (Last accessed on 27 December, 2013).

On the other hand, many good disaster management approaches suggested by local government experts in Bangladesh but those have not been integrated into a national approach. However, there is a huge debate and discussion about common challenge faced by local government during a cyclone. It is observed from the field data that there is no clear cut authority of the local government to efficient service delivery during a cyclone. Keeping this situation in mind, US Ambassador Moriarty stressed the importance of decentralization to local governments to ensure a smooth recovery and reconstruction effort after a natural disaster.³³ Hence, the active commitment and leadership of a local government is important for the implementation of any local disaster management measures to deal with.

More specifically, many disaster plans have not been fully implemented in the local-level government, such as the Union Disaster Management Committees (UDMCs), is not supported with the adequate authority and resources. There is another challenge that the widespread corruption is also used as an excuse to not give funds to the Union Parishad (UP). On the other hand, in many cases, a comprehensive disaster management measure takes long time to fully implement at the local level. To find out the reason, it is observed that the leadership of the local government is particularly crucial to implement the disaster management program throughout the process.³⁴

As the most immediate local service provider and interface with citizens, local governments are naturally situated in the best position to raise citizens' awareness of disaster risks and to listen to their concerns. Even the most sophisticated disaster management measures (such as early warning systems) may fail, if coastal communities are not properly informed and engaged by local government. Likewise, coastal community preparedness measures are sometimes as effective as costly local government in reducing casualties from disasters, and local governments should play a central role in community education and training.³⁵

³³ Embassy of the United States of America Public Affairs Section, Tel: 880-2-883-7150-4, Fax: 880-2-9881677, 9885688, E-mail: dhakapa@state.gov, Website: <http://dhaka.usembassy.gov>

³⁴ (2010). "*Local Governments and Disaster Risk Reduction*" Published by the United Nations secretariat of the International Strategy for Disaster Reduction (UNISDR), Geneva, Switzerland, March 2010 © United Nations, 2010.

³⁵ Ibid

A local government is required to institutionalize disaster management in its day-to-day operations, including development planning, land use control and the provision of public facilities and services.³⁶ Due to its closeness to affected people, a local government is better positioned than a national government to develop and experiment new tools and techniques, applying them on disaster management.³⁷

Local governments in Bangladesh often lack sufficient knowledge about disaster risks and vulnerabilities of their coastal communities as well as appropriate disaster risk reduction measures.³⁸ While local governments are responsible for a variety of critical infrastructure development at the local level such as water, drainage, sewage, schools, community clinic, hospitals, investments. The purpose is to make local people resilient to disaster risks, although in many cases it is reported that the activities of local government are not visible and sometimes neglected. Therefore, local government should properly address disaster risks, based on sound risk assessment in the coastal areas in Bangladesh.³⁹

After a cyclone, the government of Bangladesh is always tempted to focus on short-term recovery works. However, in theory, disaster management should turn into a very effective way to include local governments and communities with long-term disaster management efforts.⁴⁰ In reality, local communities in Bangladesh are skeptical of participating as stakeholders in the disaster planning process, because they feel that their reflections on the planning process will not be considered at the end.

On the other hand, a key tool to overcome the recovery stage is the establishment of the Local Disaster Risk Reduction Fund to which Union Disaster Management Committees could immediately make funding proposals to the government after a cyclone. Experts stressed that local governments and communities could see a clear path from risk assessment to funding proposal is an important step in securing confidence in the disaster management process.

Another challenge is ensuring transparency of the disaster management process and accountability of local governments to the coastal communities they represent. The establishment

³⁶ Ibid

³⁷ Ibid

³⁸ Ibid

³⁹ Ibid

⁴⁰ Ibid

of Project Implementation Committees to implement the disaster action plans has gone a long way in addressing these concerns, as its members are drawn from a diverse section of the community.⁴¹ Hence, local communities should be at the centre of disaster management plans and programs after a cyclone. They could be considered as the first victims of natural disaster and the first respondents.

A further challenge is that local governments in Bangladesh have not always felt a special need to pay attention to vulnerable and marginalized coastal groups. During the fieldwork, there is a view among local governments that this is a job for NGOs. They also feel that if they are involved in disaster management activities, then it will hamper their ability to govern the Union Council as a whole. Therefore, it is stressed that prioritising the needs of vulnerable groups in the community disaster risk assessment process has gone some way towards rectifying this, but understanding of this needs improvement in the coastal areas.⁴²

Old-aged thinking of distributing relief materials after a cyclone is existed among the people of Bangladesh. Many of them think that it is the responsibility of government and/or voluntary agencies to provide all the relief facilities to the disaster victims. Therefore, to introduce the disaster risk reduction culture and practices takes time to replace the longstanding relief culture in Bangladesh.⁴³

Hence, in case of improvement of disaster management programs and projects in the future, disaster risk assessment process at the coastal areas should be ideally led by the local government. It is observed in the field work that the capacity for this does not yet exist within all local government in Bangladesh. On the other hand, during the field investigation I found that theft, robbery, hijacking, sexual harassment of women and other unusual events during disaster is very common in the coastal areas in Bangladesh. Local government should take strong initiatives to avoid the unexpected events during disasters.⁴⁴

⁴¹ Ibid

⁴² International Centre for Integrated Mountain Development (ICIMOD) (2007). “*Disaster Preparedness for Natural Hazards: Current Status in Bangladesh*” A consultancy report by Khurshid Alam and Masroor-ul Haq Siddiqi, International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal, June 2007, Hill Side Press (P) Ltd.

⁴³ Rahman, Muhammad Fazlur (2008). “*Interim National Progress Report on the Implementation of the Hyogo Framework for Action*” Dhaka: DMB.

⁴⁴ Ibid

The hierarchical administrative set-up is not eager to accept the opinion of illiterate coastal people but wise and experienced local people in disaster management policy cycle.⁴⁵ This indicates the reluctance of the officials of local government to take into consideration of people's perception about disaster. As a consequence, it leaves little scope to get inputs from the local people in the participatory decision making process in the coastal disaster management in Bangladesh.

Untrained Volunteerism in Disaster Management

There are several reasons why the quality of disaster management may be in need of improvement in the local level in Bangladesh. First, there is a general consensus in this field that emergency management is not yet a fully-fledged profession (Crews, 2001, cited by Alexander, 2005). It is slowly moving in that direction, but it is still common to find that emergency planners lack adequate training and specialized knowledge. Second, inefficiency in emergency planning can mean mismatches between resources and procedures on the one hand and chronic emergency needs on the other. Any inefficiency in emergency management will be paid for a high casualties and damage.⁴⁶ Because it fails to anticipate and tackle foreseeable contingencies. Hence, poor quality emergency planning is at the root of such inefficiency. Third, emergency planning tends to be regarded as an end in itself, not a continuous process, yet if it is allowed to be static it will rapidly become dysfunctional.⁴⁷ Fourth, planning may be informal to the extent that responsibilities and procedures are vaguely defined and poorly articulated (Dynes, 1998, cited by Alexander, 2005).⁴⁸

Ensuring disaster risk reduction at the community level meant set up volunteer groups, and providing information and training. In many countries, volunteers within the community are an essential part of the disaster management. They play an important role in the eve of disaster. They might work in all sectors of the disaster management field, including technical rescue, fire

⁴⁵ Ahmed, Salehuddin (1994). "Key-note Paper on Disaster Preparedness and Management" P. 37, SAARC Workshop Report, Edited by Fazlul Bari, Kamaluddin Ahmed and Begum Nurun Naher, Comilla: BARD.

⁴⁶ Foster, Harold D. (1980). "Disaster Planning: The Preservation of Life and Property" New York: Springer-Verlag.

⁴⁷ Perry, RW and Lindell, MK (2003). "Preparedness for Emergency Response: Guidelines for the Emergency Planning Process" Disasters, 2003; 27(4): PP. 336-50.

⁴⁸ Alexander, David (2005). "Towards the Development of a Standard in Emergency Planning" Disaster Prevention and Management, Vol. 14 No. 2, 2005 pp. 158-175, Emerald Group Publishing Limited.

suppression, medical and paramedical response, evacuation management, logistics and transportation.⁴⁹

When major disasters strike, there is commonly a ‘*convergence reaction*’ (Auf der Heide, 2003, cited by Alexander, 2010)⁵⁰, in which people assemble to the affected area. The influx may include large numbers of people who wish to help with the relief effort (Wenger and James, 1994, cited by Alexander, 2010).⁵¹ For example, when floods affected the Italian city of Florence in November 1966, killing 34 people and doing immense damage to art treasures, huge numbers of young people, armed with nothing but bed rolls, sleeping bags and boundless enthusiasm, arrived to join in the relief work. Given the wet and dirty conditions in which they worked, the mass media nicknamed them *gli angeli del fango*, ‘the mud angels’.⁵²

But emergency response is a complex matter in which a broad training is required (Paton, 1996, cited by Alexander, 2010).⁵³ Participants as volunteers must acquire a common language and culture, as one of the principal problems is not just to know one’s own role during disaster. At the same time, participants have to be familiar with the roles of others participants. Volunteer with many kinds of specialized knowledge will be required to interact and work alongside one another in emergency situations (Neal, 2000, cited by Alexander, 2010).⁵⁴

There is required the training of volunteers in order to ensure interoperability between groups, organisations and services (Walia, 2008, cited by Alexander, 2010).⁵⁵ Generally, a tripartite scheme is appropriate. Hence, this should consist of a basic induction course to be taken by all volunteers, specialized courses designed to teach particular skills and a managerial course intended for people who supervise the work of volunteer groups during emergency situations in disaster.⁵⁶

During the fieldwork it is observed that there is no effective training system to prepare disaster response teams in the coastal areas in Bangladesh. Community volunteers do not have access to

⁴⁹ Alexander, David (2010). “*The Voluntary Sector in Emergency Response and Civil Protection: Review and Recommendations*” International Journal of Emergency Management, Vol. 7, No. 2.

⁵⁰ Ibid

⁵¹ Ibid

⁵² Ibid

⁵³ Ibid

⁵⁴ Ibid

⁵⁵ Ibid

⁵⁶ Ibid

training quickly and efficiently respond to a crisis after a cyclone. Therefore, it is always argued that community-based awareness raising programs should be strengthened at the local level. Seminar, symposium and workshop will also have to be arranged in the coastal areas to create awareness among the coastal community which is absent now. Furthermore, it is also necessary to ensure the participation of women in the community-based awareness raising programs.

Disaster management techniques should be included in school, college and university level curriculum which is currently absent in Bangladesh. Besides, short course, diploma and training programs have to be introduced both in urban and rural areas,⁵⁷ although many individual communities have their own coping system to face cyclone. Department of Disaster Management (DDM) conducted a research on the issue. This is the first milestone in this regard. In the year 2003, DDM organized 06 (six) workshops for Community Leaders on disaster preparedness & indigenous knowledge on coping mechanism.⁵⁸

Limited Devolution of Power to the Local Government

There are policy announcement including the disaster Plan regarding the strengthening of the local governments in Bangladesh. They in fact should have a very active and independent role as far as disaster management is concerned, because during and immediately after disaster, coastal communities meet mainly the local government representatives. But, in the context of Bangladesh, the local governments have no autonomy either in decision-making or financial matters to execute plan.

It is also observed that the national government strictly controls the local governments as kind of a vote bank for the party in power. This is the reason why the winning political party or any coalition after forming the government always initiates elections at the local government levels in Bangladesh. This is a serious pitfall in managing disaster at the local levels. But local government should have the main thrust area for disaster management in the coastal areas.

⁵⁷ Islam, Md. Rabiul (2012). “*Vulnerability and Coping Strategies of Women in Disaster: A Study on Coastal Areas of Bangladesh*” Bangladesh Journals OnLine, Arts Faculty Journal, July, 2010-June, 2011, Vol. 4 Available at http://www.bdresearch.org/home/attachments/article/nArt/A2_12938-47251-1-PB.pdf (Last accessed on 10 May, 2012).

⁵⁸ Disaster Management in Bangladesh, Country Report 2003, Available at <http://www.adrc.asia/countryreport/BGD/2003/page2.html> (Last accessed on 15 February, 2013).

On the other hand, another challenge is being faced by the coastal community at the local level about access to information to cyclone. Coastal people's access to information about disaster management is limited; as a consequence, this hinders implementation of plans at the local level. This indicates that local coastal people do not have information about plans developed at national level. There is also no effective communication strategy to disseminate them.

Lack of Participation of Local Communities

There is a common perception that political culture is conducive to vested interests in Bangladesh. This situation actually hampers consistent and effective disaster management in Bangladesh. It is also observed that democratic institutions like local government are underdeveloped. As a result, the low level of participation of the coastal people in disaster management diminishes their self-help capabilities, although the Community Based Disaster Preparedness Program in Bangladesh has scope in very limited areas in the coastline. They have some community-based disaster risk reduction programs in the coastal areas, by mobilizing local communities to become involved in the process. These programs are to equip cyclone shelters and building people's capacity to respond to a cyclone.

Hence, disaster management should be faced with proper plan of action and programs through which active participation of affected coastal people has to be ensured. It has been stressed by experts during my field work that participation of the coastal people should be in an attempt to reduce the damages of property. It has also been suggested to shorten the sufferings of local people as well as enhance the sustainable disaster management process in the coastal areas in Bangladesh.

Maskrey opines (1989: 1, cited by Ben, 1993) that disasters are generally considered as a coincidence between natural hazards (such as flood, cyclone, earthquake and drought) and conditions of vulnerability. There is a high risk of disaster when one or more natural hazards occur in a vulnerable situation.⁵⁹ Hence, disasters can be interpreted as "*the extreme situation which is implicit in the everyday condition of the population*" (Baird et al. 1975; Jeffrey 1980,

⁵⁹ Ben, Wisner and Henry R. Luce (1993). "*Disaster Vulnerability: Scale, Power and Daily Life*" Geo Journal, Vol. 30, No. 2, Vulnerability, Hunger and Famine (June 1993), pp. 127-140, Published by: Springer, Stable URL: <http://www.jstor.org/stable/41145733> (Last accessed on: 24/08/2013 09:10).

cited by Ben Wisner and Henry R. Luce 1993).⁶⁰ Disasters “bring to the surface the poverty which characterizes the lives of so many inhabitants” (Hardoy and Satterthwaite 1989: 203, cited by Ben Wisner and Henry R. Luce 1993).⁶¹

It is observed that disaster management programs at the local level do not ensure that the coastal communities understood the benefit of disaster management. It is also not being practised by them about the related activities of cyclone risk reduction continuously. Hence, it is important to strengthen coastal community with active participation by the decision making and monitoring process at the local level. It could be done through the acquisition of knowledge and skills about the preparedness of disaster intensity (Sumathipala 2002, cited by Islam, et.al, 2001).⁶²

The active participation of vulnerable coastal community in decision-making and in the daily life of the community helps to ensure that disaster plans are effective at the local level. Participation of them can positively impact on the health, well-being and safety of the vulnerable coastal residents. Therefore, special attention should be given to ensuring that all coastal people are able to participate in decision-making process at the local level. Even further it should include those groups at the local level with specific needs and/or those who are marginalized and lacking a voice in decision-making.

Institutions involved with disaster management at the local level are not much careful about the promoting of women leadership initiative. It does not create any opportunity for women in decision-making process in disaster management at the local level. Hence, disaster management strategy should be designed in such a way that supports favorable environment for women. If necessary, massive campaign should be designed and implemented to make local coastal people, especially men, understand that participation of women in disaster management system is essential.⁶³

⁶⁰ Ibid

⁶¹ Ibid

⁶² Islam, Md. Nazrul, Malak, Md. Abdul and Islam, M. Nazrul (2013). “Community-based Disaster Risk and Vulnerability Models of a Coastal Municipality in Bangladesh” Natural Hazards, Springer Science+Business Media Dordrecht 2013.

⁶³ Islam, Md. Rabiul (2012). “Vulnerability and Coping Strategies of Women in Disaster: A Study on Coastal Areas of Bangladesh” Bangladesh Journals OnLine, Arts Faculty Journal July, 2010-June, 2011, Vol. 4, Available at-http://www.bdresearch.org/home/attachments/article/nArt/A2_12938-47251-1-PB.pdf (Last accessed on 10 May, 2012).

Lack of Accountability Programs at Local Level

Though aid dependence is declining in Bangladesh, still a substantial part of disaster management budget comes from foreign aid. Interestingly it is observed that the government's accountability in case of using disaster management fund is upward, towards the donors, rather than downward, towards the local communities. To find out the reason, in a study it is found that such aid dependence naturally places greater pressure on the public agencies to be accountable to donor-set standards.⁶⁴ On the other hand, it is observed that some officials of the national government has blamed on local government officials that local government does not have all of the resources needed to deal with cyclone.

From the above findings it seems clear that maintaining the interest and capacities of local government is a challenge in the coastal areas in Bangladesh. However, disaster management issues are not necessarily viewed as a priority issue among the many challenges that local government face with. In many cases there is a lack of accountability of implementing disaster management programs at the local level. There is also required with a paradigm shift in disaster management, which is now characterized by a focus on top-down implementation approaches.

⁶⁴ Mitlin D, and Thompson J (1995) "*Participatory Approaches in Urban Areas: Strengthening Civil Society or Reinforcing the Status Quo?*" *Environment Urban* 7(1), April, 1995.