

Causes of Seasonal Out-Migration in the Terms of Agricultural Perspectives in Phulbari Upazila, Kurigram, Bangladesh

Abstract

This paper explores the major push-pull and self-selective factors driving seasonal out-migration in Phulbari Upazila, Kurigram District, from an agricultural perspective. Seasonal migration, especially during lean agricultural periods, is a longstanding livelihood strategy in this region. The study utilizes primary and secondary data to understand the agricultural dynamics influencing past and present migration trends. Key factors contributing to seasonal out-migration include flooding and river erosion, agricultural off-seasons, landlessness, poverty, limited employment opportunities, climatic variability, debt, economic pressure, social networks, and migration traditions. The research reveals that natural vulnerabilities and seasonal food insecurity continue to drive migration. **Due to uncertain climate change and weather conditions, rural areas suffered from seasonal hunger due to a lack of manpower and unsuitable soil conditions to harvest food for their people. This outlines the patterns, causes, and impacts of seasonal out-migration among agricultural workers in Bangladesh as well as how this condition affects the socioeconomic of a rural area, Phulbari Upazila, Kurigram.** Most migrants are agricultural wage laborers, landless, and marginal farmers. The study also highlights that households' coping capacity is closely linked to the socio-economic status of the household head, with illiterate and low-income groups being more vulnerable than their educated and higher-income parts. This study identified the significant role of agricultural changes in shaping migration decisions and suggests that interventions aimed at reducing dependency on seasonal migration could foster sustainable development. The push factors, such as poverty and unemployment, are more influential than pull factors. Empowering migrants through education, safety nets, and diversified income opportunities, both in their villages and at migration destinations, can transform migration from a necessity into a choice. Collaboration works among communities, government, NGOs, and other stakeholders is important for implementing sustainable and impactful policies and strategies.

Keywords: Seasonal out-migration, agricultural perspectives, Phulbari Upazila, Kurigram.

1. Introduction

Internal migration, mostly composed of young adults and the poor, constitutes the largest flow of people in developing countries (UNDP, 2009). In developing countries, where households face labor and financial market constraints, migration can be a strategy to diversify income sources and cope with risks (Rosenzweig and Stark, 1989; Protik and Kuhn, 2006). In Bangladesh, a small South-Asian country bordering India and Myanmar, seasonal hunger afflicts a large portion of the rural population, especially those living in the northwest region of Rangpur. During the annual seasonal famine, income decreases by 50-60% and spending on food drops by 10-25%. About 15.4 million people live in Rangpur. Approximately 13.6 million of these people live in areas where during the yearly pre-harvest season, there is a decline in labor demand and wages causing households that don't own land to regularly skip meals. The limited income opportunities during the lean season drive residents to migrate temporarily to urban areas or neighboring regions for work, particularly in construction and the service industry (Rahman et al. 2020). Simultaneously, low-skill labor opportunities become available in other regions of the country. Seasonal migration for these jobs, which generally entails leaving farms to move to more lucrative cities, is a common practice. It is a practice that the rural poor in Bangladesh use to provide for their families so they can eat regularly (Sarah Uddin, 2020).

This research aimed to understand the patterns, causes, and impacts of seasonal out-migration among agricultural workers in Bangladesh, and to explore how this phenomenon influences agricultural productivity, rural economies, and socio-economic conditions of Phulbari Upazila, Kurigram. Environmental conditions particularly the impacts of climate change play a crucial role in seasonal migration patterns in Phulbari. The region is prone to flooding and other climate-related challenges, which significantly affect the agricultural productivity. Adverse weather conditions compel many residents to seek temporary employment elsewhere, particularly during the monsoon season when agricultural activities are hindered (Hossain et al. 2019). The study region faces ongoing challenges related to climate change and economic instability, addressing the implications of seasonal migration is essential for development and community resilience.

Due to uncertain climate change and weather conditions, rural areas suffered from seasonal hunger due to a lack of manpower and unsuitable soil conditions to harvest food for their people. This outlines the patterns, causes, and impacts of seasonal out-migration among agricultural workers in Bangladesh as well as how this condition affects the socioeconomic of a rural area, Phulbari Upazila, Kurigram

To understand the patterns, causes, and impacts of seasonal out-migration among agricultural workers in Bangladesh, and to explore how this phenomenon influences agricultural

productivity, rural economies, and socio-economic conditions to examine that the study carried out some specific objectives

-To examine the demographic characteristics of seasonal migrants (age, gender, education).

-To Assess-economic factors driving migration, such as income disparities, employment opportunities, and agricultural yield variability.

-To analyze how seasonal migration affects labor availability during critical farming periods. Investigate remittance flows and their impact on local economies and household income.

2. Data and Methods

Seasonal out-migration in Phulbari, Kurigram, is a significant phenomenon influenced by various economic, environmental and social factors. Economic factors are the primary motivates for seasonal out-migration in Phulbari. Many rural households rely on agriculture, which is subject to seasonal fluctuations. According to Rahman et al. (2020), the limited income opportunities during the lean season drive residents to migrate temporarily to urban areas or neighboring regions for work, particularly in construction and the service industry.

This migration helps families diversify their income sources and cope with economic uncertainties. Environmental conditions particularly the impacts of climate change play a crucial role in seasonal migration patterns in Phulbari. The region is prone to flooding and other climate-related challenges, which significantly affect the agricultural productivity. Adverse weather conditions compel many residents to seek temporary employment elsewhere, particularly during the monsoon season when agricultural activities are hindered (Hossain et al., 2019). Social networks significantly facilitate seasonal out-migration in Phulbari. Research indicates that established connections between migrants and their home communities provide essential support for new migrants. These networks offer information about job opportunities, housing, and social integration, making migration less risky and more attractive.

The presence of previous migrants often encourages others to follow suit, reinforcing migration trends within the community (Islam and Folk, 2016). This research employs a mixed-methods approach to comprehensively examine the patterns, causes, and impacts of seasonal out-migration in Phulbari Upazila, Kurigram.

By integrating both quantitative and qualitative research methods, this study aims to provide a holistic understanding of the migration dynamics within the context of rural Bangladesh. To conceptualize migration decision-making of rural people in northern Bangladesh (Phulbari Upazila, Kurigram), individually utilize qualitative data collected through individual interviews and questionnaire survey and utilize quantitative data through questionnaire survey. These are the primary sources of data. Some secondary sources of data used also. Different published research (BBS, Researchgate.net, IOM, UNHCR and some individual research paper published by other website), unpublished dissertation and field report, Union Parishad, Upazila Parishad

used as secondary data source. Phulbari Upazila in Kurigram district is purposefully selected for this study. Phulbari Upazila area 156.61 square km, located in between 25°32' and 26°04' north latitudes and between 89°28' and 89°40' east longitudes. It is bounded by West Bengal state of India on the north, Kurigram Sadar, Rajarhat and Lalmonirhat Sadar upazila on the south, Nageshwari upazila on the east, Lalmonirhat Sadar upazila on the west. Average literacy is 44.8% in the study area, 50.0% for male and 39.8% for female. Main sources of income agriculture 74.28%, non-agricultural laborer 5.18%, industry 0.25%, commerce 9.31%, transport and communication 1.70%, service 3.81%, construction 0.65%, religious service 0.18%, rent and remittance 0.17% and others 4.47% (Banglapedia, 2010).

Questionnaire survey conducted among 50 samples by random sampling. Some KII and FGD conducted. Data collection took place during the Aman period in September 2024, when the most of the temporary migrants were present in their home place. Collected data analyzed after data cleaning process. After analysis the data represented in graphs, tables, pie-chart and diagrams.

3. Results and Discussion

3.1 Socio economic status

Field Survey, July 2024 shows that highest proportions of the migrants (54%) were adults and most of the respondents are male about 90% and female 10%. Most of the households are nuclear family (84%). Married respondents are 80% of total sample; some of the others are single 10%, widowed 6% and last is divorced 4%.

Table: 1 Age distribution of the respondents

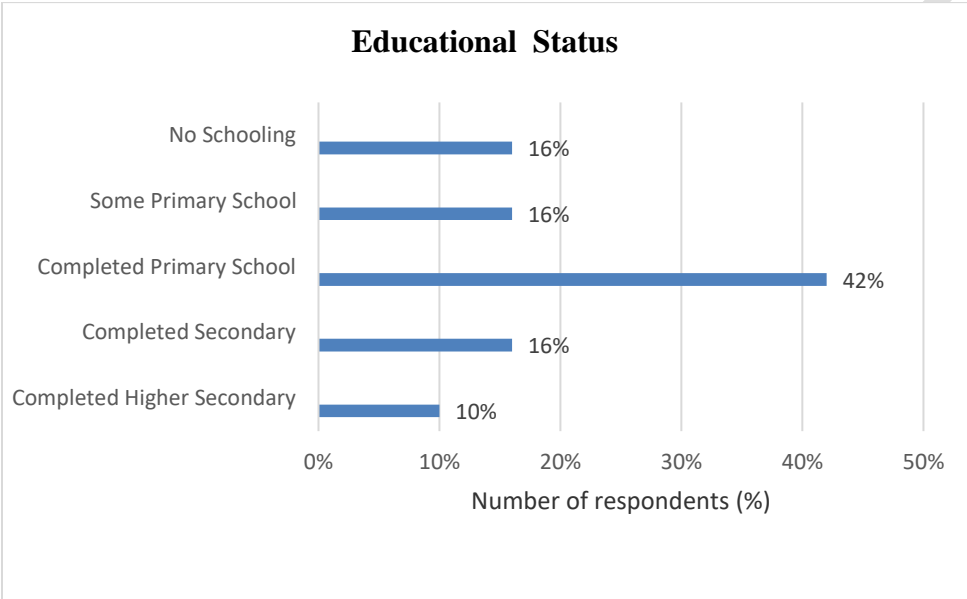
Age frequency	Percentage
18-25	18%
26-35	54%
36-45	24%
46 and above	4%
Total	100%

Source: Field Survey, July 2024

Figure: 1 represents that, most of the respondents are completed primary school (42%), illiterate is about 16%, some person went school but didn't completed their primary level is about 16%, completed secondary level is about 16% and completed higher secondary level is about 10%.

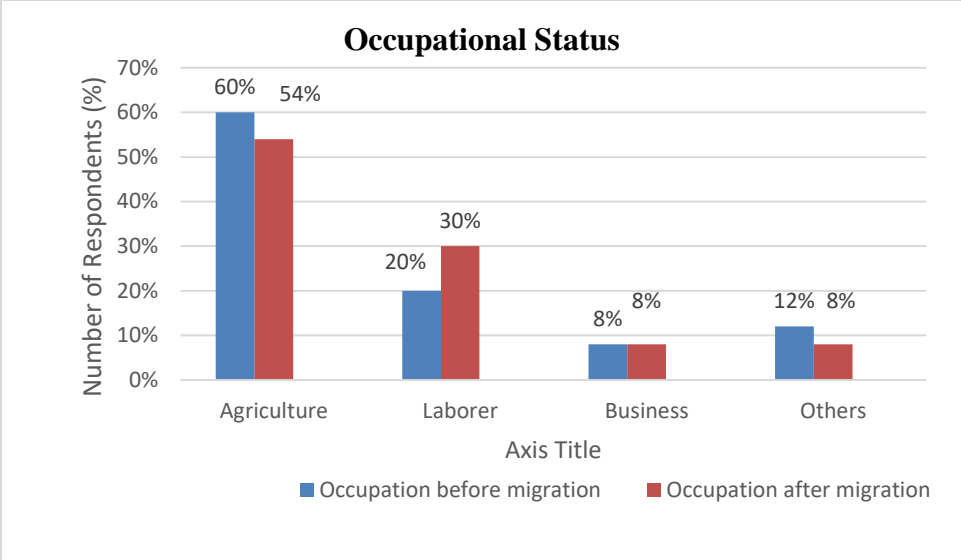
Figure: 2 shows that, 60% of the respondents engaged with agriculture activities before migration, but after migration it gone lower down to 54%. Labor work increased among the respondents after migration. All about 30% respondents engaged in labor work after migration while it was 20% before migration. There is no difference between after and before migration among the business works.

Figure: 1 Education Status of the respondents



Source: Field Survey, July 2024

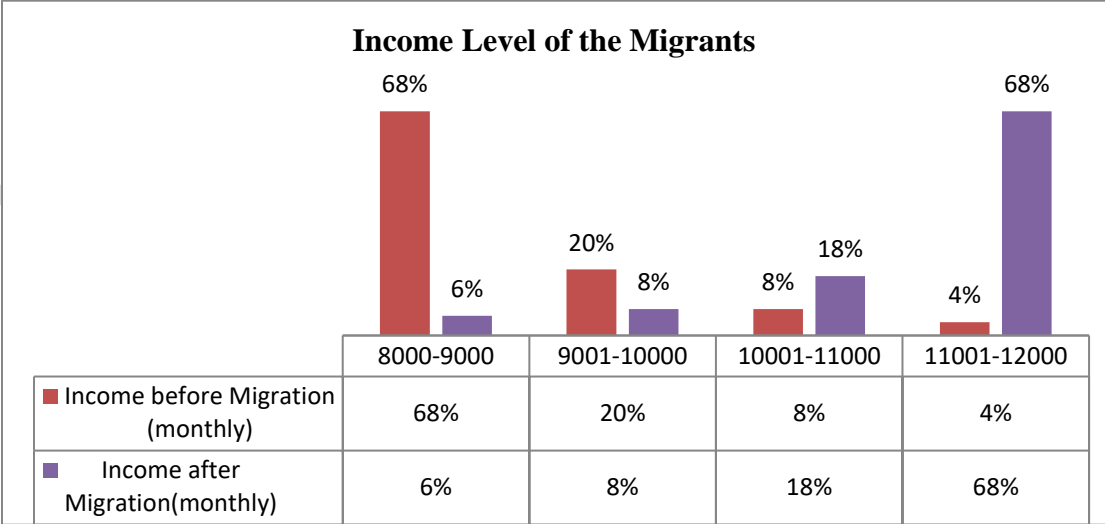
Figure: 2 Occupational Status of the respondents



Source: Field Survey, July 2024

The figure: 3 represents that, income level is higher in destination than origin area. The figure shows that the highest income (68%) in origin place ranges from (8000-9000) and in the destination highest income (68%) ranges from (11001-12000).

Figure: 3 Income Levels of the Migrants



Source: Field Survey, July 2024

Table:2 Crop periods in the study area

Activity	Months
Boro planting time	Magh
Boro harvesting time	Choitra
Aush planting time	Falgun
Aush harvesting time	Boishakh
Aman planting time	Srabon
Aman harvesting time	Kartik-Ograhaon

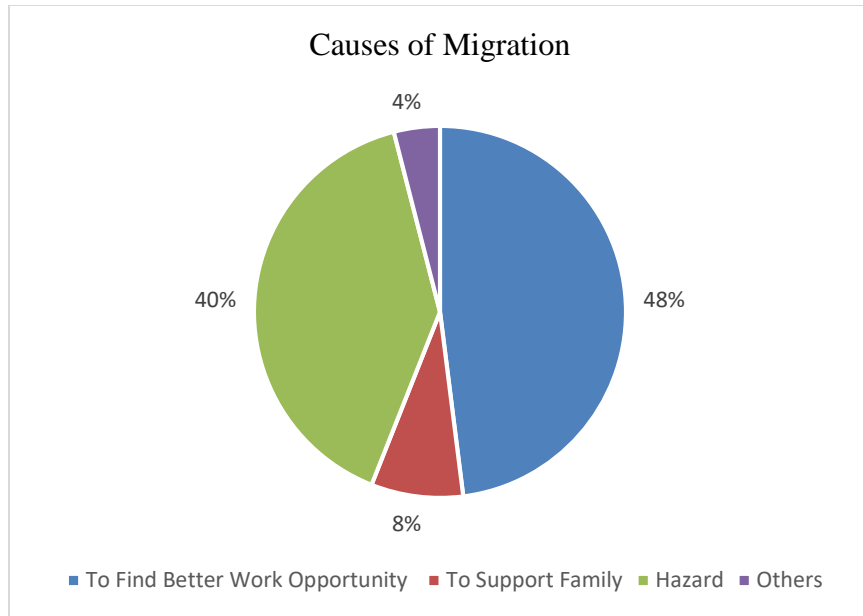
Source: Field Survey, July 2024

The respondent said that indeed there are ample job opportunities in their home region in “Boro”, “Aush” and “Aman” planting and cutting season. But they suffer much lack of job opportunities during “mid-Falgun to mid-Choitra” and “mid-Ashwin to mid-Kartik”. At that time they went in search of work in different areas within Bangladesh like Jatrapur, Barishal, Pabna, Kumilla, Bogura, Munsiganj, Feni, and Dhaka etc. Could be said that, the study area is full of job opportunities in the agricultural season but off season in agricultural work most of the respondent are suffer mostly.98% respondents said “yes” in agricultural off season it is hard to find work in the study area and 2% said no.

3.2 Causes of migration

The pie chart in figure: 4 reveals that, most of the migrants (48%) migrated for better work in the agricultural off season and the other most important cause for migration is hazards like floods about 40%; then, to support family economic condition is about 8% and others is about 4%.The respondents said that often they are inspired by their family members, friends and neighbors to migrate. The field survey, 2024 shows 80% people are inspired to migrate by friends and family members. Neighbors also influences to migration and is about 16% and 2 respondents migrated by themselves.

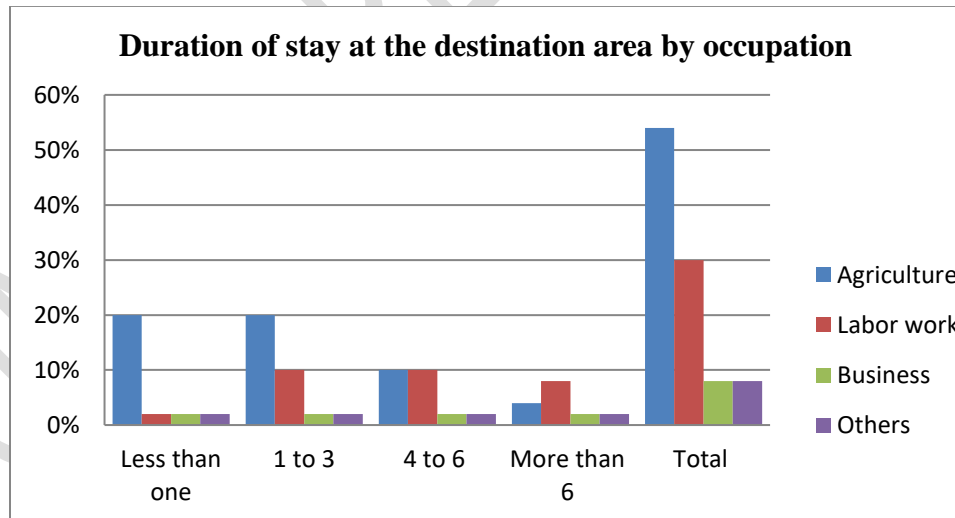
Figure: 4 Causes of migration



Source: Field Survey, July 2024

3.3 Duration of Stay at the Destination area by Occupation

Figure:5 Duration of stay at the destination area by occupation



Source: Field Survey, September 2024

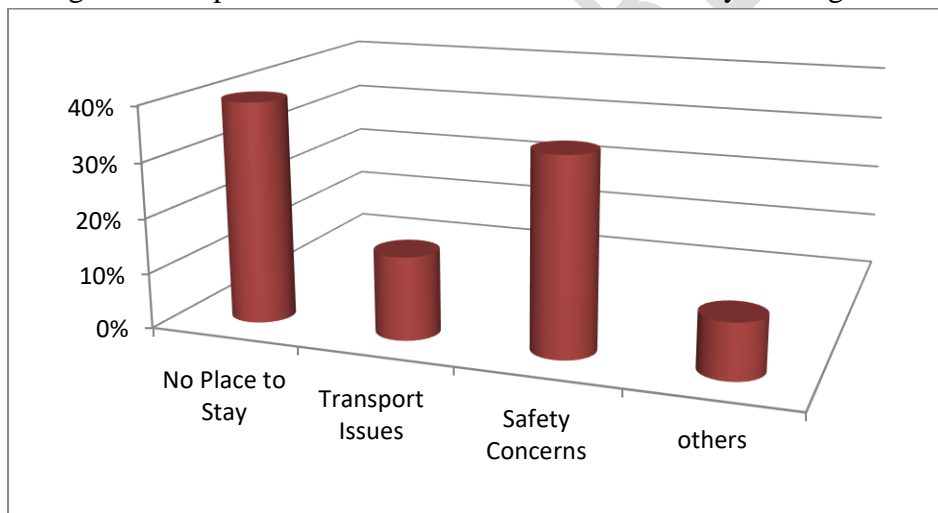
According to the respondent information after migration 54% work in agriculture,30% work in laborer, 8% work in business and 8% work in others sector.

Total 26% respondents are migrated for less than one-month in agriculture (20%), in labor work (2%), business (2%) and others sector (2%). Total 34% migrants are migrated for 1-3 months in agriculture (20%), in labor work (10%), business (2%) and others sector (2%). Total 24% migrants are migrated for 4-6 months in agriculture (10%), in labor work (10%), business (2%) and others sector (2%).Total 16% migrants are migrate for more than 6 months in agriculture (4%), in labor work (8%), business (2%) and others sector (2%).

3.4 Problems Faced in Destination Area

The migrants faced lots of problem in their destination areas. The problems are broadly three categories: no place to stay 40%, transport issues 15%, safety concerns 35%.Another problems are low social status, lack of cooperative organization and inequality in wage.

Figure: 6 the problems faced in the destination area by the migrants:



Source: Field Survey, September 2024, Phulbari Upazila, Kurigram

3.5 General types Seasonal Migration in Phulbari Upazila, Kurigram

Seasonal migration among the people of Kurigram, particularly in Phulbari, is driven by several factors, including economic opportunities, climate impacts, and agricultural cycles. Many

families migrate to urban areas or other regions in search of work during lean agricultural seasons when local employment is scarce.

- During the agricultural off-season, jobs in construction, textiles, and service sectors in urban areas attract rural workers seeking better wages (Hossain, 2017).
- Migration helps families diversify their income sources, reducing dependency on agriculture and increasing financial resilience (Rahman, 2016).
- Frequent floods and erratic weather patterns in Kurigram affect agricultural productivity, prompting seasonal migration as a coping strategy (Maqsood, 2019).
- Limited natural resources in rural areas encourage families to seek better living conditions and job prospects elsewhere (Khan, 2020).
- Established migration patterns and networks facilitate movement, making it easier for families to find work and housing in destination areas (Ali, 2018).

3.6 Direct Effects of Seasonal Migration

Seasonal migration has multifaceted effects on both the communities of origin and the destination areas.

- **Economic Benefits:** Seasonal migrants often send remittances back home, significantly boosting household incomes. These financial inflows can lead to improved living standards, increased investment in education and health, and enhanced local economic activity (Mastrorillo et al., 2016). In rural areas, remittances can be crucial for agricultural investments and diversification of income sources.
- **Social Changes:** Migration alters family dynamics and social structures. Those left behind may take on new responsibilities, leading to shifts in gender roles and family roles. This can create both challenges and opportunities, as family members adapt to new social realities. Additionally, the experiences and cultural exposure of returning migrants can introduce new ideas and practices to their home communities. (Mastrorillo et al., 2016).
- **Labor Market Effects:** In destination areas, seasonal migrants often fill labor shortages, especially in sectors like agriculture and construction. This can benefit local economies but may also lead to wage suppression for local workers, creating tension between migrants and residents. (Mastrorillo et al., 2016).

- Environmental Impact: Seasonal migration can strain local resources in both sending and receiving areas. Increased population density in host areas can lead to greater demand for housing, water, and other services, while communities of origin face challenges due to the absence of working-age individuals. (Mastrorillo et al., 2016).

Most of the migrants said that migration affects farming at their home and is about 95% and 5% respondents said that migration didn't affect farming at their home. Out-migration from Phulbari, Kurigram, like in many rural areas of Bangladesh, can significantly affect farming at home in several ways. The respondents said that migration affects both negative and positive impact at farming. Some effects are given below: With young and able-bodied family members migrating to another region for better economic opportunities, there is often a shortage of manpower for farming activities. This leaves behind an aging population who may not be able to manage the labor-intensive tasks of farming effectively. Due to the labor shortage, families may switch to cultivating crops that require less labor, or they may reduce the amount of land they farm. This can reduce agricultural diversity and productivity in the region. Families may need to hire laborers to compensate for the loss of family members who used to work on the farm. This can increase the cost of farming, cutting into profits and making farming less sustainable. Kumilla Jatrapur, Kurigram Pabna Barishal Feni Munsiganj Bogura. On the positive side, remittances sent by migrants can be used to invest in modern farming techniques, machinery, or better-quality seeds, which may improve productivity. However, this depends on the priority migrants place on farming compared to other household needs.

In some cases, land may be left fallow or rented out to others for farming. This can lead to a decline in the area under cultivation, particularly if many families face similar labor shortages. Migration can also affect the transfer of traditional farming knowledge. Younger generations who migrate may lose touch with farming practices, leading to a decline in farming expertise over time.

Findings

The agricultural perspective on seasonal out-migration in Phulbari Upazila, Kurigram, typically focuses on several key factors, which influence both the push (riverbank erosion, flood, seasonal food insecurity and lean periods) and pull (higher income than origin place, better job quality) dynamics for migration. Based on research, reports, and general patterns from similar regions in Bangladesh, here are the main findings regarding the causes of seasonal out-migration: Phulbari Upazila, like other parts of Kurigram, is prone to riverbank erosion and seasonal flooding due to

its location near major rivers like the Dhorla and Teesta, which forces farmers to seek seasonal work elsewhere. The loss of land from erosion and siltation diminishes farming opportunities, pushing families to migrate for alternative sources of income during off-peak agricultural seasons. Phulbari, like many parts of northern Bangladesh, experiences the “monga” period—a time between planting and harvest seasons, especially in pre-harvest months. During this period, there is little agricultural work, causing a scarcity of income and food insecurity. As a result, people migrate to urban areas or other districts to find temporary employment. Seasonal out-migration in Phulbari Upazila is deeply tied to the vulnerabilities and constraints faced by the agricultural sector. Environmental challenges like flooding, land degradation, and climate change, combined with socio-economic factors such as small landholdings, poverty, and lack of off-season employment, drive households to seek livelihoods elsewhere. Addressing these underlying causes would require agricultural reforms, diversification, and investments in rural development to reduce dependency on seasonal migration throughout this research report.

Need more investigation about climate change impacts on migration pattern.

Need more support from government and non government to improve livelihood diversification to reduce migration dependency.

Adapt effective agricultural technology to create local employment opportunity.

Conclusion

In Phulbari, Kurigram, seasonal out-migration is a common response to the agricultural off-season, driven primarily by unemployment, food insecurity, and environmental challenges such as floods and river erosion. The region’s dependence on agriculture, with limited non-farm income opportunities, compels many rural households to migrate in search of temporary work during lean periods. Migration offers short-term financial relief through remittances but poses challenges to the long-term sustainability of local agricultural productivity. From an agricultural perspective, this pattern of migration creates labor shortages during critical farming seasons, impeding agricultural development and limiting the region’s potential for growth. The frequent outflow of labor also constrains innovation in farming practices, as people often lack the stability or resources to invest in more productive, sustainable agricultural methods.

The complex interplay between environmental factors, economic vulnerability, and agricultural dependence highlights the need for targeted interventions. Policies that promote livelihood diversification, climate-resilient agriculture, and improved infrastructure, such as irrigation and flood management, can significantly reduce the pressure to migrate. Additionally, government support through employment schemes, access to agricultural technology, and market connectivity could enhance local agricultural productivity, mitigating the need for out-migration.

In conclusion, while seasonal out-migration serves as a coping mechanism for Phulbari's rural households, it is not a sustainable solution to the deeper issues of agricultural vulnerability and economic insecurity. A long-term strategy that focuses on strengthening local agriculture, promoting alternative livelihoods, and building climate resilience will be essential to reduce dependency on migration and ensure the socio-economic stability of the region.

Disclaimer (Artificial intelligence)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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