

INVOLVEMENT OF WOMEN IN DISASTER ECONOMIC LOSS UPLIFT IN THE COASTAL AREA OF BANGLADESH

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Shantanu Deb Barman, Subrata Sarker, Kartik Chandra Kuri and Md. Shariar Mahmud Chowdhury. (2010). Involvement of Women in Disaster Economic Loss Uplift in the Coastal Area of Bangladesh. Bangladesh Res. Pub. J. 4(2): 147-152. Retrieve from <http://www.bdresearchpublications.com/admin/journal/upload/09159/09159.pdf>

Abstract

The coast of Bangladesh (14.2 million ha, of which roughly coastal brackish waters cover 17%) is the most hazardous coast in the world in terms of the number of people who suffer from various types of environmental hazards every year. Present study was conducted in the Sitakunda Upazilla as this Upazilla is one of the coastal areas of Bangladesh and affected by multiple vulnerabilities of natural disaster. The present study aims to understand involvement of women and men in disaster economic loss uplift in the defined study area. Data were collected by questionnaire interview of communities and then statistically analyzed by using computer based software SPSS (Statistical Package for Social Science) to test the hypothesis that there is no significant difference between men and women in disaster economic loss uplift. Both men and women participate in economic activities to uplift their economic loss. T-test result shows that with out fish catching ($t_{cal}=1.98$, $t_{tab}=1.68$) there is no significant difference between men and women in participation in economic activities to recover disaster financial loss where value for Fire wood collection ($t_{cal} = -.021$), Fish processing ($t_{cal} = 1.21$), Fish marketing ($t_{cal} = 1.30$), Net sewing ($t_{cal} = 1.44$), Laboring ($t_{cal} = 1.23$) and Cattle rearing ($t_{cal} = -1.12$). Tabulated value is 1.68 for all variables.

Key words: Women, disaster, coast, economic loss and Bangladesh.

Introduction

Women are members of the household are the greatest blessings and sources of happiness in a home. In the context of our rural life in Bangladesh, women are regarded as necessary sources of labour for earning money. As the population is increasing, poverty is also increasing. Poverty, a broken or incomplete home offers little stimulation and adversely affects children of fishermen and women (Kosemani, 1995). Bangladesh is a coastal country. 19 districts of this country are in coastal area (Islam, 2004). Coastal people are suffering from different coastal hazards. These areas are highly vulnerable to both natural and man-made hazards and disasters like coastal flooding, cyclones, storm surges, erosion, salinity, arsenic contamination, and pollution, etc. (MoWR, 2005). Disasters arising from natural hazards are a growing global threat affecting

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tens of millions of people every year, with devastating impacts on vulnerable communities in developing countries and high costs to developed countries (IFRC/RC, 1999). The overall trend shows that the number of recorded natural disasters has doubled from approximately 200 to over 400 per year over the past. With almost 20 years of armed conflict and droughts and floods, there is a constant, but increasingly acute, humanitarian crisis in Bangladesh (Biswas, 2009). As the out put of these extreme events, people's livelihood strategy is changing and diversified. Disasters are, in fact, increasing in impact and scope through the combined effects of economic, social, demographic, ideological and technological factors. Greater numbers of people are more vulnerable to natural and other hazards than ever before, due in part to increases in population, but more so to their location in dangerous areas. In fact, disaster risk and losses have dramatically increased, but unevenly so according to region (IFRC/RC, 2003). Coastal disaster (e.g. tropical cyclones, storm surges, coastal erosion and flood) has created significant impact on coastal rural people. These extreme events make the life of coastal community more complicated, keep in risk, destroy property and limit the livelihood options. However, regardless of region, some form of displacement of individuals and communities frequently results from the threat or impact of a disaster. In very graphic ways, disasters serve as indices of the success or failure of a society to adapt, for whatever reasons, to certain features of its natural and socially constructed environment in a sustained fashion (Oliver-Smith, 2002). To minimize the economic loss of natural disaster women are also getting involved with work. About 70% of world's poor are women and related to victim of disaster related hazards (Women Institute). Women are involved with fish marketing, net sewing, tailoring and many other works to uplift their economic loss. The present research work is intended to understand the level of involvement of rural women in Disaster Economic Loss Uplift.

The only hypothesis tested in the study was that:

Ho: There is no significant difference between the involvement of male and female in Disaster Economic Loss Uplift in the Coastal Area of Bangladesh.

Ha=We want to justify, Economic activities for disaster economic loss uplift of male are stronger than female activities.

Materials and Methods

Study Area

The study was carried out in Sitakunda Upazilla. Sitakunda is an Upazilla of Chittagong district and occupies an area of 483.97 square kilometers and exposed with multiple vulnerabilities of coastal disasters. The Upazilla consists of one municipality, 11 union parishads, 61 mouzas and 107 villages (BBS, 2002). Total Population is 274903 where male 55.34%, female 44.66%; Muslim 84.91%, Hindu 14.40%; Buddhist, Christian and others 0.69%. Average literacy is 41.1% where male 49.3% and female 30.6%. Main occupations are Agriculture 15.3%, forestry 2.77%, fishing 3.27%, agricultural laborer 8.61%, wage laborer 2.64%, industry 3.27%, transport 2.84%, commerce 13.88%, service 32.76%, renting house 1.01%, construction 1.01%, others 12.64% (Banglapedia, 2006).

Data Collection

The target population for the study was women of Sitakunda Upazilla who are involved with economic activities. Data were collected through a questionnaire interview, Focus group discussion and participatory observation. Participatory observation offer a good opportunity to get a comprehensive and authentic insight in actual situations of the evaluation topic including "actions, conversations, and physical descriptions" (Gittleson and Mookherji, 1997). The focused group interview consists of a guided in-depth interview of a relatively homogeneous small group of individuals purposefully selected by the researcher

to address a specific topic (Saint-Germain et al, 1993). Fifty-four people comprising 31 males and 23 females were randomly selected for the study.

Data Analysis

Data were analyzed by using computer based software SPSS (Statistical Package for Social Science) those were collected from questionnaire survey.



Figure 1: Sitakunda Upazilla.

Results and Discussion

Socio-Economic Characteristics of Respondents

From the survey it is found that majority of the people were between the ages of 31 and 40 while only 33 percent were between the ages of 20 and 30. These finding shows that most of the children in the area of study were matured enough to be used for labour. The findings further revealed that more males were involved in economical activities than females. As for religion of the respondents, the results indicated that all the two religious groups- Islam and Hindu were involved in economical activities showing that religion may not be a necessary factor for the involvement of the women in economical activities. The results of the study showed that few of the people have no formal education. Most of the respondents were educated up to the secondary school level. Socio economic condition of interviews is shown in table 1.

Table 1. Socio-economic characteristics of interviews

Variables	Frequency	Percentage
Sex		
Male	31	57
Female	23	43
Total	54	
Age		
20-30	18	33
31-40	36	67
Total	54	
Religion		
Muslims	30	56
Hindu	24	44
Total	54	
Education		
Primary	08	15
High school	46	85

Definition of Variables

Following coding scheme was used for t-test.

Variables	Code
Fish catching	1=yes, 0=No
Fire wood collection	1=yes, 0=No
Fish processing	1=yes, 0=No
Fish marketing	1=yes, 0=No
Net sewing	1=yes, 0=No
Laboring	1=yes, 0=No
Cattle rearing	1=yes, 0=No
Sex	1=Male, 0=Female

Here, Sex is dependent variable, Fish catching, Fire wood collection, Fish processing, Fish marketing, net sewing, Laboring and Cattle rearing are dependent variables.

Involvement in fishery activities

Table 2 revealed that men were involved in fish catching, fire wood collection, fish marketing, fish processing, net sewing, cattle rearing and laboring activities. Fish catching is an activity encompassing catching small fish. Fire wood is collected from forest. Both male and female are involved in fish marketing. Some fishes are dried and then stored. In the free time households are busy with net sewing. Most of the house holds have cattle for development of their living style.

Table 2: Involvement of male in Economic Activities (multiple response) (N = 31).

Activities	Highest frequency	Percentage
Fish catching	9	17
Fire wood collection	17	32
Fish processing	12	23
Fish marketing	17	32
Net sewing	30	61
Laboring	16	30
Cattle rearing	10	19

Table 3 provides information about the involvement of women in economic activities in the present study area. Highest frequency were found for fish catching 5, fire wood collection 16, fish processing 12, fish marketing 24, net sewing 12, laboring 5 and cattle rearing 6. Highest involvement found is in fish marketing and lowest are in fish catching and laboring.

Table 3: Involvement of women in Economic Activities (multiple response) (N = 23).

Activities	Highest frequency	Percentage
Fish catching	5	9
Fire wood collection	16	30
Fish processing	12	22
Fish marketing	24	44
Net sewing	12	22
Laboring	5	9
Cattle rearing	6	11

Testing of Hypothesis

The hypothesis of this study is there is no significant difference between the involvement of male and female in disaster economic loss uplift in the coastal area of Bangladesh.

Data those were collected through questionnaire interviews of target people from the present study area were feed up in computer based statistical software SPSS (Statistical Package for Social Science) and then analyzed. T-test was used to test the assigned hypothesis. Result of the test were found for fish catching ($t_{cal} = 1.98$, $t_{tab} = 1.68$), Fire wood collection ($t_{cal} = -.021$, $t_{tab} = 1.68$), Fish processing ($t_{cal} = 1.21$, $t_{tab} = 1.68$), Fish marketing ($t_{cal} = 1.30$, $t_{tab} = 1.68$), Net sewing ($t_{cal} = 1.44$, $t_{tab} = 1.68$), Laboring ($t_{cal} = 1.23$, $t_{tab} = 1.68$) and Cattle rearing ($t_{cal} = -1.12$, $t_{tab} = 1.68$).

T-test results showed that significant difference between the involvement of male and female in fish catching. This activity is not performed dominantly by female children. Other result for fire wood collection, fish marketing, fish processing, net sewing, cattle rearing and laboring does not differ between men and women.

Table 4. T-test for Determining Significant Difference between Involvement of Male and Female in economic activities

Activities	t_{cal}	t_{tab}	Decision
Fish catching	1.98	1.68	Significant
Fire wood collection	-.021	1.68	Not significant
Fish processing	1.21	1.68	Not significant
Fish marketing	1.30	1.68	Not significant
Net sewing	1.44	1.68	Not significant
Laboring	1.23	1.68	Not significant
Cattle rearing	-1.12	1.68	Not significant

Level of significance = 0.05

Conclusion

Disasters are ongoing part of human life and make people lives vulnerable. People are displaced and become poor due to natural disaster. Every people performed some activities to reduce the loss of disasters. Out put of this research indicated the major roles played by male and female role in economic activities to over come the losses the disaster. To reduces the losses after disaster women are involved in many activities which make them self sufficient.

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