

Making migration decisions amid climate change

Across Bangladesh, villagers are finding that climate stresses and shocks, including droughts and floods, are increasingly affecting their lives. A new study by UK and Bangladesh researchers shows that many people in rural Bangladesh believe that while many of the environmental processes and events they face are in God's hands, they themselves can play a proactive role to minimise or offset their impacts. Many of them seek diverse livelihood strategies, including migrating to new locations within the country. By working in different locations for short or long periods before returning, they try to earn more and save enough to help themselves and their families back home. Though they often see migration as a normal livelihood strategy, it helps them prepare for and recover from the impacts of climate change and variability. So, in reality, migration is working as an effective adaptation strategy. However, the study also finds that migrants often end up living in slums and informal settlements of growing cities, exposed to flooding and other hazards. To make this form of adaptation safer and more effective, the study recommends that future policies should be designed to support internal migratory movements – for long or short stays – and provide safe environments and facilities in terms of infrastructure, housing, and services such as children's education in the migrant destinations.



Rural livelihoods such as fishing (above) and farming are climate-sensitive. Photo: Michael Foley, The World Bank

The climate in Bangladesh is changing, its impacts are palpable. People are adapting to these changes creatively by sending family members to cities and other villages to earn a better living. So says a joint qualitative study by the Sussex Centre for Migration Research (SCMR) at the University of Sussex and the Refugee and Migratory Movements Research Unit (RMMRU) at the University of Dhaka. The study is funded by the Climate and Development Knowledge Network (CDKN). The research covers 14 villages across three districts in Bangladesh – Chapai Nawabganj, Satkhira and Munshiganj – affected by drought, flooding and cyclones. It probes what goes on inside people's minds when they change their livelihoods. It is based on emerging

theories of climate adaptation and social psychology that try to make sense of how people make decisions to move out or stay put in the face of changes in their environment and climate. The study notes that migration decisions are made on the basis of how people perceive migration and the likelihood and severity of environmental threats (environmental beliefs) and a set of behavioural factors. These include a comparative assessment of the benefits and costs of different livelihood choices (attitude), the way people believe how they can change their lives (control beliefs), make decisions, be innovative and influence others (personal norms); and the extent to which they trust and get influenced by family, friends, peers and authorities (social norms).

Changing climate and environment

Migration as adaptation

People across all the three regions perceive that their climate is changing and livelihoods are becoming increasingly difficult. People in all these places feel that extreme temperatures, especially during summer, are increasing. They often find it tough to work in the fields during mid-day. “This year, the heat is extremely intolerable,” says a villager in Chapai Nawabganj. This experience chimes with findings in scientific literature that the number of hot days per year in Bangladesh has increased in the last 50 years.

The villagers, however, do not always attribute the observed changes to anthropogenic climate change. Water stress is another problem often noticed by the villagers. The reasons for this, as suggested by those interviewed, include a reduction in rainfall and salinisation of water resources. In Chapai Nawabganj the perception is that drought has become particularly severe over the past decade with tubewells drying up. “The layer of water is going down day by day. Now water can be found 160 feet down. Ten years ago it could be found 100-120 feet down,” says a villager. In Satkhira villages, salinisation of water sources and soil makes drinking water scarce and farming and aquaculture impossible. The respondents blame the water ‘crisis’ on ‘unpredictable’, ‘irregular’ and ‘decreased’ rainfall. The other reasons they cite include storm surge inundation during Cyclone Aila and a prevalence of brackish water aquaculture.

Flood and riverbank erosion are two other common problems, especially in Munshiganj and the riverine islands of Chapai Nawabganj. Eighty per cent of the land area in Bangladesh consists of floodplains of major rivers, the biggest being Padma, Brahmaputra and Meghna. In Munshiganj district, people find riverbank erosion making floods even more fearsome. Interviewees say that since the 1970s the rivers have been swallowing up large chunks of land. For example the villagers of Bhagyakul note in the last 20 years the width of the river has expanded to over two miles.

Meanwhile Chorpka union (an administrative block of villages) of Chapai Nawabganj, an island on the Padma where people moved in during the early 1980s, has now lost most of its land due to erosion. Going by the local villagers’ estimate, the original 48,000 bigha (1 bigha = 0.33 acres) area has now shrunk to 6,000 bigha.

Faced with such dramatic changes, people are diversifying their livelihoods. Sons and daughters of local farmers and fishers are migrating to become shrimp cultivators, vegetable vendors, rickshaw pullers, toy-sellers and casual labourers. Depending on the availability of jobs, migrants often take up different roles, deriving a living from a basket of livelihoods in any single year. Against a background of economic growth and reduction in farm livelihoods, villagers are confident about making use of the emerging opportunities in cities. They are positive about the efficacy of migrant labour as a way out of the limited job opportunities and the environmental stresses and shocks back home. Migration patterns, however, differ across regions.

Erosion often leads to entire families or communities moving out. In the cyclone-hit areas it is usually men who migrate and in the drought belt it can be individual, family or community migration. People see migration as a strategy to diversify livelihoods. It works as an effective adaptation strategy to offset the impact of climatic stresses and shocks. People’s belief in this regard is in line with earlier studies in different parts of the world. These studies showed that village households often diversify livelihoods by sending one or some of the household members away to work – for different durations – and thus reduce their vulnerability to shocks and stresses, including climatic ones. Planning Commission figures show that in Bangladesh the rate of population movement is 4.5 per cent. A 1600-household survey done a decade ago in north-western Bangladesh found that 19% of them resorted to migration during lean farming seasons. For a quarter of the poor households migration was a major livelihood strategy. An ongoing quantitative study that is part of the Sussex-RMMRU project is expected to give newer figures soon for other parts of Bangladesh.

Responding to ‘acts of God’

Villagers tend to believe that the success of their household is mostly determined by factors outside their control. ‘It is all in God’s hands’, is how the villagers often put it. However, the creative and bold adaptive actions taken by them suggest that they have a sense of control over their destinies. The belief that disaster occurrence is in the hands of God does not prevent them from taking preparatory and remedial action.

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A rickshaw-puller in Dhaka, a typical image of a migrant. Photo by Steve Evans

Migration decisions are generally made by the migrant, or the head of the household, after consultation with friends, relatives and other members of the community. Migration is not seen as a pioneering or risk-taking venture, but as a business-as-usual activity despite all the uncertainties involved in it. In the destination areas, however, migrants hardly get any support for housing or services such as education and healthcare. They end up living in informal settlements and often find themselves exposed to a new set of hazards such as urban floods.

The migrants trust their social networks to inform them about opportunities and places to migrate. Usually the information for migration is provided by people who work outside the village, family members, relatives or their friends – not by government agencies or institutions. Most of the resources for migration also come from family members. In making livelihood choices people put their trust in fellow households. NGOs and the national government also enjoy their trust, but on a lesser level.

Recommendations

Set against a background of socio-economic vulnerabilities and exposure to risks, climatic stresses and shocks threaten people's lives and livelihoods. Steps are needed to model, forecast and disseminate information on climate change, variability and impacts. Bangladesh's existing disaster early warning systems

should be extended to cover longer time scales and the information produced effectively communicated. Supported largely by family ties and informal social networks, migration works as an effective adaptation strategy. However the migrants often end up living in slums, exposed to hazards such as floods. The government should take steps to ensure that seasonal and long-term migrants get better support in terms of safe infrastructure, adequate housing with a clean environment, healthcare and children's education.

Current policies address the need for international migration, but often implicitly discourage internal migration, seeing it as a failure to adapt within the rural system. Such a bias can restrict migration and trap poor people in risky environments. Instead, migration should be seen as a time-tested coping and adaptation mechanism and supported by interventions such as advice and skills training for better-paid paid and formal sector jobs. National and international adaption funding can facilitate this process.

Migration decisions are influenced by perceptions, beliefs and cultural and social norms. People often return to their places of origin despite limited livelihood options and safety risks there. The cultural aspects of adaptation and migration require better understanding – especially to frame policies that help communities adapt to climate change in ways that they want. Options include engineering solutions, opportunities to diversify livelihoods in situ and to migrate or get resettled. The needs and safety of those who stay back, especially women, children and the elderly, also have to be addressed.

Key readings

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About the project

The field research for this policy brief was conducted in Chapai Nawabganj, Munshiganj and Satkhira districts of Bangladesh. It is part of the climate change -related migration in Bangladesh project of the Sussex Centre for Migration Research, University of Sussex and Refugee and Migratory Movements Research Unit, University of Dhaka. The CDKN-funded project aims to understand, plan for and respond to climate-induced migration. It seeks ways to reduce vulnerability and build resilience of the Bangladeshi people to withstand the impact of climate change.

The project will produce qualitative and quantitative evidence on climate change and migration in Bangladesh, identify policy needs and make appropriate policy recommendations that will minimise the costs and risks and maximise the contribution of migration in response to climate change. The Government of Bangladesh is a key stakeholder in the project. This paper was written by Maxmillan Martin and Dominic Kniveton at the Department of Geography, University of Sussex and Tasneem Siddiqui of RMMRU. For more information kindly contact: d.r.kniveton@sussex.ac.uk and info@rmmru.org.

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