

RESEARCH ARTICLE

Rural to urban migration of disaster induced displaced people in coastal area of Bangladesh: An analysis of risk and opportunity

Morshed Hossan Molla^{1*} Mohammed Arifur Rahman² Mohammad Shahjahan³ Prabal Baura⁴ Abdul Quader⁵¹ Department of Geography and Environmental Studies, University of Chittagong, Chittagong, Bangladesh² Techno India University, West Bangla, India³ Knowledge Management for Development, YPSA (Young Power in Social Action), Chittagong, Bangladesh⁴ Department of Environmental Science, Jahangirnagar University, Savar, Dhaka, Bangladesh⁵ Department of Geography and Environment, University of Dhaka, Dhaka, Bangladesh

Correspondence to: Morshed Hossan Molla, Department of Geography and Environmental Studies, University of Chittagong, Chittagong 4331, Bangladesh; E-mail: morshedgeo@yahoo.com

Received: July 9, 2021;**Accepted:** August 24, 2021;**Published:** August 26, 2021.

Citation: Molla MH, Rahman MA, Shahjahan M, *et al.* Rural to urban migration of disaster induced displaced people in coastal area of Bangladesh: An analysis of risk and opportunity. *Resour Environ Econ*, 2021, 3(2): 263-268.

<https://doi.org/10.25082/REE.2021.02.001>

Copyright: © 2021 Morshed Hossan Molla, *et al.* This is an open access article distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.



Abstract: Displacement is the earlier concept of civilization but climate induced displacement is the contemporary issue as climate victim of modern and industrialized world. The prime aim of the study was to investigate the rural to urban migration of disaster induced displacement in coastal area of Bangladesh addressing to risks and opportunities. The study mainly based on primary data and secondary data was used for validation. Primary data have been obtained through the quantitative along with qualitative sources. Qualitative data were attained through Participant Observation, Key Informant Interview (KII) and Focus Group Discussion (FGD) methods. Quantitative data have been acquired through the field study consisting of a questionnaire survey. Data were interpreted by the Statistical Package for the Social Science (SPSS-20). The study reveals that after displacement nearly 89% displaced people migrated from rural (Kutubdia Island) to Cox's Bazar urban area. Consequently, meantime their monthly income, occupational status, housing and sanitation condition, source of drinking water and health care facilities were changed positively but in most cases they are dissatisfied. Because they lost their traditional and indigenous occupations system (after migration nearly 30% dissatisfied about their occupation but before migration it was 16%) and their housing pattern and conditions become worsen. Availability of water and sanitation facility and healthcare seeking behavior changed positively in the urban area. However, in urban area they faced multi-dimensional problems such as harassment by mussel man (14%) and local elite group influence (32%), loss of identity and dignity, freedom of speech, social stratification, loss of socio-cultural harmony and fear of eviction as well as involvement of different types of illegal activities, such as drug addiction and smuggling and so on. Finally, the study revealed that there is risk and opportunity for climate displaced people in urban migration. However, planned migration of disaster induced displaced people can reduce the risk factors in the urban setting.

Keywords: displacement, migration, risk and opportunity

1 Introduction

The effects of rising temperatures in some regions will reduce agricultural potential and undermine 'ecosystem services' such as the availability of clean water and fertile soil. Besides, heavy precipitation will cause flash or river flood in tropical regions. In addition, sea-level rise will permanently destroy extensive and highly productive low-lying coastal areas that are home of millions of people who will have to relocate permanently [1]. These hazards are already leading to loss and destruction of houses, land and property, loss of livelihoods and widespread displacement across the country. Among the 64 districts of Bangladesh, 26 coastal and mainland districts are already making climate displacement. It also found that almost 60 Lakh peoples were displaced from their home and land due to climate change in Bangladesh [2]. Over 35 million people will be displaced in 19 coastal districts of Bangladesh if 1-meter sea level rise happened in this century. Many people have already migrated to the urban slums from the coastal areas of Bangladesh, due to frequent cyclones, storm surges and river erosion, *etc.* [3]. About 46% people temporarily displaced and 12% people were permanently displaced due to different hazards in four climate hotspots of Bangladesh [4]. On the other hand, it is revealed that due to the impact of climate change, total areas of Kutubdia Island were reduced by almost 50% in last 20 years. Since 1991, six villages on the island have been completely devoured

by the sea and about 40,000 people have left and most of them took temporary shelter near Cox’s Bazar [5]. The vast majority of these people will be displaced domestically – not across international borders – presenting the government with enormous challenges, particularly when it comes to finding places to live and work for those who have been displaced [6]. Hence, the research is to investigate the rural to urban migration of disaster induced displaced people of southeastern coastal areas in Bangladesh, addressing the risks and opportunities.

2 Materials and methods

Two types of approaches, namely the qualitative as well as quantitative method has been applied. Qualitative data have been collected through observation, Key Informant Interviews (KII) and Focus Group Discussion (FGD) checklists, besides quantitative data have been gathered through questionnaire survey method respectively. Total 10 KIIs were interviewed, among 8 KIIs were conducted in displaced areas and 2 KIIs are accompanied in destination areas respectively. Also, among 2 were done with Additional Deputy Commissioner (Revenue), 2 with union chairmen, 2 with journalists, 2 with Upazila chairmen and Upazila Nirbhahi Officer (UNO) at Kutubdia Upazila respectively. Total 6 FGDs were completed, among them 4 FGDs were conducted before displacement (displaced) areas and 2 were conducted after (destination) displaced areas separately. A semi-structured questionnaire has been applied for quantitative data collection at the household level of displaced people from displaced and destination places. To conduct a statistically representative and authentic survey, the Cochran’s Sample Size Formula has been applied for appropriate sampling size selection for the Target Population [7, 8] are presented this following formula.

Formula, $n_0 = (\frac{z^2pq}{d^2})$, Where, n_0 denoted the desired sample size, z = standard normal deviate usually set at 1.96, which corresponds to the 95% confidence level, p = assumes proportion in the target population estimated to have a particular characteristic, q = proportion of the estimation of population (1-p), d = allowable maximum error in estimating a population proportion respectively. Besides, the simple random sampling technique has been adapted for successfully operating of 385 questionnaires at household level of the displaced people (Figure 1). Qualitative data have been interpreted with ‘Narrative Analysis’, besides quantitative data are interpreted with Statistical Package for The Social Science (SPSS: version-20).

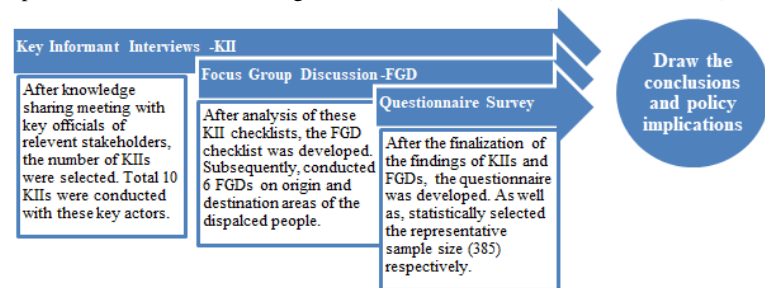


Figure 1 Pathway of methodology

3 Results and discussion

Destination of Displaced People after Displacement

The coastal areas of Bangladesh were severely affected by floods in 1988 and cyclone in 1991. During these disasters, every person was temporarily displaced and significant portion went to other places permanently. However, there are two types of destination have been identified, such as own and outer district (Figure 2). For instance, in Kutubdia Island, 90% displaced people chosen their destination in their own district while only 10% displaced people found their destination in outer districts.

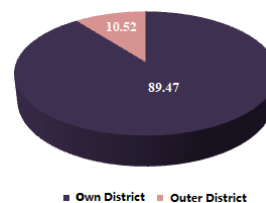


Figure 2 Destinations of climate induced displaced people

3.1 Risks and opportunities of displaced people between before and after displacement

3.1.1 Monthly income before and after displacement

The monthly income has changed negatively. Before displacement, people were satisfied with their monthly income (Figure 3). But after displacement, people were dissatisfied with their monthly income which is 13.7% before being displaced, while 27.9% after being displaced. Before displacement, people were engaged in many occupations and a lot of opportunities were available for alternative livelihood. However, after displacement, they had few opportunities for livelihood. Moreover, in the current location, the cost of living is high and life is insecure, the surrounding is poor, absence of social bonding and feeling of physiological stress is also high.

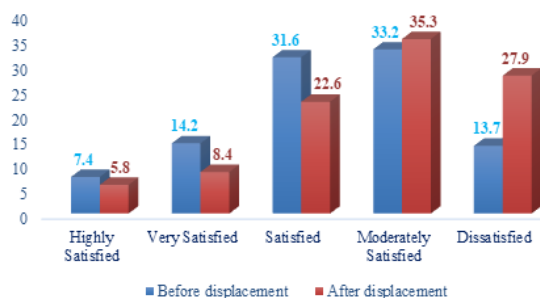


Figure 3 Monthly income before and after displacement

3.1.2 Pattern of occupation before and after displacement

Types of occupations of climate displaced people before and after displacement was negatively impacted (Figure 4). In original areas or before displacement, people took on traditional occupations such as fishing, day labor, small business, boat driving, and farming which were practiced from their father and grandfather. Besides, brotherhood existed between occupation owners and workers. Thus, nobody was left unemployed. Also in destination areas, displaced people faced new or unknown environment where none of them were known. As a result, they could not get themselves engaged in new occupations easily. Finally, they faced hardcore poverty, eventually getting engaged in different informal activities.

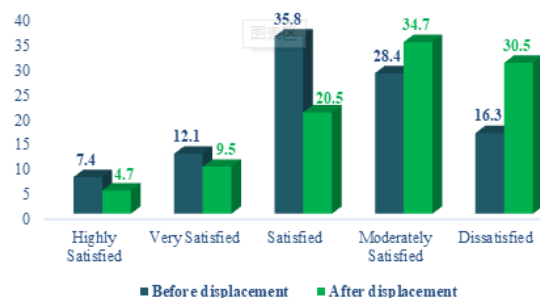


Figure 4 Pattern of occupation before and after displacement

3.1.3 Housing pattern in the before and after displacement situations

Housing conditions of climate displaced people in before and after displacement situation was negatively changed (Figure 5). Along with most of the people still remaining in their own Upazilas even after being displaced several times and most of them are relying on the humanitarian assistance program by the Government and NGOs. Though houses were made through materials like polythene, earthen wall and floor and straw built roof at before displacement areas but after displacement, displaced people depended on house owners if they were renter; otherwise they would also live in the same house like before displacement. In slum or destination areas, people made their household or rent a brick-built house where low space of room, poor ventilation or lightening, high house rent, and marshy environment created the unhygienic dwelling in those areas. Consequently, their level of satisfaction was decreased.

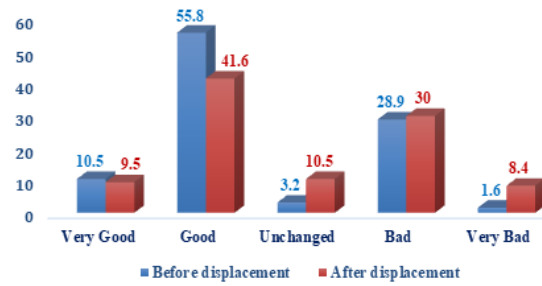


Figure 5 Housing pattern in the before and after displacement situations

3.1.4 Sources of drinking water in the before and after displacement situations

Sources of drinking water of climate displaced people in before and after displacement areas were little changed (Figure 6). In Kutubdia Island, villagers had collected their drinking water from the same sources, particularly tubewell, well, pond/doba, river, and neighbor’s tubewell. Although after being displaced, displaced people were drinking from same sources, but very few displaced family had the opportunity to collect the pipeline water in urban slums areas. Yet urban slums areas’ displaced people were dissatisfied to meet the sources of drinking water.

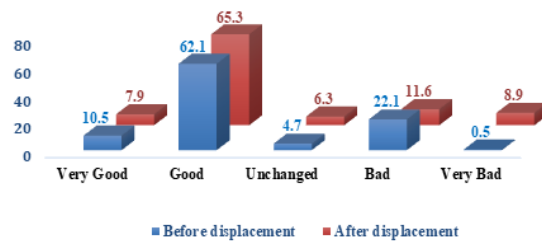


Figure 6 Sources of drinking water in the before and after displacement situations

3.1.5 Sanitation situation before and after displacement

Sanitation condition in before and after displacement situations of the displaced people significantly changed, too (Figure 7). In Kutubdia Island, displaced people used open spaces, open toilets, and very few displaced people used hygienic toilet for sanitation purposes. Besides, after displacement, displaced people were mostly using hygienic toilet; most of time, the toilet was shared with the next door family members.

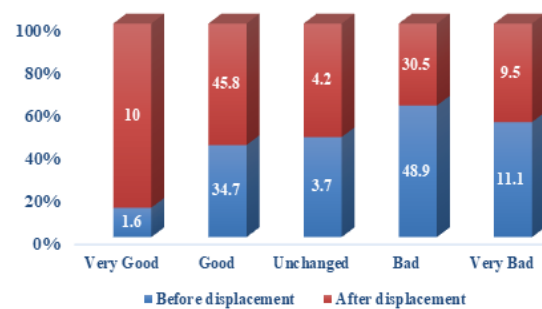


Figure 7 Sanitation situation before and after displacement

3.1.6 Health care facilities before and after displacement

Health care facilities of climate displaced people in before and after displacement areas were good (Figure 8). In Kutubdia area, villagers received healthcare services from *Polli* Doctor in the pre-displacement situation. On the other hand, after displacement, displaced people received healthcare services from local pharmacy, Polli doctors, union/upazila health care centers and government medical centers respectively. Although, displaced people weren’t easily getting the ongoing health care facilities, those are provided by the government related agencies. Because displaced people didn’t get the ‘National Identity’ from election commission or identification card from competent local authority. So, the satisfaction level was declining in displaced areas.

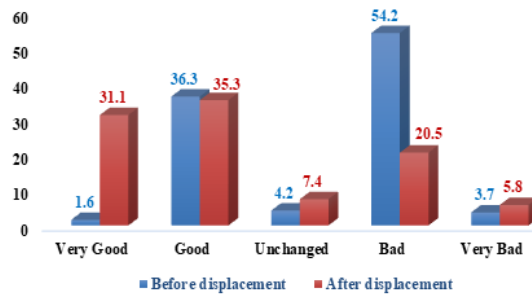


Figure 8 Health care facilities before and after displacement

3.1.7 Security condition in the before and after displacement situations

In Kutubdia Island area, villagers only felt risky of natural disasters before displacement. But in after displacement situation, displaced people felt not only risky of natural disasters, but also harassment by local notorious influential people, and gangster / muscle men. However, in the post displacement situations in Cox's Bazar, Chakaria and urban slum areas, displaced people are facing identity crisis, political harassment, humiliations and violence of by musclemen.

3.1.8 Social and cultural harmony in the after and before displacement situations

Displaced people were facing a lot of negative behaviors by the society, for instance social stratification, local political and muscle men violence, economic crisis because nobody trust them, psychological stress, loss of social, cultural norms and value and so on. As the lifestyle of the displaced people is very different from local inhabitants, they are not accepted so easily in the community. Along with that displaced people are deprived of their rights, dominated by the local people, threatened and afraid, and victimized for their marriageable offspring. They often face an identity crisis as well. Local people also tend to show, unwilling behavior when the displaced people sent their children for education and also they were deprived of basic and urban amenities.

3.1.9 Risks for displaced people between before and after displacement

Displaced people have been influx from coastal areas to urban slum areas. In these circumstances, displaced people didn't enjoy their cultural harmony, social status, family bondage in urban areas. Furthermore, the displaced people were left out of ongoing social safety net programs and fell in inaccessible situations to get their children into school, children education program, community based health care facilities and were not easily getting the authorization of the local competent administrative body. Moreover, there are some misconceptions among local people such that the displaced people are involved in many anti-social activities, particularly local violence, robbery and ransoming, drug business activities and so on. Consequently, local people were unwilling to create any kinds of social bondage like marriage, community based get-together, social and cultural events with displaced people.

4 Conclusions and policy guidelines

Climate induced disasters are interrupted the development activities and weaken the 'development wheel' due to an influx of displaced people in urban and semi-urban areas. Hence, the study has prescribed the following policy guidelines with a stress on considering the opinions of relevant stakeholders. These guidelines would ensure a planned/fair and prudent migration for disaster induced displaced people and reduce the risk factors in the urban setting such as, relevant stakeholders should ensure civilian rights of displaced people, mainly humanitarian assistance in emergency period, housing and shelter, land, food, water and sanitation, education for school children, health care facilities, freedom of movement, and right to choose their residential location and relocate. Besides, strengthening the existing climate change or disaster related laws, rules and policies and updating the aspect of the contemporary situation, particularly the rights of displaced people and protect their social, cultural naturalization. Moreover, related bodies, agencies and departments should ensure the priority based rehabilitation program of the displaced people to get *Khas* land at before and after displaced situation. Furthermore, introducing '*Community Based Planned Relocation Program*', it will ensure the dignity, livelihood,

social-cultural harmony, and local integration of displaced people in relocated areas. Further, connected stakeholders should ensure that all these people get to live in free and fair conditions without any political undue and illegal influences during rehabilitation program. In addition, relevant stakeholders should ensure proper coordination among stakeholders, particularly government related agencies and NGOs/development partners to ensure the relocation/rehabilitation of displaced people in the most efficient way.

References

- [1] Morton A, Boncour P and Laczko F. Human security policy challenges. *Forced Migration Review*, 2008, **31**: 5-7.
<https://www.fmreview.org/climatechange/morton-boncour-laczko>
- [2] Displacement Solutions. *Climate Displacement in Bangladesh: The Urgent Need of Housing, Land and Property Rights*, 2012.
<https://displacementsolutions.org/latest-news-on-climate-displacement-in-bangladesh>
- [3] Rabbani MG. Climate forced migration: A massive threat to coastal people in Bangladesh, *Climate Asia: Climate Action Network-South Asia newsletter*, BCAS, Dhaka, 2009.
- [4] CDMP-II 2014. *Trend and Impact Analysis of Internal Displacement due to the Impacts of Disaster and Climate Change*, Comprehensive Disaster Management Programme, Ministry of Disaster Management and Relief, Dhaka, 2014.
- [5] *The Guardian* 2013. Sea change: the Bay of Bengal's vanishing islands.
- [6] Shahjahan M and Barua P. Climate Displacement in Bangladesh: Need Urgent Actions. *Social Change*, 2014, **4**(1-2): 81-89.
- [7] Islam N. *An Introduction to Research Methodology*, University Press Limited, Third edition, Dhaka, Bangladesh, 2014, 162-165.
- [8] BBS. *Bangladesh bureau of statistics, Ministry of Planning, Government Republic of Bangladesh*, Dhaka, 2011.