8 Gender, migration and environmental change in the Ganges-Brahmaputra-Meghna delta in Bangladesh¹

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Introduction

The relationship between gender and migration is complex. Gender differences in roles and relations affect who migrates, to where and with what purpose. Migration also has gendered effects in both receiving and sending areas and, in turn, affects roles and relations. Migration has long been an important component of livelihood strategies in Bangladesh. The majority of migration is from rural areas due to lack of employment, as has been recognized in the Sixth and Seventh Five Year Plans. Migration to urban areas is one of the major contributors to urban growth (Afsar 2003; Government of Bangladesh 2012, 2015).

Bangladesh is situated at the confluence of three major rivers – the Ganges, Brahmaputra and Meghna – with a large proportion of its surface area defined as a delta where these rivers meet the Bay of Bengal. Deltas are characterized by change, with the land areas constantly shaped and reshaped by the interaction of river sediment loads from upstream and the erosive capacity of the sea. Populations living in deltas have become accustomed to this variability. However, the rate of environmental change is exacerbated by human activities and climate change, which alter the context in which livelihoods are carved out and in which migration decisions are made (Szabo et al. 2015).

In this chapter we investigate the linkages between gender, migration and environmental change. We first outline some of the theory on migration and gender, on how environmental change affects migration, and the gendered effects of environmental migration. Then we illustrate migration patterns

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in Bangladesh, drawing on primary data from a sex-disaggregated survey of 1356 households in the Ganges-Brahmaputra-Meghna delta conducted between 2015-16. Next we present some of the effects of these patterns on migrant-sending areas, and then finally we conclude with some insights into future environmental change and migration.

Unpacking migration

Migration is a complex phenomenon with varying dimensions and definitions. As a result, there are multiple theories explaining its drivers and decisions, and the range of intertwined factors associated with migration and other forms of human mobility (Bakewell 2010; Massey et al. 1993). Migration is often characterized by its duration, with permanent, seasonal and circular being common distinctions. Hugo (1978) embraces this by highlighting the idea of commitment within migration, in that there will be a change in “usual place of residence” and a sense of “permanence” in the move only if it is followed by a change in commitment from one area to another. Considering commitment can therefore shed light on various long-term movements (e.g., return or permanent migration) and the changing circumstances in which they occur (Begum 1999).

Reasons for migration also differ. The New Economics of Labour Migration theory posits that migration is economically driven and occurs to increase income (Castles 2010; Stark and Bloom 1985). The structural-functionalist approach emphasizes the role of the wider socio-economic and environmental structure in which individual action is embedded (Gerold-Scheepers and van Binsbergen 1978). Rational choice theories and the methodological individualist approach highlight that people’s migration decisions reflect the nature of their human capital and are designed to be income maximizing (Haug 2008; Todaro 1969, 1976). Although the nature of the motivation may differ, whichever theory is applied the unifying thread is the perception that migration will bring improvements to livelihoods and wellbeing, and are thus associated with development (Bakewell 2010; Massey et al. 1993).

Gendered migration patterns

Many countries, including Bangladesh, collect sex-disaggregated data for internal migration, which enables interrogation of differences in patterns between women and men. Historically marriage is a major cause of migration, particularly for women (GIZ-RMMRU 2014). The extent of women’s migration as related to marriage reflects gender roles and relations. Gender roles are the prescribed behaviours and characteristics that are allowed, expected and valued of men and women (Alston 2013; Begum 2015). They are socially and culturally defined, and so vary from place to place, but also over time. Broadly speaking, men are typically associated with ‘productive’ tasks, i.e., those that generate economic income, whilst women are typically

associated with 'reproductive' tasks, i.e., care tasks related to the household, and looking after children and the elderly (Islam 2014). Since gender roles dictate that earning income is typically the responsibility of men, much labour migration has traditionally been of men within the informal sector.

Despite migration trends being typically skewed in favour of men, a 'feminization of migration' is now occurring, both within Bangladesh and internationally (Castles and Miller 1993; Hossain et al. 2013). The increase in female migration has been attributed to various factors relating to the receiving area (pull factors) and the sending area (push factors) (Willis and Yeoh 2000). Growing access to education and level of education is a prerequisite for women's participation in the labour market (Williams 2009). The lower costs of international migration and changing policies that support it have also encouraged female out-migration (Government of Bangladesh 2015). That said, gender roles and relations often still impede ability to migrate, even when the intention is there, particularly for women with lower levels of education. Based on a large panel survey, using individual-level data from 148 countries between 2009 and 2013, women are more likely to want to migrate if they do not feel treated with dignity and respect. However, the likelihood that these intentions are acted upon reflects income and family obligations, as well as the extent of their networks (Ruyssen and Salomone 2018).

Determining the causes of migration of men and women is inextricably linked with gender roles and relations. Whilst female migration may be increasing, and this is associated with better education and economic labour opportunities, these may still be different from those of men. Large worldwide flows of women to do paid domestic work, for example, are fed by inequalities of gender, race, class and nationality, and in turn contribute to reproducing these differences (Altman and Pannell 2012). The links between gender and migration can be understood within a broader framework of social change: one in which gender roles and relations are considered (Lutz 2010). Gender differences in migration intersect with other social identifiers which contribute to power relations. In Bangladesh, migration is reconfiguring class and gender identities but it is also mediated by religion and the modern Islamic identity (Rao 2014). Whilst women are often left behind, patterns of migration are also linked to the construction of masculinities, with pressures to provide for the family in a globalizing world linked to transnational mobility (Yeoh and Ramdas 2014).

Environmental change and migration

Migration has long been one of the many ways in which humans adapt to environmental change. Increasing concerns about growing environmental problems have augmented the interest of the scientific community and policy makers in the linkages between population movements and the environment (Black et al. 2011; Hugo 2011). Furthermore, in the past

climate-induced displacement and environmental migration were addressed separately from mainstream migration theories. This approach is now considered antiquated among researchers and practitioners, and in policy circles, with environmental change, migration and development increasingly being examined together (Bettini and Gioli 2016).

The role of the environment in migration plays out in many circumstances. In Bangladesh, for example, there is a long-established seasonal pattern of migration from rural areas, with rural dwellers seeking work in urban areas (Etzold et al. 2014). This occurs during the lean agricultural season, or during flooding, particularly in the *Monga*-prone districts in the north-west and the north-eastern *Haor*-affected areas (Afsar and Baker 1999; Hossain et al. 2003; Marshall and Rahman 2012). Who migrates in this way and where is contingent upon availability of capital to cover the costs of such migration (McLeman and Smit 2006). Moving out from areas linked to environmental change suggests that deltas will experience net out-migration – although in Bangladesh the second-largest city, Chattogram (Chittagong), is within the delta, meaning that rural–urban migration, even to the largest urban areas, can also take place within the delta.

With climate change and climate change-related environmental stress, it is the likely magnitude and permanence of migration, not to mention its involuntary nature, that will be different. Strong policy discourses at international level talk of the likely high numbers of ‘climate migrants’ and ‘climate refugees’. According to some estimates, there will be 200 million migrants by 2050 as a result of climate-induced push factors (including sea-level rise, coastal erosion, land degradation, floods, etc.) (Myers 2005; Stern Review Team 2006), although others suggest that migration may be even more significant (Black et al. 2011; Foresight 2011). However, the limited empirical evidence on this relationship has generated highly politicized debates. Estimates of the number of environmentally driven migrants, present and future, remain piecemeal, with considerable variation in projected figures (Gemenne 2011).

The emotive consequences of such mobility for human security, as well as the political implications, have constructed a discourse based on the intangible nature of climate migrants. It has been posited that such climate migrants are more of a “hyperobject” than a reality (Baldwin 2017). This is because, despite evidence of climate change-related pressures, the environment is rarely cited as the main reason for migration. In the Maldives, more than 50 per cent of respondents perceive future sea-level rise as a serious challenge at national level, but at individual level cultural, religious, economic and social factors play the most important roles in making decisions to migrate or not (Stojanov et al. 2016). Even in the face of exposure to climate change, for example floods or sea-level rise, whether or not people migrate is contingent upon a variety of factors affecting their vulnerability (Perch-Nielsen et al. 2008).

The causes and nature of environmental migration have variously been investigated, which can give some insights as to whether migration is a

failure of adaptation, maladaptation or whether it is an effective adaptation response (Agrawal 2010). The roles of environmental degradation, water availability and extreme events have been researched. Exposure to extreme events such as floods, and loss of assets due to such events, can create large numbers of displaced people (Laczko and Aghazarm 2009). Extreme events have also been shown to be a driver of migration in Bangladesh (Joarder and Miller 2013). However, when migration is planned and voluntary, it can provide the resources necessary to improve wellbeing in the sending households (Adger et al. 2003; Tacoli 2009). Hence migration is more likely to be an adaptation (as opposed to a failure of adaptation) when it is planned and supported, and not forced and occurring under distress (Kartiki 2011).

Gendered effects of environmental migration

The relationship between environment and migration is gendered in terms of who moves, but also in terms of the implications. Increasingly the adaptation, resilience and vulnerability literature is engaging with gender; when considered through a gender lens, differences between men and women emerge (Bunce and Ford 2015). Whether or not migration acts as an adaptation differs between men and women, and it also reflects (and reinforces) existing gender relations. Social relations are altered as a result of climate change (Pearse 2017; Rao and Mitra 2013). To a certain extent, the effect on women depends on whether there has been forced or a planned and voluntary migration (Biao 2007), otherwise known as “erosive” or “content” migration (Warner and Afifi 2014). If the migration is voluntary, there is the possibility that ongoing interactions with the migrant may increase economic wellbeing (e.g., through remittances) and also social wellbeing. *De facto* female-headed households, where a woman is the head as a result of migration, often benefit from differently defined gender roles. This means that these women may be afforded access to community decision-making structures, for example, whereas if their husband were at home he would preferentially participate. However, if the migration has been forced or undertaken in conditions of distress, this may not be the case, and there is the risk that vulnerability may be exacerbated. In India, where tradition is for the wife of a migrant to join her in-laws in his absence, there is evidence that women’s economic and social mobility is impeded (Desai and Banerji 2008; Gulati 1993).

Taking an intersectional approach also illuminates how other identifiers intersect with gender to determine whether migration improves or erodes the adaptive capacity of women left behind. Marital status plays a more significant role in affecting the adaptive capacity of women compared to men. In a study of the adaptive capacity of single, married, divorced and widowed men and women in Tanzania, widows and female divorcees were found to be relatively more disadvantaged in the field of agricultural water

management, whilst divorced women assumed relatively more income-generating activities outside the farming sector (Van Aelst and Holvoet 2016). In tropical delta regions, out-migration is contributing to changing population structures and increasingly ageing populations, which has implications for the nature of vulnerability (Szabo et al. 2016). Thus, intersectionality is also important in determining the role of migration in social relations and the implications for adaptive capacity.

Investigating migration through a household survey

Fifty locations in the Ganges-Brahmaputra-Meghna delta were selected for implementation of the cross-sectional household survey. Sampling was undertaken in two stages. The first stage divided the study areas into five hazard zones (very low, low, medium, high, very high). Each cluster of households in the study area was assigned one of five hazard categories based on the risk category with the greatest percentage coverage in the cluster. In each stratum (multi-hazard zone), a number of clusters were selected proportional to the number of clusters in each stratum. Once clusters had been selected, a household listing took place based on demographic and migration characteristics. This approach resulted in 1356 valid sex-disaggregated questionnaires across 14 districts: Bagerhat, Barguna, Bhola, Chandpur, Chattogram, Cox's Bazar, Gopalganj, Jessore, Khulna, Laxmipur, Noakhali, Pirojpur, Potuakhali and Satkhira. The survey captures voluntary and planned migration more than forced displacement, and thus the results presented are biased towards these migration types, with supplementary information on displacement where available.

Migration patterns in Bangladesh

Who migrates, where, why and for how long?

The migration patterns highlight who migrates where and our survey data provides insights into the reasons for, and duration of, the migration. The vast majority of migrants are men. Survey findings reinforce earlier studies that found that 75 per cent and 83 per cent of internal migrants are male (Hossain et al. 2013; Sharma and Zaman 2009). They migrate internally, typically from rural areas to urban areas, which confirms findings from earlier panel surveys (e.g., Rahman et al. 1996) (Figure 8.1). Dhaka, which represents nearly 40 per cent of the urban population of Bangladesh, had net annual migration arrivals during the 2000–10 period of 300,000–400,000 (teLintelo et al. 2018). Approximately 58 per cent of all internal migrants in Bangladesh head to Dhaka (Siddiqui and Mahmud 2014). Chattogram grew by 3.6 per cent per year across the period 1990–2011 and had an aggregate population of four million in 2011 compared to 3.3 million in 2001 (Mia et al. 2015). Analysis of the household survey data revealed that Dhaka and Chattogram together accounted for almost 43 per cent of all

Figure 8.1 Gendered migration patterns from the Ganges-Brahmaputra-Meghna delta in Bangladesh.

Source: Shouvik Das using DECCMA survey data, 2016–17.

internal migration. Only 8 per cent of internal migrants in the survey were women, and over half of them moved to Dhaka, with smaller numbers migrating to Chattogram and Khulna. Government data also suggest that both male and female migration is increasing over time (BBS 2008).

Although the majority of migrants in our survey were internal, moving within Bangladesh's borders, a significant number also migrated internationally. Trends for international migration from Bangladesh have existed since independence in 1971 and patterns reflect colonial history.

A considerable number of Bangladeshis have been living abroad for some time, relocating primarily to the United Kingdom (Hadi 2001). In 2004, the size of the Bangladeshi diaspora in selected developed countries was around 1.5 million (Ministry of Expatriates' Welfare and Overseas Employment and IOM 2004). The findings of the household survey revealed that 37 per cent of migrants have relocated to international destinations. Oman (26 per cent), United Arab Emirates (24 per cent) and Saudi Arabia (16 per cent) were the most prevalent destinations among Bangladeshi migrants. Malaysia (7.5 per cent), Bahrain (5.8 per cent), Qatar (5.2 per cent) and Kuwait (4.0 per cent) were also cited by survey respondents.

The vast majority of international migrants are male. In our survey less than 3 per cent of the 173 reported international migrants were females. However, like female internal migration, female international migration is increasing. In 2006 the Bangladesh government lifted a restriction on female workers and since then the number of women migrating abroad has increased significantly. However, numbers are still small compared to men due to gender roles and relations creating an expectations that women should stay in the home.

For both internal and international migration, economic opportunities are the major reason for migration. Within Bangladesh, urban areas provide opportunities in both formal and informal sectors of the economy associated with the rapid industrialization and urban growth of the country. The majority of internal migrants captured in the household survey are waged workers (36 per cent) or own a small, mostly informal, business (9 per cent). The same is true for international migration, which has grown as a result of the ongoing fragile socio-economic conditions in Bangladesh that have driven people to seek employment opportunities elsewhere. The Middle East and Asia provide many opportunities for unskilled and semi-skilled labour, for example in the construction industry.

Figure 8.2 shows that, among the 156 households with a migrant, economic reasons for migration are by far the most prevalent, cited by nearly two-thirds of migrant families. This category includes pull factors, such as employment, and push factors, such as debt or loss of income in one or more seasons. The second most common motivation for migration is family reasons, for example a woman moving either to join her husband or for marriage. Nevertheless, these account for less than one-fifth of migrant households. Environmental stresses, such as environmental degradation and extreme events, account for 13 per cent of migration. This is consistent with an earlier study where 10 per cent of respondents attributed the primary reason for their migration to climatic stresses, although many of them had experienced different types of climate stresses and reported challenges of food security (Martin et al. 2013). Instead over a third said that their motivation for leaving was to earn a better income and have a better life. Housing problems, social/political problems and education each account for less than 5 per cent. The reason for migration is linked with gendered patterns. The gender roles and expectations are that men should engage in

Figure 8.2 Reason for migration in migrant households (n = 463).

Source: DECCMA survey data, 2016–17.

productive labour to support their families, so when there is a need to move for economic reasons, it is more likely that the man will be the one to leave.

The duration of migration varies. Overall in Bangladesh, there is an increasing trend for temporary and circular migration, with short-term durations dominating over long-term ones (Hossain et al. 2013). The overwhelming majority (84 per cent) of international migrants are employed under a temporary contract that usually lasts three years.

Displacement

The migration outlined above is voluntary, in that people made the choice to leave. Forced migration, or displacement, whereby people have to move from their homes, is also common (Begum 2017). Situated on a delta, with the majority of the land less than 10m above mean sea level, Bangladesh is exposed to cyclones, flooding and erosion. Annually approximately 60,000 people are made landless as a result of the normal reshaping of the *chars* due to erosion (Hutton and Haque 2003). On top of this, an estimated 50 million people are exposed to, or affected by, disasters every five years, with the coasts facing a severe cyclone every three years on average, and a quarter of the country getting inundated during the annual monsoon rains (Shamsuddoha et al. 2013). Loss of houses and/or land can lead to forced migration or displacement.

Forced migration as a result of displacement does not exhibit the same gender differences as voluntary migration, nor the same patterns. Post-disaster movement typically involves short distances, but large numbers of people, with whole families moving together. For example, the 1998 floods inundated 61 per cent of the country, rendering 45 million people homeless. There were 26 major cyclones from 1970 to 2009, with the largest, Sidr, in

2007, displacing 650,000 people. Cyclone Sidr left US\$1.7 billion of damage, approximately half of which was attributed to houses lost in the storm (World Bank 2010).

Effects of migration on migrant-sending areas

Voluntary migration rarely involves a whole family moving at one time. Instead it is more likely that one person from a household, typically a man, will migrate, leaving behind other members of the family in the migrant-sending area. The consequences of migration, therefore, exist not only for the migrant but also for the family (s)he leaves behind. In this section we outline some of the effects of migration in migrant-sending areas, and the extent to which migration is deemed successful.

One of the most prominent positive effects of migration on migrant-sending areas is the receipt of remittances. Remittances refer to money and/or goods that are sent back home by the migrant. Since the bulk of migration is driven by economic reasons, it is not surprising that flows of money and/or goods take place. Figure 8.3 shows that over 84 per cent of migrant households receive money and/or goods from their migrant members. Money is remitted most frequently, usually weekly or every 4–5 weeks, with monthly amounts equivalent to up to 50,000 Bangladesh Taka (approximately \$550).

The receipt of remittances improves the economic status of the family left behind (Szabo et al. 2018). This can have impacts in terms of poverty reduction and can enable improvements in food security, health and education status, and housing. It can also enable purchase of productive assets. In a comparison of landholding sizes, the average for (internal) migrant households was 114.3 decimals, compared with 73.9 decimals for non-migrant households (Hossain et al. 2013). In our survey, the bulk of remittances is

Figure 8.3 Percentage of migrant households receiving remittances (n=463).

Source: DECCMA survey data, 2016–17.

spent on daily necessities (e.g., food). The economic impacts of international migration are often more significant, due to the potential for higher earnings than internal migrants are able to achieve. There is also positive evidence of the impacts of women's migration in terms of contribution to family income. In one study, almost half of the women migrating abroad became the principal income earner in the household during their period of migration (Siddiqui 2001).

Remittances and the economic benefits of migration are likely to be a key component of the perceived success of migration. Figure 8.4 highlights that over 89 per cent of women in both non-migrant and migrant households deem migration to be helpful. This suggests that the material benefits are evident even to those households that are not yet participating in migration. Less than 10 per cent see it as unhelpful, neither or are not sure.

Whilst remittances are a positive effect of migration, the social effects and implications for gender roles and relations can be negative. In some cases, women report greater autonomy and decision-making capacity when their husband has migrated, as society is more flexible with social norms and more tolerant of women's involvement in what are often seen as men's tasks. On the other hand, migration can increase burdens on women left behind due to their reproductive care roles (Hossain et al. 2013). This is often exacerbated in the multi-generational households that are typical of rural Bangladesh. A woman typically moves in with her husband's family at marriage and if he then migrates, she has sole responsibility for the daily support of her parents-in-law. There can be a significant loss of autonomy in this case, as the mother-in-law takes priority in decision making. Our survey also included questions about levels of wellbeing. Overall, over two-thirds of women deem themselves happy. However, slightly fewer women in

Figure 8.4 Perceived success of migration by women (non-migrant households n=844; migrant households n=404).

Source: DECCMA survey data, 2016–17.

migrant households deem themselves happy and slightly more deem themselves unhappy than women in non-migrant households (Figure 8.5).

Often, migration is an unfolding process as opposed to a one-off event. Typically, a man will migrate first alone, in order to establish himself in the receiving area in terms of employment and housing. If this process is successful, his family will often join him at a later date. In our survey nearly two-thirds of the women in migrant households expressed their intention to migrate in the future (Figure 8.6). However, migration is not an easy

Figure 8.5 Level of happiness of women in migrant and non-migrant households (women in non-migrant households $n = 844$; women in migrant households $n = 404$).

Source: DECCMA survey data, 2016–17.

Figure 8.6 Percentage of women in migrant households who intend to migrate in the future (women in migrant households $n = 404$).

Source: DECCMA survey data, 2016–17.

Figure 8.7 Barriers to migration for women in non-migrant and migrant households (women in non-migrant households $n = 844$; women in migrant households $n = 404$) (note each woman could cite more than one barrier).

Source: DECCMA survey data, 2016–17.

decision, and there are often significant ties of attachment to place that have to be overcome in order to move. Figure 8.7 shows that this is the major barrier to migration of women in both migrant and non-migrant households. However, for women whose husband has already migrated, other barriers relating to the receiving area, such as fear of not having a place to stay, not having a social network there or it being too crowded/expensive/dangerous are lower than for women in non-migrant households. Being part of a migration network, where there is information about work and people who can support integration into the receiving area, has been found to be important in any migration (Hossain et al. 2013).

Future environmental change and migration

Migration has a long history in Bangladesh (Bhuiyan and Siddiqui 2015; Siddiqui 2003). The vast majority of voluntary and planned migration is internal and from rural to urban areas, driven by economic reasons and the opportunities for employment. With Dhaka outside the delta and Chattogram within it, some migrants are moving outside the delta, whereas others are changing location within it.

Historically men have been, and continue to be, far more likely to migrate than women, although migration of women is increasing over time, including international migration. Whilst whole families may be displaced and forced to migrate, voluntary and planned migration typically involves selected members of the family – at least initially. Many women left behind state their intentions to migrate in the future when financial circumstances allow. Since it is more common for selected members to migrate, and typically men, the migration process has consequences for the households left behind and, in particular, for women.

Migration changes the population structure of sending areas, and has gendered consequences. When remittances are sent, this plays a role in increasing economic wellbeing. Gender roles are often more fluid as a result of migration, which can benefit or disadvantage women, depending on their circumstances. The psycho-social consequences of migration and the splitting of families can lead to different levels of happiness in migrant compared to non-migrant households.

The role of environmental factors in migration patterns is already being discerned, and is likely to continue into the future. However, since much of the country is a delta, it is difficult to determine delta-specific findings, and this explains why analysis of the survey reinforces existing understanding of the drivers and patterns of migration. However, these patterns may change in the future.

The geography of Bangladesh, as a low-lying coastal delta country, means that in addition to changes in temperature and rainfall patterns, it will be exposed to other climate changes such as sea-level rise. The amount of the country that will be flooded under a global average temperature increase of 3°C is more than 2.5 times that which would be flooded if the aspiration of limiting temperature increase to 1.5°C is achieved (Brown et al. 2018). Migration linked to climate change – although not solely for adaptation – is likely to increase (Saul 2012; Stojanov et al. 2016). In particular, the level of displacement is projected to increase. By 2050, it is estimated that over 35 million will be displaced in Bangladesh as a result of climate change – and this will lead to increased internal and external migration (DSK 2012). A consequence of the changing environmental conditions will be a change in the context in which migration decisions are made, with effects on migration patterns (Call et al. 2017). Although very few people cite the primary reason for migrating as environmental or climate – related, in many cases environmental and climate change are contributing to the stresses on livelihoods that prompt migration (Dasgupta et al. 2014).

The effectiveness of adaptation will play a key role in determining migration patterns and consequences. Structural adaptations, such as dikes and polders, are necessary to protect delta land and reduce the risk of large-scale displacement. *In-situ* livelihood adaptations enable people to earn a sustainable living in the delta, meaning that if they do take the decision to migrate it is likely to be planned and voluntary rather than forced. The government of Bangladesh has signalled its commitment to adapting to climate

change through the National Adaptation Programme of Action and forthcoming National Adaptation Plan, the Bangladesh Climate Change Strategy and Action Plan, and the Bangladesh Climate Change Trust Fund. However, establishing effective linkages between national and local levels can be challenging (Stott and Huq 2014). The implementation of these policies is uneven, with implications for adaptation at local level (e.g., Mahmud and Prowse 2012). At the same time, there have been critiques of the extent to which national policies are informed by local realities (DSK 2012; Haque et al. 2012). Whilst some infrastructural adaptation decisions need to be taken at district or national level, there is a strong trend for community-based adaptation in Bangladesh, and supporting the development of social institutions can reduce adverse impacts of climate change (Ali et al. 2014). Gender-sensitive adaptations will be essential to ensure women have equitable access to livelihood options that afford them choices and ensure that if they do move it is out of choice, and not forced.

At the same time, planning for future migration flows will be essential. Currently the greatest risks from climate displacement come from human insecurities that result from precarious alternative homes, for example in the growth of urban slums, and from social conflict (DSK 2012). Interviews with women migrants in urban slums in Chattogram highlighted that they are often subject to particular exploitation (Ava et al. 2017). There is also a need to develop appropriate legislation to protect displaced persons. Refugees who cross international borders are recognized and have legal rights but, as yet, no similar legislation exists to protect the human rights of internal migrants (Allan et al. 2016). Putting such frameworks in place is likely to contribute to the attainment of gender equality in Bangladesh.

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