

# CLIMATE CHANGE AND MIGRATION IN BANGLADESH: A GENDER PERSPECTIVE



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# EXECUTIVE SUMMARY

Bangladesh is a country with a unique geographical location. As such, the impacts of climate change on this small sub-tropical country are more intense and damaging, and they are on the rise. Within the country, certain regions are more affected than others, and the rural, poverty-stricken population bears the brunt of the blow. Cyclones, floods, and droughts have been on the rise, in both intensity and frequency, over the last thirty years, leaving citizens with few options to earn an adequate living to sustain themselves and their families. As a result, migration has been increasing, with large numbers of people, mostly men, travelling to other regions in search of a better life and livelihood.

The women of Bangladesh not only have to cope with the increasing effects of climatic change and natural disasters, but also the increasing patterns of migration of male family members. Most often women stay behind, usually with children, and other members of the family, take care of the household and try to make ends meet.

This study focuses on the women who stay behind while their male family members migrate. The study area covers five distinct eco-zones of Bangladesh. This study found that women, mostly living with children, other female family members, and in-laws, face adversity on a day-to-day basis. In most cases migrated male family members were unable or simply unwilling to send money back to their households, leaving the women to find other means of survival during these periods of migration. In some situations, women were looked down upon by the other members of their society due to the absence of male family members, and some reported harassment and assault. In some regions, women living without male family members have become targets for thieves.

Existing social norms and practices across the country lead to the discrimination of women and their rights, which are exacerbated during times of male migration. On top of unpaid work such as fetching water, cooking and taking care of children, women who can find employment often have unstable income. Some women suffer from increased physical, emotional, and mental stresses. Further, it is easier for women to fall into nutritional deficiencies, as they eat less and work more, either because they cannot earn enough, or because of social norms and practices that dictate women must feed their families first. Without social support mechanisms and an adequate policy environment to protect women's rights, the process of male migration due to climate change may contribute to worsening gender inequality.

Yet, in spite of the negative impacts of migration, migration can help families to stay afloat, and even improve their overall financial conditions. In a disaster-stricken country like Bangladesh, migration can be a negative and positive approach to dealing with climate change. Given the predicted effects of climate change on Bangladesh, policy and programmatic efforts need to acknowledge migration as a reality and commit to policy reform that support those who do migrate, and those who stay behind.

# INTRODUCTION

## 2.1

### Background

Internal migration in search of livelihood options is a common phenomenon in Bangladesh. Male members from a family usually migrate, and women and children usually remain behind. Normally the male member migrates to a nearby district or town, but in some cases to cities far from their home or to neighboring India. The men migrate for short to long periods ranging from fifteen days to more than a year. During the period of migration the women and children who remain behind face various difficulties.

This report explores the impacts of male migration on women who stay behind. The economic, social, and psychological impacts are explored in this report. The report is based on a study conducted by Bangladesh Centre for Advanced Studies. The study focused on 10 distinct districts under five different

eco-zones in Bangladesh, and examined the district specific implications of migration that women face due to the migratory trends. This report also provides particular policy recommendations to reduce the negative impacts of the migration process that have been found in this study.

This research report has eight chapters beginning with background information and a literature review followed by the study methodology. Chapter four presents the study areas of the research and is followed by the climate change impacts in each area. Chapter six identifies the migration status in each area and chapter seven looks at the impacts of this migration on women. The research report concludes with recommendations for policy and more gender-friendly migration.

## 2.2

### Objectives of the study

The main purpose of the study was to explore the implications of migration on women who remain behind at the household level. The study also looked at the migration scenarios in the study areas to understand the underlying causes, types, and nature of migration. Once understood, these factors can influence changes in policy in ensuring social security for women who face the implications of migration due to climatic factors. More broadly, this study contributes to project outcomes of gender-sensitive policy measures being adopted to reduce women's vulnerabilities to climate change.

## 2.3

### Research questions

1. What are the climatic factors and hazards that cause people to migrate from cyclone/flood/drought-prone areas?
2. Who are the people that migrate, what types of migration exist, and where do people migrate to due to increasing climatic hazards?
3. What is the differential impact of climate-induced migration on women and men?

# LITERATURE REVIEW

**This section of the report reviews the relevant literature on climate change-induced migration. Emphasis has been given to the common drivers that influence human migration and relocation, and their typology. A framework has been developed to clarify how climate change acts as a driving force of human migration on the basis of available literature.**

## 3.1

### Causes of human migration

Human migration is caused by many varied push and pull factors. These factors include social, political, and economic aspects; and its effects vary for both sending and hosting countries (Goh, n.d). In Bangladesh, the major concern for rural people is income, and they generally migrate to urban areas for it. Recent rural-urban migration studies have identified that majority of the migrants are concentrated in the main urban centres of Bangladesh. One study has observed that in 1974, 56.4, 42.4 and 58.9 percent of urban dwellers of Dhaka, Chittagong and Khulna cities respectively were internal migrants (Mohit, 1990).

Several studies have found that migration varies depending on socio-economic, demographic, and cultural factors including unavailability of work, unemployment, poverty, natural disasters e.g. flood, drought, river erosion. Other socio-cultural factors such as marriage, family conflict, better living, better education facilities, social discrimination, social prejudice, fanaticism, and political chaos also act as motivational factors for migration (Rahman and Rahman, 2012). All push and pull factors can be brought under the four categories: environmental, political, economic, and cultural. This study considers the environmental factors, in particularly climate change and its effect on the environment.

## 3.2

### Environmental migration

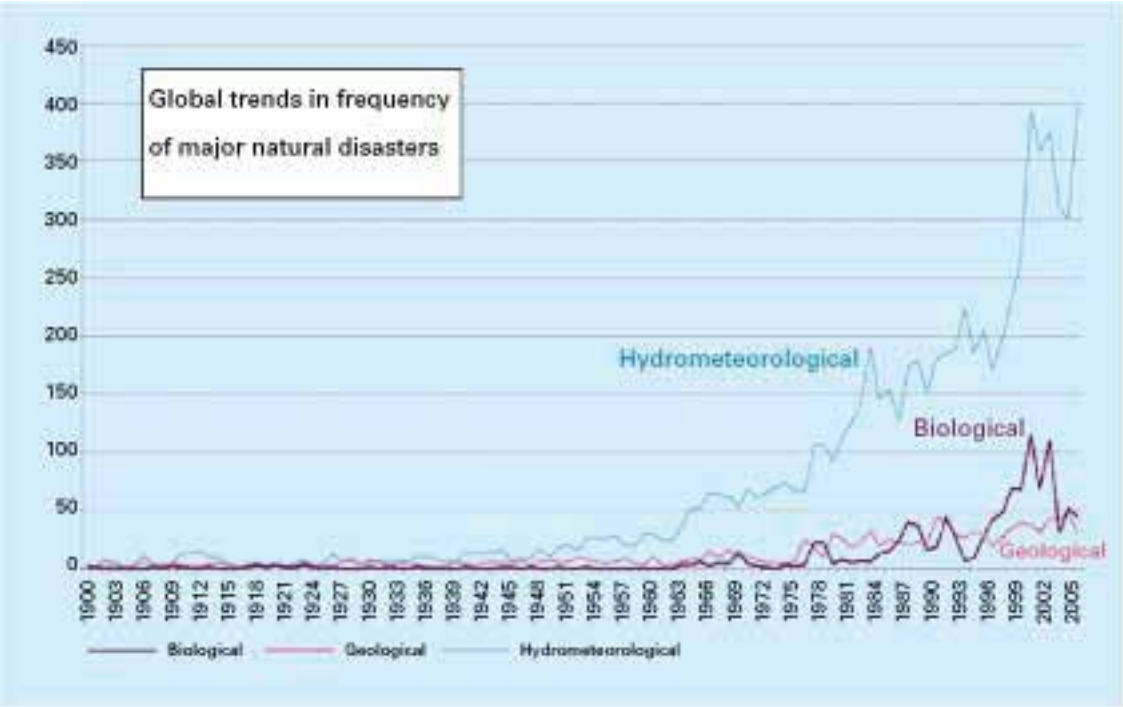
All natural hazards are not derived from climate change-induced phenomena. Some hazards like earthquakes, tsunamis, and volcanic eruptions are climate-independent hazards and can also force a significant number of people to migrate.

UNISDR has defined hydro-meteorological hazards “Process or phenomenon of atmospheric, hydrological or oceanographic nature that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage” (UNISDR, 2012).

Hydro-meteorological hazards include tropical cyclones (also known as typhoons and hurricanes), thunderstorms, hailstorms, tornados, blizzards, heavy snowfall, avalanches, coastal storm surges, floods including flash floods, droughts, heat waves, and cold spells. Hydro-meteorological conditions also can be a factor in other hazards such as landslides, wild land fires, locust plagues, epidemics, and in the transport and dispersal of toxic substances and volcanic eruption material (UNISDR, 2012). In Bangladesh climate change impacts are all hydro-meteorological phenomena.

Hydro-meteorological disasters being so prominent in a country like Bangladesh, act as major push factors for human migration. Over the last 50 years such disasters have been gradually increasing around the world in both frequency and intensity, and more recently have increased exponentially.

**FIGURE 1**  
**Increase in hydro-meteorological disasters around the world**



Source: EM-DAT (2014)

### 3.3

#### Types of human migration

Voluntary and involuntary migration:

Voluntary and involuntary migration can be differentiated depending on the willingness of the migrants and their decision-making power. It also depends on push and pull factors or age-based build of the migrating population (Gerber, 2002).

Temporary or seasonal and permanent migration:

Bell, et. al., (2000) distinguished temporary and permanent migration on the basis of production-related and consumption-related factors. For permanent migration, Bell included 'labour migration' as production-related factors and 'housing adjustment' or 'amenity-led migration' as consumption-related factors.

Internal and international migration:

The Guiding Principles on Internal Migration (1998) defined internally migrating people as "the persons who have been forced or obliged to flee or to leave their homes or places of residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized state border".

International migration, on the other hand is the type of migration where people cross international borders. Usually the poor and the marginalized move internally, and seldom choose or can afford to cross borders into a new country. However, whether international or internal, people migrate short distances initially and consider internal migration first in the aftermath of natural disasters. In this study it was found that the coastal districts of Satkhira, Khulna, and Bagherhat are experiencing higher rates of international migration than other parts of Bangladesh.

3.4

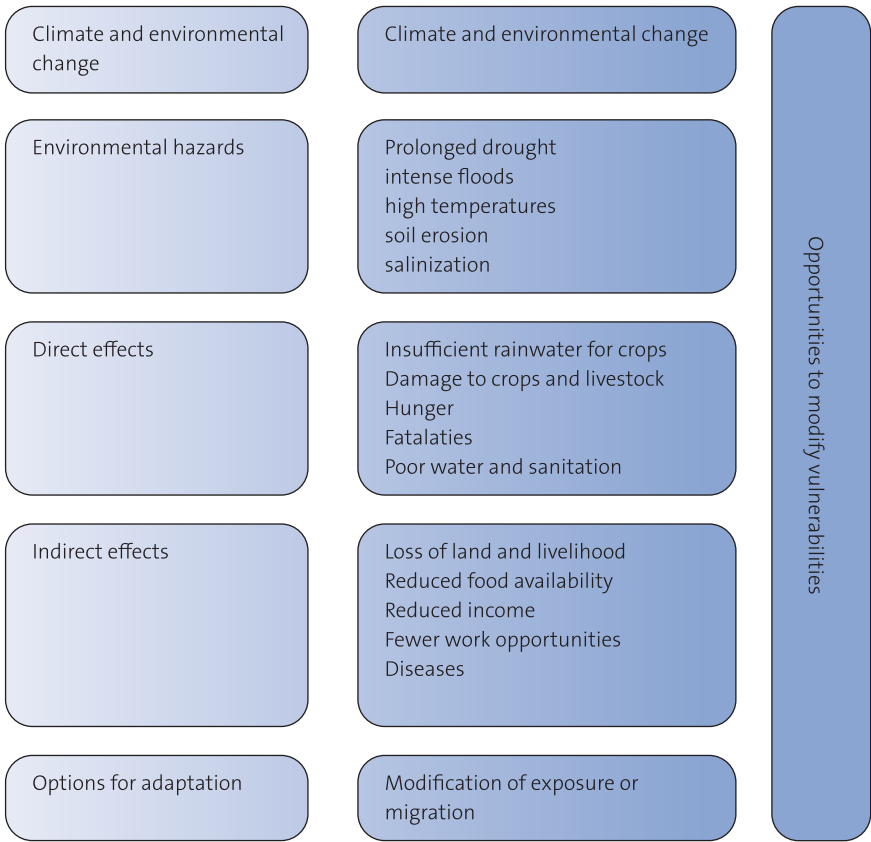
Climate change-induced human displacement and migration: terms and concepts

The terminology of addressing forced migration by climate change and environmental factors is yet to receive global recognition. There is much that is creating ambiguity and undermining the issue. Dun et al. (2008) argued that terms and concepts such as environmental refugees, climate change migrants, and environmentally-induced forced migrants are found scattered through the literature. The main reason for the lack of definition relating to the migration caused by environmental degradation is linked to the difficulty of isolating environmental factors from the other drivers of migration.

The terms and concepts referring to climate change- affected populations are found dissimilar throughout the literature; terms such as ecological and environmental refugees, climate refugees, climate change migrants, environmentally-induced forced migrants, or internally migrated person. This study does not intend to raise the discourse of what terminology should be designated for this kind of forcible migration. Rather, the study attempts to examine whether the migration is truly caused by climate change-induced factors. Therefore, the study mostly uses “climate change-induced displacement and migration” as written in the UNFCCC negotiation system.

Figure 2, below, explores some of the influences of environmental change and identifies where migration becomes an adaptation option.

FIGURE 2  
Influence of climate/environmental change on migration and environmental hazard



### 3.5

#### Framework of human migration induced by climate change

The Network on Climate Change (2010) classifies the impact of climate change on population settlement in three distinct ways. The first one is involved with decline in agriculture production and ecosystem services (fresh water, quality of soil) due to warmer and drier weather in some season as a response of climate change. The second way is involved with extreme weather events like floods, tropical cyclones and the final way through the desertification of huge productive coastal land that forces large numbers of people relocate permanently. The study found that the reason for migration largely depends on the time of occurrence of disasters.

The study argued that the nature of migration in Bangladesh is also separate in different eco-zones. Different eco-zones are affected by different types of natural disasters and their climate change impacts also vary. This study focuses on the three eco-zones: drought-prone, flood-prone and coastal areas. These three eco-zones are affected by the hazards associated with climate change and explains how droughts, floods, tropical cyclones, sea level rise, and salinity intrusion force people to migrate.

### 3.6

#### Gender and migration

Looking at migration through the lens of gender can show us how futile it is to try to divide up experiences of migration as either forced or voluntary, positive or negative, empowering or restrictive (Bulletin, 2005). In real life scenarios migration can involve a family from Niger faced with famine moving for survival; a daughter in the Philippines sent by her family to work as a maid and required to send her earnings back home; a Bangladeshi woman divorced by her husband who is sent back to her parents' village; a woman fleeing feared violence from the militia to a displaced people's camp in Darfur; an English boy who runs away from home to escape sexual abuse; a transgender adolescent in Brazil thrown out by his family moving to the nearest city to seek out a transgender community; or a Serbian woman who has willingly migrated for sex work, but has been deceived into believing that she will earn good money rather than be trapped in conditions of virtual slavery. In a country like Bangladesh though, the implications are a little more gender-specific than elsewhere.

It is true that migration can lead to a greater degree of economic and/or social autonomy for women, and the opportunity of challenging traditional or restrictive gender roles. Through migration, both men and women may develop skills or earn higher wages, some of which they can send back to their own communities. Yet the scenario in Bangladesh sees more men migrating than women, and, as found in this study, with many cases where no wages are sent back to the woman to support the family. These kinds of trends are what inspired a study like this, and the implications are provided in this report.

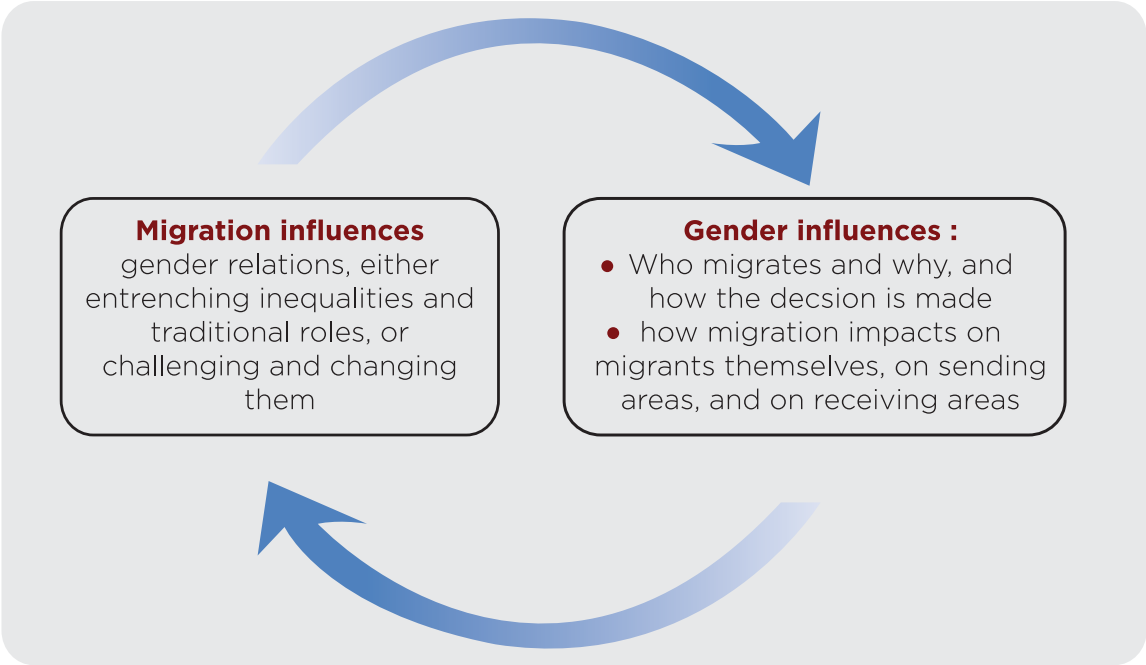
The migration of a male family member has various social, economic, and emotional impacts on the women and children of a family, including insecurity and impacts on their decision-making abilities. The workloads on the female members also increase accordingly. According to Martin (2004), "Migration profoundly affects gender relations, particularly the role of women in households and communities. The impacts are complex. Migration can serve to reinforce traditional gender roles. This is particularly the case when women are expected to preserve cultural and religious norms that appear to be under attack". Another study said noted, "it is believed that the effects of climate change on population movements are likely to adversely and disproportionately impact poor and vulnerable population groups, especially women" (Hunter and David 2009). While research on climate change-induced migration in itself is scarce, its impact on women is under-explored. Climate change may not only directly impact women through environmental changes such as rises in sea levels or increases in temperature, but also makes them more vulnerable because of its interaction

with socio-cultural factors (The Government Office for Science 2011). For instance, unequal gender relations and access to resources may make women more vulnerable to climate change than men (Masika 2002, p 4). Furthermore, adaptation, that is, the ability to adapt to and cope with changes due to climate change, is also gendered. The adaptive capacities of individuals greatly depend on income, education, health, and access to natural resources. Given that women tend to be poorer, less educated, have a lower health status, and have limited direct access to, or ownership of, natural resources, they will be disproportionately affected by climate change (Masika 2002, Demetriades and Esplen 2010). For instance, it is predicted that climate change will negatively impact food production and availability of natural resources such as water. Scarcity of food can worsen a woman’s nutritional status due to her marginalization within a household. Also, as women are mainly responsible for gathering water for the household, scarcity of water might increase the burden on women. The impact on women is likely to be worse in developing countries because of the deeper economic and social gender divides.

A report by the US National Intelligence Council on climate change and cross-border migration (US Office of the Director of National Intelligence, 2009) predicts that people affected by climate change in Bangladesh will most likely migrate to India. Currently, there are approximately 15 to 20 million people who have migrated to India from Bangladesh, most of them being illegal immigrants. India’s anti-immigration position and the fact that it has not ratified the 1951 Refugee Convention, exposes the entire climate migrant population and particularly women to high personal security risks. There are numerous cases where illegal women migrants from Bangladesh have been ‘sold’ as wives or trafficked because they were not provided any protection due to their illegal status (Ramachandran 2005).

Figure 3 is a visual representation of the gender/migration relationship. It demonstrates how gender can influence migration outcomes.

**FIGURE 3**  
**Gender-migration relationship**



Source: BRIDGE Gender and Development in Brief, Issue 16 –September 2005

# METHODOLOGY

## 4.1 Methodology

This report is based on qualitative research conducted by BCAS in three eco-zones in Bangladesh. The three most common qualitative methods, and the ones that have been used in this research, explained in detail in their respective modules, are participant observation, in-depth interviews, and focus groups. Each method is particularly suited for obtaining a specific type of data.

- Participant observation is appropriate for collecting data on naturally-occurring behaviors in their usual contexts
- In-depth interviews are optimal for collecting data on individuals’ personal histories, perspectives, and experiences, particularly when sensitive topics are being explored
- Focus groups are effective in eliciting data on the cultural norms of a group and in generating broad overviews of issues of concern to the cultural groups or subgroups represented

The strength of qualitative research is its ability to provide complex textual descriptions of how people experience a given research issue. It provides information about the “human” side of an issue – that is, the often contradictory behaviors, beliefs, opinions, emotions, and relationships of individuals. Qualitative methods are also effective in identifying intangible factors, such as social norms, socioeconomic status, gender roles, ethnicity, and religion, whose role in the research issue may not be readily apparent. When used along with quantitative methods, qualitative research can help us to interpret and better understand the complex reality of a given situation and the implications of quantitative data (Mack et.al. 2005).

The study was undertaken in three distinct eco-zones of Bangladesh; flood-prone areas, drought-prone areas and coastal zones. These three can be further classified in to five eco-zones which are shown below:

TABLE 1  
Five study zones with district, upazilla, and union

SL	Eco-zone	District	Upazilla	Union
1	South West Coast	Khulna	Koyra	North Bedkashi
		Bagerhut	Mongla	Chila
		Satkhira	Shyamnagar	Munshiganj
2	Central Coast	Patuakhali	Kalapara	Dhulishar
3	South East Coast	Cox’s Bazaar	Teknaf	Sabrang
4	North West	Chapainawabganj	Nachol	Nachol
		Natore	Singra	Kalam
5	Flood/Flash flood	Shariatpur	Bhederganj	North Tarabunia
		Sirajganj	Kazipur	Kazipur
		Sunamganj	Jamalganj	Beheli

## 4.2

### Data collection, tools, and processes

This study from the project “Reducing Vulnerability of Women Affected by Climate Change through Viable Livelihood Options” is a critical assessment of the impacts of migration on women who stay behind in the households from where men are migrating, and has used five distinct tools of data collection from the project areas. They are:

**1. Preliminary literature review:** This encompasses existing research and publications, including academic journals and Bangladesh Bureau of Statistics (BBS) secondary data. The aim was to find Unions in respective project districts and Upazillas and identify them as migration ‘hot spots’. BRAC reports were also reviewed, as this project partner has experience in issues related to migration as a result of climate change.

**2. Initial discussions with local government institutions and vulnerable communities:** Selected Unions (based on literature review) were finalized in consultation with relevant officers at the Upazilla level (e.g. Project Implementing Officers and Upazilla Statistical Officers). At the Union level, three participants were selected from each Union such as the Chairman, female members of Union Parishad and a NGO/Community Based Organization representative to identify villages that have experienced climate-induced migration. At the village level, three distinctive personnel with a knowledgeable background such as teachers and village elders were consulted with, to identify households from which at least one member had migrated mainly because of climatic hazards.

**3. Focus Group Discussions (FGDs):** To collect data and information regarding impacts of climate change-induced migration on women and the associated vulnerabilities, twenty FGDs were conducted in the villages that had been identified as ‘hot spots’. The study conducted two FGDs in each of the study districts at the five specific eco-zones. All FGDs were conducted at the Unions of the respective districts under each of the eco-zones.

The FGD participants included climate-vulnerable female groups and mixed groups i.e. both males and females from the identified households. The mixed group FGDs were formed to reduce the biasness of the collected information. Between 10 and 14 people were invited to participate in each FGD.

All female group FGDs were conducted by female facilitators to ensure that the women did not feel uncomfortable or threatened to reveal more sensitive information about the impacts and consequences they are facing from migration issues.

**4. Key Informant Interviews (KII):** KIIs were conducted with the Upazilla Female Welfare Officers, female members at the identified Union Parishads, and two female community members from the respective Upazillas, whom have a history of climate induced migration within their household. The total KIIs amounted to 40 from 10 vulnerable project districts. The checklist (Annex 1) for both FGDs and in-depth interviews included topics such as the socio-economic status of the respondents, livelihoods, problems and challenges of livelihoods, temporary/seasonal/permanent migration (individual/family), factors of migration, awareness of climate change, and impacts of migration on women/children.

**5. Disaster-Migration Timeline:** At least four participants were chosen from each FGD to sit for a separate discussion, and a disaster-migration timeline was extracted from each discussion. This tool was used to enrich the data received from the FGDs and in-depth interviews, and a general timeline was built upon this platform to analyze the patterns of migration in relation to disasters induced by climate change in the study areas.

**6. Case Studies:** A total of 20 case studies, two from each district were conducted. Additional case studies were produced from two women who were identified with migrant husbands.

The criteria of evaluation that were used were: (See Annex 2).

Before

- Physical Health
- Food habits
- Any traumas they faced (disasters, diseases, social insecurity)
- Economic conditions (any previous incomes, property)
- Education situation (including training)

After

- Physical Health
- Food habits
- Any traumas they faced during migration and after coming back (disasters, diseases, social insecurity, trauma during travel)
- Economic conditions (any previous incomes, property)
- Education situation (including trainings)

### 4.3

#### Limitations of the study

The biggest problem faced during the study was tracking down people, especially women, facing the impacts of migration. From the initial discussions and KIIs, men and women had to be identified from locations that were quite distant from each other. The task of getting all the people to come to one place for a FGD was challenging.

The biggest limitation of the study was identifying migration as a result of climatic hazards and factors and differentiating it from the other push factors that forced people to leave their home towns and venture elsewhere. More often than not, both factors overlapped, and the distinctions were rather grey. The direct factors that seemed to influence migration on the whole had to be derived as secondary impacts of climate change and climatic hazards, and the data analyzed as such.

# AREA PROFILES

The geographical location of Bangladesh and the geomorphologic conditions of its land make the country highly exposed to natural calamities. Bangladesh is a country particularly prone to river flooding, riverbank erosion, sea level rise, salinity intrusion, cyclones and storm surges (BCCSAP, 2009). As Bangladesh is an intensively riverine country, river bank erosion, induced by the massive rivers that cut across the heart of this land, displaces many from their homes, sometimes, many times in their lives (Shamsoddoha et al., 2012).

Almost every year, the country experiences disasters such as tropical cyclones, tidal surges, coastal erosion, floods, and droughts. The Ganges-Brahmaputra-Meghna (GBM) river basin is one of the most populous river basins in the world. Floods and droughts in the GBM may affect, directly or indirectly, the fate of nearly one-sixth of the population of the world (Chowdhury et al, 2012).

Among different hard-to-reach agro-ecological zones in Bangladesh three areas i.e. exposed coastal areas, drought-prone areas and flood-prone areas have been selected for the study. The poor, excluded, and vulnerable in these areas, have been focused on in the study, with special emphasis on women. All the villages studied have been experiencing a number of environmental and climate change-related problems including temperature rise, erratic rainfall, prolonged droughts, sudden floods, frequent cyclones and tidal surges. Slow onset climate change and environmental problems like the drawing down of ground water, salinity, arsenic and iron in ground water, were also reported by the community.

## 5.1

### The coastal area

Bangladesh is one of the coastal marginal countries of the Bay of Bengal, and geographically situated in a natural hazard-prone area. The southern-most part of Bangladesh is bordered by about 710 km of coastal belts, including the study districts of Satkhira, Khulna, Bagerhat, Patuakhali, and Cox's Bazaar, where cyclones, storm surges, salinity intrusion, and coastal erosion are becoming extremely common. The coastal belt has been identified as typical problem area due to these different climatic disasters, complex hydro geological conditions and adverse water quality, which make safe water supply difficult and in some cases, inaccessible. Similar to other areas in the coastal belt, Satkhira, Khulna, Bagerhat, Patuakhali, and Cox's Bazaar districts are also associated with an acute drinking water crisis.

## 5.2

### The drought-prone area

In recent decades, the hydro-climatic environment of northwestern Bangladesh has been aggravated by environmental degradation. The severity of droughts was higher in the western parts of the country compared to other parts, especially in the study districts of Natore and Chapainawabganj. The entire north-western region of the country has been severely hit by drought which has worsened the existing water scarcity situation there. According to the National Drought Mitigation Center (2006), Bangladesh has already shown an increased frequency of droughts in recent years. Every year Bangladesh experiences a dry period for seven

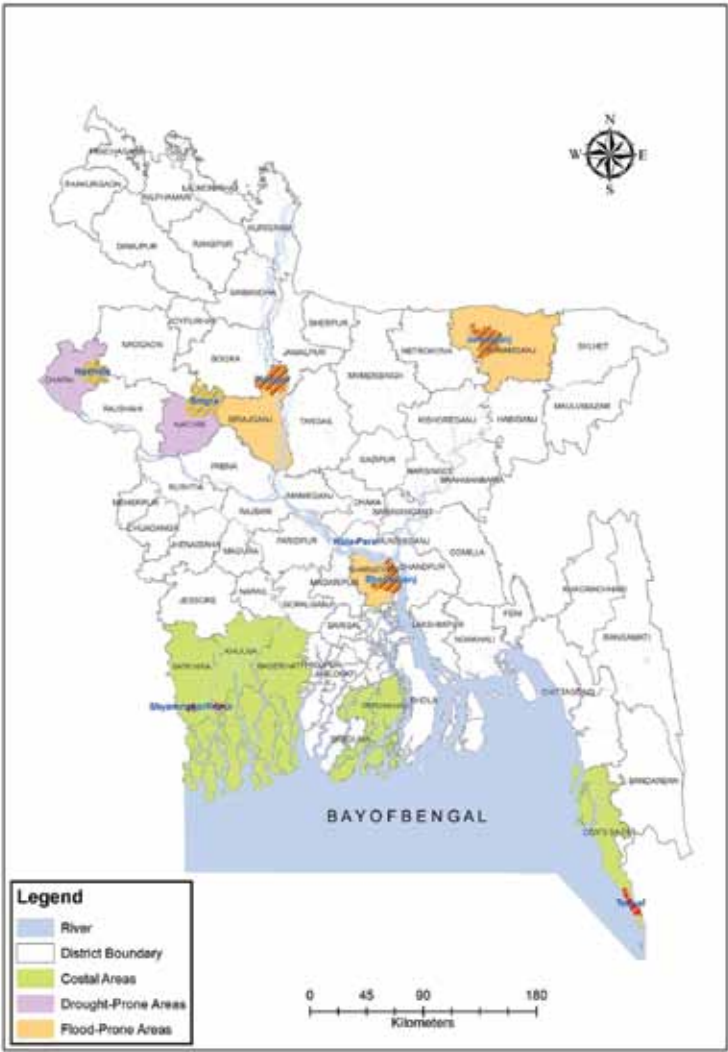
months, from November to May, when rainfall is normally low. Since independence in 1971, Bangladesh has suffered severe droughts in 1973, 1978, 1979, 1981, 1982, 1992, 1994, 1995, 2000, and 2006. It is a recurrent phenomenon in some parts of the country, but the northwestern region is severely drought prone because of high rainfall variability (Shahid and Behrawan, 2008).

### 5.3

#### The flood-prone area

The topography of the country is mostly low and flat. Two-thirds of the country is less than five metres above sea level and is susceptible to river and rainwater flooding and, in lower-lying coastal areas, to tidal flooding during storms (MoEF, 2009). In South Asia, the Fourth Intergovernmental Panel on Climate Change Report predicts that monsoon rainfall will increase, resulting in higher monsoon season river flows; these rivers flow into Bangladesh from India, Nepal, Bhutan, and China (IPCC, 2007). During the monsoon season, many parts of Asia frequently suffer from severe floods. The situation is particularly serious along a wide stretch of the overall area of confluence of the three major rivers. The study locations in Shariatpur and Sirajganj districts are highly prone to river flooding and Sunamganj district is prone to flash flooding.

**FIGURE 4**  
Location of the study areas in different ecological zones of Bangladesh



# IMPACT OF CLIMATE CHANGE

The geographical location of the country has made Bangladeshis highly dependent on the environment and vulnerable to natural disasters. Being vulnerable to climate change, Bangladesh will experience special seasonal differences in changes of temperature in the upcoming years. A number of global and regional scale factors influence the climatic conditions of Bangladesh. When ecosystems become more fragile and natural resources are totally lost or are out of reach, poor communities that depend on them for their survival are the most affected. Within communities, women, in comparison to men, feel these effects more severely.

## 6.1

### Climatic hazards with seasonality for coastal areas

Coastal communities face multiple vulnerabilities more varied and more intense than those faced by more inland-situated communities. The major threats faced by people living in the coastal zone are cyclones and storm surges, floods, drainage congestion, and water logging, droughts and salinity intrusions, erosion and deteriorating ecosystems. These adversities are aggravated by the inevitable consequences of climate change and climatic variability. Greater probability of cyclones and storm surges, increased rainfall during the monsoon season, less precipitation in winter, higher temperatures and sea level rise will have an adverse impact on livelihoods of people in the coastal zones (Ahmed and Wilde, 2010).

In addition, the vulnerability of coastal settlements is an important issue. It is widely accepted that settlements in the low elevation coastal zone (LECZ: 0-10m) will be mostly affected by the anticipated sea level change. Coasts are in fact, already experiencing the adverse consequences of hazards related to climate and sea level rise (IPCC, 2007).

During disasters, women and children are at risk more than men. Due to gender gaps, many women are more vulnerable and prioritised less privileged and as a result, they are more susceptible and therefore more likely to be exposed to greater risk.

For this study, three regions of the coastal area have been selected: Satkhira, Khulna and Bagerhat district on the south-west coast; Patuakhali district on the south-centre, and Cox's Bazar district on the southeast coast of Bangladesh (Figure 4). The Participatory Rural Appraisal sessions of hazards seasonality revealed that, these coastal zones and their populations, especially women, are very vulnerable, where tropical cyclones, storm surges, flooding, salinity intrusion, droughts, cold waves, water logging, and bank erosion hazards cause major damage every year. Tidal surge intensity is very high in the months of June, July, and August in the study area. Salinity intrusion intensity is extreme in the months of March, April, and May. In addition, the people of coastal area are severely affected by tornadoes and droughts in April, and flooding and erosion hazards severely in the months of August and September. The field data also revealed that October and November are the months of Norwester hazards in the coastal areas.

## 6.2

### Climatic hazards with seasonality for drought-prone areas

In the last 50 years, Bangladesh has experienced 19 droughts. This is a recurrent phenomenon in some parts of the country, but the north-west region is mostly a drought-prone area because of high rainfall variability, receiving much lower rainfall compared to the rest of the country (Shahid and Behrawan, 2008). The 1973 drought was one of the harshest and was responsible for the local famine in northern Bangladesh in 1974. In the 1975 drought, 47 per cent of the country was affected and caused suffering to about 53 per cent (Task Force Report 1992).

Rural women in developing countries are the principal producers of basic food items and the agricultural sector is very exposed to risks of droughts and uncertain precipitation. This means that climate change endangers food security as well as the wellbeing of families and their capacities to survive (FAO, 2007). For this study, the Chapainawabganj and Natore districts have been selected as drought-prone areas in Bangladesh. Table 2 shows the status of climate-induced hazards with seasonality in the drought-prone areas. Drought intensity is very high in the months of March, April, and December in the study area. Water levels deplete and many water bodies (i.e. ponds, canals and ditches) dry up. The intensity of cold waves is extreme in the months of December and January.

In addition, inhabitants of drought-prone areas are severely affected by Norwesters and autumn storms in April, May, and November, and flooding and erosion hazards between August and September. The field data also revealed that December and January are highly vulnerable to fog, which reduces agricultural production extensively. Sudden hailstorms can destroy all the standing crops during March and April.

## 6.3

### Climatic hazards with seasonality for flood-prone areas

Most of the country is low-lying land, comprising mainly the delta of the Ganges and Brahmaputra rivers. Floodplains occupy 80 per cent of the country. Mean elevations range from less than one metre in tidal floodplains, one to three metres on the main river and estuarine floodplains, and up to six metres in the Sylhet basin in the northeast (Rashid, 1991). For this study, three types of flood-prone areas have been selected: the active Ganges floodplain on the mighty river Padma under Shariatpur district, the Brahmaputra Jamuna floodplain on the mighty River Jamuna under Sirajganj district, and the Isurma-Kusiyara floodplain under Sunamganj district in Bangladesh.

The study location of Shariatpur district is located in the lower Padma riverine area. It is a highly flood and river erosion-prone area where vulnerable communities often suffer repeated and multiple shocks to their lives, their settlements, and their livelihoods. Table 2 shows the status of climate-induced hazards with seasonality in the study sites of flood-prone area. Heavy rainfall occurs in the months of July and August in the floodplain study area. When water levels in the three major rivers rise simultaneously and cross the danger marks, severe floods usually occur all over the country.

Flood damage has both socioeconomic and spatial dimensions. Floods cause considerable damage to standing crops, livestock, houses, transportation, and communication systems, and educational and other social facilities. It also seriously affects the livelihood of the flood-prone communities. In addition to floods, inhabitants also face recurrent riverbank erosion disasters. Many households in the study area are forced to move away from their homesteads due to riverbank erosion and floods. The months of August, September and October are high time for severe floods in these areas. When floods and erosion disasters strike, houses, trees and homesteads can be washed away within a short period of time.

In addition, Sunamganj district is highly prone to flash flooding from July to August. This type of flood is characterized by rapid rising water and inundation, the onset range of which can vary between a few minutes and a few hours. This type of flood occurs mostly in some of the north-central, northeastern and southeastern parts of the country. River erosion consumes fertile agriculture land, homesteads, and other infrastructure

that destroys the livelihood options of the people of flood-prone areas during July and August. Heavy rainfall that causes water logging and inundates agro-fields in the study area, is extreme during July. In Sunamganj, it causes sudden flooding and washes out the crops. In addition, communities in flood-prone areas are affected by cold waves and fog hazards in January and February. March is a dry month for the flood-prone study area. Due to the monsoon climate persisting in Bangladesh, Norwesters attacked severely in April and October from the south and southwest side and caused huge settlement structural and agricultural damage. The months of March and April are prone to hail hazards that can cause huge agricultural damage.

**TABLE 2**  
**Classification of climate hazards by type and occurrence**

Climate-related hazards	Meteorological	Hydrological and hydro-meteorological	Climatological
Rapid onset	Tropical, extra tropical, and local storm	Flood, flash flood, bank erosion	Extreme temperature, wildfire
Slow onset	Reduction of rainfall over time	Sea level rise, coastal erosion, salinity intrusion	Drought



Photo: Dried up pond due to drought in Chapainawabganj district

# MIGRATION STATUS OF THE PROJECT AREAS

In the eco-zones surveyed, the findings indicate that migration takes place as a strategy to survival. Families are forced to migrate to other areas in search of work, or are separated while the male members alone migrate. Women usually remain behind, making a life for themselves in their home towns while the men migrate, either sending back money to support their families, or bringing it back when they can.

Migration takes place in these areas due to climate-induced disasters and their consequences, ranging from disease, to loss of life and property. These migration factors have been detailed in this chapter, divided into broader eco-zones based on regions in Bangladesh.

## 7.1

### Coastal areas

#### South west coast

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“It is mostly from the families who do not own land, from where the men migrate to neighbouring areas in search of work. Some men migrate to cities to pull rickshaws or work in factories. Full families have also been reported to migrate away from this area.”

- Akbar Ali, a local land laborer from Khulna

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The focus group discussions (FGDs) conducted revealed that natural disasters are the primary reason for people migrating from this area. Respondents reported that this migration rate has been on a steady increase over the last decade in line with the increasing frequency and intensity of the disasters that take place in the South West. This had led to consistently decreasing opportunities for work and income and people have no alternative but to leave. During one of the key informant interviews (KII), Farida Khatun, a 39-year old woman whose husband migrated to Khulna town in search of work said that since Aila in 2009, the salinity levels of the soils have been taking their toll, and agriculture is close to zero in this area. What was once an agriculture dependent area, now sees most of the farmers, especially the poorer ones, migrating to other areas. Better jobs and higher incomes are also reasons for migration, and it was reported in the FGDs that both men and women migrate from the area to cities where they work as laborers in garments factories, construction sites, and pull rickshaws.

Findings suggest migration in the south west is seasonal, and highly dependent on seasonal weather changes. This type of migration occurs with the purpose of finding work elsewhere when work opportunities are low in the area. Timeframes for migration range from one to six months, with some as short as 12 to 20 days. Popular areas of migration are the cities of Khulna, Jessore, Shatkhira, and Faridpur.

Further east in Bagerhat, Md. Rafiqul Islam, a local leader of the Kiyabuniya village, and farmer, said in this area, he sees two types of families migrate; the relatively richer families, and families who are highly dependent on agriculture. The salt content in the soil in this area have increased over the last decade due to climate change induced disasters like Cyclone Aila and salt water intrusion. Rafiqul said that migration is usually permanent, with the richer families selling their lands at low prices and leaving for good. Some migration also takes place due to riverbank erosion.

During a mixed female and male FGD the participants said that cyclones, tornadoes, and erosion are the biggest cause of migration. People go to other areas to work as fishermen, woodcutters, and paddy cutters. Amina Khatun, a participant of a female FGD said that her husband had gone to work in the port area (in Mongla) and others go for the garments industry. There was a general consensus during the FGDs and the KIIs that people who return from migration to Bagerhat return to their previous income sources. It was also reported, mainly by the FGD participants, that the financial conditions of families in Bagerhat who migrate, usually improve.

A local NGO worker, Jahidur Rahman, whose organization keeps records of migration in the area pointed out that migration is male dominant in this area. Very few females choose to migrate. Jahidur noted that three types of migration are observed in this area; a. Temporary b. Seasonal and c. Permanent.

a. Temporary migration mainly consists of men going into the forest for a week or fortnight in order collect wood. It also includes men who travel out to sea for up to six months to catch fish.

b. Seasonal migration usually ranges from three to six months and takes place from September to December. People usually migrate to the nearby cities of Khulna and Fakir Haat. Some choose to migrate to Dhaka in search of good income and others migrate to the port city of Chittagong.

c. Permanent migration takes place mostly after disasters and as a result of disasters, and people migrate with their entire families to the capital other cities.

In a KII with a Government Officer of Satkhira, it was discovered that the poorer population of this area tend to migrate more than the richer inhabitants. Mr. Saidur Islam, Female Welfare Officer of the area, said, “These are the people who do not own their own lands. Men migrate to the cities for work, and sometimes full families are also known to migrate. The top reason for migration is climate change-induced disasters and their aftermaths. Aila, in 2009, not only caused massive destruction to life and property, but also left behind a trail of collateral damage including a massive amount of salt in the soils of the area. This has left the agricultural fields barren and unable to produce crops”.

Another reason for migration was the introduction of new agro-technology which has reduced human involvement in the agricultural processes. During the mixed FGD, men talked about machines such as tractors and harvesters that left them little work. One participant said, “The landlords no longer hire as much help as they used to, and so we have less work available to us in the area”.

Findings suggest that loan repayments are one of the reasons people do not migrate permanently. “Very few people in this area have been known to migrate permanently,” said Shamir Ranjan, an employee of local NGO Sudipta Shamaj Unnayan Shankstha (SSUS). “Most people in this area are loan holders from the local NGOs and do not have the option of leaving the area for good until they repay their debts.” Female FGD participant Khadija Begum, a local housewife with three children added, “the few people who have migrated permanently fled to India due to high amounts of debt which they could not repay.”

Fellow FGD participant Majeda Haque, said, “the types of work these men find when they migrate include day labor in different sectors, rickshaw pulling, and working as carpenters. Females who migrate choose to work as domestic house help or in garments factories. When they return to their own areas, they choose to return to their previous professions”.

It was reported that financial conditions of the families in Satkhira generally do not improve when they migrate or even when they come back, mainly due to the debts that have to be repaid to the NGOs.

**FIGURE 5**  
**Migration pathways for South West Coastal Zone (Khulna, Bagerhat, Satkhira)**

Occupation before migration	Reasons for migration	Migration area	Occupation after migration
Farming Day labour Business pioneer Rickshaw pulling Fishing	Cyclone Aila Riverbank erosion NGO debts Better jobs Introduction of new technologies in agriculture leading to loss of jobs Other	Dhaka Khulna Jessore Satkhira Barisal Chadpur Faridpur India	Rickshaw pulling Day labour Garment worker Wood cutting, paddy cutting

Central coast

According to Hafizur Rahman, the Upazilla Assistant Statistician Officer of the Kalapara Upazilla, poorer families tend to migrate more from the area of Patuakhali in the central coast of Bangladesh. These people do not have their own land and mostly live on unused government land. It is the men who migrate, mainly to find alternative sources of income due to the poor conditions in their own area caused by climate change-induced disasters and hazards. A Union Parishad member, Mostopha Houlader said that these hazards are cyclones, floods and salinity intrusion.

Hafizur Rahman added, “intensive flooding inundates the agricultural fields and makes agriculture impossible. Some women are also known to migrate for the same reasons, and usually they will migrate with their husbands in search of better income”.

Mosammat Sanjida, a female member of the Union Parishad of Kalapara said, “people migrate to Dhaka for better work, where they usually pull rickshaws and women work in the garments factories. Others have also migrated to Chittagong and Barisal”.

“It is during the flooding season that people feel the urge to migrate to find better work elsewhere,” said Rasheda Begum, a local housewife whose husband had migrated recently. She was one of case study participants in the district of Patuakhali, from the village of Kalapara. “The migration periods last for about two or three months depending on work availability,” she explained. During the FGDs, there were also reports of whole families permanently migrating due to the unbearable situations that floods can cause.

Female FGD participants stressed that migration helps improve the financial condition of families and so seasonal migration is quite popular in this area. Rasheda Begum stressed that this is why she is willing to bear with the temporary hardship. People return to their prior professions once they return from their seasonal migrations, similar to the South West Coast findings.



Photos: Case studies being implemented in Patuakhali (Rasheda Begum on left)

**FIGURE 6**  
**Migration pathway for central coast zone (Patuakhali)**

Occupation before migration	Reasons for migration	Migration area	Occupation after migration
Farming Fishing	Floods Better jobs Water logging Other	Dhaka Barisal Chittagong	Rickshaw pulling Day labour Garment worker House help

South east coast

The Upazilla Statistics Officer of the Teknaf Upazilla in the district of Cox’s Bazar reported that climate change and its effects play a huge role in the push factor for migration from this area. The FGDs revealed that the area has seen an increase in the intensity and frequency of rain and resultant water logging. Sea level rise and a breach in the embankment that used to protect the area have resulted in salinity intrusion and an increasing encroachment of the tide that has now become almost unbearable for the people living in this area. It is mostly the poorer people of the area, who have to live in the marginal lands close to the sea, who migrate to other places, mostly Dhaka, Chittagong, and Cox’s Bazar.

“Income is another major push factor for these people. In search of a better life they move elsewhere, and sometimes even across the sea to Malaysia,” explained local Upazilla female member, Sanjida Begum. Jahir Mia, a local political leader, who recently came back from Saudi Arabia said that although some have made it to Malaysia, many are either missing or dead, leaving their families, including wives and children in disarray.

Arifa Khatun, a local school teacher of Hariya Khali high school said that women in this area do not migrate, unless they leave with their entire families to other locations or are migrating back to their own villages, since the area is highly religiously conservative and run by a religious leader who oversees everything.

She added, “Men migrate seasonally and permanently. Men from families who are in dire need of a little sustenance migrate seasonally for up to three months, either going to the capital city or to nearby towns in search of work. Permanent migration has also happened from this area, where whole families have left to go to a better place”.

FGDs revealed the other form of permanent migration in this area occurs when men migrate to Malaysia in search of a better life. Almost half the women in the female-only FGD reported their husbands had migrated permanently to Malaysia. The men to do this by travelling on a small boat, paying a lump sum amount of money to alleged migration agencies. Although many men have made it to Malaysia this way, some of whom have been able to start sending money back to their families, many others have died or remain missing. The wives of these men are left alone in the area to fend for themselves. Other women in the FGD explained that some of these women then migrate back to their own villages or towns to be with their families.

Mosammot Jayeda Khatun, a woman who lost her husband a year earlier, when he had tried to migrate to Malaysia by boat, said during the female-only FGD that people who come back to this area are usually better off than before owing to the work they found outside the area. Some former seasonal migrants have returned to set up their own small businesses and are prospering.

**FIGURE 7**  
**Migration pathways for south east coastal zone (Cox’s Bazaar)**

Occupation before migration	Reasons for migration	Migration area	Occupation after migration
Farming Fishing Small business Salt processing	Heavy rainfall Better job Water logging Other	Dhaka Cox's Bazaar Chittagong Malaysia	Rickshaw pulling Day labour Garment worker House help

7.2  
Drought-prone areas

Chapainawabganj

The Union Parishad Chairman of Chapainawabganj in the north west of Bangladesh, Mr. Enayetullah Khan said during his KII that climate change-induced impacts and the need for a better life are the push and the pull factors for the people of this area to migrate. It is the poorer population who choose to leave, since their lives here are very difficult, especially during drought. Droughts, Enayetullah added, can destroy entire seasons of crops in succession, and for the poor farmers who live on marginal, unused government land, this can mean starvation and suffering.

Fatema Begum, a woman whose husband and two eldest sons migrated to Dhaka to work as a construction workers, said that over the last decade the intensity and frequency of such disasters have increased drastically. In addition to the all-consuming droughts, cold waves are very common in this area, and for poor people who can barely afford clothes, fighting a particularly cold winter can be devastatingly hard.

“It is much easier for them to leave the area and find work such as day labour, garments work, and rickshaw pulling for a little while in other places,” stated Fatema.

During the mixed FGD, it was found that mostly the poor migrate. Renu Begum, like many other poor families in the area, lives on unused government land. She explained men usually migrate to other cities for work, sometimes families migrate, but rarely does anyone migrate permanently. “Most of them come back when things around here become normal,” she said.

Temporary and seasonal migration can range from two to four months, and usually people come back to the area and pursue their previous occupations said the participants in the female FGD. The women also stated that most people choose to migrate to Dhaka, while some go to Pabna, Faridpur, or Tangail and it is mainly the men who migrate.



Photos: Men and women signing their names during the focus group discussions at Chapainawabganj

Natore

The Upazilla Women’s Affairs Officer of the Natore District, Ms. Rasheda Pervin noted that poverty is a major factor in the migration trends in this area.

“Aggravated by continuous and relentless disasters like droughts, the people of this area simply find themselves moving faster and faster around the vicious cycle of poverty. The poor community in this area do not own their own lands and thus have to work as laborers in the fields of land owners. In a bad year, when droughts hit hard, they find themselves with next to nothing to see themselves through the hardship. Most spend days with little or no sustenance. Migration is the easier choice, to find work,” she stated.

There are more than 50 safety net programmes running in the Upazilla, but there there is little information being collected at the moment.

The FGDs established that it is mostly men (16 - 40) who migrate in search of better work, but women also migrate, sometimes with their husbands, sometimes alone. Kulsum Ara, who recently returned to the area with her family after having moved to Tangail a few months back, said that it was easier for her to migrate with her husband rather than stay back in Nurpur, and suffer.

The mixed FGD indicated that migration is mostly seasonal, mainly during the drought season which can last between one to six months. Some return within 12 to 20 days. Permanent migration is not common in this area.

Many choose to migrate to Tangail to work as day labourers in the fields there. Others choose to go to Dhamrai, Kushtia, Bogra, Pabna, and Manikganj. Many who migrate from this area return to their previous professions. Although their economic conditions do not improve much, this form of migration helps people to survive the harsh situations they face.

**FIGURE 8**  
**Migration pathways for drought-prone areas (Chapainawabganj, Natore)**

Occupation before migration	Reasons for migration	Migration area	Occupation after migration
Farming Small business Day labour Rickshaw pulling	Droughts Better job Poverty Other	Dhaka Pabna Faridpur Tangail Damrai Manikgonj Bogura Kustia	Rickshaw pulling Day labour Garment worker

### 7.3

#### Flood-prone areas

Mirza Almad Uddin, the Project Implementation Officer of the local government office in Bhederganj Upazilla of Shariatpur, said that over the last decade, this riverine area has seen a gradual decrease in the availability of fish. “Over fishing and climate change together have hampered the fish breeding capacities and most men complain that fishing is no longer enough to compensate their livelihood needs.” He added that this, coupled with riverbank erosion, is making it tough for poor inhabitants to gain any sort of stability in their lives.

Manager of the local BRAC office, Jatish Kumar Gorami, noted that floods have also been on the rise both in intensity and frequency over the last decade, and these reasons together compel the people to migrate from the area. Jatish also noted that it mostly men who migrate while few women do. The women migrate to the towns and cities, mostly as house help or garment workers. The men choose to pull rickshaws or work as day labourers.

The FGD participants explained that migrations are usually seasonal, but some families have migrated permanently. Seasonal migration occurs during the rainy and flood season, and people usually return when it is over, the intensive part of which can last for a month or two. People usually migrate to Bhola, Barishal, or Chadpur, while some also migrate to Dhaka. Here they can find better work, and when they return, they usually go back to their previous professions. Yet people who migrate do not see their financial conditions improve greatly.



Photos: Focus group discussion at Shariatpur

FGD participants also reported that the river has damaged their homes and possessions over 15 to 17 times, and they have struggled with poverty for over 30 years. During floods people go and live on a long embankment that will eventually become a road, with the little sustenance they can find. These extreme situations force the poor people of this area to migrate elsewhere.

Md. Tajul Islam, the local Statistics Officer of the Upazilla stated that although it is mostly the men who migrate, sometimes whole families also migrate to nearby places until the floods abate.

Ruma Khatun, whose husband had migrated leaving her in Kazipur with her only child to work as autorickshaw puller in Sirajganj town three months ago, said, “the men usually migrate to these locations to work as autorickshaw drivers or day labourers”. She also stated that her husband, who migrated every year for four to five months, went back to his previous profession as a day labourer when he came back. “This is common to the men who migrate from this area.”

There were reports of permanent migration from the areas as well. Some men were reported to have migrated to Dhaka, leaving their wives and families behind. One such woman is Bina Khatun. A mother of two, Bina’s husband Mohammad Hasan, sent her money occassionally.

The district of Sunamganj sees intensive annual flooding which destroys crops and makes life very hard. Both the flooding and and rain have intensified over the last decade. These climate change-induced reasons are why people choose to migrate from this area, and it is generally the poor people who do so. Most of these people do not own their own lands according to one farmer who was present in the mixed FGD.

The FGDs and KIIs also revealed that men migrate to Sylhet and Dhaka in search of better work options, and mostly they work as day labourers and rickshaw pullers whereas women do not generally migrate from this area and are left behind by the men.

When the flood and rainy seasons are over the men usually return to the area to their homes and their previous professions of farming, fishing, or laboring, according to 90 percent of reports from the FGDs. It was reported that migration does not generally improve the life conditions of the people in this area, mainly because most of them are loan holders from local NGOs.

**FIGURE 9**  
**Migration pathways for flood-prone areas**

Occupation before migration	Reasons for migration	Migration area	Occupation after migration
Farming Fishing	Floods Better jobs Riverbank erosion Lack of fish	Dhaka Sylhet Barisal Bhola Chadpur Comilla	Auto Rickshaw driving Rikshaw pulling Day labour Garment worker House help



Photos: Female-facilitated FGD at Bagerhat with female group

# IMPACTS OF MIGRATION ON WOMEN

**Rural areas in Bangladesh are governed by cultural, religious and social norms and it is not easy for a women when her male partner leaves for a certain period of time each year. This, topped with the hardships of coping with natural disasters and their aftermaths lead to some common and some area-specific problems for women. This chapter details the findings from the field in this regard.**

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“The biggest setback to not having a husband around is having to maintain a family and earn a living at the same time. The little money that my husband sends back is not enough to support the entire family with food, clothing, and land rent.”

– Fatima Zohra, a participant of the female FGD in Sirajganj

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## 8.1

### Impacts of migration in all areas

Ninety per cent of women that were interviewed in all the communities stated that their biggest concern is that of sustenance. This not only includes food, but also daily expenses, clothing, and house rent. When men leave to earn livelihoods elsewhere, women are left behind, and while others choose to stay behind, they barely have the means to make a living. Eighty five per cent of women in the communities affirmed they don't receive enough, or in some cases, receive no support from their husbands who had migrated. Thirteen per cent (out of approximately 190 women from the FGDs) stated that their husbands were sending back money to them. The rest of the women had to find work to make ends meet. In some communities they could not even do that, and the most common complaint was that of hunger and not being able to support their families. According to most reports, this problem is aggravated by the presence of natural hazards.

The second biggest issue, from approximately 50 per cent of the female respondents, was that women had the additional burden of having to look after their families and having to work outside to earn a living. This put stress on their physical health and in most cases led to increased disease occurrences and the additional cost of healthcare.

Thirty per cent of women in the study who had a male member migrate from their family said that they already worked outside the house, even when their husbands were present, but once their husbands migrated, they became the sole bread earner which was difficult. Of this 30 per cent, financial stress meant most families could no longer send their children to school. This finding came from approximately 65 per cent of the female respondents across all FGDs. This problem occurred because either the children were also involved in income earning, or that women did not have the time to take their children to school. When men are not home, women also need the extra help from their children at home to fulfill their daily needs. Some women claimed to have involved their children in income-earning activities, barring them from further education. According to 45 per cent of respondents, this situation is aggravated by the increasing presence of natural hazards. Some women noted that it was their husbands who usually took their children to school and in their absence, especially during disasters, it became impossible for the women to do so.

Harassment was a big issue brought up in the FGDs and was reported from 60 per cent of the communities in which this study took place. Women are constantly being subjected to verbal abuse and harassment, including name calling, while also being taken advantage of in other ways. Being disturbed by the local youth was a

common complaint amongst these women in most of these communities, some of the cases leading to serious incidences like physical abuse. Forty per cent of the studied communities (both men and women participants in the FGDs) reported that the younger women from such families live in constant fear and in most cases they stop going out, effectively ending their education.

In the cases of migration for longer periods many women stated that their husbands no longer kept in contact with them, and in some cases there were reports of adultery, or marrying elsewhere. This number was relatively low, although in two or three areas there were reports of divorces, and sullied reputations of women whose their husbands were away. In these cases, women reported that due to their divorces, both their in-laws and their own parents or relatives would abandon them, leaving the woman to fend for herself in an already hostile environment.

Women in 60 per cent of the studied districts reported increased theft, or an increased fear of theft, when their men migrated. In 20 per cent of the districts that mentioned this, women complained about having to sleep in constant fear at night, sometimes having to spend sleepless nights at a stretch, which affected their health. Mental trauma was another very common complaint amongst the women, especially from harassment and fear. In the 60 per cent of women that reported increased theft, or fear of theft, almost all of the women reported of the stress and extra burden of having to both look after their families and make sure they had enough income to live on. These women explained that the stress was unrelenting, and frequently, they would have mental breakdowns, from which it was very hard to recover. This stress of having to work outside to earn enough money to get by led to a lack of time to properly care for children. This led to an increase of disease occurrences within the children, and in most cases, incidences of malnutrition and stunted growth.

## 8.2

### Area-specific problems of migration

#### 8.2.1 Coastal areas (south west, central and south east)

The FGDs in Khulna brought up one very distinct phenomenon that was different from the other migratory situations in the other areas of the study; men and women of this area both migrate to India to work as house help. As the area is highly saline, due to the recent cyclones and resultant storm surges, this leaves little choice for livelihood earning this side of the border. The respondents also reported that they usually have to bribe officials to get past the border, but once inside India, work is easy to find. Women in the FGDs, two or three who had migrated to India in 2013, said that although this is good money, they have to leave their homes and families for long stretches of time and this is difficult. They also said that the mental stress of having to migrate long distances affects their physical and mental health.

Women reported that the hardest part of having to migrate for work was to leave their children behind, with grandparents or other relatives. Women said that this keeps playing on their minds when they are away. Furthermore, the children, under the care of people who are not their direct guardians, suffer from many stress and illnesses.

Eighty percent of women in Bagerhat, noted their biggest issue when their husbands migrate, is abuse. Not only do they face verbal harassment, and property damage, but 40 per cent of those women reported having been physically assaulted, sometimes sexually and violently. Women also reported that they did not receive any support from village elders or leaders and some said they were harassed when they went to complain.

Nasima Begum, a school teacher in the village of Keyabunia, said, “This leads to the young girls stopping school and the whole family living in fear and anxiety.” She reported several of her female students no longer come to school because of this.

Due to salinity intrusion, men of the family have no scope to work in the agricultural lands and tend to migrate to other areas in search of work. Women, who have scope to work in the rich households as a house helpers, collect edible spinach from agricultural land, catch fish from freshwater bodies, rear goats or chickens, but

face food and nutrition crises. With the extreme heat, overburdened with work, lack of food, and no medical facilities lead to some serious health-related problems for the women in the area.

Participant Amina Khatun explained safe water and sanitation facilities are other important issues women face. “Most of the time women work during the day and do their household work at night. They collect water in the evening and into the night.” While collecting water, they are sometimes assaulted, as others know that these women have no male family members to protect them.

While working, women noted that they have nobody to look after their children, and sometimes, young children are left at home by themselves. Occassionally, these children have been injured while unsupervised.

In the female FGD in Satkhira, women said that being located right beside the Sundarbans, they lived in fear of tiger attacks (mainly during the winter months), which are common in the area. These combined stressors have huge traumatic effects on the women. To help mitigate some of the risks, and increase their social security, they go to work and the market in groups.

**FIGURE 10**  
**South west coast: Problems men and women face due to migration**

Economic problems	Social problems	Physical problems	Psychological problems
<ul style="list-style-type: none"> <li>Some women migrate to India to work as househelp</li> <li>Women remaining behind have to find work for themselves</li> <li>No economic stability</li> </ul>	<ul style="list-style-type: none"> <li>Community does not support them</li> <li>Fear of theft and assault</li> <li>Female children stop going to school</li> <li>Bribes have to be given to officials to cross borders</li> </ul>	<ul style="list-style-type: none"> <li>Diseases from lack of food and stress</li> <li>Physical assault</li> <li>Have to travel long distances to get water</li> </ul>	<ul style="list-style-type: none"> <li>Stress from harassment</li> <li>Living in fear of tigers and theft</li> </ul>

Water and sanitation are one of the major problems for women in the south west coast. This, in addition to food stress and disease outbreaks lead to hardship for the women. Surveys in the coastal areas have also shown less support from the community towards the women and the highest rate of physical and mental abuse in Bangladesh in relation to migration.

Women do not work in this area, and are highly dependent on the migrating male family member for money and other necessities. This puts the entire family left behind in a vulnerable state, and women live their days under huge mental stress, not only having to care for their children, but also their in-laws.

Women tend to take decisions when the men are not at home. But when the men return, decision making becomes collaborative again. The female respondents also said that in absence of male members at home, they have to go to the village market for weekly shopping and in a medical emergency they have to visit doctors on their own in town, which is quite a distance from the village. This is socially unacceptable in this area, and they are often gossiped about. When male relatives come to visit them, members of the community can get abusive.

Women in this area do not receive remittances regularly, and and may ask neighbors for loans. Often they are refused because it is assumed they will not be able to pay the money back. This economic problem creates dependency on others. Furthermore, they struggle to attend social ceremonies, and the children usually drop out from school. Due to the inadequacy of working opportunities, they may not eat for days. Their children do not receive essential nutrition, suffer from malnutrition and are exposed to serious health problems.

Some men in the area tease girls and women, and at night the fear of theft is ever present. During a disaster such as a cyclone or tornado, there are no men to accompany them to a shelter, and more often than not, these women do not leave their houses for emergency shelters and risk their lives.

**FIGURE 11**  
**Central coast: Problems women face due to migration of men**

Economic problems	Social problems	Physical problems	Psychological problems
<ul style="list-style-type: none"><li>• Have to work outside to earn a living</li><li>• No support from migrated members</li></ul>	<ul style="list-style-type: none"><li>• Do not get support from community people</li><li>• Girls stop going to school</li></ul>	<ul style="list-style-type: none"><li>• Illnesses due to over exertion and stress</li><li>• Some people have been physically harassed</li></ul>	<ul style="list-style-type: none"><li>• Stress from harassment</li><li>• Trauma</li></ul>

Support from family members in times of need is essential, which women in this area have said they do not get. Community help is also at a minimum in this area, and exertion on part of the women to earn a living and look after the family lead to stress and illness. There were several report of physical harassment during the FGDs.

During the mixed FGD it was found that men usually migrate to Malaysia by boats across the Naf River, and more often than not, do not come back due to border issues. In some cases, as several of the women in the FGD reported, they are captured or killed at the border of Burma, leaving their families to suffer at home. Their wives not only have to live with the trauma of losing their husbands, some of them at a very young age, but also have to start bearing the weight of earning for a living along with responsibilities of taking care of their children, and in most cases their in-laws. The problem with earning a living though, as some women claimed during the FGDs, is that the area is very religious, and is led by strict religious leaders.

Women tend not to work or go outside the home if they can avoid it, due to strict regulations from the religious leaders. Women who have lost their husbands to migration are living their lives in high uncertainty. Many have gone back to their parents' homes. "This is seen as something extremely shameful for a woman of such a society," said Jahir Mia, the political leader, recently returned from Saudi Arabia, "most often she is looked down upon, and cannot marry again".

Yet the religiously conservative nature of the area also has benefits, according to the women, including the fact that harassment is rare. The women may well be living in much less social insecurity than most other areas. Another upside of the religious nature of the area is that there is a high sense of cooperation, especially when there is a woman alone at home with children. This sense of cooperation also extends to financial help through loans.

Even with the support of the community, most women feel vulnerable to the impacts of climate change. Some women, who have lost their husbands to migration, have also lost their homes to the ever encroaching tide. Especially after the embankment that protects the area from the tide broke, the sea has been intruding further and further inland, and many people, including many women who have been left behind, are now homeless. Some women, who used to grow vegetables in their homesteads claim that the salinity intrusion caused by the sea has made this almost impossible to do now.



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**FIGURE 12**  
**South east coast: Problems women face due to migration of men**

Economic problems	Social problems	Physical problems	Psychological problems
<ul style="list-style-type: none"> <li>• Loss of homes to sea level rise</li> <li>• Lack of support from migrant men</li> <li>• Some men are killed during migration and women are left to earn themselves</li> </ul>	<ul style="list-style-type: none"> <li>• They sometimes become widows because their husbands are killed trying to get to Malaysia</li> <li>• Community is very supportive</li> </ul>	<ul style="list-style-type: none"> <li>• Stress and disease</li> <li>• Over exertion</li> </ul>	<ul style="list-style-type: none"> <li>• Mental trauma from losing spouse</li> <li>• Cannot get out of the house and so they cannot work to earn a living casuing stress</li> </ul>

This area was the second incidence of international migration other than Khulna in the South West Coast. Males migrate to Malaysia by boat. Some are captured or killed in the process. The area has a high level of support for women whose husbands migrate, but women here are not allowed to work outside the house due to religious restrictions and so many have to go back to their own homes or areas to survive.

### 8.2.2 Drought-prone areas

Diverse problems are faced by the females left behind in this study area, according to the data collected from interviews. The harssment faced by women whose husbands have migrated from relatives, neighbours, and other members of society, is severe. For example, if a woman visits a neighbour’s house, the neighbour may immediately assume she has come for money or something similar, and the woman is sent away rudely. Although loans aere occassionally offered, they are given at extremely high rates of interest. When men migrate for a period of six months or more, these issues become magnified.

Although women are mainly housewives in this area, most of them also earn money through household income sources like poultry and cattle farming, tailoring, and vegetable growing.

In this drought-prone area, women have to travel long distances to get water. Yet because of their position in society, these women are only allowed to take water when everyone else has done so. This kind of discrimination adds to the stress levels of women, both physically and mentally. Decreased food consumption, malnutrition and other health problems make them more vulnerable to diseases, including anemia or mental disorders.

Financial problems are also common for these women, according to 90 per cent of respondents in the FGDs. They often have to buy goods on cedit, and receive lower prices when trying to sell goods.

At night women are not able to leave their homes, even for using latrines due to fear of abuse by men.

When asked about decision making, 40 per cent of women claimed to be able to take some decisions on their own when their husbands have migrated. If their husband returns, they said, they usually take decisions together.

The women left behind when men migrate face different types of social, mental, financial, and behavioral difficulties. Many are neglected by society and deprived of different social contacts and amenities. Social problems for women include others who abuse or harrass them, deprivation, and humiliation by the other male and female members of the society. Issues can arise among the female members of the migrated family.

With water surrounding the area, transportation is a huge problem in this area. People travel mostly by boat. Women who are left behind due to migration, are especially impacted, when they have to travel, for example, to see a doctor for themselves or with their children. Due to the added stress of having to earn an income for their families, malnutrition from a lack of food, and additional home responsibilities, women regularly fall sick and their health conditions can deteriorate quickly. Sometimes they have to wade through water to get drinking water. Their workload increases, as they take over duties traditionally performed by men such as going to markets, offices, and hospitals. This workload becomes even more problematic during floods and droughts. Due to the added stress of having to earn an income for their families, malnutrition from lack of food, and additional home responsibilities, women regularly fall ill, and their health conditions can deteriorate quickly. The stress of abuse, harassment, and even violence, especially at night also weighs heavily. In addition, the women fear for their husband's or son's health, accidents, or even them getting married elsewhere.

Quite often, the men are not able to send enough money to support their families, and the women have to borrow money from neighbours or relatives. This is hard as they are viewed differently when their husbands migrate, and people usually do not want to loan them money. Even if they do, they usually pressure the woman to give back the loan with a sizeable interest very quickly, which adds to the pressure in women's lives.

Sometimes cattle and other household assets are stolen, usually because the thief knows there is no man in the house. Yet women never leave their abodes at night to seek help because they fear the gossip and rumours that may follow. In one incident, a woman, who went to complain about theft had to face a trial in front of the whole village, where blame was put on her for allowing a male to enter her house, and her hair was cut off. Fear of ghosts, snakes, and other wild animals, is also big problem.

The women reported that they do not take decisions by themselves. When their husband is away, it is usually her in-laws or relatives who decide for her. When her husband returns, they both make the decisions.

**FIGURE 13**  
**Drought-prone areas: Problems women face due to migration of men**

Economic problems	Social problems	Physical problems	Psychological problems
<ul style="list-style-type: none"><li>• Women have to take loans from relatives and others</li><li>• Lack support from migrant males</li></ul>	<ul style="list-style-type: none"><li>• Discrimination in society</li><li>• Lack of support from community</li></ul>	<ul style="list-style-type: none"><li>• Long travel for water.</li><li>• Malnutrition</li><li>• need to work outside</li><li>• Transportation</li></ul>	<ul style="list-style-type: none"><li>• Stress from discrimination</li><li>• Mental fatigue</li></ul>

Women have reported that they get by with loans taken from relatives and other members of the society. This is hard for them since they face a lot of discrimination and lack support from the community. Water in drought prone areas is scarce and they have to travel long distances to get water. Lack of adequate transportation access adds to this problem.

8.2.4 Flood-prone areas (Shariatpur, Sirajganj and Sunamganj)

Women in Shariatpur suffer from huge mental stress when the male family members are away. Society treats them very differently and women and young girls suffer from insecurity. Girls are barred from going outside days on end. Women generally stay home as much as they can. Children are sent to the shops and markets to buy things whenever possible. This adds immense hardship on the women, especially during floods, when it is hard to get out of the house.

Most women from the FGDs reported that harassment comes in different forms in the area, especially for the younger females. Apart from the common eve-teasing that these girls face, some situations can get very serious and can go as far as physical assault. Some of the women have complained the village elders, but to no avail. Most of the time, since they are looked down upon, due to the absence of their husbands, their appeals go unheard. When their husbands return, hearing the gossip, they can often turn on their wives.

More often than not, the men do not send enough money to support the family and the women have to borrow money from relatives or buy items on credit from shops. They are often harassed by creditors, and find themselves under huge pressure, mentally and physically, to return the money.

Eighty per cent of women in Sirajganj reported that they are not allowed to work outside the house, and they are subjected to physical abuse by their husbands if they do. The prevailing community attitude also views work outside the home as an inappropriate thing for women to do. This adds huge pressure on women who are already struggling from a lack of money or food when their husbands migrate. Not being able to work outside the home critically restricts their abilities to support their families in times of need, and mostly they spend their days in suffering and hunger. Help from neighbours, relatives, or friends is unlikely in this area.

A special type of migration that takes place in this area is internal migration or relocation. This happens due to the riverbank erosion of the Jamuna River. Here, families have watched their homes get washed away and rebuilt more than 16 to 20 times. Seeing one’s home and belongings being washed away is a trauma that affects women more than it does men. Sometimes it leaves women with nothing but the clothes on their backs. Considering the social security of women in rural Bangladesh, especially after marriage, this leaves women with great trauma.

Sunamganj is covered in haors, which means that there is water everywhere for most of the rainy season, with pockets of dry land in between. With little work to choose from, and men not sending enough to support their families, women have to travel far to find work, and drinking water. Children are left at home sometimes with grandparents, and sometimes unsupervised.

FIGURE 14  
Flood-prone areas: Problems women face due to migration of men

Economic problems	Social problems	Physical problems	Psychological problems
<ul style="list-style-type: none"><li>• Women have to take loans from relatives and others</li><li>• Mostly no support from migrant males</li></ul>	<ul style="list-style-type: none"><li>• Community treats them differently</li><li>• Lack of social security</li><li>• Relatives and others refuse to help</li><li>• False complaints about the women</li></ul>	<ul style="list-style-type: none"><li>• Travelling long distances for water</li><li>• Malnutrition</li><li>• Stress from working outside</li><li>• Transportation problems</li><li>• Children drowning</li></ul>	<ul style="list-style-type: none"><li>• Stress from over exertion</li><li>• Missing male partner</li><li>• Stress from harassment</li><li>• Huge pressures of earning livelihood</li></ul>

In flood-prone areas the lack of support from the local communities was the highest. This leads to lack of social security and women reported in the FGDs that false complaints and accusations were given to their husbands about them when they migrated back to the area. Besides water and transportation problems due to the floods, malnutrition rates in the area, especially in children was high.

### 8.3

## Specific and common impacts of migration in the five eco-zones

In this section of the report a matrix was developed from the collected field data. The matrix shows the specific and common impacts of migration on women of project area. The following table describes the specific and common impacts of migration in the five eco-zones.

Table 3  
Specific and common impacts of migration in the five eco-zones

Eco-zone	District	Specific impacts of migration on women	Common impacts of migration on women
South West Coast	Khulna	<ul style="list-style-type: none"> <li>• International migration. Migrants have to illegally cross the border into India at life risk</li> <li>• Women endure stress and fatigue of having to migrate long distances</li> <li>• Children, who are most often left behind suffer from many illnesses and mental stress due to parents migrating to India</li> </ul>	<ul style="list-style-type: none"> <li>• Women who stay behind do not receive money and support from migrating male members</li> <li>• Additional burden due to having to look after their families and having to work outside</li> <li>• Stress on their physical health and increased disease occurrences</li> <li>• Financial stress also means that most families can no longer send their children to school</li> <li>• Harassment was a big issue. The younger females from such families lived in constant fear and in a lot of cases they stopped going out, thus effectively also stopping their education</li> <li>• In the cases of migration for longer periods many women claimed that their husbands no longer kept contact with them, and in some cases there were reports of men marrying elsewhere</li> <li>• In most cases women reported that due to their divorces, both their in-laws and their own parents or relatives would abandon them altogether</li> <li>• Women in most communities reported increased robberies, or at least an increased fear of it when their male members migrated. Most women complained to having to sleep in constant fear at night, sometimes having to spend sleepless nights at a stretch which also affected their health</li> </ul>
	Bagerhat	<ul style="list-style-type: none"> <li>• Harassment from other male members in society, especially on young girls</li> <li>• Physical assaults also take place, sometimes sexually and violently</li> </ul>	
	Satkhira	<ul style="list-style-type: none"> <li>• Women claim that the absence of men in the house make them more at risk from attacks from tigers from the Sundarbans</li> <li>• Women have to work outside, which they prefer not to do</li> </ul>	
Central Coast	Patuakhali		
South East Coast	Cox’s Bazaar	<ul style="list-style-type: none"> <li>• Often the migrating males do not come back due to border issues. While migrating to Malaysia,men are sometimes captured or killed at the border of Burma</li> <li>• Nobody dares to harass women</li> </ul>	
North West	Chapainawabganj	<ul style="list-style-type: none"> <li>• Women have to travel long distances to get water</li> <li>• The long walks in the heat during summer are stressful and sometimes physically fatal</li> <li>• Women can take some decisions</li> </ul>	

	Natore	<ul style="list-style-type: none"> <li>• Malnutrition from a lack of food</li> <li>• Since male members send money sporadically, women have to borrow money from neighbours or relatives</li> <li>• Women cannot take decisions</li> </ul>	
Flood/ flash flood	Shariatpur	<ul style="list-style-type: none"> <li>• Society treats women very differently due to the fact that they have chosen to remain behind</li> <li>• Young girls suffer from insecurity due to harassment</li> <li>• Women have to borrow money from relatives</li> </ul>	<ul style="list-style-type: none"> <li>• Mental trauma was another very common complaint amongst the women, especially from harassment and fear. Frequently it was also from the stress and extra burden of having to both look after their families and make sure they had enough income to live on. Some women claimed that the stress was too much to take, and frequently, they would have mental breakdowns from which it was very hard to recover</li> <li>• Due to the added stress of having to work outside to earn enough money to get by, most women said that they could no longer take proper care of their children. This firstly led to an increase of disease occurrences within the children, and in most cases incidences of malnutrition and stunted growth</li> </ul>
	Sirajganj	<ul style="list-style-type: none"> <li>• Neighbors and relatives refuse to help the women in the absence of their male members</li> <li>• People in the area tell lies about the women, making their husbands turn on them in anger</li> </ul>	
	Sunamganj	<ul style="list-style-type: none"> <li>• Have to travel far to find work</li> <li>• Drinking water has to be brought from long distances</li> <li>• Children fall into the water and drown, since the women are out working and there is no one to watch them</li> <li>• People of the area are very supportive.</li> </ul>	

The data from the field suggests that the impacts of migration are generally negative. The female population of the rural areas in which the study was conducted are finding it hard to maintain a sustainable level of sustenance. Yet, the data also suggests that the women are finding ways to cope with the problems that migration can impose, and this in turn suggests that they are becoming less dependent on their spouses for income. In terms of female empowerment, perhaps this is the silver lining that is needed to overcome barriers that are posed by cultural, social, and religious aspects. When faced with adversity, these women have managed to perservere, proving that regardless of the traumatic situations they live in, migration has made possible a whole new approach to female empowerment.

Interpretation of the data has led to the conclusion that, depending on the region, the micro-climatic variations and the lifestyles they require, the problems that migration can cause are varied; and yet there are commonalities all over the regions. One such commonality is women falling sick more frequently, or facing more health complications from existing conditions. One interpretation of this can be that added stress of having to look after the family and having to work outside to earn a living (more than before if they were already working) takes a toll on their health. Women in these conditions have reported of very little time to look after themselves. The lack of food security in areas such as the coastal, flood-prone and drought-prone zones, and the general level of nutrition that the women can afford, also affects this.

In drought-prone areas, women also have to walk long distances, under the scorching sun, in search of water. The little water they can bring back at a time is enough to get the showers, dishes, and cooking done, with a minimal amount left for drinking. Women who are not re-hydrating themselves after the added miles they walk to fetch water also face added implications on their health.

In the flood-prone zones, communication is a big barrier. During, and for some time after floods, getting to places is extremely hard, and communication methods are scarce. Minor illnesses are easily ignored, which can lead to further complications or aggravation of the health situation of the women. Floods also cause massive damage to livelihoods and property, and families are occupied in trying to save their houses, and their means of survival such as their household items, and agricultural lands.

From the field data, it has become quite clear that migration, which has all the potential to become beneficial for families in disaster-stricken areas, is not quite meeting the standards it should be. The data reveals a picture of random decision making on the part of families, little planning, and even less development. Decisions are made based on word of mouth information and a lot of guessing and assumptions about job prospects. So ravenous are these families to get out of the black holes they are put in after disasters that men give little thought to how their families will get by with them. They also give little thought to what kind of options they have once they migrate and whether that will actually help to improve the situation. Ill-informed decisions lead to further disaster and a worsening of an already dire situation. Such actions have also been seen to reach desperation levels, especially in areas such as Teknaf in Cox's Bazar, where men are risking their lives, with high likelihood of actually not making it to or back from their destinations. Detailed studies and more resources need to be put into areas such as this to understand what can lead to such desperate moves on the part of families.



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# CONCLUSION AND RECOMMENDATIONS

## 9.1

### Conclusion

Climate variations are occurring. Global temperatures are increasing, erratic precipitation patterns are becoming the norm, and extreme climatic events are becoming more severe and frequent. These environmental changes are having deleterious effects on the lives and livelihoods of poor rural farmers globally who depend on rain-fed agriculture for their income, for their health and nutritional status, and for their subsistence. In Bangladesh, adaptation strategies such as small-scale irrigation, farm mechanization, and the use of more water-efficient crops have been implemented at the household level. Nationally however, there are large gaps in infrastructure development, risk reduction, and coping strategies, and political will. Given these constraints, migration, specifically rural-to-urban migration is increasingly used as a last-resort coping strategy for the poorest of these subsistence-farming families. The findings from this study suggest that migration has now become a common practice in climate affected areas of Bangladesh.

The study has found that increases in the intensity and frequency of cyclones, salinity, tidal intrusions and extreme rainfall in the coastal zones, increased intensities and frequencies of flooding in the flood-prone zones and an acute lack of water and damage to crops due to droughts in the drought-prone zones are now causing people from these areas to migrate more. Mostly, it is the poor and extremely poor, and mostly it is the men, who having lost their income sources due to the above mentioned adversities, are forced to look for work elsewhere. A majority of women remain behind, mostly bound by the responsibilities of looking after children and other family members.

The most common type of migration that the study found was temporary migration, where usually the male members of the family, and in a few cases the entire family, migrate to other localities (usually urban areas with better income opportunities) in search of temporary income. These migrations are almost always internal, with only two upazillas in Bangladesh where people migrate to other countries in search of better lives; Teknaf - where men travel by boat to Malaysia and Khulna - from where men, and sometimes both the husband and wife travel across the border to India. Permanent migration was found to be extremely rare in Bangladesh, and only happens when the family migrating has nothing left to come back to in the area they migrate from, or the conditions become too extreme, such as extreme cases of salinity in the coastal zones.

Whilst in some cases, migration has had positive effects on the economic conditions of families and communities, the setbacks that families face due to a member or the entire family migrating can be immense. Better income opportunities in urban areas can mean lucrative ways to reduce the aftermaths of disasters and climatic impacts, and yet, the study has shown that families being separated due to migration can have detrimental impacts overall, both for the family and the community.

The negative impacts of migration on both men and women, are usually stressful and in cases life-changing. While for the men this means a change of lifestyle and having to move away from their families, the impact is by far the highest on the women who do not migrate, but remain behind to look after the family and household. In many cases, the woman is left handling not only her family wellbeing and nourishment, but also, in most cases, the added responsibility of having to earn an income to support her family. This occurs in cases where the men who had migrated were unable or unwilling to send back money to their families. For the women who were already earning income, even before their husbands migrated, the aftermath of the migration, in the cases where no money was sent back home, usually meant extra hours at work, and in some cases, more than one job for the woman.

In a majority of cases, the added stress, for both the women who have to start working and the ones who have to take on extra work, showed increased occurrences of physical illnesses. Existing health conditions were further aggravated, due to a lack of time or money to receive medical attention. In other cases, the extra stress resulted in anxiety attacks and other psychological issues. These problems were further aggravated by cases of harassment from local men, neglect from neighbours and family, and physical and sexual abuse.

Bangladesh, still bound by numerous cultural and religious barriers, is lagging behind when it comes to acceptance of women working outside the house and being self-dependent. These barriers can lead to harassment, abuse and social insecurity. In many cases women stopped leaving the house and young girls stopped attending school because of this harassment. Such impacts can be harsh and life-changing for the women, and in terms of adaptation to climate change, is having a negative impact overall. Communities are struggling from the detrimental effect of gender-segregated migration impacts, and the overall economy of the areas are thus also being hampered.

## 9.2

### Recommendations for migrants

In most cases, if not all, migration can help families to stay afloat, if not improve their financial conditions. In a disaster-stricken country like Bangladesh, migration can be a blessing in disguise. Even so, there is a vital need to ensure that if male members are migrating, that they either return, or ensure proper remittance provisions for the women and family members remaining behind. This report suggests a collaborative programme that can be taken with government initiative, and include the Union Parishad, Union Disaster Management Committees, and the private sector.

- Communities with potential climate change-induced disasters and hazards should organize annual or seasonal migration programmes collaboratively. The Union Parishad, more specifically the Union Disaster Management Committee, should lead this initiative, and if necessary, create new structures under their authority, to deal with migratory issues. The migration committee should organize logistics, including sign up for migration, locations to migrate, the transportation arrangements and pathways to send back money to families.
- The collaborative programme should set up employment options in the relocation areas, by collaborating with private businesses in these areas, ensuring that migrating members will find livelihood options for the period of migration. This information should be provided to the community, or be able to be accessed by community members, so that men and women thinking of migrating can make informed decisions.
- The collaborative programmes should also set up remittance sending programmes through systems such as MoneyGram, BIKASH, UCASH and Dutch Bangla Mobile Banking.
- Effective monitoring systems should be in place to track migrants and the amount of remittance being sent back to family members.

Such a collaborative approach can ensure that migrants find viable livelihood options in the areas they migrate to, but more importantly the women and children who remain behind receive adequate support. If remittances can be ensured through such programmes, issues such as food shortages and resulting malnutrition, having to borrow money, and having to work outside the house in areas where it is disapproved of, can be averted.



### 9.3

#### Recommendations for those who stay behind

The collaborative programme needs to ensure that the women who remain behind are also involved:

- Data should be collected to ensure remittances arrive to the right address, and periodic checkups can be conducted through the UDMC structures to ensure the health and safety of remaining family members.
- Households with women who have remained behind who have been signed up with the migratory programme need to be given extra protection from the Village Defense Party and Ansar. Especially at night, in areas where there are increasing incidences of theft, the police should increase patrols and checkups.
- The Union Parishad needs to ensure that any complaints of harassment, abuse or manipulation, is strictly dealt with. Swift punishment (ranging from fines to exile) needs to be handed down to perpetrators who criminal offences of this sort.
- The UDMC migratory committee should help the women who have remained build supportive networks. A form of this was seen in the south west coast study area, where women whose husbands had migrated moved in groups to avoid tiger attacks when they went out to get water.

# REFERENCES

- Ali, A., 1999, Climate Change Impacts and Adaptation Assessment in Bangladesh. *Climate Research*, special 6, 12 (2/3), 109-16.
- Anil K. Gupta, Sreeja S. Nair and Vinay K. Sehgal, 2009, Hydro-meteorological disasters and climate change: conceptual issues and data needs for integrating adaptation into environment - development framework, *e-Journal Earth Science India Vol.2 (II)*, April, 2009, pp. 117 - 132. Available at <http://www.earthscienceindia.info/> [Accessed 20 June 2014]
- Banglapedia, 2000, Flood. Available at [www.banglapedia.org/HT/F\\_014.htm](http://www.banglapedia.org/HT/F_014.htm) [Accessed 8 June, 2014]
- Bell M and Ward G., 2000, Comparing temporary mobility with permanent migration. *Tourism Geographies*, 2(1).
- Bridge Report, 2005, Gender and Migration, Institute of Development Studies, University of Sussex, England.
- Climate Change Cell (CCC), 2007, Climate Change and Bangladesh. Department of Environment, Government of the People's Republic of Bangladesh, Dhaka. Available at [http://www.bdresearch.org.bd/home/climate\\_knowledge/cd1/pdf/Bangladeshper cent20andper cent20climateper cent20change/Climateper cent20changeper cent20impactspers cent20vulnerability,per cent20risk/Climateper cent20Changeper cent20 Andper cent20Bangladesh.pdf](http://www.bdresearch.org.bd/home/climate_knowledge/cd1/pdf/Bangladeshper cent20andper cent20climateper cent20change/Climateper cent20changeper cent20impactspers cent20vulnerability,per cent20risk/Climateper cent20Changeper cent20 Andper cent20Bangladesh.pdf) [Accessed 20 June 2014]
- CRED and Munich RE, 2009, Disaster Category Classification and peril Terminology for Operational Purposes EM-DAT (2014), The International Disaster Database, available at <http://www.emdat.be/>, [Accessed June, 2014]
- Demetriades and Esplen 2008; Demetriades, J. and Esplen, E. (2010) The Gender Dimensions of Poverty and Climate Change Adaptation'. In Mearns, R. and Norton, A, ed., 2010, *Social Dimensions of Climate Change: Equity and Vulnerability in a Warming World*, the International Bank for Reconstruction and Development/ The World Bank, Washington DC.
- Dun, O., and Gemenne, F., 2008, Defining 'Environmental Migration.' In: *Forced Migration Review* . vol. 31
- Gebre, Y., 2002, "Contextual determination of migration behaviors: The Ethiopian resettlement in light of conceptual constructs", *Jo. of Refugee Studies* 15, 3, 265-82
- Goh, Daniel. nd. What are the causes of human migration and the effect on the sending and/or host country?, *Academia*. Available at [http://www.academia.edu/5025685/What\\_are\\_the\\_causes\\_of\\_human\\_migration\\_and\\_the\\_effect\\_on\\_the\\_sending\\_and\\_or\\_host\\_country](http://www.academia.edu/5025685/What_are_the_causes_of_human_migration_and_the_effect_on_the_sending_and_or_host_country) [Accessed: 5th June 2015]
- Hunter L M and David E, 2009, *Climate Change and Migration: Considering the Gender Dimensions* (Boulder, CO: Institute of Behavioral Science, University of Colorado) Working Paper, Population Program.
- Internal Displacement Monitoring Centre (IDMC) and Norway Refugee Council (NRC), 2011, Displacement due to natural hazard-induced disasters, Global estimates for 2009 and 2010. Available at: [http://reliefweb.int/sites/reliefweb.int/files/resources/Full\\_Report\\_1079.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/Full_Report_1079.pdf), [Accessed 8 June, 2014]
- International Organization for Migration (IOM), 2010, *Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh*. Available at: <http://www.population.gov.za>, [Accessed 8 June, 2014]
- IPCC, 2007, *Climate Change 2007: The Physical Science Basis*. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B.

- Averyt, M.Tignor and H.L. Miller (eds.)). Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Mack N., Woodsong C., Macqueen K. M., Guest G., Namey E. 2005, *Qualitative Research Methods: A Data Collector's Field Guide*, Family Health International, Research Triangle Park, North Carolina, USA
- Masika R, 2002, Editorial *Gender Dev.* 10 2-9
- MoEF, 2009, *Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2008*. Ministry of Environment and Forests, Government of the People's Republic of Bangladesh, Dhaka, Bangladesh. xviii + 76 pp.
- Mohit, Mohammad A., 1990, Rural- Urban Migration in Bangladesh: An Urban Perspective, *Journal of Bangladesh Institute of Planners*, Volume 1 & 2, pp 47 - 59.
- NCC, B. 2010, *Network on Climate Change, Annual Report*. Available at <http://nccbd.org/>
- Piguet, E., Pécoud, A. & de Guchteneire, P. (eds.) (2011) *Migration and Climate Change*, UNESCO Publishing/ Cambridge University Press: New York.
- Rahman, Syed Ajijur and Rahman, Mahfuzur. 2012, Factors of Migration in Urban Bangladesh: An Empirical Study of Poor Migrants in Rajshahi City, Bangladesh *e-Journal of Sociology*. Volume 9, Number 1, pp 106 - 108.
- Ramachandran S., 2005, Indifference, impotence, and intolerance: transnational Bangladeshis in India *Global Migration Perspectives* (Geneva: Global Commission on International Migration) no. 42
- Sabine L. Perch-Nielsen & Michèle B. Bättig. 2008, Exploring the link between climate change and migration, *Climatic Change* (2008) 91:375-393 DOI 10.1007/s10584-008-9416-y. Available at [http://www.glogov.org/images/doc/equity bd.pdf](http://geminis.dma.ulpgc.es/profesores/personal/jmpc/Master08per cent28SegundaEdiciper centFnper cent29/PARAper cent20ELper cent20MASTERper cent20SEGUNDAper cent20EDICIONper cent203/ClimateAn Migrationsper cent28L,Uper cent29.pdf) [Accessed June 20, 2014]
- Shamsuddoha, M., and Chowdhury, R.K., 2009, Climate Change induced Forced Migration: in need of dignified recognition under a new protocol. Available at: <http://www.glogov.org/images/doc/equity bd.pdf> [Accessed June 20, 2014]
- Martin, Susan Forbes, 2004, *Women and Migration*, United Nations Division for the Advancement of Women (DAW), Consultative Meeting on "Migration and Mobility and how this movement affects Women" Malmö, Sweden
- Tahera Akther, 2009, *Climate Change and Flow of Environmental Displacement in Bangladesh*, Unnayan Onneshan, Dhaka
- The German Watch, 2004, *Sea-Level Rise in Bangladesh and the Netherlands- One Phenomenon, Many Consequences*
- The Guiding Principles on Internal Migration, 1998, Who is an internally displaced person ('IDP')?, available at [http://www.law.georgetown.edu/idp/english/id\\_faq.html](http://www.law.georgetown.edu/idp/english/id_faq.html) [Accessed June, 2014]
- UNISDR, 2012, *Terminology*. Available at <http://www.unisdr.org/we/inform/terminology> [Accessed June, 2014]
- Warner, k., Ehrhart, C., Sherbinin, A. D., Adamo, S., Onn, T. C., 2009, *In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement*. Care, CIESIN, UNHCR, UNU-EHS, The World Bank.
- White, G., 2011, *Climate Change and Migration: Security and Borders in a Warming World*, Oxford University Press: Oxford.
- Zetter R., 2011, Protecting environmentally displaced people: Developing the capacity of normative framework. Available at <http://www.rsc.ox.ac.uk/pdfs/workshop-conference-research-reports/Zetter-per cent20EnvDispRepper cent2015022011.pdf> [Accessed 10 July, 2014]

# ANNEX 1

## Checklist for focus group discussion

### A. Livelihoods

1. What are the main livelihoods options that men in your village undertake?
2. What are the main livelihood options for women in your village?
3. What are the challenges of livelihoods for both men and women?

### B. Agriculture and farming

4. What kinds of crops are normally grown in your village (year round)? Please list.
5. From the above list, in which ones are aided in production and harvesting by women?

### C. Climate change and natural disasters

6. What are the natural hazards/disasters that affect this village?
7. What impacts do these disasters have on the food security, water and sanitation of the poor, and health of the households in your village?
8. What kinds of impacts do these disasters have on the livelihoods of people in your village?
9. Do you know of any specific impacts on women due to these disasters? (Guide talk towards women as food distributors at household levels)

### D. Migration and relocation

10. What do you know about migration/relocation of (individual/family) from your village?
11. Are there any people (individual/family) from your village who have migrated/relocated?

### E. Types and duration of migration/relocation

12. Do whole families migrate, because of disaster impacts, or do only males, or only females migrate from your village?
13. When and for how long do people usually migrate/relocate from your village (Temporary/Seasonal/permanent)?
14. To where do people usually migrate?

### F. Migration factors

15. What kind of disaster affects force people to migrate/relocate from your village? Please give the reasons.
16. Do people from your village migrate mostly due to climate-induced impacts or do other factors like jobs/economic issues have a bigger role to play?
17. If natural disasters/climate change (intensive flooding, cyclone and storms, intensive or too little rain/salinity) are reasons, please explain.
18. If women migrate from this area, please explain why.

### G. Impacts of migration on women

19. How does migration of male members affect the women in terms of their social status (with or without children)?
20. How does the migration of male member affect the women and female children left behind in households? Please give details of financial, physical and psychological impacts in terms of:
  - 20.1 If male member seasonally migrates (for less than 3 months).
  - 20.2 If male member temporarily migrates (for 3 months to 1 years).
  - 20.3 If male member migrates for long term (for over 1 year).
21. How does a woman manage the family financially if male members migrate from your area?
22. Do women independently take decisions on any household matters when male members (husband/brother/father in law) migrate?
23. If they do, what happens if the male member comes back?
24. Do you know any stories/experiences that women have had to face because of migration of male members of the household? How did they manage?

# ANNEX 2

## Guidelines for case studies

### Location

Name:

Village:

Union:

Upazila:

Zila:

Time:

Mobile:

### Topics of Discussion

1. Most successful two livelihoods from existing all livelihoods of the area (at least two)
2. Who initiated the livelihood option – male/female (details with name)
3. Total cost (including Labour) for the livelihood option
4. Profit from the livelihood option
5. Types of work (agriculture, fisheries, homestead, cottage industry)
6. Percentage of people involved with the livelihood option of that village
7. Is the livelihood option sustainable during disaster, and are any adaptation options taken during the disaster? Please detail
8. Adaptation option/change to keep the livelihood option sustainable in future.
9. Have you received any help from any government or non-government organization to develop that livelihood option?

# ANNEX 3

## KII Checklist for Upazilla Statistics Officers

1. Does your office collect migration related data?
2. At what level (Upazila/ Union/ Ward/ Village) is the data available?
3. May we collect this (if available) migration related data from you? (Historical trends, etc.)
4. From which union of your upazila do people usually migrate?
5. What are the causes of these migrations?
6. Can you please tell us the push factors and pull factors? (disasters, jobs, etc.)
7. What are the disaster and climate related factors causing migration in the union of your upazila?
8. Who are the normal migrants of a family? Please tell us about male, female, total house hold level migration.
9. Can you please tell us the coping (financial, social, WATSAN etc.) mechanism of female member of a migrant family?

# ANNEX 4

## Other checklists

### **KII checklist for NGO officials**

1. For how long has your organization been working on migration in this area?
2. Are you working at the grass root levels (Union, Upazila, and village)?
3. Do you maintain any database for migration/list of migrant families?
4. From which union/village is the rate of migration high?
5. What are the main factors (push and pull) of migration in this area? Please tell us about the different causes of migration.
6. What is the status of migration for both males and females of your area?
7. Is there a trend in the times of the year that people choose to migrate?
8. Due to male member migration, what problems do the female members of a household face?
9. Can you please suggest a specific union and a village where the migration rate is very high/prominent?

### **KII checklist for Union level (chairman or female member)**

1. What is the migration situation of your union?
2. What are the main causes of migration (push and pull factors)?
3. Which ward or village has a higher migration rate (to identify the ward/ village/ 'Para' or hotspot)?
4. What are the natural/ disaster/ climate change related causes of migration?
5. Do you know any specific family that has migrated or is ready to migrate from your area? Or at least one member of a family that has migrated due to natural/ disaster/ climate change factors. (Collect name and contact).
6. Please suggest a place to conduct climate affected migration FGDs.

### **KII checklist for village level (teacher/local leaders/religious leaders)**

1. What is the status of migration of your village?
2. What are the causes (push and pull factors) of migration of your village?
3. Usually which types of families migrate? (social status/economic status)
4. Can you please name some migrant families who have already migrated or are ready to migrate?
5. Which area or region has the largest number of migrant families?
6. Please mention some conditions that women face (social and economic) of a migrant family.



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