

Climate Change-induced Migration in Bangladesh: Realizing the Migration Process, Human Security and Sustainable Development

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Introduction

The impact of climate change induced migration (CCM) on sustainable development and achieving of the Sustainable Development Goals (SDGs) is still an emerging and relatively unexplored issue. In the recent years, migration increase due to natural disasters has received a lot of attention both from the media and the political world. In the short-term, the main challenge related to displacement caused by natural disasters is humanitarian; in the long-term, policy makers have to guarantee a sustainable future to the populations affected (Banerjee, S, 2014). At the same time, millions of people are displaced by slow-onset environmental degradation.

The decision to migrate in response to climate change is very complex and studying it from a sustainable development perspective helps understand the way in which environmental push factors interact with other economic, social and political variables (Afsar, R, 2010). This paper explores the situation and processes of climate change induced migration and focuses on the challenges of human security and sustainable development in Bangladesh.

Situation of Climate Change Induced Migration

Bangladesh is the world's seventh most populous nation with 160 million people within 143,998 km²; out of that 160 million, 30% are

living in urban areas (Begum, A. 2015). Internal migration is one of the key drivers of rapid urbanization in Bangladesh. The urban population growth rate in Bangladesh is approximately 3.5%. The urban growth rate is 1.3% and the determinant 2.2% is influenced by internal, one of the key drivers of rapid urbanization in Bangladesh. During the last decade climate change has emerged as an environmental push factor which has been credited with amplifying the migration rate.

The total ultra-poor in urban areas is estimated to number about 14.6 million, according to the World Bank, "who are earning less than US\$ 1 per day" (ADB, 2012). Furthermore about 25% of these poorest of the poor have migrated from rural areas and they have done so because of natural calamities and changes in the local physical environment, for example loss of farm land, increasing salinity, loss of welling, and no livelihood options (Black, R. 2010). According to the Department of International Development (DFID), migration is most prominent in Dhaka, the capital of Bangladesh. The DFID annual report estimates that around 55% and 32% of Dhaka's population are absolute (actual number of people, the population has increased and decreased by in a certain period of time) and ultra-poor (the ultra-poor are as those living on \$1.25 per day or less. They have very limited physical, human, and financial assets and social networks to draw on to mobilize and leverage household and community resources or external

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assistance.) respectively (Ahmed, 2010). Within the last 30 years Bangladesh has been hit by more than 100 cyclones, 60 flash floods and other such disasters like epidemics, drought, and heat waves. The coastal areas of Bangladesh are the home to almost 50 million people (1/3 of the total population) who are highly exposed to these natural calamities. For example around 9.2 million people from the south coast region of Bangladesh were affected by storm surge and tropical cyclones in 2007–2009. Between 1984 and 2007, 19.3 million people throughout the Bangladesh were impacted by floods (Alam, 2011). The victims of natural disasters are often displaced from their secure homes; some are displaced for a short time eventually and subsequently returning to restart lives at the point of origin while others permanently migrate far and wide. According to the projected population census of 2001, by 2010 the rural vs urban population was to be roughly equal and by the end of 2020 the urban population will be double that of rural areas (CDKN, 2011). Although the growth rate has come down due to some positive economic growth in selected part of the country, natural growth and traditional rural-urban migration cannot be the sole reasons for such a dramatic urban influx. It is clear that external forces influence the population distribution and challenge the urban system in Bangladesh. Between 1980 and 2010 natural disasters have acted as direct push factors for internal migration to such an extent that it has altered the urbanization pattern and become a challenge for the urban planning system (Displacement Solutions, 2012). It is evident that over the last decade the intensity and frequency of natural disasters, especially cyclones and floods, have increased while the distribution of population between rural and urban areas has also changed (Hossain, 2009).

Understanding the Climate Change Induced Migration Process

This research study has been conducted throughout two districts i.e. Khulna and Satkhira in Bangladesh which are particularly prone to the impacts of climate change. Based on the collected data, it is found that internal migration is steadily rising and there is a strong linkage between the sudden onset of disasters such as cyclones or tidal surges, and increasing number of migration. This study revealed that the displaced people initially try to relocate themselves within their niche or in neighbouring villages, and then gradually shift to the nearest urban centers, larger cities and finally to the capital. Most of them end up settling in slums or squatter settlements where there is a dearth of basic services. Their numbers have been constantly increasing; by 2007 the growth rate was 4% per year. In 2007, displaced people represented 86% of the overall urban population (UN-HABITAT 2007). Heavy monsoonal rains in 2007 affected over 10 million people spreading over 39 districts out of total 64 districts, driving a reported 3,000 migrants a day to Dhaka due to inadequate relief and lack of income (IRIN 1997). However, where aid has been effectively distributed and food markets supported for example during the 2004 tornado and 1998 floods, migration has been minimal. From 1991 to 2002, around 226,000 persons migrated overseas in search of employment. Most of who originally came from disaster prone areas of Bangladesh (Del Ninno et al. 2001).

Seasonal migration has been a recognized trend in Bangladesh for decades, whereby people temporally migrate during the agricultural lean season and return to their homes at the conclusion of the season. This research found that seasonal migration has morphed permanent migration in recent times. A number of push factors have contributed to this

permanent migration such as damage to infrastructure after a sudden disaster, lack of livelihood options and a decline in alternative coping mechanisms in the affected areas. Participants of focus group discussions stated that permanent migration tends to be seen as the only solution in such a situation. This research found that climate induced migration takes place after major extreme climatic events. The time span between extreme climatic events and actual migration differs from case to case. However, this study revealed three key situations. In the first instance, some of the victims migrate within 3 to 15 days following the onset of the extreme climatic events. During and immediately after such events, life comes to a standstill and the migrant families wait for a relatively better situation when the families can dispose of the remaining assets and are able to save enough money to cover travelling expenses. The families then set off for the receiving area. In this study, it has identified 115 families in such a situation which correspond to 40 percent of the total number of families questioned. The second situation involves families who have some assets at their disposal who try their best to restore their normal life after the event. Failing to be able to cope with their situation, the family decides to migrate. These families are forced to a 'distress sell' their remaining assets to be able to pay the travel expenses to the receiving areas. This study has identified 108 families in such situation which corresponds to 29 percent of questioned families. The third situations identified are families who lose income and assets due to one or more natural calamities. This combined with social and economic constraints means that these families borrow money from more than one source to restore normal life. When these families cannot repay their loans, they leave for a new place. 72 such cases were identified in this study which corresponds to 19 percent of the total families addressed under the survey.

The research has also found the increasing salinity in the coastal region districts. Due to the climate change and recession of glaciers in the mountain regions the fresh water discharge in cross boarding rivers of Bangladesh has decreased alarmingly in the last decade. As a result the fishermen depending on rivers have no livelihood now leading to migrate to the urban areas. The impact is the intrusion of salty water percolating to new farmlands due to lack of fresh water. Although many of the farmlands are developed for shrimp cultivation but they couldn't accommodate the total displaced.

Climate Induced Migration in the Context of Human Security and Sustainable Development

The displaced populations during natural calamities who are unable to return to their dwellings or unable to resume their traditional livelihoods are usually forced to head towards the urban centers in search of employment and a better life. Such rural- urban migrants end up in the big urban slums and ghettos, earning the bare minimum in the informal-sector. Generally, these people face insecurity of land tenure and shelter, with women being especially vulnerable to exploitation and abusive practices. The conditions under which most of the rural-urban migrants live include lack of shelter, lack of secure tenure, and lack of access to basic services such as clean drinking water, healthcare and education (Akter, 2009). Rapid and unplanned urbanization has implications for environmental migrants, the urban poor and the society at large. There are serious and far reaching human security impacts arising from such conditions. Firstly, environmental and other rural urban migrants tend to live in overcrowded slums, and consequently end up contributing to the environmental degradation of the surrounding area (Huq, 2001).

Absence of proper drainage and garbage disposal systems also compounds the effects. Secondly, competition is exacerbated over already scarce basic resources such as clean water, electricity, etc. This results in increased social tension within both slum population and the urban residents at large. This may lead to outbreaks of conflict (Huq, 2003). Thirdly, the arrival of displaced persons in large numbers jeopardizes a city's ability to plan for the future, as overcrowding and overuse of existing amenities and services disrupts urban planning. Finally, overcrowding and overpopulation of urban centers poses serious risk in wake of disasters such as floods and earthquakes as well as a public health challenge. Given the current urbanization in Bangladesh's cities, a mass exodus of environmental migrants from rural areas would no doubt be a cause for alarm (Rahman, 2007).

Existing Policy Response

The National Adaptation Programme of Action (NAPA) and the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) guide the country's climate change related plans. The Climate Change Trust Fund provides funds for project implementation based on revenue from the national budget, while the Climate Change Resilience Fund pools resources from development partners (Roy, D, 2014). Key policies relevant for internal migrants are: the Policy for Distributing Khas Land among the Landless 1987 gives priority to men, women and families that have become landless due to river erosion; the National Agriculture Policy 1999; the National Land use Policy 2001; the Coastal Zone Policy 2005; the National Disaster Management Policy 2008; and the more recent Rural Development Policy. The 2011 Nanson Declaration on Climate Displacement and Migration – Bangladesh is a signatory (RRCAP, 2013 (RRCAP, 2013).

National legislation also protects the rights of slum dwellers on the basis of 'no eviction without rehabilitation or resettlement.' However migrants in cities like Dhaka, also need to benefit from employment policies that recognise labour in informal sectors. This applies especially to women in garment factories, as well as men who pull rickshaws and work in construction and brick-making. Other sectoral strategies and programmes do not incorporate issues related to internal displacement and migration.

Policy Recommendation

Migration in Bangladesh remains a 'hit and miss' strategy for households with little or no alternative (Siddiqui, T, 2013). For internal migration to become a radical adaptation strategy, policy changes are needed. This study suggests:

- Take a 'rights-based' approach to empower migrants and families left behind. The government could support this process by recognising how migration will fit into future climate change scenarios.
- Use financial streams such as the Municipal Development Fund to develop low-cost, disaster-resilient infrastructure.
- Rapid industrialization with proper urban planning in the small towns will help to absorb more migrants from the coastal areas.
- Enforcement mechanism of housing bye-laws needs to be improved in the urban areas to reduce vulnerable housing.
- Develop peri-urban areas with improved transportation for migrant populations. Gurgaon, a satellite town outside Delhi in India that houses migrant workers, could be a model. This policy would ease pressure on slums and squatter settlements, as well as on amenities like sanitation.

- Create urban hubs far away from the capital city and encourage settlement in growth areas to help absorb migrants and reduce the pressure in Dhaka.
- Scale-up construction of infrastructure such as roads, bridges and culverts to complement the ongoing projects to build growth centres managed by the Local Government Engineering Department.
- View urbanisation as an opportunity for enhanced urban planning rather than a threat, while considering land-use patterns and potential conflicts in the planning process. Government projects for the landless, such as the Climate Victims Rehabilitation Project ('Gucchagram') can help frame migration in a better light to promote livelihood strategies of the poor.
- Foster greater understanding among scientists and policymakers on adaptation, resilience, capacity building and disaster risk reduction, especially in climate hotspots and vulnerable areas.
- Pursue more rigorous research on migration, displacement and movements of people internally and internationally.

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