Disaster Risk Reduction for the Old People in SIDR Affected Coastal Area: A Case Study of Shoronkhola Upazila

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Abstract

Natural disaster is a common phenomena for Bangladesh. So every year Bangladesh is affected by natural disaster like flood, cyclone, drought, river erosion etc. To manage this events, there are three approaches working together that include a livelihood framework from the bilateral development aid context, community-based disaster management and risk transfer and finance from multilateral development finance institutions. In most of the cases, the government and donor organizations involved themselves with this approaches of disaster risk reduction initiatives without considering vulnerable group. As a result, initiatives taken by the government and donors are not meeting demand of all stakeholders. However, despite the significant efforts of these communities, the vulnerability of many individuals and communities to natural hazards continues to increase considerably. In this article, disaster vulnerability of old people is examined considering special location and context. It has been observed that the old people can not meet their need by themselves and protect themselves from natural disaster.

Introduction

Bangladesh is a low-lying deltaic country in South Asia formed by the Ganges, the Brahmaputra and the Meghna rivers. It is a land of around 145 million people within its 147,570 sq. km territory (DCC, 2006). More than 230 waterways and tributaries have made this country a land of rivers (RIC, 2008).

Bangladesh is one of the most disaster prone countries in the world. The two most common form of hazard that affects the country are cyclone and flood. The Bay of Bengal is the breeding ground for tropical cyclones and Bangladesh is the worst victim in terms of fatalities and economic losses incurred. The global distribution of cyclones shows that only 1% of all the cyclones that form every year strike Bangladesh, but, unfortunately, the fatalities they cause are 53% of the whole world (DCC, 2006). The other form of hazards that cause serious loss in different regions of the country are river bank erosion, salinity, draught, famine (*monga*), earthquake, cold wave, water logging etc. All these are area specific and cause regular damage in different parts of Bangladesh almost every year.

The great floods that suffered Bangladesh in recent past occurred in 1887, 1988, 1998, 2004 and 2007. These floods were caused mainly by the river systems (dominated by three great rivers Ganges, Brahmaputra and Meghna) drain a total area of about 1.72 million square kilometers in India, China, Nepal, Bhutan, and Bangladesh. Only 8% of this area lies within Bangladesh. As a result, huge inflows of water, which Bangladesh has no control, enter the country. At different times and in an unpredictable manner, it has too much or too little water(RIC, 2008).

Study area

Bagerhat is one of the coastal belt districts of southern part of Bangladesh. Total population of this district are 1516000, among them male are 786000 and female are 730000. Among the total

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population of Bagerhat district 69% are poor, 37% ultra poor, 49% landless and 59% small farmers (ICZMP, 2005). Cyclone SIDR caused a huge damage in Bagerhat Zila. It was one of the four (Bagerhat, Pirojpur, Borguna and Patuakhali) worst affected zilas declared by the Government. Within Bagerhat Zila, Shoronkhola was the worst affected Upazila and older people of this area were affected mostly. To explore the disaster vulnerability of the older people, Shoronkhola Upazila under Bagerhat *Zila* has been selected as Study Area (Figure 1). In Shoronkhola, total number of population are 112100; among them male 59360 and female 52740 and the older people who are the target group of the study covers 7.78% of the total population (BBS, 2003).

Objectives and Methodology of the Study

The broad objective of the study is to know about the existing social status of the old people and explore the survival capacity of old people against disaster. The study on the vulnerability assessment of the old people against disaster is conducted on the basis of primary and secondary information. The secondary information was collected from different published documents of government and non-government organizations, who are the pioneers in the field of mitigating disaster vulnerability of the disaster prone areas of Bangladesh. The primary data were collected directly from field survey. The SIDR affected areas of Southkhali, Rayenda, Donsagar and Shoronkhola unions were selected for this purpose. A total of 200 households of older people were selected for the survey. Among 200 old people, 80 were women and 10 were disable women.

Conceptual Framework

Hazard is a potentially damaging physical event, phenomenon or human activity, which may cause loss of life or injury, property damage, social and economic disruption or environmental degradation. Hazards can be single, sequential or combined in their origin and effects. However, most authors agree that hazards, unlike events, always have the potential to cause harm to people, property or the environment.

The probability of harmful consequences or expected losses results from a given hazard to a given element at danger, over a specified time period (IFRC, 1999). In technical definitions, the terms 'risk' and 'hazard' are linked to each other but should be clearly distinguished. For economists and engineers, risk mainly signifies a probability of the occurrence of (negative) impacts and their generated losses. In management terms, 'risk' is also seen as a measure of uncertainty about the achievements of set objectives.

Disaster is a serious disruption of the functions of a society, causing widespread human, material, or environmental losses which exceed the ability of the affected society to cope using only its own resources (Kent, 1994). Disasters are abrupt shocks to the socio-economic and environmental system, involving loss of life and property. In the past, a disaster was seen as a natural event and definition used to include the human aspect by claiming "a disaster generally results from the interaction, in time and space, between the physical exposure to a hazardous process and a vulnerable human population" (Jaspars, 1999). There is no threshold to the extent of events that would count them in or out as 'disasters'.

Conventional Disaster Managment System

In conventional disaster management system, most of the agencies think relief and rehabilitation efforts is the ultimate way to ensure sustainable development (Hugh Goyder et.al. 2006). While the relief based disaster management system is still dominating and Bangladesh also tries to transform it into a comprehensive disaster management model (MoFDM, 2007). Experience shows that earlier efforts did not address the complexity, causes and long term implications of

emergency during disaster. This approach of disaster management is fully disaster oriented, not participatory; it's a top down approach where decision disseminated from higher level rather than community grass root level (MoFDM, 2007).

Few years ago disaster management system of Bangladesh was fully dominated by the traditional approach i.e. relief and rehabilitation (MoFDM, 2007). The disaster management model based on relief and rehabilitation was less effective to reduce the disaster vulnerability of the men, women, children, disable as well as older people because of its nature of disaster management procedure. This model operated only during and after the disaster. But to reduce the disaster vulnerability, it was not effective for all over the year. As a result, huge loss in terms of property, human life, and crop damage increased significantly year by year in the preceding years.

Paradigm Shift

A paradigm is a set of ideas about something (Patricia, 2003). In the arena of disaster management traditional approach focused particularly on relief and recovery has little to redress rising levels of risk. Study shows that total damage to the economy had increased 1,200 million taka in 1954 to 100,000 million taka in 1998 and the number of deaths, have increased from 112 in 1954 to 2,379 in 1988 (Khalequzzaman, 2007). The increasing number of damage and death prove that the traditional approach of disaster management is not working effectively. Thus, the Ministry of Food and Disaster Management (MoFDM), has decided to minimize the gap between planning approach and implementation procedure through adopt a more holistic approach that embraces processes of hazard identification and mitigation, community preparedness, integrated response efforts and where relief and recovery activities are planned within an all-risk management framework that seeks to raise the capacities of communities while lowering their vulnerability to specific hazards through Comprehensive Disaster Management Programme (DMB, 2005).

Background of Disaster Risk Reduction in Bangladesh

One of the worst cyclone which hit coastal area of Bangladesh on April 1991 killed 0.14 million people and property damages were more than two billion US dollars (ADPC, 2003). Huge loss of this cyclone worked as an eye opener for Bangladesh. To reduce the loss in natural disaster, Bangladesh Government established Disaster Management Bureau in 1993. Initially a lot of emphasis was put on emergency relief and rehabilitation. Later the focus was given on community based disaster management and now on disaster risk reduction (DMB, 2005). In this regard, Bangladesh Government has changed the name of the concernrd Ministry from `Ministry of Relief and Rehabilitation' to `The Ministry of Disaster Management and Relief (MDMR)' and now `Ministry of Food and Disaster Management (MoFDM)'. The transformation of the name provides hints of the trends of disaster management in Bangladesh.

Legal and Political Background to Disaster Risk Reduction

Bangladesh government is supportive to the donors, NGOs and other actors and working on Disaster Risk Reduction (DRR) in the country. The Allocation of Business Rules of the Government assigns roles and responsibilities to various ministries of the government, the Standing Order on Disasters (SOD) assigns roles and responsibilities to relevant government agencies as well as to Disaster Management Committees (DMCs) at all levels. The enactment of a disaster management law is currently in progress (DRR, 2005).

Integration of Disaster Risk Management in Development Programs in Bangladesh

Development planning in Bangladesh, where vulnerability to natural and environmental hazards must be taken into account, has addressed risk reduction into some sectoral plans. The National

Water Management Plan underlines the importance of implementing effective non-structural measures to reduce the impact of floods and erosion. Recent policies and plans have recognized the importance of participatory planning that focuses on sustaining people's livelihood (RIC, 2008). The National Environment Management Action Plan (NEMAP) takes into account the disaster management and risk reduction as a vital component. The Integrated Coastal Zone Management (ICZM) program has built-in components to address risk reduction. However, there remains a need to create a holistic and comprehensive risk reduction culture within national policies and strategies for disaster risk reduction.
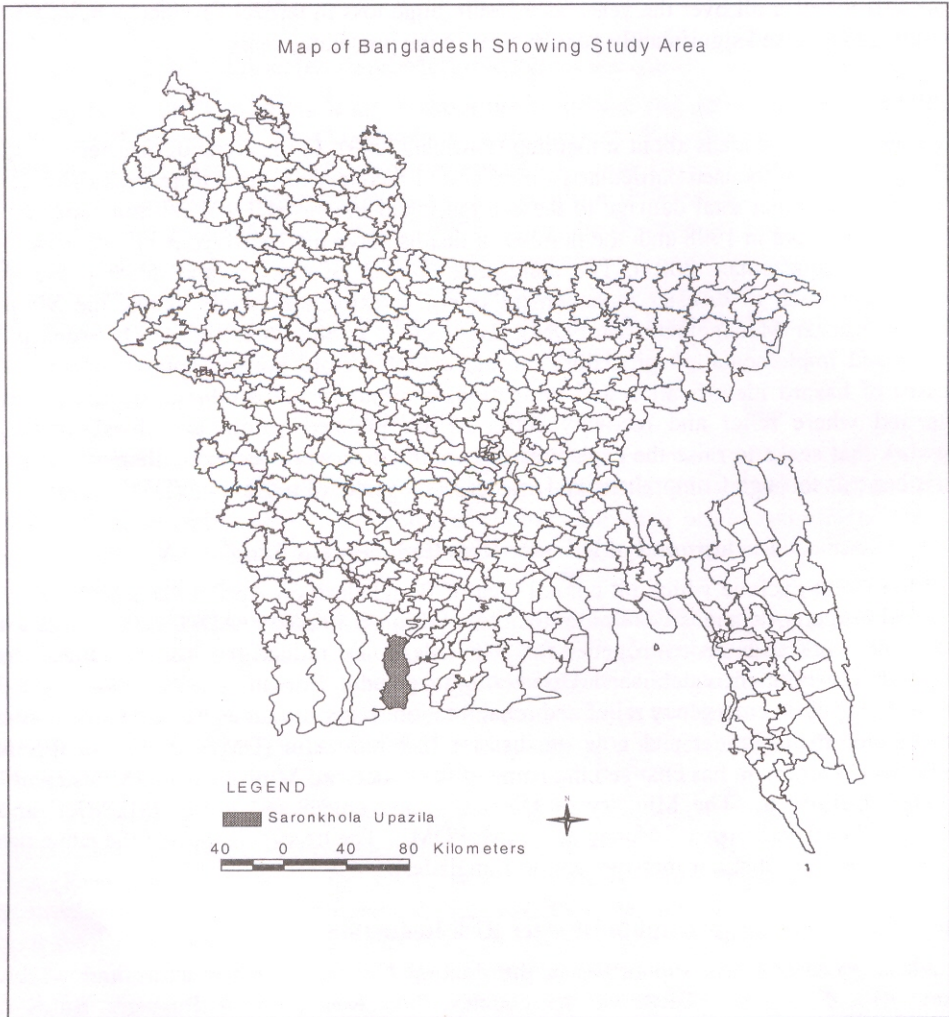
Source: National Encyclopedia of Bangladesh, 2006. Modified by the author, 2010.
Fig. 1: Location of the Study Area

Existing Specific Risk Situation of Old People

Among the different vulnerable groups, special needs of women, children, and disable have been recognized by different disaster risk reduction programs taken by Bangladesh government and as well as different donors. But the old people are still left out from meeting their special needs,

particularly disaster risk reduction matters. The risk situation that the old people are faced with can be understood from the information provided in Figures 2-4.

Change of Power Structure

Power structure of the family and society level has changed in the recent past. Once old people was the decision maker at the family and society levels. Now a days, young people enjoy the power mainly due to change of family structure from joint family to nuclear family, change of economic condition of the families and so on. old people now is no more a part of decision making at the family and society levels. Their scope of work is getting limited day by day and it is resulted due to lack of mobility and remain out of social network. They often are neglected by their family members and even in the society. All these contribute to their low visibilty within the family and society as well. As a result, their special need before, during or after disaster not yet been recognized and no one from them raise voice in this regard.
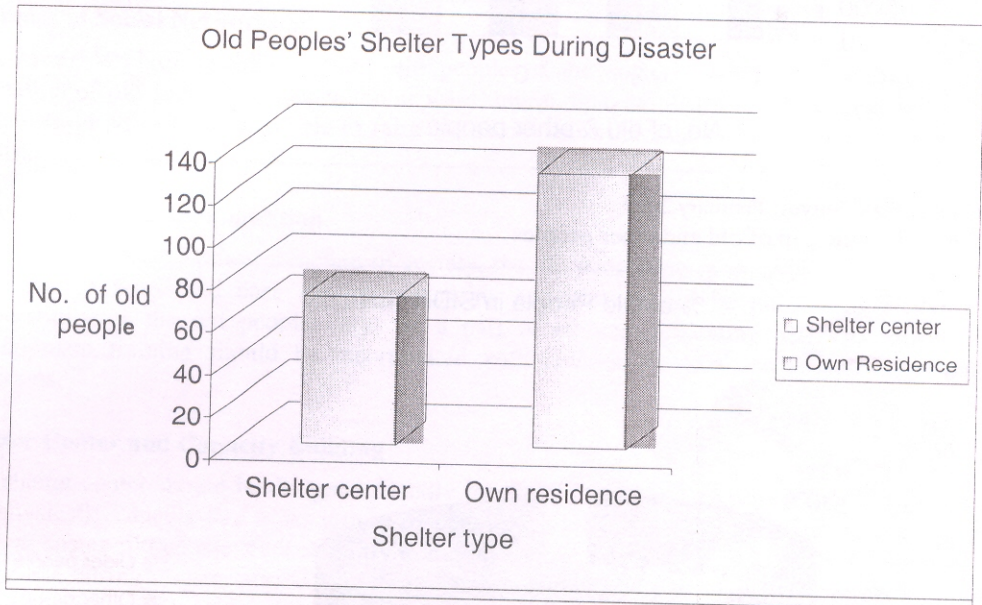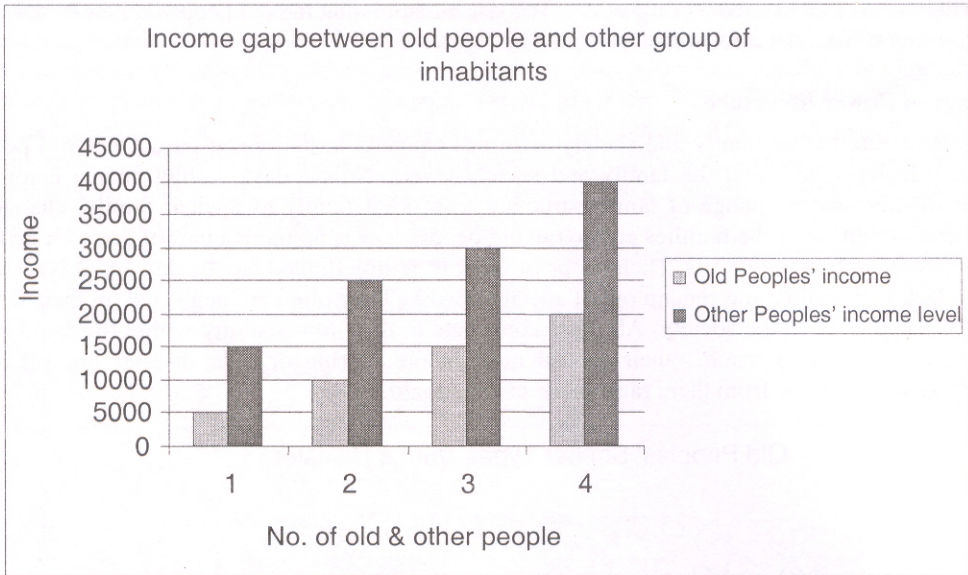

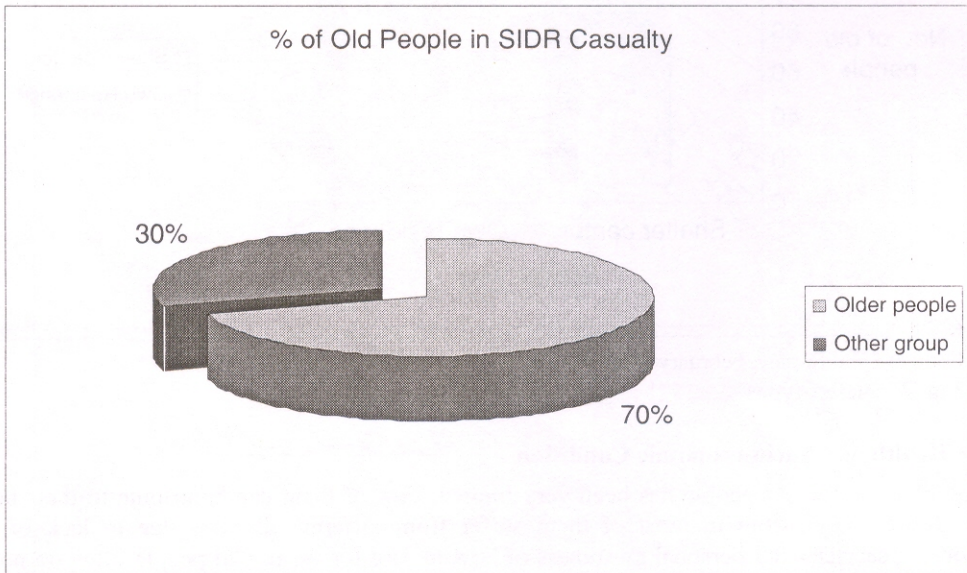Source: Field Survey, February 2009.
Fig. 2: Shelter types

Poor Health and Socio-economic Condition

Scope of work for old people has been very limited. Few of them can contribute to their family expenditure. Apart from it, most of them suffer from different diseases due to lack of both responsive services and personal awareness of how to care for them. Old people often do not use the public health services because of poor service, high cost, and limited information, and instead they resort to spiritual healing, self-care and self-medication without proper guidance. They often suffer physically and economically from preventable or treatable illnesses and conditions, and some are unable to perform even activities of daily living. All these things make them vulnerable.

Source: Field Survey, February 2009
Fig. 3: Income gap of old and other peoples

Source: Field Survey, February 2009.
Fig. 4: Percentage of old people in SIDR casualty

Lack of Awareness of Stakeholders about Vulnerability of Old People

It has been observed from working experience with old people that there is a big gap in understanding of several donors and the concerned ministries of the government in case of identifying the special need of old people. Comprehensive Disaster Management Bureau (CDMP) conducted Community Risk Assessment including landless, women, disable as vulnerable groups

and incorporated all concerns within their plan but left out old people (CDMP, 2007). So the national level DRR planning conducted by Disaster Management Bureau (DMB) which is going to be implemented soon merely have any reflection of old people's special needs and reduction of their specific vulnerabilities.

Recommendations

Stakeholders' Awareness Rising and Advocacy

More national and international organizations should be involved for old people's disaster risk reduction at national and local levels though different risk reduction initiatives including preparation of risk reduction planning, especially for old people. Advocacy program should be introduced by the NGOs and civil societies to incorporate old people's issues at different levels from national to grass root levels.

Increase of Social Networking

The lower level of visibility among old people of the society should be increased through formation of old people's organization at ward, union, upazila, district and national levels. This organization will play a vital role to raise issues of their vulnerability in the forum at different levels.

Enhancing Economic Condition

Due to change in the power structure of society, the old people are in most vulnerable condition. So, different household base income generating activities should be introduced focusing the vulnerability of the old people only. As a part of income generating activity, various skill development training should be incorporated with national to local level skill development programs.

Shelter Center and Capacity Building

The shelter center should be designed friendly for the old people, because most of old people are not physically capable like other groups of people. It's essential to incorporate ramp along with stairs to ensure old people's accessibility in the shelters and separate rooms should be reserved for old people during disaster period. Different capacity building initiatives for the old people should be introduced at the local level through conducting introductory courses on disaster risk reduction. The old people should be able to response by themselves during disaster so that community people may help in the reduction of vulnerability for old people at a significant level.

Reformation of Disaster Management Committee

Existing local level disaster management committee should be reformed in order to create scope for old people to enter in the committees, because existing structure of disaster management committee does not consider old people as the most vulnerable group. So to reduce the old people's disaster vulnerability at a significant level, it's essential to reform existing disaster management committee and create a scope to get their opinion and experience at the same time.

Conclusion

Finally, it could be said that the current top down approach should be shifted rapidly towards bottom up approach to ensure more participation in hazard and risk identification. If we can integrate all stakeholders in a same line that includes government, donor agency, community people, through win win situation then risk identification and risk reduction planning could be

more efficient. Beside this, to ensure sustainable disaster risk reduction, community based organization of old people is to be established and operationalzed by root level old people, while different activities could be incorporated as a regular activity. On the other hand, participation of old people in different disaster management committees from national to local level, will ensure voice of old people in different committees. Though regular occurrence of disaster may still be the common phenomena in Bangladesh, but in-terms of casualty, with such approaches, it might be fewer.

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