# DRIVERS OF SEASONAL MALE-OUT MIGRATION, ITS IMPACTS ON AND ADAPTATION STRATEGIES OF LEFT-BEHIND FAMILIES: THE CONTEXT OF SLOW-ONSET DISASTERS IN BANGLADESH

## **EXECUTIVE SUMMARY**

#### **Background of the research**

Climate change and human migration are closely related because people's decisions to migrate are greatly influenced by it. Migration caused by the climate is highly heterogeneous in terms of its drivers, patterns, and outcomes. People migrate in the hope of bettering their living conditions, but the entire family left behind suffers, particularly women and children. Since the early 2000s, researchers have worked hard to empirically investigate whether and how climatic variables, climate-induced risks, and natural disasters affect domestic and international migration flows. The majority of studies that are currently available are based on rapid disasters that cause migration, such as floods, cyclones, typhoons, earthquakes, and tsunamis. Research related to slow onset disaster induced seasonal male out migration and its impact on left behind family is rarely carried out. Thus, the main aim of this research is to understand the mechanism behind slow-onset disaster prone areas in Bangladesh.

### **Research Objectives**

- 1. To review the disaster-induced migration contexts, its drivers, and major thematic areas of in the current literatures.
- **2.** To analyse the drivers between different slow-onset disasters and seasonal migration of rural people.
- **3.** To investigate the impacts of seasonal migration on women and children in slow-onset disaster prone areas.
- **4.** To explore the adaptation/coping strategies of women and children during the period of seasonal migration.
- **5.** To overview and provide policy recommendations addressing the vulnerabilities from seasonal migration.

#### **Research Methodology**

The study used mixed methods including a set of quantitative and qualitative methods to achieve the research objectives. The study areas were five districts in south-western and north-western Bangladesh (Khulna, Satkhira, Rajshahi, Naogaon, and Chapai Nawabganj). Several research instruments and methodologies, including a literature review, questionnaire surveys, participatory rural assessment tools, and semi-structured face-to-face as well as telephonic questionnaire interviews with relevant officials and respondents, are used to fulfill the research objectives. Mailed questionnaires was also used for collecting secondary data from different offices. When necessary, several statistical analyses have also been conducted to derive the research outcomes. For Chapter 2 and 3, i.e., literature review, both systematic literature review technique using PRISMA method and narrative literature reviews were applied. For Chapter 4, Nvivo software was used for the qualitative analysis. The narratives were also used when necessary. Different statistical methods were also used in chapter 6, 7, and 8 such as correlation, multiple regression, etc.

#### **Key findings**

Irrespective of the type of disaster, the major spatial-temporal pattern of migration was perceived to be temporary domestic migration from rural to urban areas. Comparing the auxiliary drivers of migration revealed some common economic drivers. The comparison diagram also identifies several other drivers which are disaster specific. For e.g., social, demographic, and physical drivers are perceived to drive migration in cyclone-affected areas, while environmental drivers (land degradation, scarcity of safe drinking water, changes in soil condition, etc.) are the primary drivers behind migration in saline-affected areas.

The left-behind families, especially the women and children perceived several impacts due to seasonal male-out migration. Social, economic, environmental, educational, and health-related impacts were perceived by the women of the left-behind families. Farm size, number of children, number of older people, daily labor as the secondary source of income, and joining in minimum wage program variables were significantly correlated with the impact of migration on left-behind families.

Findings revealed that the left-behind families adopted a wide range of planned adaptations and sometimes depending on the situation several coping measures were also adopted. The social adaptation measures at the individual level, economic adaptation measures at the farm or off-farm level, health-related adaptation measures by the women, children, and old-aged people, educational adaptation measures for the children, and different environmental adaptation measures at the household level were found. The planned adaptation of the leftbehind families due to the male-out migration, women empowerment, participation in decisionmaking process were evidenced. The planned adaptation of the left-behind families helped in the development of resilience to some extent.

#### Conclusions

To the best of my knowledge, this is the first attempt to compare the disaster specific auxiliary drivers of migration (relationship between and among disasters) where respondents linked various auxiliary drivers like economic, social, institutional, environmental, agricultural, physical, institutional, and demographic drivers to individuals' migration decisions. Slow onset disaster induced migration are often linked to economic (i.e., debt, low income, no work, job opportunity) and agricultural (crop loss, degradation of cultivable land) drivers, whereas migration due to rapid onset disasters are more associated with physical (i.e., damage to infrastructure) and institutional drivers (lack of post disaster recovery, resettlement, lack of disaster risk reduction policy). Male-out migration has a positive impact on household income, loan payment, and education of children from left-behind families, but migration cause loss of cultural value and indigenous knowledge, loss of social ties, and loss of agricultural labor. This demonstrates the need for more integrated local-level disaster recovery plans, specific to disasters, to minimize the negative impacts of disaster induced migration as well as to provide better livelihood to the households that will prevent them from migrating to urban areas. These findings have policy implications for the management of disaster-induced human migration.