BANGLADESH SHELTER CLUSTER
Coordinating Humanitarian Shelter and Settlements

BANGLADESH

Shelter Vulnerability and Capacity Assessment

Shelter Cluster Bangladesh

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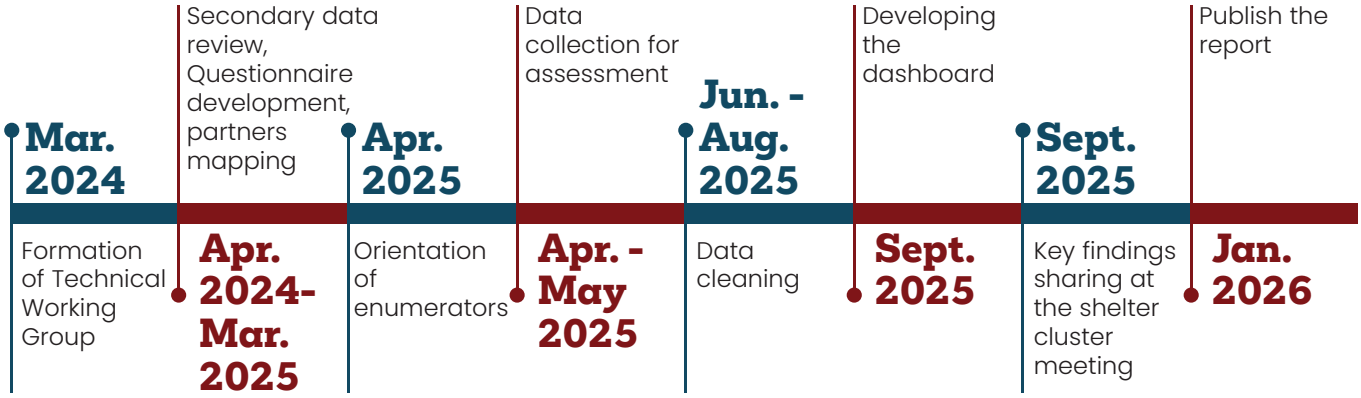
Timeline of the assessment



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Foreword

Alberto Bocanegra
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IFRC

It is with great honor and enthusiasm that the Shelter Cluster Bangladesh presents the Shelter Vulnerability and Capacity Assessment Report. This critical study offers valuable insights into the shelter-related challenges faced by disaster-affected communities across the country and highlights the resilience, capacities, and aspirations of those living on the frontline of climate-induced disasters.

Bangladesh remains among the most climate-vulnerable countries in the world. Each year, millions of people are affected by cyclones, monsoon floods, and flash floods, events that disrupt lives, destroy houses, and undermine livelihoods. These recurring hazards continue to test the resilience of communities, particularly those already living in conditions of poverty and marginalization.

This assessment, undertaken through an extensive field engagement and collaboration among the Shelter Cluster partners in Bangladesh, provides critical evidence to inform national planning, strengthened shelter standards, and will allow guide humanitarian actors towards more inclusive and sustainable responses. It sheds light on the lived experiences of affected households: their exposure to risks, coping strategies, recovery pathways, and the urgent need for coordinated support to enhance long-term resilience.

The International Federation of Red Cross and Red Crescent Societies (IFRC) is proud to co-lead the Shelter Cluster Bangladesh alongside the Ministry of Disaster Management and Relief (MoDMR) of the Government of Bangladesh (GoB) and UNDP.

This report stands as both a reflection of our collective effort and a call for action. It urges government institutions, humanitarian and development partners, the private sector, and communities themselves to collaborate in building safer, stronger, and more resilient shelter systems that can withstand the increasing impacts of climate change.

I extend my sincere appreciation to all partners, volunteers, and technical teams whose dedication and expertise made this assessment possible. Together, we reaffirm our shared commitment to safeguarding lives, protecting dignity, and fostering resilience for the most vulnerable.

Executive Summary

In response to the persistent threat of disasters caused by natural hazards across Bangladesh, the Shelter Cluster Bangladesh conducted a comprehensive Shelter Vulnerability and Capacity Assessment vulnerable to natural hazards. This strategic initiative aimed to illuminate the underlying vulnerabilities of households and evaluate community resilience in the face of recurring hazards such as cyclones, monsoon floods, and flash floods. The findings are intended to inform the revision of national shelter standards and guide humanitarian actors in designing more effective, community-centered shelter interventions.

The assessment uncovered a landscape marked by widespread structural and socioeconomic fragility. A significant majority of households reside in highly vulnerable shelter types—69% in Kancha[1] and 25% in Jhupri[2] structures—which offer minimal protection against hazards. Alarmingly, 98% of surveyed households have experienced at least one disaster in the past five years, with an equal proportion reporting damage to their shelters. The socioeconomic profile of these communities further compounds their vulnerability: 84% of households earn less than BDT 12,000 (Approximately USD 100) per month, and nearly half depend on daily wage labor. 22% of shelters have lack adequate living space, and two-thirds of households' report discomfort while sleeping, underscoring the urgent need for improved shelter conditions.

Access to essential services remains critically limited. Only 25% of households have food storage capacity, and 74% lack proper waste disposal systems. Electricity supply is erratic, with 50% of households receiving power for only one to seven hours daily. The impact of disasters is severe and often leads to damage, 65% of responders said their shelters were partially damaged and 35% said fully damaged of shelters. Recovery is predominantly self-financed, with 60% relying on loans, 24% on savings, and 42% resorting to selling assets. Notably, only 25% of households received any form of shelter support post-disaster, highlighting significant gaps in humanitarian response.

Market disruptions during emergencies further exacerbate household vulnerabilities. 94% of respondents reported price hikes in essential shelter materials and household items, such as Corrugated Galvanized Iron (CGI) sheets and kitchen utensils. Communities expressed clear preferences for assistance, emphasizing the need for durable materials (CGI sheets-92%, timber-79%, bamboo-73%, tie-down kits-73%) and toolkits (rope-93%, nails-67%, handsaws-64%, claw hammers-64%). Non-food items like sleeping mats (88%), blankets (71%), and lighting tools (84%) were also frequently requested.

Capacity building emerged as a critical recommendation. 78% of respondents advocated training local masons and carpenters, while 76% emphasized family-level preparedness. Regarding assistance modalities, 49% preferred a combination of cash and in-kind support, and 45% favored cash-only assistance, reflecting a nuanced understanding of community needs and preferences.

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1 **Kancha house:** A structure is defined as Kancha if its floor is made of soil or wood or any other material except brick/cement/concrete and roof is made of bamboo/golpata/palm leaves/chhan/straw etc. is defined as Kancha structure. Nevertheless, if the floor is made of cement/concrete/brick/ terracotta etc., but the wall and roof are made of any other material except cement/concrete/ brick/terracotta.
Source: Census 2022.

2 **Jhupri house:** A structure is defined as a Jhupri if its floor is made of soil or wood/bamboo/trunk etc. and the wall & roof are made of straw/ bamboo/chhan/golpata/palm leaves/polythene etc.
Source: Census 2022.

While the assessment offers valuable insights, it is important to note its limitations. Due to time and resource constraints, the study was not statistically representative and focused primarily on shelter-related issues, with limited exploration of other sectors such as Water, Sanitation and Hygiene (WASH), health, and education.

In conclusion, the findings underscore the urgent need for multi-sectoral, inclusive, and resilient shelter programming that addresses both structural vulnerabilities and socioeconomic fragility. The Shelter Cluster Bangladesh calls upon national stakeholders, humanitarian actors, and development partners to leverage these insights in shaping future shelter interventions that are community-driven, contextually relevant, and sustainably impactful.

Contents

Shelter Cluster Bangladesh

Following the Humanitarian Reform Process in 2005, the Shelter Cluster Bangladesh has been coordinating the sectoral support since 2007 after the super cyclone Sidr. In its subsequent phase, whenever the clusters in Bangladesh have been activated, Shelter Cluster Bangladesh has been coordinating the responses to betterment of the supports by its partners.

The goal of the Shelter Cluster Bangladesh is to provide people affected by disasters with the means to live in safe, dignified, and appropriate shelter. The Shelter Cluster Bangladesh collaboration with all stakeholders who are involved in providing shelter and basic household items. These Shelter Cluster partners include the Government, UN agencies, international and local NGOs, Civil Society Organizations, Bangladesh Red Crescent Society (BDRCS), International Federation of Red Cross and Red Crescent Societies (IFRC), IFRC network, 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.

In Bangladesh, the Shelter Cluster has been leading by Ministry of Disaster Management and Relief (MoDMR) and supported by IFRC and UNDP as co-lead.

The Government of People's Republic of Bangladesh has recognized the Cluster approach through its revised Standing Orders on Disaster (SOD) 2019. According to the SOD the Shelter Cluster Bangladesh is

1. Provide assistance to different ministries and departments in formulating Early Recovery Plans
2. Assess the needs for recovery
3. Provide assistance in formulating guidelines for emergency shelter management and reconstruction

The Shelter Cluster helps all shelter actors work together more effectively and efficiently, so that people who need shelter assistance receive the right kind of assistance and as fast as possible. The shelter cluster makes every effort to involve the affected people and their communities in decisions related to the shelter response.

Since 2012, the Humanitarian Coordination Task Team (HCTT) has been working as a coordination platform to strengthen the collective capacity of Government, national and international actors to ensure effective humanitarian preparedness for and response to the impacts of disasters in Bangladesh. HCTT is moving from a one-year strategy to a multi-year approach through the HCTT Nexus Strategy to better integrate humanitarian preparedness and response to development.

Under the HCTT Nexus strategy Shelter Cluster Bangladesh has provided the key actions for the preparedness, which has been strengthening the Shelter Cluster coordination mechanism.

Shelter Vulnerability and Capacity Assessment Approach

Objective of the assessment

The Shelter Vulnerability and Capacity Assessment is a community-driven process that captures the perceptions and experiences of residents. It gathers their insights and recommendations based on past experiences. The findings from this assessment will guide the selection of appropriate shelter support, inform the review and update of Shelter Standards and Guidelines, enhance community disaster preparedness plans, and help identify suitable housing typologies across different regions.

Specific Objectives

- To identify the shelter needs and priorities of disaster-affected communities through direct community feedback, ensuring that humanitarian interventions are responsive and appropriate.
- To support the revision of Shelter Cluster Bangladesh's shelter standards and guidelines by providing updated field data and community-driven recommendations.
- To document existing community-based disaster preparedness practices related to shelter, enabling humanitarian actors to align their planning with local strategies and capacities.
- To assess the extent of unmet shelter needs and understand how affected populations self-recovering through reconstruction or repair are using their own resources.
- To analyze geographical variations in shelter design and construction materials and assess current shelter conditions in high-risk areas to inform the development of context-specific shelter solutions.

Assessment Methodology

A comprehensive mixed-method approach was used to ensure accurate, representative, and actionable data collection. The methodology combined quantitative and qualitative techniques, supported by secondary data review and rigorous quality assurance measures.

Household Surveys: Structured questionnaires were administered through face-to-face interviews with household representatives, preferably heads of households or decision-makers. The objective was to capture quantitative data on shelter conditions, coping strategies, household demographics, and priority needs. A stratified random sampling strategy was applied to ensure representation across all affected areas.

Key Informant Interviews (KIIs): Purposive sampling was used to select individuals with specialized knowledge, such as teachers, elected representatives. These interviews provided qualitative insights into community-level challenges, coping strategies, and gaps in shelter response.

Focus Group Discussions (FGDs): FGDs were conducted to understand community perspectives, gender-specific needs, and cultural considerations. Groups of men, women, and vulnerable populations ensured inclusivity. Discussions were guided by structured tools to capture diverse viewpoints.

Secondary Data Review: Existing government reports, previous assessments, and cluster data were reviewed to triangulate findings and validate primary data, strengthening the reliability of conclusions.

Data Analysis: Quantitative data were analyzed using descriptive and comparative statistical methods, while qualitative data underwent thematic analysis to identify patterns and key issues.

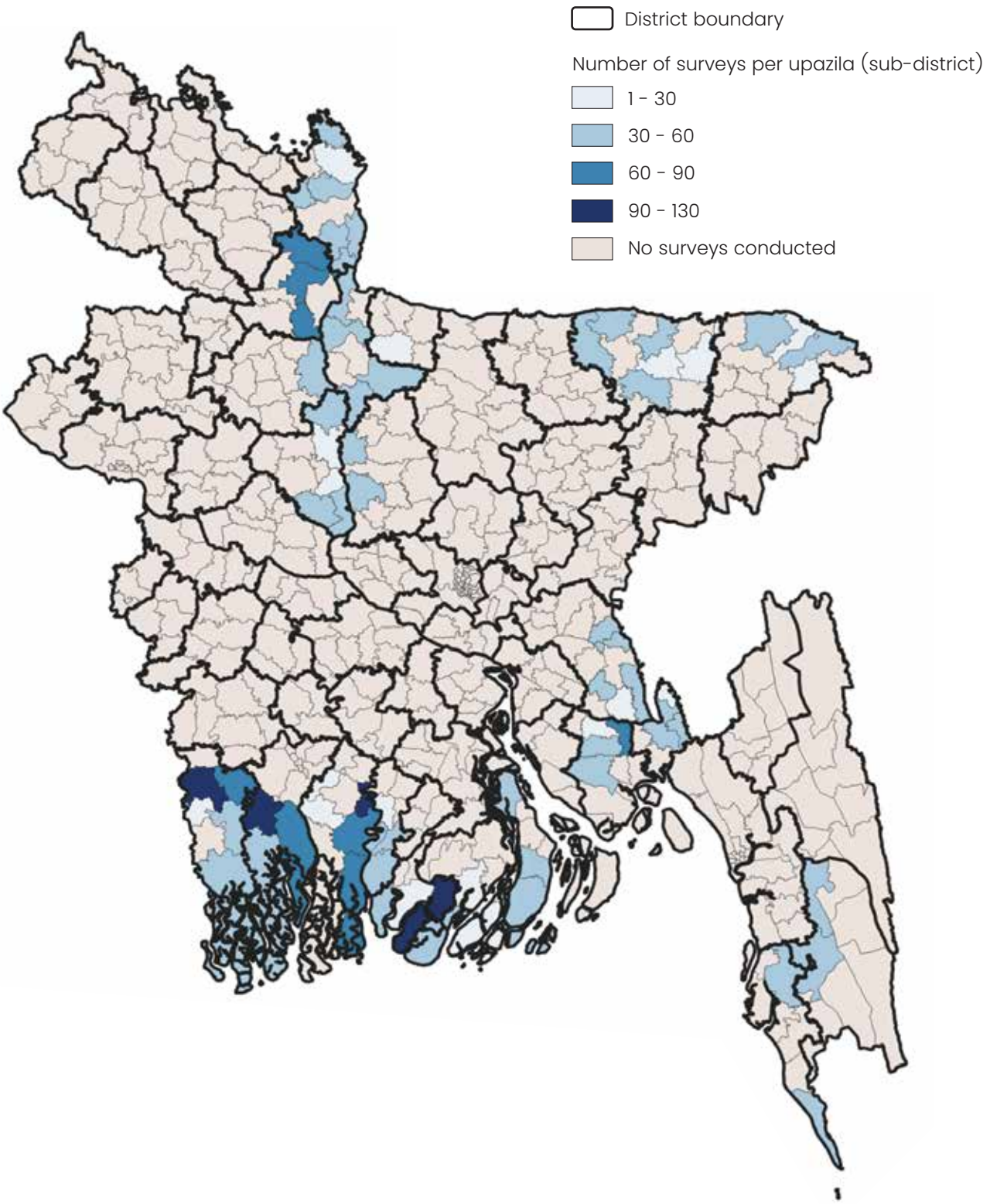
Quality Assurance: Enumerators and facilitators received training on tools and ethical standards. Field monitoring was conducted during data collection, and responses were cross-checked to ensure consistency. Triangulation across sources further enhanced validity.

Ethical Considerations: Informed consent was obtained from all participants, and data was anonymized to protect privacy. The assessment adhered to the principle of "Do No Harm," maintaining sensitivity to cultural norms and the needs of vulnerable groups.

Selection of location

Bangladesh is highly vulnerable to disasters caused by natural hazards, which affect millions of people every year. Different recurring events—such as cyclones, monsoon floods, and flash floods—severely disrupt lives and livelihoods, often diminishing the coping capacities of affected communities. In response to this ongoing challenge, the assessment focused on country's most prone to these specific hazards. The selection of priority areas was guided by two key criteria: the historical disaster data from 2015 to 2024, and the Bangladesh subnational INFORM Risk Index 2022, which provides a comprehensive analysis of risk levels across different districts. This targeted approach ensures that humanitarian efforts and resources are directed toward the most vulnerable populations, enhancing preparedness and resilience in high-risk zones.

Assessment areas:



District and Sub-districts:

Flood prone area	Gaibandha (Sadar, Saghatta, Sundarganj), Kurigram (Bhurungumari, Char Rajibpur, Chilmari, Sadar, Nageshwari, Rajarhat, Raumari), Jamalpur (Dewanganj, Islampur, Sadar, Sarishabari), Sirajganj (Belkuchi, Chauhali, Kazipur, Shajadpur, Sadar), Tangail (Bhuapur, Sadar), Bagura (Shariakandi).
Cyclone Prone Area	Cox's Bazar (Teknaf, Chakaria), Barguna (Amtali, Sadar, Patharghata, Taltali), Bhola (Sadar, Char Fasson, Lalmohan), Pirojpur (Bhandaria, Mathbaria, Indurkani), Satkhira (Assasuni, Sadar, Shyamnagar, Tala), Patuakhali (Galachipa, Kala Para), Bagerhat (Kachua, Morrelganj, Sarankhola), Khulna (Dacope, Koyra, Paikgacha).
Flash Flood Prone Area	Sylhet (Gowainghat, Kanaighat), Sunamganj (Chhatak, Derai, Dharmapasha, Sadar, Tahirpur), Banderban (Sadar, Lama), Feni (Chhagalnaiya, Sadar, Fulgazi), Noakhali (Begumganj, Sadar, Senbagh, Sonaimuri), Cumilla (Burichang, Chauddagram, Adarsha Sadar, Laksham).

The Survey:

- Data collection was carried out in selected districts and sub-districts across Bangladesh, chosen based on their history of disasters such as cyclones, monsoon floods, and flash floods. The assessment covered 67 sub-districts within 20 districts. Shelter Cluster partners identified the most vulnerable communities for data collection, drawing on their field experience.
- A total of 3,078 quantitative survey responses were collected as part of the assessment process, aiming to ensure a thorough and representative understanding of the conditions, vulnerabilities, and needs of at-risk households. This extensive data collection effort was designed to provide reliable insights that can inform evidence-based planning and targeted interventions.
- To gather additional insights, 84 Key Informant Interviews (KIIs) were conducted with key community stakeholders, including teachers, religious leaders, and elected representatives. Additionally, 24 Focus Group Discussions (FGDs) were held at the community level to explore collective perspectives and experiences further.
- Due to limitations in time and operational capacity, the assessment methodology was not structured to yield a statistically representative sample across the selected geographical areas. Instead, the primary objective was to gather qualitative insights and highlight key issues faced by households considered to be at higher risk, thereby informing targeted interventions and strategic planning.

Analysis of Result

The findings presented in the report have been categorized into four distinct groups including the households' (HHs) basic information, following a consistent sequence for ease of understanding. Additionally, the data has been disaggregated by geographic location to provide a clearer picture of regional variations and context-specific insights. This approach aims to enhance the understanding of the assessment areas by highlighting context-based findings.

The report primarily focuses on several key aspects: the current condition of households, the impact of disasters on families, the types of shelter support previously received, and whether those supports adequately met the needs of the affected households. Furthermore, the assessment includes direct feedback and recommendations from households regarding how shelter assistance can be improved in the future. These insights are intended to guide more effective and responsive shelter interventions.

Household Characteristics: This section provides a comprehensive overview of the socio-economic and living conditions of households. It begins by detailing the primary sources of income and the average monthly incomes of families, offering insight into their financial stability. Additionally, it examines the types of shelter and land tenure—whether families own, rent, or have informal arrangements—and the physical characteristics of their shelter, such as the size of living spaces and the quality of ventilation in cooking areas, which are crucial for health and safety.

The assessment also explores food storage practices, including the duration for which households can preserve food and the methods they use, which reflects their preparedness and resilience. A particularly insightful part of this section is the evaluation of families' satisfaction with sleeping in their own shelters, including the reasons behind their comfort or discomfort.

Environmental concerns are addressed through an analysis of waste disposal practices, identifying common dumping areas and their impact on the local environment. Finally, the section assesses the functionality of electricity during normal times, highlighting access and reliability, which are essential for daily life and emergency preparedness.

Households' Disaster History and Impacts: Given that the assessment was conducted in some of the most disaster-prone regions of Bangladesh, it is expected that a majority of households have experienced one or more disasters. This section documents the types of disasters encountered—such as floods, cyclones, flash floods—and the frequency of these events.

It further investigates the extent of damage to shelters, including structural losses and estimated financial impacts. Beyond physical damage, the assessment captures whether households received any external support, such as support from government agencies, NGOs, or community groups. It also evaluates the effectiveness of this support—whether it helped families to recover or rebuild and explores how households coped in the absence of external assistance.

The section delves into the duration and process of shelter reconstruction, assessing whether families were able to rebuild to the same standard as before the disaster. It also examines the availability and functionality of electricity during disaster periods, and whether local markets remained operational for purchasing shelter materials, household essentials, and kitchen utensils.

Current Status of Households: This section focuses on the present condition of households, particularly the resilience of their current shelters against future disasters. It explores whether families believe their shelters can withstand upcoming hazards and whether they have plans to improve or reinforce their structures.

The assessment also identifies the types of improvements households are considering—such as strengthening walls, elevating floors, or using more durable materials and whether these plans are feasible given their resources. Additionally, it evaluates the current market conditions, including the availability of shelter materials, which directly influence the ability of families to upgrade their Shelters.

Households' Recommendations: In this section, households provide their own recommendations for shelter-related support. These suggestions cover both the preparedness phase including the training, materials, or early warning systems and the emergency response phase, including immediate shelter assistance, kits, and financial support. These insights are valuable for shaping future community-driven and contextually appropriate interventions.

Limitations of the Assessment

Limited Household Data Across Geographic Areas- The assessment covered cyclones, monsoon floods and flash floods prone areas. Despite the wide geographical coverage, the volume of household-level data collected was relatively low, limiting the representativeness and depth of analysis.

Shelter Cluster partners played a vital role in making the assessment possible. Their presence enabled the assessment in the areas where they are active. However, some disaster-prone areas could not be covered due to the absence of partners in those specific locations.

Shelter-Specific Focus- While disasters impact multiple aspects of family life, this assessment intentionally prioritized shelter-related information. Other critical dimensions, such as livelihoods, WASH, health, and education, —were not explored, which narrows the scope of understanding of overall vulnerability and recovery needs.

Constraints on Time and Resources- The Shelter Cluster partners conducted the assessment alongside their ongoing activities. Due to limited time and the absence of dedicated resources, the depth and breadth of data collection were constrained.

Response Bias and Data Accuracy- Data was primarily collected through self-reported responses from at-risk populations. This introduces potential biases such as; social desirability bias, recall bias, household-level generalization, without capturing intra-household variations. Additionally, answer options were mostly predefined, limiting the opportunity for nuanced or reflective answers. Vulnerable groups such as hijra communities and sex workers—who often reside outside regular community structures—were underrepresented.

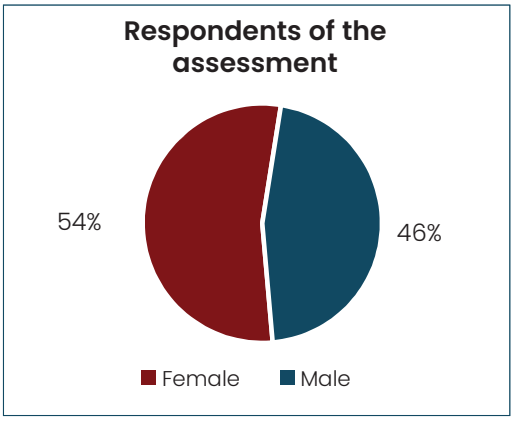
Limited Qualitative Data Sources- Although 24 Focus Group Discussions (FGDs) and 84 Key Informant Interviews (KIIs) were conducted, these may not sufficiently capture the diversity of experiences and perspectives across the large and varied geographical area. This limitation should be considered when interpreting qualitative findings.

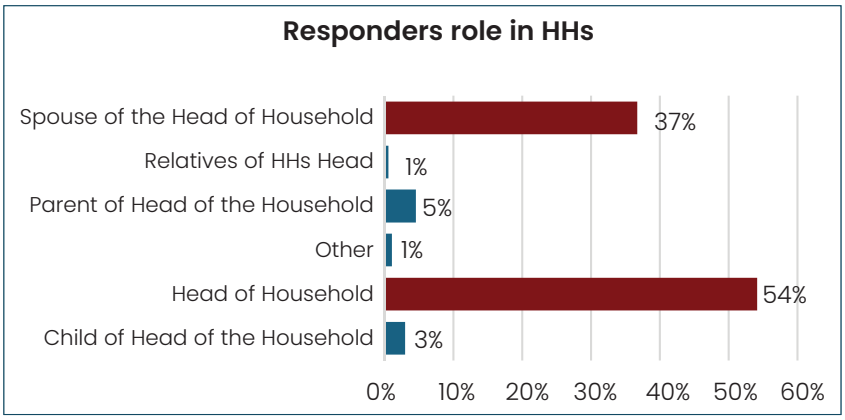
ASSESSMENT FINDINGS

BASIC INFORMATION

Respondents and their Role in Households:

In the household survey, out of 3,078 respondents, 54% of the respondents were female, while the remaining 46% were male. Among these participants, 54% identified themselves as the heads of their households, and 37% were the spouses of household heads. This indicates that

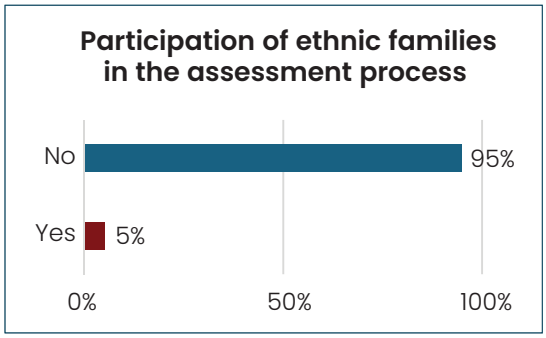




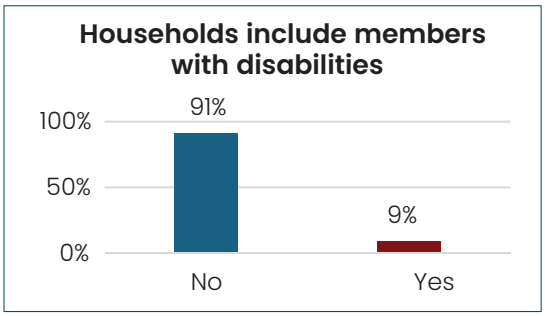
the majority of the interviews were conducted with individuals who hold key decision-making roles within their households, thereby ensuring that the survey responses reflect informed perspectives on household matters.

Ethnic[3] Households:

Given the extensive geographical scope of the assessment, which encompassed diverse regions including those predominantly inhabited by ethnic communities, the participation of these groups was meaningfully captured in the overall findings. Their inclusion not only enriched the data but also ensured that the unique perspectives and needs of these communities were represented. Notably, ethnic families comprised approximately 5% of the total households assessed. This figure underscores their presence within the surveyed population and highlights the importance of considering their specific circumstances in future planning and response efforts.



Person With Disabilities (PWDs):



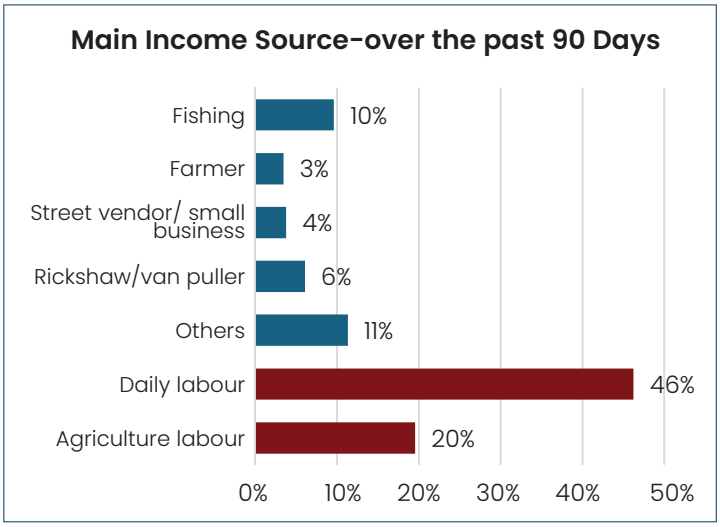
The integration of PWDs into all activities is essential to ensure their perspectives, experiences and needs are adequately reflected. In this assessment, approximately 9% of the families surveyed included members with disabilities. Since the assessment focused on the overall household situation, including their perceptions and market conditions, it did not involve direct interviews with PWDs. It gathered valuable insights through conversations with their family members. These family members were able to highlight the specific vulnerabilities and needs of PWDs, particularly in the context of disaster situations.

3 In Bangladesh, the "ethnic population" primarily refers to "small ethnic groups," as officially termed by the Government, who are distinct from the majority Bengali population. These groups are officially recognized under the 2010 Cultural Institution for Small Anthropological Groups Act.

ASSESSMENT FINDINGS

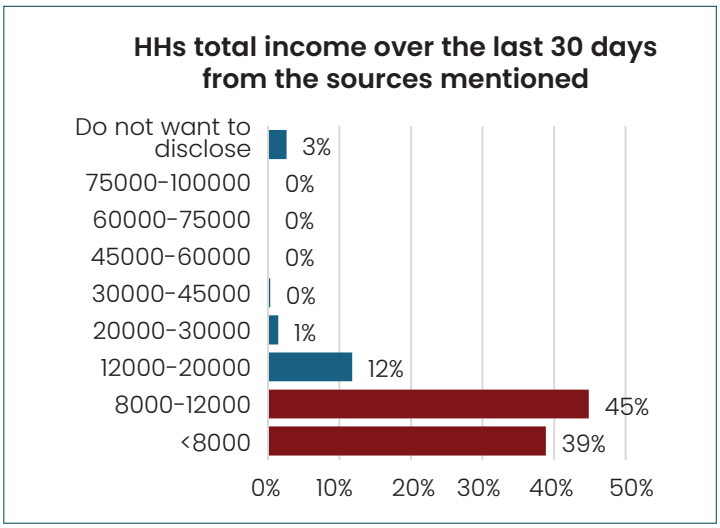
Household Characteristics

Main Income Source:



As previously highlighted, the assessment focused on the most vulnerable areas, and its findings reveal a strong correlation between these conditions and the primary income sources of households surveyed. In rural communities, the income of marginalized populations is highly seasonal, fluctuating with agricultural cycles and other temporary work opportunities. This variability makes it challenging to capture a stable economic picture. To address this, the assessment specifically asked households to report their main source of income over the past 90 days—a timeframe chosen to reflect short-term livelihood patterns. For family's dependent on their own agricultural land, income often arrives only once every three months, coinciding with harvest periods. Therefore, the 90-day reference period was critical for accurately understanding household income dynamics. The results show that nearly half of the households -46% rely primarily on day labor, while another 20% depend on agricultural labor. These figures underscore the precarious nature of livelihoods in these communities, highlighting their vulnerability to seasonal changes and the heavy reliance on labor-based income for survival.

Households Income:



The Household Income and Expenditure Survey (HIES) 2022 by Government of Bangladesh revealed that the average monthly income of rural households across Bangladesh stands at BDT 26,163 (Approximately USD 218), encompassing all occupational categories. While this figure provides a general overview of rural income levels, it does not fully capture the economic realities faced by households in the most vulnerable regions, where livelihoods are often precarious and heavily dependent on informal labour.

In these areas, the assessment indicates that a significant proportion of households rely primarily on day labour and agricultural labour as their main sources of income. These occupations are typically seasonal, low-paying, and lack work security, which directly influences the income distribution observed in the surveyed communities.

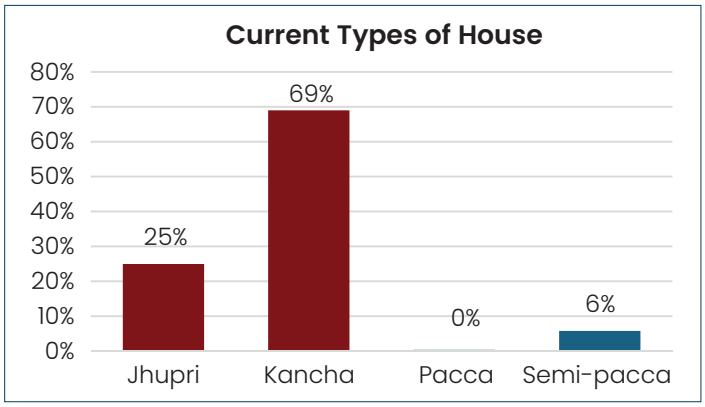
The income data from these vulnerable regions shows a stark picture:

- A substantial 39% of households earn less than BDT. 8,000 (Approximately USD 67) per month, placing them well below the national average and indicating a high level of economic hardship.

- Another 45% of households report monthly incomes ranging between BDT. 8,000 and BDT. 12,000 (Approximately USD 100), suggesting that nearly half of the population is living just above subsistence level.
- Only 12% of families earn between BDT. 12,000 and BDT. 20,000 (Approximately USD 167) each month. This income lets them live a little better than very low-income families, but they still face many limits.
- Alarmingly, only 1% of households report a monthly income exceeding BDT 20,000, highlighting the widespread economic fragility and limited prospects for upward mobility within these communities.

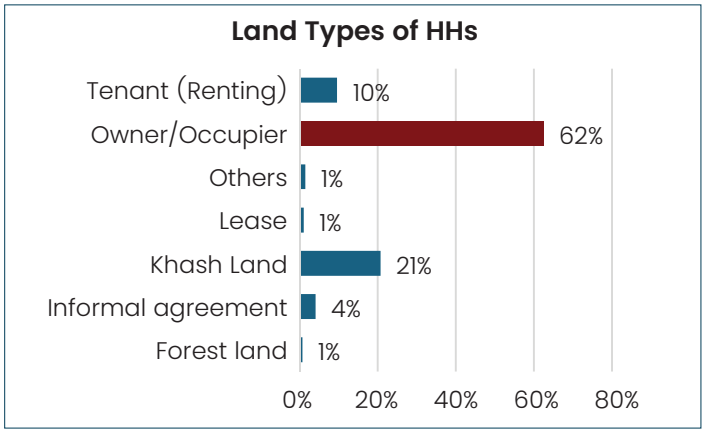
This income distribution highlights the deep economic vulnerability of rural populations in the assessed areas. The heavy reliance on informal labour, coupled with limited access to diversified income sources, contributes to persistent poverty and restricts opportunities for growth and development.

Types of Houses:



In rural areas of Bangladesh, housing typologies exhibit a common pattern characterized by traditional and highly vulnerable structures. The majority of houses are either Kancha or Jhupri. The assessment findings confirm this trend: approximately 69% of the houses are Kancha, while Jhupri houses account for 25% of the surveyed areas. These structures are inherently fragile and lack the capacity to withstand even minor shocks or disasters such as heavy rainfall, strong winds, or flooding. Their poor resilience significantly increases the risk of damage, displacement, and loss of life during the disasters. Consequently, the inhabitants of these dwellings face persistent threats to their safety, security, and overall well-being.

Land Types:

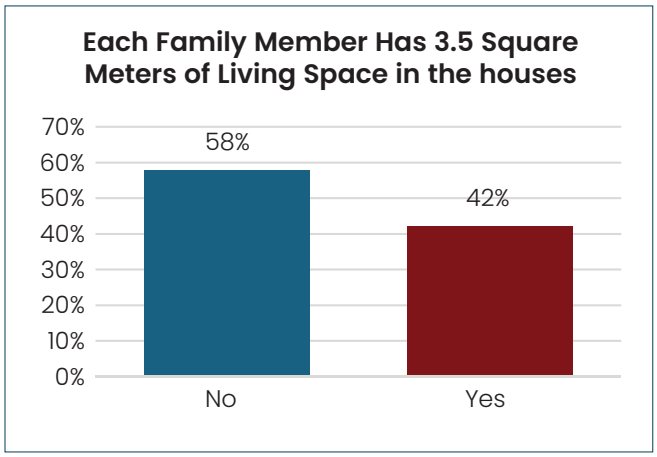


The assessment provides insights into the types of land tenure among residents. It reveals that 62% of households live in houses they own, and most of these households possess official land ownership documents. Additionally, 21% of households reside on government-owned khash[4] land, which is allocated by the government but not privately owned. About 10% of households live under rental agreements, while 4% occupy land based on informal arrangements. These informal agreements indicate that the residents are living on the land without any formal or legal contract with the landowner.

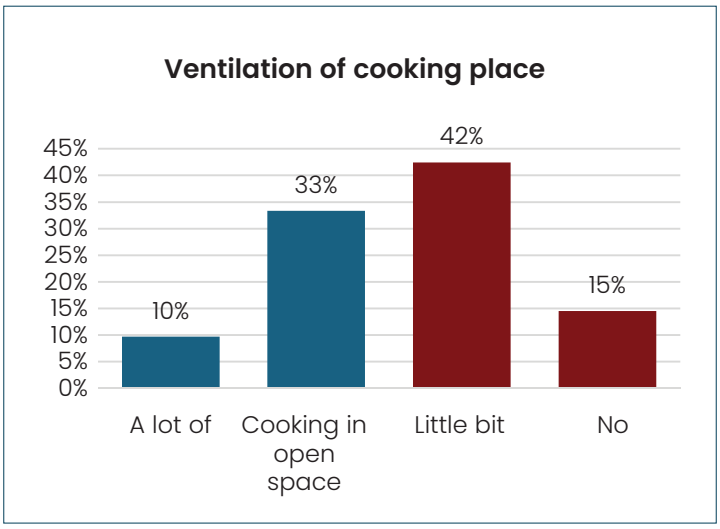
4 Khash land is Government-owned land, often agricultural but also including non-agricultural land and water bodies, which is not privately owned and is managed directly by the Government.

Living Space:

Adequate living space within a house is essential for the well-being, privacy, and dignity of every family member. According to Sphere standards, a minimum of 3.5 square meters of living space per person is required to ensure basic comfort and functionality. However, the assessments have revealed that 58% of the house surveyed fail to meet this minimum requirement. This significant shortfall highlights the overcrowded conditions in many houses, which can severely compromise the privacy and dignity of individuals, particularly in vulnerable communities.



Ventilation of Cooking Space:



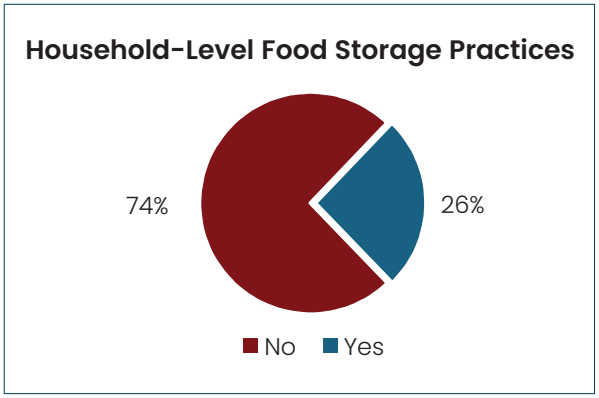
Ventilation plays a vital role in maintaining a healthy cooking environment. It significantly improves indoor air quality by removing smoke, odors, and airborne pollutants generated during cooking. Proper ventilation also helps regulate moisture levels, maintain a consistent temperature, and reduce the risk of long-term health issues.

As part of the assessment, households (HHs) were asked about the ventilation conditions in their cooking spaces. The findings revealed trends; 42% of households reported having limited ventilation, indicating that while some airflow exists, it may not be sufficient to ensure a healthy cooking environment. 15% of households stated they have no ventilation at all in their cooking areas, which poses serious health risks due to the accumulation of smoke and heat. 33% of families cook in open spaces, which naturally provides better ventilation but may expose them to other environmental hazards. Only 10% of households reported having adequate ventilation, suggesting that a small fraction of the population enjoys safe and comfortable cooking conditions.

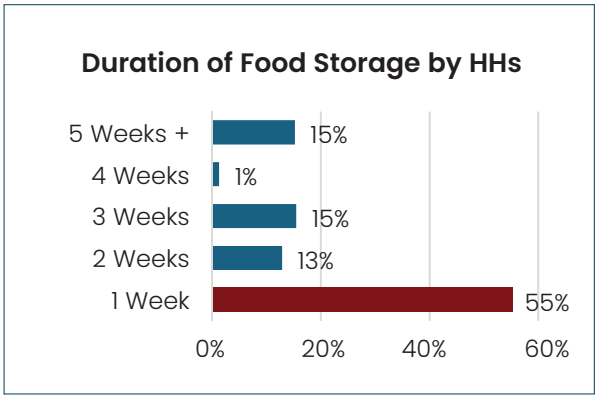
These findings highlight the need for targeted interventions to improve ventilation in household cooking spaces, especially in enclosed environments, to promote better health and well-being.

Household Level Food Storage:

The assessment asked the question to understand household-level food storage practices in most disaster-prone areas. The findings revealed significant challenges in food preservation and storage at the family level. According to the data collected, 74% of households reported not having any form of food storage, while only 26% indicated that they do have some form of food storage system in place. This disparity highlights a critical gap in food security and resilience among rural populations. The lack of storage facilities means that the majority of households are vulnerable to food shortages, especially during periods of crisis, seasonal scarcity, or market disruptions. It also suggests limited access to infrastructure, resources, or knowledge related to safe and effective food storage practices.



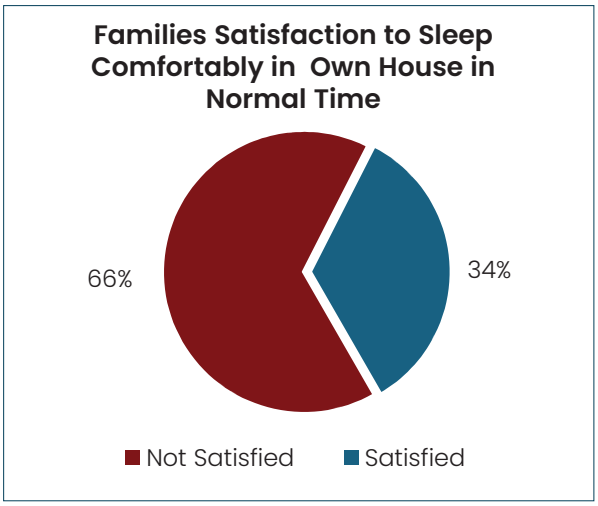
Duration of Food Storage:



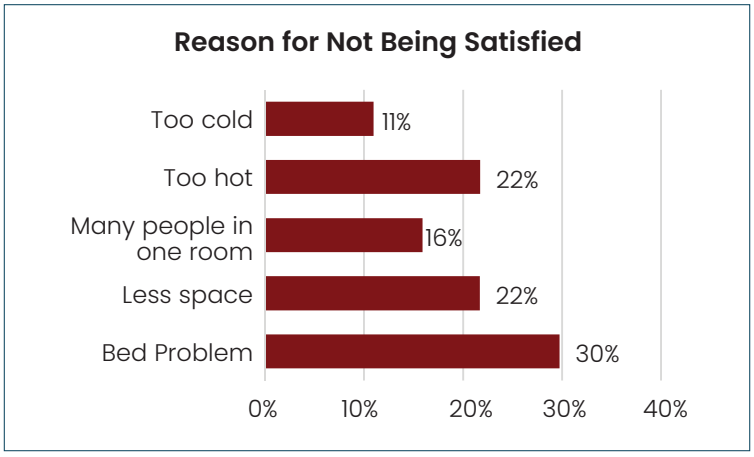
Food storage capacity among households shows notable variation. Among the 26% of households that reported maintaining food reserves, the majority, 55% store enough food to last for up to one week. A smaller portion, 13%, have food storage that can sustain them for two weeks, while 15% of households are equipped to manage for three weeks. Interestingly, another 15% reported having food storage sufficient for up to five weeks, indicating a higher level of preparedness among a minority of the surveyed group.

Families' Satisfaction to Sleep Comfortably in Own House in Normal Time:

According to the previous indicator, 58% of households lack adequate living space. This issue is further reflected in the current findings, with 66% of families reporting dissatisfaction due to difficulties sleeping comfortably in their own house.



Reason for Not Being Satisfied:



During the assessment, significant concern emerged regarding the quality of sleep among residents. Many households expressed dissatisfaction with their sleeping conditions, prompting the survey to delve deeper into the underlying causes.

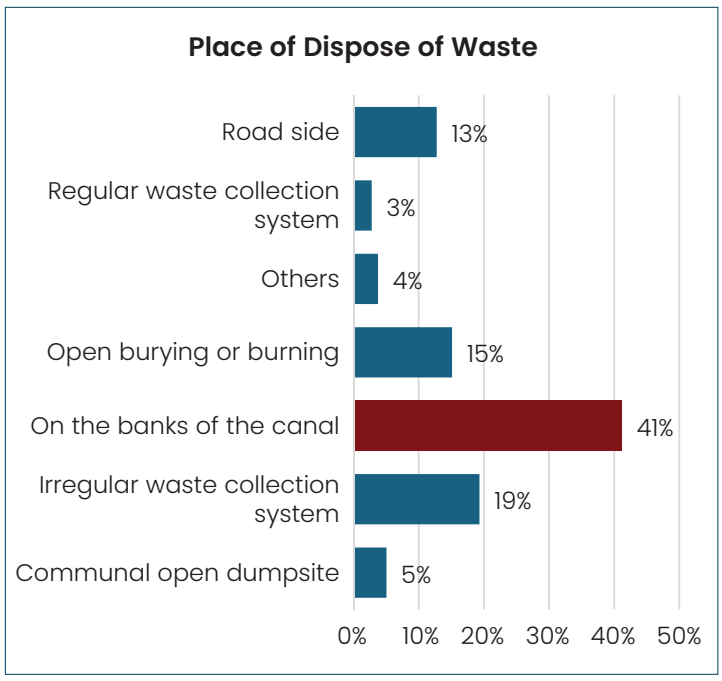
When asked about the main reasons for their discomfort, 30% of households identified problems with their beds—highlighting issues such as inadequate bedding, worn-out mattresses, or the complete absence of proper sleeping arrangements. This was the most commonly cited factor affecting sleep quality.

On the other hand, 22% of respondents pointed to the lack of space within their house. These households often struggle with cramped living conditions, where rooms are too small to accommodate all family members comfortably. This spatial constraint not only affects sleep but also contributes to a general sense of discomfort and stress.

Closely related, 16% of households reported that too many people are living in a single room. Overcrowding leads to noise, lack of privacy, and disrupted sleep cycles.

Environmental factors also played a significant role. 22% of households mentioned that it gets too hot inside their house, particularly during summer. Poor ventilation and inadequate insulation exacerbate this issue, making it difficult to sleep comfortably. Conversely, 11% of households said their houses become too cold, especially at night or during the winter season, due to a lack of proper heating or warm bedding.

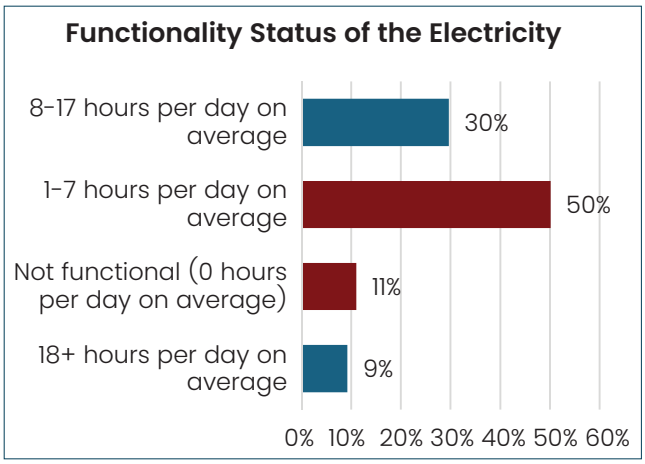
Place of Dispose of Waste:



Waste disposal in rural areas remains a significant challenge. According to the assessment, 41% of households dispose of their waste along canal banks, contributing to severe environmental degradation, including water pollution and health hazards. Additionally, 19% of households rely on irregular waste collection systems, which are inconsistent and often ineffective. 15% of households report to open burning or burying of waste, practices that pose serious risks to both human health and the environment. Alarmingly, only 3% of households benefit from a regular and organized waste collection service, highlighting the urgent need for improved waste management infrastructure and awareness in these communities.

Functionality Status of the Electricity:

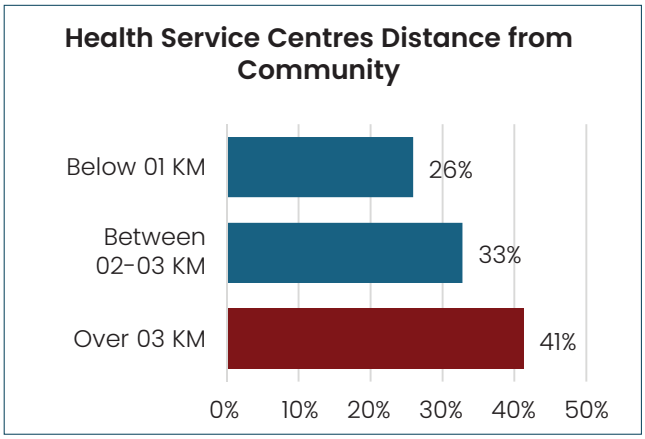
Bangladesh has made notable progress in expanding electricity supply to rural areas. However, the assessments reveal that the quality and consistency of electricity access remain uneven. On average, 50% of rural households receive electricity for only one to seven hours per day, indicating partial functionality. Another 30% of households experience electricity for eight to seventeen hours daily, which, while better, still falls short of full-day access. Alarmingly, 11% of households have no functional electricity at all, highlighting persistent gaps in rural electrification efforts.



Health Service Centers Distance:

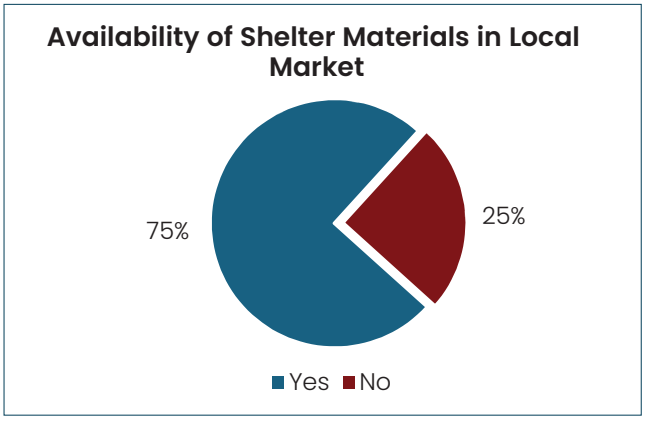
Although government health service centers are widely available across the country, the assessment aimed to understand how accessible these facilities are from the perspective of local communities. Respondents were asked to estimate the distance from their community to the nearest health service center.

The findings revealed that 41% of respondents reported that the nearest health facility is located more than 3 kilometers away. 33% stated that the distance is between 2 and 3 kilometers and 26% mentioned that the facility is less than 1 kilometer from their community.



These insights suggest that while health services are generally present, a significant portion of the population may face challenges in accessing them due to distance. This could have implications for timely healthcare, especially in emergencies or for individuals with limited mobility.

Availability of Shelter Materials in Local Market:



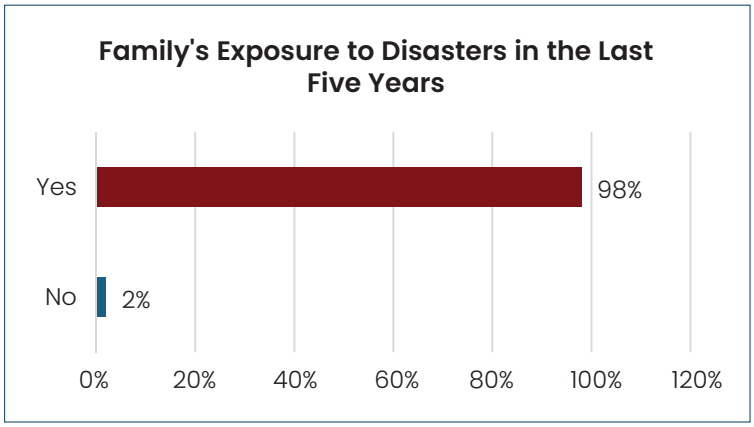
The assessment evaluated the availability of shelter construction materials[5] in local markets based on the feedback provided by respondents. According to the findings, 75% of the respondents reported that essential shelter materials—such as timber, corrugated galvanized iron (CGI) sheets, and pillars—are readily available in their local markets. In contrast, 25% of the respondents indicated that these materials are not accessible in their immediate area. As a result, they are compelled to procure the necessary items from markets located outside their local areas.

5 Construction Materials: Corrugated Galvanized Iron (CGI) sheet, Timber, Bamboo, Reinforced Cement Concrete (RCC) Pillar, fixing materials etc.

ASSESSMENT FINDINGS

Households Disaster History and Impact

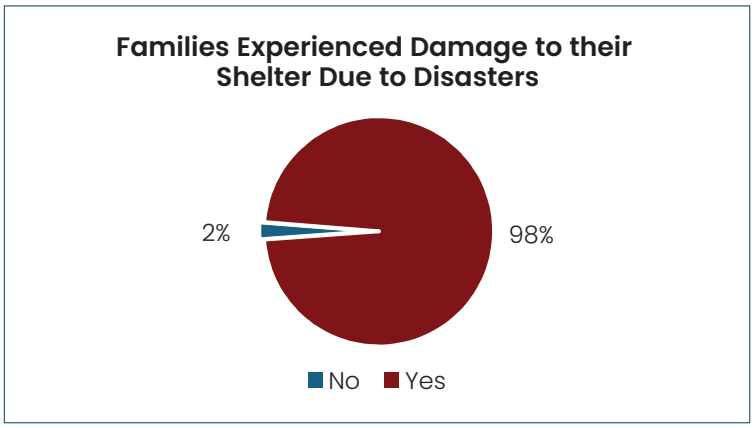
Family's Exposure to Disasters:



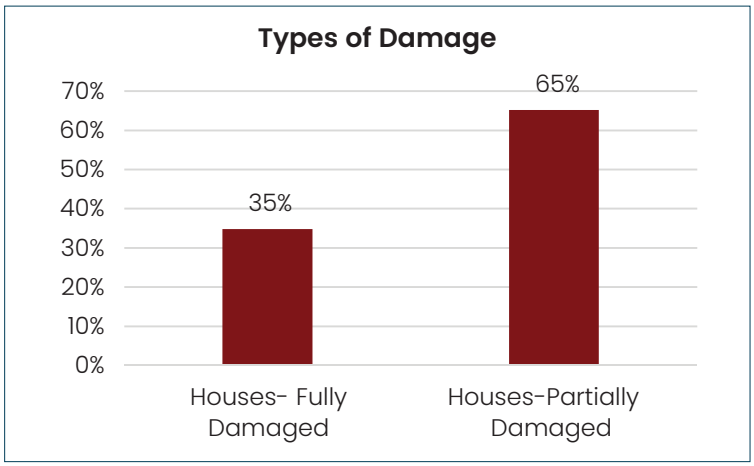
The assessment was conducted in several disaster-prone areas across Bangladesh. The findings indicated that a majority of families had experienced some form of disaster in the past. As part of the assessment, households were asked about their exposure to disasters over the last five years. Predictably, 98% of the households surveyed reported having faced at least one type of disaster during that period.

Families Experienced Damage to Their House Due to Disasters:

The shelter assessment conducted in the targeted areas reveals that the majority of shelters are constructed as Kancha and Jhupri structures—types of housing that are highly vulnerable to natural disasters. During the assessment, households were asked about the impact of disasters on their shelters. Alarmingly, 98% of families reported experiencing at least one disaster in the past five years. Among these affected families, an overwhelming 98% suffered damage to their shelters during these events, highlighting the urgent need for resilient housing solutions.



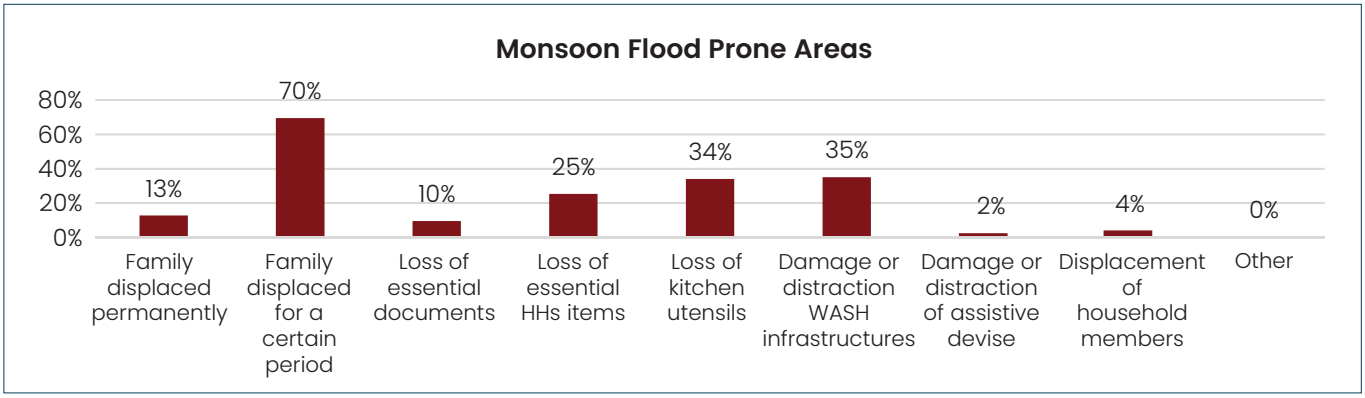
Types of House Damage:

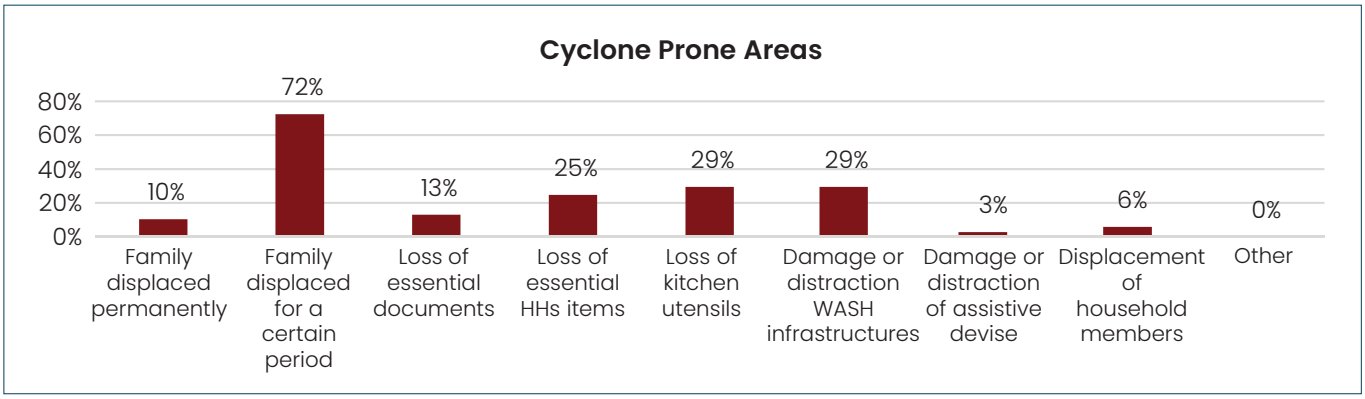


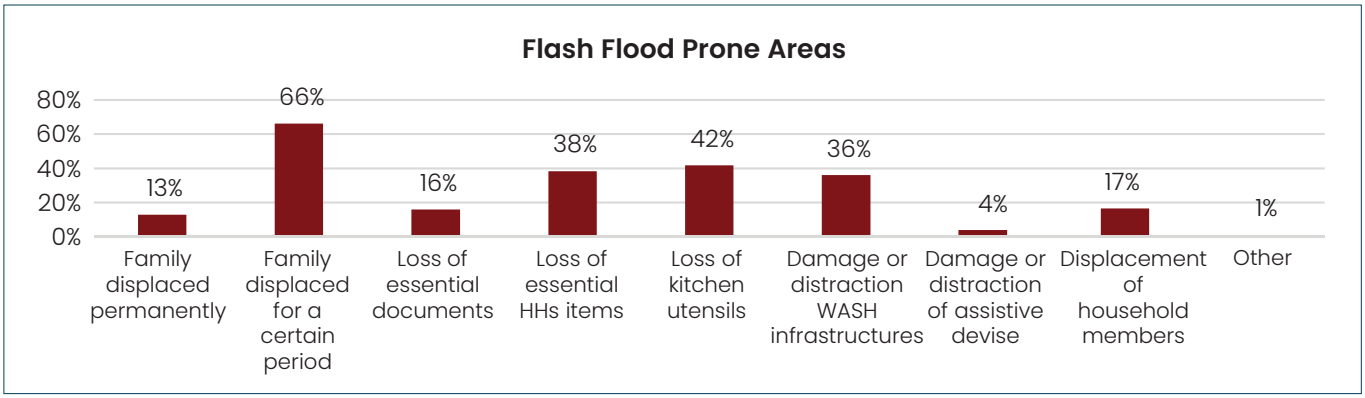
During the shelter assessment, affected households were asked to describe the types of damages they experienced. The findings revealed that 65% of the households reported partial damage to their shelters, which typically involved structural issues such as damage to the plinth, roof, walls, or other essential components. These shelters, while still standing, were compromised in terms of safety, durability, and habitability, requiring repair and reinforcement to restore adequate living conditions. On the other hand, 35% of the households reported fully damaged shelters, where the entire structure had collapsed or was rendered completely uninhabitable, leaving families without any form of safe shelter.

Other Shelter-Related Impacts Experienced by Affected Families:

Disasters have a profound impact on shelter, often extending to related aspects such as household items, essential documents, and assistive devices for PWDs. The nature and severity of these impacts vary depending on the type of disaster.





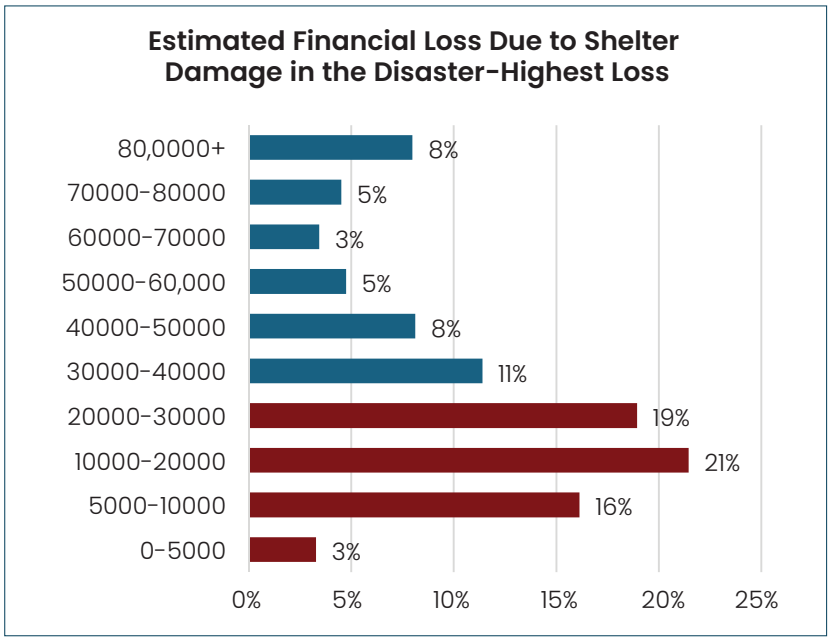


In monsoon flood-prone areas, 13% of households were permanently displaced, while 70% experienced temporary displacement, seeking refuge in evacuation centers, neighbors' houses, or relocating temporarily until the disaster subsided. Similarly, cyclone-prone areas seen 10% permanent displacement and 72% temporary displacement, whereas flash flood zones reported 13% permanent and 66% temporary displacement.

assistive devices reported. Additionally, WASH (Water, Sanitation, and Hygiene) facilities suffer significant destruction- 35% in monsoon flood areas, 29% in cyclone-prone areas and 36% in flash flood zones

These figures highlight the multifaceted and severe consequences of disasters on shelter and related infrastructure, emphasizing the need for comprehensive and inclusive disaster response strategies.

Estimated Financial Loss Due to Shelter Damage:



The data presents an overview of the estimated financial losses incurred by households as a result of damage to their shelters. These figures reflect the highest recorded losses experienced by families in the past, offering insight into the economic impact of shelter-related disasters.

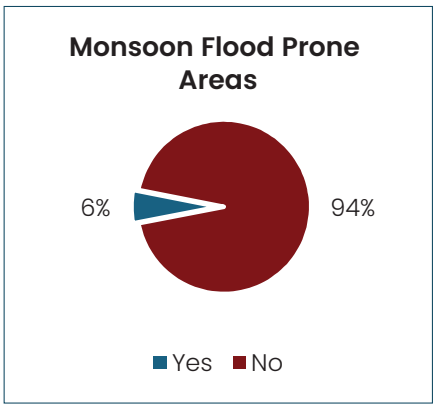
A significant portion of households; 21% reported their highest financial loss falling within the range of BDT. 10,000 (Approximately USD 83) to BDT. 20,000 (Approximately USD 167). This represents the most common loss bracket among the affected families.

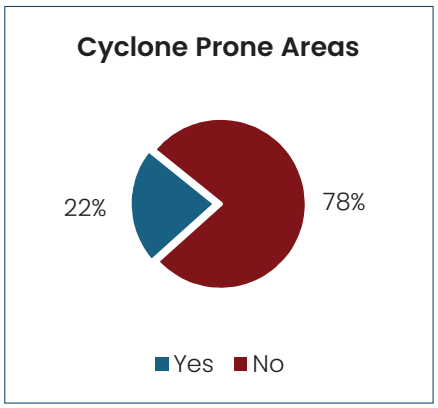
Following closely, 19% of households experienced losses ranging from BDT. 20,000 to BDT. 30,000 (Approximately USD 250), indicating a substantial financial burden for nearly one-fifth of the surveyed population.

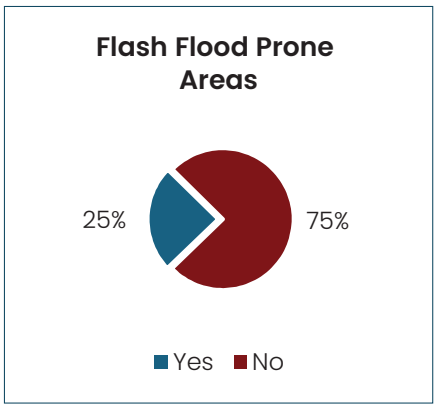
Notably, 8% of households reported losses exceeding BDT. 80,000 (Approximately USD 667), highlighting the severe impact on a smaller but critically affected segment of the community.

Households Received Shelter Support Ever After Disaster:

The assessment focused on households residing in disaster-affected shelters and examined whether they had ever received shelter support following those disasters. The findings revealed significant variation in support coverage across different disaster-prone regions. In areas frequently affected by monsoon floods, only 6% of households reported having received any form of shelter assistance after a disaster. In contrast, cyclone-prone regions showed a higher rate of support, with 22% of households having received shelter support. The highest level of support was observed in flash flood-prone areas, where 25% of households reported



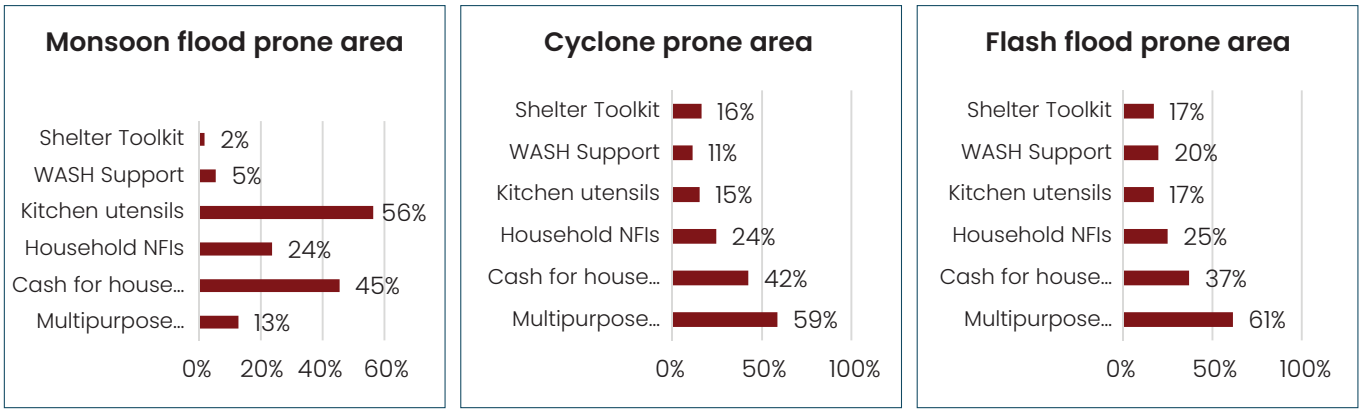




receiving shelter assistance at some point after a disaster. These disparities highlight the uneven distribution of post-disaster shelter support across different hazard zones.

Types of Shelter Support were Received:

The assessment aimed to understand the types and extent of shelter-related support received by households affected by different hazards. It revealed a complex landscape of humanitarian assistance, where households often received multiple forms of support from various agencies. The nature and intensity of support varied significantly depending on the type of hazard—monsoon floods, cyclones, or flash floods. Since WASH is an integral part of shelter support, the assessment also included the WASH sector. However, it only covered tubewell and latrine support under WASH.



<u>Monsoon Flood-Prone Areas:</u> In regions vulnerable to monsoon flooding, the response was largely item-based. A significant proportion of households (45%) received cash for shelter support, indicating a targeted effort to help families repair or rebuild their homes. Interestingly, kitchen utensils were provided to 56% of households, suggesting that floods often damage essential household items. However, multipurpose cash assistance (MPCA) was notably low at just 7%, implying limited flexibility for affected families to prioritize their own needs.

The provision of WASH support—critical in flood contexts—was surprisingly minimal, with only 5% of households receiving latrine or tubewell assistance. Even fewer (1%) received shelter toolkits, which could have empowered families to undertake basic repairs themselves. This pattern suggests a more prescriptive assistance model, possibly due to the predictable nature of monsoon flooding and logistical constraints.

<u>Cyclone-Prone Areas:</u> In cyclone-affected regions, the humanitarian response shifted toward cash-based interventions, reflecting the sudden and widespread destruction caused by such events. A striking 59% of households received MPCG, allowing them to address diverse and urgent needs. Additionally, 42% received cash for house repairs, reinforcing the emphasis on enabling self-directed recovery.

Support for household items was more modest: 24% received NFIs, and only 15% received kitchen utensils. However, shelter toolkits were distributed to 16% of households—much higher than in flood-prone areas, indicating a strategic push for household-level resilience. WASH support reached 11% of households, a slight improvement but still relatively low given the sanitation challenges post-cyclone.

<u>Flash Flood-Prone Areas:</u> Flash floods, often sudden and devastating, prompted a response similar to cyclone-prone areas. Here, MPCG was the most common form of support, reaching 61% of households, the highest among all hazard types. This reflects a recognition of the need for flexible, rapid assistance in unpredictable emergencies.

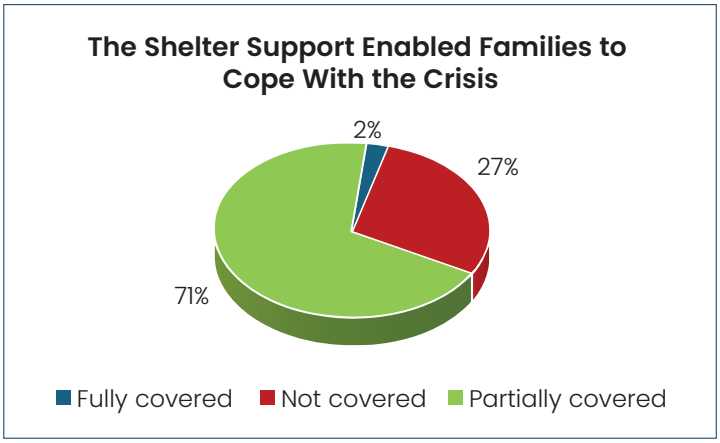
Cash for house repairs was provided to 37% of households, while 25% received NFIs and 17% received kitchen utensils. Notably, WASH support reached 20% of households—suggesting a

growing awareness of the sanitation risks associated with flash floods. Shelter toolkits were also distributed to 17% of households, indicating a balanced approach between direct aid and enabling self-recovery.

The assessment highlights a nuanced approach to shelter support across different hazard contexts. While cash-based assistance dominates in cyclone and flash flood areas, item-specific support remains prevalent in monsoon flood zones.

The Shelter Support Enabled Families to Cope with the Crisis:

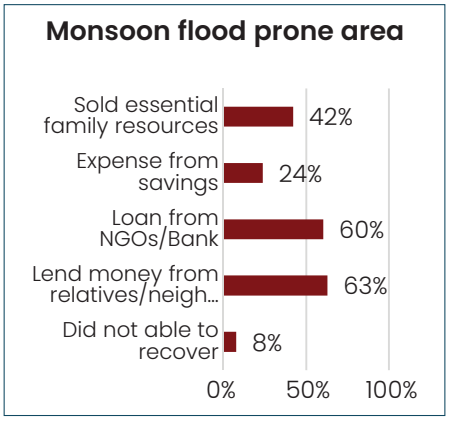
The assessment aimed to explore the extent to which support provided by humanitarian agencies met the needs of affected households during times of crisis. Surprisingly, only 2% of households reported that the support they received fully addressed their crisis. Meanwhile, 71% of households stated that the support partially met their needs, and another 27% commented that the support did not meet their needs at all. These findings suggest that, in most cases, the assistance provided by humanitarian agencies only partially addressed the crises faced by affected families.

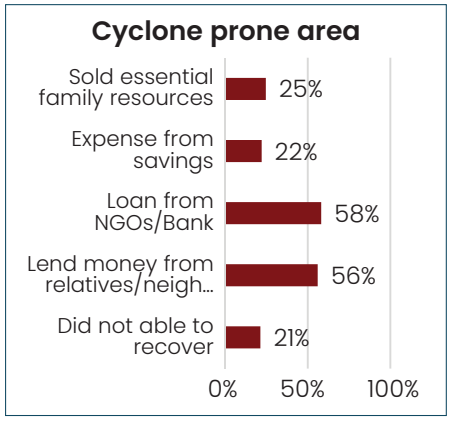


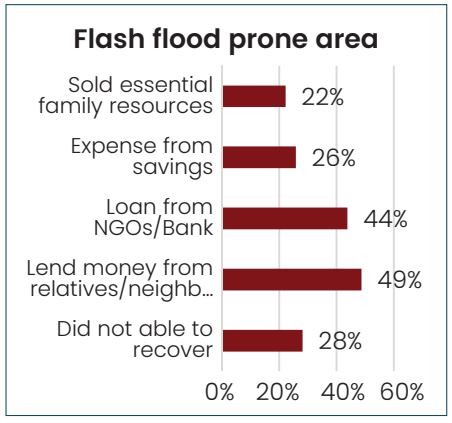
Coping Mechanisms in Hazard-Prone Areas:

The assessment focused on households that had not received any shelter support. Respondents were asked how they coped with the loss of their shelters, and the findings revealed that households adopted multiple strategies to manage their situation.

In areas prone to monsoon flooding, 8% of households reported that they were unable to repair or reconstruct their damaged shelters. To cope with the losses, a significant portion of households, 63% of households borrowed money from neighbors or relatives, while 60% received loans from NGOs or banks. This indicates that microfinance institutions are highly active and accessible in these hazard-prone regions. Additionally, 24% of households utilized their personal savings to fund repairs or reconstruction, and 42% reported that sold essential household items such as livestock and poultry. Since the question allowed multiple responses, it became evident that households often relied on a combination of financial sources to restore their shelters.



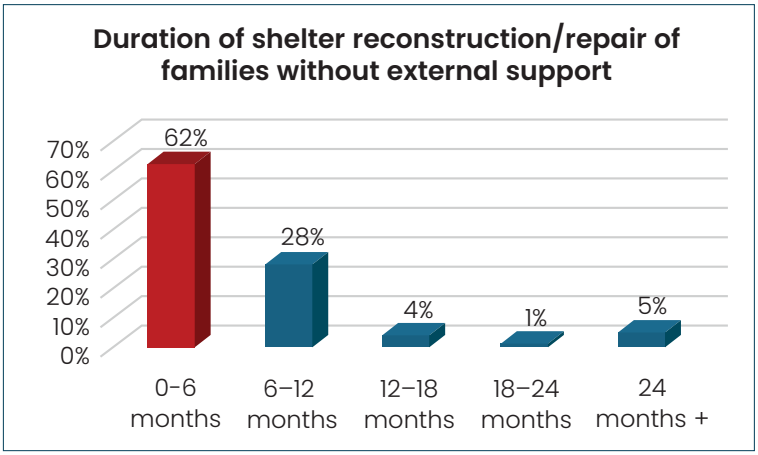




In cyclone-prone areas, the situation was similarly challenging. About 21% of households reported that they were still unable to repair their shelters. To repair the shelters, 56% borrowed money from relatives or neighbors, and 58% obtained loans from NGOs or banks. Furthermore, 22% used their savings, while 25% sold essential family assets to fund the necessary repairs or reconstruction.

In regions affected by flash floods, the assessment revealed that 28% of households did not able to repair or rebuild their shelters. Among the rest of the households, 49% borrowed money from neighbors or relatives, 44% received loans from NGOs or banks, 26% used their savings, and 22% sold essential household assets. These findings highlight the diverse and often difficult financial decisions households must make in the absence of formal shelter support.

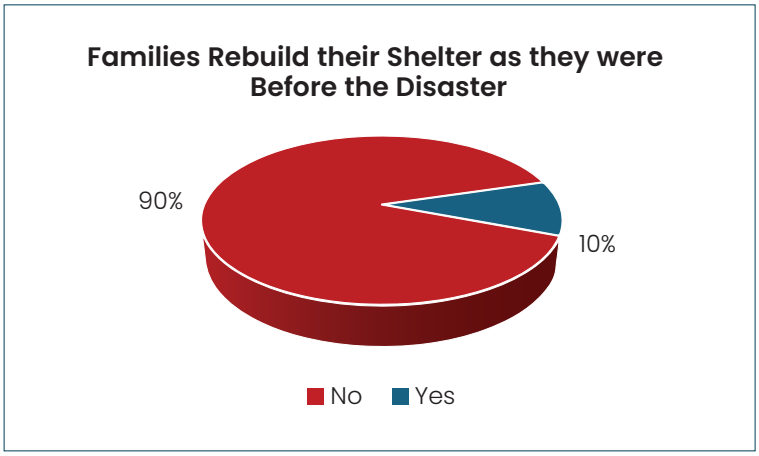
Duration of Shelter Reconstruction/Repair of Families Without External Support:



During the assessment, households that had not received any formal shelter support but had managed to reconstruct or repair their shelters were asked about the time it took them to complete the process. The findings revealed that a significant majority—62% of these households—were able to repair or rebuild their shelters within a period of six months. Additionally, 28% of the respondents reported that it took them between 6 to 12 months to complete the reconstruction or repair of their shelters. These insights highlight the resilience and resourcefulness of affected households in restoring their living conditions despite the absence of external assistance.

Families Rebuild their Shelter as they were Before the Disaster:

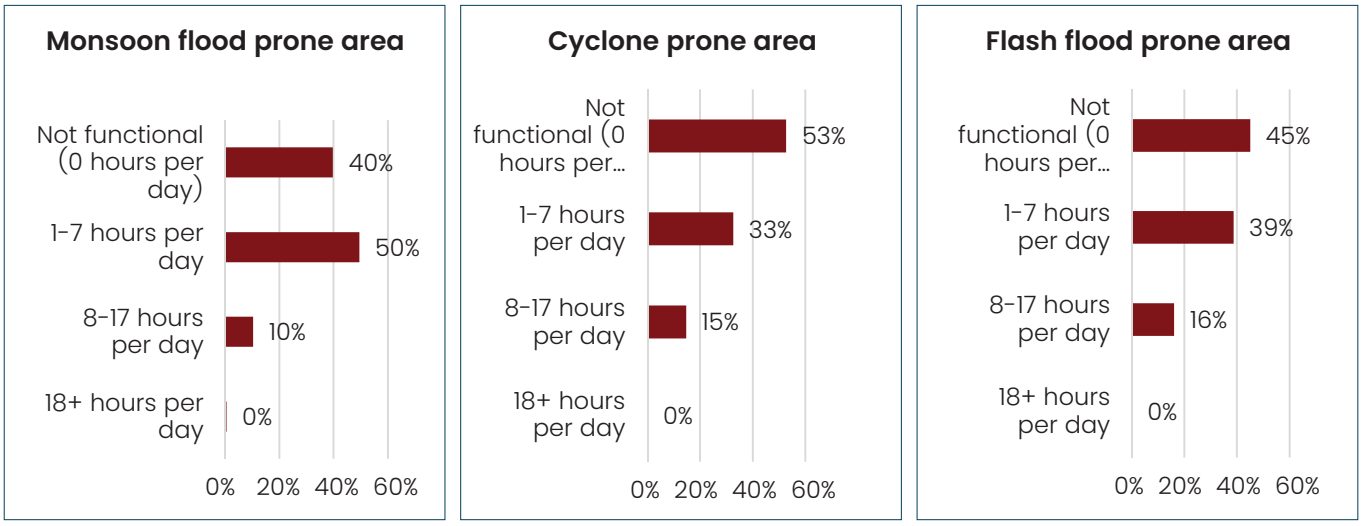
During the assessment, households were asked whether they had been able to rebuild their shelters to the same standard as before the disaster. While many households managed to reconstruct their shelter, 90% of them reported that the rebuilt shelters were not the same as those they had prior to the disaster. This indicates that although physical reconstruction took place, the quality, structure, or resilience of the new shelters did not match the original ones. The findings highlight a significant gap in recovery, suggesting that most households faced limitations—such as lack of resources, technical support, or access to durable materials.



Electricity Functionality in Disaster Situations (During and Right After):

During the assessment, households shared their experiences regarding electricity availability in the critical moments during and right after disasters. The responses paint a stark picture of infrastructural vulnerability and the urgent need for resilient energy systems.

In monsoon flood-prone areas, electricity disruption was widespread. 40% of households reported a complete loss of electricity, while 50% experienced only minimal access, averaging one to seven hours per day. A small fraction, only 10% had slightly better access, with electricity available for eight to seventeen hours daily, yet none had uninterrupted service. This suggests that while some infrastructure remains partially operational, it is far from reliable during emergencies.



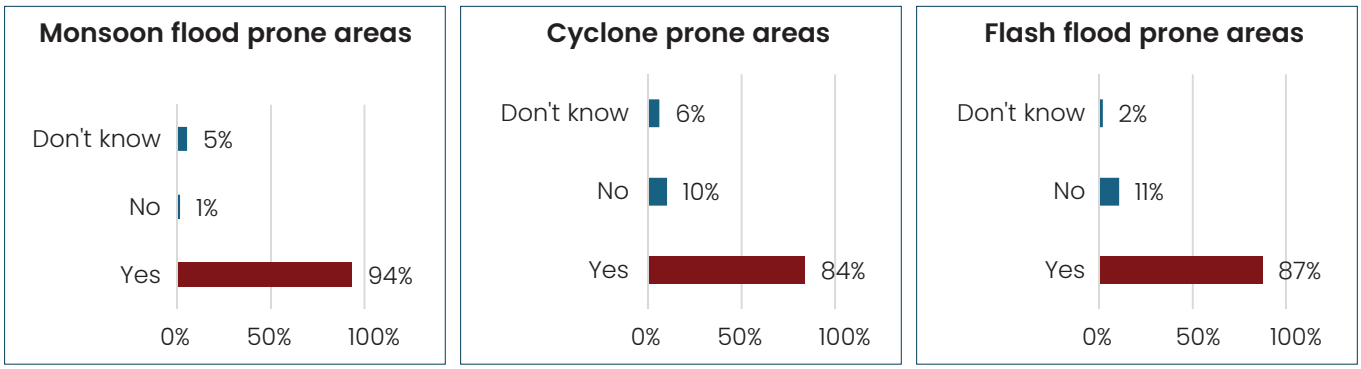
The situation was even more dire in cyclone-prone areas, where over half (53%) of the households faced total electricity outages. Only 33% had limited access, and 15% had moderate access. Again, no households reported full functionality.

In flash flood-prone areas, the pattern was similar but slightly less severe. 45% of households experienced complete outages, while 39% had limited access and 16% had moderate access. Despite these variations, the absence of fully functional electricity was consistent across all regions.

Electricity infrastructure is not resilient enough to withstand natural hazards. The lack of full functionality during and after disasters not only hampers emergency response but also affects communication, healthcare, and access to essential services.

Shelter Materials Market Conditions in Disaster Situations:

: During disaster situations, local markets often experience significant disruptions, particularly in the availability and pricing of shelter construction materials. To understand this dynamic, the assessment gathers household-level insights on market conditions during disasters, focusing specifically on key shelter materials such as Corrugated Galvanized Iron (CGI) sheets, timber, Reinforced Cement Concrete (RCC) pillars, and other construction materials.



In areas prone to monsoon flooding, a substantial majority—94% of respondents—reported that the prices of shelter materials increased during disaster. Only 1% of households indicated that there was no noticeable change in prices, while 5% stated that they were unaware of the market conditions during such times.

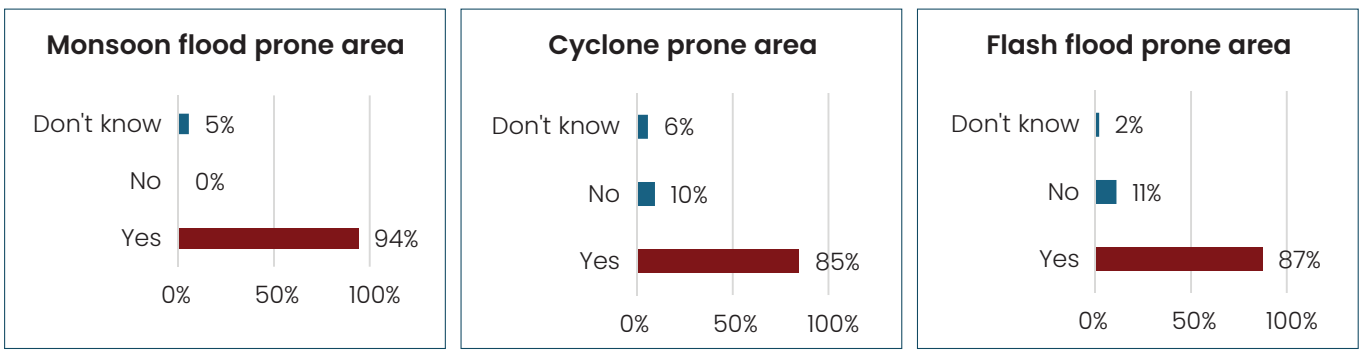
Similarly, in cyclone-prone regions, 84% of households observed a rise in shelter material prices during disasters. Meanwhile, 10% reported no price increase, and 6% were uncertain about the market situation.

In flash flood-prone areas, 87% of respondents confirmed that shelter material prices surged in the aftermath of disasters. Conversely, 11% of households did not experience any price hike, and 2% were unsure about the pricing trends in local markets.

These findings highlight a consistent pattern across different disaster-prone areas: the cost of essential shelter materials tends to escalate during emergencies, posing additional challenges for affected communities in rebuilding or repairing their shelters.

Household NFIs Market Conditions in Disaster Situations:

The market conditions for household non-food items (NFIs) remain consistently challenging across disaster-prone areas. The assessment findings indicate that during disaster situations, such as floods and cyclones, the availability and affordability of essential household items are significantly affected.



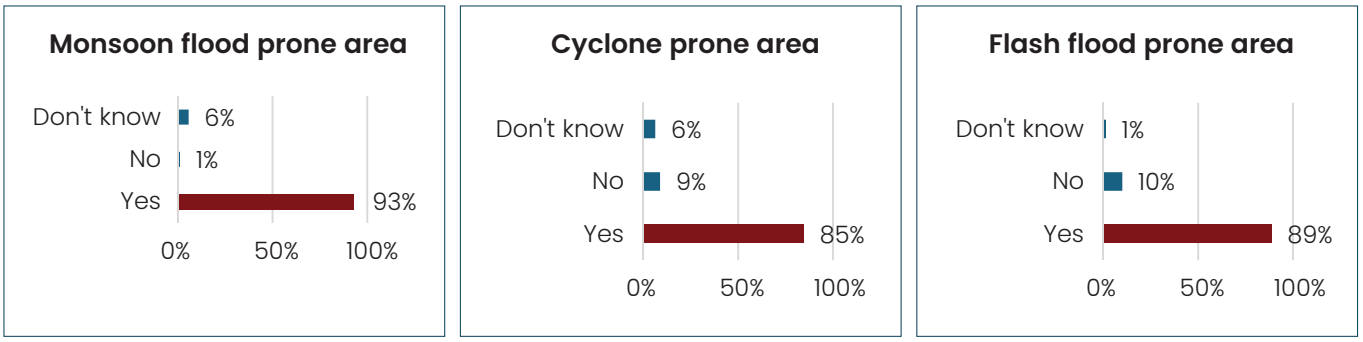
In monsoon flood-prone areas, a substantial majority—94% of respondents—reported that the prices of household NFIs, including clothing, sandal, mattress, pillow, hygiene products, candles, and lamps, tend to increase during disasters. This suggests a strong disruption in supply chains or increased demand during emergencies. Meanwhile, 5% of household members stated that they were unaware of the market conditions during such times, indicating a gap in market awareness or access to information.

In cyclone-prone regions, 85% of households observed a rise in the prices of essential household items during disaster events. In contrast, 10% of respondents reported no change in prices, and 6% admitted they were not informed about the market situation. This variation may reflect differences in local market resilience or access to relief mechanisms.

Similarly, in flash flood-affected areas, 87% of households confirmed that the prices of essential NFIs increased during disaster periods. However, 11% noted that prices remained stable, and 2% were unaware of the market conditions. These findings highlight the vulnerability of local markets to sudden shocks and the need for targeted interventions to stabilize prices and ensure access to basic household items during emergencies.

Kitchen Utensils Market Conditions in Disaster Situations:

In hazard-prone regions, the kitchen utensils market has shown a noticeable increase in prices following disasters. In areas affected by monsoon floods, nearly all households, 93%—reported that the cost of kitchen utensils rose after the disaster. Only a small fraction, 1%, felt that prices remained unchanged, while 6% were unaware of the market situation. This trend was similarly observed in cyclone-prone areas, where 85% of respondents experienced price hikes, 9% saw



no change, and 6% had no knowledge of the market conditions. Flash flood-prone areas also reflected a comparable pattern, with 89% of households noting increased prices, 10% reporting stability, and just 1% lacking awareness.

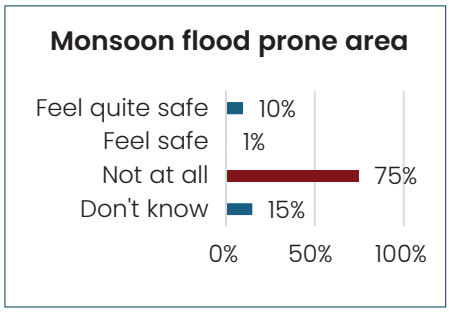
These figures suggest a consistent disruption in the kitchen utensil market across different types of hazards, with the majority of households perceiving a rise in prices. Overall, the data underscores the economic strain disasters place on essential kitchen utensils, highlighting the need for targeted support and market monitoring in vulnerable areas.

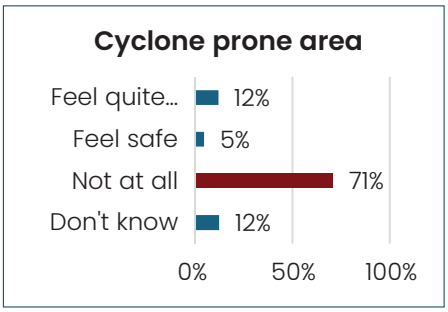
ASSESSMENT FINDINGS

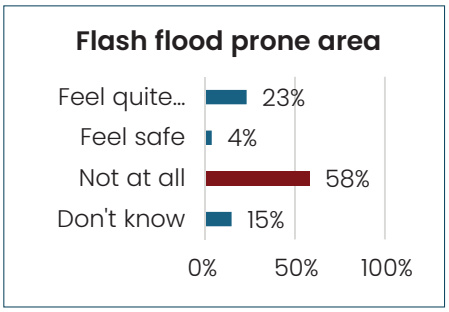
Current Status of Households

Disaster Resilience of Current Types of Shelter:

The assessment tried to understand how residents in various disaster-prone areas perceive the resilience of their current shelters. The results reveal a concerning trend, with a majority of respondents expressing doubts about the safety and durability of their shelter in the face of natural hazards. In areas prone to monsoon flooding, a striking 75% of respondents reported that their shelters are not disaster resilient. Only 10% felt their shelters were quite safe, and a mere 1% believed their shelters could withstand disasters.





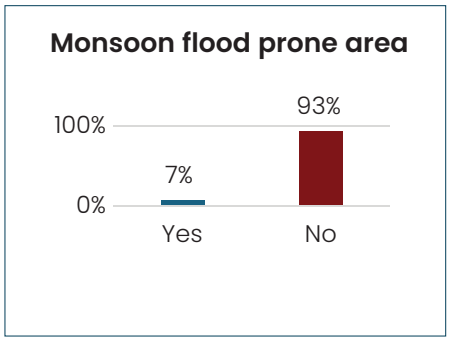


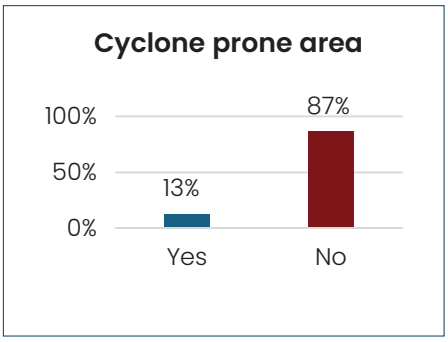
Similarly, in cyclone-prone regions, 71% of respondents indicated that their shelters lack resilience. Just 12% considered their shelters to be quite safe, while 5% believed their shelters were disaster resilient. Flash flood-prone areas showed slightly better perceptions, yet still concerning: 58% of respondents felt their shelters were not resilient, 23% thought their shelters were quite safe, and only 4% considered them disaster resilient.

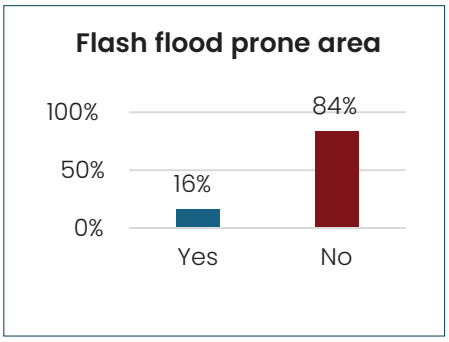
These findings highlight significant regional disparities in shelter safety perceptions and underscore the urgent need for targeted interventions to improve housing resilience, particularly in monsoon flood-prone areas where confidence in shelter safety is alarmingly low.

Household Ability to Repair their Shelter:

The assessment revealed a concerning trend regarding the financial capacity of affected populations to repair their existing shelters. When asked about their ability to undertake necessary shelter repairs, a significant proportion of respondents across three hazard-prone regions expressed their inability to do so due to financial constraints.



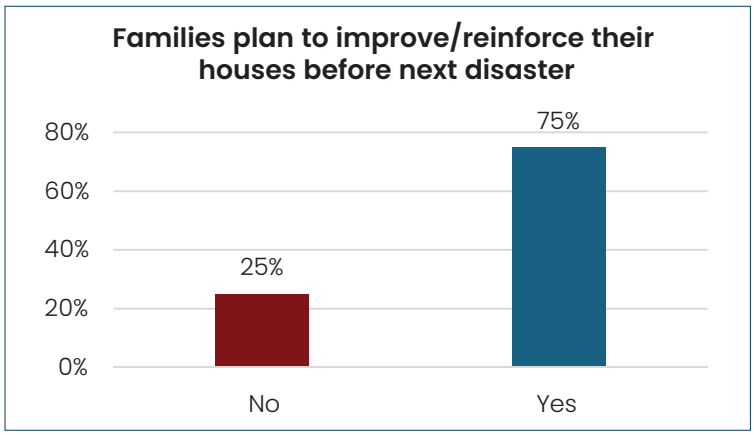




In monsoon flood-prone areas, a staggering 93% of respondents reported that they do not have the financial means to repair their current shelters. In cyclone-prone regions, 87% of participants similarly indicated their inability to afford repairs. Meanwhile, in flash flood-prone zones, 84% of respondents shared the same concern.

These figures highlight a widespread lack of financial resilience among vulnerable communities, underscoring the urgent need for targeted shelter assistance and recovery support in these regions.

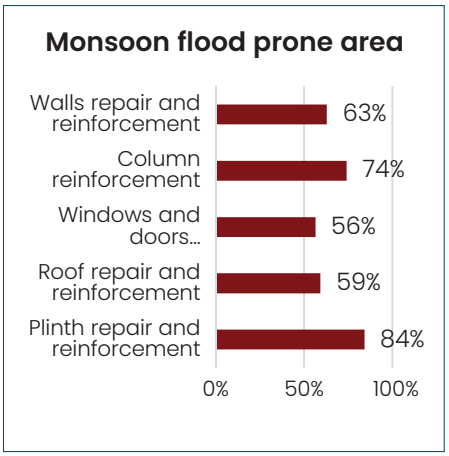
Families Plan to Reinforce/Improvement of their Shelters:

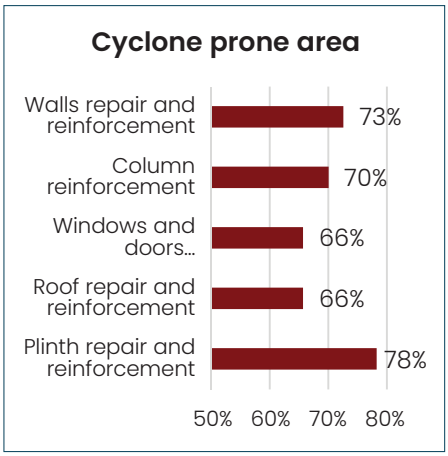


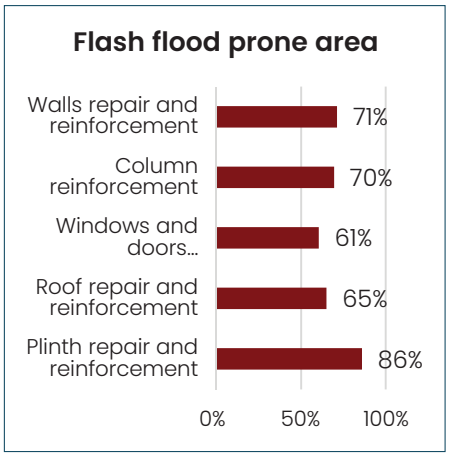
The assessment conducted in several hazard-prone areas across Bangladesh, revealing that most existing shelters are not resilient to disasters. In rural regions, households frequently undertake repairs or reinforcements to their shelters, often on an annual basis, due to recurring exposure to natural hazards. As part of the assessment, respondents were asked about their plans to reinforce or improve their shelters. Notably, 75% of them indicated that they plan to strengthen or upgrade their shelters before the next disaster season.

Types of Reinforcement or Improvement Work Required:

In hazard-prone areas, the shelter landscape is dominated by vulnerable structures such as kancha and jhupri, which are particularly susceptible to damage during disasters. Despite the fragile nature of these shelters and the households' limited financial capacity, a significant majority (75%) are planning to reinforce or improve their shelters ahead of the next disaster. This proactive intent reflects a strong awareness of risk and a desire to enhance resilience, even in the absence of immediate resources.







The assessment reveals that the types of reinforcement work are varied and often overlap, with nearly every shelter requiring improvements in multiple areas. In monsoon flood-prone regions, the most common planned intervention is plinth reinforcement, with 84% of households prioritizing this foundational upgrade. Roofs, windows and doors, columns, and walls also feature prominently in households' plans, indicating a comprehensive approach to strengthening shelter structures against water damage and structural instability.

In cyclone-prone areas, the pattern is similar but with slightly different emphasis. Here, 78% of households plan to reinforce their plinths, while 66% focus on roofs and windows/doors.

Columns and walls also receive attention, with 70% and 73% of households respectively planning reinforcements. These figures suggest that households are preparing for high wind impacts and potential structural collapse, which are common consequences of cyclones.

Flash flood-prone areas show the highest percentage of households planning to plinth reinforcement, at 86%. This reflects the urgent need to elevate shelters to prevent sudden water intrusion. Roofs, windows and doors, columns, and walls are also targeted for reinforcement, with percentages ranging from 61% to 71%, underscoring the widespread vulnerability and the need for multi-faceted improvements.

Despite the clear intent to reinforce shelters, previous findings indicate that households currently lack the financial means to carry out these improvements. This disconnect between planning and capacity highlights a critical gap that must be addressed through targeted shelter repair interventions. Such support is essential not only to meet immediate needs but also to build long-term resilience in communities facing recurring hazards. The data strongly suggests that preparedness efforts must include financial and technical assistance to enable households to translate their plans into action before the next disaster strikes.

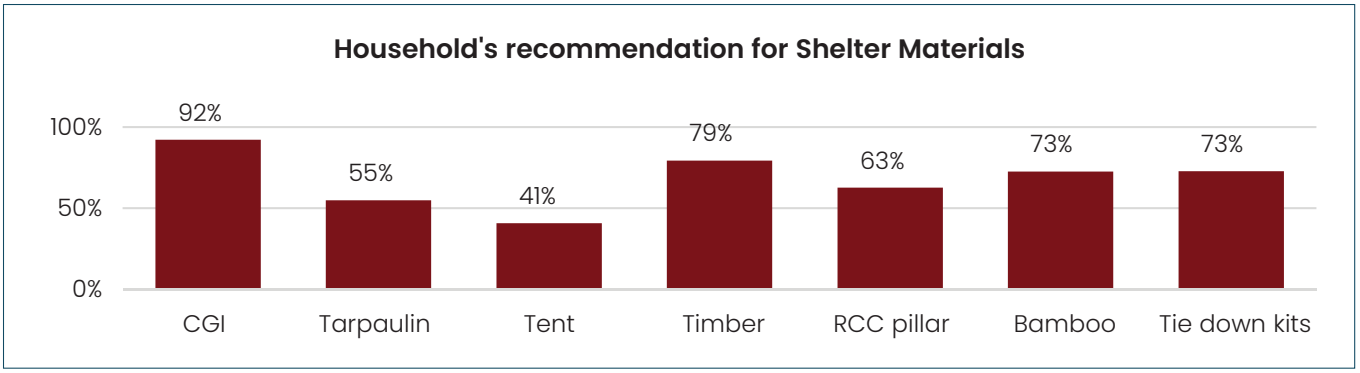
ASSESSMENT FINDINGS

Household Recommendations for Shelter Support

Household Recommendations for Shelter Materials:

After a disaster strikes, humanitarian agencies often step in to provide shelter materials to affected communities. However, the type of support offered can vary widely depending on local needs and preferences. This assessment sought to understand what specific shelter materials households in rural Bangladesh require in the aftermath of such events. The responses revealed a clear pattern of preference rooted in traditional housing practices and practical considerations.

Respondents recommended multiple options, indicating that they required one or more shelter materials as part of shelter support.



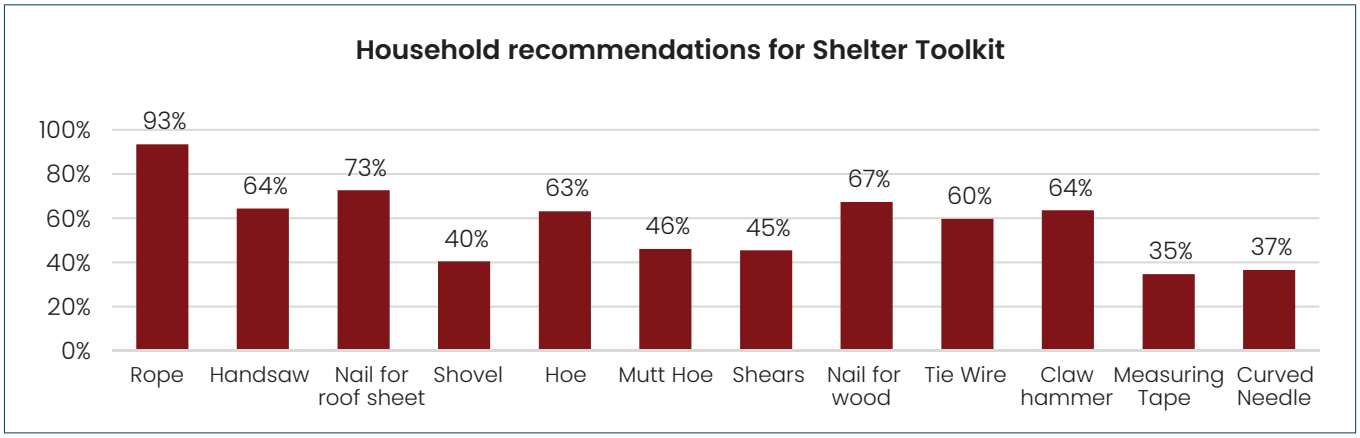
A striking 92% of households recommended CGI sheets, underscoring their importance as a core component of rural housing. These sheets are widely used for roofing and walling and are valued for their durability and familiarity. In emergency situations, tarpaulins also play a significant role, with 55% of households identifying them as essential for immediate shelter needs. Although tents are not commonly used in Bangladesh, 41% of respondents considered them a viable option for temporary shelter, indicating some openness to alternative solutions. Timber emerged as another critical material, with 79% of households requesting it for use in pillars and internal structures. This reflects the traditional construction methods in rural areas, where timber is a key element in building stable shelter. Similarly, RCC pillars were recommended by 63% of respondents, particularly for strengthening kancha houses, which are more vulnerable to damage. Bamboo, known for its versatility and availability, was requested by 73% of households, highlighting its role in both structural support and jointing components. Tie-down kits were also recommended by 73% of respondents, emphasizing the need for wind-resistant solutions in disaster-prone areas. These kits are crucial for securing shelter structures against heavy winds and preventing further damage.

The materials recommended by affected households are not only culturally appropriate but also essential for rebuilding shelters that can withstand future hazards. Shelter support programs must consider these preferences to ensure that aid is both effective and respectful of local practices.

Household Recommendations for Shelter Toolkit:

Shelter toolkits play a vital role in humanitarian shelter support, especially in post-disaster or displacement contexts. These toolkits typically contain essential tools and materials that enable affected households to repair, reinforce, or rebuild their shelters. Recognizing the importance of tailoring these kits to actual household needs, the assessment gathered direct feedback from affected communities regarding the most useful items to include.

The assessment asked households to identify which tools and materials they considered most helpful for shelter repair and maintenance. The results revealed strong preferences for certain items, indicating both practical utility and local familiarity with their use.

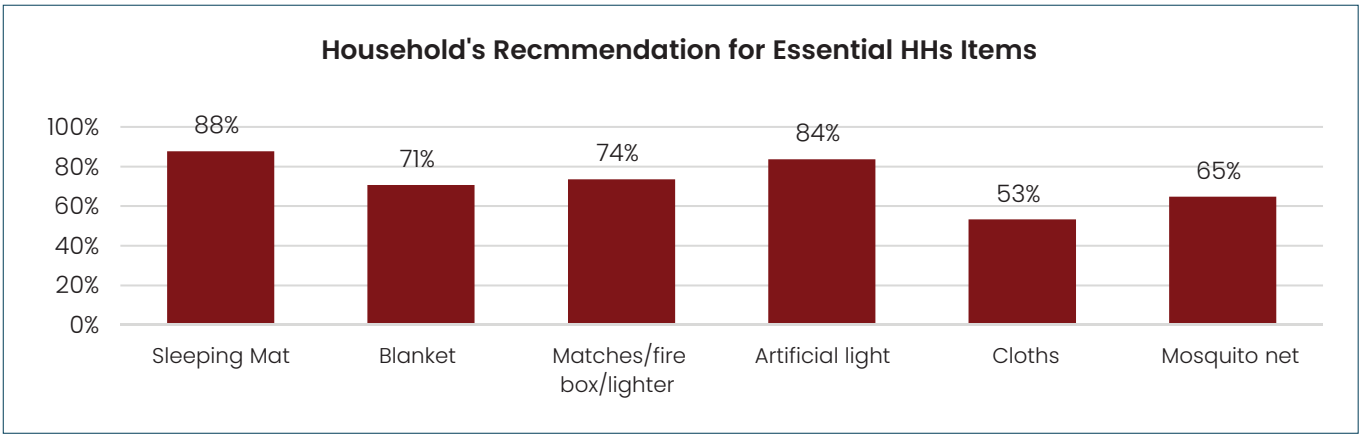


- **Rope** was the most highly recommended item, with **93%** of respondents emphasizing its importance. Rope is commonly used to tie structural components together, secure roofing materials, and stabilize temporary shelters.
- **Nails for roof sheets** were suggested by **73%** of households, reflecting the need for reliable fastening solutions for corrugated metal or other roofing materials.
- **Handsaws** were recommended by **64%,** indicating the necessity of cutting wood or bamboo for structural repairs.
- **Nails for wood** received support from **67%,** further highlighting the importance of basic carpentry tools.
- **Claw hammers** were also favored by **64%,** essential for driving and removing nails during construction or repair.
- **Tie wire,** supported by **60%,** is useful for binding materials and reinforcing joints.
- **Hoes** (63%) and **mutt hoes** (46%) were recommended for ground clearing and foundation preparation.
- **Shovels** (40%) are vital for digging, leveling, and moving soil or debris.
- **Shears** (45%) are useful for cutting lightweight materials such as plastic sheeting or vegetation.
- **Measuring tape** (35%).
- **Curved nails** (37%) were also mentioned, for specific structural applications.

These findings provide valuable insights into the practical needs of households and will inform the design and distribution of future shelter toolkits. By aligning toolkit contents with community preferences, humanitarian agencies can enhance the effectiveness of shelter interventions and empower households to take an active role in rebuilding their living spaces.

Household Recommendations for Essential Household Items:

In the aftermath of disasters, families often face the loss of essential household items, which significantly affects their ability to recover and maintain basic living conditions. Humanitarian agencies have long recognized the importance of providing household support as part of emergency relief efforts. To better understand community needs, the assessment gathered direct feedback from affected households regarding the types of items they consider most critical during emergencies.



The results of the assessment reveal a clear prioritization of certain household items. A striking 88% of respondents identified sleeping mats as the most important item, underscoring the urgent need for basic bedding when families are displaced or their shelters are damaged. Sleeping mats offer immediate comfort and protection, especially in temporary shelters where traditional bedding is unavailable.

Blankets were also highly requested, with 71% of respondents emphasizing their importance, particularly during the winter season. This reflects the vulnerability of disaster-affected populations to cold weather and the need for warmth and insulation in the absence of proper housing.

Another significant finding was the demand for fire-starting tools—matches, fireboxes, or lighters—with 74% of respondents highlighting their necessity. In flood or cyclone situations, rain and water damage often disrupt access to fire, which is essential for cooking. The ability to generate fire becomes a critical survival need in such contexts.

Alternative lighting sources such as lamps were requested by 84% of respondents. This high percentage points to the frequent disruption of electricity during disasters and the need for alternative lighting to maintain safety and functionality in dark or damaged environments.

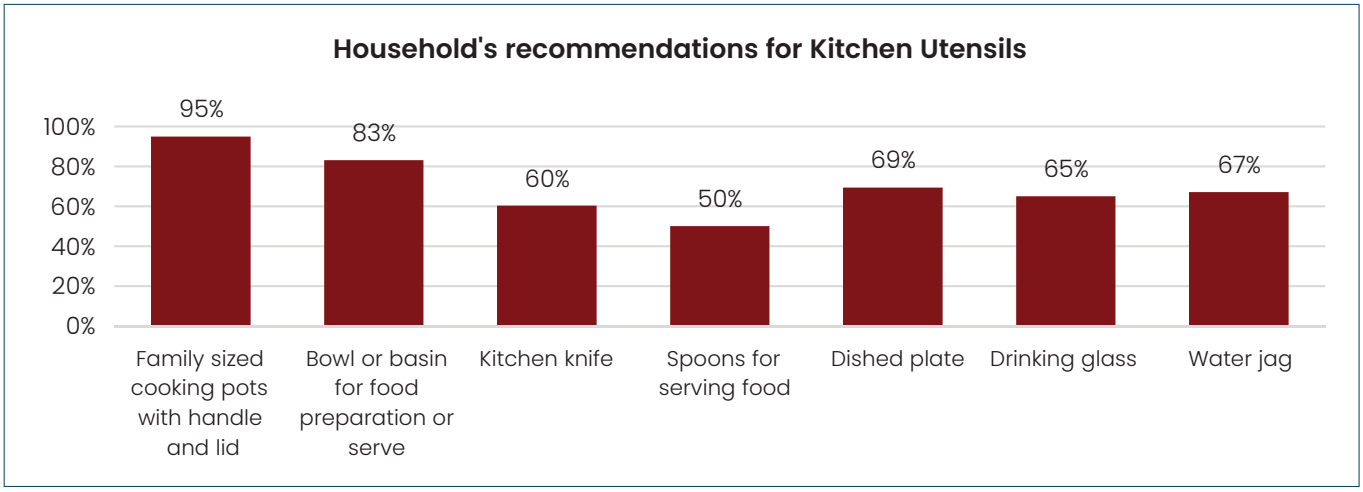
Clothing was mentioned by 53% of respondents, reflecting the loss of personal belongings and the need for appropriate attire for men, women, and children. Clothing is not only a basic necessity but also a matter of dignity and protection, especially when families are forced to evacuate or live in temporary conditions.

65% of respondents asked for mosquito nets, particularly in rural areas where stagnant water following floods can lead to an increase in mosquito-borne diseases. The request for mosquito nets highlights a preventive health concern and the importance of protecting vulnerable populations from additional risks during recovery.

Overall, the assessment provides a clear picture of household priorities in disaster contexts. These insights should guide humanitarian agencies in designing emergency kits that reflect actual community needs, ensuring that relief efforts are both effective and responsive. By aligning aid with the lived experiences of affected families, agencies can enhance the impact of their interventions and support more resilient recovery processes.

Household Recommendations for Kitchen Utensils:

Kitchen utensils play a vital role in the daily lives of families, serving as essential tools for food preparation and consumption. However, during disasters, these items are often damaged or lost, leaving affected households without the means to cook or serve food properly. Recognizing this need, humanitarian agencies frequently include kitchen utensils as part of their relief packages to support families in rebuilding their lives.



To better inform future humanitarian responses, the assessment pointed the specific kitchen utensil needs of disaster-affected families. The findings revealed a strong demand for basic cooking and serving items:

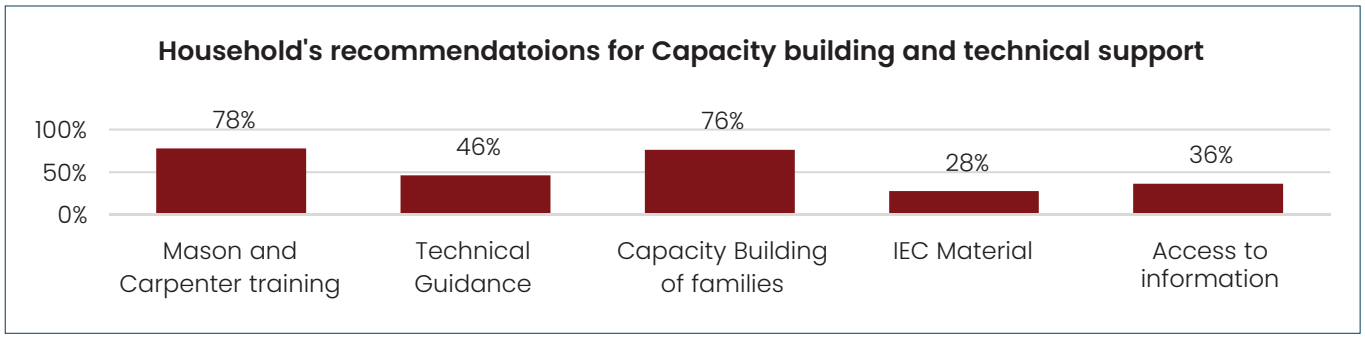
- 95% of households expressed the need for a family-sized cooking pot with a lid, emphasizing its importance for preparing meals after a disaster.
- 83% of respondents requested bowls or basins, which are essential for both food preparation and serving.
- 60% of households identified kitchen knives as necessary, highlighting their use in cutting vegetables, fish, and other ingredients.
- 50% of respondents asked for spoons, primarily for serving food.
- 69% of households indicated a need for dish plates, used for serving meals.
- 65% of respondents requested drinking glasses, underscoring the importance of having proper utensils for consuming water.
- 67% of households asked for water jugs, which are useful for serving water during meals.

These insights reflect the critical role kitchen utensils play in restoring normalcy and dignity to families affected by disasters. By aligning relief efforts with these specific needs, humanitarian agencies can enhance the effectiveness and relevance of their support.

Household Recommendations for Capacity Building and Technical Support:

In addition to providing materials, it is essential to offer capacity building and technical support to households. It emphasizes the importance of complementing material support for shelter with capacity building and technical assistance to households, particularly in disaster-prone areas. This approach recognizes that simply providing materials is not sufficient to ensure long-term resilience. Instead, empowering communities with knowledge and skills is crucial for sustainable shelter solutions.

The assessment findings reveal a strong community preference for training local masons and carpenters, with 78% of respondents identifying them as key actors in constructing



and repairing shelters. This reflects a practical understanding that these individuals are often the first responders in post-disaster reconstruction and are deeply embedded in the community. Their ability to apply disaster-resilient techniques can significantly influence the safety and durability of shelters.

In addition to skilled labor, 76% of households emphasized the need for capacity building among family members themselves. This suggests that communities value not only external expertise but also internal awareness and preparedness. When families understand the principles of safe shelter design, they are better equipped to make informed decisions, supervise construction, and maintain their shelter effectively.

Technical guidance during shelter construction or repair was highlighted by 46% of respondents. This points to a gap in real-time support and the need for accessible, context-specific advice. Such guidance could include on-site supervision, community workshops, or advisory teams that help families and builders apply best practices.

The demand for IEC (Information, Education, and Communication) materials, noted by 28% of households, underscores the importance of visual and easy to understand resources. Pictorial guides tailored to local contexts can bridge literacy gaps and serve as practical tools for both families and laborers. These materials can also foster a shared understanding of what constitutes a safe shelter, enabling better collaboration between households and technical workers.

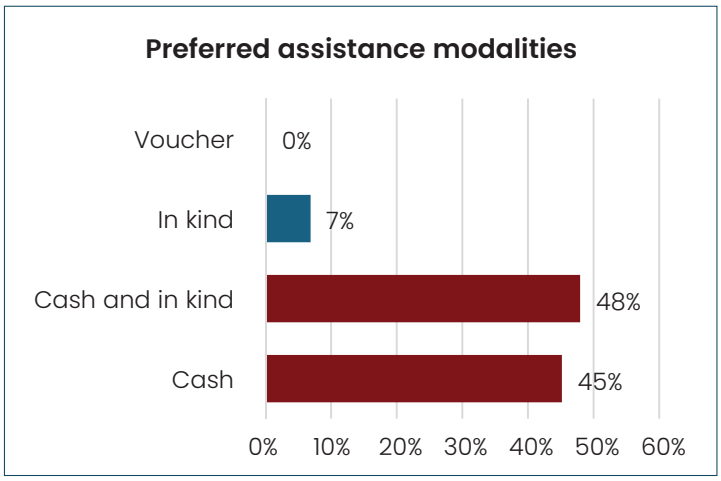
36% of respondents expressed a need for broader access to information to enhance disaster preparedness. This includes early warning systems, shelter safety checklists, and community awareness campaigns. Such information empowers households to take proactive measures before disasters strike, reducing vulnerability and improving overall resilience.

The assessment highlights a multi-layered approach to shelter support, where technical training, household education, and accessible information work together to build safer communities. It reflects a shift from reactive aid to proactive resilience, rooted in local capacity and informed decision-making.

Preferred Assistance Modalities:

After a disaster, the choice of assistance modality becomes a critical factor in ensuring effective shelter support. In the assessment, households were asked about their preferred form of shelter support, and the responses revealed a clear inclination toward flexible and context-sensitive support.

A notable 45% of households preferred cash support. This preference stems from the autonomy it provides, allowing families to purchase shelter materials based on their specific needs. Cash assistance is often seen as empowering, especially when markets are functioning and accessible, as it enables recipients to make decisions that best suit their circumstances.



However, the largest, 48%, opted for a combination of cash and in-kind support. This reflects a pragmatic approach, acknowledging that post-disaster market conditions are often unstable. Prices of essential materials tend to rise, and availability can be inconsistent. By receiving both cash and materials, households can navigate these challenges more effectively, ensuring they have access to what they need without being entirely dependent on volatile market dynamics.

Only 7% of households preferred in-kind support alone. This low percentage suggests a general dissatisfaction with receiving pre-selected items, which may not always align with individual needs or preferences. It indicates that while in-kind support can be useful, it is not the most favored modality when offered in isolation.

Interestingly, no households expressed a preference for voucher-based assistance. This absence points to a lack of familiarity with the voucher system in Bangladesh, where such methods are not commonly used or understood. Unfamiliarity likely contributes to its rejection, highlighting the importance of cultural relevance and community awareness when designing aid programs.

Overall, the findings emphasize the need for humanitarian actors to adopt flexible, locally informed assistance strategies that consider both household preferences and market realities. Cash and combined modalities appear to offer the most promise in meeting shelter needs effectively in the Bangladeshi context.

Call for Action

The findings of the Shelter Vulnerability and Capacity Assessment paint a sobering picture of the housing crisis in Bangladesh. Across the country, millions of families are residing in shelters that are structurally unsound, inadequate, and hostile to withstand the frequent and intensifying natural hazards that plague the region. These shelters are often made from temporary, low-cost materials such as bamboo, CGI sheets, and plastic—offer little to no protection against cyclones, floods, and other climate-induced disasters.

The consequences of this widespread shelter insecurity are both immediate and long-term. In the short term, families face repeated exposure to life-threatening conditions and displacement. In the long term, the inability to secure safe housing perpetuates a cycle of vulnerability, where communities are forced to rebuild again and again, draining their financial resources, eroding their resilience, and stalling progress toward sustainable development.

This is not merely a humanitarian issue—it is a developmental emergency. Inadequate shelter undermines health, education, economic stability, and social cohesion. It exacerbates poverty, increases gender-based vulnerabilities, and limits access to basic services. Without safe and durable housing, families cannot recover, thrive, or contribute meaningfully to national development goals.

To address this urgent challenge, the Shelter Cluster calls upon government agencies, humanitarian actors, development partners, and donors to come together in a spirit of collaboration and shared responsibility. The following strategic actions are recommended:

Strengthening Policy and Regulatory Frameworks for Shelter Resilience: To enhance disaster preparedness and promote sustainable development, it is imperative to strengthen the policy and regulatory frameworks governing shelter and land use. A key priority is the development and enforcement of building codes and land-use policies that mandate disaster-resilient construction practices. These regulations must be context-specific, reflecting local hazard profiles, environmental conditions, and socio-economic realities.

Moreover, shelter resilience must be systematically integrated into national and local development plans. This includes aligning housing strategies with climate adaptation goals, urban planning frameworks, and community-based disaster risk reduction initiatives. By embedding resilience into planning and policy instruments, governments can ensure that shelter systems not only withstand future shocks but also contribute to long-term safety, dignity, and sustainability for vulnerable populations.

Invest in Resilient Shelter Solutions: Transitioning from unsafe, temporary structures such as Kancha and Jhupri houses to durable, disaster-resilient housing is essential. This shift requires investment in locally appropriate construction techniques and materials that are both environmentally sustainable and culturally acceptable. Resilient shelters not only save lives during disasters but also protect livelihoods, assets, and the dignity of affected communities.

Empower Communities Through Capacity Building: Resilience begins with people. By training local masons, carpenters, and community members in safe and resilient construction practices, we can ensure that vital knowledge and skills remain within communities. These capacity-building efforts foster self-reliance, enabling families to build and maintain safer shelter and reducing dependency on external aid.

Ensure Equitable and Inclusive Support: Shelter interventions must be inclusive and equitable. Special attention should be given to marginalized and vulnerable groups, including ethnic minorities, persons with disabilities, elderly individuals, and female-headed households. Tailored support mechanisms ensure that no one is left behind toward safer and more dignified living conditions.

Adopt Flexible Assistance Modalities: In diverse and dynamic contexts, one-size-fits-all solutions are ineffective. Expanding the use of cash-based assistance and hybrid support models empowers families to make choices that best meet their unique needs. Flexibility in assistance also enables communities to adapt to changing market conditions and accelerates recovery efforts.

Strengthen Market and Infrastructure Resilience: A resilient shelter system depends on robust local markets and infrastructure. Efforts must focus on stabilizing supply chains for construction materials, improving access to essential services such as electricity and waste management, especially in disaster-prone and remote areas. Strengthening these systems enhances the overall resilience of communities.

Respond with Urgency and Coordination: The findings of the assessment must serve as a catalyst for action. They should inform the revision of national shelter standards, guide strategic planning, and promote coordinated, multi-sectoral responses. By aligning efforts and resources, stakeholders can ensure that shelter interventions are community-driven, context-specific, and sustainable in the long term.

Shelter is far more than just a physical structure or a roof overhead—it represents the cornerstone of human security, dignity, and the ability to recover from adversity. It provides protection from the elements, a sense of privacy, and a place to call home, which are all essential for physical and emotional well-being. In times of crisis or displacement, shelter becomes a critical lifeline, offering stability and hope.

When we unite our efforts and take timely, coordinated action, we can transform fragile and inadequate housing into resilient, safe, and dignified shelter. This transformation not only improves living conditions but also strengthens communities, enhances disaster preparedness, and promotes long-term development.

Together, we can build a future where everyone regardless of circumstance has access to safe and secure shelter, laying the groundwork for a more just, inclusive, and resilient society.

Shelter Cluster Bangladesh