

# **RESEARCH ARTICLE**

# THE SOCIO-ECONOMIC CHALLENGES OF RIVER BANK PEOPLE: A STUDY ON KAWARCHAR AREA, BARISHAL DISTRICT

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Manuscript Info

## Abstract

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The challenges of riverbank people in Bangladesh are often considered to socio-economic vulnerabilities. Riverbank people face multiple forms of social and economic losses and are seen to be extremely marginalized after riverbank erosion. The present study depicts the scenario of experiences faced by riverbank people because of nature of their living place with the aim to relate with challenges in adaptation as well as resettlement process. This study has been conducted in the most vulnerable regions of Bangladesh (i.e. Kawarchar, Barishal district) due to riverbank erosion frequently occurs here.Respondents of this study have been selected using simple random sampling and interviewed to collect data on socio-demographic characteristics, patterns of economic loss, challenges experienced in their daily life and livelihoods, local people's attitudes toward them in social settings and related vulnerabilities. Respondents of low income group have less opportunity to meet daily basic needs such as food consumption, pure drinking water, and health care facilities during the time of adaptation & resettlement with the assistance from significant people. It is evident that riverbank erosion mainly grabs the land and no one has denied about the loss. People have been also lost their house. occupation, agricultural crops, and cattle, and so on. Another objective of this study is to explain the factors motivate to adapt and resettle due to riverbank erosion. Under this it is found that mostly assistance from relatives has immensely contributed to survive and adapt in resettlement process of the marginalized people after disaster as well as only few assistance and cooperation have come from local people, NGOs, and local Govt. In survey method, face to face interview technique has been applied using a semi-structured questionnaire among 60 samples. On the other hand, case study has been conducted in 10 respondent's applying a check list.

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#### **Introduction:-**

Bangladesh is a riverine country. It is widely regarded as one of the world's most vulnerable countries due to its low-lying deltaic geographical position with more than 230 rivers and vast waterways that lead to disasterproneness, as well as serious socio-environmental concerns including over population, poverty, and low economic

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and technological capacity. It is estimated that about 5% of the total floodplain of Bangladesh is directly affected by erosion (Banglapedia.com). Some researchers have reported that bank erosion is taking place in about 94 out of 489 upazilas of the country(M.Aminul, 1995, M.Z. Mamun&N.Amin, 1999, GoB, 2014 and EGIS, 2000).

In Brazil, riverbank erosion is caused for deforestation, mining and irrigation and the unconsciousness of the landholders (H.R.S. Francisco et al, 2005). In United States, Bank erosion has been occurring because of a number of natural forces and human induced activities. Seepage flows, eddy currents, disturbed flows due to exposed tree roots, surface drainage, etc. that caused erosion. In Australia, people have concerns for quality of the drinking water, loss of property, and loss of aquatic habitat. In Europe, riverbank erosion affects the ecological balance, losses the property and push to resettlement. In Asia, people become helpless and loss property, land, moreover losses life due to riverbank erosion. In Bangladesh, the effects of riverbank erosion is longer (K.T. Das, et al, 2014). Riverbank erosion is one of the most dangerous disasters in Bangladesh. According to another research outcome, riverbank erosion has been occurred mainly since 1988 and its process is still going on. The Char people use their indigenous knowledge to adapt in this diverse situation and a suggestion comes from the findings, that government organization should take responsibilities to protect chorpeople's life as well as livelihood in the devastating situation of riverbank erosion (Islam.et al, 2015). Because of riverbank erosion people faces food insecurity, job insecurity and they need urgency to make resettlement (A.Monirul.et.al, 2020, M.S. Rahman& A. Gain, 2020 F. Islam and A.N.M Rashid 2011 and I. Nazrul et al, 2020). From the result of another research, if a disaster struck, community receives adequate government and NGO support either in terms of post disaster relief in terms of food, shelter or financial help as they are less likely to move from their area to an uncertain place where they have to struggle to find a job, shelter etc (L.Nirjan, 2012). Most of the time the affected people didn't get much help from government to adapts this crisis situation. Due to inadequate support of government and NGO people faces challenges on adaptation and resettlement process. The people of riverbank people resettle near distance area. Short distance resettlement increases the risk of more time resettlement. (M. Martin, 2016). In Barishal, Bakerganjupazila, people losses lots of property, job, land, house and displaced from their home (D.K. Roy, et al. 2017). Coastal areas people adapt riverbank erosion situation and resettled many time because of their living place (A. Ahmed, 2018). Due to riverbank erosion people resettle in the roadside embankment, with the cooperation of neighbors and relative land (M.R., Raman, 2010, M.S. Rana& A.M. Nessa, 2017 and P. Sultana, et al, 2019).

In Kawar Char area, people are affected by riverbank erosion and they resettled in near area. Thus, this short distance settlement makes them more vulnerable where they needed to make resettlement after every disaster. Coastal areas of the world are physically dynamic in nature. Coastal and riverinearea is the most risky to survive and adapt where as this vulnerable people always aware of resettlement. The present study deals with the challenges experienced by marginalized people in the adaptation and resettlement process due to riverbank erosion. No other problem is as disastrous as riverbank erosion and resettled people faced many problems in every steps of daily life. The resettled people are forced to lead a landless life due to riverbank erosion.

## **Objectives:-**

The main objective of this study is to find out the challenges experienced by river bank people in their survival time to adapt during as well as resettlement process in post disaster crisis situation. However; the present study has been conducted with some specific aims.

- 1. To identify the nature of losses experienced by riverbank people.
- 2. To understand the patterns of daily life challenges in relation with adaptation and resettlement processof bank people.
- 3. To explain the factors motivate to adapt and resettle them during and post riverbank erosion crisis.

## Methodology:-

Descriptive research design has been followed to explain the present study. To address the research problem, both quantitative and qualitative method has been applied to keep up the consistency of the present study objectives. As a study area, Barisal district has been selected purposively where riverbank people who are victims and sufferers of riverbank erosion considered as unit of analysis. In present study, total 60 participants in survey questionnaire using non-probability, purposive random sampling and 10 participants have been engaged in case study. The equal participants from two villages under Kawarchar union, besides the Kirtonkhola riverbank have taken as study population and household heads (male or female) have been interviewed. In order to understand and explain the overall challenges experienced by riverbank people in resettlement process where purposive sampling technique is

much suitable for collecting data. As quantitative data has been collected in using survey method where semistructured questionnaire used to collect primary data as data collection tools in applying face to face interview technique. In qualitative part, case study has been adopted as data collection method and an in-depth interview as primary data collection technique is applied among each household. Through the consent of respondent, audio recorder was used to find in-depth interview. In addition, books, journals, articles have been used to explore information as part of secondary sources of data. In this study, to organize and explain data, a thematic data analysis technique has been applied. To ensure ethical issues, all personal information of respondents must be destroyed after publication. From January to June 2019, data collection process of the present study was done.

#### Data Analysis and Result Discussion:

#### Socio-demographic characteristics of the respondents:

Data on demographic characteristics of the respondents illustrated in table: 1.1 reveals that out of 60 respondents surveyed, 51.75% are male and on the other hand, 48.3% are female.Most of all respondents except few come from poor socio-economic backgroundand frequent riverbank erosion leads to make them more poor and vulnerable. The following table shows quantitative analysis,here a large number (n=36) are belonged to the more than 36 year aged group and the rest of 40% respondents are aged between 26-35 years old.

Category	Responses	Frequency	Percentage (%)
Sex	Male	31	51.7
	Female	29	48.3
Age	26-35	24	40
	More than 36	36	60
Schooling	Under PSC	34	56.7
	Under SSC	18	30
	Under HSC	8	13.3
Occupation	Farmer	21	35
	Private sector	10	16.7
	Unemployed	29	48.3
Family Members	1-3	4	6.7
	4-5	13	21.7
	5-6	13	21.7
	More than 6	30	50
Monthly Income	1000-3000 tk.	0	0
	4000-6000 tk.	16	26.7
	7000-9000 tk.	27	28.3
	More than 9000 tk.	27	45

Table 01.1:- Socio-demographic characteristics of the respondents:

(Source: Field Survey, 2019).

Due to frequent riverbank erosion as well as poverty, people in this area are not aware about education. The large proportion of this study respondents (56.7%) remains to under primary education, amid this population (n=34) only few write their names as well as some are able to read address, and the rest of the respondents are illiterate. Here, (30%) significant respondent's belongs to under SSC 30% and respectively 13.33% respondents studied till HSC but did not pass the examinations. Due to riverbank erosion most of the people, mostly men can't work even as a farmer and the unemployment rate are high among women as their domestic work never counts as paid work. In this study, 35% presently works as farmer, 16.7% engages themselves as private sector employee and the biggest number remains unemployed which is 48.3%. As it appears from study, respondent's income and expenditure depends on the size of family members. Most of the family is large and their income is 45% more than 9000Tk, 28.3% is (7000-9000) taka, and the rest of respondents (26.7%) have only (4000-6000) taka monthly income. It is found from the study, here 50% respondents said they have more than 6 family members, 21.7% family have 4-5 members, 21.7% respondents have 5-6 family members and only 6.7% family is nuclear whose family member is 2-3.

In qualitative data, it is found that out of 10, sex ratio is equal and aged mostly more than 36 years old, as well as most of them only can write their names. As most of all come from poor socio-economic background, they meet their daily necessities as day labor except a few.

Pattern	Frequency		Percentage (%)	
	Yes	No	Yes	No
Occupation	29	31	48.3	51.7
House/Infrastructure	4	56	6.7	93.3
Agricultural Products	42	18	70	30
Land	60	0	100	00
Assets (Cattle)	5	55	8.33	51.67
Assets (Money)	60	0	100	00

 Table 01.2:-Nature of economic losses experienced by respondents due to riverbank erosion:

(Source: Field Survey, 2019).

In this study, table 01.2 demonstrates the various economic losses mostly experienced by the respondents due to riverbank erosion. Here, 48.3% people lost their occupation as the means of their livelihood by riverbank erosion and 51.7% people didn't lose their occupation. It is observed that only 8.33% people lost their cattle, 6.7% people have lost their living house and 93.3% people have no loss their house as they rebuilt that house another place. A remarkable percentage of the respondents (70%) mentioned, as means of their living subsistence, agricultural crops and products destroyed by this disaster whereas 30% agreed they have no loss any crops or products. As it is presented in this study, riverbank erosion mainly grabs the land. All of the respondents (100%) lost their land as well as assets (money).

From qualitative study, as it appears, all but agree about economic loss experienced during riverbank erosion (for example, profession, agricultural products, land, cattle, money and domestic utensils) except a few respondents.

Factors	Frequency		Percentage (%	)
	Yes	No	Yes	No
People facing problems	60	0	100	00
Infection of various diseases	55	5	91.67	8.33
Sources of income	47	13	78.33	21.67
Safe water availability	17	43	21.67	78.33
Access in medical facilities	9	51	15	85
Food security	9	51	15	85

**Table 01.3:-** Patterns of daily life challenges in adaptation and resettlement process:

(Source: Field Survey, 2019).

Table 01.3: shows the patterns of daily life challenges faced by the people of riverbank area to adapt and resettle during and post disaster situation. Here, in this study no one denied that they have been faced the problem to meet their daily life necessities due to river bank erosion. It must be mentioned that almost every respondents in various settings, suffer various diseases (91.67%) and only 8.33% agreed they have no disease. In disaster prone area, significant percentage (78.33%) mentioned they experienced challenges to get previous or alternative income source as they lost their occupation and the rest of 21.67% respondents don't face this problem. In this area 78.33% people faced problem to get access in safe water both in drinking as well as other work purposes whereas 21.67% people have access of safe water. During the riverbank erosion, 85% people of this area never receive any medical facilities but only 15% respondent's reportible have. As well as in this area, most of the people (85%)have faced food insecurity here. They can't even fulfill their basic need by their lower income.

It is found in qualitative study that increasing adverse social and economic challenges make these poor more vulnerable. During and after disaster, approximately all case except one reported that they face a large number of problems to order to survive and adapt in crisis situation as well as suffer mostly waterborne, infectious disease, food insecurity, and safe drinking water.

Due to increasing poverty, affected people try to survive as well as adapt to new situation in the time of riverbank erosion. After adapting, they become resettled another place. Riverbank affected people mostly face problems on maintenance of daily necessities 13.3%, employment problem 6.7% and both the problem faced 80% people experienced both of the problems in this area. The following table shows newly emerged problems, a number of

diseases experienced by the respondents during adaptation process due to riverbank erosion that is explained in table no.01.4. Diarrhea is the most common type of waterborne disease experienced by almost half of respondents (n=29,48%) out of total 60 respondents in the study followed by Typhoid 17.3%, and Cholera 17.3%.

Category	Response	Frequency	Percentage (%)
Kinds of problem faced	Maintenance of daily necessities	8	13.3
during adaptation	Employment problem	4	6.7
	Both of problems	48	80
Total		60	100
Various diseases faced	Typhoid	9	15
during adaptation	Cholera	9	15
	Diarrhea	29	48.3
	Others	8	13.33
	Above all	5	8.3
Total		60	100
Pattern of re-involvement	Day laborer	29	48.3
in profession during	Fisherman	4	6.7
resettlement process	Housemaid	10	16.7
	Private job	4	6.7
	No employment	13	21.7
Total		60	100

<b>Table 01.4:</b> - Explanation of experiences faced by respondents in their adaptation and resettlement process:
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(Source: Field Survey, 2019).

In Kawarchar area, most of the people resettled near the place of riverbank erosion and most of the people got reinvolve with profession as is presented in table-01.4. But it is also found that some people changed their profession for newly emerging crisis situation and only few lost their past profession. After resettlement process, 48.3% people take profession as day laborer, 6.7% people are fisherman, 16.7% people are housemaid, 6.7% people have involved with private job and the rest of the people (21.7) who are women still remain unemployed.

In order to survive, in qualitative data few case reports that they have no means to have food as they lost their assets, money and significant others. And almost all cases suffer from diarrhea as they have no medical facilities.

 Table 01.5:- Resettle place of respondents:

Category	Frequency	Percentage
Near this place	60	100
From different districts	0	0
Total	60	100

(Source: Field Survey, 2019)

It is obvious from quantitative statistics, that all respondents resettled here from near place as same as all cases that is found in qualitative data.

Table 01.6:- Local	people's attitude	experienced by res	spondentsafter resettlement process:
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Tuble 01:0: Local people 5 attitude	experienced by respondentsuiter	resettlement process	
Category	Response	Frequency	Percentage (%)
Local peoples attitude/treatment	Stranger	17	28.3
toward resettled people	Friendly	9	15
	Helpless	25	41.7
	No one	9	15
Total		60	100

(Source: Field Survey, 2019).

In this riverbank area, people resettled their near place but out of 60, 28.3% respondents reported they are treated as stranger, 15% people as friendly, 41.7% people as helpless, and 9% people as no human being.

The above findings are also relevant in qualitative data out of 10, more than half cases said that they are treated as helpless vulnerable; andfew local people treat them like stranger.People who live at riverbank area in Bangladesh experience disaster very frequently in every year. In some extent they get support from govt. to adapt and resettle here but all cases agree, major support comes from relatives. The study is also found; these people overcome newly emerging problems through the food assistance, health facilities, cooperation and suggestion, instant money support, loan, cattle as part of loan through four agents, respectively relatives, local people, NGOs and Govt. assistance.

Category	Multiple response	Frequency	Percentage (%)
Patterns of local	Instant money support	9	15
people's assistance	Loan	4	6.7
	Instant daily necessitates and health facilities	5	8.33
	Cooperation and Suggestion	5	8.33
	No assistance	37	61.67
Total		60	100
Patterns of	Instant money support	10	16.67
relative's assistance	Provide food support	15	25
	Help to make and repair house	4	6.7
	Instant residence facility	4	6.7
	No assistance	27	45
Total		60	100
Patterns of NGO's	Money as loan	15	25
assistance	Cattle a part of loan	4	6.7
	Relief	6	10
	No assistance	35	58.33
Total		60	100
Patterns of Govt.'s	Money as relief	12	20
assistance	Land facility (Accommodation)	10	16.67
	Instant health facilities	0	0
	Loan facility	0	0
	No assistance	38	63.33
Total		60	100

 Table 01.7:- Assistance to overcome challenges in adaptation and resettlement process:

(Source: Field Survey, 2019).

Table-01.7. displays the quantitative distribution of assistance from four sectors to overcome challenges experienced by the respondents in the time of adaptation and resettlement process due to riverbank erosion. Here as is presented out of 60, respondents (n=9, 15%) have got instant money support, 4 (6.7%) have loan, 5 (8.33%) have instant daily necessitates and health facilities, 5 (8.33%) have cooperation and suggestion from local peoples and 61.67% respondents have no assistance. On the other hand, of these 60 respondents, 10 (16.67%) have instant money support, 15 (25%) have food support, 4 (6.7%) get helps to make and repair house, 4 (6.7%) have instant residence facility, and significant respondents (n=27.45%) have no assistance from relatives. It is more frustrating that affected people don't get enough assistance from govt. that needs are essential to survive and adapt in the resettlement process. Here, 38 respondents (63.33%) have no assistance but 12 respondents (20%) have received money as relief, 10 respondents (16.67%) have land as accommodation. In the context of NGOs assistance as is shown that total only 15 (25%) have money as loan, 4 (6.7%) havecattle a part of loan, 6 (10%) relief and rest of 35 respondents have never received any assistance to overcome daily challenges in the resettlement process.

As part of social and economic factor that is found in qualitative data, relative assistance creates a new hope for vulnerable people to survive and adapt to a new crisis situation during riverbank erosion as well as resettlement process in post disaster situation. It appears in all cases except one report that married women receive economic cooperation, land from her parents to make new accommodation. Out of 10, only a few cases (only 2) agree that they get loan from local govt., one gets loan from NGOs, as well as all cases agreed that they have never received any assistance from local people as they are also poor and vulnerable.

## **Conclusion:-**

It is clearly evident from the study that riverbank people are seen as vulnerable and marginalized in social settings. Frequent riverbank erosion and poverty push them to lead miserable life with having no or low income during disaster as well as post disaster situation.

Riverbank erosion mainly grab the land as is presented in this study, all of the respondents lost their land as well as assets (money). Most of the respondents have also lost their profession; agricultural products and this loss make their misery worse.

Adaptation process is much challenging during and after the riverbank erosion. The newly emerged problems (no or less access to meet basic necessities, unemployment) as well as waterborne diseases (e.g. Typhoid, Cholera andmost common as Diarrhea) remain high amongmarginalized people, as social and economic challenges increases. Alternative or previous source of income becomes worse, reported by most of the study respondents. All but except few respondents agreed that they face food insecurity, medical insecurity where as local peoples attitude toward marginal people after resettlement (e.g. stranger, helpless, no one) is also frustrating.

In post disaster situation, social and economic factors that push the marginalized people to adapt and resettle their houses and life as social cooperation and economic necessity are the most inducing. In order to survive and adapt in resettlement process, a greater percentage of motivating assistance (e.g. money, food, residence facility and so on)with hopecomes from relativesthan assistance is found from local people as they also poor and victim of riverbank erosion. Only little assistance is found from local govt., where as these vulnerable people receivedmoney as a loan, cattle, reliefto survive and resettle from NGOs that is worth mentioning in compared to local govt.

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