

Seminar Paper on

# **Assessing the Policies of Climate Induced Displacement and Migration in Bangladesh**



Submitted by  
Mohammad Manirul Islam  
Deputy Secretary  
Roll-120  
130th ACAD Training Course, BPATC, Savar, Dhaka

## **1. Introduction:**

### **1.1 Background**

Bangladesh is exceptionally vulnerable to climate change because of its low elevation from the sea level and high population density. Two-thirds of Bangladesh is less than five meters above sea level (Ismail, 2016). 28% of the population of Bangladesh lives on the coast, where the primary driver of displacement is tidal flooding caused by sea level rise (UNFCCC, 2012). It has been estimated that by 2050, up to 18 million people may have to move because of sea level rise alone. By 2050, with a projected 50 cm rise in sea level, Bangladesh may lose approximately 11% of its land, affecting an estimated 15 million people living in its low-lying coastal region. Coastal flooding and salinization is the consequences of sea level rise. The process of salinization has been exacerbated by rising sea levels. Coastal drinking water supplies have been contaminated with salt, leaving the 33 million people who rely on such resources vulnerable to health problems (EJF,2020). So, Bangladesh is on the front line of these impacts.

Considering the above-mentioned statement, Bangladesh has been identified as one of the most vulnerable countries in the context of climate change (Huq 2001, Huq and Ayers 2008). Its exposure to frequent and extreme climatic events such as floods and cyclones (IPCC 2012) is a concern for policymakers and scientists. Over the years, successive governments, civil society organisations and development partners have come up with innovative approaches to help the affected people adapt to climate change (IPCC 2012, Planning Commission 2012).

#### **1.1.1 Conceptualizing Climate Change, Migration and Displacement:**

"Climate change" means a change of climate which is attributed directly or indirectly to human activity that alters the arrangement of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods (Haque 1996). However, IPCC (2007) refers it as 'a change in the state of the climate over time, whether due to natural variability or as a result of human activity' (Patwary 2009). United Nations Framework Convention on Climate Change (UNFCCC) has defined climate change as "a change of climate which is attributed directly or indirectly to human activity" (UNFCCC 2001). So, it's evident that human activities do have major impacts on the climate.

Migrants refer to individuals who have changed their place of residence either by crossing an international border (international migration) or by moving within their country of origin to another region, district or municipality (internal migration). People are normally considered 'migrants' if they remain outside their original place of residence for a period of at least three months.

Displacement is a particular form of migration, in which individuals are forced to move against their will. Where people are forced to move within their country of origin, this is referred to as internal displacement.

### **1.1.2 Climate Induced Displacement and Migration in Bangladesh:**

The Current Situation Climate change is expected to affect the movement of people in at least four ways: (i) the intensification of natural disasters both sudden and slow-onset leading to increased displacement and migration; (ii) the adverse consequences of increased warming, climate variability and of other effects of climate change on livelihoods, public health, food security and water availability; (iii) rising sea levels that make coastal areas uninhabitable; and (iv) competition over scarce natural resources potentially leading to growing tensions and even conflict and, in turn, displacement. Bangladesh's vulnerability to natural hazards leads to climate displacement the forced displacement of individuals and communities from their homes and lands. This is a result of both "sudden onset events" such as floods, cyclones and river bank erosion as well as "slow onset processes" such as coastal erosion, sea-level rise, salt water intrusion, changing rainfall pattern and drought. The primary causes of climate displacement in Bangladesh are tidal height increases in the coastal areas (leading to tidal flooding) and riverbank erosion in the mainland areas. The key secondary causes of displacement are tropical cyclones and storm surges in the coastal regions and river flooding in the mainland. The primary sites of displacement have been in the coastal regions and in the river delta regions in the mainland. Of Bangladesh's 64 districts, coastal and mainland districts are already producing climate displaced people. It is estimated that six million people have already been displaced by the effects of climate hazards in Bangladesh (Walsham 2010). However, Migration is a multi-causal phenomenon: even in cases where climate change is a predominant driver of migration it is usually compounded by social, economic, political and other factors. Resource, social network, cultural ability to cope with change,

individual's attitude, position in family decision making and gender contributes to decision to migrate or not.

### **1.1.2.1 Sudden-onset Events**

#### **Floods**

In the last 25 years, Bangladesh has experienced six severe floods, with the 1988 and 1998 floods alone causing 2000-6,500 and 1,100 deaths respectively and displacing as many as 45 and 30 million people. Further, in addition to the existing flood risk, there is an increasing problem of protracted water-logging in many areas due to sedimentation in drainage channels and rivers, particularly in the South-West coastal region of Khulna Division. Periodic severe floods in Bangladesh cause displacement on a very significant scale. In the most recent severe floods of 2007, around 32,000 Km<sup>2</sup> were inundated, affecting almost 16 million people in around 3 million households. Around 85,000 houses were severely damaged, with 1.12 million hectares of cropland affected and an estimated loss of BDT 5.8 million in livestock. Damage to embankments and other critical infrastructure are also a major problem and often prevent the early return of affected communities. An International Organization for Migration (IOM) study reveals that 28 per cent of households in flood affected regions had at least one migrant and 83 per cent reported that unemployment due to frequent floods was the main reason for family members to leave. Importantly, only 6 per cent of migrants went to another village, and these were all from the poorest income quartile, while 89 per cent went to the nearby city (70 per cent of whom were from the middle quartiles economically) (Siddiqui 2011). The remaining 5 per cent of households with overseas migrants were all from the richest quartile.

#### **Cyclones and Storm Surges**

On an average, a severe tropical cyclone hits Bangladesh after every 3 years.<sup>26</sup> These storms generally form in the months just before and after the monsoon and intensify as they move north over the warm waters of the Bay of Bengal. They are accompanied by high winds of over 150 kmph and can result in storm surges up to seven meters high. The tropical cyclones in 1970 and 1991 are estimated to have killed 500,000 and 140,000 people, respectively (BCCSAP 2009). The enormous, forceful and devastating cyclone Sidr struck the coast of Bangladesh on November 15, 2007. It killed over 10,000 people and devastated the lives and livelihoods of over 30 million

people. Most recently, cyclone Aila hit the coasts of Bangladesh on April 25, killing 193 people and displacing thousands. Many people of coastal districts were made homeless for weeks and suffered from serious food and water insecurity. Thousands of them were thrown into extreme poverty. Water borne diseases spread amongst many affected communities (Rahman 2009). The storm surges are higher in Bangladesh than neighboring countries because the Bay of Bengal narrows towards the north, where Bangladesh is located. Tropical cyclones and storm surges in coastal areas have led to high loss of life; extensive damage to houses, property and infrastructure; loss of livestock; and disruption to agriculture and livelihoods (Rahman 2009).

### **River Bank Erosion**

River-bank erosion is a constant threat to people living alongside Bangladesh's major rivers and on river islands ('chars'). Riverbank erosion is caused because the course of rivers tends to shift over time. The Government estimates that annually several thousand hectares of floodplain are lost due to river bank erosion and that this leads to thousands of people becoming landless and homeless every year (BWDB 2012). Along with the floodplain, Bangladesh loses several kilometers of roads, railways and flood embankments every year. A number of cities and towns such as Chandpur, Rajshahi and Faridpur are also threatened by erosion. According to a recent study, "about one million people are directly affected by riverbank erosion each year and landlessness in these areas could be as high as 70 per cent".<sup>33</sup> One study on north-west Bangladesh found on an average household have been displaced 4.46 times. Majority moves essentially within localized areas, some households migrated to greater distances. Another study found that 80 to 95 per cent of char households of northwest Bangladesh are migrant households.<sup>34</sup> Migrations from chars are mostly temporary, seasonal and circular. 5500 of 30,000 slum dwellers in Sirajganj were found to be riverbank erosion affected displaces (Haque and Hutton 2004).

#### **1.1.2.2 Slow-onset Processes**

##### **Coastal Erosion**

Coastal erosion can be a slow-onset process with one study identifying rates of erosion on Bhola Island for instance as between 0.31 to 0.43cm a day - as well as a sudden-onset event, for instance when high spring tides or storm surges result in much faster rates of change. Climate change is expected to exacerbate coastal erosion primarily through rising sea-levels, but also through

changes to river flow and other hydrological dynamics.<sup>36</sup> During the last 40 years, Bhola Island has been squeezed to 3400 km from 6400 sq. km from 1960 suffering net loss of 3000 sq. km. (Haque and Zaman 1996). The research work of 2004 reveals that 3332 families lost their houses from river erosion. 21 schools were affected, 7 were abolished completely and 14 were under constant risk of being eroded. There was no available resources like land, construction materials etc to rebuild the school elsewhere in the community. Kutubdia and Moheshkhali an outreach island situated in the south-eastern part of the Bay of the Bengal, has been eroding fast due to strong tidal action, as well as by cyclonic action and storm surges. This island, once which was 250 sq km in size, 100 sq km in size lost around its 65% during last 100 years respectively.

### **Sea-Level Rise (SLR)**

Being a low-lying deltaic country, Bangladesh is bound to face the serious consequences of sea level rise (SLR) including permanent inundation of huge land masses along the coast line. Over the last 100 years Bangladesh has already been warmed up by about 0.50 and 0.50 m SLR in the Bay of Bengal. World Bank's study on the impact of SLR in Bangladesh reveals that, 100 cm sea level rise within next 100 years will inundate 15 to 17 per cent of country's land area which will make 20 million people environmental refugee and a country like Bangladesh might not be able to accommodate such huge uprooted people (Shamsuddoha & Chowdhury 2007). For this reason, Bangladesh has been ranked as the 3rd most vulnerable in the world to SLR in terms of the number of people and in the top ten in terms of percentage of population living in the low elevation coastal zone. Therefore the threat of the communities being pushed away due to the effects of climate change is one of the most severe on earth (Pender 2010). Sea level Rise significantly increases coastal erosion, saline intrusion, flooding and water logging and storm surge.<sup>40</sup> Salt-Water Intrusion Saline intrusion is already a major problem in the South-West of Bangladesh, where diminished flow in the dry season enables salt water to penetrate far inland through the estuarine river system, severely limiting the potential for supplemental irrigation and potentially damaging crops during very high tides. Access to groundwater is also limited, with coastal wells required to penetrate as deep as 250m or more to reach fresh water and increasing water usage in 'recharge' areas further north threatening to exacerbate the issue still further. As a result of climate change, rising sealevels and, potentially, decreased winter rainfall are expected to aggravate the situation by increasing salt water intrusion up coastal rivers and into groundwater aquifers and reducing the

availability of freshwater in the coastal regions, particularly in the South-West. Increased salinity has severe consequences on agricultural productivity, with the multiple effects on surface water, groundwater and soil quality change combining to reduce crop yields (Pender 2010).

### **1.1.3 The Future of Climate Displacement in Bangladesh**

It is projected that the effects of climate change will exacerbate many of the natural hazards faced by Bangladesh, including all of the natural hazards currently leading to climate displacement – flooding, tropical cyclones, storm surges, salinity intrusion and river-bank and coastal erosion and SLR. IPCC has stated that climate change and global warming are likely to lead to an intensification of rainfall; increase in the frequency of flash floods and large-area floods; earlier melting of snowpacks and melting of glaciers; frequent and intense droughts; intense tropical cyclones; rising sea levels; frequent and intense storm surges; and intense inland rainfall and stronger winds:

Sea level rise from climate change is anticipated to worsen many of these processes and to subsume up to 13 per cent of Bangladesh's coastal land by 2080 (Pender 2008).

Heavier and more erratic rainfall in the Ganges-BrahmaputraMeghna system is likely to lead to further riverbank erosion resulting in mass displacement in the mainland areas of Bangladesh. Besides, erratic rainfall is also likely to lead to over-topping and breaching of embankments resulting in widespread flooding in both urban and rural areas.<sup>45</sup> In addition, it is likely to lead to increasing droughts, especially in the drier northern and western regions of Bangladesh which record significantly less rainfall causing the destruction of crop yields and severe disruption to livelihoods (Pender 2008).

Erratic rainfall is likely to lead to increasingly frequent and severe landslides in the hill regions of Bangladesh triggering human exodus. As the Himalayan glaciers continue to melt, it is likely that there will be higher river flows in the warmer months of the year, followed by lower river flows and increased saline intrusion after the glaciers have shrunk or disappeared (Pender 2008).

The difficulty inherent in predicting the future impact of climate change on displacement in Bangladesh means that any attempt to quantify the exact number of climate-displaces should be treated with some caution. However, as all of the key current drivers of displacement are expected to increase in both frequency and intensity due to climate change, it is highly likely that the number of climate induced displaced people will continue to increase in the future in Bangladesh. In

addition, the number is likely to rise even higher due to secondary and as yet unforeseen effects of climate change (Pender 2008).

#### **1.1.4 Additional Concerns Resulting from Climate Change in Bangladesh**

In addition to exacerbating the natural hazards that are already leading to displacement in Bangladesh, the effects of climate change may also lead to additional concerns that will impact on climate displacement in Bangladesh. Displaced populations who are unable to return to their residences or unable to resume their traditional livelihoods are usually forced to head to the urban centres in search of employment and a better life. Such rural-urban migrants end up in the city's slums, earning the bare minimum in the informal-sector. These people in general face insecurity of land tenure and shelter, with women especially vulnerable to exploitation and abusive practices. The conditions under which most of the rural-urban migrants live violate their most basic, human rights including lack of shelter, lack of secure tenure, and lack of access to basic services such as clean drinking water, healthcare and education. Rapid and unplanned urbanization does not only have implications for the environmental migrants and the urban poor but the society at large. There are serious, 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. Absence of proper drainage and garbage disposal systems also compound the effects. Secondly, competition over already scarce basic resources such as clean water, electricity, etc, leads to increased social tension within the slum population but also among the urban residents at large, which could eventually result in outbreaks of conflict. Thirdly, the arrival of displaced persons in large numbers to a city also jeopardizes the city's ability to plan for the future, as overcrowding and overuse of existing amenities and services disrupt urban planning. Finally, overcrowding and overpopulation of urban centres pose an incredible risk in terms of disasters such as floods and earthquakes, as well as a public health challenge. Given the current state of Bangladesh's cities, a mass exodus of environmental migrants from rural areas would no doubt be a cause for alarm (Fatima & et all 2010).

## 1.2 Statement of the Problem:

Over the past two decades frequent disasters, increases in soil salinity, river erosion, floods, tropical cyclones, and storm surges have forced marginal coastal communities to migrate to other destinations in search of alternative livelihoods. Bangladesh has lost thousands of lives due to catastrophic cyclones in recent history, notably Cyclone Sidr in November 2007, which caused nearly 4000 deaths. Moreover, the frequency of cyclones in Bangladesh has increased more than five-fold when compared with the past three decades. Following Sidr, Cyclone Aila hit on May 25, 2009. Approximately half a million people were forced to leave their homes. Large areas of productive farmland were rendered useless as a result of inundation and subsequent salinity, and others were permanently flooded, forcing residents to migrate. Such migration has taken place mostly into the southern coastal cities in Bangladesh, such as Khulna and Barisal. In their search for alternative livelihoods displaced communities generally opt for urban destinations where employment opportunities and livelihoods are perceived to be available; thus, those displaced can be labeled climate migrants. In the last 25 years, Bangladesh has experienced six severe floods, with the 1988 and 1998 floods alone causing 2000-6500 and 1100 deaths and displacing as many as 45 and 30 million people respectively (NAPA 2005). Following Cyclone Aila in May 2009, an estimated 100,000 people were still living on embankments in the early months of 2010 (IOM and other agencies 2010; IRIN 2010). Cyclone Aila killed only 193 people, but it displaced more than 297,000, and severely damaged infrastructure, institutions, crops and cultivable land, causing a huge influx of saline water into agricultural land and fresh water areas (MoDMR, 2018). Many displaced people would have returned home if given access to basic services such as fresh water and their preferred livelihoods, but assessments more than two years after Cyclone Aila suggest most have been forced to migrate, particularly to urban areas, due to failed post disaster action such as embankment reconstruction and provision of basic services (Roy and Sultana 2010; ECHO 2009). Although 'cash for work' and 'food for work' schemes initiated by the government and humanitarian organizations helped, the absence of other social, economic and environmental support services forced those displaced by Aila to migrate.

Riverbank erosion displaces 50,000 to 200,000 people in Bangladesh every year (Mehedi 2010). The erosion takes away not only people's homes but often their farming land also (Zaman 1989). Sometimes communities get displaced several times on account of erosion. A mid-1980s study in

Kazipur sub-district showed that two-thirds of the inhabitants of the Jamuna-Brahmaputra floodplain experienced displacement at least once, about 17 per cent three times and 15 per cent 10 times (Hutton and Haque 2003). A survey in Hatia showed 16 per cent households moved to cities to cope with the impacts of riverbank erosion and 22 per cent migrated after tidal surges. A study by Abrar and Azad (2004) on northwest Bangladesh found that on average households have been displaced 4.6 times by riverbank erosion. A majority moved essentially within local areas, some households migrated to greater distance.

Despite difficulties defining the precise contours of the causal link between climate change and individual displacement – whether as a result of “sudden onset events” or “slow onset processes” (Siddiqui 2011) - as well as the element of choice in such displacement (McAdam & Saul 2010), what is evident is that millions of people in Bangladesh are already being displaced by natural hazards and that many millions more will be displaced in the future as a result of the increase in frequency and severity of natural hazards due to climate change. This is combined with a startling institutional and policy response gap to both the issue of climate displacement and the need to find durable housing, land and property rights solutions for climate displaced people. This gap is apparent at both the Government of Bangladesh level and the international legal and policy level.

Current legal and policy frameworks are not sufficient to govern climate-induced displacement. Several frameworks, such as the legal instruments governing climate induced displaced and migrants, are largely inapplicable and inappropriate. Individuals rendered displaced by the slow or fast onset effects of climate change essentially constitute an entirely unprotected category. This series of holes in global governance frameworks perpetuates the threat that climate change poses to our collective human rights and, in particular, the world’s most vulnerable people. This paper explores to what extent migration can be an effective way of adaptation to climate change and looks at policy options in this regard.

### **1.3 Rationale of the Study:**

This research has assessed the present status of the policies regarding climate induced displacement and migration and has identified the policy gaps and organizational constraints. It founded out some loopholes in the existing practices and obstacles to address the displacement and migrations due to climate change. On the light of the findings of the study the researcher have tried to provide some recommendations to reduce the policy gap of climate change adaptation. These suggestions will assist the decision makers both at national and local levels to formulate the strategy, action plans etc. and as well as will provide the information for policy review, and will help the professionals to design and implement effective method to address the issues of displacement and migration tendency in Bangladesh. Furthermore, this study will encourage and assist to find the pathway of future research.

### **1.4 Objectives of the Study:**

The objectives of this study are-

- (i) To assess the present status of the policies regarding climate induced displacement and migration;
- (ii) To identify gaps and organizational constraints in the policies;
- (iii) To support decision makers to formulate and review the climate change adaptation policies more expediently when choosing the issues of displacement and migration in Bangladesh.

### **1.5 Methodology:**

The study has tried to assess the present status of policies and institutional framework of the climate induced displacement and migration dimensions in Bangladesh in order to identify the policy gaps and organizational constraints. It has also attempt to find out some loopholes in the existing practices and obstacles to address the displacement and migrations due to climate change impacts in the coastal areas where people are forced to migrate and displace.

Primary and secondary data sources have been used in this study which was qualitative. Primary data has been collected through Key Informant Interviews of relevant stakeholders related to climate change and disaster risk reduction. Key Informants have been categorized into two cluster/group such i) three officials of the Government of Bangladesh and 01 climate change professional working in national and local NGOs; and ii) 02 affected people from the community. Hence, I have used a purposeful sampling method to determine key informants for the Non-structured interviews.

The secondary data and information have been collected by studying of relevant books, journals, research reports, seminar reports, reports, published and unpublished documents; editorials of major or national newspapers and internet sources. Relevant policies of the government of Bangladesh pertaining to climate change adaption, displacement and migration have been thoroughly reviewed to understand the legislative and institutional arrangements of the government of Bangladesh. Qualitative analysis tools and models have been used to find out the policy gap.

### **1.6 Limitation:**

Due to COVID-19 pandemic situation, Key Informant Interviews can be conducted via using telephone, email and social networking.

## **2. Assessment of Existing National Policies and Institutional Frameworks regarding Climate change Induced Displacement and Migration**

Being one of the most vulnerable countries, Bangladesh has adopted a number of policies and institutional frameworks over recent years. These measures have been accepted to combat frequent natural disasters and the adverse effects of climate change.

### **2.1 Policies and Institutional Framework on Environment**

Bangladesh Environmental Policy 2018, National Plan for Disaster Management 2015-20, Disaster Management Policy 2015, National Adaptation Action Plan 2005 and the Coastal Zone Policy 2005 deal with the adverse effects of disasters and environmental problems. Considering the key documents, the National Environmental Management Action Plan 1996, the more recent National Capacity Self-Assessment (NCSA) for Global Environmental Management 2007 deals as guiding strategies on the environment. There are also some sector specific environmental policies such as the National Water Policy 2013 and the Guidelines for Participatory Water Management. All of these documents are understandably focused on meeting Bangladesh's current environmental challenges and make few specific references to the migration effects of environmental change and degradation. NSCA refers to the problems of displacement by river bank erosion, rural-urban migration and the potential for out-migration from coastal zones. In divergence, policies on disaster management such as the National Plan for Disaster Management 2010-15 do making reference to displacement and specific vulnerabilities related to migration, such as problems facing families left behind when men out-migrate following an event. The institutional framework of Bangladesh consists of different disaster management committees at different national and local levels comprising government, non-government, voluntary, and other relevant stakeholders. The National Disaster Management Council (NDMC) headed by the Prime Minister is the highest-level of institution for the formulation and review of disaster management policies. The Inter-Ministerial Disaster Management Coordination Committee is responsible for implementing disaster management policies and the decisions of the NDMC, and is advised by the National Disaster Management Advisory Committee. The Ministry of Disaster Management and Relief is the mandated ministry for disaster management in Bangladesh. Its Department Disaster Management (DDM) is mainly responsible for coordinating national disaster management interventions across all agencies. In 2010, the government published 'Standing Orders on

Disaster', which provides a detailed institutional framework for disaster risk reduction and emergency management, and defines the roles and responsibilities of different agencies and committees.

## **2.2 Policies and Institutional Framework on Climate Change**

The Government of Bangladesh has signaled its clear intention in the area of adaptation:

*"It is essential that Bangladesh prepares now to adapt to climate change and safeguard the future well-being of its citizens... the Government is unequivocal in its commitment to protect the people from the ravages of climate change..."*

The Government has taken many steps to address adaptation to climate change including the establishment of a 45-million-dollar Climate Change Fund, development of The Bangladesh National Adaptation Programme of Action 2005 (NAPA) and The Bangladesh Climate Change Strategy and Action Plan 2009(BCCSAP).

In 2005, Bangladesh completed and published The Bangladesh National Adaptation Programme of Action (NAPA) prepared by the Ministry of Environment and Forests. The NAPA recognizes that Bangladesh will be one of the most adversely affected countries due to climate change especially because of Bangladesh's *"low economic strength, inadequate infrastructure, low level of social development, lack of institutional capacity and a higher dependency on the natural resource base"*

The NAPA identified that some of the effects of climate change have links with migration; however, these links were not expressed in concrete terms. For example, the report stated that the long term consequences of the project to *"promote adaptation to coastal crop agriculture to combat Salinization"* was that the *"affected community would not migrate to cities for job and livelihood"* and that the *"social consequences of mass scale migration to cities would to some extent be halted"*. The document also stated that a potential long-term consequence of the *"adaptation to agriculture systems in areas prone to enhanced flash flooding"* project would be that *"people might get a means to continue with farming, instead of migrating to cities after the flood"*. Bangladesh NAPA has moved from the urgent needs to wider adaptation requirement to address medium and long-term climate issues. It gave emphasis on four basic national security issues of Bangladesh i.e. a) food security; b) energy security; c) water security; and d) livelihood security (including right to health) and respect for local community on resource management.

The Government formulated the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) in 2008, and revised it in 2009. The 2009 BCCSAP is a 10 year programme (2009 – 2018) designed to *“build the capacity and reliance of the country to climate change”*. The BCCSAP recognizes that *“Bangladesh is one of the most climate vulnerable countries on earth and will become even more so as a result of climate change”*. And highlights the risk of many of the effects of climate change that have led to displacement, including: floods, tropical cyclones, storm surges and droughts. Importantly and in contrast with the 2005 NAPA, the 2009 BCCSAP draws direct links between climate change and displacement in Bangladesh. It states that increased river bank erosion and saline water intrusion in coastal areas *“are likely to displace hundreds of thousands of people”* and that if sea level rise is higher than currently expected and coastal polders are not strengthened and/or new ones built, *“six to eight million people could be displaced by 2050 and would have to be resettled”*. Specifically, the BCCSAP states that *“it is now evident that population in many parts of the country will be so adversely affected by climate change that they will have to move out. The process of migration of climate change-affected people, both inside and outside the country, needs to be monitored closely and adequate institutional support should be provided for their proper resettlement”*.

Secondly, the BCCSAP suggests that increased river bank erosion and saline water intrusion in coastal areas *“are likely to displace hundreds of thousands of people”*. However, surveys undertaken by the Association of Climate Refugees suggest that this number is likely to be more accurately in the millions of people displaced, rather than the hundreds of thousands.

Thirdly, the BCCSAP suggests that six to eight million people could be displaced if *“sea level rise is higher than currently expected”*. Again, sea level is already leading to displacement from coastal areas in Bangladesh. The BCCSAP does however, importantly, highlight that the role of monitoring climate displacement and ensuring institutional support for *“proper resettlement”* lies with the Ministry of Environment and Forests, the Ministry of Home Affairs and the Ministry of Local Government, Rural Development and Cooperative.

Importantly, the BCCSAP highlights that *“climate change is likely to impact most severely on the poorest and most vulnerable in society and that every effort will be made to ensure that they are protected and that all programme focus on the needs of this group for food security, safe housing, employment and access to basic services, including health”*. This statement acknowledges the increased vulnerability of the poorest in society to the effects of climate change as well as the need to ensure safe housing as part of the Government’s adaptation strategy.

It is mandated that the Ministry of Environment and Forests (MOEF) is accountable for addressing climate change challenges, including international negotiations. The National Steering Committee on Climate Change (NSCCC), chaired by the Minister of MOEF is comprised by secretaries of all relevant ministries, divisions, and representatives of civil society and business community. The National Environment Committee under the Ministry is anticipated to mainstream climate change issues into the national development planning. Climate Change Focal Points (CCFP) in various ministries are anticipated to provide collaboration. Besides, five technical working groups have been established for adaptation, mitigation, financing, technology transfer and public awareness.

### **2.3 Climate Change Induced Displacement and Migration: Evidences from Key Informant**

Apart from the policy assessment, this study has conducted Key Informant Interviews to get significant research findings which is necessary to find the gaps of policy and its implementations. Stakeholders engagement and feedbacks are compulsory to assess the policies. Therefore, the study, in this chapter, is presented few case studies in order to illustrate the previous analysis and has given further theme based investigation of existing policy status accordingly.

## River bank erosion wiped out her dreams, It's a fate but nothing



**Meherzan**, a 57-year-old woman now, displaced with her husband, a son and two daughters from Bhola 09 years ago due to river bank erosion. They had lost everything including their home and agricultural land. Her husband worked as a farmer, her 12-year-old son and 8 years old daughter studied at school and 4-year-old daughter stayed at home with her. Her son wanted to be a doctor. River bank erosion faded their dreams. They had been forced to migrate at the Demra slums in Dhaka city. Her son and daughter had to stop their study. Her husband and son's income combined were not enough to pay rent and buy food in the city because they did not get work every day. Therefore, her husband forced her to earn extra income, but she failed as she had never been to the city and was not skilled

enough to fit into the urban employment. Because of her incapacity to support her family, her husband divorced her 06 years ago. Her son and elder daughter got married and live separately. Now, Meherzan is living at the same slum with her 13-year-old daughter and is serving as a housemaid. Forced migration has made her earn an income but has taken her family and washed out her dreams.

## His Hope shattered.... No one is responsible



“Md Idris was wealthy farmer back in Shamnagar Thana. He was forced to migrate due to Cyclone Aila in 2009. Idris had to migrate with his wife and three sons and a daughter because his agricultural land has contaminated and water logged by saline water influx during Cyclone Aila. He waited for five years to get normal status of his agricultural land for productivity. He was expecting government intervention to restore his livelihood but nothing happened in the course of time. Even he was suffering severe scarcity of drinking water because sources of fresh water have been contaminated by saline water as well. His son had to collect drinking water from about 5 k.m. distances. After that another three consecutive cyclones hit the area and he lost his hope to get his land back. He lost everything and has no optimism of

returning to resume his former life. He became poorest and decided to migrate in Dhaka for better life. Now he is a small shop keeper at the Korail slum area. He lost his economic and social status due to adverse impact of climate change”.

### **Resilience livelihoods could be an option.....**

“Internal displacement is an issue to be addressed with utmost priority while we are trying to build the community resilience. Due to the natural disasters like floods, cyclones, river erosions and salinity intrusion every year a large number of people become homeless and unemployed. These people migrate to urban areas for their survival. In the char and haor areas male members of the Households migrate during the lean season. Though it helps them to earn during the lean season but the women and children become vulnerable and insecure.

While we are addressing the poverty in the slump areas we have to work on the root cause of urban migration as well. Creating employment opportunity in the rural areas may help the urban poor to go back their native villages. Resilience livelihoods could be an option to create employment opportunity at the rural context where life and livelihoods is vulnerable due to the impact of CC and natural disasters”.

**Ms Afsari Begum**

*Practical Action Bangladesh, Representative of NGOs*

### **Government is stressing on Climate Change Adaptation....**

*“Government has taken initiatives to address the adverse impact of climate change. Now a days, people of the coastal region are engaging themselves with climate adaptation but still huge numbers of people are forced to displace their home and livelihood due to salinity intrusion and water logging in the west-southern region of Bangladesh. Salinity is increasing day by day, it is alarming for the agricultural productivity and farmers and day labourer are anxious about their livelihood”.*

**Dharitri Kumar Sorker**

*Deputy Secretary, Ministry of Environment, Forest and Climate Change*

### **Existing Policies have constraints to address the Migration and Displacement....**

*“It is difficult to maintain the information about displaced and migrant people whereas Bangladesh is one of the most densely populated countries. We do not have standalone policy about climate induced migration and displacement but NAPA covers the adaptation only. It is true that there are no clear indications of displacement issues in the policies. Before formulating the policies, we could not able to intervene the issues raising on everywhere among the affected people. We can assist them to adapt the situation but can not able to restore their inhabitation and livelihood”.*

**Mohammad Mazedur Rahman**

*Deputy Secretary, Ministry of Environment, Forest and Climate Change*

## **Policy review is inevitable for solving Displacement....**

*Riverbank erosion is the main cause of climate induced displacement and migration. It is noted from a study conducted by Dhaka University that up to 50% of people are now living in Bangladesh's urban slums because they were forced to flee their rural homes as a result of riverbank erosion. Government has endeavor to address the issues and taken a programme to allocate housing facility called Disaster Resilient House for poor and affected people across the country. Land ownership is necessary to get the allocation of the Disaster Resilient House as primary condition.*

**Md Ali Reza Mazid**

**Additional Secretary, Ministry of Disaster Management and Relief**

### **3. The Gaps and Challenges Regarding Policies and Institutional Frameworks**

The national policies and institutional frameworks of Bangladesh are not sufficient to protect climate induced migrants. It is clear that climate change and migration are not unknown terms in Bangladesh, but the consequences of forced migration and how it can be addressed are not yet clear at the policy level. There are no clear indications of how population displacement problems will be addressed in these policies. In addition, there are no detailed action plans with a timeframe to tackle these problems. The national legal framework does not even include provisions to address the protection of the rights of environmental migrants or internally displaced persons. The NAPA neither articulated any concrete links between climate change and displacement nor prescribed any adaptation programme or policies specifically related to the issue of such displacement. In not identifying displacement as an adverse effect of climate change, the instrument, unfortunately, fails to address the need of developing rightsbased solutions for the millions of current and future climate induced displaced persons across Bangladesh. Further, the 2009 BCCSAP does not accurately portray the full extent of climate induced displacement in Bangladesh. First, such displacement in the BCCSAP is characterized as a potential future event, though, climate induced displacement is already occurring in Bangladesh. Perhaps more critical than the mischaracterization of the seriousness and urgency of climate displacement in Bangladesh, is the fact that the BCCSAP itself does not propose any policies, programme or actions designed to address climate displacement and migration. The instrument clearly states that six to eight million people could be displaced by sea level rise and that they “would have to be resettled”. However, the BCCSAP does not propose any policies or strategies for these millions of people, let alone any rights-based housing, land and property solutions for these affected communities. Instead the BCCSAP merely proposes that the process of migration of climate-change affected people needs to be “monitored closely” and that “adequate institutional support should be provided for their proper resettlement”. There is no indication of where or how this “institutional support” will be provided. Furthermore, migration issues are not effectively mainstreamed with environmental, disaster management, or climate change policy at present. Besides, in existing migration discourses, the tendency to concentrate on its negative dimensions –such as forced displacement or migration as a 'failure of adaptation' – is a barrier to introducing more proactive policy measure that maximize the benefits of migration from and between environmentally vulnerable regions. Experiences from the 2009 Cyclone ‘Aila’ indicate that weaknesses and inefficiency exist in

managing natural disasters. The concerned authorities were not able to repair the damaged embankments caused by the cyclone for a long time. There was no proper and adequate rehabilitation programme for the displaced people.

In addition, there was a lack of accountability and a lack of transparency in implementation of emergency responses and rehabilitation programme. In many cases, negligence and corruption of the local disaster management authorities and the local leaders were reported in relief and emergency management programme. Various studies show that the existing United Nations and international policies for protecting internally displaced persons are insufficient. As per the normative frameworks under the 1998 UN Guiding Principles on Internal Displacement, the respective states have the primary responsibility to help internally displaced persons. However, there are challenges on the ground to ensuring the protection of internally displaced persons. This is because the affected countries are sometimes unable to protect the displaced people, and in some cases even deny the entry of international protection and assistance agencies, referring to the principle of national sovereignty and non-interference.

The international migration policies do not adequately support the protection of environmental or climate migrants. As the numbers of climate or environmental migrants are expected to rise in coming years due to climate change and sea level rise, developed countries may face demands to accept climate displaces from vulnerable and affected countries.

A gap between disaster research and practice exists. Disaster management strategies are often not adopted based on intensive and in-depth disaster research and analysis. The lack of proper vulnerability assessment to climate change impacts in vulnerable communities is a major drawback. Additionally, there are the challenges of raising necessary funds and implementing adaptation programmes for the most vulnerable countries.

#### 4. Recommendations

For adopting a sustainable bottom-up policy approach in addressing climate change induced displacement and migration in Bangladesh, the following coordinated initiatives can be substantial:

- i) The Government should instantly instigate to encourage the engagement and the coordination among the relevant Government agencies, affected communities and civil society on climate-displacement and migration issues. The knowledge, experience and resources of affected communities themselves will be essential in developing and implementing effective policies and programme to solve climate displacement in Bangladesh. Due to the unique access and expertise, civil society must play an imperative role in ensuring effective coordination, consultation and participation between the affected communities and the Government. Government can clearly designated a ministry or institution on which primary responsibility for the success of this liaison will lie.
- ii) As Bangladesh is a developing country with limited resources, it is important that the regional and international communities become aware of the climate related displacement crisis in Bangladesh and support the efforts of the Government to protect the resilience of climate-displaced people. This support can come in multilateral moods and does not necessarily need to include the resettlement of such people. Types of support could include financial assistances, technical cooperation and the capacity building of relevant institutions. Recent progresses at the global level have been stimulating in this regard. The outcome of the COP16 summit was adopted an agreement called a "Green Climate Fund". The Fund is designed to assist poorer countries in financing emissions reductions and adaptation which proposed to be valued at 100 billion a year by 2020. Although there are concerns with the Fund, especially as to how the money will be raised, that have continued through the COP negotiations, it is essential that Bangladesh captures the momentum of this process and contributes to the development of this institution in a way that will best protect the rights of climate-displaced people across this country. Therefore, it is needed to clearly identify a lead

ministry or agency for whom the regional and international community can engage with on a technical level in the development and implementation of solutions to climate displacement across Bangladesh.

- iii) An integrated national plan should be developed by the government to address climate induced displacement and migration. Thus, avoiding duplication of resources and fragmentation of the Government's response, this national plan can be incorporated as part of the 2009 BCCSAP. This plan should include an effective national mechanism for monitoring climate related displacement and keeping statistics on the scope and causes of climate displacement. The international and regional communities should assist Bangladesh in developing an effective monitoring mechanism for providing technical assistance and expertise. Government should disseminate necessary information through concerned agencies so that climate-displacees can have clear understanding of which institutions are able to provide social, financial and resettlement assistance and which institutions are entrusted with enforcing, respecting and protecting housing, land and property rights. International Human rights law provides an important framework for the development of a rights-based national plan to resolve climate displacement. The Government must provide effective protection to the most vulnerable individuals and communities across the country under human rights law. As with the development of the NAPA and the BCCSAP, the responsibility for developing a rights-based plan to resolve climate displacement could be guided by a Project Steering Committee, headed by the Ministry of Environment and Forests as well as members from other key ministries, departments and agencies including the Bangladesh Ministry of Finance and Planning. The preparation process should include consultations with a wide variety of stakeholders, including the policy makers, the local representatives of the Government, the members of the scientific community and various research institutes, researchers, academics and importantly, the civil society representatives and the representatives from the affected communities themselves.
- iv) Investment should be made to achieve sustainable development and reduce vulnerability in environmentally vulnerable regions. The project should focus on infrastructure development, providing basic services (education, health etc.),

conducting awareness raising campaigns, strengthening livelihood and better management of existing environmental migration.

- v) Special investment should be made to implement Disaster Risk Reduction (DRR) programme in disaster prone regions. The endeavour should highlight areas vulnerable to cyclones and storm surges, floods, river and coastal erosion and droughts. This is even more important in areas experiencing recurring disasters or a combination of extreme events and gradual environmental degradation, which generate cumulative vulnerabilities.
- vi) Collaborations among disaster risk reduction, climate change adaptation and development should be developed ensuring representation, participation, and coordination of different stakeholders in the community.
- vii) Precise policies on river and coastal erosion including the feasibility of assistance and protection measures for affected people should be developed.
- viii) Contingency plans and funds for immediate repair of the breached embankments that do not rely on standard funding and tendering processes should be introduced (including a potential role for the army in addition to civil protection entities where/if needed).
- ix) Contingency planning for relocation of communities threatened by coastal erosion should be made. Unused government-owned 'khas' land and/or newly accreted land in coastal areas should be allocated to displaced households and regulatory mechanisms for resolving land disputes should be improved. In the past, a number of Village cluster projects such as 'Adarsha Gram' and 'Ashrayan' have been undertaken by the Government of Bangladesh to relocate landless individuals and families. The use of community land trusts together with the village cluster model may be explored as a possible domestic relocation solution to climate displacement within Bangladesh. International expertise and experience with community land trusts should be drawn on in designing effective models that best protect the rights of climate displaced persons.
- x) Instead of viewing migration as threat the Government of Bangladesh should incorporate migration as an important adaptation strategy. The Government of Bangladesh should mainstream migration into adaptation strategies.

In facing the challenges of climate change, organized internal and international migration can play a significant role. Internal migration linked to formal sector employment, and international migration particularly in short term nature mostly takes place from certain pockets of Bangladesh. Climate change affected regions do not belong to those pockets. The existing institutional frameworks to govern migration do not cover environmentally vulnerable regions. The ministry which manages migration should be linked with the ministries who are in charge of managing environment so that the vulnerable groups can benefit from a planned migration programme. Through this the population movement threat related to climate change, can be transformed into a source of opportunity in the adaptation process of the climate induced displaced.<sup>101</sup> Finally, there is currently a concern that existing climate change adaptation policies and programme are being affected by a lack of transparency and corruption. These issues should be resolved immediately. The regional and the international communities, the donor countries and the civil society in Bangladesh should play an essential watchdog role in this regard to eliminate corruption and to improve transparency.

## 5. Conclusions

Despite the unwelcoming forecast for the climate vulnerability of Bangladesh and the millions of current and future victims who will be displaced as a result of climate change, it is essential to emphasize that rights-based solutions are not only required but that they are also very achievable and that early hour successes are already in place. The majority of climate displaced people in Bangladesh will be displaced internally and will not flee across international borders. Thus, the primary responsibility for protecting the rights of climate displaced people in Bangladesh falls on the Government of Bangladesh. All climate displaced people are entitled to the full range of human rights protections under both the international instruments that Bangladesh is a party to as well as the protections in the domestic law of Bangladesh. It is within Bangladesh that solutions, based on the Government's obligations to respect, protect and fulfill the human rights of all Bangladeshis, must be focused. Bangladesh has a vibrant and dynamic civil society and it is these organizations, alongside the Government, affected communities and the regional and international community, who can and must work together to resolve the current and future climate related displacement crisis. It will require the coordinated efforts of these and other stakeholders to ensure that the millions of climate-displaced people can live in security and dignity with full respect for their human rights. It is obvious that a range of co-ordinated measures, backed by sufficient resources, can go a long way towards finding climate related displacement solutions.

## References:

Barnett, J. and Webber, M. (2009) Accommodating Migration to Promote Adaptation to Climate Change, Commission on Climate Change and Development, Stockholm, Sweden

BCCSAP (2009) Bangladesh Climate Change Strategy and Action Plan, 2009

BWDB (2012) Bangladesh Water Development Board : yearly report,  
[http://www.bwdb.gov.bd/index.php?option=com\\_content&view=article&id=179 &Itemid=148](http://www.bwdb.gov.bd/index.php?option=com_content&view=article&id=179&Itemid=148),  
last accessed on 20 August, 2012.

CCC (2009) Characterizing Country Settings: Development of a Base Document in the Backdrop of Climate Change Impacts. Climate Change Cell, Department of Environment, November 2009

ECHO (2009) In-Depth Recovery Needs Assessment of cyclone Aila affected areas, European Commission's Humanitarian Aid Office Report, accessed 02 December 2020 at  
[http://www.reliefweb.int/rw/RWFiles2009.nsf/FilesByRWDocUnidFile/name/SKEA-7YRJ2A-full\\_report.pdf/\\$File/full\\_report.pdf](http://www.reliefweb.int/rw/RWFiles2009.nsf/FilesByRWDocUnidFile/name/SKEA-7YRJ2A-full_report.pdf/$File/full_report.pdf)

Fatima, W. and et all (2010) 'Human Rights, Climate Change, Environmental Degradation and Displacement: A new paradigm', ELCOP & Palal Prokashoni, Dhaka, p.192

EJF (2012) 'Climate Displacement in Bangladesh', <https://ejfoundation.org/reports/climate-displacement-in-bangladesh>, accessed on 11 November, 2020.

Haque, M. (1996) 'Climate Change: Issues for the Policy Makers of Bangladesh', Environment and Development Alliance, Dhaka, P. 13-14.

Haque, C.E. and Zaman, M.Q. (1996) 'Coping with Riverbank Erosion Hazard and Displacement in Bangladesh: Survival Strategies and Adjustments' Disaster', The Journal of Disaster Studies and Management, vol.13, no. 4, pp 301-314.

Hutton, D. and Haque, C.E. (2004) 'Human Vulnerability, Dislocation and Resettlement: Adaptation Processes of River-bank Erosion-Induced Displaces in Bangladesh', Disasters 28(1): 41-62

IPCC (2012) Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change, Cambridge, UK, and New York: Cambridge University Press.

IRIN (2010) 'Cyclone Aila survivors take another hit', accessed on 02 December 2020 at [www.irinnews.org/Report.aspx?ReportId=88716](http://www.irinnews.org/Report.aspx?ReportId=88716).

- Ismail (2016) 'Climate Change, Food and Water Security in Bangladesh', accessed on 12 November 2020 at <https://www.futuredirections.org.au/publication/climate-change-food-water-security-bangladesh>
- McAdam & Ben Saul (2010), Displacement with Dignity: International Law and Policy Responses to Climate Change Migration and Security in Bangladesh, University of New South Wales Faculty of Law Research Series, Paper 63.
- Mehedi, H. (2010) Climate Induced Displacement: Case study of cyclone Aila in the Southwest coastal region of Bangladesh . Khulna: HumanityWatch.
- MoDMR (2018) 'Publication on Salinity Intrusion', Dhaka: Ministry of Food and Disaster Management, Government of the People's Republic of Bangladesh.
- NAPA (2005) National Adaptation Programme of Action, 2005
- Patwary, O. H. (2009) 'The Security Dimensions of Climate Change', Peace and Security Review, Vol.2, No.2, Second Quarter, pp.54-55
- Pender, J.S. (2010) Climate Change, its Impacts and Possible Community-Based Responses in Bangladesh, Church of Bangladesh, 2nd ed. Dhaka, p.48,. available at [http://www.churchofscotland.org.uk/\\_\\_data/assets/pdf\\_file/0008/3977/climate\\_change\\_bangladesh\\_2010.pdf](http://www.churchofscotland.org.uk/__data/assets/pdf_file/0008/3977/climate_change_bangladesh_2010.pdf)., accessed on 20 November 2020.
- Pender, J.S. (2008) 'Community-led Adaptation in Bangladesh', Forced Migration Review 31, p54, the UK Institute of Development Studies, available at: <http://www.ids.ac.uk/climatechange/orchid>, last accessed on 28 November, 2020.
- Planning Commission (2012) The Millennium Development Goals: Bangladesh Progress Report 2011. Dhaka: Planning Commission.
- Rahman, A. (2009), 'Climate change and human rights', The Daily Star, available at [http://www.thedailystar.net/newDesign/print\\_news.php?nid=97199](http://www.thedailystar.net/newDesign/print_news.php?nid=97199), last accessed on 20 November 2020.
- Roy, K., and U. T. Sultana (2010) Climate Change Disasters and Rural Poverty: Case of Coastal Bangladesh. Third International Conference on Bangladesh Environment (p. 13). Dhaka: BAPA-BEN.
- Shamsuddoha, M. & Chowdhury, R. K. (2007) Climate Change Impact and Disaster Vulnerabilities in the Coastal Areas of Bangladesh. COAST Trust and EJWG, Dhaka, pp.22-23.
- Siddiqui, T. (2011) 'Climate change induced displacement: Migration as an adaptation strategy', Published on The Daily Star, 15 November 2011.

UNFCCC (2001) Climate Change (IPCC Third Assessment Report), available at [http://www.grida.no/publications/other/ipcc\\_tar/](http://www.grida.no/publications/other/ipcc_tar/), last accessed on 02 December, 2020.

UNFCCC (2012) Bangladesh experiences with the NAPA process, Bangladesh experiences with the NAPA process, Least Developed Countries Portal, [http://unfccc.int/cooperation\\_support/least\\_developed\\_countries\\_portal/items/6497txt.php](http://unfccc.int/cooperation_support/least_developed_countries_portal/items/6497txt.php) accessed on 11 November, 2020.

Walsham, M. (2010) Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh, International Organization for Migration, available at [http://publications.iom.int/bookstore/free/environment\\_climate\\_change\\_bangladesh.pdf](http://publications.iom.int/bookstore/free/environment_climate_change_bangladesh.pdf), p.3, last accessed on 20 November, 2020.

Zaman, M.Q. (1989). The Social and Political Context of Adjustment to Riverbank Erosion Hazard and Population Resettlement in Bangladesh. Human Organization. 48 (3), p196-205.