BANGLADESH
SHELTER CLUSTER
Coordinating Humanitarian Shelter and Settlements

Eastern Floods

Shelter Damage and Needs Assessment

01 October 2024




Concerted efforts of

Shelter Cluster Bangladesh is profoundly grateful to its partners for this assessment, and it is an outcome of a concerted effort involving partners. The way partners have collaborated in such a short time alongside their ongoing work, it is remarkable and demonstrate that everyone is committed to alleviate the loss of affected population.

Content

Shelter Cluster Bangladesh

The goal of the Bangladesh Shelter Cluster is to provide people affected by disaster with the means to live in safe, dignified, and appropriate shelter.

The Bangladesh Shelter Cluster works with everyone who is involved in providing shelter and basic household items. These Shelter Cluster partners include the government, UN agencies, international and local NGOs, civil society organizations, the Red Cross Red Crescent Movement, academia, and donors. The Cluster also provides a forum to liaise with the media, the private sector, and other actors with a stake in the provision of humanitarian shelter.

The Shelter Cluster helps all shelter actors work together better, so that the people who need shelter assistance get help faster and receive the right kind of assistance. The shelter cluster makes every effort to involve the affected people and their communities in decisions related to the shelter response.

The Shelter Cluster is a global mechanism that is supported by many different organizations. In Bangladesh the Shelter Cluster is led by the Ministry of Disaster Management and Relief (MoDMR) and supported by IFRC and UNDP as co-lead.

Shelter Cluster supports and coordinates humanitarian response in cluster activated countries. Shelter Cluster ensures the six core functions as defined by the Inter-Agency Standing Committee (IASC) including accountability towards affected populations as the seventh one. Shelter clusters strengthen country-wide preparedness and technical capacity to respond to a humanitarian emergency through improved coordination at national and sub-national levels.

Preface

Since August 21, 2024, heavy monsoon rains, combined with low pressure over the Bay of Bengal and extremely heavy rainfall in the neighboring Indian states of Meghalaya and Tripura, have led to a sudden rise in water levels in the Gomti, Muhuri, Feni, and Halda rivers, causing a flash flood across 11 districts in Bangladesh. Cumilla, Feni, Noakhali, Lakshmipur, and Khagrachari are the hardest-hit areas. Approximately 5.8 million people have been affected by the flooding including around 3.05 million females, 72,467 people with disability, 0.59 million infant and child (age 0-4 years), 1.77 million child and adolescent (5-19 years), 0.47 million elderly population (age 60+), 78,362 pregnant and lactating women[1]. Around 4.5 million Kutcha and Jhupri houses, which are common in the affected districts, remain vulnerable to further damage and destruction. As of 11 September 2024, a total of 26,991 houses are destroyed, and 307,443 houses are partially damaged[2]. In the 11 affected districts, 71 people have died, and 311,419 hectares of land have been flooded, according to the Department of Agricultural Extension (DAE). Rural roads, agricultural fields, and fishponds are submerged, cutting off access and livelihoods. Power outages and limited connectivity are hindering communication efforts. As of August 26, 4,624 kilometers of roads across 12 districts have been damaged, disrupting road and rail links between Dhaka and Chattogram. Over 7,000 schools are closed, impacting the education of an estimated 175,000 primary students.

The walls and roofs of rural houses in this region are mainly made of corrugated iron sheet and the floors are usually made of mud. Some places have mud houses. Mainly due to flood these types of houses have suffered the most damage. Due to the long-standing water of the flood, the mud houses were destroyed, and a lot of mud was formed inside the houses. The walls of the house are severely damaged by water and in most cases are not suitable for reuse. The height of the water was 6-7 feet at some places, as a result of which the household essentials were completely destroyed, and the cooking utensils were also damaged. It is noteworthy that many local families use earthen stoves, which have been destroyed by floodwaters.

Immediate shelter needs include cash support for reconstruction, tarpaulins or tents, shelter toolkits, corrugated galvanized iron sheets, bamboo, timber, and other non-food items (NFI) at the household level. These NFIs include solar lighting solutions, clothing, mosquito nets, kitchen utensils, and basic bedding, stove.

[1] NDRCC Report, SOS form, Government-led cluster information (This breakdown is from the 2022 census and the MISP calculator). DLS & DPHE
[2] (D form and SOS form September 2024, MoDMR)

Objectives of the assessment

The main objective of the Shelter Damage and Needs Assessment is to identify the housing damage at the community level for Floods 2024 and to determine the current key immediate needs for shelter assistance in the affected areas. To achieve this, the assessment has the following specific objectives.

1. To know the patterns of house damage and the local housing typology of the most vulnerable population in the affected areas.

2. Assessing the capacity of affected communities to cope with damage and seeking their views in determining mitigation measures.

3. To determine the challenges faced by affected communities during and after floods.

4. To know the existing market situation of house building materials and potential costs associated with building a house and the skills of local mason and carpenters.

5. To determine the most relevant and significant support for humanitarian assistance to the most vulnerable affected population.

Scope, methodologies and limitations

A holistic approach was adopted for conducting the assessment. To collect and triangulate data, this assessment uses qualitative and quantitative methods, with the primary objective of knowing the housing damages and current key needs of the vulnerable population in flood 2024 affected areas. The assessment followed three approaches; are Key Informant Interview (KII) with concerned Government officials in District and Sub-districts levels and at the community level the assessment approaches were Focus Group Discussion (FGD) and Households (HHs) survey.

A total of 6 KIIs have been conducted at 5 districts, 5 FGDs were conducted at 5 different communities and 254 HHs surveys have been conducted at 76 villages at the community level.

Data collection for the assessment began on 10 September and ended on 20 September 2024. The collected datasets were stored in Kobo and were extracted to MS excel to clean, process, analyze and visualize the datasets. Potential errors in specific variables or the values themselves were identified and corrected.

This assessment has some limitations. It has been accomplished at all locations where Shelter Cluster Bangladesh partners are present. Considering the extent of the flood the sample size of the assessment is very short. The extent of the 2024 floods was across the entire eastern region, but this assessment only provided information on vulnerable people at the village levels across the affected areas.

Key findings from assessment

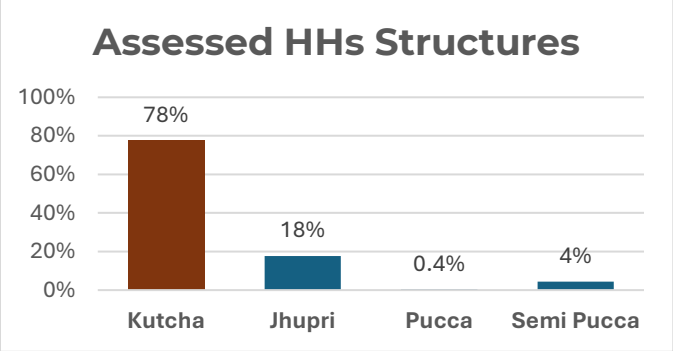
- Majority of the houses at the assessed areas are severely affected.
- People are living in unsafe and makeshift houses.
- Assessed 78% of the houses are kutcha[3].
- 31% of assessed households' income depends on daily wage-based work.
- Assessed 50% of households took shelters in friends, relatives and neighbors houses.
- Current average monthly income of the assessed HHs is less then BDT. 5,000 (Approximately US$ 45).
- Peoples are not able to repair their houses by their own effort. Along with Government, Humanitarian agencies support is essential at affected areas.
- Assessed 92% of households asked for Corrugated Galvanized Iron (CGI) sheet and 81% asked for cash support.
- Assessed 24% of households have asked for essential household items support.
- Usually, peoples use 30 pcs of Corrugated Galvanized Iron (CGIs) on roof.
- BDT. 40,000-60,000 will be required for repairing the houses (Approximately US$ 350-525).
- Market is functioning and house repairing materials are available in local markets.

Current key Immediate Needs at community level based on HHs survey, FGDs and KIIs:

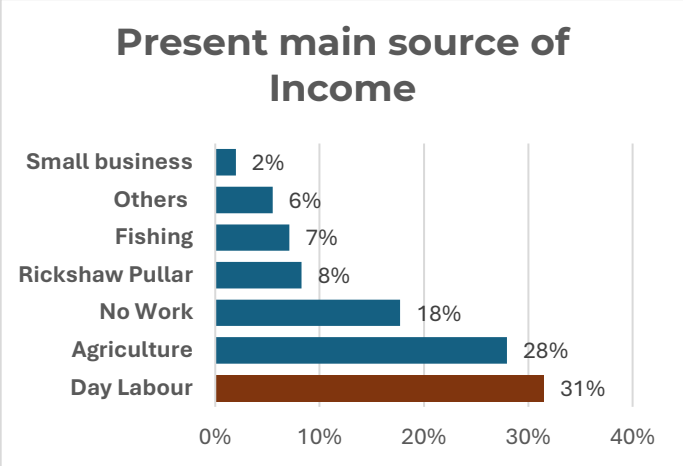
- Corrugated Galvanized Iron (CGIs)
- Cash Support
- House repairing materials
- Bamboo
- Plinth raising initiatives
- Long term housing support program
- Essential HHs items

[3] Houses are made of CGI/Bamboo/mud/tiles known as kucha house.

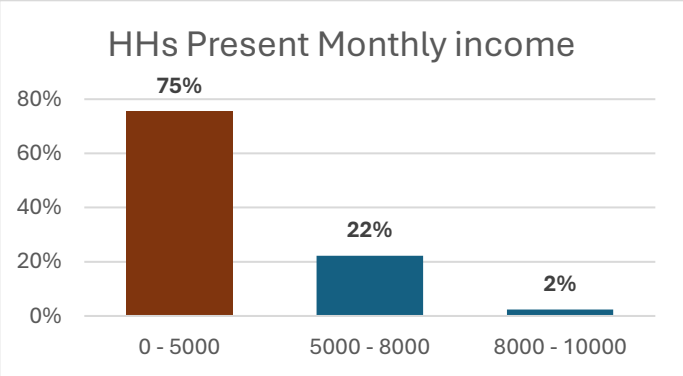
Household assessment findings



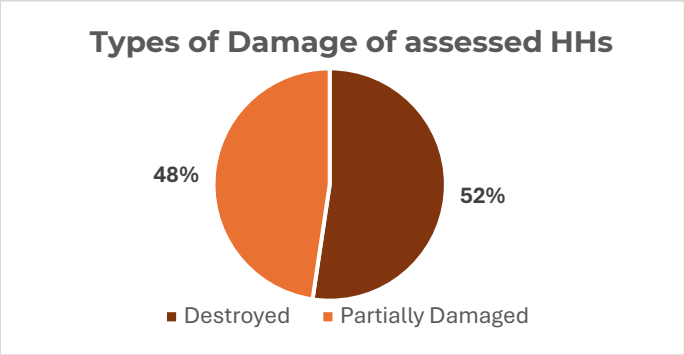
Assessed HHs Structures: In carrying out this assessment priority has been given to most affected households by the floods. Most of the assessed HHs are Kutch and Jhupri. A total of 254 HHs were interviewed through the assessment, of which 17% are ethnic population. Also, preference given to women headed HHs, which is 20% of assessed families.



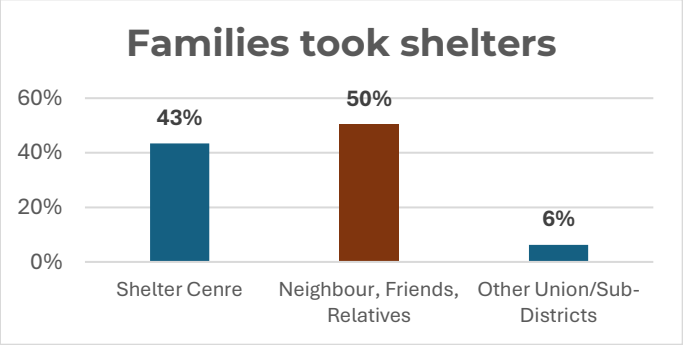
Present main source of income: Through the assessment, it is sought to know about the current source of income of the families. It is observed that the main source of income for most of the households assessed is daily wages, which is 31% of total assessed HHs. 28% of the households income is agricultural work which includes livestock rearing. It is noticed that there are a large number of households that are basically not involved in any work after the post-flood period, it is 18% of the assessment.



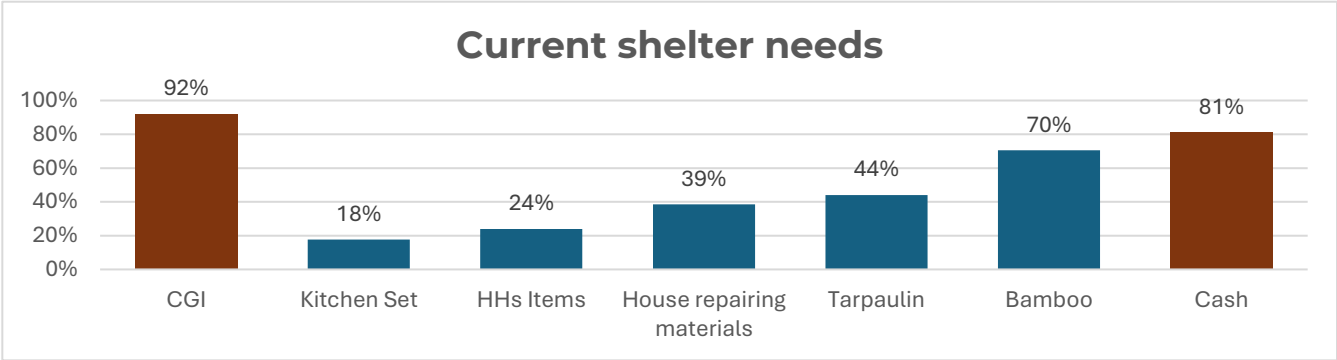
HHs Present Monthly Income: The monthly income of the households decreased significantly after the floods. In the Household Income and Expenditure Survey 2022, the monthly average income of the households in rural level is 26,163, but in the assessed households, it is noticed that 75% of the households have a monthly income of BDT. 5000. The main reason for this is the problem of getting work done in floods, also, families are unable to do agricultural work as large areas are still under water. Livestock rearing is one of the main income source of the families in rural areas, floods have caused heavy damage to this sector and the income of families from this sector has stopped. Families are unable to cope with post-flood crisis on their own due to reduced income.



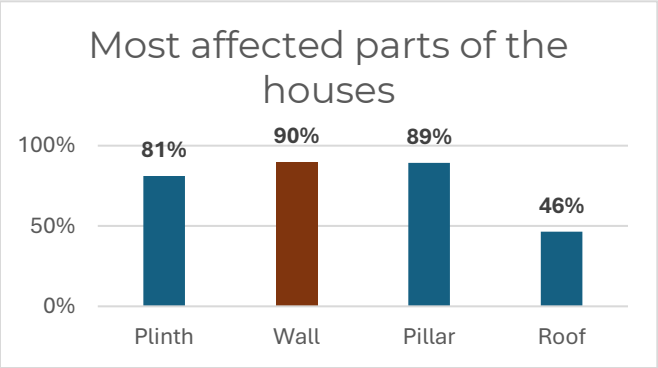
Damage pattern: Assessed households have affected in some way. It should be noted that the assessment is done in the most affected communities. It was observed that, assessed 52% of houses were completely destroyed, these are mainly made of CGI and mud.



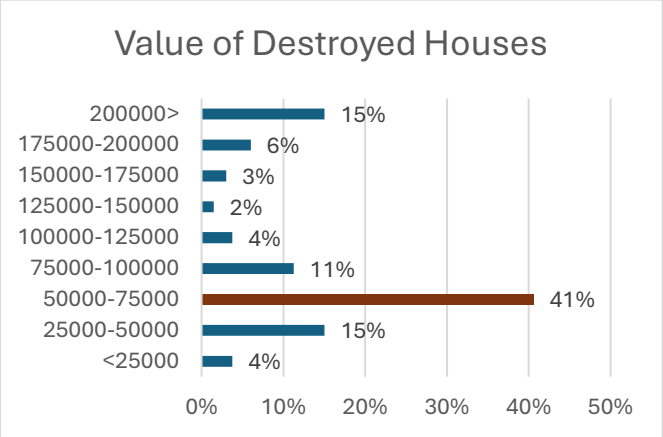
Families took shelter: 99.6% of the assessed households were affected by the flood and 95% of them took shelter elsewhere. 50% of assessed households took shelter in the house of their friends, neighbors or relatives. They were able to take shelter as these types of houses were concrete buildings. Also, 43% of households went to shelter centres, which are mainly educational institutions.



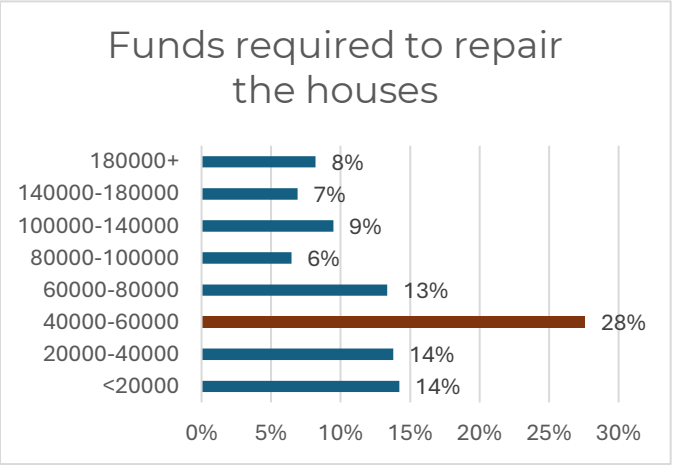
Current Shelter needs: Households gave highest preference to Corrugated Galvanized Iron (CGI) sheet and cash assistance as a means of house repair in emergency situations. Local houses are mainly made of CGIs and such houses have been severely damaged by floods. Hence, in time of emergency, the assessed households have expressed their unwavering support. Also, they need cash support for house repair, through this cash they will buy necessary materials for house. Households whose houses have been partially damaged have reported an urgent need for house repairing materials. A significant number of households reported the need for household essentials and cooking utensils. In this assessment 74% of households mentioned needing both cash and in-kind support.



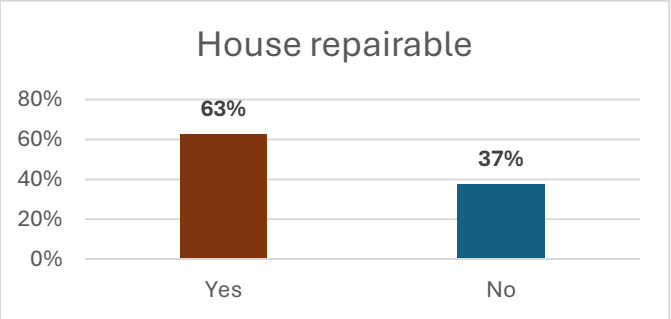
Most affected parts of the houses: A house is divided into four parts for collecting assessment data for houses, wall, plinth, roof and pillars. Through the assessment, it can be seen that the most damaged parts of the houses are the walls. Most of them are made of CGI, 90% of the assessed houses have damaged the walls, pillar damaged in 89% of the houses and plinth damaged of 81% of the houses.



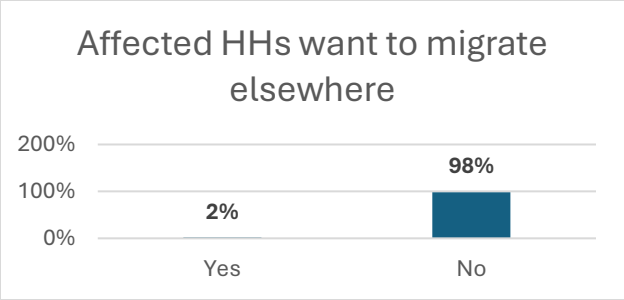
Value of destroyed houses: Through the assessment households are asked about the value of houses that have been completely-destroyed. It is observed that 41% of the households reported that their houses were worth BDT. 50,000-75000. These include CGI made house, mud house and bamboo wall houses. 15% said their houses worth between BDT. 25,000-50,000.



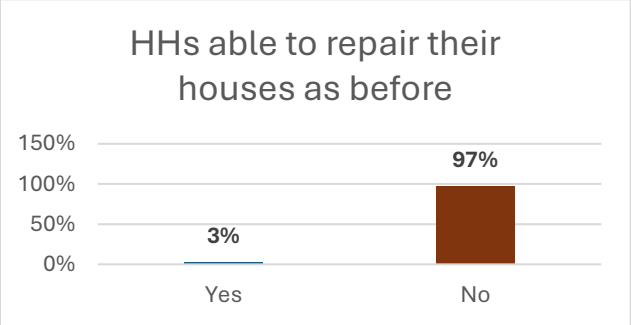
Funds required: Through the assessment, partially damaged household asked how much funds they might need to repair the houses. 28% of the said they need BDT. 40,000-60,000 for their house repairs. 13% said they need BDT. 60,000-80,000 and 14% said they need BDT. 20,000-40,000. Through this they will purchase new materials as well as use damaged house materials.



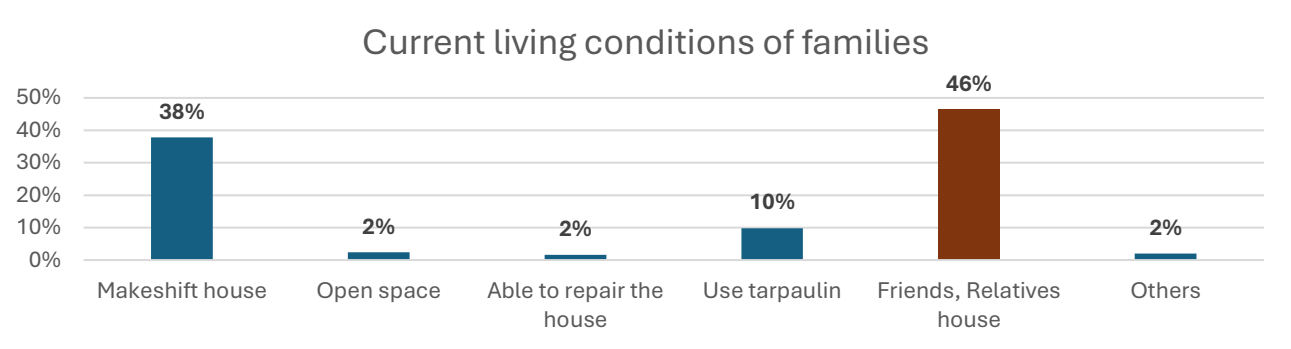
Present House conditions: Through the assessment household asked that their houses are repairable or not. 37% of households said that their houses are not repairable. That means houses are damaged in such a way that these cannot



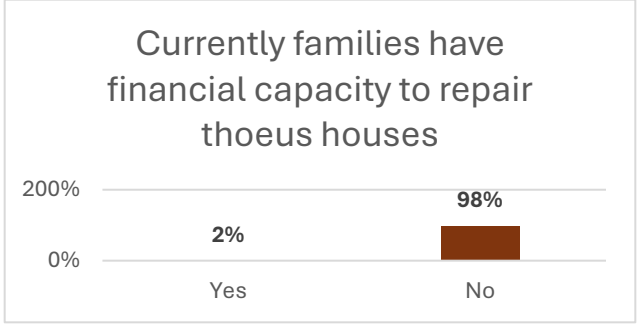
Migration: Assessed 98% household said that they do not want to migrate from their own land.



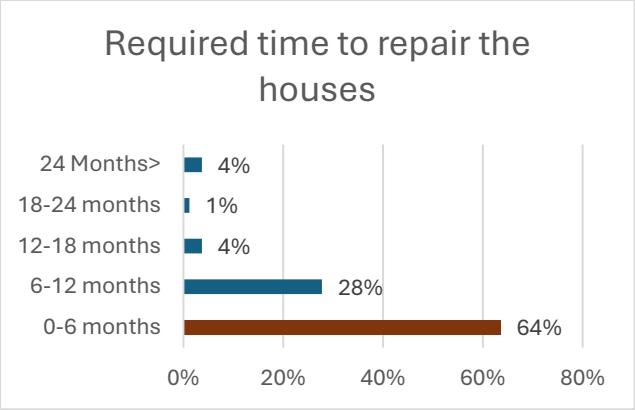
Present status of houses: 97% of assessed households have not yet been able to repair their houses. Essentially, their livelihoods have been severely impacted and their incomes have significantly decreased. So they have not been able to repair their houses as before.



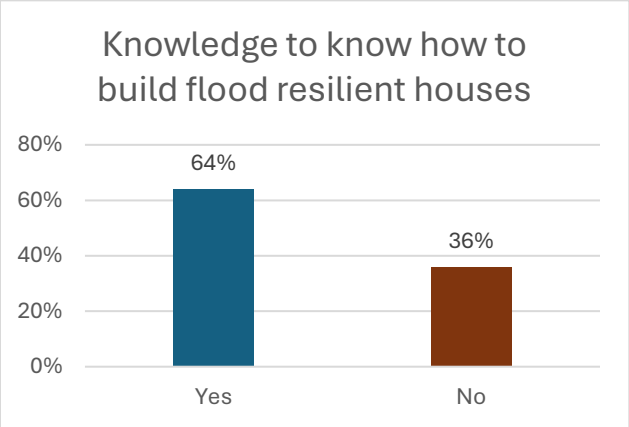
Current living conditions: A significant number of people are still unable to return to normal conditions after the flood. There are many people who are staying away from their houses. Through the assessment, it is observed that 46% of households are still staying their friends, neighbor or relatives' houses. Basically, they are not yet able to repair their own houses. 38% of households are making makeshift houses, they are basically living in makeshift houses made from damaged house materials. 10% of households are living using tarpaulin and only 2% of households have been able to repair their houses.



Financial Capacity of families: Through the assessment we noticed that the income of the families has decreased significantly. Therefore, they are not able to start repairing their houses. In this case, it was asked through the assessment whether they could repair their own houses, in this case 98% of the households said that currently they do not have the financial ability to repair the houses. They basically need external support.



Time to repair houses: The assessment has shown that most of the households have not been able to build their houses so far. Given the current situation of the families, they are not able to build houses as before. Through the assessment, they asked how much time they needed to repair the house, 64% of households said they would need 6 months, but not as much as before.



Knowledge on flood resilient houses: Through the assessment, households asked whether they knew about the ways to build flood-resilient houses. In the regard 64% of households said they are aware of the characteristics of flood resilient houses.

Focus Group Discussion (FGD) findings

A total of 92 participants were present in the FGD, out of which 74 were male and 17 were female. The participants of the FGDs were determined to include men and women members of the teachers, masons and carpenters, religious leaders, businessmen and community people of the villages.

The main reason for severe damage in 2024 is that the community people did not have any kind of forecast and most of the areas were submerged in a very short time the unprecedented level of flood waters and people not being able to decide what to do immediately due to their lack of experience of such a terrible flood.

- Through focus group discussions, based on the 2024 flood experience, the challenges faced by the locals during and after the flood are discussed, which are:

Challenges faced during the Flood

- Living at home
- Saving life
- Saving livestock
- Drinking water
- Markets were not functioning
- Severe food crisis
- Distorted the livelihood opportunities
- Losses of stored food
- Collapsed the communication system
- Livestock food crisis and living
- Collapsed of the sanitation facilities

Challenges facing after the Flood

- House repairing
- Facing the crisis of losing the household items
- Living condition
- High price of essentials
- Decrease the income and lack of income opportunities
- School dropout of students
- Severe situation of sanitation facilities
- Diseases

- Through the FGDs, some specific information regarding the houses of the locals has been revealed:
  - The materials that the locals use to build houses
    - **Roof and fence:** Most households use Corrugated Galvanized Iron (CGIs)
    - **Frame:** Bamboo and timber used by the people
    - **Pillar:** The majority of the house pillar made of concrete, but bamboo pillars are used in some areas.
    - **Plinth:** Most of the house's plinths are made of mud.

  - **Materials details used in the houses**
    - People are using 30 number of pieces CGIs on the roof and the length of the CGIs is 8-10 feet and the width is 2.6 feet.
    - 40 numbers of pieces CGIs use in the wall and the length of the CGIs is 8 feet and width is 2.6 feet.
    - Around 20 numbers of pillars use in the house. Based on the discussion, sufficient number of masons and carpenters are available in the community, but they are only used to building houses in the traditional way. They need training to build flood resistant houses.

- Most of the community people depend on masons and carpenters to build their houses.

- Average BDT. 18,000 is needed to build a new house as remuneration of mason and carpenters. Usually, 10-15 days are required to build a new house upon the availability of mason and carpenters.
- Necessary house repairing materials are available at local union markets.
- Based on the topography, geographic location, distance, roads condition the lowest transportation cost to carry the house materials is BDT. 5,000 and the highest cost is BDT. 15,000.

Key Informant Interviews (KIIs) findings

KIIs reveal the present market situation of house building materials and the kinds of assistance that are currently needed in the affected areas. Besides, it was found out how many shelters were opened in the Sub-districts level and how many people had taken to shelter there. Also, the number of houses damaged in the Sub-district and the amount of total financial loss have also been known.

- To alleviate the shelter crisis, along with Government the humanitarian agencies' supports are essential at the community level.
- Most of the markets at the Union levels have an adequate supply of house materials.
- Longer term house construction support is essential for vulnerable people
- House repairing materials, tarpaulin, plinth raising initiatives, CGI sheet, Cash support, Kitchen sets are required at this moment at the community level

Important links

Bangladesh Shelter Cluster Guidelines 2022

Bangladesh Shelter Cluster Guidelines 2015

Humanitarian Response Plan

Annexures

Questionnaires

Geographical Coverage of HHs assessment

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Visit: https://sheltercluster.org/geographic-region/bangladesh to get updates on Shelter activities in Bangladesh.