PEOPLE'S ADAPTATION PLAN – CHARABARI COMMUNITY

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DESCRIPTIONS

Sector
Region
Keywords
Contact

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Executive Summary

A locally led, highly participatory process identified the primary climate threats to this community to be limited access to clean drinking water, and lack of hygienic toilets. The Chari Bari People's Adaptation Plan calls for immediate redress via two priority adaptation solutions: (i) provision of water tanks to store rainwater, and (ii) the construction of hygienic toilets. Financing of USD 33,023 is required to address this water need; and USD 16,881 for sanitation needs.

GCA and BRAC already invested USD 5,600 to install 5, 5000 litre community level water tanks and USD 13,100 to construct 30 pit latrines with a water seal of 30-40 liters capacity for the most vulnerable 30 households. Municipality invested USD 71,000 to construct herringbone brick roads with drain. Further resources of USD 53,868 would be required for the remaining solutions taking total financing for this People's Adaptation Plan to USD 72,568.

Table Of Contents

List Of Maps

NO TABLE OF FIGURES ENTRIES FOUND.

List Of Figures

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List Of Tables

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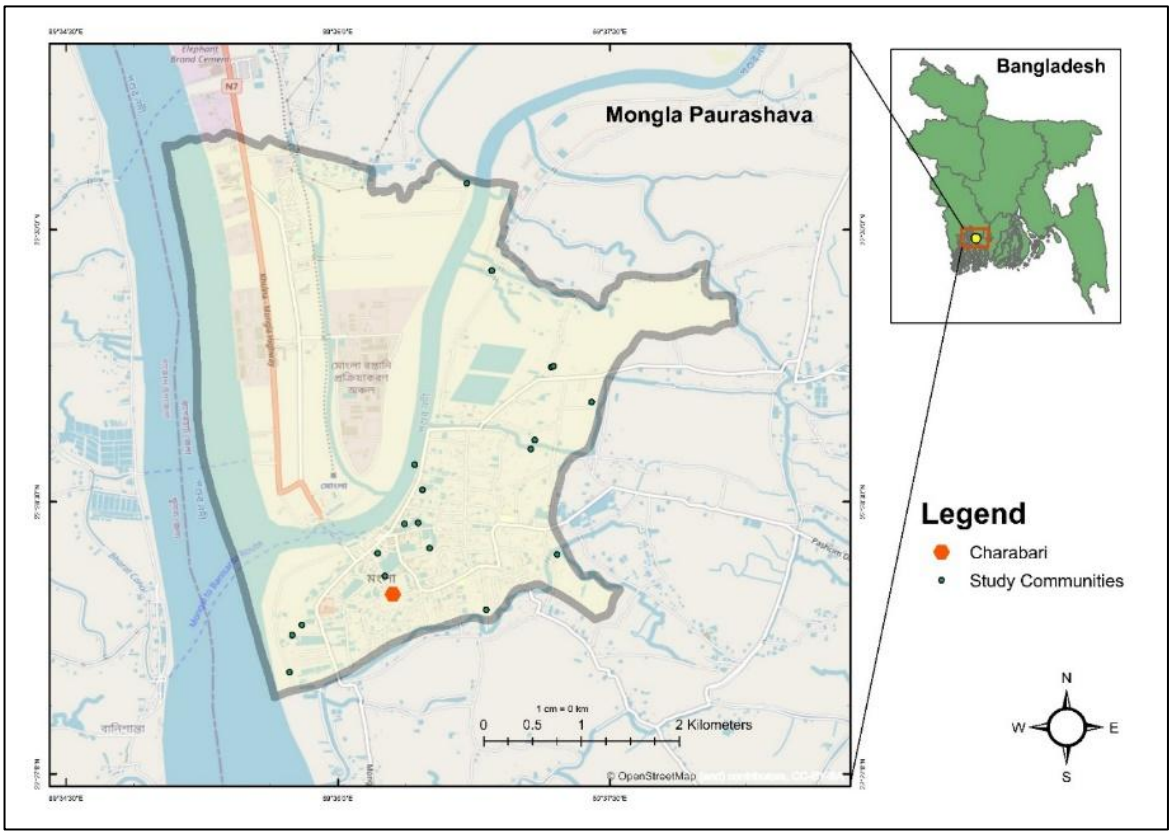
1. INTRODUCTION

1.1 About Charabari Community



Chari Bari ('abandoned place') is an informal settlement with a population of around 450 people, situated on the south side of the Mongla river.The Port Authority owns around two thirds of the land and originally used it for staff quarters. However, as Port staff residents left upon finding more reliable accommodation elsewhere in Mongla, people working as construction workers at the Port, primarily migrants from Morrelganj upazila of Bagerhat district, Barisal and Satkhira district, settled in from 1988.

Around 41% of land is owned by local elites, from which residents rent land for informal settlements. A majority of residents live on the Port Authority owned land, and are at a high risk of eviction. The Port Authority issues an eviction notice at least once a year, stating an intention to construct high rise buildings on the land. Strong protest by the community and direct interventions from the local Member of Parliament have, however, halted the evictions temporarily. The constant uncertainty has driven some families to leave for alternative affordable housing provided by the government. Many have no option to move or migrate due to lack of resources, and because affordable housing schemes are few, and difficult to access.

Key Features of the Community:

Total no. of HH: 127
Total Population: 458 (approx.)
Average household size: 4
Climate vulnerability ranking by communities: 6th
Gender ratio: Male (46.94%), Female (53.06%)
Dominant Religion: Islam
Female headed households: 11%
Per capita income: BDT 3,030 (USD 25.95)
Average distance to nearest health complex: 1.9 km
Source of drinking water: Municipality supplied water, rainwater

The detailed house-to-house study conducted in Chari Bari indicates an average monthly household income of BDT 12,175 (USD 104), and average monthly expenditure of BDT 13,948 (USD 119.46).

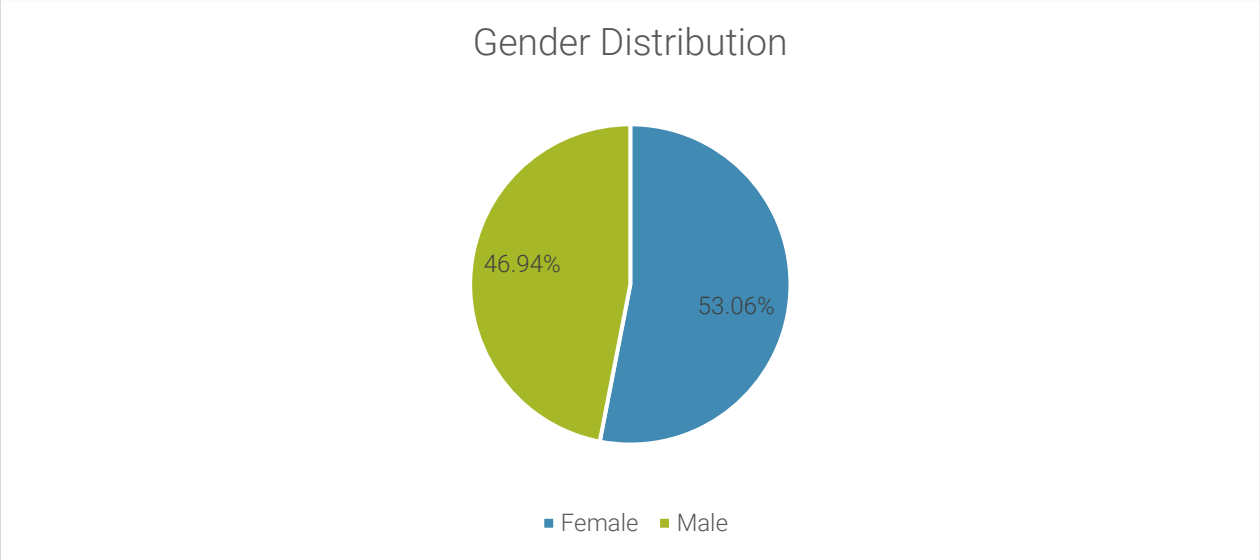
2. SITUATIONAL ANALYSIS OF CHARABARI COMMIUNITY

2.1 Demographic and Socio-Economic Overview

2.1.1 Population Size & Composition

Charabari Community is an area with estimated 127 households, where 60 are males (46.94%) and 67 are females (53.06%), underscoring its demographic importance. Male-headed households constitute the majority, accounting for 89% (113 households), while female-headed households represent 11% (14 households).

This highlights the community's adherence to traditional gender roles, where men are generally recognized as the primary providers of households even if the majority of the household are female. However, the presence of a considerable proportion of female-headed households points to arising changes in social structures. This shift may be linked to factors such as male migration, widowhood, and changing economic or social conditions that encourage women to take on more leadership responsibilities within their families.



Household sizes in Charabari Community vary considerably, with an average of 3.83 persons per household. Male-headed households continue to dominate, comprising 89% (113 households), while female-headed households represent 11% (14 households). Small households of 1 to 3 members are the most common, accounting for 43.31%, followed by medium-sized households of 4 to 6 members at 49.61%. Large households with seven or more members are relatively rare, making up only 7.09%, with the largest household recorded at 11 members, including both nuclear and extended family members. This distribution reflects a trend toward smaller to middle size family units, possibly driven by urbanization, evolving family dynamics, and economic pressures that shape household composition and living arrangements.

2.1.2 Socio-Economic Indicators

Household income and expenditure

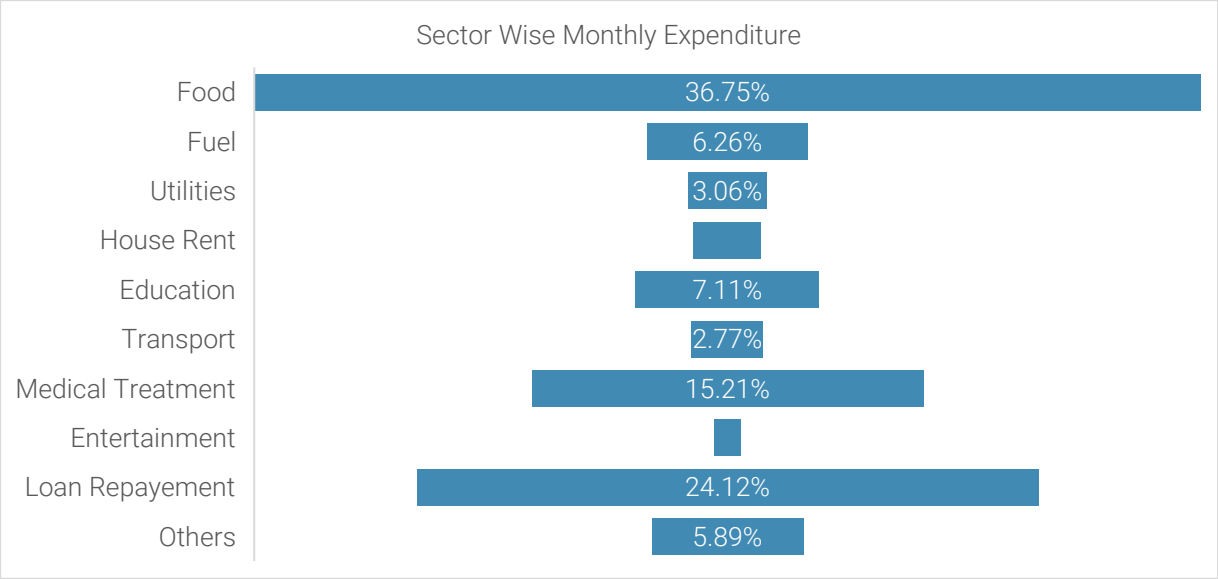
Household baseline survey shows that the average monthly household income in Charabari Community Community is BDT 12,175 (USD 104), while the average monthly expenditure is BDT 13,948 (USD 119.46) along with the per capita income is BDT 3,030 (USD 25.95). Majority of the residents have a monthly income in between BDT 10,001-15,000 per month and for the monthly expenditure it falls in the same range. This shows that there is a financial stretch and there are a very few opportunities for savings.

Monthly household Income (BDT)	Percentage
<5,000	7.87%
5,001-10,000	47.24%
10,001-15,000	28.35%
15,001-20,000	10.24%
20,001-30,000	3.94%
Above 30,000	2.36%
Grand Total	100.00%

Analysis of household expenditure in Charabari Community indicates that the majority of households (94.49%) incur moderate to high monthly spending, ranging from BDT 5,001 to 30,000. In contrast, only 5.51 % of households report low monthly expenditures below BDT 5,000, highlighting limited financial capacity among a small segment of the community. These patterns reflect notable economic disparities and financial vulnerability, as many households face low or unstable incomes while managing expenditures that often exceed earnings. Enhancing household income through income-generating opportunities and improving access to financial resources could strengthen economic resilience and promote overall well-being in the community.

Monthly household expenditure (BDT)	Percentage
<5,000	5.51%
5,001-10,000	33.86%
10,001-15,000	40.94%
15,001-20,000	13.39%
20,001-30,000	3.94%
Above 30,000	2.36%
Grand Total	100.00%

An analysis of sectoral expenditure reveals that the largest share of monthly household spending is on food (36.75 %). A significant portion (24.12%) is allocated to loan repayments, highlighting financial instability and over-reliance on credit. Households also spend 15.21% of their income on medical treatment, reflecting prevalent health concerns in Charabari Community.



Household savings and loan

The average monthly household savings in Charabari Community Community is only BDT 556.86(USD 4.56), which shows an unstable financial condition among the community. Around 76% of households have taken loans from local microfinance institutes, cooperatives, or NGOs. Only 44% of households currently access social benefits as not all families are eligible, despite very low wage conditions. Migrants face discrimination when it comes to accessing such social benefit schemes. Although the majority of men are day laborers, many also work as van drivers or own a small business. Women are mostly housewives, or work as labor in the garment sector

Monthly household savings (BDT)	Percentage
<5000	18.18%
5001-10000	5.68%
10001-15000	3.41%
15001-20000	9.09%
20001-30000	17.05%
>30000	46.59%
Grand Total	100.00%

Among the households with loans, the average loan amount is about BDT 42,977 (USD 567.45) with an average monthly installment of BDT 4,601 (USD 51.10).

Total loaned amount (BDT)	Percentage
<5,000	96.88%
5,001-10,000	0.00%
10,001-15,000	0.00%
15,001-20,000	3.13%

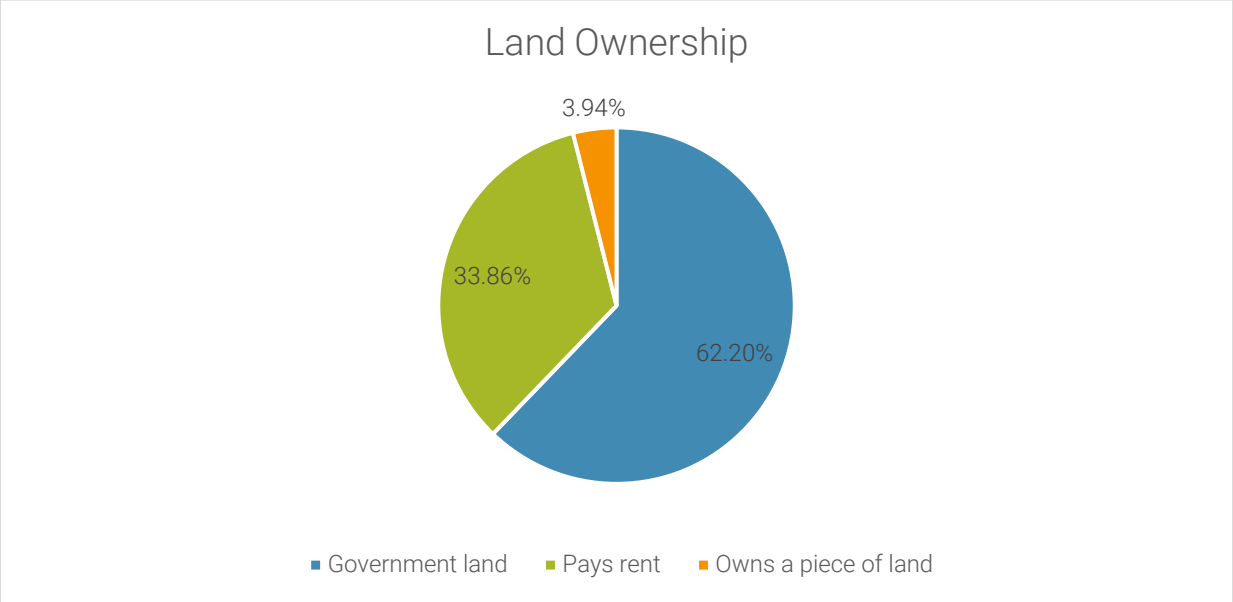
20,001-30,000	0.00%
Above 30,000	0.00%
Grand Total	100.00%

Analysis of loan utilization shows that the largest portion (14.3%) of granted loan is invested in new or existing businesses, with 7.1% used for family expenses showing that. Significant portions of loaned money are allocated to home repairs (3.09%), highlighting the financial pressures imposed by climate vulnerabilities. Additionally, 3.70% of loan funds are used to repay other debts, underscoring a concerning cycle of indebtedness among residents of this informal settlement.

2.2 Settlement Patterns

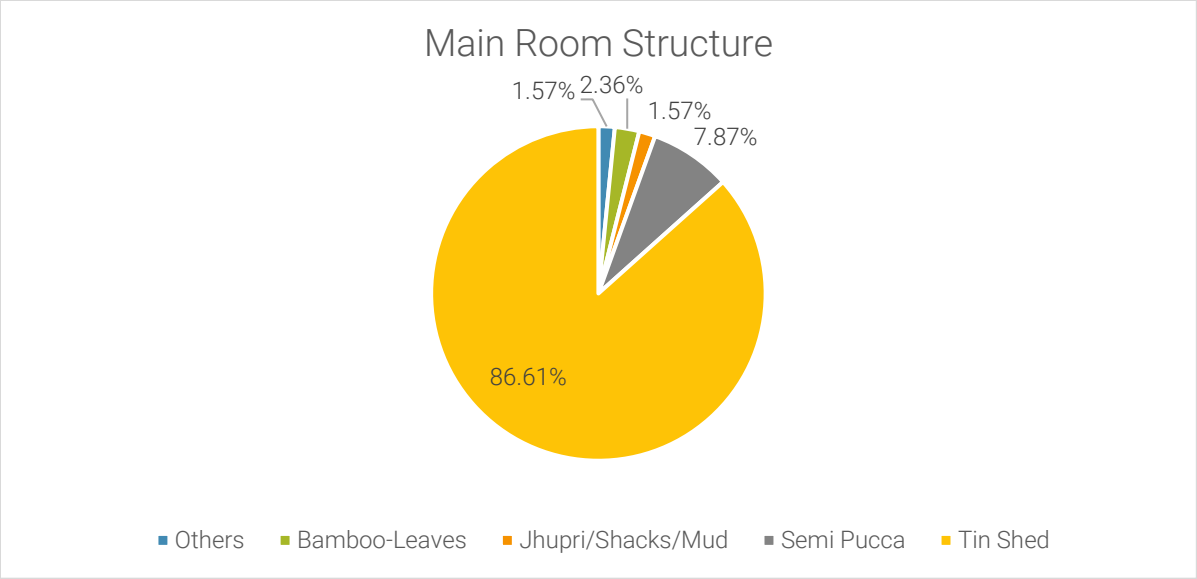
2.2.1 Access to Land

According to enumeration data, Charabari Community is largely situated on government land, with 62.20% of households living there, while 33.86% pay rent and only 3.94% own land. Households that pay rent contribute an average of BDT 1,004.65 per month. The predominance of government land occupation highlights tenure insecurity and the vulnerability of residents to displacement, particularly in the face of urban development pressures or climate-induced hazards in Mongla Municipality.

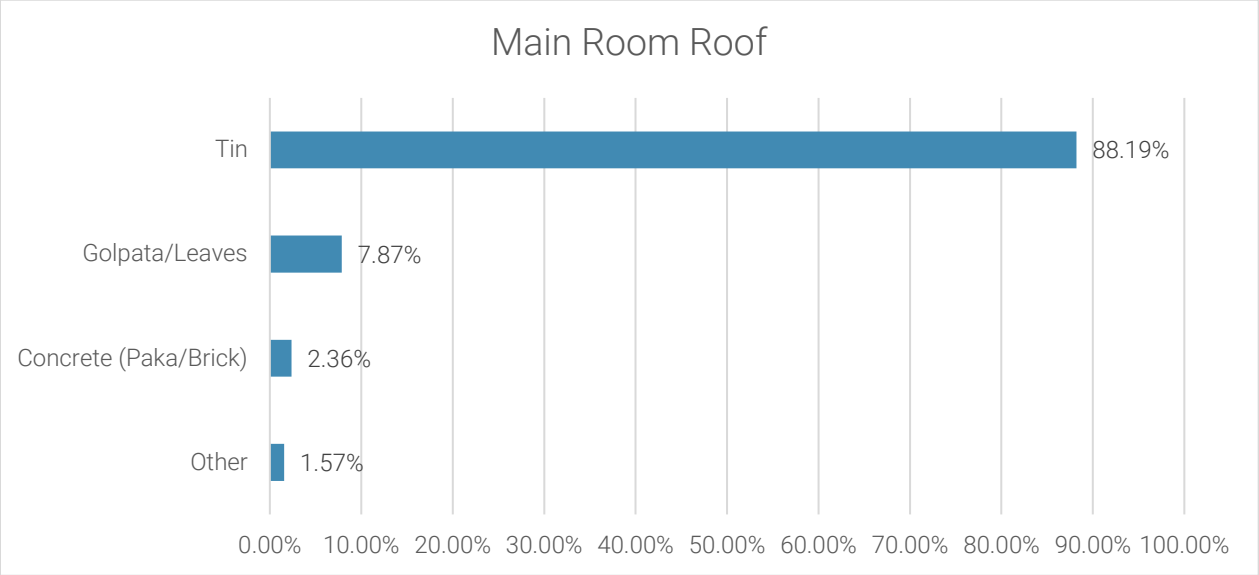


2.2.2 Housing Types and Conditions

Data show that the average household consists of 3.83 persons living in 2.08 rooms, which suggests moderate crowding but generally better spacing than some informal settlements. However, households on rented or government land remain vulnerable to eviction and housing insecurity, affecting overall living conditions.



Housing conditions in Charabari Community remain significantly underprivileged. Data reveal that 86.61% of homes are Tin Shed structures, 7.87% are Semi Pucca, and 1.57% are bamboo-leaves based structures. Another 2.36% are jhupri/mud type, while 1.57% are in dilapidated and unsafe condition. The dominance of Tin Shed homes indicates low durability and continuous exposure to salinity, cyclones, and strong winds. Only a small number of households have been able to resettle elsewhere, while the majority continue to live in these fragile and climate-vulnerable structures.



Regarding roofing materials, 88.19% of households have tin roofs, 2.36% have concrete roofs, and 7.87% rely on golpata/leaf roofs, which are extremely fragile and prone to damage during storms. Overall, 0.79% of households are in good condition, 92.13% are in moderate condition requiring refurbishment, and 7.09% are in dilapidated, unsafe condition. Poor housing quality disproportionately affects women, housewives, and elderly members who spend longer periods indoors.

2.2.3 Energy

Electricity supply and access

Most households (93.70%) are connected to the national electricity grid, reflecting notable progress in electrification. Smaller portions of the community rely on kerosene (3.94%), solar power (1.57%), or battery chargers (0.79%) for lighting. Despite widespread access, electricity distribution is often unstable, with frequent outages reported. This unreliability constrains daily household activities, especially for families dependent on electrical appliances for cooking, lighting, and small business operations.

Cooking energy

Cooking energy is a major concern due to environmental, health, and financial implications. Firewood remains the primary cooking fuel for 88.2% of households. Its widespread use is driven by affordability, accessibility, and cultural familiarity, but prolonged exposure to smoke increases respiratory health risks, particularly for women who are responsible for daily cooking. LPG gas, used by only 5.5% of households, provides a cleaner and more efficient alternative; however, high initial costs for cylinders and stoves limit wider adoption. Charcoal (3.1%) and coal (1.6%) are minor sources, while other fuels such as cattle excrement, grass, or uncooked food are negligible.

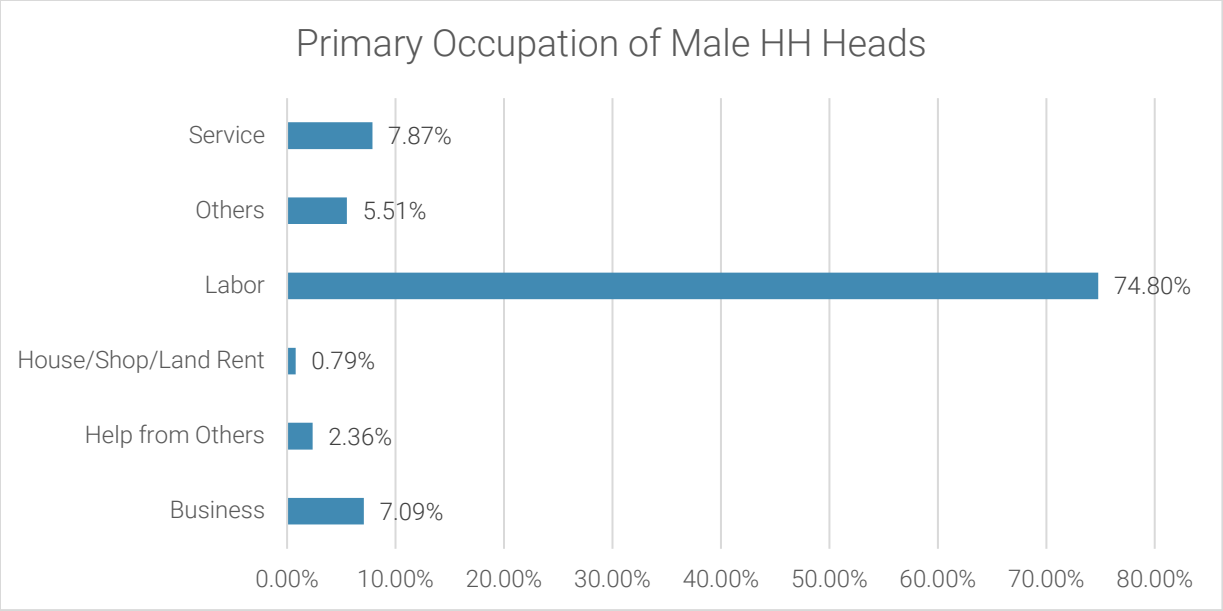
Cooking Fuel	Percentage of Households (%)
Firewood	88.2%
LPG Gas	5.5%
Charcoal	3.1%
Coal / Burnt Coal	1.6%
Food Not Cooked at Home	0.8%
Grass / Herbs / Bark	0.8%
Total	100

2.3 Livelihood Systems and Vulnerabilities

2.3.1 Primary Livelihoods

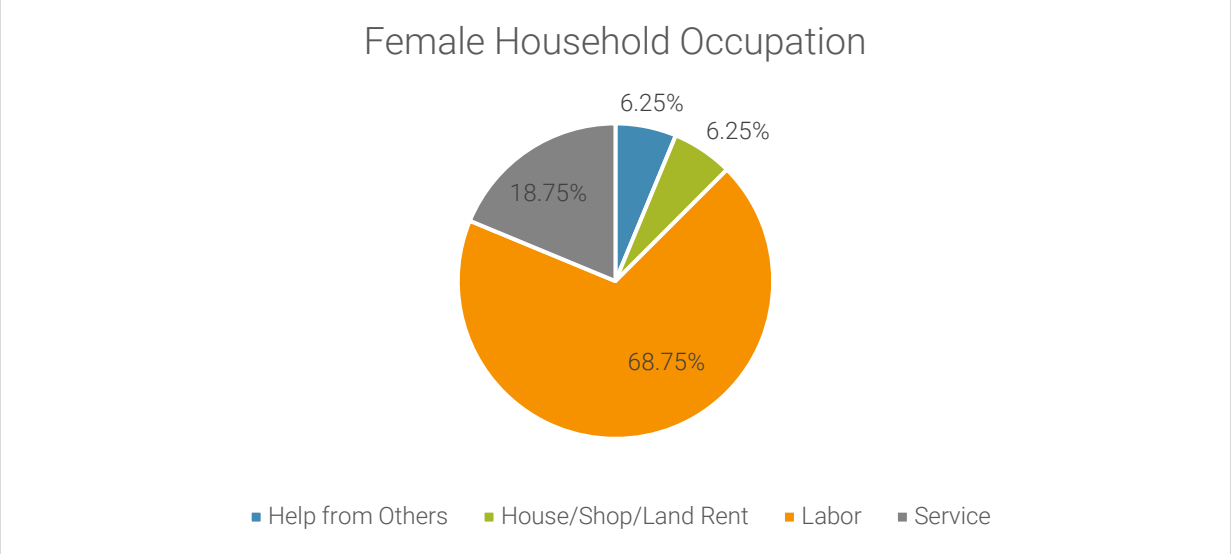
Male headed households

Enumeration data indicate that the majority of male-headed households in Charabari Community (74.8%) depend on labor as their main source of income. This includes daily wage work, construction, seasonal agricultural activities, and other informal manual jobs. Other livelihood sources include financial support from relatives or friends (7.09%), pensions or allowances (5.51%), rental income from land or shops (2.36%), and agriculture (1.57%). The dominance of labor-based livelihoods highlights the vulnerability of these households to income fluctuations, seasonal variability, and climate-related events such as floods or cyclones, which are common in Mongla. Limited access to stable, higher-paying employment reduces long-term economic security and constrains opportunities for savings and investment.



Female headed households

Primary data indicate that Female-headed households are similarly reliant on labor (68.75%), though their work is often lower-paying and less secure. Smaller shares of women engage in service work (18.75%), receive support from others (6.25%), or earn from house, shop, or land rentals (6.25%). The concentration of income sources in informal and low-paid sectors increases economic vulnerability, especially for widows, single mothers, and elderly women, who face both financial and domestic pressures.

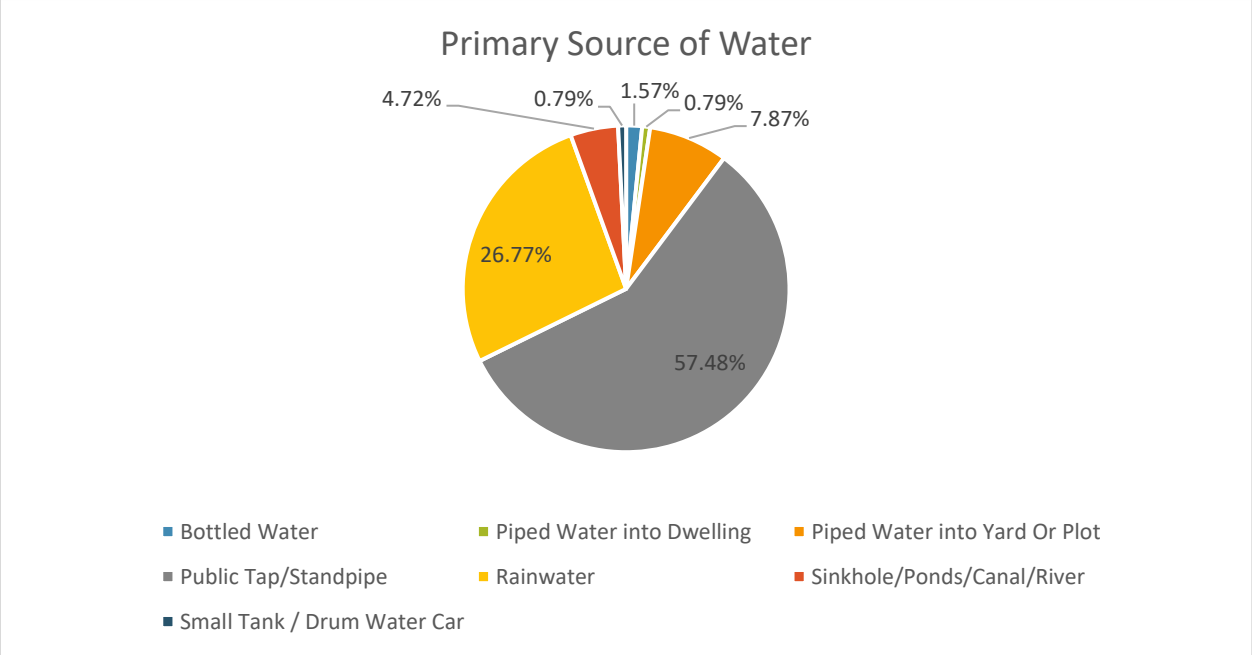


2.4 Infrastructure and Services Baseline (WASH, Housing, Roads, Drainage, Energy, Health)

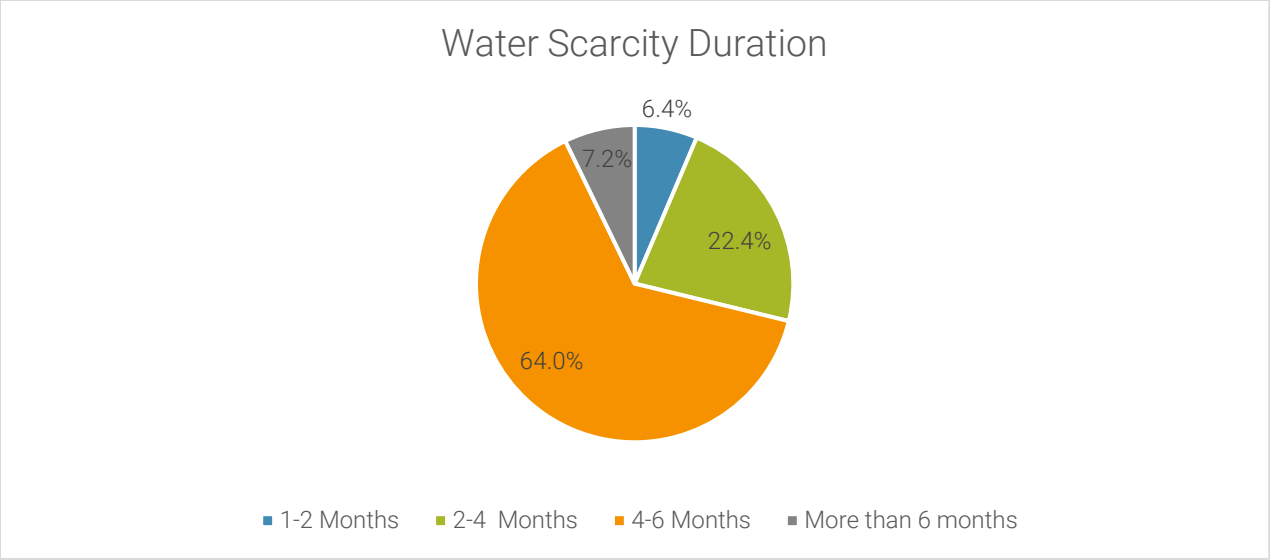
2.4.1 Water

Access to and supply of drinking water

Water scarcity remains one of the most critical challenges for households in Charabari Community. The enumeration data show that the primary source of drinking water for most households is public taps provided by the municipality, with 57.48% of residents relying on them. Rainwater collected in tanks or smaller containers serves 26.77% of households, while piped water into yard or plot is used by 7.87%. Smaller portions of households access bottled water (1.57%), piped water into dwelling (0.79%), or water from sinkholes, ponds, canals, and rivers (4.72%). Women typically collect water multiple times per day, often waiting in long queues. The average distance to the water source is 232.88 meters, and the average collection time is about 22.52 minutes per trip, making water collection physically exhausting and time-consuming.

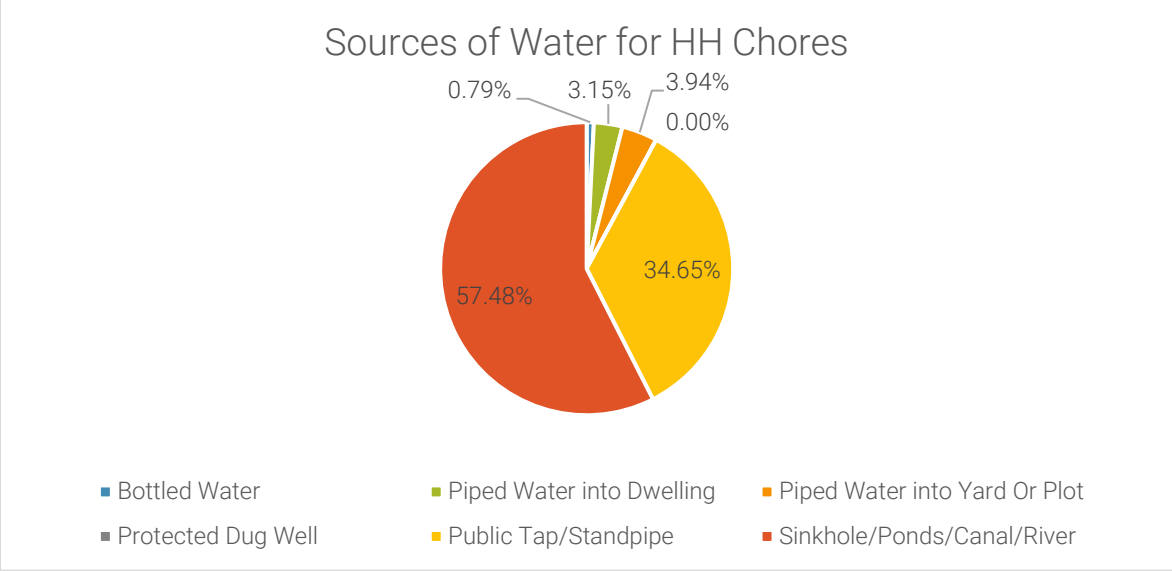


Water scarcity duration varies: 6.4% of households face shortages for 1–2 months, 22.4% for 2–4 months, 64% for 4–6 months, and 7.2% experience scarcity for more than six months. During dry seasons, reduced water pressure in municipal taps forces households to rely on alternative sources, often compromising water quality and health.



Access to and supply of water for household chores

For cooking, cleaning, and other domestic activities, most households (57.48%) depend on surface water from ponds, canals, or rivers, which is predominantly saline. This reliance on unsafe water sources increases health risks, particularly for women, who are primarily responsible for domestic chores. The exposure contributes to waterborne diseases, skin conditions, and other hygiene-related health problems.



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2.4.2 Sanitation

Sanitation in Charabari Community remains limited and often unhygienic, posing serious health risks, particularly for women, children, and elderly residents. Most households rely on basic toilets that are either poorly maintained or inadequately designed, which contributes to disease transmission and poor living conditions.

The majority of households (76.38%) use ring slab toilets without water seals, which, although affordable and easy to construct, do not prevent the escape of foul gases or insects. A smaller proportion (18.11%) have ring slab toilets with water seals, offering slightly better hygiene. Open pit or hole-type toilets are used by 5.51% of households, while other types such as hanging closets or modern septic systems are virtually absent..

Type of toilet	Percentage of Households
Closed Pit or Hole (Without Ring)	0.97%
Hanging Closet	0.24%
Holes (Without Rings and Lids)	0.49%
Open defecation	0.73%
Ring Slab with Water Seal	1.95%
Ring Slab Without Water Seal	91.24%
Toilet With Septic Tank	4.38%
Grand Total	100%

While 51.97% of households have access to individual toilets, 48.03% share facilities with other families. Among those who share, the average waiting time is approximately 5.94 minutes, which can create inconvenience, particularly during peak usage hours. These conditions highlight the need for improved sanitation infrastructure to reduce exposure to pathogens and prevent waterborne diseases.

2.4.3 Solid Waste Management

Household waste storage and disposal

Solid waste management in Charabari Community is a major challenge due to the lack of formal collection and disposal systems. Households store and dispose of waste in ways that often lead to environmental contamination, blocked drainage, and increased health risks. At the household level, 52.76% of families store waste in plastic bags, 26.77% stack it in specific places, 4.72% use garbage bins or drums, and 10.24% have no designated storage area. This indicates that most households rely on informal storage methods, which are prone to spilling, attracting pests, and creating unhygienic conditions.

Household Waste Storage	Percentage of Households (%)
Plastic Bag	52.76%
Stacked in Specific Place	26.77%
Garbage Bin / Drum	4.72%
No Storage Place	10.24%
Total	100%

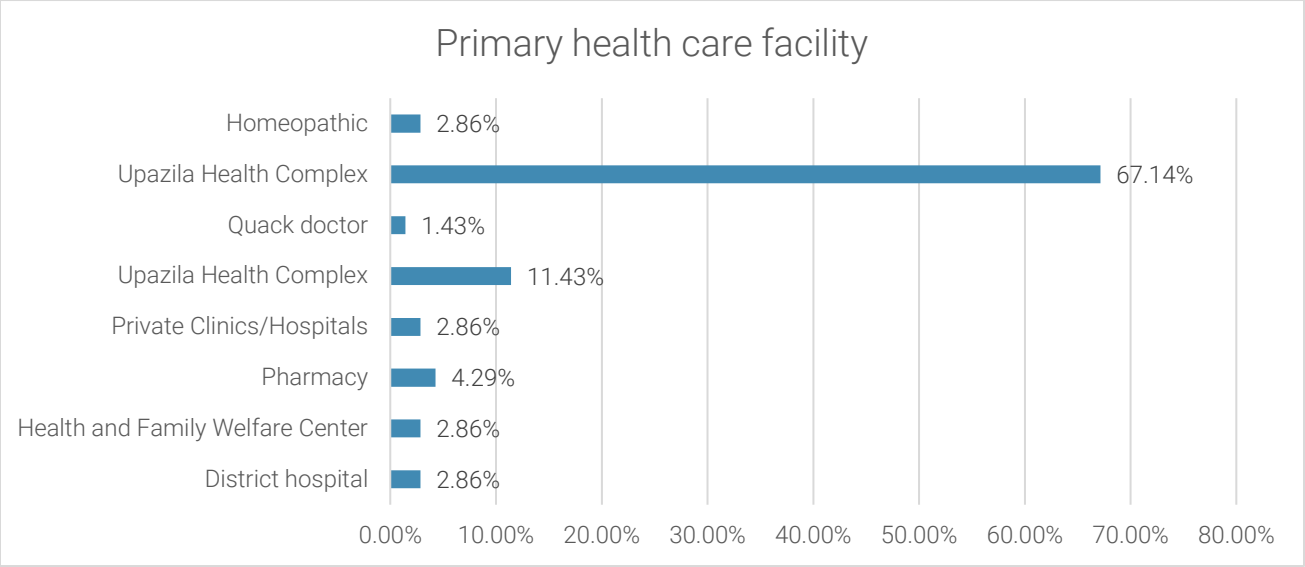
For waste disposal, informal and unsafe methods dominate. 30.71% of households dispose of waste by throwing it into drains, 28.35% in open spaces or along roads, 18.90% in holes, and 14.17% into nearby water bodies. Only a small fraction (3.94%) use community bins or containers. These practices

contaminate local water sources, obstruct drainage systems, and increase the prevalence of waterborne and vector-borne diseases.

Waste Disposal Method	Percentage of Households (%)
Throwing in Drains	30.71%
Open Space / Road	28.35%
Dumping in Holes	18.90%
Throwing in Nearby Water Bodies	14.17%
Containers / Community Bin	3.94%
Total	100%

2.4.4 Health

Health care data from Charabari Community show that the Upazila Health Complex serves as the main source of medical assistance for 38.9 percent of residents. However, this facility is located outside the settlement, making it difficult to access promptly during floods or other emergencies. About 15.4 percent of residents seek treatment at private clinics or hospitals, while 11.1 percent depend on pharmacies, which provide faster but often costly and unregulated care. A smaller share, 6.8 percent, rely on homeopathic treatment, indicating limited access to formal healthcare services within the community.

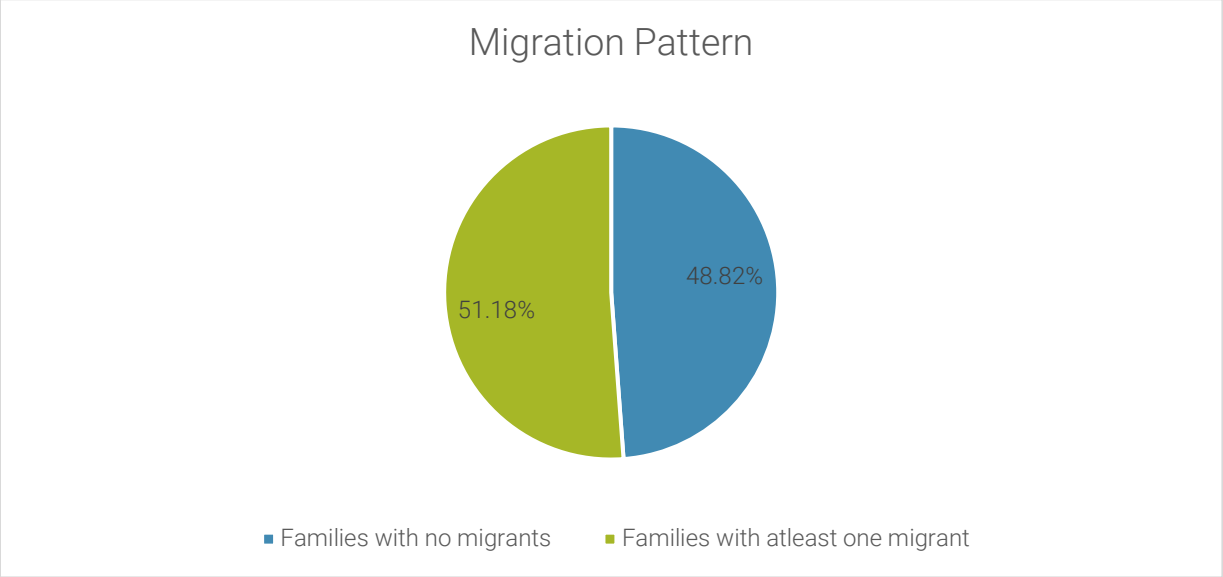


In terms of proximity to healthcare facilities, only 13.4 percent of residents live within 100 meters, and 4.7 percent are located 101–500 meters away. About 11 percent reside 501–1,000 meters from a facility, while the majority, 70.9 percent, live more than one kilometer away. These distances create significant barriers to accessing timely medical care, especially during heavy rainfall or waterlogging when poor road conditions hinder mobility. Vulnerable groups such as women, children, and the elderly are particularly affected, and the lack of nearby, affordable, and well-equipped healthcare services further exacerbate health-related risks in the community.

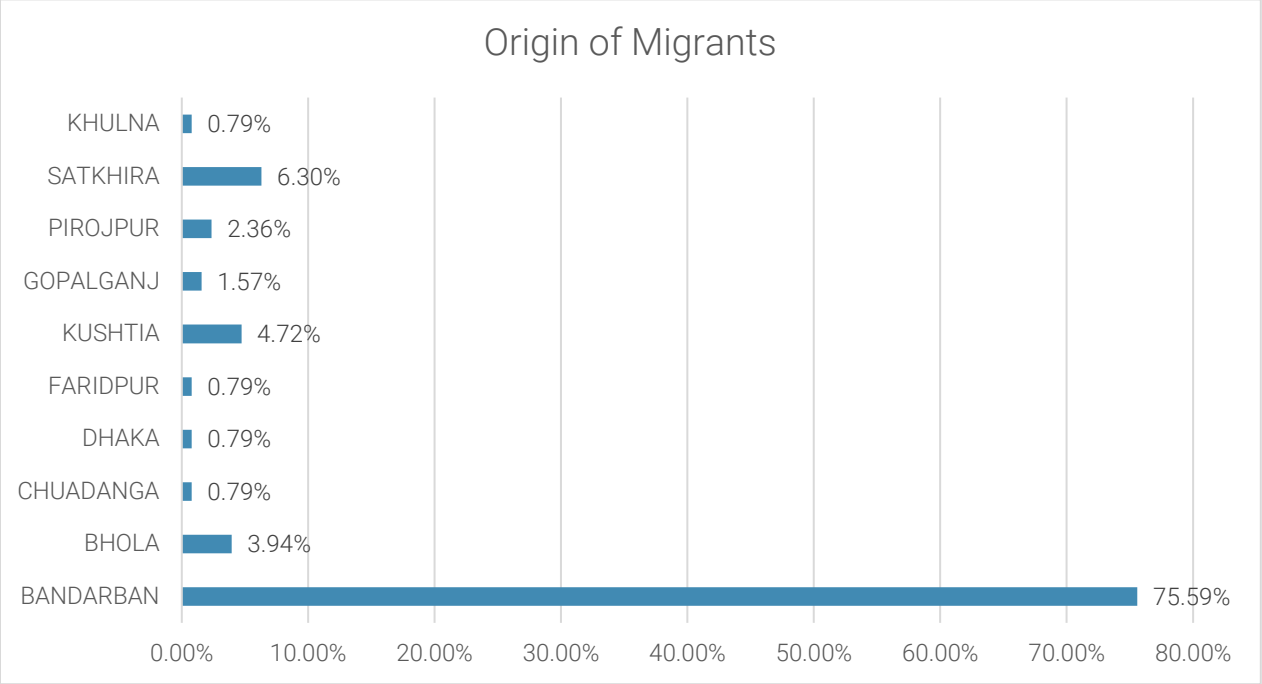
2.5 Migration

2.5.1 Patterns of Migration

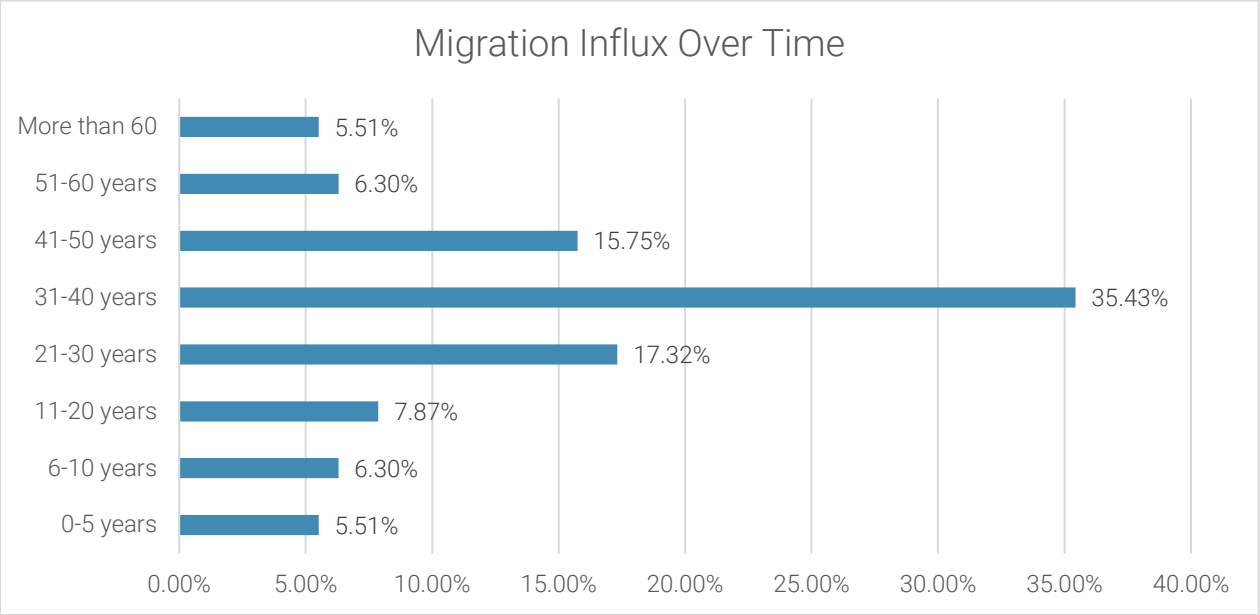
Migration has played a critical role in shaping the settlement structure of Charabari community. Enumeration data shows that 51.18% of households have at least one migrant member in the family, while 48.82% reported no migration experience. This indicates that slightly more than half of the families have a history of population movement, which has significantly influenced household settlement choice and socio-economic orientations.



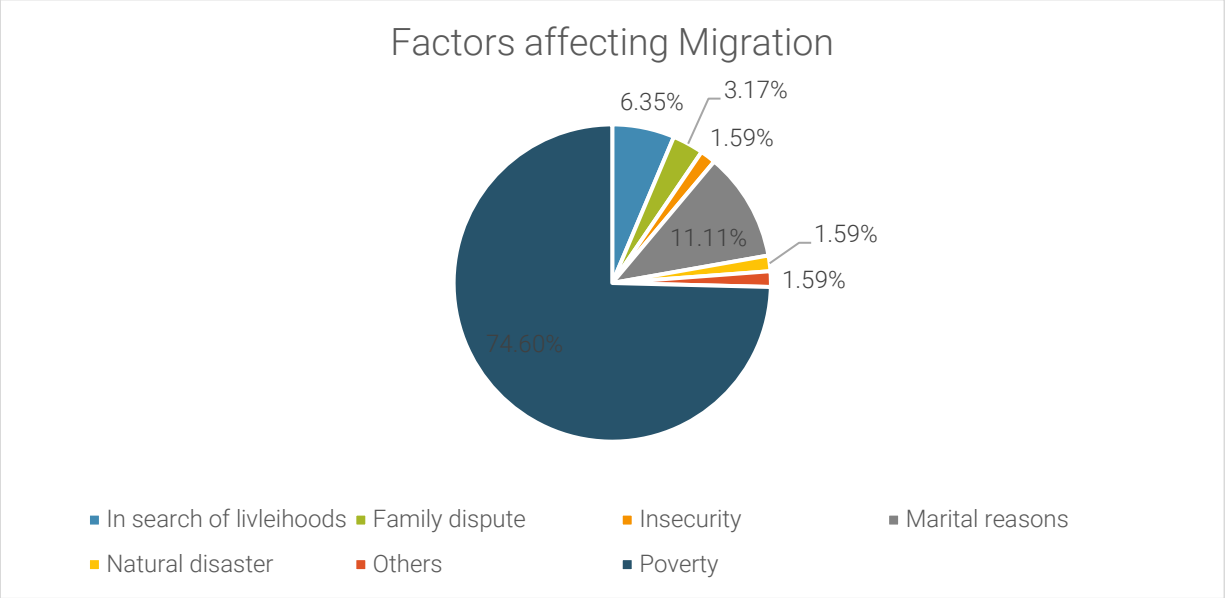
2.5.2 Trends of Migration



Data indicates that the majority of households (72.86%) migrated to Charabari Community from other upazilas within Bagerhat district. These areas are among the most climate-vulnerable zones in Bangladesh, exposed to cyclones, salinity intrusion, riverbank erosion, and agricultural decline. Additionally, 18.57% of households migrated from nearby Khulna district. The largest influx occurred between 1995–2004, during which 29.53% of current residents settled in Charabari, marking a period of rapid population concentration associated with post-cyclone displacement and livelihood transition.



2.5.3 Factors affecting Migration



Migration into Mongla is primarily influenced by a combination of push and pull drivers. The push factors at places of origin are rooted in persistent poverty, declining agricultural productivity, and recurrent disaster shocks that repeatedly erode livelihoods. On the other hand, Mongla Municipality functions as a pull center due to diversified income opportunities connected to port activities, informal labor markets, and expanding service-related work.

Moreover, a significant share of migrants are younger individuals seeking employment, economic independence, and better living standards. This reflects both national and global trends where youth migration is increasingly driven by economic aspiration rather than purely displacement. Lack of access to adequate services and limited social protection at origin locations further accelerate outmigration, pushing households to migrate in search of stability, resilience, and upward mobility within urban settings like Mongla.

3. COMMUNITY CLIMATE RISK ASSESSMENT & VULNERABILITY ANALYSIS

3.1 Community perception about climate change

Using the methodology outlined in Chapter Three, Charabari Community has been identified as the 6th most vulnerable informal settlement within Mongla Municipality. The residents reported facing multiple climatic hazards, notably increased salinity levels, irregular rainfall, heatwaves, heavy precipitation, cyclones, and waste management challenges and each event intensifying existing socioeconomic and infrastructural vulnerabilities.

According to the primary household survey, 85.83% of respondents indicated that they or their families had directly experienced the impacts of climate change. Salinity intrusion emerged as one of the major hazards, with 88.19% of households observing a marked rise in water and soil salinity over the past two to three decades. This phenomenon undermines the structural integrity of houses, contaminates drinking water sources, and reduces the productivity of kitchen gardens, exacerbating livelihood challenges for low-income households.

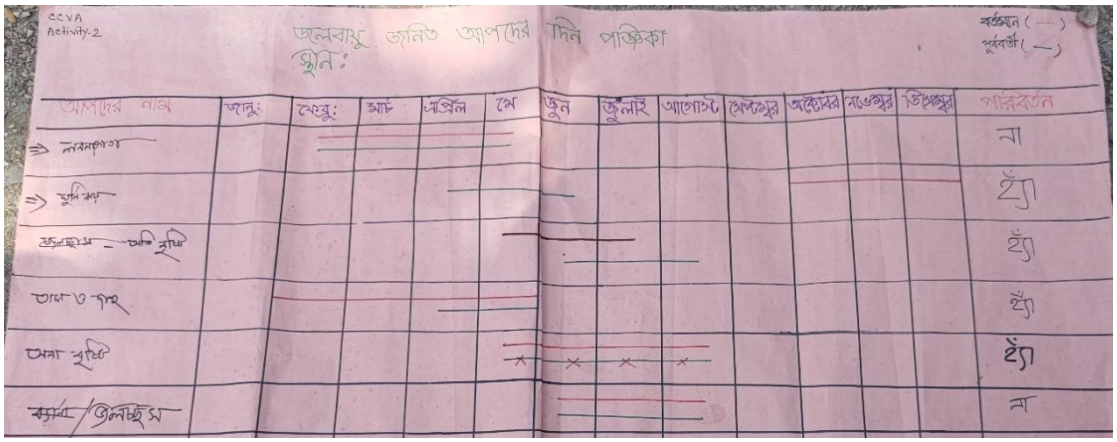
A significant proportion of respondents (94.49%) believe that ambient temperatures have risen, while 94.49% feel that winters have shortened, aligning with broader warming trends observed along coastal Bangladesh. Similarly, 78.74% reported experiencing more intense rainfall, which often leads to frequent waterlogging and flooding in the settlement's low-lying and poorly drained terrain. These recurrent events disrupt housing stability, sanitation conditions, and daily activities, rendering the community's infrastructure increasingly fragile.

Awareness of seasonal shifts is also notable, as 74.80% of respondents still believe Bangladesh experiences six distinct seasons, reflecting ongoing perceived climatic variability. Overall, residents' perceptions and empirical data underscore the urgency of context-specific adaptation measures, particularly focused on drainage improvement, safe water supply, sanitation enhancement, and storm resilience strengthening.

Perception about climate change	Yes	No	Do not feel any change
Have you/your family ever faced impacts of climate change	85.83%	12.60%	1.57%
Has water and soil salinity increased in the last 20-30 years?	88.19%	10.24%	1.57%
Has the temperature risen in the last 20-30 years?	94.49%	3.94%	1.57%
Has rainfall become more frequent and intense than what it was 20-30 years ago?	78.74%	18.90%	2.36%
Do you feel six distinct seasons in Bangladesh like what it was 20-30 years ago?	74.80%	23.62%	1.57%
Is winter getting shorter?	94.49%	3.94%	1.57%

3.2 Changing hazard patterns

Community perceptions of changing patterns of hazards were further cross-checked during the community risk profiling exercise (detailed in chapter 3 section 4.3). The Community Adaptation Committee's (CAC) hazard calendar exercise identified changing patterns over the previous 20 years (see Table **).



Climate Hazard	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	Changes
Salinity		←	←	←	←								Yes
			←	←	←								
Cyclone / High Tide									←	←	←		Yes
			←	←									
Heat Wave			←	←	←	←							Yes
				←	←								
Heavy Rainfall						←	←		←	←	←		Yes

* Previous Trend ←→

Current Trend ←→

Over the last two decades, the seasonal patterns of major climate hazards in the study area have shifted significantly, intensifying the community's vulnerability and complicating established coping strategies:

Salinity

- Previously, salinity intrusion mostly occurred from March to May, during the dry season when river flow was low and rainfall scarce.
- Now, the intrusion period starts earlier and lasts longer, from February through May, due to unpredictable rainfall and warmer, extended dry spells.
- This means families are exposed to salty conditions for a longer time, making it harder to get safe water and increasing risks to health.

Cyclone / High Tide

- Historically, cyclones and high tides mostly happened from March to April, matching the start of the pre-monsoon season.
- Currently, these threats now occur mainly from October to December, making the risk period much longer—often outside the old seasonal pattern.
- This change creates more uncertainty, causes extra damage to homes and infrastructure, and means communities must be prepared for disasters all year.

Rising Temperature

- Previously, extreme heat occurred mostly in March, April, and May, during pre-monsoon summer.
- Now, heat waves start in February and continue through May, creating a longer, earlier hot season.
- This trend increases health risks, lowers productivity, and puts more pressure on limited water sources.

Heavy Rainfall

- Before, heavy rains were mostly in May and June, at the beginning of the monsoon.
- Now, heavy rainfall happens both earlier and later—from April to May and again in October and November—bringing more irregularity and unpredictability.
- These changes cause more frequent flooding, overload local drains, and make farming harder to plan.

Implications for Community Adaptation

- All four hazards now start earlier, last longer, or happen out of usual seasons, as seen in local observations and studies.
- Old coping methods are not enough; new strategies for storing water, building homes, flood controls, and warning systems are needed.
- Adapting to these changing climate hazards requires urgent, localized solutions and stronger resilience across the community.

3.3 Climate vulnerability analysis by sector

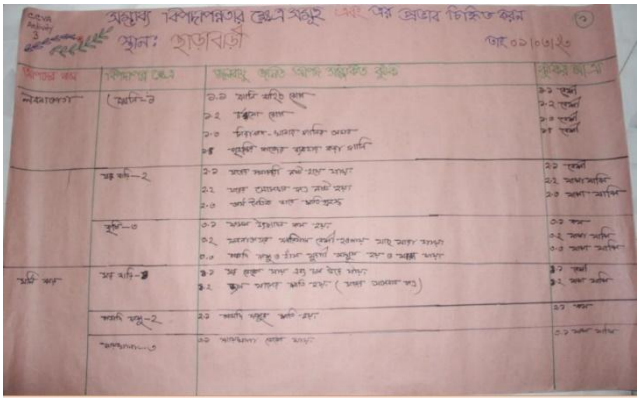
Based on comprehensive hazard identification and trend analysis, the community's vulnerability to climate change impacts was assessed across key sectors. The frequency, intensity, and shifting patterns of climatic hazards—such as salinity, cyclones, high tides, rising temperatures, and heavy rainfall—were analyzed to determine their effects on water, health, housing, road networks, drainage, sanitation, livelihoods, and livestock. The level of impact on each sector was evaluated to prioritize adaptation needs. A social map is being created to understand the community profiling.

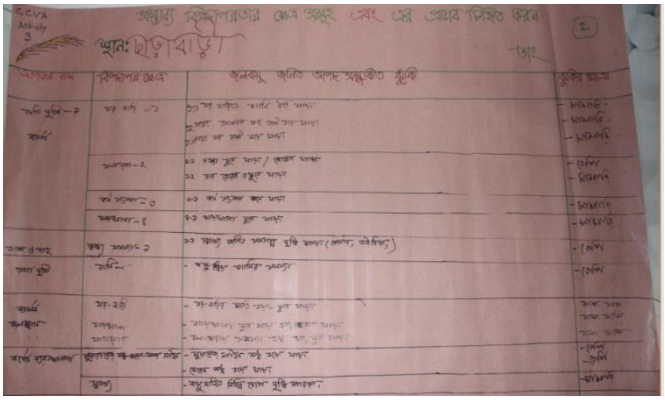
The settlement is located close to a major road named Rudra Mohammad Sohidullah, and south of the River Mongla. There is one big pond, 8-10 small to medium sized ponds (some capable of storing water and some not), a few shrimp enclosures and a few grocery shops in this community. Around five households, located near the major road, have individual water taps connected to Municipality supplied water.

Around half (61 of 114) households have individual toilets with the rest using shared toilets. The access roads within the community are mostly kutcha (earthen) roads or made of brick. There is a small, narrow, makeshift bridge made of bamboo which is used by the community to travel from one side of the stream to the other. The community is not connected to the Municipality central drainage system and does not have any garbage disposal facilities.

Climate Hazard	Vulnerable sectors	Impacts	Level of impact
Salinity	Water	Shortage of fresh drinking water Shortage of water for cooking and other household chores	High
	Health	Increase in the no. of water borne diseases, skin diseases and reproductive health related issues among women	High
	Housing	Peeling of plaster and paints	Medium
	Agriculture	Decrease in vegetable production	High
Cyclone and storm surge	Housing	Housing structures and assets get damaged	High
	Road network	Falling off of trees on the roads and subsequent damage	Medium
	Livestock	Lack of safe space for livestock	Medium
Rising temperatures	Health	Increase in no. of air borne and water borne diseases Increase in no. of heat strokes	High

Climate Hazard	Vulnerable sectors	Impacts	Level of impact
	Livestock	Increase no. of diseases among livestock and subsequent death	High
	Livelihood	Loss of productivity during extreme hot days	High
	Water	Drying of pond water and drop in water level Increase in salinity in pond water with lack of rainfall	High
Heavy rainfall	Housing	Housing structures get submerged and damaged Assets get damaged	Medium
	Drainages	Clogging of drainage network due to poor waste management and prolonged water logging	Medium
	Sanitation	The toilets get destroyed and waste water gets mixed with nearby ponds	High





3.4 Salinity

- Water: Families face a serious shortage of clean drinking water, and there isn't enough water for cooking or chores, especially during dry months—this is a high risk.
- Health: Waterborne diseases, skin troubles, and women's health issues increase due to salty water. The risk for health is high.
- Housing: Wall paint and plaster often peels off because of salt, causing a medium risk for home durability.
- Agriculture: Vegetable farming drops when soil is salty—this brings a high risk to food supply.

3.5 Cyclone and storm surge

- Housing: Homes and everything inside can get badly damaged or flooded during cyclones and storm surges, a high risk for families.

- Road network: Roads get blocked or ruined when trees fall during storms; this makes travel harder and is a medium risk.
- Livestock: It is not easy to keep animals safe in these hazardous times, which is a medium level of risk.

3.6 Rising temperatures

- Health: Hot weather causes more air and waterborne diseases and more heat strokes—this is a high risk for vulnerable people.
- Livestock: Livestock suffer more diseases and some may die from heat and poor conditions, making this a high risk.
- Livelihood: People can't work as much on very hot days, so lost income and job problems are high risk.
- Water: Ponds dry up, water levels drop, and salt builds up in water when rain is less—a high risk for community water security.

3.7 Heavy rainfall

- Housing: Heavy rains lead to flooding and house damage, which is a medium risk for families.
- Drainages: Poor waste management and long waterlogging clog drainage systems, causing a medium risk for the area.
- Sanitation: Toilets may break and dirty water mixes with ponds, raising a high risk for everyone's health.

4. PEOPLE'S ADAPTATION PLAN OF CHARABARI COMMUNITY

Following the identification of climate vulnerabilities in the community, a locally led process then went on to identify the potential adaptation solutions available. Solutions were prioritized based on the urgency of the need, and the available resources of the Municipality.

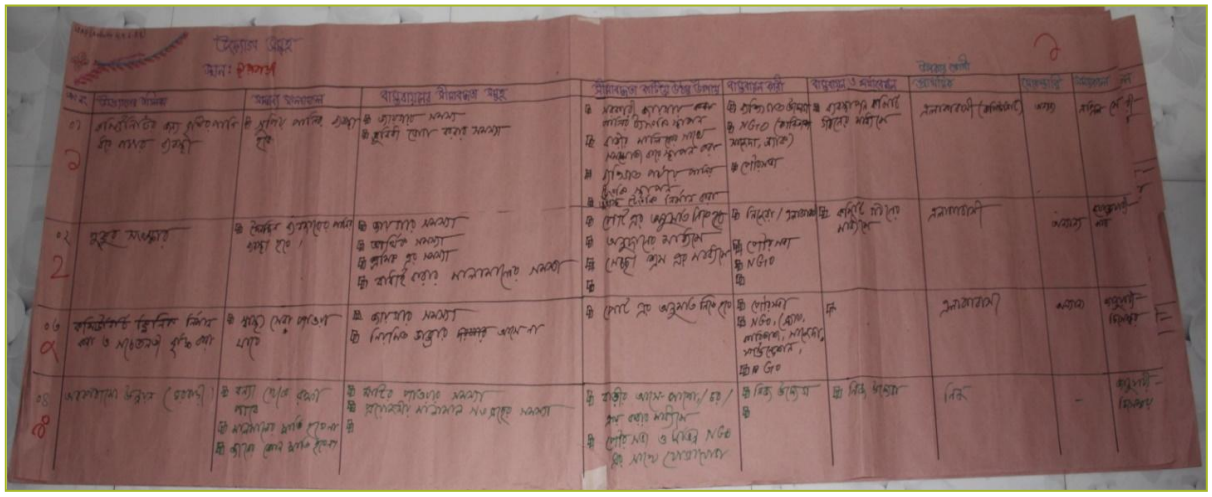
As water was identified as the most vulnerable sector, the two priority adaptation solutions identified for this problem were:

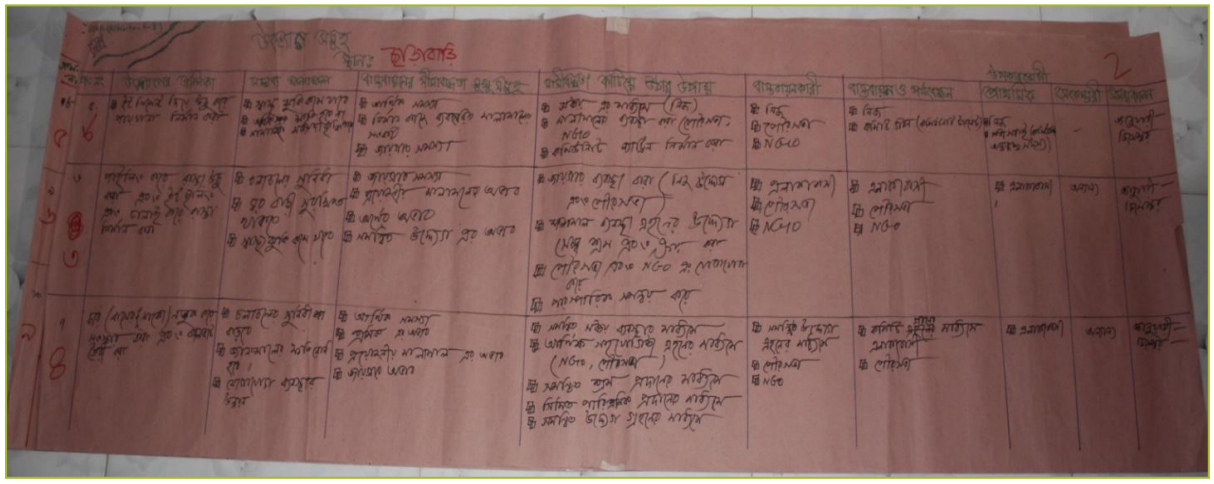
(i) provision of water tanks to store rainwater at community level, and
(ii) excavation of existing ponds.

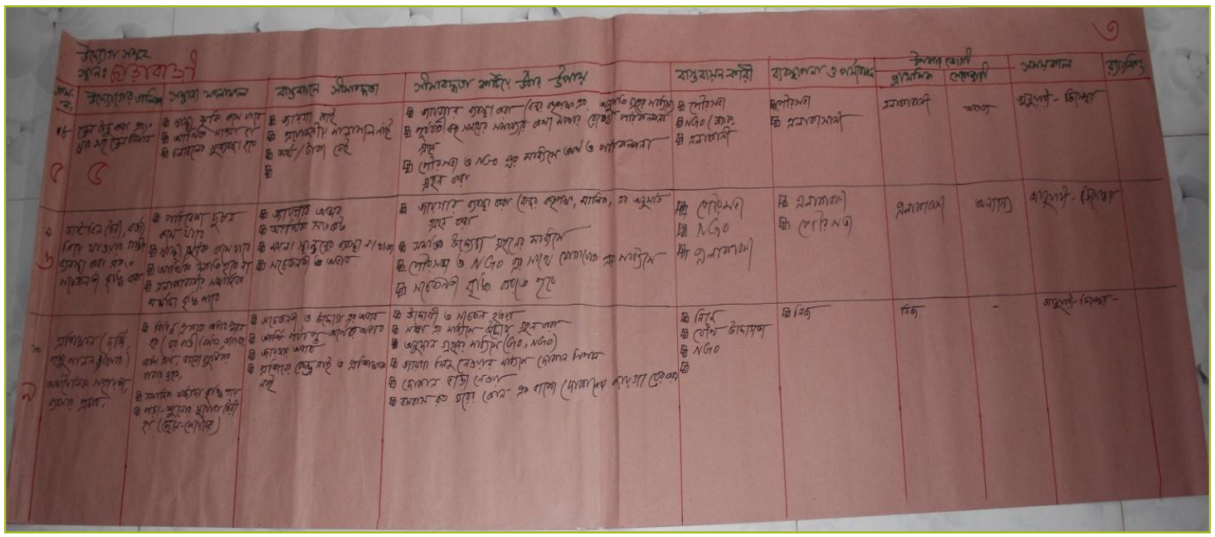
Regarding the sanitation sector, the construction of hygienic toilets was identified as the most urgent adaptation solution required.

After consultations across stakeholders, the community requested that the construction of toilets be prioritized over the water scarcity solutions, because there were at least (sub-optimal) strategies to deal with water scarcity. The new toilets were an absolute priority as the current sanitation facilities were putting health at huge risk, and resolving this issue is beyond their financial and technical capacity, plus requires approval from the Municipality and relevant Ministry. This view on prioritization from the community is just the kind of crucial direction which locally-led adaptation facilitates, helping to ensure the most important needs of the community are met first.

A detailed list of sector specific priority interventions, with further details such as expected execution entity and an approximate community perceived budget, is provided below.







Vulnerable Sector	Vulnerability	Solutions and Interventions	Priority	Implementation Challenges	Mitigation strategies	Implementers	Operation and Maintenance	Proposed timeframe for implementation	Approx. Budget (BDT)
Water	Lack of safe drinking water Lack of safe water for daily household chores	Provision of 100 thousand litre community level water tank to store rainwater.	1st	1. Finding space within communities 2. Convincing the Municipality 3. Lack of funds 4. Conflict over distribution of water from communal water tanks •	1. Secure permission from Municipality in advance 2. Engage with relevant govt. agencies/NGOs/development partners for fund 3. Formation of a committee to ensure equitable distribution of water	Department of Public Health Engineering, local NGOs	Community	Dry season (Dec-Mar)	2565024 USD: 22,036
		Re-excavation of a pond with raised pavements	3rd			Municipality	Community and Municipality	Dry season (Dec-Mar)	1278900 (estimation for 1 pond) USD: 10987
Sanitation	The toilets get destroyed and waste water gets mixed with nearby ponds	Construction of hygienic toilets on raised plinths at household level	2nd	1. Lack of fund 2. Often less prioritized by community members over other pressing issues	1. Encourage community members to save money. 2. Collective efforts from local NGOs to fund.	Individual families	Individual families	Dry season (Dec-Mar)	1965000(estimation for 30 toilets-1 for every 3 households. USD: 16,881
Housing	Housing structures get submerged and damaged during cyclones and storm surges	Elevating and renovating houses	9th	1. Lack of technical knowledge; 2. Shortage of space 3. Lack of durable construction materials in the locality	1. Arrange technical training for community members 2. Negotiate with Municipality in sourcing construction materials	Individual families with support from the Municipality	Individual families	Dry season (Dec-Mar)	185000 (approx. budget for building one structure) (for each housing) USD: 1590
Livelihood	Lack of alternative livelihood opportunities	Introduce training for non-farm alternative livelihood opportunities (tailoring, livestock, small	8th	4. Lack of initiatives from concerned govt. agencies	1. Municipality to play a central role to negotiate with the three agencies and arrange training 2. NGOs and govt.	Department of Youth Development, Department of Women Affairs	Department of Youth Development, Department of Women Affairs	Throughout the year	500000 (estimation for 2 trainings) USD: 4295

Vulnerable Sector	Vulnerability	Solutions and Interventions	Priority	Implementation Challenges	Mitigation strategies	Implementers	Operation and Maintenance	Proposed timeframe for implementation	Approx. Budget (BDT)
		business) and provision of seed funding			agencies to work together to increase number of training opportunities. 3.	NGOs	NGOs		
Road network	The road are submerged in water and damaged during cyclones, storm surges and heavy rainfall	Build elevated, long term durable roads with concrete	7th	1. Possible eviction of communities from the selected site for the road/drain construction 2. Lack of Funds •	1. Provide compensation to affected families 2. Negotiate with Municipality for Fund from their development budget. 3. Municipality to engage with relevant govt. agencies/NGOs/development partners for fund	Local Government Engineering Department, Municipality, Communities	Communities, Municipality	Dry season (Dec-Mar)	912000(for 200 meter road) USD: 7835
		Renovation of existing bamboo bridge and culvert construction	5th						250000 USD: 2148
Livestock	Increase no. of diseases among livestock and subsequent death	Provision of veterinary health services	10th	1. Lack of experience veterinary doctors. 2. Lack of funds	1. Municipality to engage with Department of Livestock 2. Department of Livestock to initiate health checkups for livestock.	Department of Livestock	Communities	Throughout the year	-
Drainage	Clogging of drainage network due to poor waste management and prolonged water logging	Construction of elevated drainage network with slabs	4th	1. Possible eviction of communities from the selected site for the drain construction 2. Lack of Funds 3. No formal	1. Provide compensation to affected families 2. Negotiate with Municipality for Fund from their development budget. 3. Municipality to	Local Government Engineering Department, Municipality, Communities	Community, Municipality	Dry season (Dec-Mar)	611400(estimation for 100 meter drainage network) USD: 5252

Vulnerable Sector	Vulnerability	Solutions and Interventions	Priority	Implementation Challenges	Mitigation strategies	Implementers	Operation and Maintenance	Proposed timeframe for implementation	Approx. Budget (BDT)
		Provision of area wise dustbins	6th	garbage collection service from the Municipality	engage with relevant govt. agencies/NGOs/ development partners for fund 4. Municipality to procure dedicated vehicles and engage community members for garbage collection	Municipality, Communities		Throughout the year	179640 (for 4 dustbins) USD: 1543
Total Budget (BDT):									84,46,964

5. IMPLEMENTATION OF PRIORITY ADAPTATION SOLUTIONS

Following the finalization of the People's Adaptation Plan, the Community Adaptation Committee (CAC) engaged with the Municipality, ward councilors, and project partners to expedite implementation of the top-priority water-related interventions. Recognizing the community's vulnerability, the Mayor and ward councilors sought assistance from the Global Center on Adaptation (GCA) and BRAC to enhance local water security.

In response, GCA and BRAC funded the installation of 2,000-liter water tanks with filters for 55 highly vulnerable households, investing USD 16,400. For the remaining 42 households that lacked space for individual tanks, the CAC collaborated with the Ward No. 9 Councilor to identify five communal locations in Uporer Char, where seven 5,000-liter water tanks were installed to serve these families. This phase was completed between March and June 2024, with an additional USD 7,950 investment from GCA and BRAC.

While sanitation, drainage, and road repair interventions ranked next in priority, community members and CAC representatives agreed that these should be implemented by the Municipality and the Local Government Engineering Department (LGED). Negotiations are ongoing to secure support for these sectors.

Meanwhile, community members requested livelihood diversification training to strengthen economic resilience. Responding to this, GCA and BRAC organized a training on urban agriculture in November 2024, facilitated by the Upazila Krishi Officer with an investment of USD 1,000. The training focused on saline-tolerant crop varieties, sack gardening, seedbed preparation, organic pest management, and crop care techniques. This initiative successfully encouraged more families to practice urban agriculture, improving both household nutrition and food security within Charabari Community.

Annexes

- Maps (climate risk maps, infrastructure, land use)
- Workshop reports
- Stakeholder matrix
- Data tools used (e.g., GEE outputs, VRA matrix)
- Draft policies or bylaws proposed
- Gender and youth inclusion strategies