



# Lives and Livelihoods of Chars Dwellers

Findings from a Baseline Survey  
in Selected Char in Northern  
Bangladesh





Knowledge for a  
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World

# Lives and Livelihoods of Char Dwellers

## Findings from a Baseline Survey in Selected Char in Northern Bangladesh

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# Acronyms

ANC	Antenatal Care
ATP	Asset Transfer Project
BBS	Bangladesh Bureau of Statistics
BDHS	Bangladesh Demographic and Health Survey
BDT	Bangladeshi Taka
BIGD	BRAC Institute of Governance and Development
CBN	Cost of Basic Needs
CDSP	Char Development and Settlement Project
CHT	Chittagong Hill Tract
CLP	Chars Livelihoods Programme
DRM	Disaster Risk Management
FCS	Food consumption score
GBM	Ganges-Brahmaputra-Meghna
HIES	Household Income and Expenditure Survey
IDP	Integrated Development Programme
IGA	Income-Generating Activity
IPV	Intimate Partner Violence
IRB	Institutional Review Board
MFS	Mobile Financial Service
NEET	Not in Education, Employment, or Training
NGO	Non-governmental Organization
OLS	Ordinary Least Squares
PNC	Postnatal Care
RCT	Randomized Controlled Trial
SDP	Skills Development Programme
SELP	Social Empowerment and Legal Protection
WASH	Water, Sanitation, and Hygiene
WFP	World Food Programme
WHO	World Health Organization

# Glossary

## **Char**

A char refers to land surrounded by seas, oceans, lakes, or rivers. Typically, chars are areas formed by the sedimentation of rivers or estuaries. In Bangladesh, chars are considered by-products of rivers' hydro-morphological dynamics. Although some chars in the study area are now connected to the mainland by roads, they were originally isolated by surrounding rivers.

## **Household**

A household is a group of individuals—such as family members, relatives, or housekeepers—who live together and share meals from the same kitchen. A household may consist of one or more members and could occupy multiple houses, or several households may reside within a single house.

## **Household head**

The household head is the member responsible for planning and overseeing all types of work, including managing financial expenses and making major family decisions. This individual bears the responsibilities associated with household management.

## **Main female**

The main female is a household member responsible for managing various tasks during the absence or incapacity of the household head, including overseeing financial expenses and making significant family decisions. In some cases, the main female may also serve as the household head.

# Executive Summary

## Background

Chars are dynamic landforms shaped by Bangladesh's extensive river systems, covering approximately 8% of the country's landmass. These regions are remote and highly vulnerable to natural hazards, such as flooding and riverbank erosion. The estimated char population of 20 million people faces limited economic opportunities and restricted access to essential services. The region suffers from inadequate infrastructure, including poor road networks, healthcare facilities, markets, financial institutions, limited government services, and scarce employment opportunities, resulting in high poverty rates. BRAC's Integrated Development Programme (IDP) has designed a suite of targeted livelihood interventions to improve the lives and livelihoods of char residents. To assess the impact of IDP interventions in the chars, the BRAC Institute of Governance and Development (BIGD) has developed a study using a randomized controlled trial (RCT) approach. This report presents the baseline survey's key results, providing insight into the economic conditions, social status, access to essential services, and resilience and coping mechanisms of char residents.

The study organizes the key findings into four main themes: economic conditions; social status; access to essential services; and resilience, shocks, and coping mechanisms.

## Methods

The baseline survey was conducted in 90 chars across the two northern districts of Gaibandha and Kurigram. These chars were randomly assigned into two groups: a control group of 30 chars and a treatment group of 60 chars. Approximately 68 households were surveyed in each char, resulting in a total sample size of 6,120 households. Basic characteristics were similar between households in the treatment and control groups, indicating successful randomization. Additionally, BIGD conducted a simultaneous survey to collect char-level information on population structure, infrastructure, social services, and governance.

## Char Overview

There is considerable variation in population and household numbers across chars, with an average of 3,512 people and 530 households per char, and a high proportion of young residents (45% under the age of 20). Infrastructure in chars is mixed: only 27% have road connectivity to the mainland, a mere 8% have agricultural markets, and none have bank branches. However, electricity access is relatively high, with 84% of chars connected to electricity. Social services are unevenly distributed, with government primary schools present in most chars (77%) but secondary schools extremely scarce (4%). Sanitation is a major issue, with inadequate improved sanitary latrines available in 61% of chars. Formal governance structures are weak; only 10% of chars have Union Parishad offices. Non-governmental organizations (NGOs) are active in 79% of chars, providing essential services like microcredit, healthcare, and education. However, newer chars (aged 5–25 years) are more deficient in basic infrastructure and services compared to older chars (aged over 25 years).

## Demographics

Chars in the study area have a predominantly young population, with 45% of residents under the age of 20. The higher fertility rate in char regions, compared to national and rural rates in Rangpur, contributes to this youthful demographic. The population structure in chars highlights the need to focus on health, education, and skill development for young people.

Most char households (90%) are male-headed, and nearly half of household heads are illiterate. Around 4% of residents have disabilities, a rate lower than the national rural average. Housing conditions vary based on how long a household has resided in the chars. Newer households (living up to five years) are more vulnerable to natural shocks like floods and river erosion, whereas older households (over five years) are more likely to own land and have better housing conditions. In contrast, newer households experience higher rates of internal migration and greater losses from natural disasters. Housing structures are primarily made from tin or wood, with most

requiring minor repairs. Displacement is common, with most displaced households affected by riverbank erosion. These households often relocate to other chars or nearby villages, illustrating the region's vulnerability to natural hazards.

## Economic Condition

The economic landscape of char households lacks diversity. Newer households (living in their current location for up to five years) are more vulnerable than older ones (living for more than five years). Despite a high rate of participation in income-generating activities (63%), employment in chars is largely limited to low-productivity sectors like day labour and subsistence farming, with notable underemployment (an average of 21 hours per week, compared to 37 hours in Rangpur rural areas and 38 hours nationally). Youth unemployment is high, with 14% of young males and 8% of young females (aged 15–20) neither employed nor in education or training. Child labour rates (5%) exceed national averages, often driven by poverty.

The average per capita income of char households (BDT 3,825) is significantly lower than the national rural and Rangpur division averages, with 55% of residents living below the poverty line and 41% in extreme poverty. Only 47% of households own registered land, 42% own unregistered land, and 18% are landless. Additionally, 23% own registered cultivable land, while 4% possess cultivable land acquired for free. A substantial number of households live on land belonging to others, either free of charge or on mortgage. Despite these challenges, most households rely on farming (55%), often on leased land (58%). Poultry and livestock are prominent productive assets among char households, yet financial inclusion is limited, with only 24% of households having savings, mostly with NGOs.

Conversely, 69% of households have loans, primarily from informal sources such as friends or relatives, moneylenders, and shopkeepers. Internal migration is high in char areas, with 50% of households reporting recent internal migration, whereas only about 1% reported international migration. Furthermore, skills development opportunities are scarce, with around 95% of households having received no training in income-generating activities, despite 66% expressing interest, particularly in livestock rearing and

crop farming. While some households have adopted artificial insemination for livestock, awareness of this technology remains low. Providing artificial insemination training could improve livestock productivity.

## Social Status

The study examines household social status across education, social empowerment, legal protection, child marriage, intimate partner violence (IPV), and social safety nets. Girls in chars have higher enrolment rates than boys at both primary and secondary levels, reflecting national trends; however, overall enrolment remains below national and regional averages. A significant proportion of enrolled students attend informal or unregulated institutions, such as madrasas and NGO-run schools. Supply-side limitations—such as an insufficient number of government schools and long distances to schools—adversely affect enrolment, especially for girls. The study also reveals persistent knowledge gaps in social empowerment and legal protection, particularly regarding the legal age for marriage, divorce rules, and dowry laws. A major social issue in char areas is the high rate of child marriage (68%). Although IPV, both physical and psychological, is reported at lower rates than national figures, controlling behaviour against women is prevalent (73%). Social safety net coverage is also low, with only 28% of households benefiting, compared to 44% nationally and 48% in rural Rangpur. Among eligible populations, 30% receive an old-age allowance, 12% a disability allowance, and 21% a widow allowance, underscoring the need for legal aid, support services, and awareness campaigns to address these issues in char areas.

## Essential Services

The study assesses households' access to essential services, including general health, maternal and child health, water, sanitation, and hygiene (WASH), and skills development. The health profile of char residents indicates a high prevalence of common ailments, such as colds and unspecified fevers (58%), with a morbidity rate of 270 cases per 1,000 people over the past 15 days. Chronic diseases—such as heart disease, high blood pressure, diabetes, and kidney issues—constitute 6.07% of reported cases. Healthcare-seeking behaviour differs from national norms, with only 13% of households consulting trained doctors and 33% relying on village doctors, reflecting

limited access to formal healthcare. The financial burden is substantial, with 31% of extreme-poor households incurring catastrophic healthcare expenses exceeding 10% of their total household income, highlighting the high out-of-pocket payments for healthcare among the poorest households in chars. Maternal and reproductive health in char areas shows notable deficiencies. Access to antenatal care (ANC) is particularly low, with 33% of pregnant women receiving no ANC and only 10% completing the recommended four visits, compared to 35% nationally. Postnatal care (PNC) is similarly inadequate, with 64% of mothers receiving no PNC and only 16% receiving timely care. Home births are common (81%), and unskilled birth attendants are widely used (67%). Sanitation in char areas remains a serious challenge. Despite 84% latrine ownership, only 46% of households have improved sanitary latrines, well below the national rural average of 91%.

Additionally, 48% of latrines are damaged during natural disasters, raising the risk of waterborne diseases. Menstrual hygiene is also inadequate, with only 34% of women (main female household members aged 15–49) using sanitary pads, compared to the national average of 56%, indicating a need for improved access to hygiene products and health education.

## Resilience, Shocks, and Coping Mechanisms

A key concern for char dwellers is vulnerability to both natural and non-natural shocks. Disaster risk management (DRM) awareness among char residents (represented by the main female household member) is limited, at just 14%. The region is highly susceptible to natural hazards, with 29% of households affected by floods and 25% by river erosion in the past two years, far exceeding national averages. Economic shocks are also prevalent, with 8% of households experiencing serious illness among income earners. Additionally, 26% and 22% of households reported crop and poultry losses, respectively, due to natural disasters, leading to significant financial setbacks. Losses from natural shocks represent around 16% of household income on average, while non-natural shocks account for 7%. These losses are greater among extreme-poor households compared to moderate-poor and non-poor

households. Coping strategies are limited, with many households taking no action to mitigate losses from natural shocks and relying primarily on borrowing from others.

## Recommendations

Addressing the challenges in char areas requires targeted interventions across multiple sectors. For the younger population, investments in healthcare and education are essential to developing human capital. To reduce child labour, comprehensive strategies focused on employment generation, income diversification, and child protection are necessary. Enhancing livestock productivity through the wider adoption of artificial insemination can bolster economic resilience. Households, especially those led by women, need improved access to financial services. Increasing household savings and promoting mobile financial services (MFS) among women would help to enhance financial inclusion. Expanding social safety net coverage in char areas is crucial to supporting vulnerable households. Improving market access and addressing land constraints will be vital to boosting agricultural productivity and income.

Initiatives to reduce the high rate of child marriage are also essential given its prevalence in chars. Improved maternal healthcare services, particularly for antenatal and postnatal care, are urgently needed. Increasing awareness and access to sanitary pads is vital for women's menstrual health. Finally, implementing robust DRM strategies, including better coping mechanisms such as financial support, is critical to mitigating the impacts of floods, river erosion, and economic shocks.



# 1. Introduction

## 1.1. Background

Chars in Bangladesh are dynamic, low-lying riverine landmasses or islands, most of which are shaped by the Ganges-Brahmaputra-Meghna (GBM) river systems. These areas are exceptionally vulnerable to natural hazards, such as flooding and riverbank erosion. Erosion of chars displaces approximately 200,000 people annually and results in the loss of around 8,700 hectares of land (Zaman & Alam, 2021). Home to an estimated 20 million people, chars offer extremely poor infrastructure and limited access to essential services, leaving their inhabitants among the most economically and socially marginalized populations in the country (Zaman & Alam, 2021).

Despite Bangladesh's commendable progress in reducing poverty, underserved regions such as chars face significant challenges. These remote landmasses, characterized by extreme poverty, illiteracy, disease, and

social injustices, pose unique obstacles to advancing sustainable development in the region. Recognizing these disparities, BRAC, a leading development organization, aims to empower char dwellers through its Integrated Development Programme (IDP) and "BRAC to Basic (B2B)" strategy. The IDP operates through a unified management approach, tailoring its services to the specific needs of each region. This approach ensures effective interventions across diverse communities, from the northeastern haor (a wetland ecosystem, physically a bowl- or saucer-shaped shallow depression) to the Chittagong Hill Tracts (CHTs). Acknowledging the unique challenges of the northern char, BRAC IDP has planned targeted interventions in 16–20 branches across 90 chars in the Kurigram and Gaibandha districts (Figure 1.1). In March 2024, the BRAC Institute of Governance and Development (BIGD) at Brac University conducted a baseline survey in selected chars within the programme area.

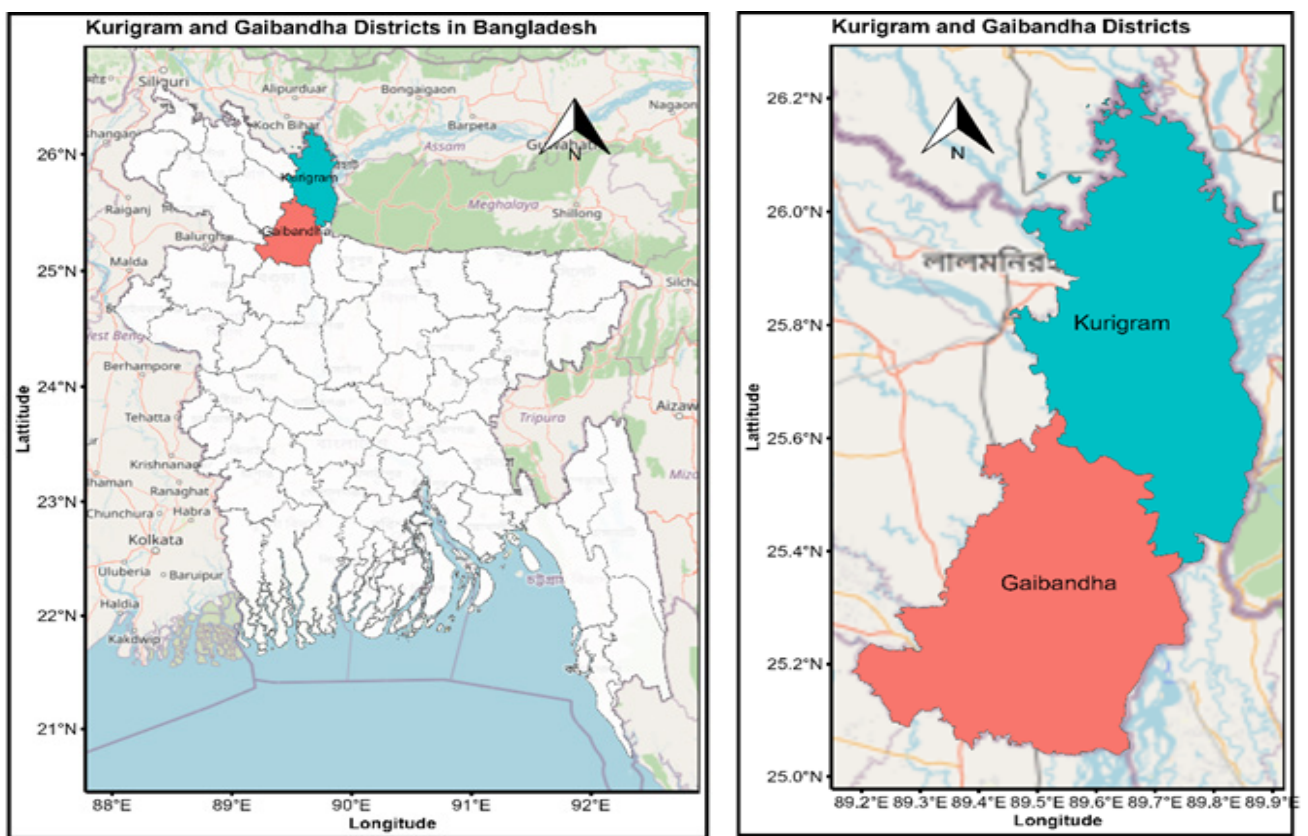


Figure 1.1. Study Locations (Kurigram and Gaibandha Districts in Bangladesh)

## I.2. Objectives

The primary objective of the baseline survey was to identify the specific service needs of the vulnerable char population, informing the design of targeted interventions. Additionally, the baseline survey can serve as a benchmark for assessing the impact of future interventions by the IDP. The specific objectives of this report include:

- i. assessing the economic conditions of households, covering employment, labour migration, income, poverty and inequality, expenditure, land ownership, farming status, livestock and poultry, savings and credit, mobile financial inclusion, food security, and skills training provided by BRAC's Skills Development Programme (SDP);
- ii. evaluating the social status of households in terms of education and enrolment, social empowerment and legal protection (SELP), child marriage, intimate partner violence (IPV), and social safety nets;
- iii. assessing household conditions, including morbidity and health status, maternal and child health, water, sanitation, and hygiene (WASH), and access to essential services; and
- iv. understanding resilience, shocks, and coping mechanisms by examining crisis and disaster risk management.

## I.3. Literature Review

Numerous initiatives have been undertaken to improve the livelihoods of char dwellers in Bangladesh. The Char Development and Settlement Project (CDSP), coordinated by BRAC, aims to achieve sustainable livelihood development for residents of coastal chars in southeast Bangladesh (Raza et al., 2011). Operating since 1994,

CDSP includes multi-sectoral interventions such as land settlement and infrastructure and agricultural development (de Wilde, 2021). The Chars Livelihoods Programme (CLP) is another initiative that works with extreme-poor households living on island chars in northwestern Bangladesh (Department for International Development [DFID] et al., 2016). CLP's Asset Transfer Project (ATP) was designed to help extreme-poor char dwellers build sustainable livelihoods, with female ATP beneficiaries being core participants. Programme households receive an income-generating asset, with around 98% opting for cattle. Studies have found that participant households in CDSP and CLP programmes experienced substantial improvements in income, food security, housing conditions, and asset holdings (Hossain, 2021; Pritchard, 2016; Raza et al., 2011). Examining livelihoods in Boyar Char under CDSP, Mahmud (2011) found that the project increased landholding and income, although the effect on asset diversification was limited. Hossain (2021) conducted a before-and-after analysis of CDSP, concluding that the programme helped households escape poverty by increasing monthly income, expenditure, and productive assets. DFID et al. (2016) evaluated the second phase of CLP (2010–2016) and found improvements in food security, income, WASH, and resilience among intervened char dwellers compared to pre-CLP conditions. Moreover, income sources shifted from wage labour to alternative sources, such as land and livestock. Siddiki et al. (2014) documented similar findings, showing that CLP reduced dependency on agricultural and non-agricultural wage labour among char dwellers.

## 2. Methodology

### 2.1. Study Design

To evaluate the impact of IDP on programme households in char areas, we are conducting a cluster randomized controlled trial (RCT) in selected chars. Below, we outline the randomization process. Before implementing the intervention, we conducted a baseline survey to collect detailed data on the socio-economic status of households. This report provides the baseline status of the sampled households.

### 2.2. Randomization

BRAC IDP initially provided BIGD with a list of 158 chars selected for programme intervention. In consultation with the programme and based on feasibility considerations, we shortlisted 90 potential chars from the initial 158 for the study. Out of these 90 chars, 60 were randomly assigned to the treatment group, while the remaining 30 chars served as the control group. Among the treatment chars, 30 were randomly selected to receive the standard interventions designed by BRAC, including regular supervision. In the remaining 30 chars, interventions will be provided with a flexible supervision model. All other support services remain the same across both treatment arms. However, the implementation of the flexible supervision model depends on securing additional funding and the programme's interest. Figure 2.1 illustrates the geographical distribution of households between the treatment and control clusters.

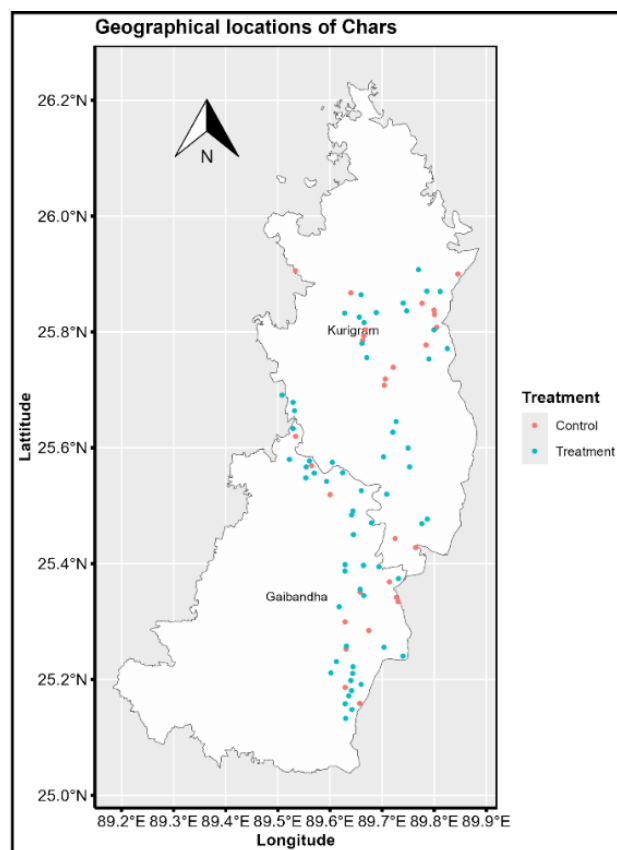


Figure 2.1. Geographical Distribution of Treatment and Control Chars (Clusters)

### 2.3. Sample Size and Recruitment

We selected 68 households from each of the 90 chars for the study, resulting in a total sample size of 6,120 households.<sup>1</sup> Within each char, households were randomly selected using a systematic sampling technique, applying a specific interval (k). To determine the interval, the total number of households in each char was divided by the 68 households targeted for the survey. This interval was used to select households consistently within each char. The main female household member was designated as the respondent for the survey.

<sup>1</sup> We estimated a potential sample size of 6,120 households by selecting an equal number from each char. By choosing 68 households from each of the 90 chars, we arrived at a sample size of 6,120.

## 2.4. Data Analysis

The study applied descriptive statistics to analyze the baseline socio-economic characteristics of the char households. Household characteristics, such as family size, age distribution, land ownership, and income sources, were examined to create a foundational portrait of the population. The study also estimated pre-intervention poverty levels among surveyed households. Additional indicators, such as health, education, WASH, social awareness, and access to essential services, were also evaluated. Key outcomes, including income, assets, employment, and access to financial services, were measured at baseline. Given that randomization was conducted at the char level, a baseline balancing test was performed using simple ordinary least squares (OLS) regression, with clustering at the char level. This test ensures that groups are comparable and similar in all relevant characteristics prior to intervention.

## 2.5. Definitions and Measures

Definitions and measures of certain outcome variables used in this report are as follows:

1. Poverty estimation: The 2023 Household Income and Expenditure Survey (HIES) estimates division-wise upper and lower poverty lines for urban and rural areas, using the cost of basic needs (CBN) method. For this report, we adopted the upper and lower poverty lines for rural areas in the Rangpur division, adjusted for inflation, as the study chars are located in this division. Based on these poverty lines, households are categorized as extreme-poor, moderate-poor, or non-poor. Households with a per capita monthly income below the lower poverty line are classified as extreme-poor; those between the lower and upper poverty lines as moderate-poor, and those above the upper poverty line as non-poor.
2. Food consumption score (FCS): The food consumption score (FCS), developed by the World Food Programme (WFP), assesses household dietary diversity, consumption frequency, and nutritional value over seven days. The score considers eight food groups: staples, pulses, vegetables, fruits, meat/fish, milk, sugar, and oil, each weighted by nutritional value.

Households scoring between 0–28 are classified as poor; those scoring 28.5–42 as borderline, and those scoring above 42 as acceptable. Poor households face severe food insecurity, borderline households are at risk, and acceptable households are deemed food-secure.

3. Intimate partner violence (IPV): The study uses World Health Organization (WHO) guidelines to measure intimate partner violence (IPV). Women aged 15 to 49 years currently in relationships were interviewed to report experiences of physical and psychological violence and controlling behaviour by their spouses. Physical violence was assessed by recording women's self-reported experiences of being slapped, pushed, hit with a fist, kicked, dragged, or threatened with a weapon. Psychological violence was evaluated using four indicators: being insulted, belittled, humiliated by a partner in public, or threatened with harm, reflecting both verbal and emotional abuse. Controlling behaviour was measured using seven indicators, including isolation from family and friends, monitoring of daily activities, and restrictions on access to financial resources. These indicators reveal partners' dominance and control over the victim's autonomy. For each type of violence, respondents reported on occurrence within the past 12 months, indicating current levels as well as lifetime incidence. Additionally, participants who reported experiencing violence in the past 12 months were asked about its frequency.

## 2.6. Ethical Considerations

We recognize the importance of obtaining approval from a qualified Institutional Review Board (IRB) to safeguard participants' rights. Following this principle, we secured approval from the BRAC James P Grant School of Public Health, Brac University's IRB (Protocol No. IRB-2024-ES-04). This approval ensures that the study adheres to ethical research standards and protects the well-being of IDP participants involved in the evaluation.

### 3. Char Overview and Infrastructure

Table 3.1 shows the diversity in the landscape across the surveyed chars, highlighting significant variations in several key areas. On average, the chars are estimated to be around 49.82 years old, though the high standard deviation of 35.21 years reflects large variations in the age of different chars. Population size and household numbers also vary considerably, with an average population of 3,512 and an average of 530 households per char.

Infrastructure on the chars presents a mixed scenario. Only 27% of chars have road connectivity to the mainland, and a mere 17% have usable roads during the rainy season, suggesting potential isolation issues. Electricity access is relatively better, with 84% of chars connected to an electricity network. However, only 8% of chars have markets that can support agricultural products, which limits local economic opportunities. Mobile banking services show potential, being available in 63% of chars, and mobile banking coverage is generally good.

Social services in the chars exhibit both strengths and weaknesses. Education access is inconsistent: while 77% of chars have a government primary school, only 4% have a government secondary school. Nonetheless, private and religious schools offer some alternatives. Healthcare access is somewhat promising, with 72% of chars having health workers and 40% having community clinics, although emergency services are lacking. Clean drinking water is widely available in 91% of chars, but sanitation facilities need significant improvement, as 61% of chars have limited to unimproved sanitation, posing health risks.

The availability of governance and support services in the chars highlights the limited government presence; only 10% of chars have a Union Parishad office. However, active non-governmental organizations (NGOs) operate in 79% of chars, helping to bridge this gap. Prominent NGOs, such as BRAC, Grameen Bank, ASA, TMSS, and Friendship, play significant roles in providing services, particularly microcredit, healthcare, and education.

**Table 3.1. Overview of Chars**

Variables	Value (mean)
<b>Char demography</b>	
Age of char (SD)	49.82 (35.21)
Number of populations in char (SD)	3,512.16 (3,065.59)
Number of households (SD)	529.56 (307.83)
<b>Infrastructure</b>	
Local market for trading (% yes)	32%
Market of agricultural products (% yes)	8%
Road connectivity with mainland (% yes)	27%
Usable roads during rainy season (% yes)	17%
Mobile banking (% yes)	63%
Electricity connection in char (% yes)	84%
Most of the HHs have electricity (% yes)	82%
<b>Social services</b>	
Govt. primary school (% yes)	77%
Govt. secondary school (% yes)	4%
Private secondary school (% yes)	20%
Ibtedai madrasa (% yes)	28%
Dakhil madrasa (% yes)	3%
Community clinic (% yes)	40%
Health worker (% yes)	72%
Emergency medical service (% yes)	1%
Clean drinking water (% yes)	91%
<b>Sanitation (latrine) system in the char (%)</b>	
Ring slab with a water seal (one pit)	34.44%
Ring slab with a water seal (two pits)	4.44%
Ring slab without water seal (one pit/two pits)	33.33%
Latrines with septic tanks	2.22%
Kacha/open/mud hole/hanging	24.44%
<b>Governance and support</b>	
UP office in char	10%
Active NGOs	79%
Services of NGOs	Overall (%)
Healthcare	52.11
Education	38.03
Livelihood support	29.58
Microcredit	92.96
Other	21.13

Table 3.2 compares the basic infrastructure of newer and older chars. Chars aged between 5 and 25 years are nearly double in area (15.60 square kilometres) compared to chars older than 25 years. However, newer chars have fewer basic infrastructure facilities. Over twice as many older chars (32%) have road connections to the mainland compared to newer chars (13%). Additionally, 21% of older chars have usable roads year-round, including during the rainy season, while only 4% of newer chars offer similar accessibility.

Although the difference in the number of primary schools between older and newer chars is minimal, 6% of older chars have secondary schools, whereas newer chars have none. Moreover, only 54% of newer chars have health workers compared to 79% of older chars. No chars have formal banking services. Slightly more than half (54%) of newer chars offer mobile banking services, while over two-thirds (67%) of older chars do.

Newer chars are also lagging in terms of NGO activities. This trend extends to local markets and markets for agricultural products. Additionally, a significantly smaller proportion of newer chars have access to electricity (67%) compared to older chars (91%).

**Table 3.2. Infrastructure and Services by Char Age**

Indicators	Age of char	
	5–25 years	26 years and more
Area (square km.)	15.60	8.82
Road connection with the mainland	13%	32%
Usable roads during all seasons (including the rainy season)	4%	21%
Primary school	71%	79%
Secondary school	0%	6%
Health worker	54%	79%
Emergency health service (ambulance/ others)	4%	0%
Pure drinking water	83%	94%
Bank branch	0%	0%
Mobile banking service	54%	67%
Active NGOs	63%	85%
UP office	4%	12%
Local market	17%	38%
Local market for agricultural product	4%	9%
Electricity	67%	91%

## 4. Demographics

### 4.1. Population Structure Based on Age and Gender

The age pyramid for the char areas has a broad base that narrows significantly with increasing age (Figure 4.1). In particular, 45% of the population in the char areas is under the age of 20. The proportion of females in the 20–44 age group is larger than that of males. For older age cohorts, the male and female populations decrease at similar rates. In contrast, the population pyramids of the Rangpur division and the country as a whole display more balanced structures: while both also have wide bases reflecting a high proportion of young people, they also show a substantial older population. The char areas, however, have

a notably higher proportion of young people than both the national and Rangpur division averages.

This higher proportion of young people in the char areas may be attributed to a higher fertility rate. In the char region, the average household size is 4.44, compared to 3.98 in the Rangpur division (Table 3). The general fertility rate is also higher in the char areas than in the rural parts of Rangpur and nationally. Consequently, the child dependency ratio in the chars is much higher than in both the Rangpur division and national rural areas, emphasizing the need for human capital development focused on children.

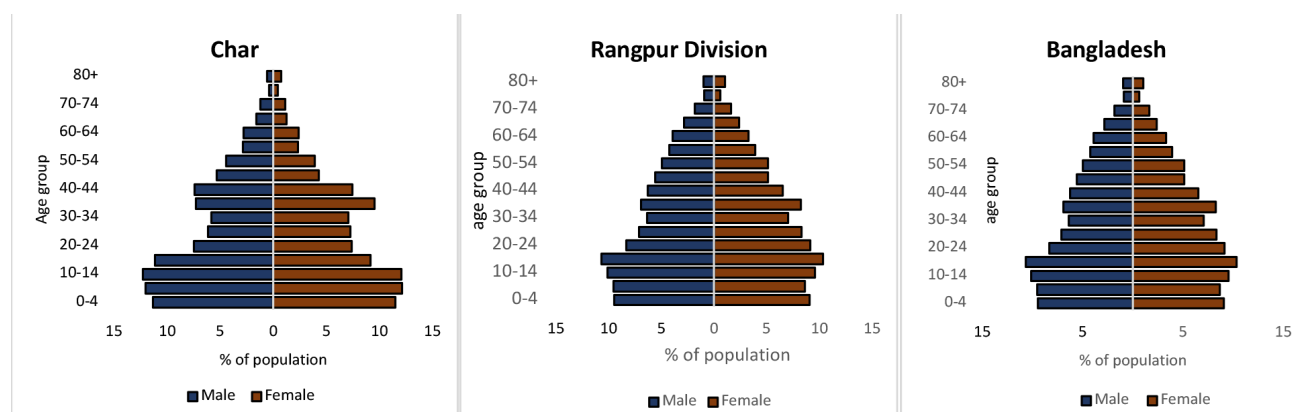


Figure 4.1. Population Structure by Age and Gender

### 4.2. Household Characteristics

Table 4.1 shows basic household characteristics. It shows that 90% of surveyed households are male-headed, a slightly higher proportion than in rural areas nationally. On average, these households have resided on the chars for around 20 years. Forty-two per cent of adult males

and 38% of adult females in the chars have not received any formal education, and over half of household heads cannot read or write proficiently. Among the surveyed char households, 4% of all members have a disability, which is lower than the national rural rate of 6%. However, 15% of households reported having at least one member with a disability.

Table 4.1. Basic Household Characteristics

Variables	Average/percentage	National rural
Male-headed households (%)	90	87.3
Dependency ratio	80	55
Child (0–14) dependency ratio	72	44
Elderly (65 and older) dependency ratio	8	10
Household size	4.44*	4.30
General fertility rate (GFR live birth last one year per 1,000 women)	152**	144

Variables	Average/percentage	National rural
Households having persons with disability (%)	4.00***	6.05
Adult male (above 15 years old) with no formal education (%)	42.00	--
Adult female (above 15 years old) with no formal education (%)	38.00	--
Households' years of living in the char (years)	20.49	--
Characteristics of household head		
Average age (years)	43	--
Formal education (%)	48	--
Can read and write (%)	43	--
Currently married (%)	94	--
Participation in the labour market (% engaged in IGA last 12 months)	96	--
Religion-Islam (%)	98	--

\*Household size in Rangpur is 3.98; \*\*GFR in Rangpur is 126; \*\*\*15% of households report members with disabilities.

Household characteristics vary depending on the length of time spent living on the char. For instance, Table 4.2 shows that households residing on the char for more than five years tend to have a lower percentage of broken houses compared to households who have lived there for less than five years. Land ownership patterns also differ between these groups, with a greater proportion of older households owning land, including cultivable land. Newer households are more likely to reside near the river and thus are more vulnerable to natural shocks, such as floods and river erosion. Consequently, these households face greater losses from natural shocks than older households (Table 4.2). Additionally, a larger share of members in newer households migrate internally, likely reflecting poorer economic conditions. Overall, the newer households in the char areas exhibit more vulnerability than older households. This pattern is similarly observed based on char age: households residing in newer chars (5–25 years) are more vulnerable than those in older chars (26 years or more) (Appendix Table A1).

**Table 4.2. Household Characteristics by Length of Stay in Chars**

Indicators	Living years in the char by households	
	0–5 years (n=1,480)	More than 5 years (n=4,640)
Own land	74%	85%
Own land (decimal)	28	35
Own cultivable land	20%	24%
Households having internal migrants	52%	49%
Losses due to natural shocks in last one year (BDT)	41,546	29,555
Flood	31%	28%
River erosion	36%	21%
House condition: broken state	24%	16%
Savings	19%	26%
Savings amount (BDT)	2216	3886
Improved (sanitary) latrine	47%	46%

### 4.3. Housing Condition

Assessing the housing conditions of households in the char areas is essential for understanding their living standards. Table 4.3 provides details on housing materials, access to electricity, and cooking fuel. Most households (93%) reside

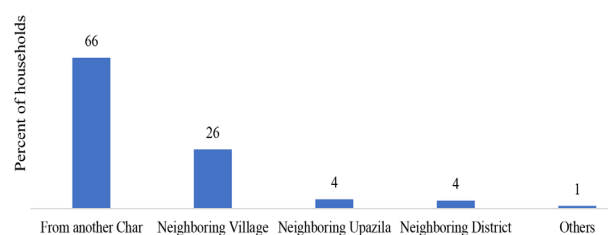
in houses made of tin or wood. The floors of most houses (93%) are constructed from soil or wood, and roofs are predominantly made of tin (99%). On average, each household has 1.79 usable rooms. Approximately 21% of households live in houses in very good condition, 18% in houses in poor condition, and 61% in houses that require minor repairs. Nearly all households in the char areas (94%) have access to electricity. The primary cooking fuels are wood and dry dung, followed by corn straw and leaves.

**Table 4.3. Housing Condition by Poverty Status**

Indicators	Overall (%)
Main wall	
Tin/wood	93.01
Brick/cement paving	3.53
Soil/stalks/straw/leaves	3.46
Main floor	
Cemented (paka)	6.76
Kacha (soil/wood)	93.24
Main roof	
Tin	98.89
Cemented/bamboo/straw	1.11
Overall house condition	
Broken state	18.06
Needs minor repairs	61.19
Very good condition	20.75
Electricity & usable rooms	
Households have electricity	93.53
Number of usable rooms	1.79
Cooking fuel	
Wood/dry dung	70.52
Gas/electricity	0.41
Corn straw/leaves	29.07

## 4.4. Household Displacement

Figure 4.2 illustrates the sources of displacement for households currently residing on the chars. Of the surveyed households, 73% have experienced displacement, with two-thirds of these households reporting previous displacement from another char. Additionally, 26% of households reported migration from a neighbouring village, either within the same char or from another char. The primary cause of displacement is riverbank erosion, which led to the loss of homesteads, followed by instances of land grabbing (Appendix Figure A1).



**Figure 4.2. Sources of Displacement (N = 4,441)**

## 5. Economic Condition

### 5.1. Employment and Economic Activity

Figure 5.1 shows the percentage of working-age household members (15–64) and children (6–14) involved in income-generating activities (IGAs). In the char region, a significantly higher proportion of working-age members are employed (63%) compared to the national rural average (43%) and the Rangpur rural average (46%). Child labour is also notably more prevalent in the chars (5%) than in both national rural and Rangpur rural areas.

Among adult working-age males in the chars, 83% are employed, which is 7 to 9 percentage points higher than the employment rates in national rural and Rangpur rural areas. Additionally, 41% of working-age females in the chars participate in IGAs, compared to only 13% in rural areas nationally and in Rangpur.

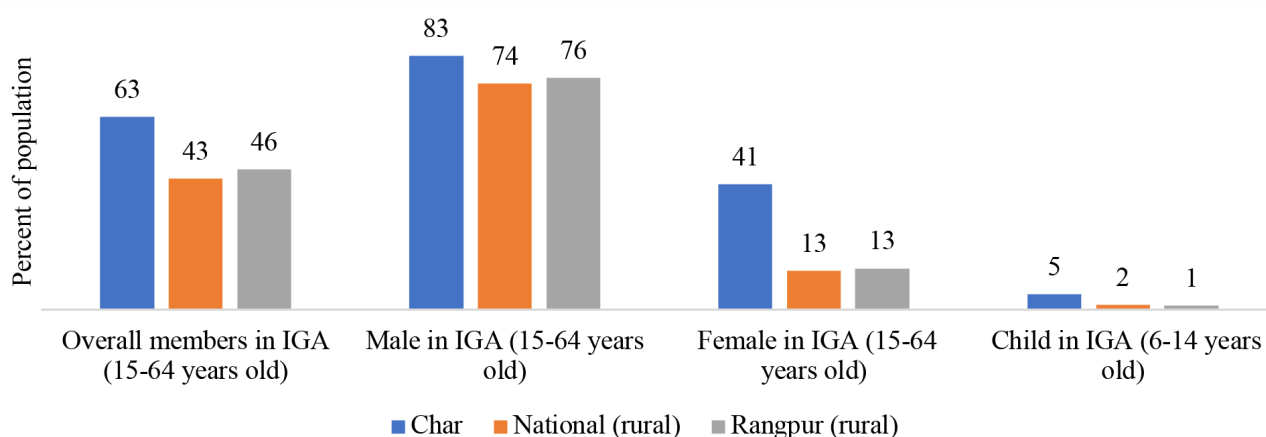
Table 5.1 presents the types of activities engaged in by the working-age population (15–64) and children (6–14) in the chars. The majority are involved in crop cultivation and fishing (22.54%), followed closely by wage labour (22.47%) and livestock and poultry rearing (22.05%). Skilled labour and transport work together account for nearly 11% of the char population aged 15–64. A quarter of the population are housewives (24.06%), 7.67% are students, and 5.39% are not involved in any activities.

A disaggregation by gender reveals that 38.18% of males aged 15–64 work as day labourers, 37.8% in crop cultivation and fish farming, and 13.62% in livestock, poultry,

and duck rearing. Livestock rearing is the primary IGA for females (30.82%). Since around half of the women are occupied with household responsibilities, very few engage in crop and fish farming, skilled work, day labour, or salaried employment in private or public sectors.

**Table 5.1. Occupational Status of Household Members Aged 15–64 (%)**

Attributes	Overall	Male (15–64)	Female (15–64)	Child (6–14)
Crop and fish farming	22.54	37.8	6.65	1.15
Day labours	22.47	38.18	6.1	0.86
Livestock and poultry	22.05	13.62	30.82	1.23
Housewife	24.06	--	49.13	2.17
Student	7.67	9.82	5.44	87.24
Salaried job	2.54	3.27	1.78	0.49
Professionals	0.76	0.99	0.51	-
Business activities	3.85	6.81	0.76	0.12
Transport worker	3.44	6.65	0.09	0.12
Skilled worker	7.31	11.29	3.17	0.53
Self-employed	0.96	1.62	0.27	0.04
Unskilled worker	2.59	4.87	0.21	0.98
Not in IGA/ unemployed	5.39	6.37	4.37	5.54
Begging	0.05	0.06	0.05	-
Total	125.69	141.37	109.35	100.49
Valid cases	16,406	8,370	8,036	2,437



**Figure 5.1. Proportion of Household Members Involved in IGAs**

Table 5.2 shows that 14% of males and 8% of females aged 15–20 are not in education, employment, or training (NEET). Vocational training may help these individuals engage in IGAs.

**Table 5.2. Children Not in Employment, Education, or Training (NEET)**

Age group	Male (%)	Female (%)
6–14	7.97	2.49
15–20	13.56	7.74
21–25	6.23	2.17
26–30	2.01	0.75
31–35	1.03	0.51

Despite a larger share of char dwellers being engaged in IGAs, their average working hours are low. As shown in Figure 5.2, employed individuals in the chars work an average of 21 hours per week, compared to 37 hours in Rangpur rural areas and 38 hours at the national rural level,<sup>2</sup> indicating significant underemployment among char residents.

## 5.2. Labour Migration

Internal migration is a common livelihood strategy among char dwellers, while overseas migration is less frequent. Approximately 50% of the surveyed households have at least one member who migrated internally in the

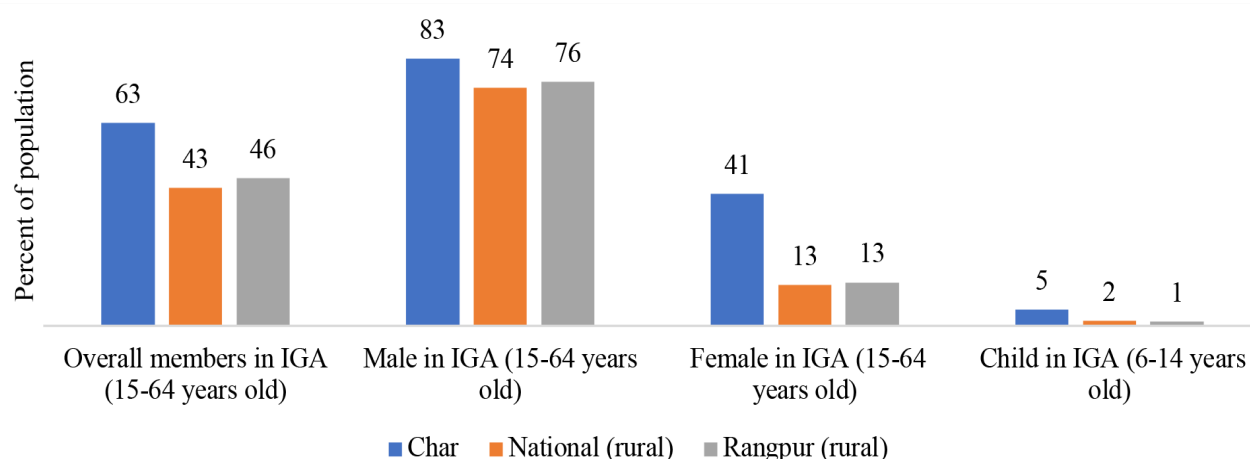
past year, compared to only 0.82% of households with members who migrated abroad (Table 5.3). When asked if any household member intended to migrate abroad in the next two to three years, only 0.38% responded “yes.” Credit constraints and limited access to information may contribute to the low rate of international migration.

**Table 5.3. Migration Information of Char Dwellers**

Variables	Value (%)
Households migrated into the current char (Yes = 1)	73
Households having at least one member migrating within the country (Yes = 1)	50
Households having at least one internationally migrating member (Yes = 1)	0.82
Households having returnee migrant (Yes = 1)	0.38
At least one member to migrate abroad in the next couple of years	0.38

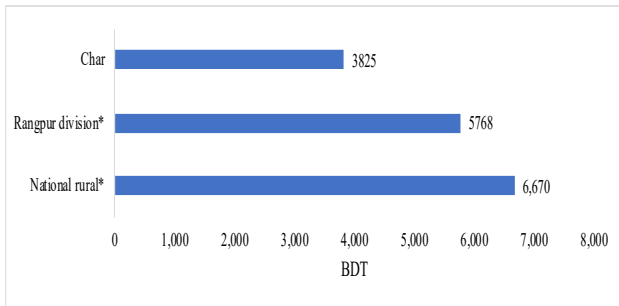
## 5.3. Household Income

This section explores the income, expenditure, and poverty incidence among char households, comparing findings with data for the national rural and Rangpur division rural populations. As shown in Figure 5.3, the per capita monthly income of char households is BDT 3,825, which is 34% lower than the per capita monthly income of rural households in the Rangpur division and 43% lower than the national rural average.



**Figure 5.2. Total Weekly Hours Worked**

<sup>2</sup> To estimate average weekly working hours, we used the following formula: average weekly working hours = total working hours in 12 months / 52 weeks. Here, total working hours refer to the sum of all hours worked by household members over the past year, and 52 represents the standard number of weeks in a year.



\*HIES 2022 (inflation-adjusted).

**Figure 5.3. Per Capita Monthly Income (BDT)**

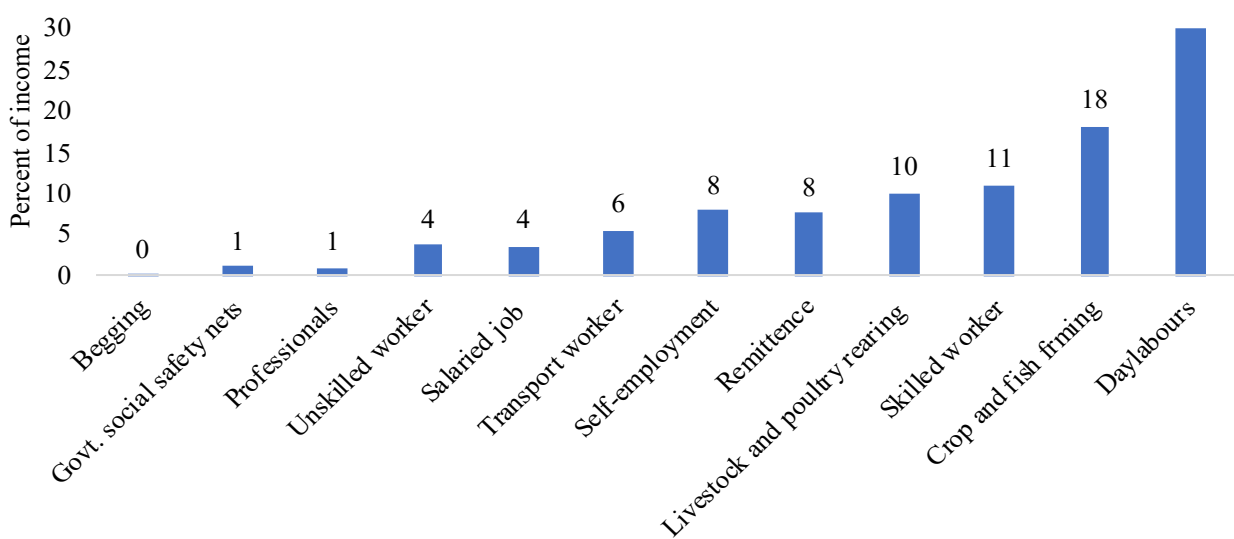
The sources of income for char households are illustrated in Figure 5.4. Wage labour and crop farming are the main sources, contributing 30% and 18% of total income, respectively, amounting to 48% combined. The remaining 52% is distributed among five other categories. Given the lower per capita income in the chars, largely derived from agriculture and non-agriculture day labour, wage disparities may be a significant factor. The per-hour wage rate for both agricultural and non-agricultural labour in chars is 10–20% lower than in other rural areas of Bangladesh (Appendix Table A3).

The distribution of per capita income in the chars is shown in Figure 5.5. Around 85% of households in the chars earn a per capita monthly income of BDT 6,000 or less. Only a small portion of the remaining 15% earn more than BDT 12,000 per capita, resulting in lower income inequality in

the chars (Gini: 0.36) compared to the national figure (Gini: 0.44) (Appendix Table A4). Additionally, only 10% of char households earn an income equal to or above the average for rural households at the national level, highlighting the economic challenges faced by char residents.

## 5.4. Poverty Incidence and Inequality

The study estimates poverty incidence using the headcount rate, defining households below the lower poverty line (BDT 2,697.72) as extreme-poor, and those between the lower and upper poverty lines (BDT 3,404.19) as moderate-poor. The two black vertical lines in Figure 5.5 represent these thresholds. According to these estimates, 41% of households are extreme-poor, falling below the lower poverty line, and 14% are moderate-poor, positioned between the lower and upper poverty lines. Figure 5.6 compares poverty incidence in the chars, at the national rural level, and in Rangpur division rural areas. In the chars, around 55% of households fall below the poverty line. Extreme poverty incidence is 35 percentage points higher in the chars than at the national rural level and 31 percentage points higher than in Rangpur division rural areas. Appendix Figure A2 shows the average income and expenditure of households across poverty categories, revealing that both are lower among extreme-poor households compared to moderate-poor and non-poor households.



**Figure 5.4. Contribution of Income Sources to Per Capita Income**

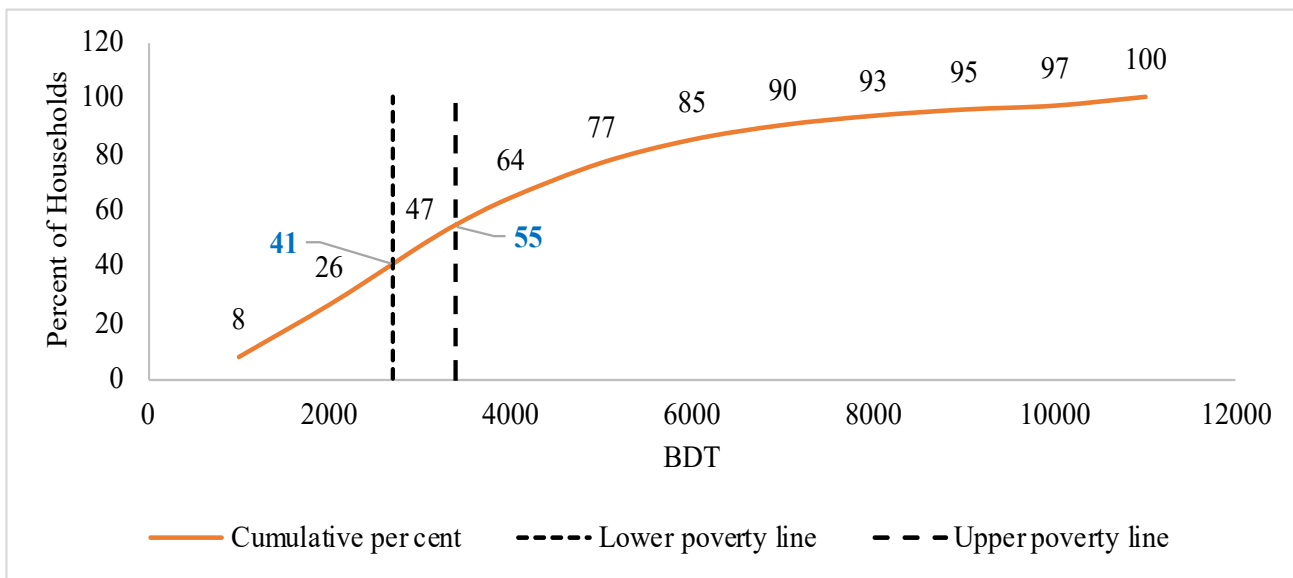


Figure 5.5. Distribution of Per Capita Monthly Income

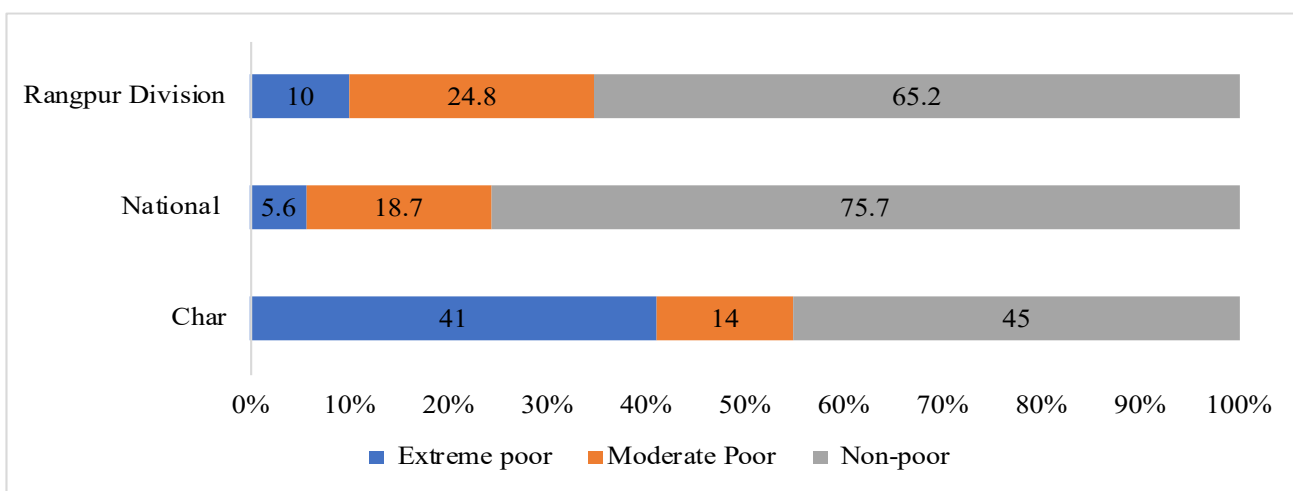
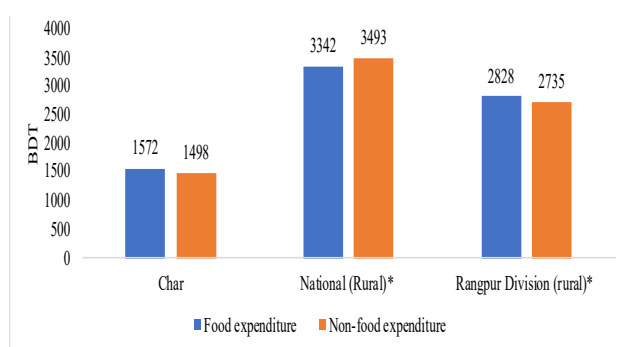


Figure 5.6. Incidence of Poverty (Headcount Rate)

## 5.5. Household Expenditure

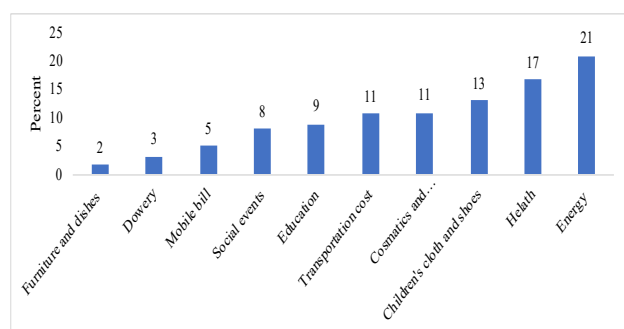
Figure 5.7 illustrates the per capita monthly food and non-food expenditures for households in the char areas, compared to rural households nationally and in the Rangpur division. The data show that char households spend considerably less than their counterparts in both national and Rangpur rural contexts. Specifically, char households spend 44% less on food than rural households in the Rangpur division and 53% less than rural households nationally. This trend also applies to non-food consumption, where char households consistently report lower expenditures than other rural households. Additionally, approximately 51% of total expenditure among char households is allocated to food items.



\*HIES 2022 (inflation-adjusted).

Figure 5.7. Per Capita Monthly Expenditure by Locality

Figure 5.8 provides a breakdown of non-food expenditure categories. Energy costs, which include cooking fuel and electricity, account for the largest share (21%) of non-food expenditure. Health expenses represent the second-largest share (17%), followed by spending on children's clothing and shoes (13%), entertainment and cosmetics (11%), and transportation (11%). Notably, only 9% of non-food expenditure goes toward children's education. Other notable categories include mobile phone bills, dowries, and household items such as furniture and dishes.



**Figure 5.8. Composition of Non-Food Expenditures**

## 5.6. Land Ownership and Farming Status

Table 5.4 presents data on land ownership and average land size by household poverty status. The table categorizes land into "owned" and "non-owned." "Owned land" refers to land that is legally owned by or used like an owner by the household, as defined by Krishi Shumari. The study further subdivides owned land into registered and non-registered categories. Registered owned land refers to land for which household members or owners hold legal rights. In the char region, 82% of households own land, but only 47% own registered land, with an average size of 26.29 decimals. Only 23% of households own registered cultivable land, with an average size of 16.66 decimals, while 4% possess cultivable land acquired without payment. Additionally, nearly 2% engage in sharecropping on their land, with an average size of 1.06 decimals.

A notable finding regarding land distribution is that approximately a third (31%) of households use homestead land they received for free, while 19% use homesteads on mortgaged land. Only 12% of households have inherited

homestead land.

**Table 5.4. Land Ownership by Poverty Status (% of Households)**

Indicators	Overall		Extreme-poor		Moderate-poor		Non-poor	
	% of HH	Land (dec)	% of HH	Land (dec)	% of HH	Land (dec)	% of HH	Land (dec)
Total owned land	82	33.62	82	27.81	82	29.71	83	40.09
Own land registered	47	26.29	47	21.82	47	22.82	48	31.41
Owned cultivable land	23	16.66	22	12.96	23	14.52	24	20.66
Own cultivated	21	15.6	21	12.15	22	13.32	24	19.44
Own land sharecropped	2	1.06	2	0.82	2	1.2	2	1.22
Owned other land	1	1.2	1	0.79	1	1.44	2	1.5
Own land non-registered	42	7.33	41	5.99	43	6.88	43	8.68
Own land by inheritance (non-reg.)	12	2.84	11	1.91	15	3.03	13	3.61
Homestead land received for free	31	2.68	30	2.61	30	2.62	32	2.76
Cultivable land received without pay	4	1.81	3	1.47	3	1.23	4	2.3
Total non-owned land	48	22.55	45	19.16	49	23.02	50	25.48
Cultivable land taken on lease	38	20.35	35	16.99	38	20.73	40	23.26
Homestead land taken on mortgage	19	2.21	17	2.17	20	2.29	19	2.22

Figure 5.9 indicates that about 18% of households in char areas are landless, around 12 percentage points higher than national rural households. This figure for char land ownership includes both registered and non-registered land, meaning that if only registered land were considered, the proportion of landless households would be even higher. Additionally, Figure 5.9 shows that the average land size is small, with 64.36% of households occupying 1–49 decimals of land, a figure close to the national rural average.

According to Table 10, 54.97% of char households are engaged in farming. Of these, 96.91% are small farms, which closely aligns with the national rural figures; 2.94% are medium farms, and only 0.15% are large farms. As shown in Table 5.6, most farming households in the chars are tenant farmers (57.72%), followed by owner farmers (27.79%) and owner-cum-tenants (14.49%). In contrast, national figures indicate that most rural farm households are owner farmers (63.93%), followed by owner-cum-tenants (33.65%) and tenant households (2.42%). In the char area, the major crops are rice (87%), jute (37%), maize (65%), pepper (24%), and nuts (18%) (Appendix Table A5).

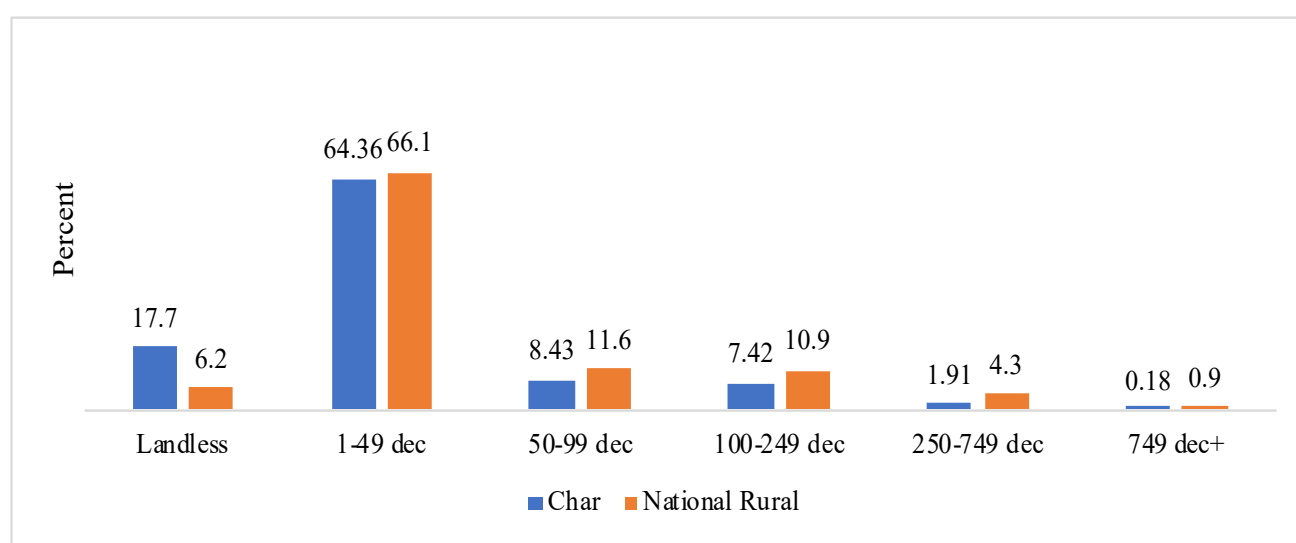


Figure 5.9. Land Size Ownership (Registered and Unregistered) Comparison Between Char and National Rural Households (Decimal)

Table 5.5. Farm Size by Poverty Status

Farm household type	Overall	National rural <sup>3</sup>	Poverty		
			Extreme-poor	Moderate-poor	Non-poor
Farm households	54.97	47.48	51.84	54.17	58.04
Small (0.05–2.49 acre)	96.91	91.70	98.45	98.29	95.26
Medium (2.49–7.49 acre)	2.94	7.70	1.39	1.71	4.55
Large (7.49 acre>)	0.15	0.6	0.15	0.00	0.19

<sup>3</sup> Bangladesh Bureau of Statistics. (2022). Agriculture Census 2019. [https://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/c645bd51\\_3c-b5\\_4f53\\_86f9\\_7d29244caa4e/2022-12-26-08-36-394361bc904a7651ef763a4ff8033b67.pdf](https://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/c645bd51_3c-b5_4f53_86f9_7d29244caa4e/2022-12-26-08-36-394361bc904a7651ef763a4ff8033b67.pdf)

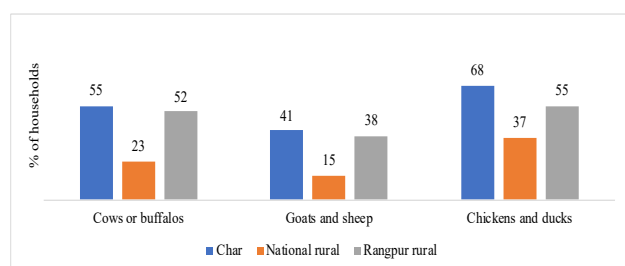
**Table 5.6. Farm Household Tenancy Status**

Farm household by tenancy	Overall	National*	Poverty		
			Extreme-poor	Moderate-poor	Non-poor
Owner farmer (own)	27.79	63.93	28.02	27.25	27.76
Owner cum tenant (own+lease in)	14.49	33.65	13.97	15.54	14.61
Tenant (lease in)	57.72	2.42	58.01	57.21	57.63

\*Krishi Shumari 2019, p. 550.

## 5.7. Livestock and Poultry Assets

In addition to land ownership, livestock and poultry ownership is an important indicator of economic conditions for char households. Sixty-eight per cent of char households own chickens and ducks, followed by cows and buffaloes (55%) and goats and sheep (41%) (Figure 5.10). The proportion of households with these productive assets is higher in the chars than in Rangpur rural and national rural areas. Char households own an average of 3.29 productive assets, with the majority being chickens and ducks (3.34 on average), followed by cows and buffaloes (1.49 on average) and goats and sheep (0.98 on average) (Appendix Table A6). Livestock and poultry rearing is thus a predominant livelihood strategy in the chars, with no significant differences observed among extreme-poor, moderate-poor, and non-poor households in terms of ownership of these assets (Appendix Figure A3).



**Figure 5.10. Livestock and Poultry Ownership**

The average values of productive and non-productive assets owned by char households are BDT 93,862 and BDT 27,175, respectively (Table 5.7). Extreme-poor households hold lower values in both asset categories compared to moderate-poor and non-poor households.

**Table 5.7. Productive and Non-Productive Asset Ownership**

Asset type	Overall	Ex-treme-poor	Moder-ate-poor	Non-poor
Productive asset (BDT)	93,862	76,333	89,401	110,990
Non-productive asset (BDT)	27,175	36,436	15,964	22,352

## 5.8. Savings and Credit

Savings and credit serve as essential indicators of financial inclusion. In the char area, only 24% of households report having savings, primarily with NGOs (Table 5.8). Specifically, 15% of households save with NGOs generally, while 6% save with BRAC, indicating that 29% of those saving with NGOs choose BRAC. It is also notable that extreme-poor households are less likely to have savings.

**Table 5.8. Household Savings Information**

Savings	Percent-age	Average amount (BDT)	Ex-treme-poor	Moder-ate-poor	Non-poor
Household have savings	24%	3,481.87	19%	27%	28%
Savings at home	2%	264.92	2%	2%	3%
Savings to others	2%	624.02	1%	2%	2%
Savings in bank/post office	3%	974.91	2%	4%	4%
Savings in BRAC	6%	418.94	4%	7%	7%
Savings in NGOs	15%	1,199.09	11%	16%	18%

Figure 5.11 presents information on household loans. The data show that 69% of char households have outstanding loans, compared to 39% nationally and in Rangpur rural areas, highlighting the extent to which char households rely on loans for their livelihoods. Additionally, informal sources dominate lending, with approximately 60% of loans in the chars obtained from informal sources, primarily shopkeepers (30%), relatives/neighbours/friends (22%),

and moneylenders (8%) (Table 5.9). While loans from relatives and friends tend to have low or no interest, moneylenders typically charge high rates (Khan & Dewan, 2017; Mallick, 2012). These findings suggest an opportunity for BRAC to expand its microcredit operations in char areas.

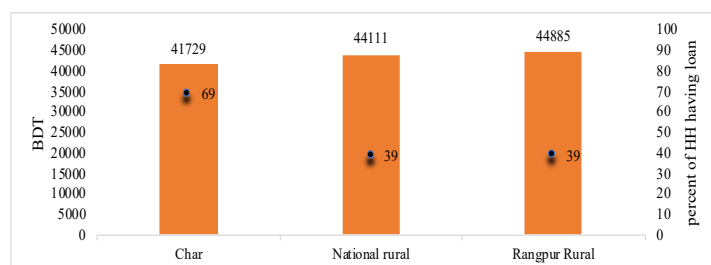


Figure 5.11. Households With Loans and Loan Amounts Received

Table 5.9. Loan Sources and Loan Amounts by Household

Sources of loans	Char			National rural % of HH
	% of HH	Received amount (BDT)	Outstanding loan (BDT)	
Loan from bank	3	2,942.81	2,665.62	6.62
Loan from BRAC	8	3,805.23	3,031.08	13.86
Loan from NGOs	15	7,640.10	5,255.99	41.65
Loan from moneylender/ landlord	8	4,988.60	5,435.84	2.86
The loan from neighbours/relatives and friends	22	10,677.81	10,528.72	9.17
Loan from shopkeepers	30	6,624.57	6,349.94	2.47

The study also shows that farm households have higher levels of both savings and loans compared to non-farm households (Figure 5.12), with farm households reporting BDT 1,203 more in savings and BDT 16,683 more in loans. This suggests that farm households may rely on loans to support their agricultural activities.

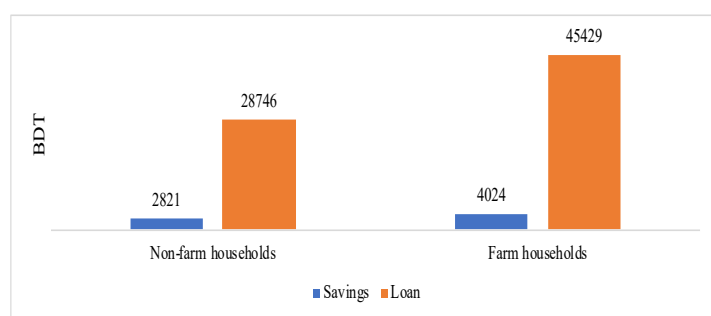


Figure 5.12. Savings and Loans by Farming Status

Another pattern observed in the data is that households more vulnerable to natural or man-made shocks tend to have lower savings and higher levels of debt than households that do not experience such shocks (Appendix Figure A4). This indicates that vulnerable households often depend on loans to recover from the losses incurred.

## 5.9. Mobile Financial Services (MFS)

Mobile financial services (MFS) have simplified saving and transactional processes for char households. The prerequisite for opening an MFS account is owning a mobile phone; the study finds that 99% of households have at least one mobile phone, although only 36% possess a smartphone (Appendix Figure A5).

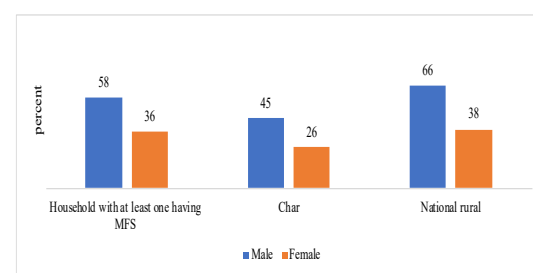


Figure 5.13. Mobile Financial Account Ownership by Gender (Aged 15 and Above)

Figure 5.13 shows that in 58% of households, at least one male member has an MFS account, while only 36% of households have at least one female member with an MFS account. In char areas, 45% of men have mobile financial accounts, 19 percentage points higher than the rate for women. A similar gender disparity exists nationally, though both male (66%) and female (38%) MFS ownership rates are higher in rural Bangladesh compared to char areas.

The study reveals that 34% of respondents have mobile financial accounts. Figure 5.14 shows that the main uses of MFS accounts are mobile phone recharge (77.92%), receiving remittances (34.79%), and receiving allowances (5.28%).

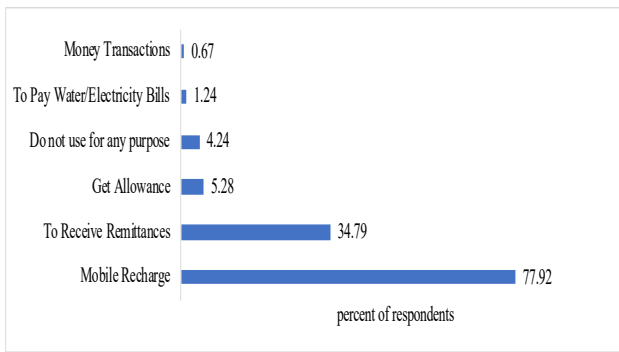


Figure 5.14. Uses of MFS by Respondents

## 5.10. Household Food Security

Food security is an important indicator of household nutritional intake. The study assesses food security based on the consumption of eight food items over the past seven days (for methodology, see Section 2). Food insecurity is more prevalent in the char area compared to other regions; 46% of char households experience moderate or severe food insecurity, compared to 24% nationally and 30% in the Rangpur rural area. Additionally, 12% of char households suffer from severe food insecurity, which is less than 1% in both national and Rangpur rural contexts (Figure 5.15).

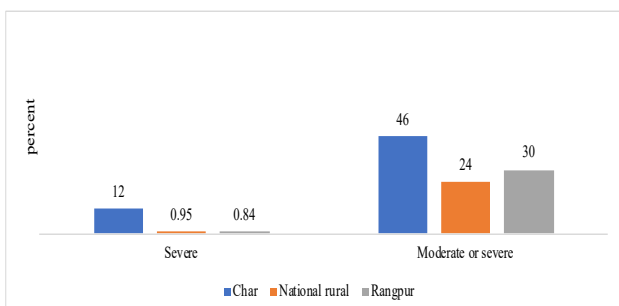


Figure 5.15. Food Insecurity Comparison

As expected, food insecurity is more severe among extreme-poor households in chars, with 15% facing severe food insecurity compared to 9% of non-poor households (Figure 5.16). Food security also varies according to farming status, as shown in Figure 5.17. Fewer farm households experience food insecurity than non-farm households. Severe food insecurity affects 15% of non-farm households and 8% of farm households. Moderate food insecurity is similarly higher among non-farm households. These findings suggest that BRAC should prioritize livelihood support for non-farm households.

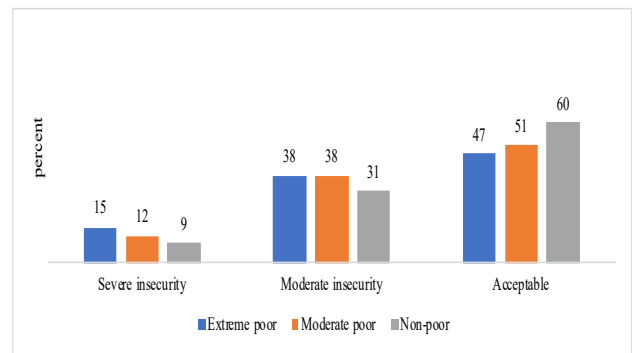


Figure 5.16. Food Security Status by Poverty Level

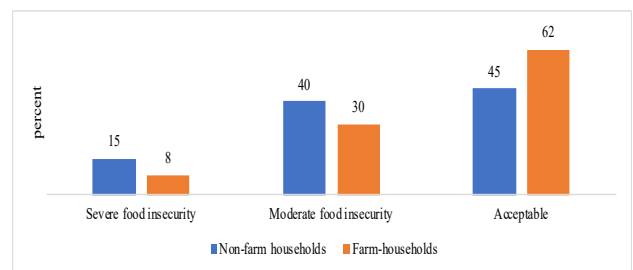


Figure 5.17. Food Security by Farming Status

Figure 5.18 shows the frequency of consumption of each food item over the past seven days, with staple foods (rice/bread/wheat) being the most frequently consumed, followed by sugar and meat/fish.

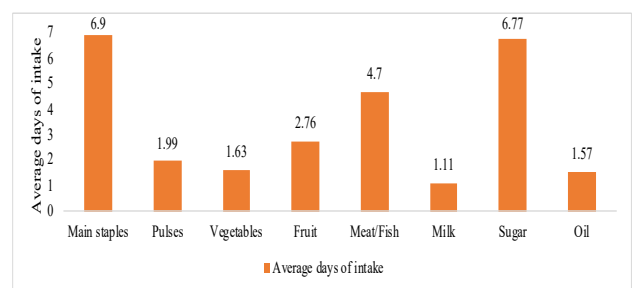


Figure 5.18. Food Intake in the Past Seven Days

## 5.11. Skills Training (SDP)

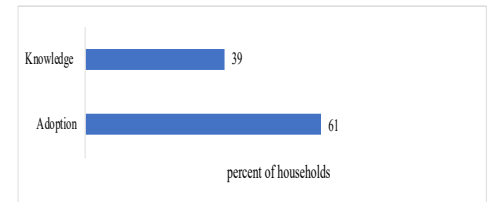
Skills training can enhance engagement in IGAs and improve household economic conditions. However, only 4.67% of respondents—primarily women—reported receiving IGA-related training in the past (Table 5.10). Among extreme-poor households, this rate is even lower, at 3.49%. Only 2.52% of households have at least one member who received non-IGA training. Despite the low participation rate, two-thirds of households expressed a need for IGA training, indicating strong demand.

**Table 5.10. Respondent Training Related to IGAs by Poverty Status**

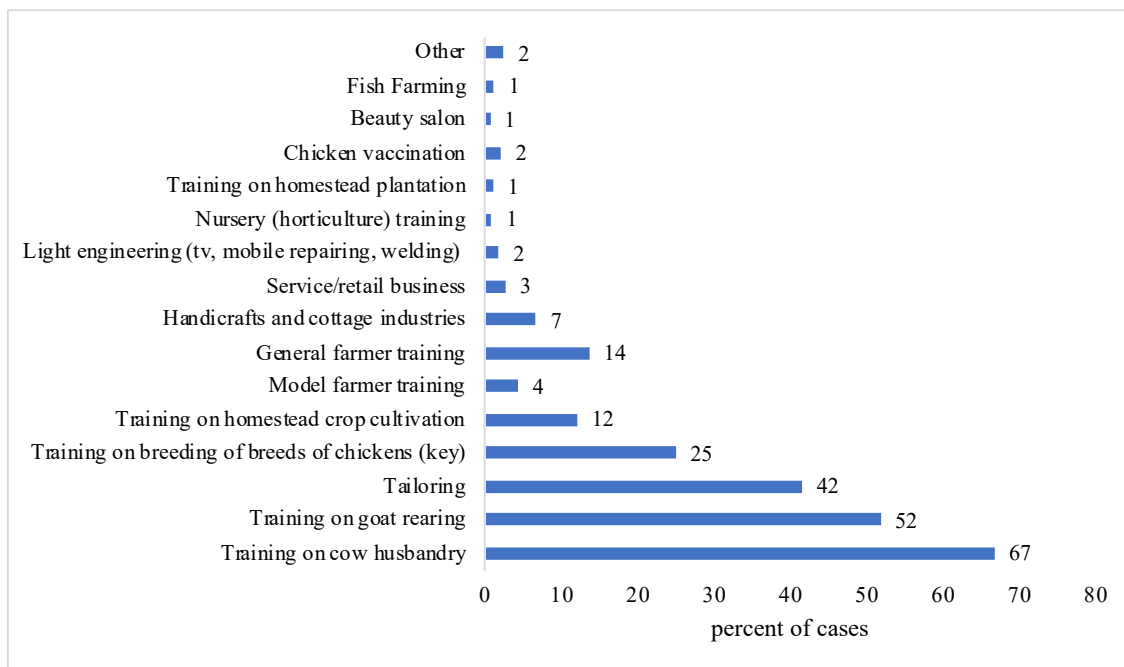
Training status	Poverty status			
	Extreme-poor (%)	Moderate-poor (%)	Non-poor (%)	Overall (%)
Non-IGA training	2.04	2.55	2.93	2.52
Received training related to IGA	3.49	5.67	5.43	4.67
No training	94.47	91.78	91.64	92.81

Demand for training varies by household (Figure 5.19). The most requested training is in cow husbandry (67%), followed by goat rearing (52%), tailoring (42%), chicken breeding (25%), and homestead crop cultivation (12.06%), suggesting that char households favour livestock rearing and small-scale farming.

Figure 5.20 shows that 61% of individuals are unaware of artificial insemination. Of those aware, 62% have adopted it. This suggests potential for increasing awareness to encourage the adoption of artificial insemination.



**Figure 5.20. Artificial Insemination**



**Figure 5.19. Households' Demand for Training (Cases = 4,045)**

## 6. Social Status

### 6.1. Education and Enrolment

Enrolment rates among primary and secondary school-aged children serve as significant indicators of educational status. Table 6.1 presents the enrolment rates of children aged 6–10 and 11–15 in the char region, alongside comparisons with other localities.

The data show that in char areas, enrolment rates are slightly higher for girls than boys in both primary and secondary schools, although still lower than rates in Rangpur and nationally. Specifically, the net primary enrolment rate for girls is 89.42% and 85.96% for boys, which are 9.14 and 8.38 percentage points lower than the Rangpur rural averages, respectively. These rates are also below national averages. The net secondary enrolment rate for girls in the char region is 82.53%, while 73.33% for boys, falling short of the Rangpur rural averages by 8.47 percentage points for girls and 15.67 percentage points for boys.

Overall, net enrolment rates in chars are 87.66% for primary and 77.64% for secondary schools, which are below both Rangpur rural and national rural averages. Notably, primary enrolment rates are slightly higher among poorer households for both genders. In contrast, secondary enrolment rates are lower among poorer households, especially for boys. This trend is consistent with Rangpur rural statistics, suggesting that boys from poorer households may need to engage in IGAs.

In the char area, only 28.94% of boys and 15.14% of girls aged 16–25 are enrolled in education, with enrolment rates higher among non-poor households. These results indicate significant gender disparities in access to higher education within char regions.

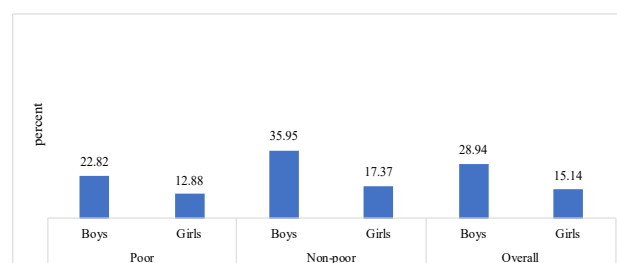


Figure 6.1. Enrolment Status of Individuals Aged 16–25

### 6.2. Type of School Attended and Reasons for Dropout

Table 6.2 shows the types of schools attended by enrolled boys and girls at the primary level. Although the largest share of primary students (42.37%) attend government primary schools, this rate is 29.15 and 21.06 percentage points lower than the Rangpur and national rural averages, respectively. A large proportion of primary school-aged children (26.90%) attend madrasas, followed by enrolment in NGO-run institutions (11.63%), both of which are higher than the corresponding rates in Rangpur and nationally. Secondary school attendance types exhibit a similar pattern (Table 6.3).

Table 6.1. Net Primary (Ages 6–10) and Net Secondary (Ages 11–15) Enrolment by Gender

Poverty status	Gender	Net primary			Net secondary		
		Char	Rangpur rural	National rural	Char	Rangpur rural	National rural
Poor	Boys	85.8	100	83.0	70.06	76.0	76.9
	Girls	90.72	95.7	88.8	80.61	88.9	86.9
	Overall	88.2	97.8	85.7	74.82	81.4	81.8
Non-poor	Boys	86.07	94.3	93.6	75.62	91	83.3
	Girls	88.57	98.2	95.6	83.72	91.2	92
	Overall	87.31	96.0	94.7	79.51	91.1	87.5
All	Boys	85.96	95.1	92.7	73.33	89.0	82.7
	Girls	89.42	97.8	95	82.53	91.0	91.7
	Overall	87.66	96.3	93.8	77.64	89.9	87.1

Note. Enrolment rate = (number of students enrolled in schools within the age group / number of children in the same age group) \* 100. The rate includes pre-primary and non-formal education, such as Qami, Hafezi, and kindergarten enrolment.

**Table 6.2. Percentage of Children Attending Primary School by School Type**

Type of school	Char	Rangpur	National rural
Government	42.37	71.52	63.43
Private (not govt. granted)	5.68	12.97	14.47
Madrasa (govt. affiliated)	8.50	4.11	5.25
NGO-run institutions	11.63	4.43	1.38
Madrasa (Qawmi/Khareji/Hafezi)	26.90	1.27 (Qawmi)	6.78 (Qawmi)
Kindergarten/Pre-primary	4.92	5.70 (govt. non granted)	8.70 (govt. non granted)

Researchers hypothesized that enrolment rates vary with the availability of educational institutions within char areas. Table 6.4 clearly shows that enrolment rates for both boys and girls are higher in chars with government primary schools as well as any form of secondary or higher secondary school, compared to those without. Enrolment rates may also be influenced by the remoteness of schools, as the study finds that enrolment rates for children aged 6–15 decrease as travel time to school increases (Appendix Figure A6). These findings suggest that establishing more schools in remote char areas may improve educational outcomes for underserved children.

**Table 6.3. Types of Secondary Schools Attended**

School type	Percentage
Govt. high school	23.77
Non-govt. high school	46.89
Govt. college	0.33
Non-govt. college	0.33
Higher education madrasa	28.14
Technical school	0.55

**Table 6.4. Enrolment by School Availability in Chars**

Gender	Net primary		Net secondary	
	No govt primary schools	Govt. primary schools (lbtedai)	No secondary school	Any secondary school
Boys	83.33	86.57	69.16	74.39
Girls	85.58	90.34	80.3	83.04
Overall	84.45	88.43	74.13	78.49

The self-reported reasons for school dropout are presented in Table 6.5. Among boys, the primary reason for leaving school is a lack of interest in studying, followed by financial difficulties or the destruction of homes due to natural disasters. For girls, the most common reasons are marriage or taking on household chores or childcare responsibilities. Financial issues are also a secondary reason for dropout among girls.

**Table 6.5. Reasons for Dropout (Ages 6–15; n = 688)**

Self-reported reasons	Male	Female	Overall
Financial problem/house damaged	37.12	26.46	33.14
Do not like study/no reason	46.17	8.95	32.27
No school or colleges/remote area/ school is damaged by disaster	7.66	16.34	10.90
Married/household chores/ caring for children	0.93	41.25	15.99
Illness/disability	3.94	3.11	3.63
In a job/searching job	1.86	0.39	1.31
COVID-19	2.09	1.17	1.74

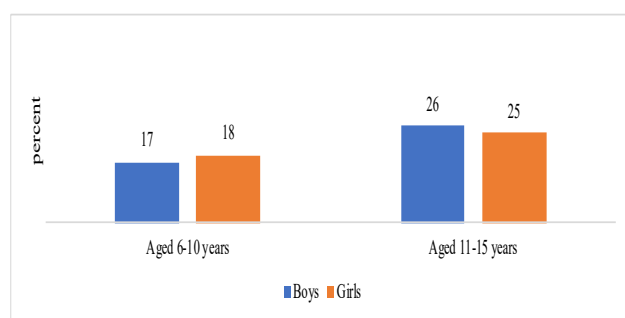
### 6.3. School Attendance and Private Tuition

The study examines regularity in school attendance, finding that 56.50% of enrolled children aged 6–10 are absent for at least two days per month (Table 6.6). Among children aged 11–15, 51.81% are absent for a similar duration, with no significant gender differences.

Access to private tutoring, either at home or elsewhere, is another important factor in assessing educational quality. Most students in char areas do not have private tutors (Figure 6.2). Data reveal that only 17% of boys and 18% of girls aged 6–10 receive private tutoring. However, rates increase among children aged 11–15, with a quarter of both boys and girls in this age group reporting access to private tutoring.

**Table 6.6. Monthly School Absence of Enrolled Boys and Girls**

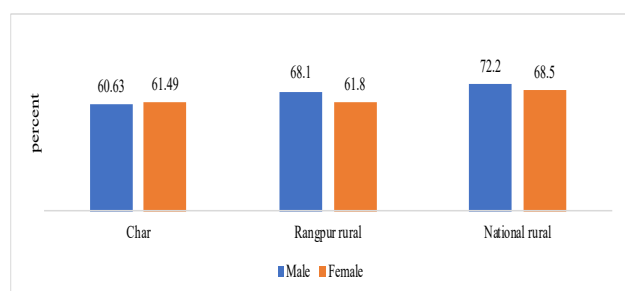
Absent days	Aged 6–10			Aged 11–15		
	Boys (%)	Girls (%)	Overall (%)	Boys (%)	Girls (%)	Overall, 9%)
Not absent	41.86	45.13	43.50	47.10	49.29	48.19
2–3 Days	29.27	30.58	29.93	26.66	28.11	27.38
4–7 days	15.60	15.70	15.65	14.90	14.10	14.50
1–2 weeks	5.88	3.45	4.66	4.47	3.09	3.78
3 weeks or more	7.39	5.14	6.26	6.87	5.42	6.15



**Figure 6.2. Children With Private Tutors by Gender**

## 6.4. Literacy Rate and Education of the Population

The literacy rate, defined as the ability to read and write, among the population aged seven years and above is shown in Figure 6.3. Literacy rates are 60.63% for males and 61.49% for females in char areas, which are slightly lower than those in Rangpur and national rural areas.



**Figure 6.3. Literacy Rate for Population Aged Seven and Above (n = 22,661)**

Table 6.7 presents the education levels of individuals aged six years and above. Although the national survey reports on individuals aged seven years and older, this study includes those aged six and above. A large proportion of

char residents aged six and above—40% of males and 36% of females—have no formal education. The data indicate that the char population is generally less educated than the national rural population. While higher proportions of char residents have no or only primary education, significantly greater shares of the national rural population have achieved higher levels of education.

**Table 6.7. Education Levels of Population Aged Six and Above (Comparison With National Data; n=23,164)**

Level of education	Char			National rural		
	Male (%)	Female (%)	Total (%)	Male (%)	Female (%)	Total (%)
No formal education	40.22	36.29	38.30	25.32	29.08	27.20
Class 1–5	35.45	40.45	37.89	30.99	27.66	29.32
Class 6–9	14.89	18.52	16.66	22.77	28.27	25.52
SSC/HSC equivalent	8.06	4.24	6.19	15.38	12.63	14.00
Tertiary	1.39	0.51	0.96	4.54	2.07	3.22

## 6.5. Social Empowerment and Legal Protection (SELP)

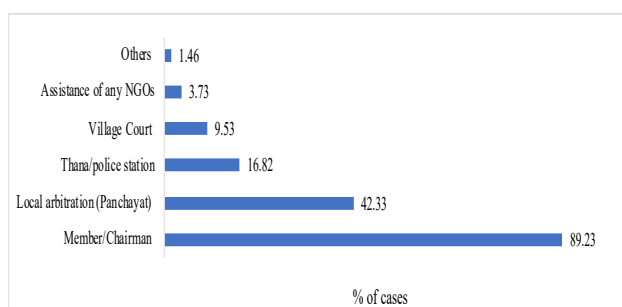
Table 6.8 provides an overview of legal knowledge and social practices among char households. Only 24% of households are aware of the legal minimum age for marriage for boys, while the majority (79%) are aware of the legal marriage age for girls. Despite this awareness, the prevalence of child marriage remains high, as discussed in Section 6.6.

When asked about awareness of penalties for giving or receiving dowries, only 11% of respondents answered positively. Most households are unaware of the legal consequences associated with dowry. As a result, 28% of households reported providing dowries for their daughters' marriages. The most frequently cited reason was a demand from the groom's family (73%), followed by a belief that finding a suitable groom without a dowry is difficult (23%) and adherence to cultural norms (20%) (Appendix Figure A7). These findings suggest that, in addition to pressure from grooms' families, the practice of dowry is perpetuated by cultural norms that brides' families continue to accept.

**Table 6.8. Knowledge and Practice Regarding Social and Legal Issues**

Variable	Percentage	Observations
Knowledge about the legal age of marriage for boys	24	6120
Knowledge about the legal age of marriage for girls	79	6120
Knowledge about punishment for giving or taking dowry	11	6120
Households gave dowry for the marriage of girls	28	4204
Knowledge about legal rules of divorce	8	6120
Knowledge about the minimum voting age	56	6120
Ability to get legal aid in char	73	6120
Did the HH ever require legal help	10	6120

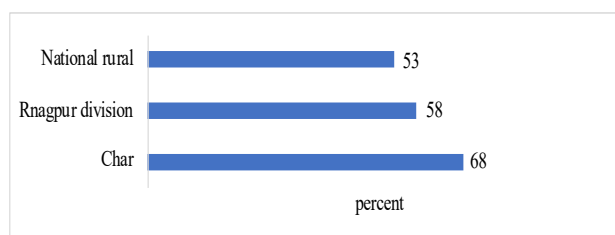
Only a small proportion of households (8%) are aware of divorce regulations. Just over half (56%) of respondents are aware of the minimum legal voting age. Only 10% of households had previously required legal assistance; however, almost three-quarters (73%) reported that they would seek legal aid if needed. Common sources for legal aid include local members or chairpersons (89.23%), local arbitration or Panchayat (42.33%), thana or police stations (16.82%), and village courts (9.53%) (Figure 6.4).



**Figure 6.4. Probable Sources of Legal Aid**

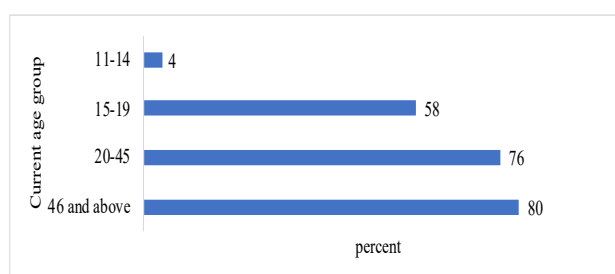
## 6.6. Child Marriage

Child marriage rates among girls are alarmingly high in the char region. Specifically, 68% of women aged 20–24 were married before turning 18, which is 15 percentage points higher than the national rural average and 10 percentage points higher than the Rangpur rural average (Figure 29). Among ever-married women living in char areas, 79% were married before the age of 18.



**Figure 6.5. Child Marriage of Women Aged 20–24**

Figure 6.6 shows that 4% of girls are married at the very young age of 11–14. Among women aged 15–19, 58% were married as children. A striking 76% of women aged 20–25 were married before turning 18, and the rate is even higher (80%) for women aged 46 and above. These figures suggest that while child marriage is gradually decreasing in char areas, the rate of decline is very slow.

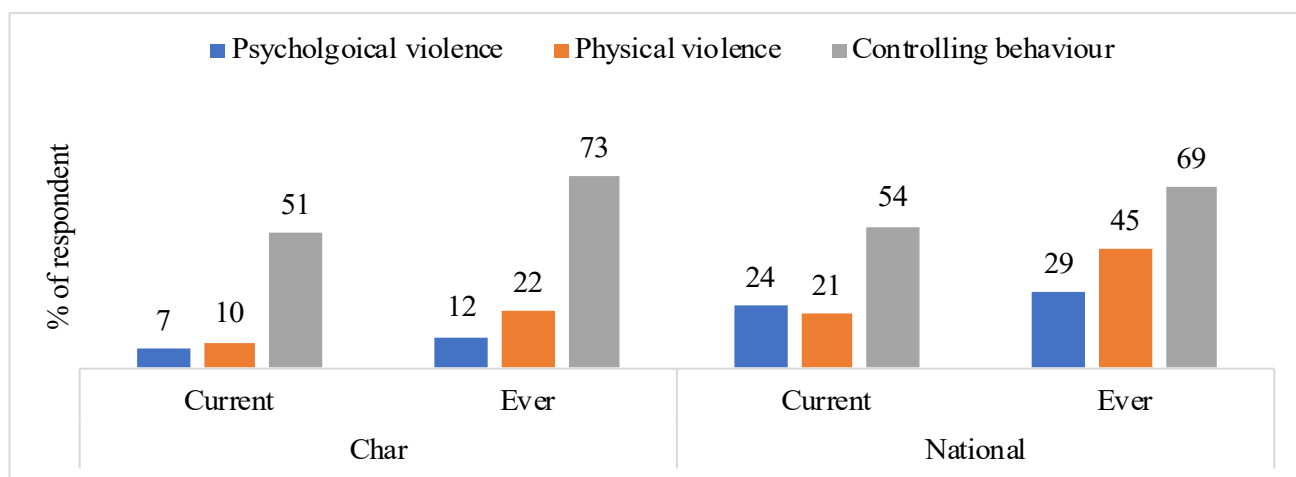


**Figure 6.6. Child Marriage of Women in Char Regions by Current Age Group**

Educational attainment among girls married young is also low; 39% of early-married girls have no formal education (Appendix Figure A8). Only 15% and 2% of them have passed Class Five and Class Ten, respectively. The school enrolment rate for currently married girls aged 10–17 is only 10%, in contrast to a 90% enrolment rate for unmarried girls in the same age group (Appendix Figure A9). These data suggest that early marriage is a major factor in school dropout among girls.

## 6.7. Intimate Partner Violence (IPV)

Intimate partner violence (IPV) is a serious form of violence against women, encompassing physical and psychological abuse and controlling behaviours. The study surveyed women of reproductive age (15–49) regarding IPV. It is worth noting that underreporting of IPV by women is common, especially when male enumerators are involved (Das et al., 2024).



**Figure 6.7. Reported Prevalence of Intimate Partner Violence (IPV)**

Figure 6.7 illustrates the prevalence of IPV. In the char area, 22% of respondents reported experiencing physical violence in their lifetime, compared to a national rate of 45% (Bangladesh Bureau of Statistics [BBS], 2016). Similarly, the reported prevalence of psychological violence in char areas is less than half the national rate. However, 73% of female respondents reported experiencing controlling behaviour, which is five percentage points higher than the national rate.

The relationship between education and IPV is highlighted in Appendix Figure A10. The incidence of IPV decreases with higher educational attainment among respondents. A similar trend is observed for both psychological violence and controlling behaviour in char areas. Additionally,

Appendix Figure A11 shows that IPV prevalence is marginally higher among younger women in the reproductive age range compared to older women.

## 6.8. Safety Nets/Social Security

The Social Security Programme is a major government initiative targeting poverty reduction among vulnerable populations. Currently, the government of Bangladesh implements 115 SSPs. The study finds that around 28% of households in char areas receive social security benefits (Table 6.9), which is 16 percentage points lower than the national rural average and 20 percentage points lower than the Rangpur rural average. These statistics suggest that expanding SSP coverage in char areas could enhance poverty alleviation efforts.

**Table 6.9. Safety Net Coverage in the Past 12 Months**

Social safety nets by services	Char	Extreme-poor	Moderate-poor	Non-poor
Social safety net (household)*	27.75	28.03	27.93	27.44
Type of programme				
Old age allowance	5.49	5.79	6.60	4.87
VWB/VGD	3.48	3.62	3.71	3.29
Asryaon Prokolpo (house)	0.69	0.20	0.46	1.19
Disability Card	2.03	2.01	1.97	2.06
Allowance for widows and other disadvantaged women	2.39	2.85	1.51	2.24
Maternity and child care allowance/Agri inputs/TR	1.98	2.29	2.09	1.66
Disadvantaged allowance/KABIKHA	0.75	0.84	0.23	0.83
Education allowance	10.52	11.26	11.24	9.64
VGF/TCB/Ration Card	5.05	4.22	5.21	5.74
Water and sanitation/blanket/others	0.65	0.48	0.58	0.83

\*Nationally, 44% of households received social safety net services, while Rangpur rural areas had a 48% rate.

## 7. Essential Services

### 7.1. Morbidity and General Health Status

Table 7.1 presents data on the health status of the char population, measured by the prevalence of various diseases over the past 15 days. The morbidity rate in char areas was found to be 270 per 1,000 individuals during this period. The majority of the ill population (58.46%) reported common ailments, such as colds and fevers, followed by skin diseases, pain, and allergies (12.32%). Stomach-related diseases, including diarrhoea, constipation, digestive issues, and dysentery, affected 8.66% of the population in the last 15 days. Chronic conditions, such as heart attacks, strokes, cancer, high blood pressure, diabetes, kidney diseases, and tumours, were reported in 6.07% of the char population, while tuberculosis, asthma, pneumonia, and respiratory diseases affected 4.05%.

**Table 7.1. Morbidity and Prevalence of Diseases**

Variables	Values
Morbidity (per 1,000 for the last 15 days)	270
Stomach-related diseases (diarrhoea/constipation/digestion problem/dysentery and so on)	8.66
Heart attack, stroke, cancer, blood pressure, diabetes, kidney diseases, tumour	6.07
Tuberculosis, asthma, pneumonia, and respiratory diseases	4.05
Neurological disease	3.84
ENT, eye, and dental	3.52
Cold and different types of fevers	58.46
Skin diseases, pain, and allergy	12.32
Reproductive health	1.06
Accident (%)	0.35
Child diseases (%)	0.24
Others	1.42

Note. Morbidity rate in Rangpur rural is 284 per 1,000, compared with 297 per 1,000 at the national rural level (in the past 30 days).

Table 7.2 details the types of initial treatments sought by those who reported illness. One-third of the respondents received primary care from a village or unqualified doctor, followed by 29.17% who sought treatment at a pharmacy,

and 13.37% who visited an MBBS doctor, satellite clinic, or government, NGO, or private hospitals. At the national rural level, 15.45% consulted village doctors, with a larger proportion visiting pharmacies (53.75%) and qualified medical professionals (24.83%). Notably, 5.42% of the population in chars took no action to address their illnesses.

**Table 7.2. Methods of First Treatment Sought**

Methods of treatment	Char	National (rural)*	Health workers in the char	
			Yes	No
No action taken	5.42		5.2	5.89
Self-treatment at home	7.56	1.18	6.7	9.46
Village doctor/non-qualified doctor's chambers	33.47	15.45	35.77	28.4
Paramedics (Ma/Fww/Ss/Chw/)	1.61	0.51	1.77	1.27
Pharmacy	29.17	53.75	27.3	33.27
MBBS doctor/satellite clinic/govt. & NGO hospitals / private clinics	13.37	24.83	13.65	12.76
Kaviraj/Hekim	1.11	0.60	1.19	0.95
Jharfuk/Tabij	0.67	0.08	0.64	0.73
Homoeopath	1.66	1.75	1.83	1.27
Mobile clinic/community clinic	2.67	1.35	2.76	2.47
Friendship Hospital	0.57	--	0.59	0.51
Upazila Health Complex	2.50	2.8	2.31	2.91
Others	0.23	0.40	0.28	0.11

\*HIES 2022.

Catastrophic health costs place a substantial financial strain on extreme-poor households, consuming 30% of their total monthly income. This rate is 21 percentage points higher than for non-poor households (Figure 7.1), reflecting the high out-of-pocket healthcare expenses borne by the poorest char populations.

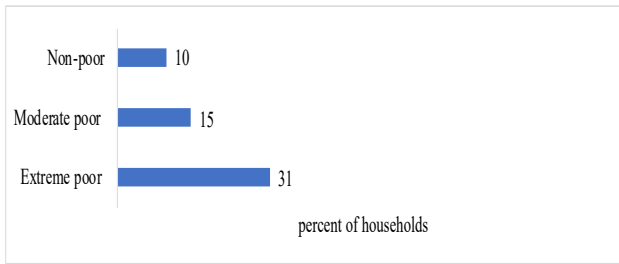


Figure 7.1. Incidence of Catastrophic Health Costs

## 7.2. Maternal/Child Health

Figures 7.2, 7.3, 7.4, and 7.5 offer insights into maternal and reproductive health. In chars, 60% of mothers of reproductive age (respondents only) use contraceptives, slightly lower than the national rural rate of 63%. Figure 7.2 highlights that one-third of pregnant women in chars received no antenatal care (ANC) visits, a rate 24.5 percentage points higher than the national rural average. Additionally, pregnant women in chars generally have fewer ANC visits than their national rural counterparts, as shown in Figure 7.2.

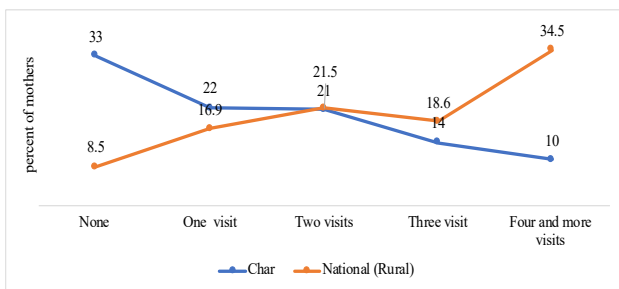


Figure 7.2. Number of ANC Visits (N = 2,292)

There are various types of ANC services, including ultrasonograms, weight measurements, blood pressure check-ups, urine tests, and tests for different types of symptoms (as outlined in Appendix Figure A12). Compared to the national rural context, expectant mothers in chars are less likely to receive comprehensive prenatal tests, including ultrasonograms and blood and urine tests. Data in Figure 7.3 show that 81% of births in char areas occur at home, compared to a national rural average of 39%. Nearly two-thirds (67%) of home births are attended by unskilled birth attendants. Only 6% of mothers in chars gave birth in government hospitals, which is 11 percentage points below the national rural level. Furthermore, just 13% of births occurred in private clinics, a significant gap compared to the national rate of 42%.

Skilled midwives or medically trained providers assisted in 44% of births in chars, 21 percentage points lower than the national rural level (Appendix Figure A13).

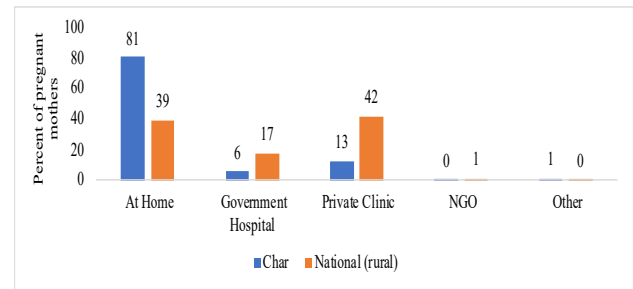


Figure 7.3. Birthplace Distribution (N = 2,292)

Postnatal care within two days of delivery was received by only 16% of mothers in chars, compared to 56% at the national rural level (Figure 7.4). Nearly two-thirds (64%) of char mothers did not receive any postnatal care after delivery, while at the national level, this figure is 39%. Figure 7.5 shows that most mothers in chars who did receive postnatal care did so at private clinics (39%), followed by their homes (27%) and government hospitals (22%).

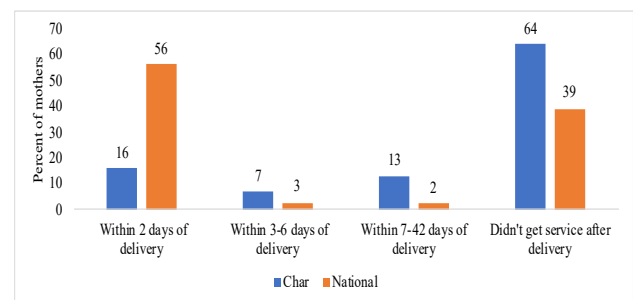


Figure 7.4. Timing of PNC After Delivery

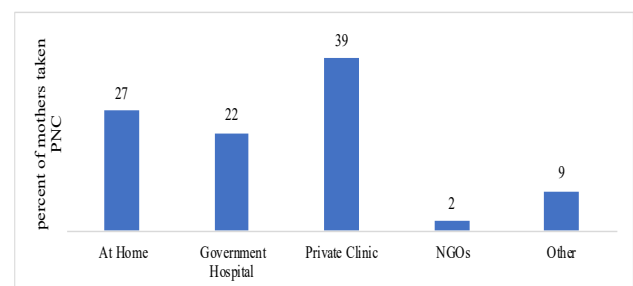


Figure 7.5. Location of PNC Received (N = 824)

For child immunization rates, the study collected data on whether children aged 0–5 years received six specific vaccinations (Table 7.3). The figures do not necessarily reflect complete vaccination, as some children under five

may not yet be eligible for all required vaccines. Nearly 90% or more of children received all vaccinations except for MR (measles-rubella), with only 68.22% coverage. Among unvaccinated children, 49.04% were too young to receive vaccines, while other reasons included time constraints (11.18%) and the remoteness of vaccination centres (Appendix Table A7).

**Table 7.3. Child Immunization Status**

Name of the vaccination	Percentage
Measles	89.87
Pent Avant (Diphtheria, Influenzas)	94.84
TB/BCG	94.55
OPV (polio)	94.60
PCV (pneumonia)	91.04
MR (measles rubella)	68.22
Completed all the doses of these vaccines	92.45

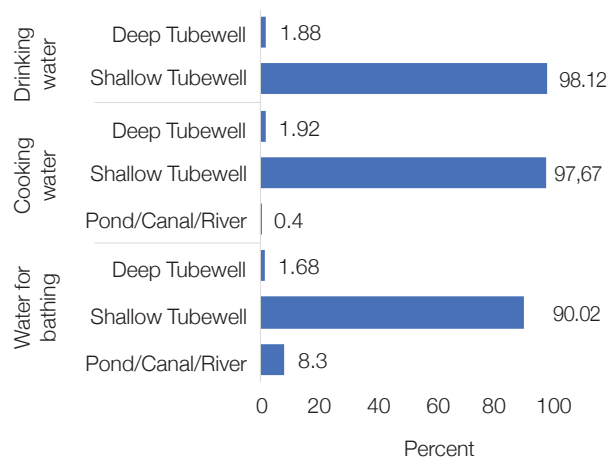
### 7.3. Water, Sanitation, and Hygiene (WASH)

This section reviews the water, sanitation, and hygiene (WASH) conditions in char households, focusing on water sources, latrine facilities, and menstrual hygiene management. Table 7.4 summarizes the ownership of latrines, water sources, and the impact of natural disasters on water and sanitation. Over three-quarters (76%) of households have access to drinking water, although only 30% have tested it for arsenic. A substantial share (30%) reported that their primary water sources had been flooded in the past three years. Figure 7.5 shows that most households rely on shallow tube wells (less than 250 metres deep) for drinking (90.02%), cooking (97.67%), and bathing (90.02%).

**Table 7.4. Sanitation and Hygiene**

Variable	Percentage	Obs.
Source of drinking water owned by the households	76%	6120
Main source of drinking water tested for arsenic?	30%	6044
Main source of drinking water flooded (last 3 years)	30%	6090
Household own latrine	84%	6120
Latrine washed away/damaged by flood or natural disaster	48%	6092
Respondent (main female) uses soap after defecation	66%	6120
Respondents use sandals in toilet	95%	6120
Distance of latrine from the main source of drinking water within 6.6 feet	59%	4338

In char areas, 84% of households own latrines. However, Table 7.3 shows that only 46.48% of char households have improved (sanitary) latrines, compared to 90.91% and 81.11% in national rural and Rangpur rural areas, respectively. Additionally, 48% of respondents reported that their latrines had been damaged or destroyed by floods or other natural disasters in the past three years (Table 7.4), underscoring the vulnerability of water and sanitation infrastructure to natural disasters, especially floods. For 59% of households, the main drinking water source (tube well) is located within 6.6 feet of their homes. Two-thirds of respondents reported using soap after defecation.

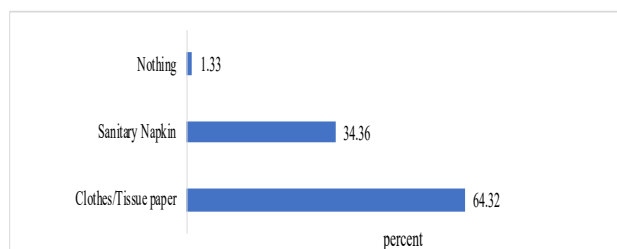


**Figure 7.5. Water Sources**

**Table 7.5. Access to Toilet Facilities**

Latrine type	Char	National rural	Rangpur rural	Poverty		
				Extreme-poor	Moderate-poor	Non-poor
Improved (sanitary)	46.48	90.91	81.11	43.69	47.05	48.82
Unimproved (ring slab without water seal)	28.04	8.12	13.89	27.77	27.58	28.42
Unimproved (raw/open/mud hole/hanging)	23.93			26.65	23.87	21.49
Open defecation	1.56	0.97	5.00	1.89	1.51	1.27

Menstrual hygiene practices are illustrated in Figure 7.6. Only 34.36% of reproductive-age respondents reported using sanitary napkins during menstruation. In contrast, 64.32% use tissues or cloth, while 1.33% use no materials during their menstrual cycle.



**Figure 7.6. Hygiene Practices of Women during Menstruation**

## 8. Resilience, Shocks, and Coping Mechanisms

### 8.1. Crisis and Disaster Risk Management

This section addresses the crises faced by households in char areas, specifically natural disasters and the associated economic losses. According to Table 8.1, only 14% of respondents reported awareness of disaster risk management or having received related training. Over half (53%) of households had experienced a natural disaster in the last two years, including floods, river erosion, and cyclones. A quarter of households reported riverbank erosion within the past year, while almost a third (30%) had experienced cyclones, and 29% had faced floods within the last two years. Among those affected by flooding, the average frequency was 1.45 occurrences per year.

Economic losses due to these natural disasters in char areas are significant. In the past 12 months, 57% of households reported damage to their houses, 26% reported crop losses, and 22% reported losses in poultry and livestock. These losses total BDT 32,456.66, more than double the financial impact of other shocks, such as illness or accidents. Losses from natural disasters amount to around 16% of total household income, while non-natural shocks account for 7% of per capita household income. Extreme-poor households experience slightly higher losses from natural shocks compared to moderate-poor and non-poor households (Figure 8.1), although this trend reverses for non-natural shocks. A prominent non-natural shock is severe illness of an earning household member (Table 8.1).

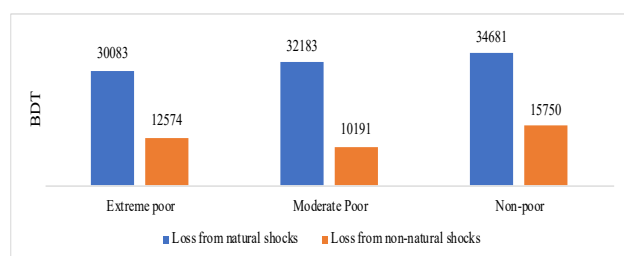


Figure 8.1. Financial Loss From Shocks by Poverty Status

Table 8.1. Overview of Vulnerability and Disaster Risk Management (DRM)

Indicators	Char	National (last 12 months)
Training/knowledge about DRM (%)	14	-
Faced natural disaster in last two years (%)	53	-
Cyclone/storm (%) (last two years)	30	3.10
Drought (%) (last two years)	17	1.39
Flood (%) (last two years)	29	7.24
River erosion (%) (last two years)	25	0.31
House yard flooded (times)	1.45	-
House damaged by natural disasters (%)	27	-
Crop ruined by natural disaster (%)	26	-
Loss of poultry and livestock (%)	22	-
Loss due to natural disaster (BDT)	32,454.66	-
Loss due to other shocks (BDT)	13,670.96	-
Serious illness of earning member (%)	8	0.84
HH member's serious illness (%)	4	0.33
Death of earning member (%)	0.36	0.32

Households employ various immediate actions based on the type of shock encountered. For instance, when a natural disaster damages housing, 34% of households take no action, while most resort to borrowing to finance repairs. Similarly, when natural disasters affect crops, nearly 68% of households take no action, with 15% borrowing funds. In response to livestock losses, all affected households reduce household expenditure. For river erosion, all affected households turn to borrowing, likely due to the severity of housing damage associated with erosion.

**Table 8.2. Coping Strategies for Natural Shocks Faced in the Past Year**

Coping strategies	House seriously damaged by natural disaster (27.30%)	Crop ruined by natural disaster (26.41%)	River erosion (12.06%)	Loss of poultry and livestock by natural disaster (21.73%)
No action taken	34.15	67.50	-	-
By reducing household expenditure	11.03	6.25	-	100%
Using previous savings	12.54	4.69	-	-
Selling assets	11.25	4.38	-	-
Sending children to relatives	0.14	0.63	-	-
Sending children (aged <15) to work	0.05	-	-	-
Adding new members to IGA	1.69	2.50	-	-
By begging	0.05	-	-	-
By borrowing	30.17	15.00	100%	-
Advance labour/cash labour	6.77	2.19	-	-
Government aid	0.43	-	-	-
Aid from NGO	0.81	0.31	-	-
Aid from relatives/friends	4.81	4.38	-	-
By moving to dry and elevated land	0.07	-	-	-
By moving to another char	0.17	-	-	-
Others	2.12	1.88	-	-

## 9. Conclusion

Despite significant strides in poverty reduction in Bangladesh over recent decades, remote areas such as the chars remain critically disadvantaged. These isolated riverine islands, shaped primarily by the Ganges-Brahmaputra-Meghna (GBM) river systems, are especially susceptible to natural hazards, including flooding and riverbank erosion. This vulnerability, coupled with extreme poverty, low literacy rates, health challenges, and social inequalities, severely restricts livelihood options for char dwellers, presenting substantial barriers to sustainable development.

BRAC IDP has been working to design livelihood interventions that address the unique needs of char communities. To gain deeper insights into their economic conditions, social status, access to essential services, and resilience to shocks and coping mechanisms, BIGD conducted a comprehensive survey across 90 chars in the northern districts of Gaibandha and Kurigram.

The survey revealed substantial variation in population and household numbers across the chars, with a high proportion of young people. Infrastructure, including road connectivity and market access, is particularly limited, and there are no banking services. However, electricity is available in most chars. Social services are inconsistent; while government primary schools are generally accessible, secondary schools are scarce, and sanitation remains a significant issue. Governance structures are weak, though NGOs are actively involved in providing some critical services.

Char households primarily engage in low-productivity activities such as day labour and subsistence farming, with high rates of underemployment and youth unemployment. Most households rely on agriculture, often on leased land, but face challenges due to landlessness and limited financial inclusion. While poultry and livestock are present, limited access to finance hinders their development as viable livelihood options. High rates of internal migration reflect the economic instability of the region.

School enrolment rates in char areas are considerable but lower than national and regional rates, with many children attending informal educational institutions due to limited access to formal schools. While reported intimate partner

violence is lower than national averages, child marriage rates are alarmingly high, highlighting deeply rooted social issues. Legal knowledge is limited, and social safety net coverage is insufficient, leaving many vulnerable households without essential support.

Access to essential services is another pressing concern in char areas. Healthcare is inadequate, with many residents relying on untrained providers. Maternal and reproductive health services are notably lacking, with low rates of antenatal and postnatal care and a high prevalence of home births assisted by unskilled attendants. Sanitation is poor, with many latrines damaged by natural disasters, increasing the risk of waterborne diseases.

Opportunities for skills development in char communities are scarce. Most households have not received any IGA training, despite a strong interest. Although there is some adoption of modern agricultural practices, such as artificial insemination, awareness and use of these technologies remain limited, indicating potential for further development.

Char residents are highly vulnerable to natural and economic shocks, with limited awareness of disaster risk management. Natural shocks like floods and river erosion, along with economic shocks such as illness, are common, resulting in housing and WASH facility damage, crop and livestock losses, and financial strain. The extreme-poor are particularly affected by these shocks, with limited coping mechanisms available. Households often resort to borrowing or take no action in response to these shocks.

In conclusion, addressing the challenges faced by char communities requires a comprehensive approach that targets multiple areas of need. Investment in health and education for younger populations is essential to developing human capital. Strategies to combat child labour should focus on creating employment and income opportunities for parents.

Enhancing livestock productivity through wider adoption of modern technologies can strengthen economic resilience. Empowering households, particularly women, through financial inclusion will improve access to credit. Increasing

household savings and promoting mobile financial services (MFS) among women should be prioritized to enhance financial inclusion. Given the limited reach of social safety nets in char areas, integrating vulnerable and eligible individuals into these programmes is crucial to support household economic improvement. Improving market access is also vital for boosting agricultural productivity and income.

Addressing child marriage requires targeted interventions that address its root causes. Improvements in maternal healthcare, particularly antenatal and postnatal services,

are urgently needed, as are enhanced menstrual hygiene practices, highlighting the need for better access to hygiene products and education.

Finally, implementing robust disaster risk management strategies, including improved coping mechanisms such as financial support, is crucial to mitigating the impacts of natural disasters and economic shocks on these vulnerable communities.

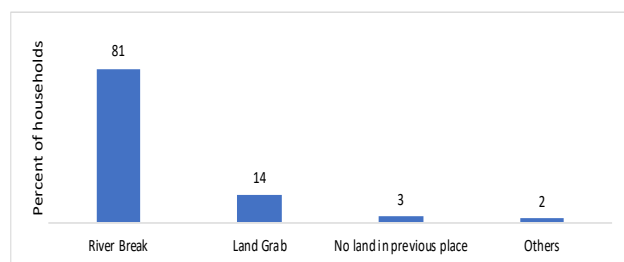
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# Appendix

**Table A1. Household Characteristics by Char Age**

Indicators	Age of char	
	5–25 years (n = 1,632)	25+ years (n = 4,488)
Own land	80%	83%
Own land (decimal)	39	32
Farm household	64%	52%
Own cultivable land	27%	22%
Own cultivable land (decimal)	20.64	15.21
Households having internal migrants	51%	49%
Losses due to natural shocks (BDT)	40,330	29,591
Flood	32%	28%
River erosion	26%	25%
House condition: broken state	22%	17%
Savings	22%	25%
Savings amount (BDT)	2769	3741
Improved (sanitary) latrine	47%	46%



**Figure A1. Reasons for Displacement (N = 4,441)**

**Table A2. Hours Worked in Major Activities in a Week**

Activities	Hours worked in a week		
	Female	Male	N
Poultry rearing	1.242	0.028	6,120
Livestock rearing	0.238	0.275	6,120
Crop cultivation	0.611	6.43	6,120
Agri. day labour	0.746	8.51	6,120
Fish cultivation	0	0.008	6,120
Housemaid	0.249	0	6,120
Begging	0.023	0.026	6,120

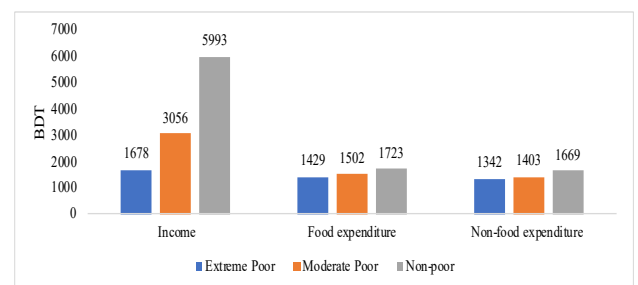
**Table A3. Per-Hour Wage Rate**

Locality	Char	National (rural)*	Rangpur division (rural)*
Agricultural	49.07	58.69	54.22
Non-agricultural	50.68	68.71	55.59

\*HIES 2022 (inflation-adjusted).

**Table A4. Income Inequality**

	Char	National (rural)
Gini co-efficient	0.363	0.446



**Figure A2. Per Capita Monthly Income and Expenditure by Poverty Level**

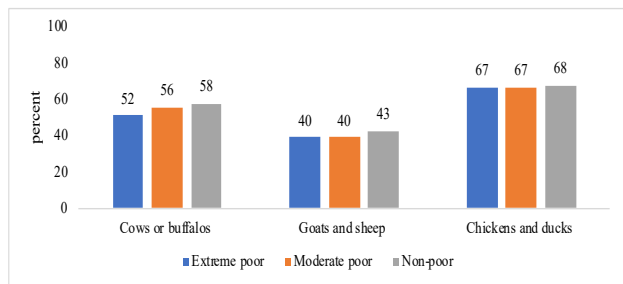
**Table A5: Types of Crops Produced**

Items	Percentage of cases
Rice	87
Jute	37.43
Maize	65.42
Pepper	24.11
Potatoes	5.19
Nuts	18.22
Dal	10.3
Other vegetables	9.45
Other	14.55

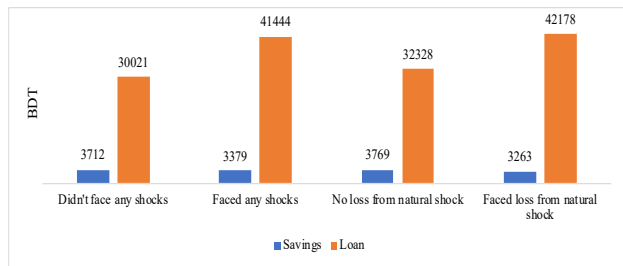
Note. Responses = 9,261; cases = 3,409.

**Table A6. Average Number of Assets Owned by Households**

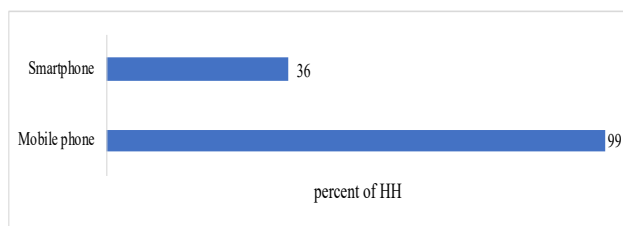
	Overall	Extreme-poor	Moderate-poor	Non-poor
Number of cows or buffalos	1.49	1.32	1.5	1.65
Number of goats and sheep	0.98	0.89	0.92	1.08
Number of chickens and ducks	3.34	3.12	3.23	3.57
Productive asset diversity	3.29	3.07	3.21	3.52



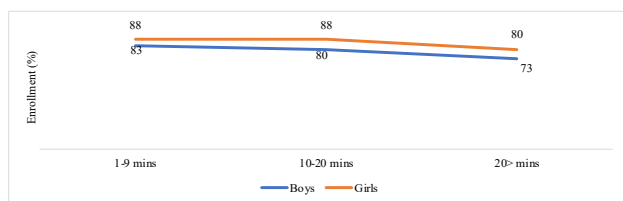
**Figure A3. Livestock and Poultry Ownership by Poverty Status**



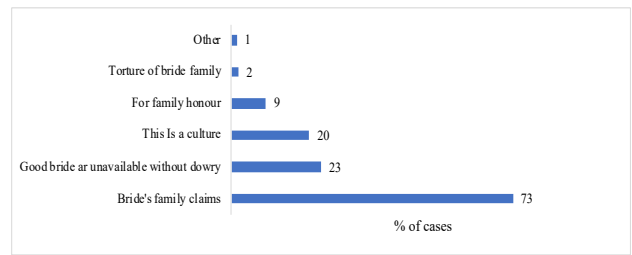
**Figure A4. Loans by Disaster Risk Capacity and Shocks Faced in the Past Year**



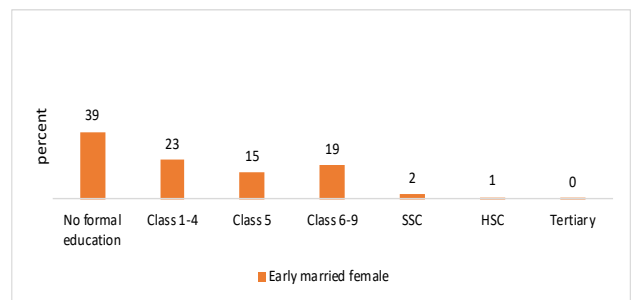
**Figure A5. Mobile Phone and Smartphone Possession**



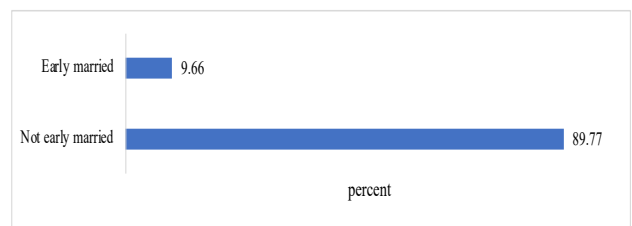
**Figure A6. Distance to School and Enrolment Rate**



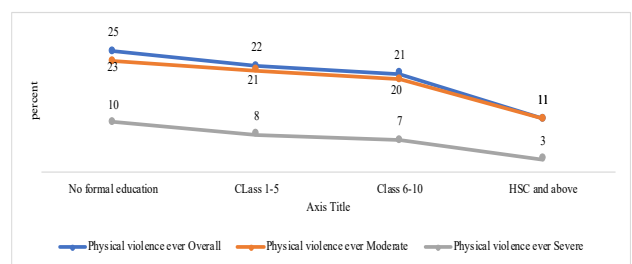
**Figure A7. Self-Reported Reasons for Dowry**



**Figure A8. Educational Level of Early-Married Girls**

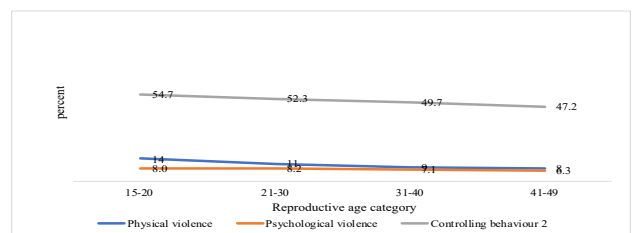


**Figure A9. Enrolment Status of Married and Unmarried Girls (Age 10-17)**



Note: HIES 2022 (inflation-adjusted).

**Figure A10. Physical Violence by Education**



**Figure A11. Physical Violence and Controlling Behaviour by Reproductive Age**

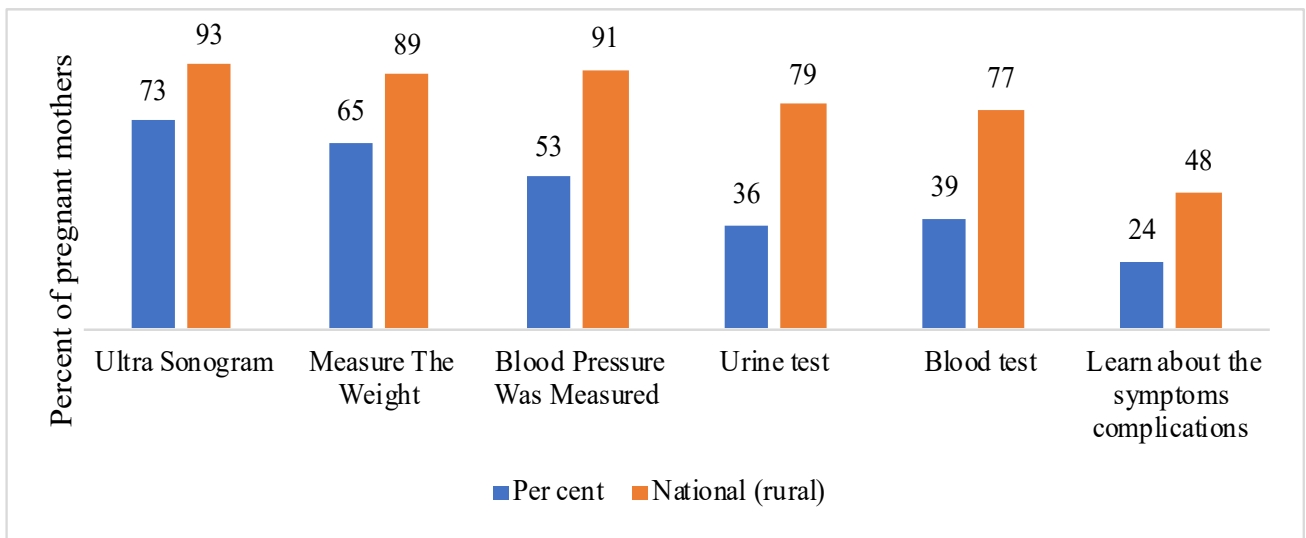


Figure A12: ANC Services Received (N = 1,531)

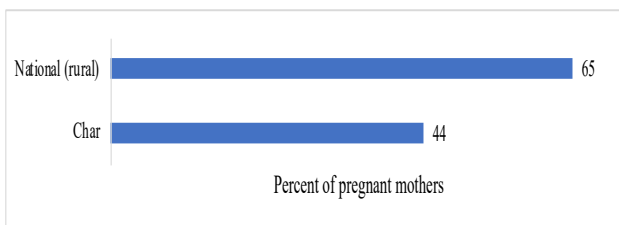


Figure A13. Assistance from Skilled Midwives or Medically Trained Providers During Delivery (N = 2,292)

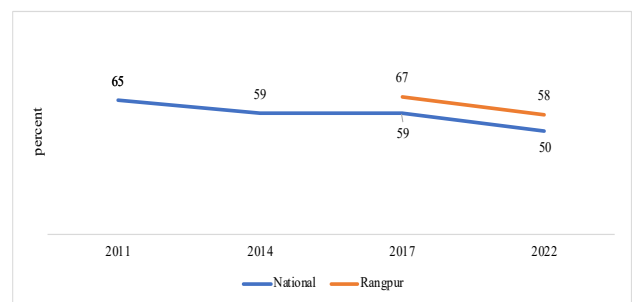


Figure A14. National Trends in Child Marriage of Girls (Ages 20–24), According to the Bangladesh Demographic and Health Survey (BDHS)

Table A7. Reasons for Not Receiving Vaccinations

Reason	Percentage
Health centre is far away	9.41
Vaccination card is lost	1.002
Will take timely	49.04
Business/limited time	11.18
Don't know/no reason	8.94

Table A8. Percentage of Social Safety Net Beneficiaries Among Eligible Household Members

Allowances	Percentage
Old age allowance (male 65 and above; female 62 and above)	30
Disability Card (of PWD)	12
Allowance for widows	21





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