



# Joint Rapid Needs Assessment

**CYCLONE BIPARJOY - RAJASTHAN**

June 2023





# **CYCLONE BIPARJOY JRNA REPORT**

**RAJASTHAN - JUNE 2023**

## Acknowledgment

This Joint Rapid Needs Assessment (JRNA) would not have been possible without the cooperation and constant support of volunteers, local member organizations of the Inter-Agency Group of Rajasthan, district and village officials, and communities from affected areas. We are indebted to all of them, exigencies of space and time constraints limit us from naming/mentioning each one of them here.

However, we would like to acknowledge with deep gratitude, the guidance, cooperation, and support extended by IAG Rajasthan for mobilizing the volunteers to collect real-time information, provide valuable inputs, and coordinate the assessment process. We would also like to acknowledge the sectoral experts, report writers, and editors who contributed their valuable time in reading and editing this report.

And, above all, the communities of affected areas of Rajasthan who, even amidst the adversities took out time and patiently provided answers to all the questions put to them, without any reservations.

Sphere India

28<sup>th</sup> June 2023

## About JRNA and Disclaimer

As per Sphere India Standard Operating Procedures, adapted to address the emergency situation, a Joint Rapid Needs Assessment (JRNA) was conducted across the flooded areas of Rajasthan; data collection was conducted through secondary sources, field visits, personal interviews, observations, and information provided by local authorities and CBOs. The organizations engaged in response have also shared their observation notes to incorporate in the report. Also, on-ground information was collected using smart phones through a data collection mobile application and collated by the core team taking due consent from the villagers. The aim was to gather information on the impact of cyclone on the community members and understand their recovery needs, collate, and analyze the findings, and disseminate the information to the State, National, and international agencies.

### **Disclaimer**

*The interpretations, data, views, and opinions expressed in this report are collected from various sources including Government led institutions, line departments, field assessments by volunteers, and team members deployed by Organizations who took initiative in Humanitarian Assistance activities and from secondary media sources. It does not necessarily carry the views and opinions of Sphere India or any humanitarian organization as a collective directly or indirectly. It is interpreted only for assessment purposes.*

### **Note**

*The report may be quoted, in part or full, by individuals or organizations for writing proposals, academic and advocacy, and capacity building purposes with due acknowledgments. The materials in this document should not be relied upon as a substitute for specialized, legal, or professional advice in connection with any particular matter. The materials in this document should not be construed as legal advice and the user is solely responsible for any use or application of the materials in this document.*

# CONTENTS

LIST OF TABLES.....	5
LIST OF FIGURES.....	5
LIST OF MAPS.....	5
EXECUTIVE SUMMARY.....	6
SECTORAL FINDINGS AND URGENT NEEDS.....	6
2. BACKGROUND.....	8
2.1 Situation Overview.....	8
2.2 Relief Measures GO & NGO.....	9
2.2.1. Government Response.....	9
2.2.2 Humanitarian Response.....	10
2.3 Humanitarian Coordination.....	10
3. OVERVIEW OF JOINT RAPID NEEDS ASSESSMENT REPORT.....	11
3.1 Timeframe.....	11
3.2 Methodology:.....	11
3.3 Rationale behind the Sampling for Assessment.....	12
3.4 Primary Data Collection.....	12
4. SECTORAL ASSESSMENT & RECOMMENDATIONS.....	14
4.1 RESPONDENTS PROFILE.....	14
4.2 FOOD SECURITY AND LIVELIHOODS.....	16
Overview.....	16
Assessment Findings.....	16
Livelihood.....	18
Urgent Needs.....	23
4.3 WATER SANITATION AND HYGIENE (WASH).....	23
Overview.....	23
Assessment Findings.....	23
Urgent Needs.....	30
4.4 EDUCATION.....	31
Overview.....	31
Assessment Findings.....	31
Urgent needs.....	33
4.5. HEALTH.....	34
Overview.....	34
Assessment Findings.....	34
Urgent Needs.....	36
4.6 SHELTER.....	36
Overview.....	36
Assessment Findings.....	36
Urgent Needs.....	41
4.7 PROTECTION.....	42

Overview .....	42
Assessment Findings .....	42
Urgent Needs .....	45
4.8 RELIEF AND RECOVERY NEEDS .....	46
Assessment Findings .....	46
5. RECOMMENDATIONS.....	49
LIVELIHOOD.....	49
HEALTH.....	50
SHELTER .....	51
EDUCATION.....	52
WATER, SANITATION, AND HYGIENE (WaSH):.....	53
PROTECTION: .....	55
Annexure.....	57
JRNA Report Writing Team & Contributors .....	57
JRNA Questionnaire .....	57

## LIST OF GRAPHS

Graph 1: Gender of RESPONDENTS .....	14
Graph 2: Age of Respondents .....	15
Graph 3: LAck of Food Reserves .....	16
Graph 4: LIMITED ACCESS TO FOOD ITEMS at district Level.....	17
Graph 5: MAIN CONCERNS RELATED TO FOOD AND NUTRITION.....	17
Graph 6: DISTRICT LEVEL FOOD AND NUTRITION CONCERNS.....	18
Graph 7: DOMINANT FAMILY OCCUPATION.....	19
Graph 8: SOURCE OF INCOME PRIOR TO DISASTER.....	20
Graph 9: AFFECT OF CYCLONE .....	20
Graph 10: Concerns related to Livelihood .....	21
Graph 11: CONCERNS RELATED TO LIVELIHOOD - DISTRICT LEVEL .....	22
Graph 12: MAIN CONCERNS RELATED TO WASH .....	24
Graph 13: Main Concerns related to WASH - District level .....	25
Graph 14: Before and After: Sources of Drinking Water .....	26
Graph 15: Excreta disposal Practice- Before and after disaster .....	27
Graph 16: Excreta Disposal Practice at district level.....	27
Graph 17: Visible Solid Waste or WASTEWATER in the VICINITY of house .....	28
Graph 18: Garbage Disposal Mechanism.....	29
Graph 19: Difficulties faced by women related to menstrual hygiene.....	30
Graph 20: SCHOOLS FACILITIES - DISTRICT LEVEL.....	32
Graph 21: Main Concerns related to Education .....	32
Graph 22: Functional health facilities - District level.....	34
Graph 23: Family members facing pre existing health problems .....	35
Graph 24: Type of Health problem at district level .....	35

Graph 25: Shelter affected by Cyclone Biparjoy .....	37
Graph 26: Current place of stay .....	38
Graph 27: Current place of stay - district level .....	38
Graph 28: Main concerns related to Shelter .....	39
Graph 29: Main concerns related ton Shelter - District level .....	39
Graph 30: IMmediate NFI needs.....	40
Graph 31: Immediate NFI needs - DISTRICT level .....	41
Graph 32: Main concerns related to Protection .....	43
Graph 33: Main concerns related to Protection - District level.....	44
Graph 34: Most affected and In need of assistance .....	45
Graph 35: Most Urgent Relief needs .....	46
Graph 36: Most urgent relief needs - district wise .....	47
Graph 37: Most Important recovery needs .....	48
Graph 38: Most Important recovery needs - District level .....	48

## LIST OF TABLES

Table 1: Time frame for JRNA .....	11
Table 2: Respondents data .....	12
Table 3: RESPONDENT'S distribution in districts.....	14
Table 4: Gender Distribution.....	14
Table 5: Age of Respondents .....	15

## LIST OF FIGURES

Figure 1: Impact of Cyclone in Rajasthan.....	9
Figure 2: Rescue Operations .....	9
Figure 3: Affected Village .....	9
Figure 4: Impact of Cyclone in RAjasthan .....	9

## LIST OF MAPS

Map 1: Affected Districts .....	8
---------------------------------	---

## EXECUTIVE SUMMARY

The cyclone Biparjoy weakened into a 'Deep Depression' on June 16<sup>th</sup> over Southeast Pakistan adjoining Southwest Rajasthan and Kutch, about 100 km northeast of Dholavira and moved to Rajasthan following its landfall in Gujarat. The western districts of Rajasthan experienced severe devastation due to heavy rainfall caused by a cyclone, resulting in eight confirmed deaths. The cyclone-induced downpour had a significant impact on five districts, including Balmer, Pali, and Jalore, where extensive damage was reported. As a consequence, around 17,000 individuals were affected by the calamity, facing various challenges and hardships. In response to the flood, relief and response efforts were initiated in Rajasthan by government and humanitarian agencies. The primary focus of these initiatives was to provide immediate assistance and support to the affected population. This included the provision of essential supplies such as food, clean water, medical aid, and temporary shelter for those who had been displaced. As per the guidance of Inter-Agency Coordination Committee, Joint Rapid Needs Assessment (JRNA) was conducted to determine urgent priorities for response and relief efforts.

### SECTORAL FINDINGS AND URGENT NEEDS



**Food Security and Livelihoods:** Cyclone Biparjoy has wreaked havoc in the affected areas, causing widespread damage to agricultural crops, food stocks, and livelihoods. The cyclone's impact has disrupted food production and supply chains, leading to limited access to nutritious food for the population. As a result, food insecurity and malnutrition risks have been further exacerbated, putting the affected population at greater risk. The cyclone's destructive force has not only affected agricultural lands, crops, and livestock, but also businesses and industries, resulting in the loss of livelihoods for farmers and daily wage earners.

*Immediate measures are crucial to address food and nutrition challenges and support the revival of livelihoods. Providing emergency food assistance and ensuring access to nutritious food should be prioritized. Efforts should focus on restoring agricultural activities, market infrastructure and supply chains, for reviving economic activities and enhancing self-sufficiency. This includes providing farmers with seeds, tools, and fertilizers to restart agricultural activities, along with financial assistance and training to recover their losses. Facilitating access to schemes such as MGNREGA, Agriculture/ livelihood related schemes under NRLM and SRLM etc., TPDS, PM-Poshan and other state specific social protection schemes.*

**Health:** The cyclone has had a significant impact on the health sector. Health facilities, including hospitals and clinics, have been damaged, hindering access to healthcare services. The destruction of infrastructure and disrupted transportation has further limited the availability of medical care. The cyclone's aftermath has also increased the risk of waterborne diseases and vector-borne illnesses due to contaminated water sources and stagnant water.



## 2. BACKGROUND

### 2.1 Situation Overview

Rajasthan is the largest State of India with a land area of 342,239 sq km. It lies between 23° 3' – 30° 12' N latitude and 69° 30' – 78° 17' E longitude with Tropic of Cancer passing through the southernmost district of the state. The state stretches 826 km from North (Sri Ganganagar district) to South (Banswara district), and 869 km from East (Dholpur district) to West (Jaisalmer district). The overall length of the state boundary is 5,920



MAP 1: AFFECTED DISTRICTS

km, of which 1,070 km is the strategically important international border with Pakistan. The State shares its boundary with Gujarat, Madhya Pradesh, Uttar Pradesh, Haryana, and Punjab. It also shares its border with Pakistan having Barmer, Jaisalmer, Bikaner, and Sri Ganganagar districts as the border districts. Sixty percent of the state falls under the Thar Desert, which is situated in western Rajasthan.

Severe devastation occurred in the western districts of Rajasthan on June 16th due to heavy rainfall caused by a cyclone, resulting in eight confirmed deaths. The districts most affected by the cyclone were Balmer, Pali, and Jalore, where extensive damages were reported. Approximately 17,000 people were affected by this calamity, facing numerous challenges and difficulties.

To address the crisis, relief and response operations are currently being conducted in Rajasthan. These efforts are being coordinated and overseen by the government as well as humanitarian organizations. The primary objective is to provide immediate assistance and support to the affected population, including essential supplies such as food, clean water, medical aid, and temporary shelter for those who have been displaced.

Volunteers, rescue workers, and medical professionals have been deployed to the affected areas to evaluate the situation, offer medical assistance, and conduct search and rescue missions if required. Additionally, restoring critical infrastructure such as roads and communication networks is a priority to facilitate aid delivery and enhance coordination among response teams.

Despite the ongoing relief and response efforts, the situation remains challenging as the affected districts continue to cope with the aftermath of the cyclone-induced heavy rainfall.



FIGURE 2: RESCUE OPERATIONS



FIGURE 1: IMPACT OF CYCLONE IN RAJASTHAN



FIGURE 4: IMPACT OF CYCLONE IN RAJASTHAN



FIGURE 3: AFFECTED VILLAGE

## 2.2 Relief Measures GO & NGO

The Government and Non-Government actors have initiated their relief efforts. Along with active coordination among like-minded civil society organizations over social media, GO-NGO coordination has also been established. Sphere India, a national coalition of humanitarian agencies which coordinates the humanitarian organizations in the country has been releasing regular sitreps and activated the Unified Response Strategy, the mechanism with SOP for inter-agency coordination during such emergencies.

### 2.2.1. Government Response

- In response to the cyclone, the Central Government has deployed seventeen teams of the State Disaster Response Force (SDRF) in Jaipur, Kota, Bharatpur, Udaipur, Ajmer, Jodhpur, and Bikaner, as well as eight teams of the National Disaster Response Force (NDRF) in the affected districts.
-

- The National Disaster Response Force (NDRF) successfully rescued 133 individuals.
- In response to the cyclone, the State Disaster Response Force (SDRF) has successfully rescued 123 individuals.
- The district administration is conducting a comprehensive survey to assess the damage inflicted upon livestock and houses, following the protocols established by the SDRF.
- The Chief Minister has been closely monitoring the situation and visited the affected area to evaluate the extent of the impact.
- The Chief Minister emphasized the importance of conducting a thorough assessment to determine the cyclone's impact and subsequently mentioned that compensation to affected individuals would be provided accordingly.
- Volunteers, in collaboration with the SDRF, are actively engaged in cleaning the roads, while respective officials are working diligently to reinstall the electric posts.

### 2.2.2 Humanitarian Response

- IAG Rajasthan is closely monitoring the situation and distributing relief materials in low lying areas.
- Caritas India is reaching out to 2000 families in Barmer District with NFI, Hygiene kits, UCT and Cash for Work.
- SEEDS India is also providing NFIs, Hygiene kits, Ration Kits, Temporary Shelter Kits, etc., to 1700 families in Barmer District.
- Roman Catholic Diocesan Social Service Society is supporting 100 families each in Jalore and Pali with Shelter and Hygiene Kits.
- Sphere India under the aegis of Inter-Agency Coordination (IAC) Committee has initiated the Unified Response Strategy (URS) and has also begun the Joint Rapid Needs Assessment (JRNA) in collaboration with IAG Rajasthan.

### 2.3 Humanitarian Coordination

In the wake of the Cyclone that affected Gujarat and Rajasthan, Sphere India called for an IAC committee meeting to assess the current situation, and get situation updates from responding organizations, and plan the forward course of action ([Minutes of the Meeting](#)). Sphere India Secretariat is also monitoring the situation closely in coordination with state IAGs.

---

### 3. OVERVIEW OF JOINT RAPID NEEDS ASSESSMENT REPORT

#### 3.1 Timeframe

In close coordination with State Inter Agency Group- Rajasthan, Sphere India has been monitoring the situation from 15<sup>th</sup> June 2023. Three Situation Reports were also released during this time. Considering the challenging situation, two preparedness meetings of IAG Gujarat were called where Sphere India also took part, and an emergency IAC meeting was convened on 21<sup>st</sup> June 2023, with representatives from IAG Rajasthan, IAG Gujarat and other responding agencies. During this meeting, the IAC committee decided to activate the Unified Response Strategy (URS) and initiate the JRNA Process.

TABLE 1: TIME FRAME FOR JRNA

Timeline	Activity
16 <sup>th</sup> June 2023	Cyclone Hit - Rajasthan
21 <sup>st</sup> June 2023	IAC Meeting with IAG coordinator and other field responders
22 <sup>nd</sup> June 2023	Orientation of Data Collection Volunteers
23 <sup>rd</sup> – 26 <sup>th</sup> June 2023	Data Collection in the field
26 <sup>th</sup> June 2023	Data Analysis
27 <sup>th</sup> June 2023	First draft of the report to be shared with Sector Committees
28 <sup>th</sup> June 2023	Consolidation and Final Report Dissemination

#### 3.2 Methodology:

Based on the emergency situation, the Inter agency Coordination committee coordinated with its existing NGO partners working in the affected districts of Rajasthan. A Joint Rapid Needs Assessment was conducted to identify the urgent, mid-term and long-term needs of affected community for the essential sectors of Food & Nutrition, Health, Water Sanitation and Hygiene (WaSH), Education, Shelter, Livelihood, and Protection. This would help flag the vulnerability of affected community to access basic services and entitlements in Barmer, Jalore and Pali districts.

The JRNA is the result of joint efforts from member organizations and the state IAG facilitated by Sphere India and with field support from local NGOs, Government led institutions, and line departments to provide the required data and information.

Volunteers were oriented to carry out data collection using household and key informant interview tools in these affected districts. The collected data got analyzed by the Sphere India team, and the

draft report was reviewed by the respective sectoral experts. The reviewed and revised report also incorporates the inputs and insights shared by the Sectoral Committee Leads.

During JRNA, urgent needs of affected communities have been identified through direct data collection from the field, damage assessment reports prepared by the government, pre-disaster information from respective line departments, and secondary data from various sources, media reports and discussions with grassroots functionaries. Data was collected according to the listed indicators available on the specific tools/questionnaires deployed during the interviews/discussions. The methodology was based on:

- a) Structured one-to-one interviews with affected households (ensuring prioritizing of random households from most affected villages giving equal representation to all sections of the local community).
- b) Secondary data from various media sources with observation and fact checking.

### 3.3 Rationale behind the Sampling for Assessment

The sample size was determined based on secondary data information available from government reports and media sources. Affected areas were chosen from different districts of Rajasthan. The areas were selected based on the impact data, vulnerability, heavy rainfall and in consultation with the local NGOs aware of local situations and event impact. The households for the survey were selected to ensure the participation and response from vulnerable groups like migrants, elderly people, PwDs, children and marginalized communities living in low-lying areas, near drainage areas, slums, etc.

### 3.4 Primary Data Collection

The primary data collection process included household surveys and key informant interviews at the affected areas to cover households and local administration. The questions were designed to grasp the needs and challenges in the sectors of Food and Nutrition Security, Shelter, Protection, Health, Livelihood, Education, and WaSH. Household level questionnaires designed by national experts, and suggestions from local humanitarian actors were filled through the KoBo Collect Tool. To keep the assessment neutral, unbiased, and reflective of the ground reality, local volunteers were engaged, physically visiting, and recording responses from the affected population.

TABLE 2: RESPONDENTS DATA

District	Respondents	Male	Female
Jalore	99	82	17
Pali	98	63	35
Barmer	25	17	08

Of all the affected villages and households, 3 districts and 222 households were taken as a sample for most affected community and have been assessed and documented based on the instruments/tools/questionnaires.

### **Quantitative Data Analysis**

Once data was collected, Sphere India team carried out data cleaning and analysis using Microsoft Excel. The key findings were analyzed and highlighted in the form of graphs and charts to provide a better understanding of the emerging trends to the readers.

---

## 4. SECTORAL ASSESSMENT & RECOMMENDATIONS

### 4.1 RESPONDENTS PROFILE

This JRNA presents a comprehensive analysis of the survey data collected from respondents in Jalore, Pali, and Barmer districts. The survey includes a total of 222 respondents, with Jalore having the highest number of participants at 99, closely followed by Pali with 98 respondents. Barmer district, while having a smaller representation, still provided valuable insights from 25 respondents. The distribution across these districts ensures a diverse range of perspectives from different geographical areas.

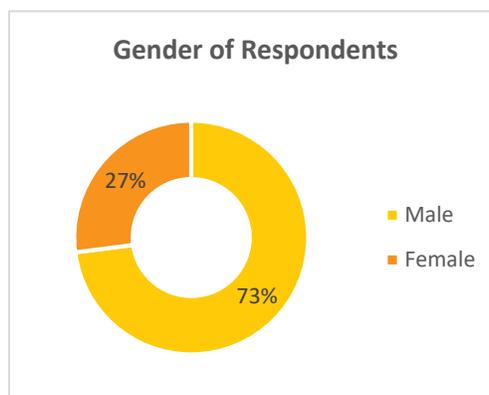
TABLE 3: RESPONDENT'S DISTRIBUTION IN DISTRICTS

District	Number of Respondents
Jalore	99
Pali	98
Barmer	25
<b>TOTAL</b>	<b>222</b>

The survey data shed light on the gender distribution among the respondents. Out of the total participants, 73% (162 individuals) identified as male, while the remaining 27% (60 individuals) identified as female.

TABLE 4: GENDER DISTRIBUTION

Gender	Numbers
Male	162
Female	60
<b>TOTAL</b>	<b>222</b>



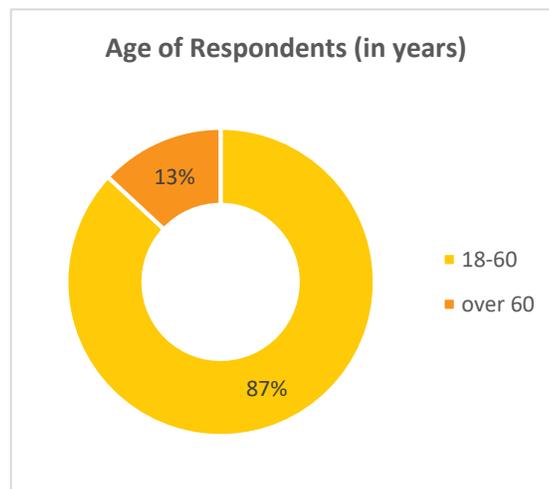
GRAPH 1: GENDER OF RESPONDENTS

The survey revealed that the majority of respondents, accounting for 87% of the total, fell within the 18-60 age range. This group represents individuals in their working-age, making their opinions highly relevant for decision-making processes concerning employment, education, and societal development. Their inclusion in the survey allowed capturing their preferences, needs, and experiences, enabling policymakers to address their specific requirements effectively.

Additionally, respondents over the age of 60 constituted 13% of the total, forming a smaller but critical segment of the surveyed population. Despite their lower representation, their insights are essential in understanding the unique perspectives and requirements of this demographic. Their experiences can provide valuable guidance for policy formulation in crucial areas such as healthcare, and social support. Including their perspectives ensures that policies and programs are designed to cater to the needs of this age group, acknowledging their contribution to society and addressing their specific challenges effectively.

TABLE 5: AGE OF RESPONDENTS

Age Group	Percentage
18-60	87%
over 60	13%



GRAPH 2: AGE OF RESPONDENTS

By encompassing a diverse range of age groups, the survey ensures a comprehensive understanding of the diverse viewpoints of the population and needs across different generations. This holistic approach to data collection and analysis allows for the formulation of well-informed recommendations and decisions that encompass the requirements of individuals in their working-age as well as those above the age of 60.

## 4.2 FOOD SECURITY AND LIVELIHOODS

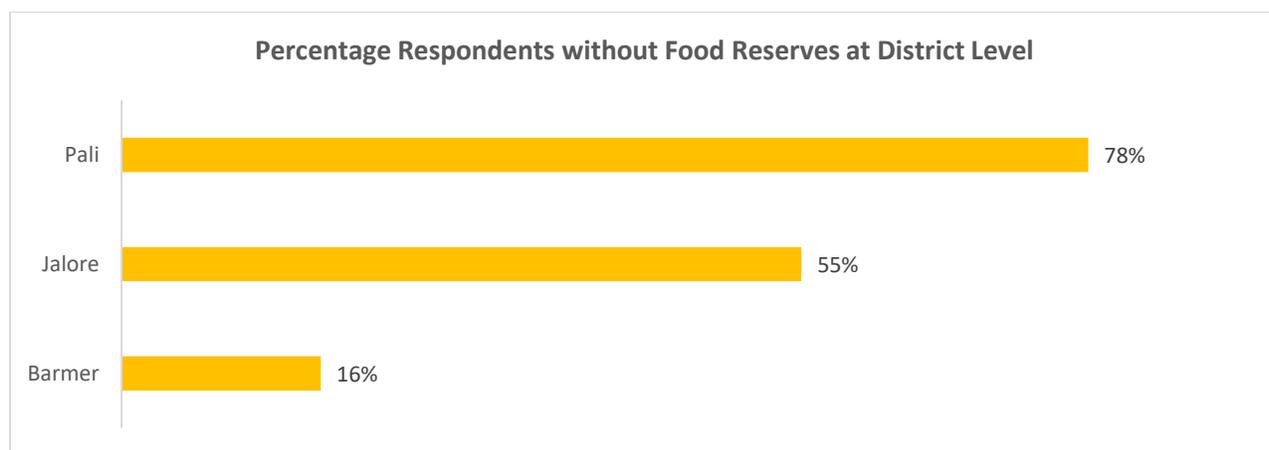
### Overview

The assessment provides an overview of the food security and livelihood conditions of people living in the affected districts of Rajasthan, affected by the cyclone, highlighting the impact of the disaster on their nutrition and livelihood needs. It assesses the extent of damage caused by the cyclone, identifies the immediate FNS and Livelihood requirements of the affected population, their current places of stay, and proposes necessary interventions to address these needs.

During the assessment of the cyclone's impact, the situation analysis highlighted insufficient food and nutrition availability in the affected districts, characterized by inadequate food supply, limited cooking facilities, disrupted market access, financial constraints, and loss of crucial documents. The most pressing concern identified on livelihoods was the impact on daily labor work, affecting a significant majority of the population and highlighting their vulnerability. Overall, the situation analysis depicted that the affected districts are facing extensive challenges in agriculture, livelihoods, and finances, emphasizing the need for immediate attention, support, and focused efforts to facilitate recovery and build resilience in the affected districts.

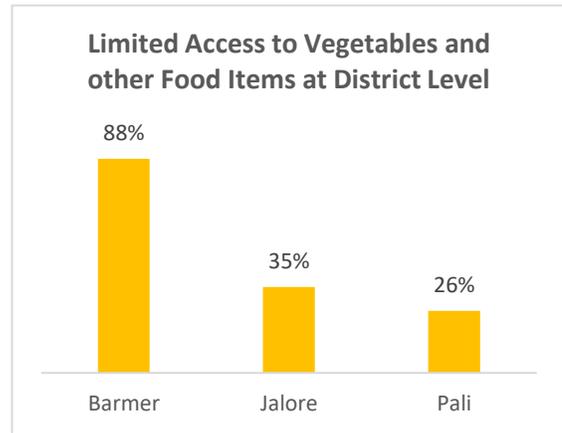
### Assessment Findings

Based on the data collected through Household Survey in the affected districts of Rajasthan, 78% of the respondents in Pali district stated that they don't have any food reserves. In Jalore district, 55% of the respondents stated the lack of food reserves, and the families did have stored food reserves stated that it would last for approximately 26 days. In Barmer district, approximately 16% of the respondents do not have any food reserves, and the affected households with stored food reserves stated that these would last for roughly 40 days.



GRAPH 3: LACK OF FOOD RESERVES

When analysing the accessibility to vegetables and other food items in the affected districts, it was observed that 88% of the respondents in Barmer district had limited access to vegetables and other food items. This is followed by 35% of the respondents in Jalore and 26% of the respondents in Pali with limited access to vegetables and other food items.

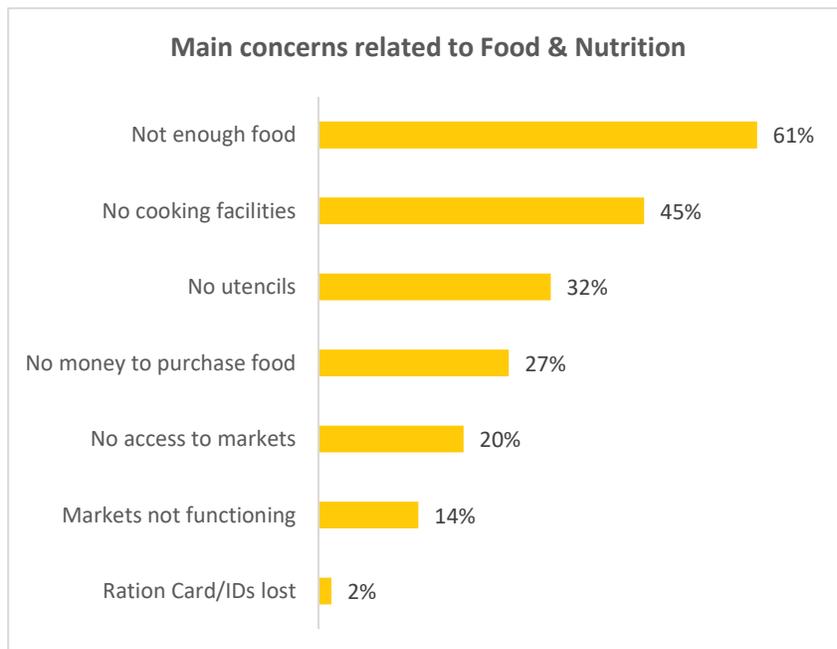


GRAPH 4: LIMITED ACCESS TO FOOD ITEMS AT DISTRICT LEVEL

To identify the key issues concerning food and nutrition security in the sampled districts of Rajasthan, it was observed that 61% of the respondents from the three sampled districts expressed lack of adequate food supply.

Forty-five percent( 45%) of the respondents stated lack of any cooking facility as the cyclone had damaged their households and rendered their previous cooking mediums unusable. Other primary concerns include inability to access markets due to disrupted routes, compounded by the fact that the markets themselves were non-functional. Approximately 27% of the households in the affected three districts of Rajasthan mentioned that they lacked the financial means to purchase food.

In addition to these concerns, some households also reported the loss of important documents like ID Cards and Ration Cards during the incessant rains caused by the cyclones.

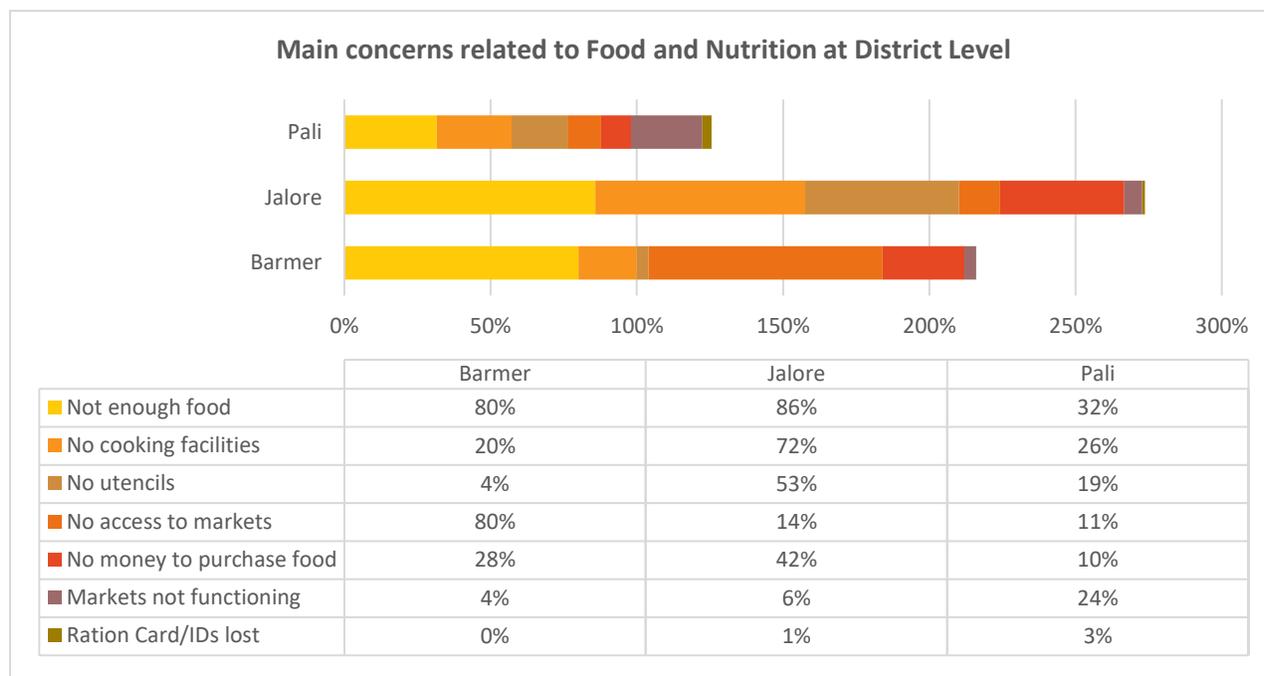


GRAPH 5: MAIN CONCERNS RELATED TO FOOD AND NUTRITION

Deeper analysis of these concerns at the district level revealed that in Barmer district, 80% of the respondents stated the lack of adequate food supplies and access to the markets. Other concerns in Barmer district were absence of cooking facilities and the lack of financial means to purchase food.

In Jalore district, 86% respondents stated that they did not have adequate food supplies. Other concerns

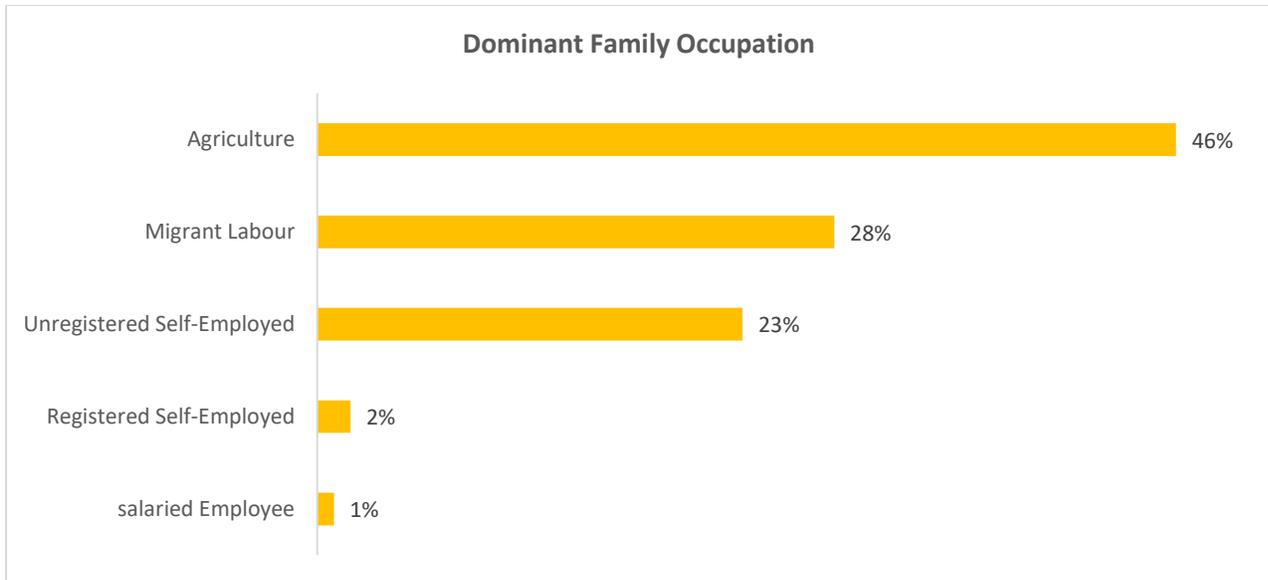
included lack of financial means to purchase food, absence of cooking facilities and utensils and lack of access to markets. In Pali district, the major concern included the lack of adequate food quantities, while other concerns included no cooking facilities/utensils, non-functional markets, and lack of access to markets due to disrupted routes.



GRAPH 6: DISTRICT LEVEL FOOD AND NUTRITION CONCERNS

### Livelihood

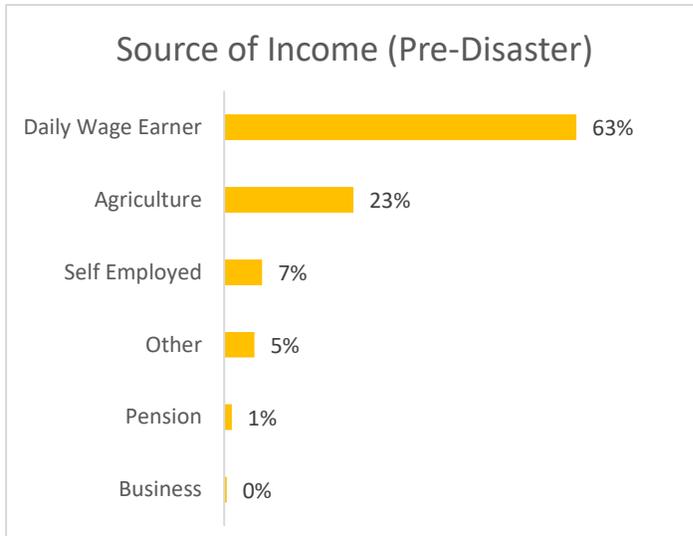
The dominant family occupation of the majority of the households in the affected districts of Rajasthan is agriculture. Twenty-eight percent (28%) of the households stated that they were primarily migrant labour and depended on daily wages for their livelihood. Respondents from 23% of the households stated that they were employed in the informal sector as the source of their livelihood. Only one-percent (1%) of the respondents stated that they were salaried employees. Populations dependent on daily labour or those involved in informal sectors primarily depend on daily wages for their livelihood, thus during disaster, due to impact on the days of earning, it can be inferred that these populations are the most vulnerable and in urgent need of support.



GRAPH 7: DOMINANT FAMILY OCCUPATION

Further analysing at the district level, it was observed that approximately all the respondents in Barmer were dependent on Agriculture since it was the dominant family occupation, 45% of the households in Jalore district were dependent on Agriculture and 29% were unregistered self-employed involved in the informal sector and 23% were migrant labour. In Pali district, 40% of the respondents were migrant labours and 34% were dependent on agriculture. Population involved in the informal sector and those working as daily wage workers lack security nets and their daily wages were also affected by the cyclone. Hence it can be assumed that they are highly vulnerable and require immediate support.

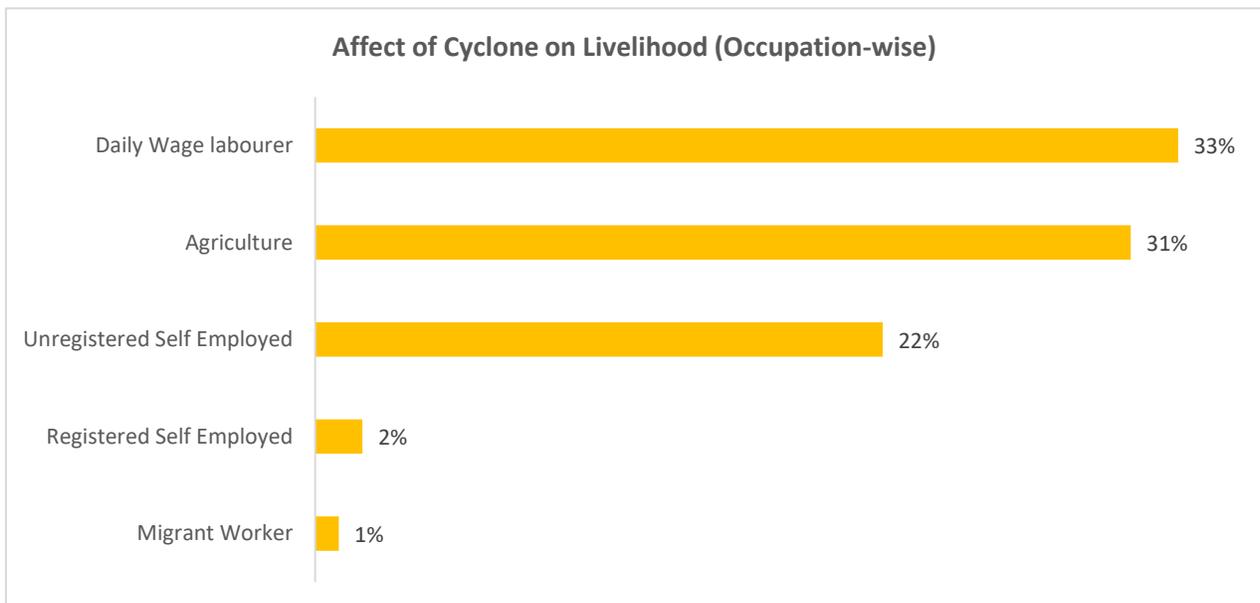
Prior to the disaster, the primary source of income in the affected districts of Rajasthan was through daily wage earning. Approximately 63% respondents in the sample area stated that they were daily wage earners, while only 23% of the respondents earned their livelihood through agriculture.



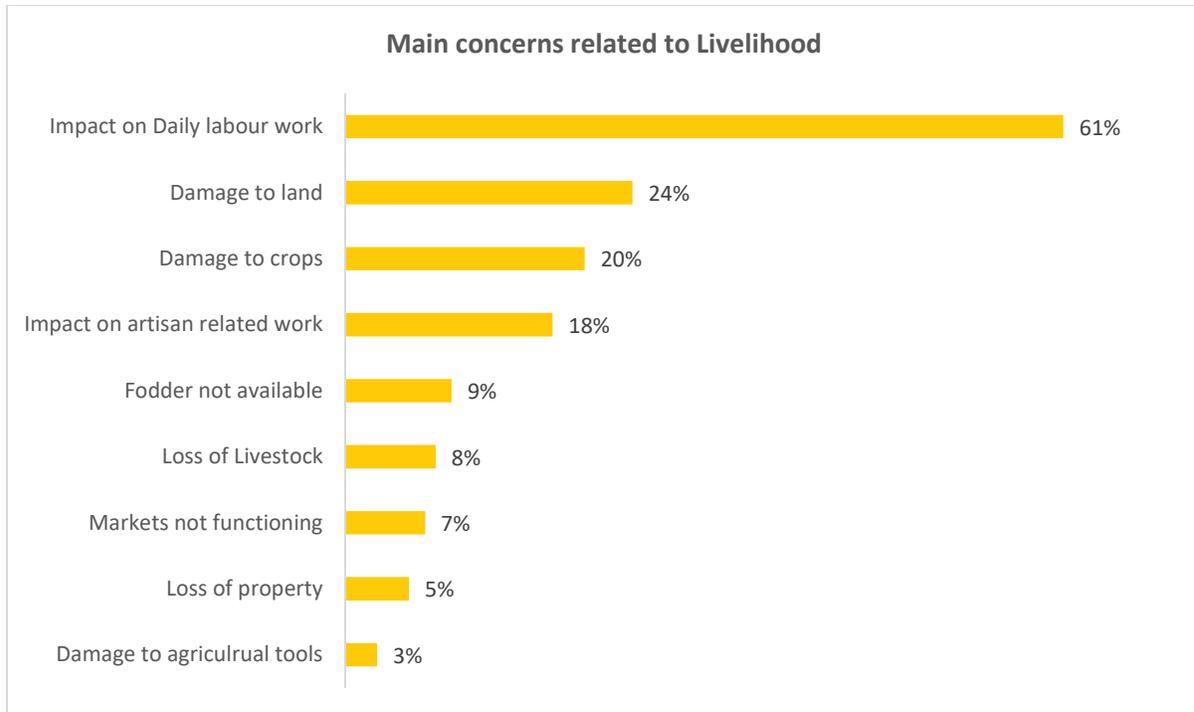
GRAPH 8: SOURCE OF INCOME PRIOR TO DISASTER

In terms of the average monthly household income, the analysis shows that 90% of the respondents earned less than Rs. 10,000 prior to the disaster. In Pali and Barmer districts, nine percent (9%) of the respondents earned between Rs. 10,000 to 20,000 monthly. Only one-percent (1%) of the respondents earned up to Rs 50,000 in a month, primarily in Pali district.

To understand the impact of Cyclone Biparjoy on the livelihoods of the people in the affected districts of Rajasthan, it needs to be noted that 33% of the affected respondents were dependent on daily wage earning for their livelihood. Similarly, 31% of the affected respondents were dependent on Agriculture and 22% of the affected respondents were employed in the informal sector. Some migrant labour also reported being impacted by the cyclone.

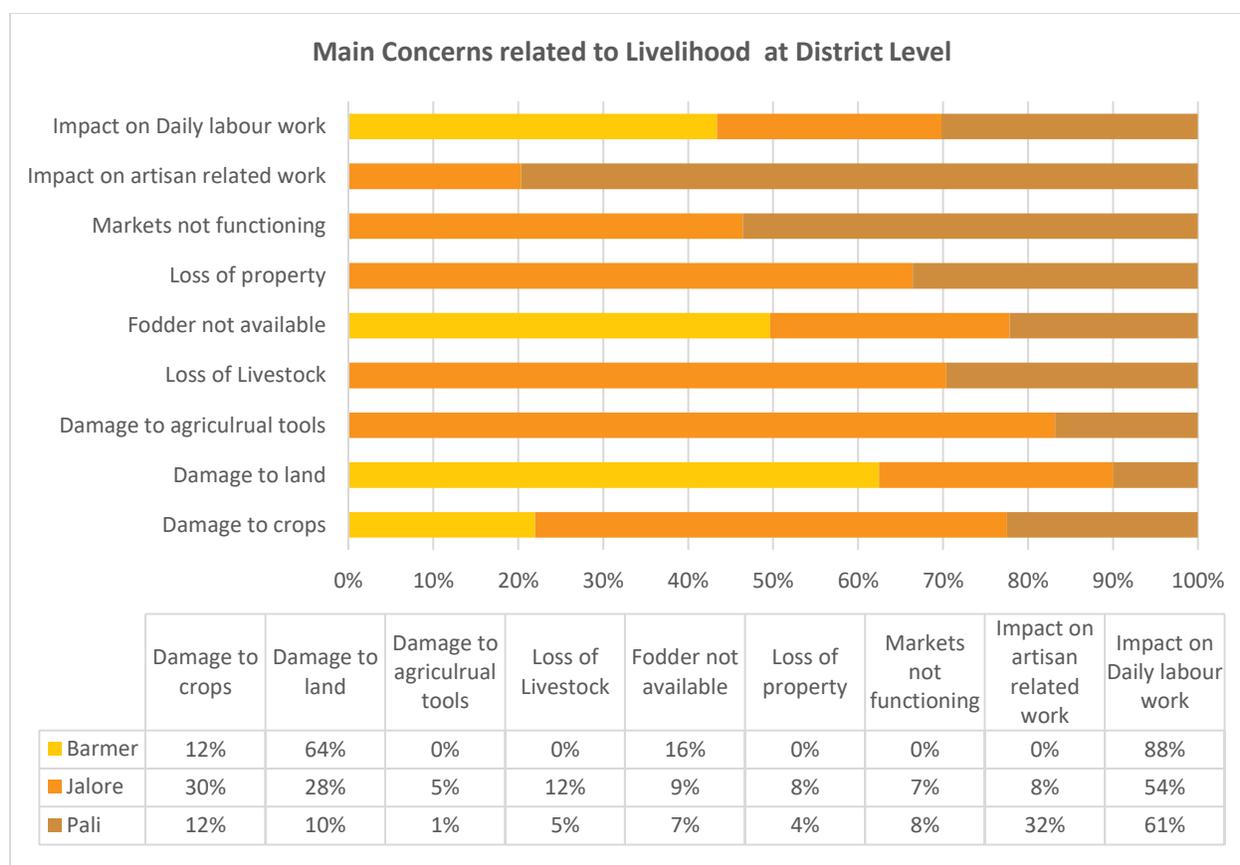


GRAPH 9: AFFECT OF CYCLONE



GRAPH 10: CONCERNS RELATED TO LIVELIHOOD

Assessing the major concerns related to livelihood in the affected areas, the most significant concern reported by the respondents was the negative impact of the cyclone on their daily labour work, highlighting the adverse effects on their employment opportunities and income. Twenty-four percent (24%) of the respondents, indicated physical damage caused to their land by the cyclone has been a major concern, and other issues included damage to agricultural tools, loss of property, dysfunctional markets due to rains, and impact on artisan related work. Twenty-percent (20%) of the respondents stated that they were concerned about the damage to their crops and eight (8%) respondents highlighted livestock loss and fodder unavailability.



**GRAPH 11: CONCERNS RELATED TO LIVELIHOOD - DISTRICT LEVEL**

When further analysed district-wise, in Barmer, 88% of the respondents stated that they were concerned about the impact of cyclone on daily labour work, 64% of the respondents highlighted the damage caused to their land as a major concern. Additionally, 16% of the respondents reported the unavailability of fodder, while some of the respondents’ expressed worries over the damage inflicted upon their crops.

Similarly, in Jalore district the primary concern was the impact of cyclone on daily labour work, while 30% of the respondents were concerned about the damage to the crops and 28% were concerned about the damage to the land. Other issues included loss of livestock, non-availability of fodder, and non-functionality of the markets.

In Pali, 61% of the respondents said they were concerned about the impact on daily labour work, while other issues included damage inflicted upon crops, land, and agricultural tools. Furthermore, the loss of livestock and the unavailability of fodder, loss of property, non-functioning markets, and the adverse effects on artisan-related work were also some of the primary concerns identified.

## Urgent Needs

1. **Urgent Food Supply:** Districts that have least food reserves to survive the disaster should be provided with sufficient food supply, and accessibility to adequate and nutritious food to shall be the priority. Emergency food distribution programs can be implemented to ensure that all affected and vulnerable population have adequate food supplies.
2. **Livelihood Support to Vulnerable Groups:** Of the affected population, persons employed in informal sectors or those working as daily wage labour are the most vulnerable in aftermath of the cyclone and thus require immediate livelihood support. Thus, special attention should be given to the groups without stable income sources.
3. **Restoration of Disrupted Routes:** Disrupted routes to markets have hindered the availability of food, nutritious food, and essential supplies. Efforts should be made to restore transportation routes and infrastructure, allowing communities to access markets and purchase necessary food items.

## 4.3 WATER SANITATION AND HYGIENE (WASH)

### Overview

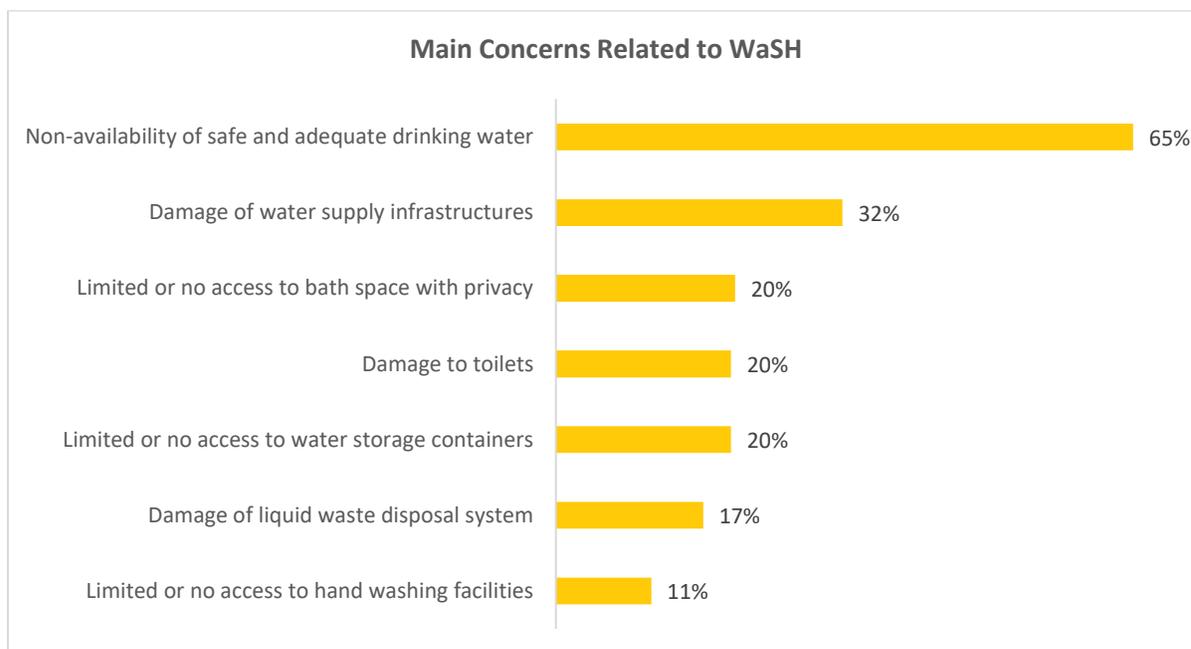
The assessment provides an overview of the water and sanitation conditions of communities affected by the cyclone, highlighting the impact of the disaster. It assesses the extent of damage caused by the cyclone, identifies the immediate WaSH requirements of the affected population, their access to safe sanitation facilities and proposes necessary interventions to address these needs.

### Assessment Findings

The field level assessment provided valuable insights with respect to the Water, Sanitation, and Hygiene (WaSH) sector, particularly focusing on access to facilities and infrastructure in three districts: Barmer, Jalore, and Pali. A total of 222 respondents participated in the survey. When examining the main concerns related to WaSH, the data reveals that 17% of the respondents reported damage to the system responsible for disposing of liquid waste. Limited or no access to water storage containers has been reported by about 20% of the respondents highlighting the challenge of limited or no access to containers for storing water. Twenty percent (20%) of the respondents reported damage to the existing toilet facilities. Similarly, 20% of the respondents shared on limited or no access to private bathing spaces. In addition, 32% of the respondents reported damage to the infrastructure responsible for water supply. The most prevalent concern identified in the survey was the non-availability of safe and adequate drinking water, with a substantial 65% of the respondents expressing this concern. From the above data, it is evident that

---

the most prevalent concern among the respondents is the non-availability of safe and adequate drinking water, which was reported by a significant majority of respondents.



**GRAPH 12: MAIN CONCERNS RELATED TO WASH**

District-wise analysis revealed the specific concerns related to water and sanitation in each surveyed district:

**Barmer:**

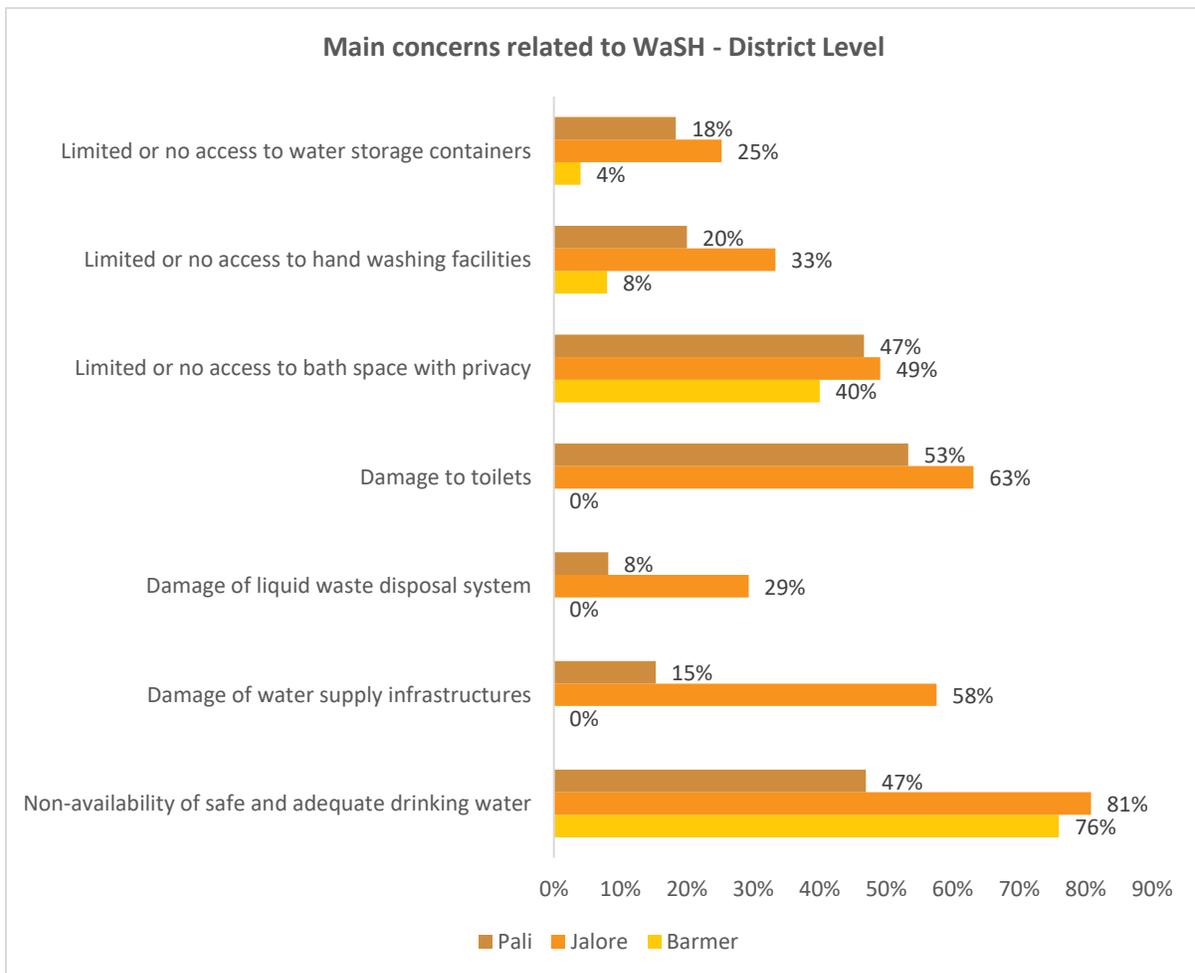
- The highest reported concern in Barmer is the non-availability of safe and adequate drinking water, with a significant 76% of the respondents highlighting this issue. This indicates a pressing need for improved access to clean drinking water sources in the area.
- Limited or no access to bath space with privacy is another significant concern in Barmer, affecting 40% of the respondents. This highlights the importance of providing adequate facilities for private bathing to ensure the dignity and well-being of the community.

**Jalore:**

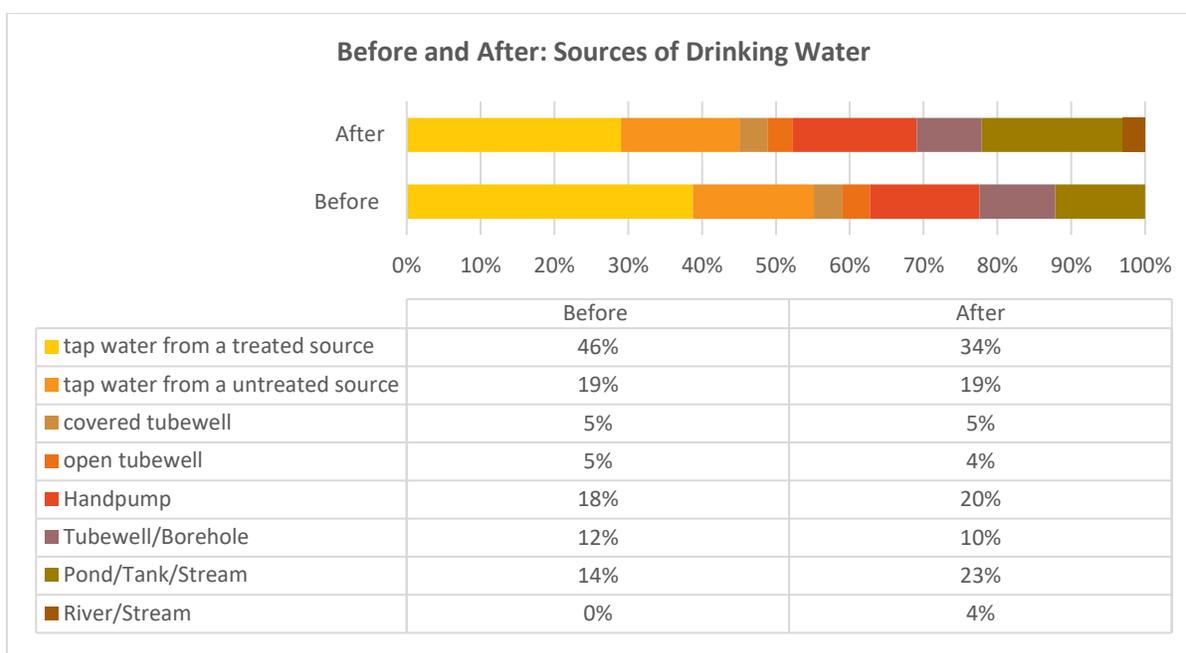
- In Jalore, the primary concern, similar to Barmer, is the non-availability of safe and adequate drinking water. An alarming 81% of the respondents in Jalore reported facing this challenge, emphasizing the urgent need for reliable sources of clean drinking water.
- Damage to toilets emerged as a major issue in Jalore, affecting 63% of the respondents. This highlights the necessity for repairs and maintenance of sanitation facilities to ensure hygienic conditions for the population.

**Pali:**

- Limited or no access to hand washing facilities is the primary concern in Pali, with 33% of the respondents facing this issue. This indicates the importance of promoting proper hand hygiene practices by ensuring the availability of adequate hand washing facilities.
- Damage to toilets is also a significant concern in Pali, affecting 53% of the respondents. It is crucial to address this issue promptly to provide functional and clean sanitation facilities to the community.



GRAPH 13: MAIN CONCERNS RELATED TO WASH - DISTRICT LEVEL

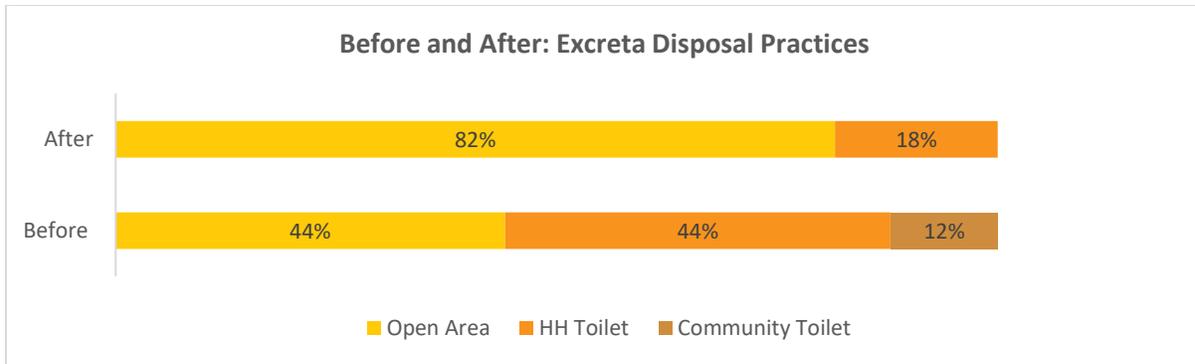


GRAPH 14: BEFORE AND AFTER: SOURCES OF DRINKING WATER

In Barmer, hand pumps and tubewells/boreholes are the main sources of water in Barmer, accounting for 32% and 48% of the respondents, respectively. This indicates a reliance on groundwater sources for meeting their water needs. Other sources, such as pond/tank/stream (8%) and open tubewells (4%), comparatively contribute to a smaller extent in fulfilling the water requirements of the population in Barmer. Currently, in Barmer the data shows a shift, with tap water from untreated sources (4%) and tap water from treated sources (0%) becoming the primary water sources. Hand pumps (32%) and tubewells/boreholes (48%) remained relatively consistent

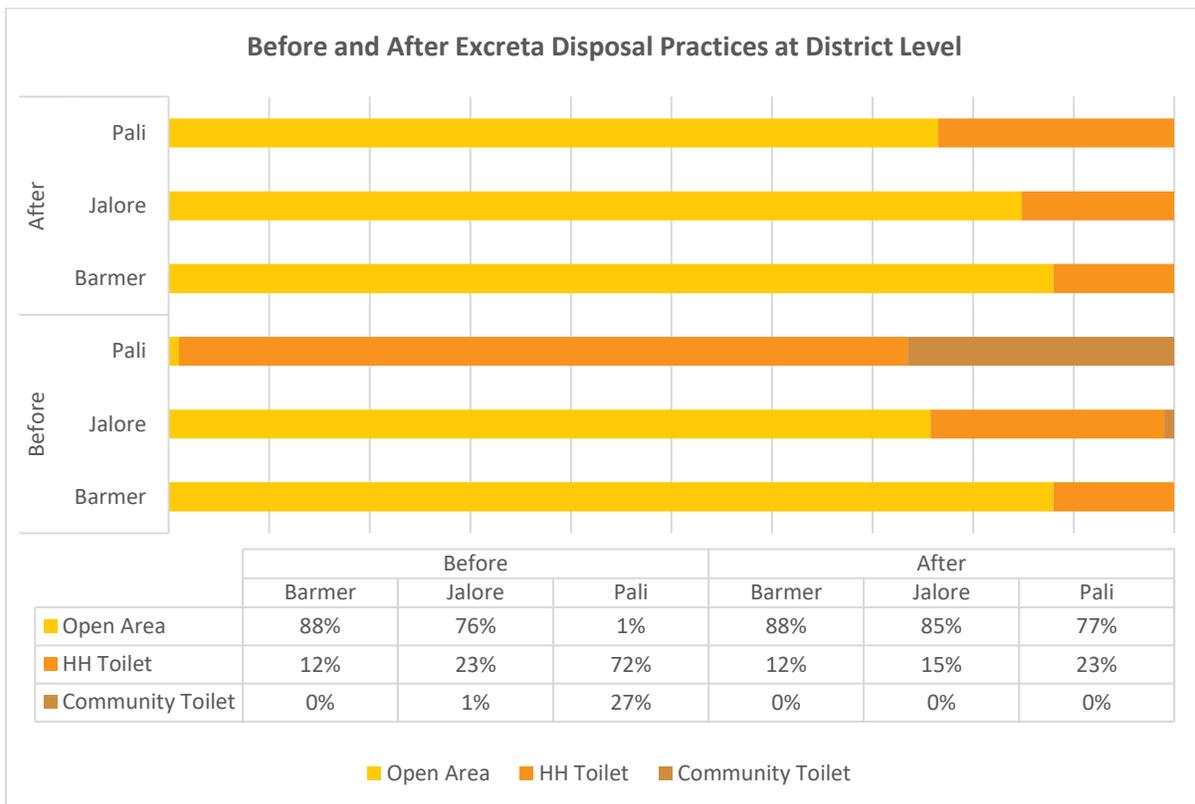
In Jalore, tap water from untreated sources is the primary source for water supply in Jalore, reported by 43% of the respondents. This suggests a significant reliance on untreated water, which raises concerns about water quality and potential health risks. Hand pumps (3%), tubewells/boreholes (14%), and pond/tank/stream (23%) are also utilized by the population in Jalore, providing additional water sources. In Jalore the water sources after the specified period consisted mainly of tap water from treated sources (53%) and hand pumps (37%). Tubewells/boreholes (6%) and pond/tank/stream (10%) were also utilized.

In Pali, tap water from treated sources is the dominant source of water in Pali, with 68% of the respondents relying on it. This indicates a higher accessibility to treated water, which is favourable for ensuring safe and clean drinking water. Hand pumps (29%) remain a significant water source in Pali, supplementing the tap water supply. Pond/tank/stream (7%) and tubewells/boreholes (1%) are used to a lesser extent. In Pali, the tap water from treated sources (68%) remained the primary source after the specified period, along with hand pumps (36%). Pond/tank/stream (10%) and tubewells/boreholes (6%) continued to contribute to the water supply.



GRAPH 15: EXCRETA DISPOSAL PRACTICE- BEFORE AND AFTER DISASTER

As per the above data it indicates 82% increase in post-disaster open defecation practices in comparison to a 44% before the disaster.



GRAPH 16: EXCRETA DISPOSAL PRACTICE AT DISTRICT LEVEL

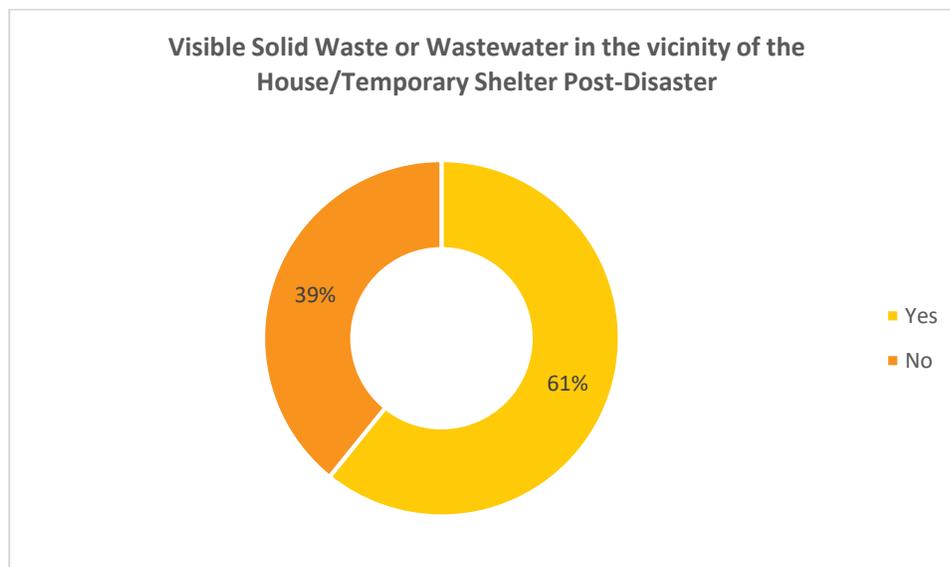
In Barmer, before the specified period, the majority of respondents in Barmer reported open area disposal practices (88%). This indicates a prevalent practice of defecating in open spaces. After the specified period, open area disposal practices remained high (88%), indicating the need for interventions to promote proper sanitation and the use of improved sanitation facilities. A small portion of respondents reported using household toilets (12%) before and after the specified period, suggesting a limited availability or utilization of such facilities in Barmer. The use of

community toilets was negligible, with no respondents reporting this practice before or after the specified period.

In Jalore, before the specified period, the predominant excreta disposal practice in Jalore was open area disposal (76%), indicating a significant reliance on open defecation. After the specified period, open area disposal practices remained relatively high (85%), emphasizing the need for interventions to promote improved sanitation practices. A portion of respondents reported using household toilets (23%), both before and after the specified period, indicating some access and utilization of individual sanitation facilities. The use of community toilets was minimal, with only a single respondent reporting this practice before the specified period.

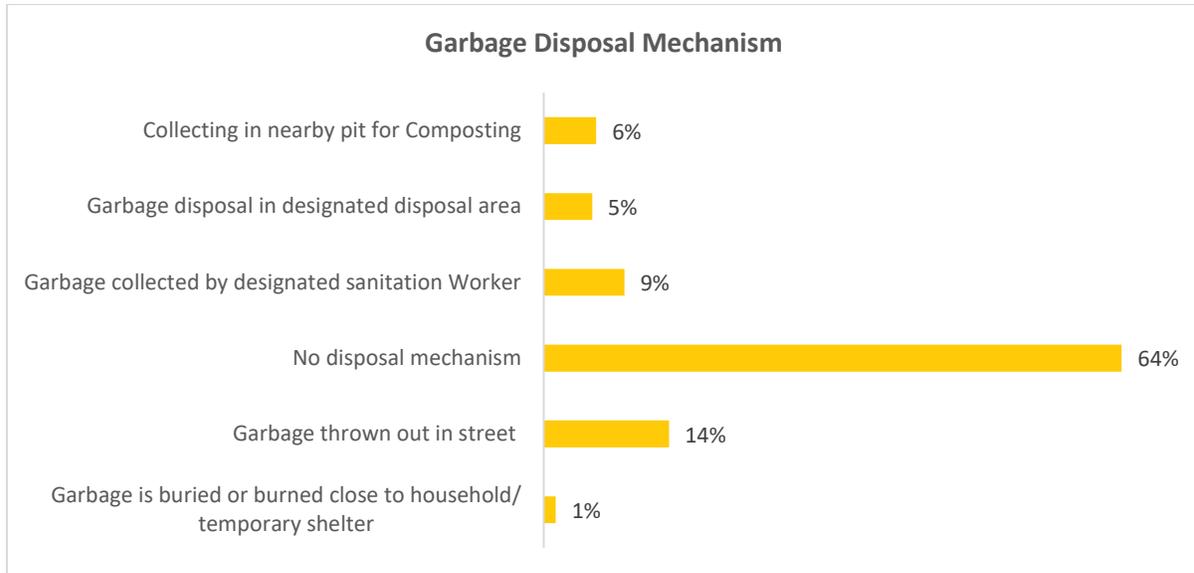
In Pali, before the specified period, open area disposal was reported by a negligible percentage (1%) of respondents in Pali, suggesting a lower prevalence of open defecation practices. After the specified period, open area disposal practices increased slightly (77%), indicating the need for continued efforts to eliminate open defecation completely. The majority of respondents reported using household toilets (23%) both before and after the specified period, highlighting a relatively higher access and utilization of individual sanitation facilities in Pali. The use of community toilets was reported by no respondents before or after the specified period, suggesting limited availability or awareness of community sanitation facilities.

Overall, the data reveals a need for significant improvements in excreta disposal practices in all three districts. Open area disposal remains a prevalent practice, indicating the importance of promoting the construction and use of household toilets as well as community sanitation facilities. Efforts should be focused on increasing access to and utilization of improved sanitation facilities to ensure proper excreta management and enhance public health and hygiene.



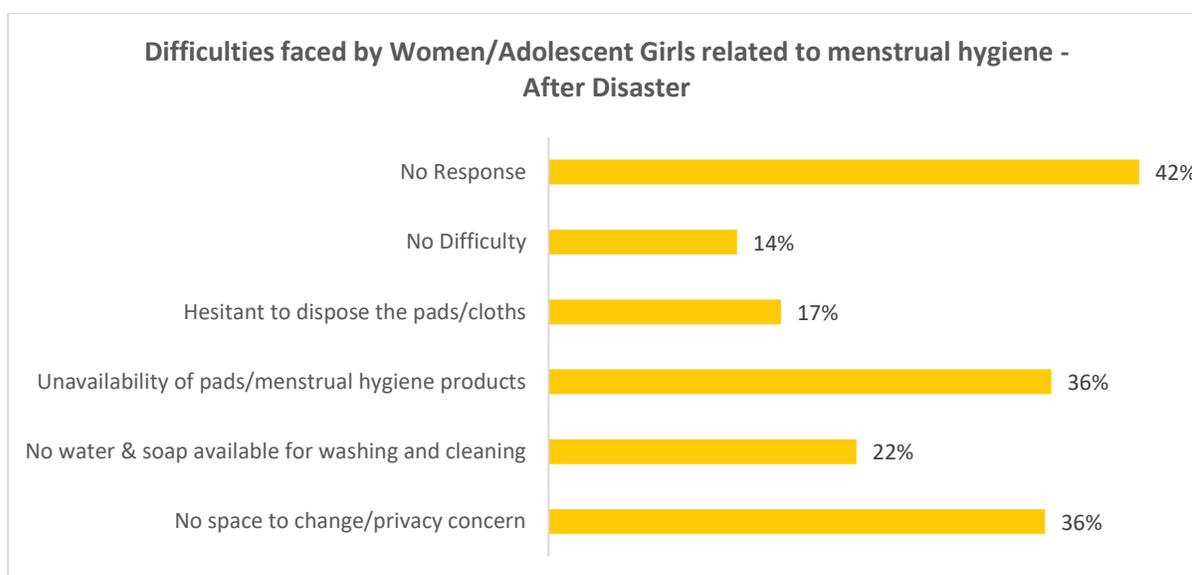
GRAPH 17: VISIBLE SOLID WASTE OR WASTEWATER IN THE VICINITY OF HOUSE

The existing availability of solid waste water systems across temporary shelters or close to the vicinity of houses stands at 61% and with 39% respondents indicating no availability of proper solid waste disposal systems



GRAPH 18: GARBAGE DISPOSAL MECHANISM

64% of respondents reported that there is no mechanism for garbage disposal. In addition, 14% of the respondents said they dispose waste in the streets, with merely nine percent (9%) respondents saying that a designated sanitation worker collecting their waste and five (5%) disposing their waste at the designated waste disposal areas and six percent (6%) composting their waste. Some of the respondents even mentioned burning or burying the waste close to their homes or temporary shelters.



**GRAPH 19: DIFFICULTIES FACED BY WOMEN RELATED TO MENSTRUAL HYGIENE**

Forty-two percent (42%) of the female respondents did not provide any response on facing any difficulties with regards to menstrual hygiene facilities with 36% females mentioning difficulty in availability of pads and menstrual products. In addition, 36% of the females mentioned having no area of privacy or availability of changing rooms. Also, 22% of the respondents mentioned having no water or soap to wash or clean post-usage of menstrual products for hygiene purposes. About 17% respondents mentioned being hesitant towards disposal of pads and cloths.

### Urgent Needs

To address the urgent needs in the WaSH sector, the following actions should be taken:

- Ensure access to safe and functional drinking water sources/ systems, considering its high prevalence as a concern across all surveyed districts.
- Provide government tankers to supply potable water to those lacking safe sources and access to water to prevent exploitation by private suppliers, and water insecurity.
- Ensure immediate restoration of pipe water supply system in the communities, if it already exists with arrangement towards alternate power supply and functional sources.
- Also ensure temporary drinking water supply through tankers in critical locations.
- Address the issue of limited or no access to water storage containers, ensuring that individuals have proper means to store water.
- Repair and maintain existing toilet facilities to ensure their functionality and cleanliness.
- If required, temporary pit latrines/ trench toilets may be constructed in designated place ensuring adequate disinfection measures.

- Ensure the availability of private bathing spaces to uphold the dignity and well-being of the population.
- Establish proper solid waste disposal systems at a safe and designated place to maintain a clean and healthy environment.
- Provide menstrual hygiene facilities, including availability of disposable sanitary napkins in adequate numbers, facilities of changing rooms, and water/soap for cleaning, to support the menstrual health and well-being of women and girls.
- Promote proper disposal methods/ inclination of used sanitary pads/ cloths to ensure hygienic practices.

## 4.4 EDUCATION

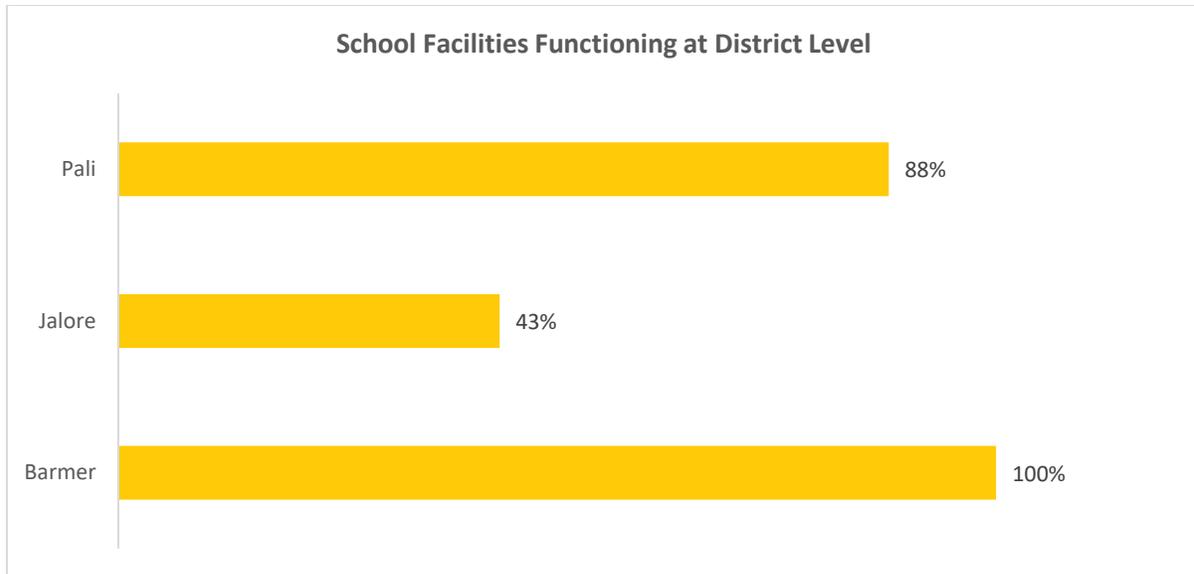
### Overview

The analysis of the education sector in the cyclone-affected areas, namely Barmer, Jalore, and Pali, reveals the disproportionate impact and challenges faced in restoring and improving the educational landscape. Among these districts, Jalore stands out as the worst affected in terms of education, requiring immediate attention to address key challenges such as teacher availability, infrastructure damage, study material replacement, school accessibility, and student support and engagement. By focusing on these urgent needs, it is possible to facilitate a sustainable and inclusive recovery process, ensuring equitable access to quality education for all students in the cyclone-affected areas. The importance of addressing these challenges is evident, as quality education plays a vital role in the holistic development and future prospects of the affected students. To ensure an effective recovery and improvement in the education sector, a multi-faceted approach is required.

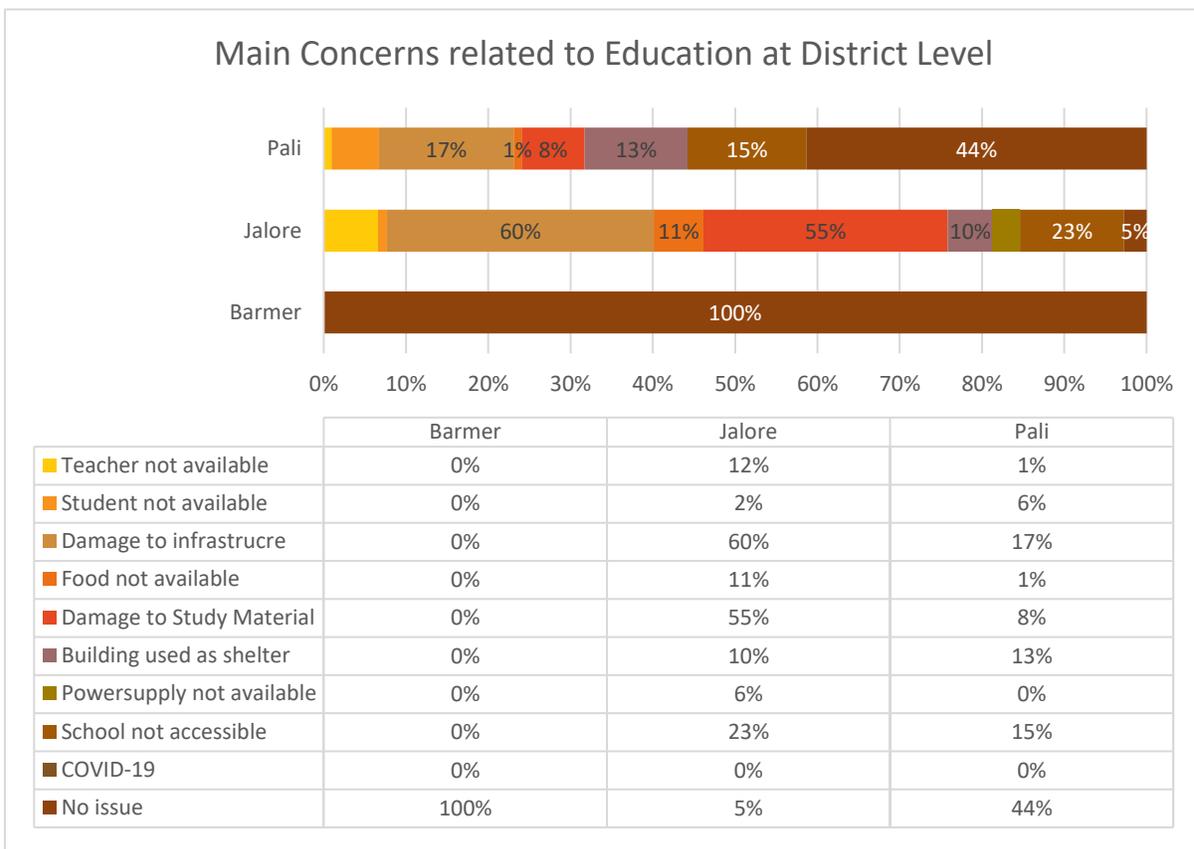
### Assessment Findings

Based on the available data, it is evident that the districts have been disproportionately affected in the aftermath of Cyclone Biparjoy, leading to variations in the functionality of school facilities across the surveyed areas. Notably, Pali District shows promising progress, with approximately 88% of the school facilities reported to be functional, indicating that a majority of the schools have successfully resumed operations after the cyclone. Barmer District also demonstrates remarkable resilience, as all 25 respondents reported 100% functionality of school facilities. However, in Jalore District, only 43% of the school facilities were reported as functional based on responses from 99 individuals. This highlights significant challenges in restoring the functionality of schools in Jalore. The data emphasizes the need for targeted interventions in districts like Jalore to ensure equitable access to quality education and expedite the recovery process.

---



GRAPH 20: SCHOOLS FACILITIES - DISTRICT LEVEL



GRAPH 21: MAIN CONCERNS RELATED TO EDUCATION

Jalore being the area with the lowest percentage of functional school facilities, faces significant challenges, including a higher percentage of teacher unavailability (12%), infrastructure damage

(60%), damage to study material (55%), and limited school accessibility (23%). Additionally, there are issues with food availability (11%) and power supply (6%). Efforts should be focused on addressing these issues to ensure quality education for students in Jalore.

Pali District, where 88% of the schools are functional, reports moderate challenges in the education sector, with issues such as limited teacher availability (1%), student unavailability (6%), infrastructure damage (17%), damage to study material (8%), building usage as shelters (13%), and limited school accessibility (15%). However, the district has a relatively lower percentage of food unavailability (1%) and no reported power supply issues or COVID-19 concerns.

Considering the 25 responses received, Barmer District appears to have minimal issues in the education sector, with no reported problems in teacher availability, infrastructure damage, food availability, power supply, or school accessibility. This limited data suggests a relatively smooth functioning of the education system in Barmer District, but further research with a larger sample size would be beneficial for a more comprehensive analysis.

### Urgent needs

- 1. Teacher Availability:** Ensure an adequate number of qualified teachers are available in schools to maintain a quality learning environment and provide effective education to students. Engagement of the local community member to continuation of the education in emergency by setting up the temporary learning centers at the community level
- 2. Infrastructure Restoration:** Prioritize the repair and reconstruction of damaged school infrastructure to create safe and conducive learning environments.
- 3. Study Material Replacement:** Provide necessary resources and materials to replace damaged or lost study materials, ensuring students have access to appropriate learning resources.
- 4. Student Support and Engagement:** Implement psychosocial first aid support to the children and their families who may have faced disruptions or trauma due to the cyclone, focusing on their emotional well-being and providing necessary academic support.
- 5. Capacity Building and Training:** Conduct training programs for teachers and school staff to equip them with the necessary skills and knowledge to handle post-cyclone challenges and provide quality education add the concept of education in emergency training is also needs to be provided the education department including the school administration.
- 6. Adequate Resources and Funding:** Allocate sufficient resources and secure funding to address the urgent needs in the education sector, including infrastructure repairs, provision of study materials, and teacher support.

By addressing these urgent needs, it will be possible to ensure equitable access to quality education, expedite the recovery process, and mitigate the long-term impact of the cyclone on the education sector in the affected areas.

---

## 4.5. HEALTH

### Overview

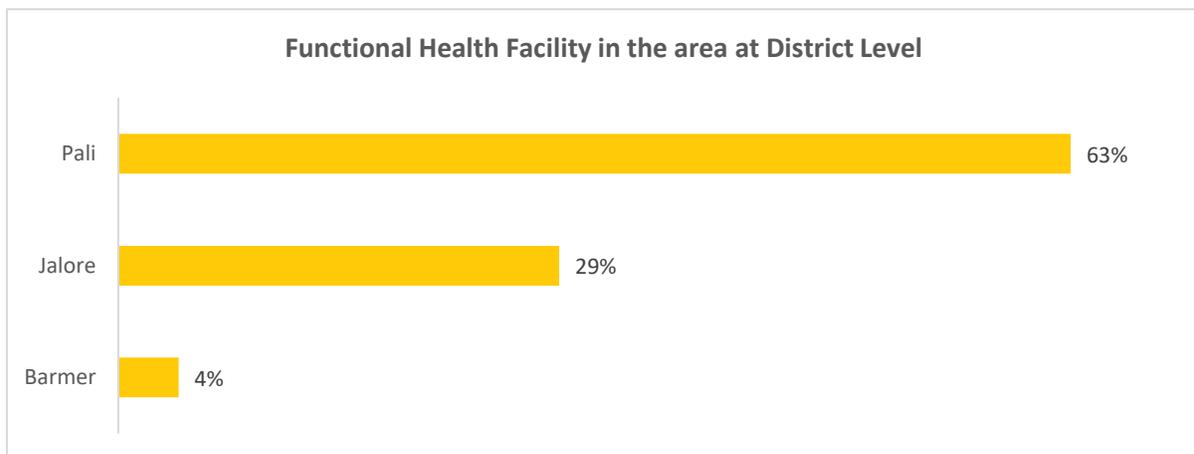
The assessment provides an overview of the health conditions of communities affected by the cyclone, highlighting the impact of the disaster. It assesses the extent of damage caused by the cyclone, identifies the immediate health requirements of the affected population, and proposes necessary interventions to address these needs.

### Assessment Findings

The immediate needs in the affected districts of Rajasthan include emergency medical assistance, including emergency medical teams, medicines, and medical supplies, required to treat injuries and prevent the spread of waterborne diseases. The restoration of damaged healthcare facilities and provision of mobile medical units are essential currently. Mental health and psychosocial support services should also be made available to address trauma and stress among affected individuals.

The respondents from Jalore reported that the nearest health facility (CSP Karvada) was damaged by the cyclone.

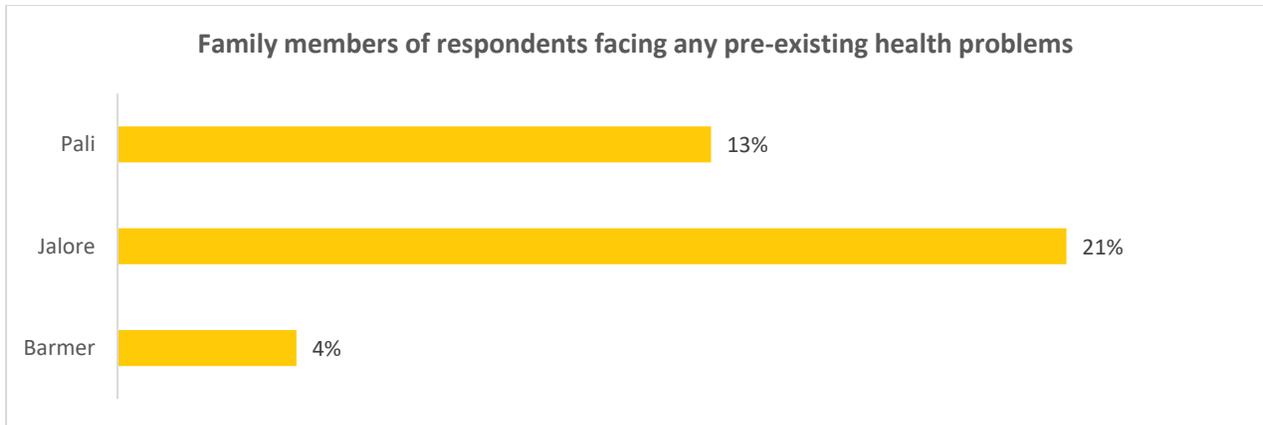
According to 63% of respondents in Pali, there was a functional health facility in their area followed by 29% in Jalore and only four percent in Barmer. There is a need to increase access to health facilities especially in Jalore and Barmer. The repair and restoration of damaged health facilities is crucial to cater to the immediate medical needs and long-term health of the residents in the affected areas.



GRAPH 22: FUNCTIONAL HEALTH FACILITIES - DISTRICT LEVEL

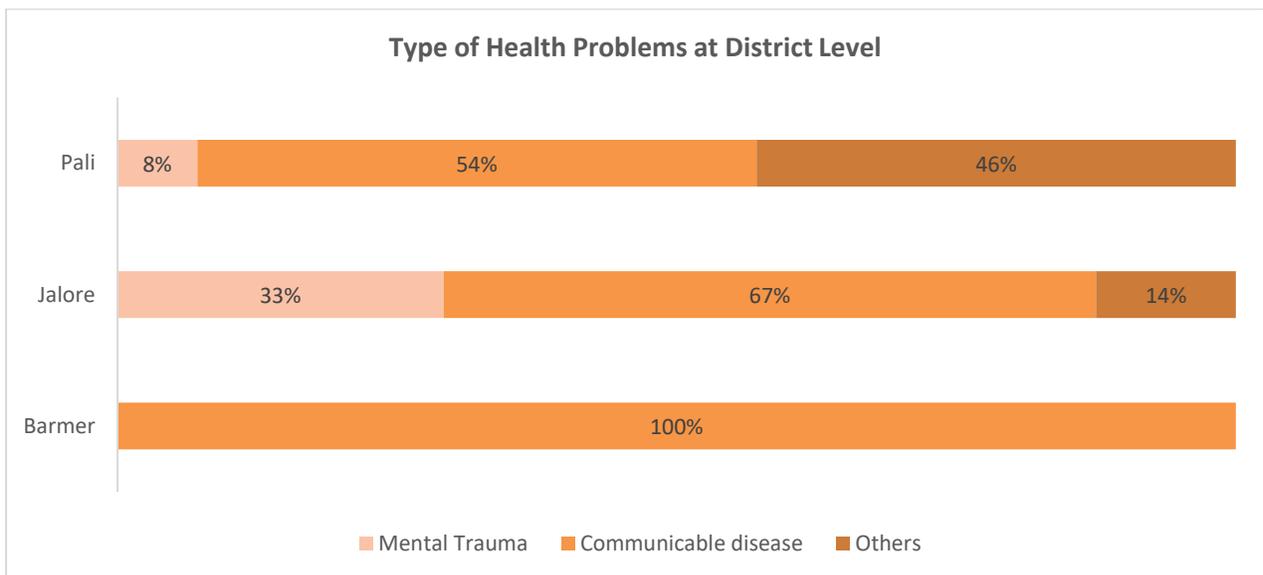
Twenty-one (21%) percent of respondents from Jalore shared that their family members suffered from health problems followed by 13% in Pali and only four percent (4%) in Barmer.

---



GRAPH 23: FAMILY MEMBERS FACING PRE EXISTING HEALTH PROBLEMS

It must be noted that all the 25 respondents (100%) from Barmer district mentioned suffering from communicable diseases such as diarrhoea, skin rashes, cold and flu etc. This is followed by 67% of the population suffering from communicable diseases in Jalore and 54% in Pali as per the responses. The population is also affected by many other health problems as reflected in the figures. Moreover, 33% of the respondents in Jalore reported suffering from mental health and psycho-social issues followed by eight percent of the respondents in Pali. This highlights the importance of providing psychosocial support services to the affected population to cope with the negative impacts of the cyclone on mental health. Ensuring health care services is therefore critical in cyclone affected areas especially in Barmer and Jalore.



GRAPH 24: TYPE OF HEALTH PROBLEM AT DISTRICT LEVEL

## Urgent Needs

1. **Access to Medical Needs and Health Facilities:** The provision of medical assistance and access to health facilities is of utmost importance. The affected population requires healthcare services to address any injuries, chronic health conditions and prevent water-borne diseases. Timely access to medical aid, including medication, medical professionals, and necessary treatments, is crucial for their physical and mental well-being.
2. **Support for managing psychosocial well-being and combating mental trauma.** The traumatic experience endured during the cyclone have taken a toll on the mental health of the respondents, making psychosocial support an essential aspect of humanitarian assistance. Addressing these urgent needs will greatly contribute to the overall recovery and well-being of the affected population.
3. **Improved WaSH facilities** can also help in improving the health conditions. Clean water for drinking and bathing and access to toilets is critical to maintain hygienic conditions and prevent the spread of communicable diseases.
4. **Restoration of Health Facility Centres:** Reconstruction and restoration of district health facilities damaged by Cyclone Biparjoy is essential to serve the long-term health needs of the affected community.

## 4.6 SHELTER

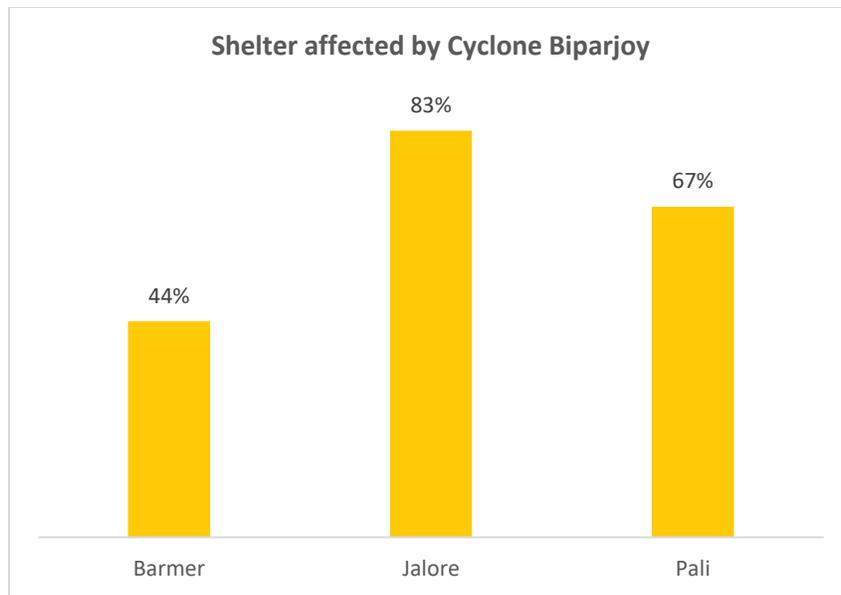
### Overview

The assessment provides an overview of the housing and shelter conditions of communities affected by the cyclone, highlighting the impact of the disaster. It assesses the extent of damage caused by the cyclone, identifies the immediate shelter requirements of the affected population, their current places of stay, and proposes necessary interventions to address these needs.

### Assessment Findings

The assessment findings reveal the impact on shelters in three districts: Jalore, Pali, and Barmer. In the district of Jalore, a staggering 83% of shelters have been affected. Similarly, in Pali district, 67% of shelters have experienced some form of impact. However, when comparing the two districts, Barmer reports a comparatively lower percentage, with only 44% of respondents indicating shelter impacts. These statistics underscore the varying degrees of shelter vulnerability across the surveyed districts.

---

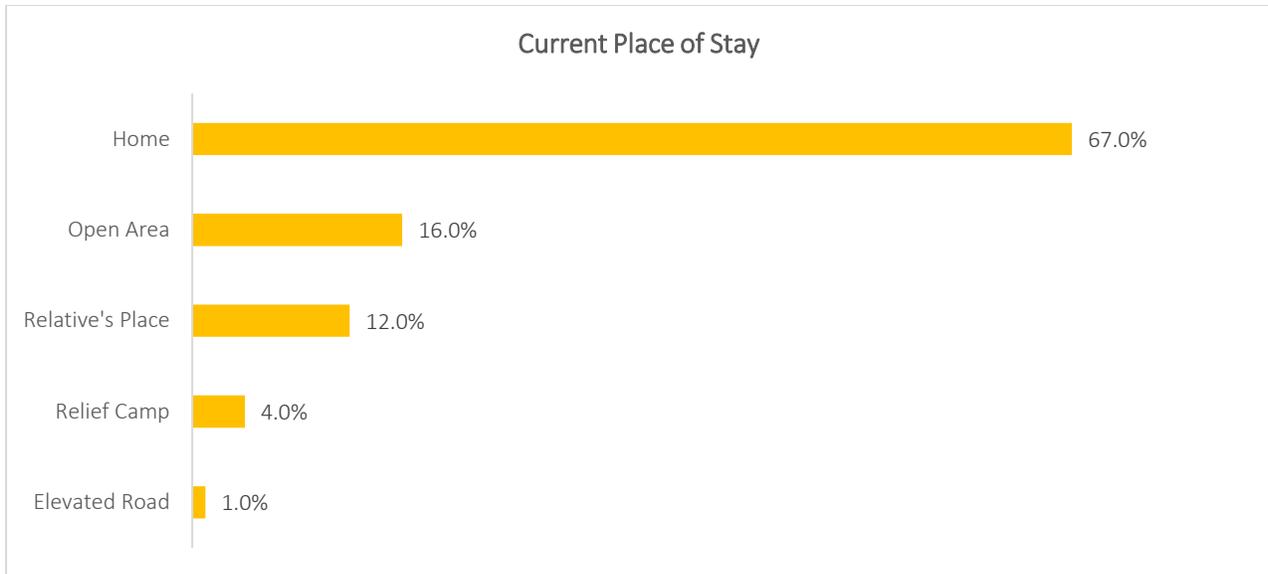


GRAPH 25: SHELTER AFFECTED BY CYCLONE BIPARJOY

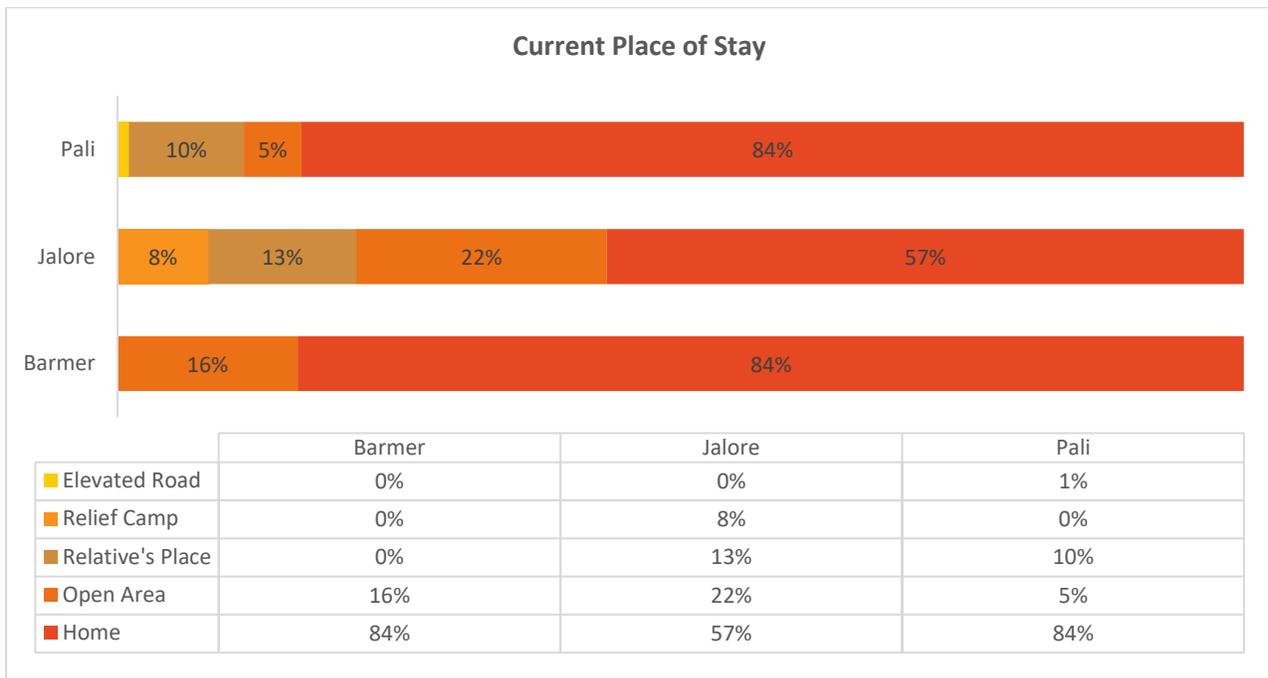
According to recent findings, it has been revealed that a significant portion of the respondents, approximately 67%, are still residing in their homes following the cyclone. Additionally, 14% of the respondents have opted to stay in open areas, while a mere 4% have sought refuge in relief camps. This indicates a shortage of camps in the affected area. Furthermore, 12% of the respondents in Rajasthan are staying with relatives. Based on this data, it is evident that approximately 33% of the respondents' houses are uninhabitable, emphasizing the urgent need for immediate attention in addressing this issue.

When examining the statistics on a district level, it becomes apparent that in Barmer and Pali districts, a substantial majority of the respondents (84%) are residing in their homes. Conversely, in Jalore district, only 57% of the respondents are able to stay in their homes. A significant proportion (22%) of respondents in Jalore district are currently residing in open areas, with eight percent (8%) seeking shelter in relief camps within the same district.

---



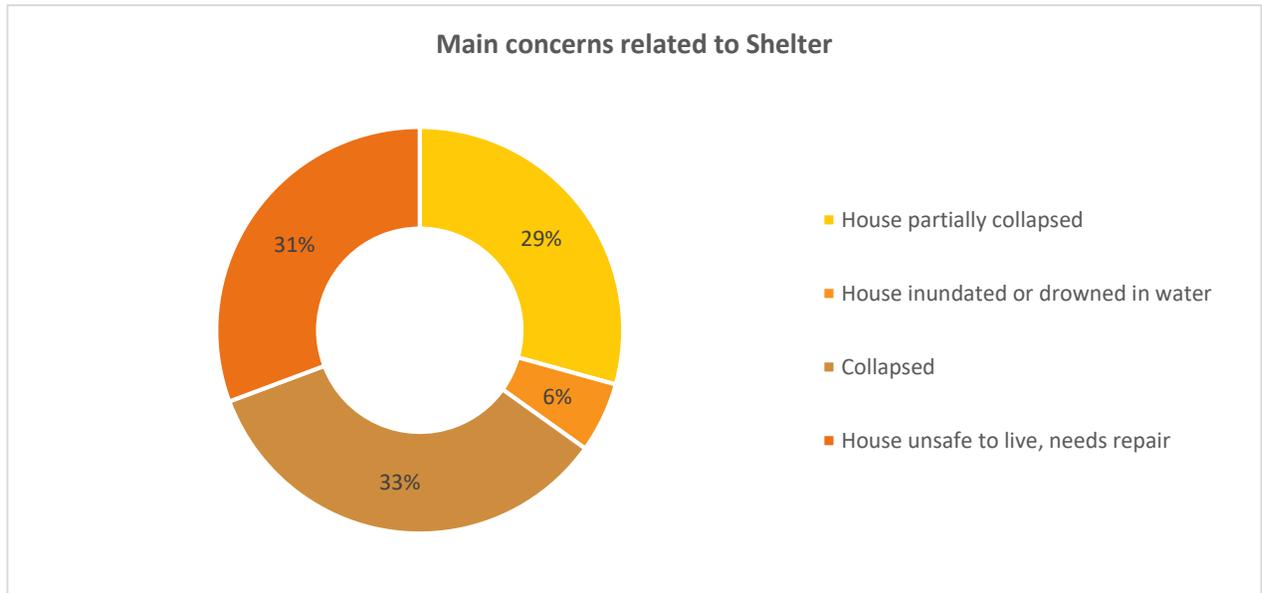
GRAPH 26: CURRENT PLACE OF STAY



GRAPH 27: CURRENT PLACE OF STAY - DISTRICT LEVEL

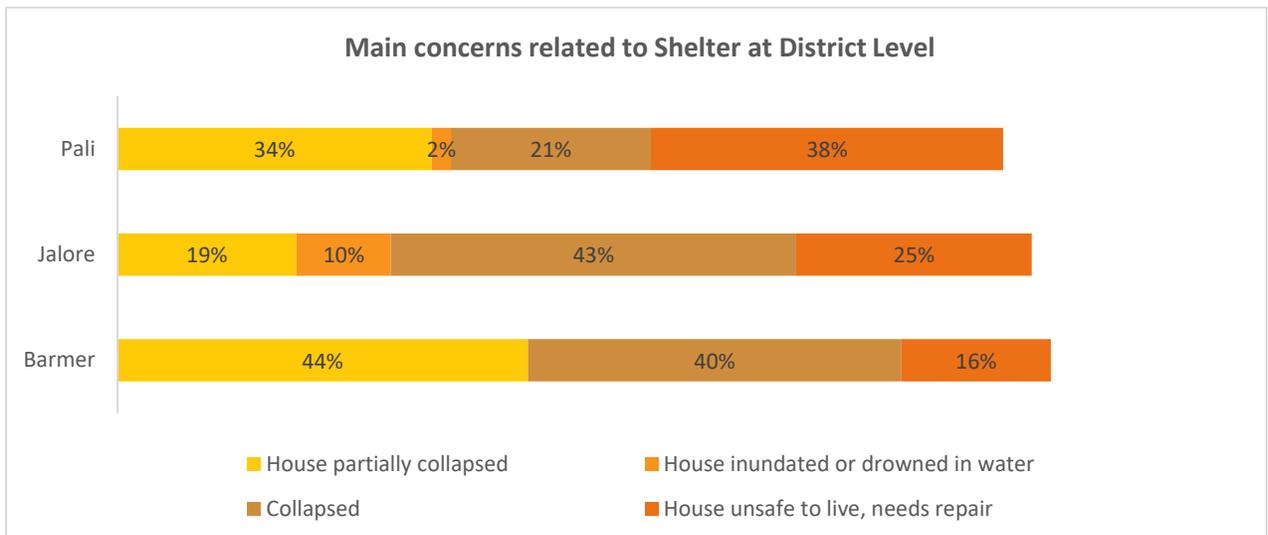
According to the assessment, the impacted area experienced significant damage due to the cyclone. The data reveals that 33% of respondents' houses in the surveyed area have collapsed, with an additional 31% of respondents reporting that their houses are deemed unsafe for habitation. In contrast, only six percent (6%) of respondents reported that their houses were inundated due to the flood. Based on these findings, it is evident that urgent repairs are required for both partially collapsed and fully collapsed houses. Additionally, measures need to be taken to

ensure the safety of individuals residing in houses that are deemed unsafe to live in. It is important to prioritize these repair and safety efforts in the affected area.



GRAPH 28: MAIN CONCERNS RELATED TO SHELTER

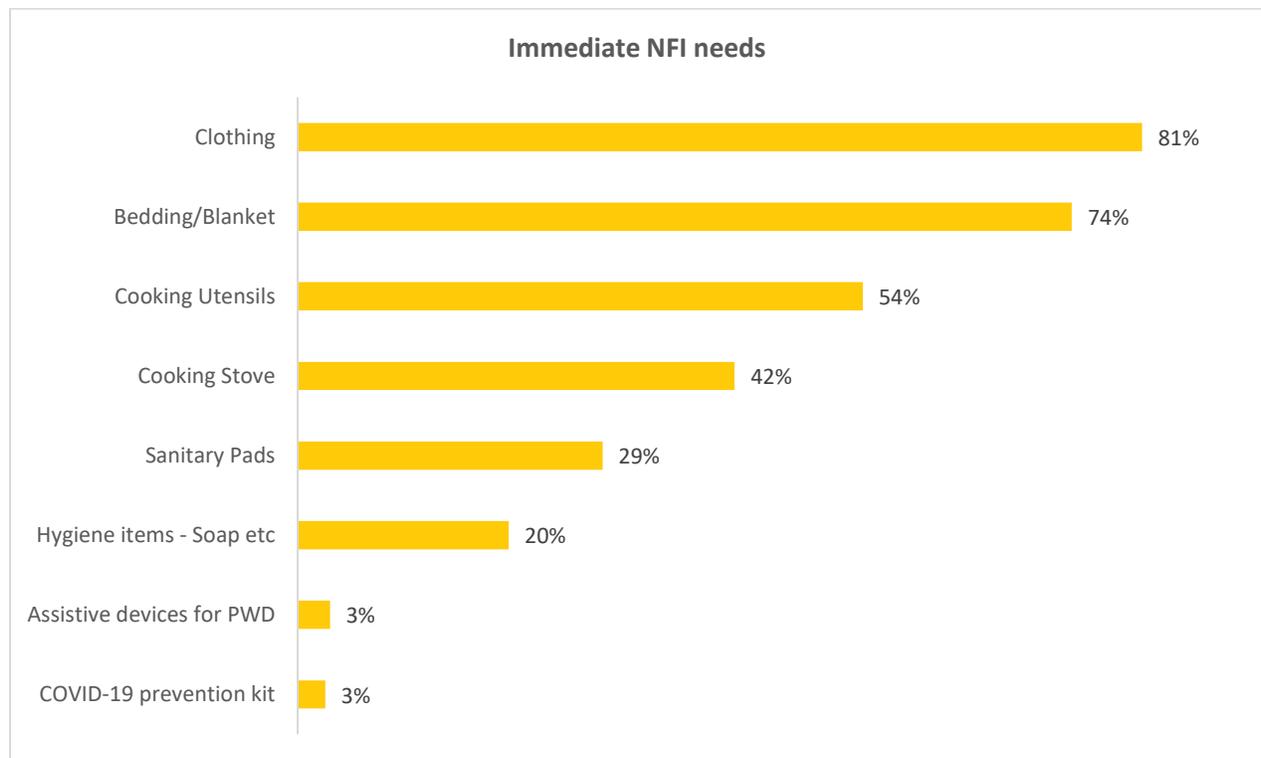
In Barmer, the situation is alarming with 44% of houses experiencing partial collapse and 40% considered unsafe for living. Jalore is facing even more severe circumstances, as 43% of respondents reported complete house collapses, and 10% of houses are currently underwater. In Pali, 38% of houses are categorized as unsafe to live, while 2% have been affected by flooding. Furthermore, Pali also has a significant percentage of partially collapsed houses, with 34% being impacted.



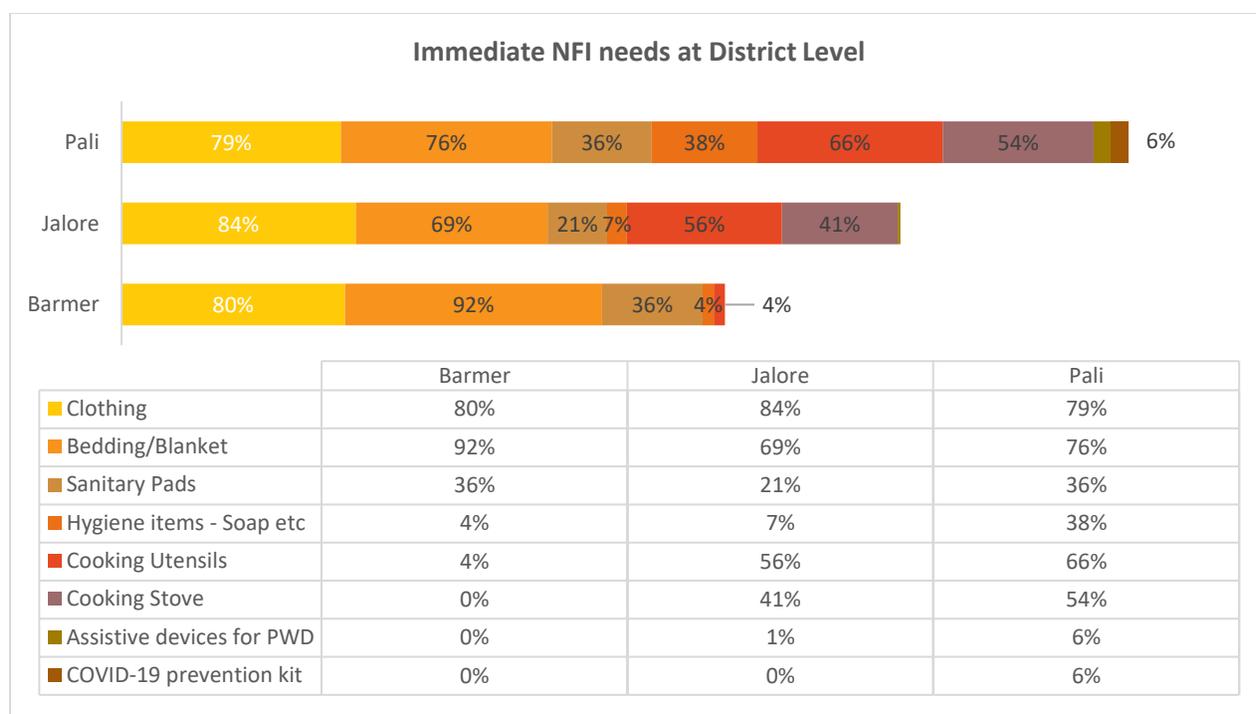
GRAPH 29: MAIN CONCERNS RELATED TON SHELTER - DISTRICT LEVEL

After conducting an assessment of the situation on the ground, it was found that there are immediate needs that must be addressed. The findings revealed that 81% of the respondents expressed the requirement for clothes, while 74% indicated the need for beds and blankets. Additionally, 54% of the respondents reported damage to their kitchen utensils due to the cyclone and subsequent flooding, and as a result, 42% expressed the need for cooking stoves. Furthermore, the assessment highlighted the necessity for hygiene items, specifically sanitary pads, which were reported as unavailable by 29% of the respondents in the affected area.

A district-wise analysis further emphasized the significance of clothing materials and blankets in three districts. In Jalore district, 56% of the respondents expressed the need for kitchen utensils, while 41% of the same district's respondents indicated the requirement for cooking stoves. On the other hand, in Pali and Barmer districts, 36% of the respondents identified the need for sanitary pads, and in Pali district specifically, 66% of the population reported the need for cooking utensils. These district-level findings provide a more detailed understanding of the specific needs within each area, highlighting the diverse challenges faced by the affected communities.



GRAPH 30: IMMEDIATE NFI NEEDS



GRAPH 31: IMMEDIATE NFI NEEDS - DISTRICT LEVEL

### Urgent Needs

1. Prioritize homestead less families for resilient housing government program, as many homes are uninhabitable due to collapse. These individuals need urgent assistance to rebuild their lives and secure permanent housing.
2. Temporary shelters are urgently needed for families who are currently living in open areas or camps. These shelters should be equipped with basic items to meet their essential needs.
3. To ensure fair and equitable access to temporary shelters, it is crucial to establish community-led shelter management committees including members from SC/ST, women groups. These committees will coordinate the distribution of shelter materials and resources.
4. There is a pressing need for essential items such as blankets, mattresses, clothing, cots, hygiene products, tarpaulins, sanitary pads, cooking stoves, and utensils in the majority of households.
5. The government's support is vital in providing the necessary resources and assistance for affected individuals to rebuild their homes and restore their lives. This requires comprehensive support and coordinated efforts from humanitarian organizations and government entities to address housing, employment, and property-related concerns in the aftermath of Cyclone Biparjoy.

## 4.7 PROTECTION

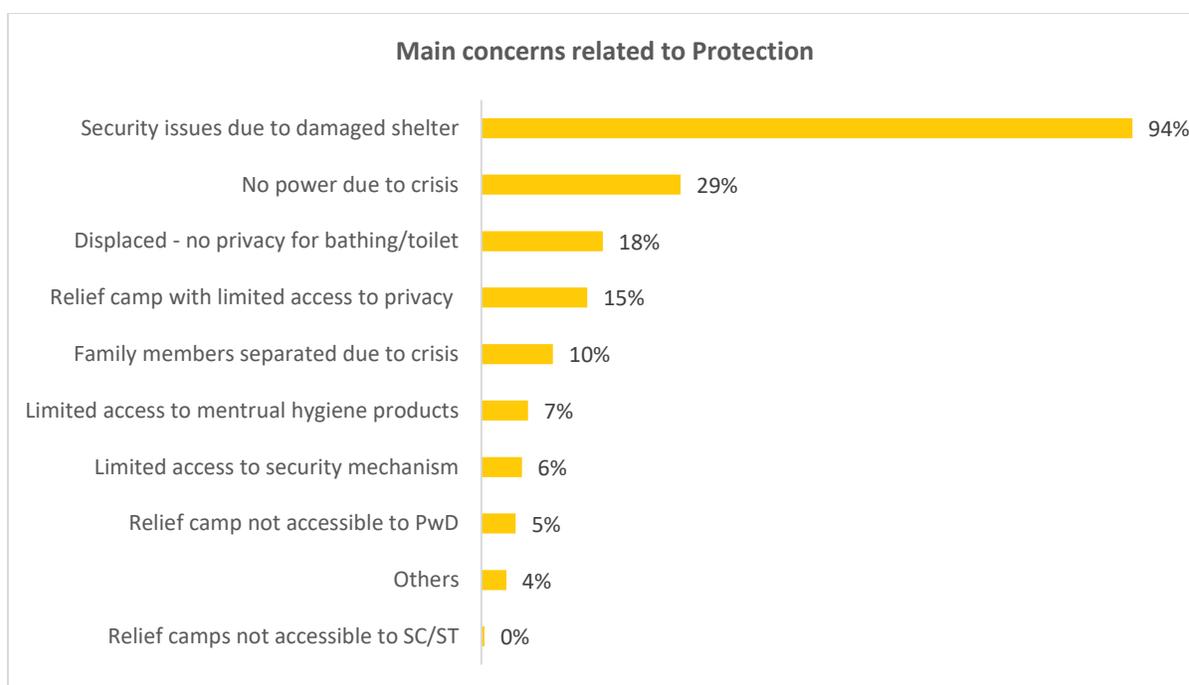
### Overview

The Protection Sector analysis reveals critical protection issues, including security concerns due to damaged shelters, limited access to security mechanisms, family separations, power outages, privacy challenges in relief camps, inadequate bathing/toilet facilities, limited access to menstrual hygiene products, and exclusion of SC/ST and PwD communities from relief camp services. Urgent action is needed to address these gaps and ensure the safety, dignity, and well-being of the affected populations. Based on this analysis, the report proposes necessary interventions and recommendations to address the identified needs, ensuring the protection and well-being of the affected communities. Efforts should focus on repairing shelters, improving security measures, reuniting separated families, restoring power supply, enhancing privacy provisions in relief camps, providing adequate sanitation facilities, ensuring access to menstrual hygiene products, and promoting inclusivity in relief camp facilities.

### Assessment Findings

In the affected regions of Rajasthan, during the household survey ninety-four percent of respondents reported high-security issues due to damaged shelters and 29% shared about the significant challenges caused due to power outages. While 18% quoted the lack of privacy for bathing/toilet facilities, 15% shared the concern over limited privacy in relief camps. A few responders also shared the issues over Family separations (10%), limited access to menstrual hygiene products (7%), limited access to security mechanisms (6%), and inaccessible relief camps for PwD (5%) populations.

---



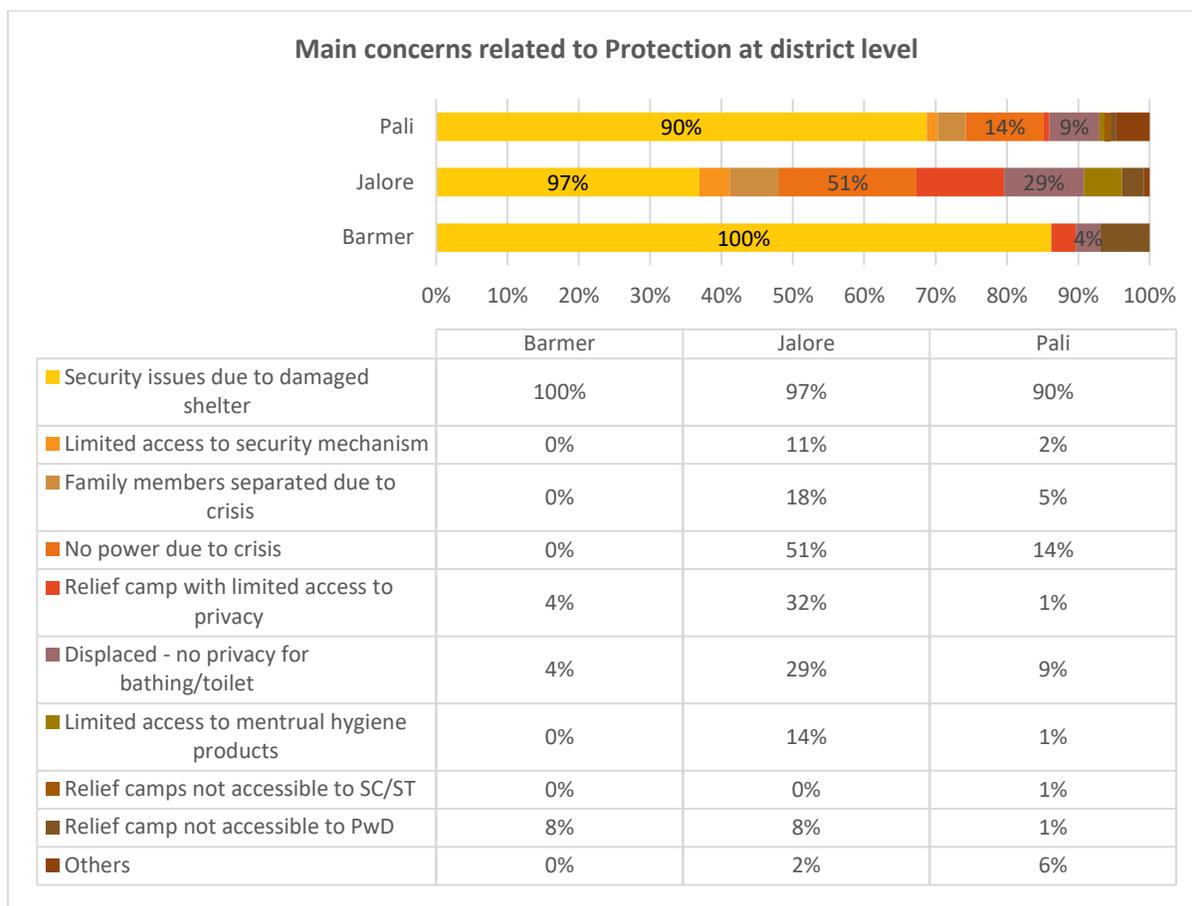
**GRAPH 32: MAIN CONCERNS RELATED TO PROTECTION**

In Barmer, security issues due to damaged shelters were reported at a high rate of 100%. However, there were instances of relief camps with 8% reporting inaccessibility of relief camps by PwD populations and 4% reporting limited access to privacy and displaced individuals lacking privacy for bathing/toilet facilities. Whereas, no respondents have raised any significant concerns regarding access to security mechanisms, family separations, access to menstrual hygiene products and accessibility of relief camps by SC/ST.

In Jalore, a significant proportion of respondents, specifically 97%, reported security issues arising from damaged shelters. Furthermore, a considerable 51% of the population experienced power outages. Privacy-related challenges were prominent, with 32% of respondents expressing limited privacy access in relief camps, and 29% lacking privacy for bathing/toilet facilities. Concerns regarding limited access to security mechanisms and family separations were also noteworthy, reported at rates of 11% and 18% respectively. Approximately 14% of respondents reported limited access to menstrual hygiene products. While relief camps were accessible to Scheduled Castes/Tribes (SC/ST) populations, they were not accessible to individuals with disabilities (PwD).

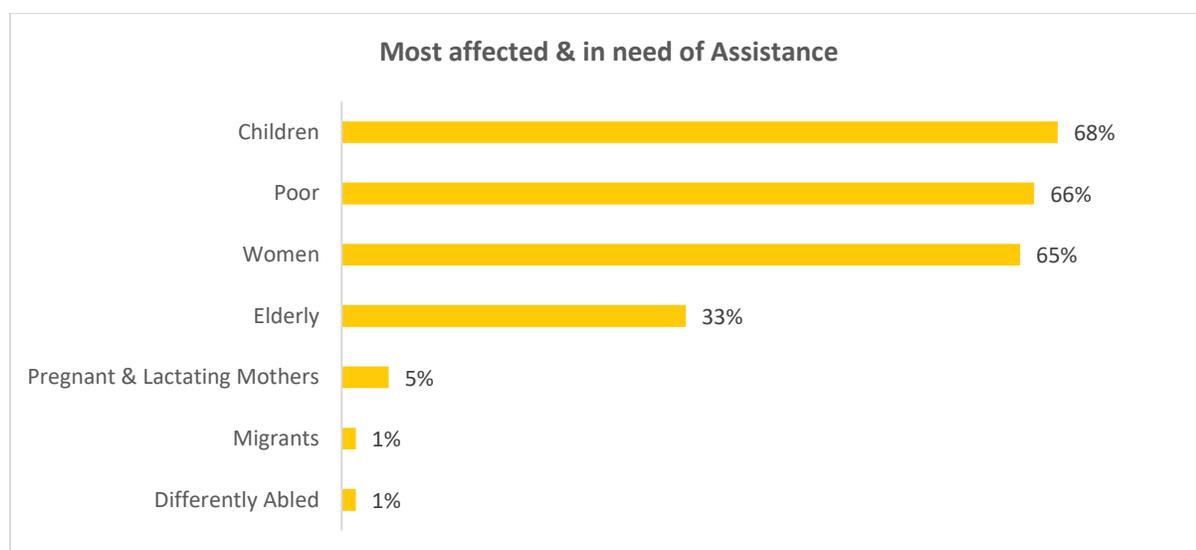
In Pali, the reported rate of security issues stemming from damaged shelters was 90%. Power outages affected 14% of the population. Additionally, individuals who were displaced lacked privacy for bathing/toilet facilities, reported at a rate of 9%. Concerns regarding limited access to security mechanisms and family separations were comparatively lower, with reported rates of 2% and 5% respectively. In terms of relief camps, one percent (1%) of respondents reported limitations on

privacy access, limited access to menstrual hygiene products, and inaccessibility to both SC/ST and PwD populations.



**GRAPH 33: MAIN CONCERNS RELATED TO PROTECTION - DISTRICT LEVEL**

The most affected groups in need of assistance include children, with 68% requiring support, followed by the poor population at 66%. Women are also significantly affected, with 65% in need of assistance. The elderly population shows a vulnerability rate of 33%, while pregnant and lactating mothers have a five percent (5%) impact. One percent (1%) of respondents reported that the Differently abled individuals and migrant were impacted.



**GRAPH 34: MOST AFFECTED AND IN NEED OF ASSISTANCE**

## Urgent Needs

Based on the provided information, the urgent needs in the protection sector for addressing the impact of Cyclone Biparjoy in Rajasthan includes:

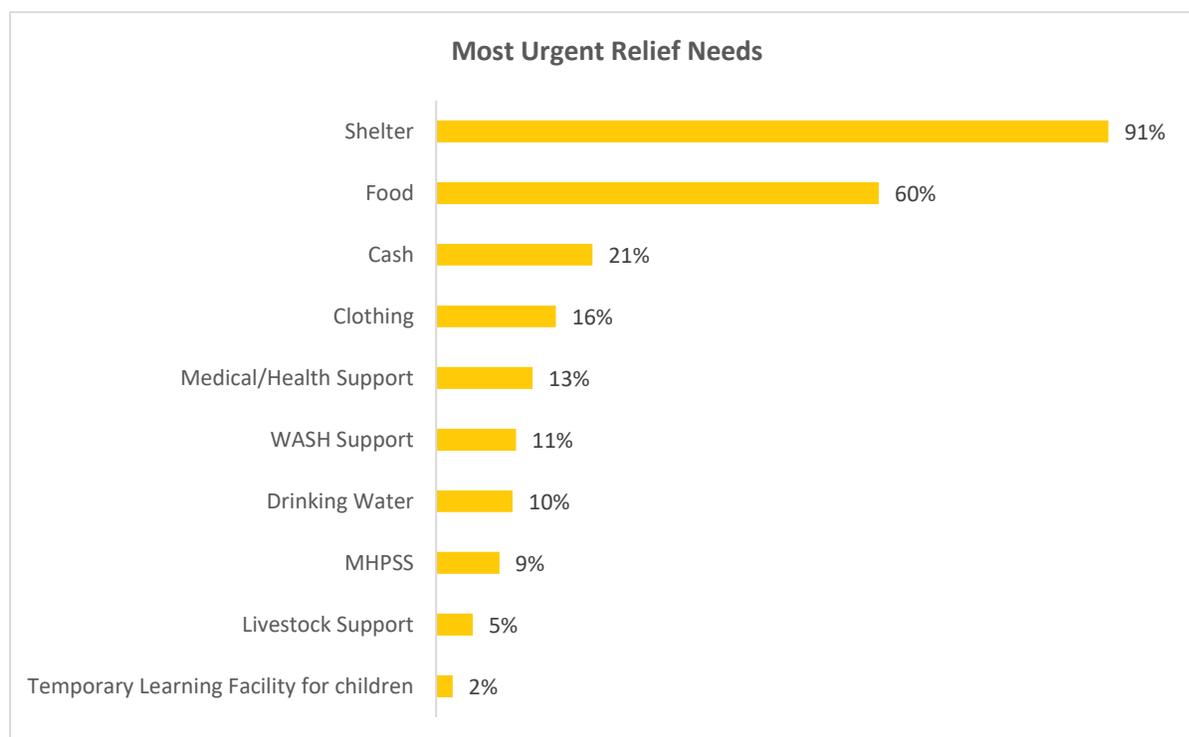
1. **Shelter Repairs:** Immediate actions should be taken to address the high-security issues reported due to damaged shelters, ensuring the safety and protection of affected individuals.
2. **Privacy Provision:** Efforts should be made to address the lack of privacy for bathing/toilet facilities, limited privacy in relief camps, and displaced individuals lacking privacy, to maintain dignity and respect for affected individuals.
3. **Family Reunification:** Urgent steps are needed to reunite families who have been separated due to the crisis, providing necessary support to alleviate emotional distress.
4. **Menstrual Hygiene Support:** Adequate supplies of menstrual hygiene products should be provided to ensure the well-being and hygiene of affected women and girls.
5. **Improved Security Mechanisms:** Measures should be taken to enhance the access to security mechanisms, ensuring the safety and protection of the affected population.

It is important to prioritize these urgent needs to effectively respond to the protection concerns and ensure the well-being, safety, and inclusivity of the affected population in the aftermath of Cyclone Biparjoy.

## 4.8 RELIEF AND RECOVERY NEEDS

### Assessment Findings

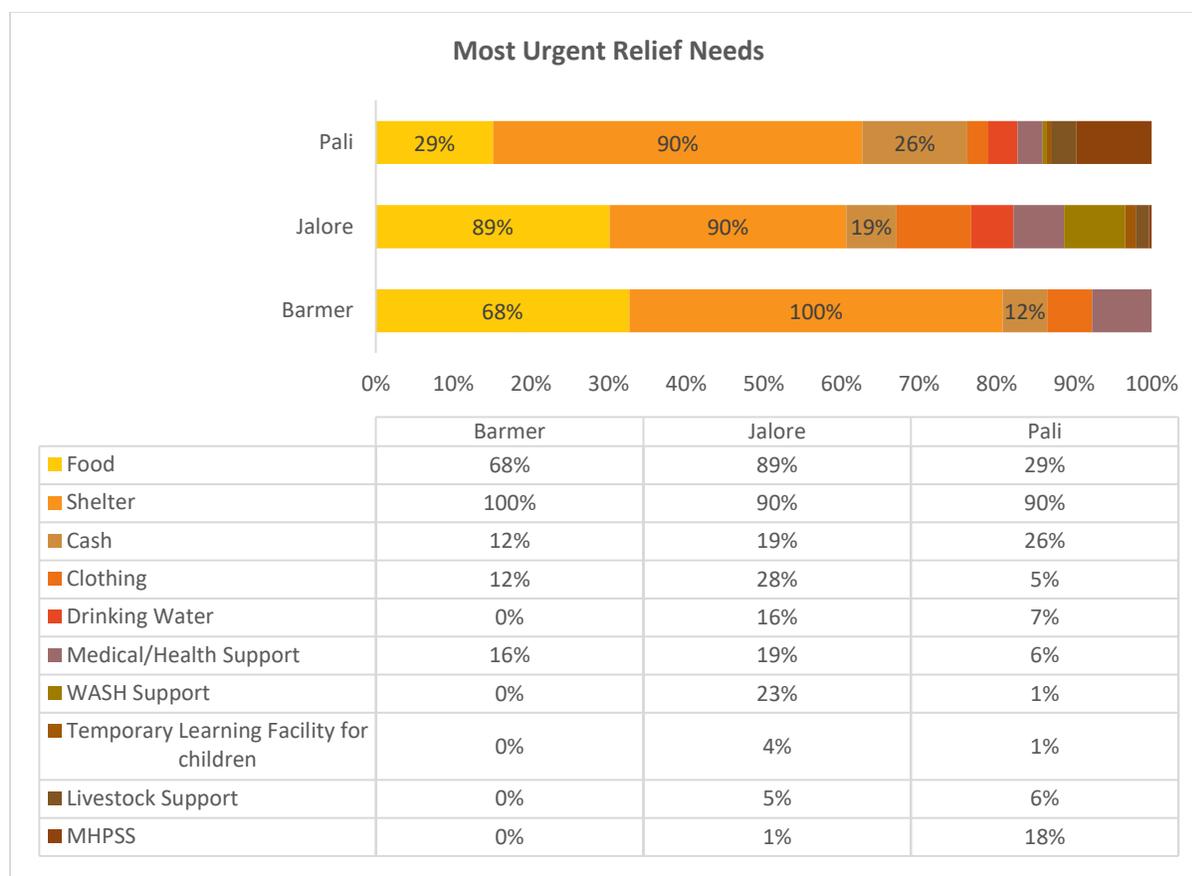
100% of respondents from all the districts reported that Power supply and Communication lines were restored in their respective districts. However, the provision of shelter was brought up as a significant concern, with 91% of respondents expressing an urgent need for safe and secure housing. Food assistance is also critical, identified by 60% of individuals to address immediate food security challenges. Financial support is emphasized by 21% of respondents as a means to meet various needs. Adequate clothing is identified as an important priority by 16% of participants. Access to medical and health services is crucial, highlighted by 13% of respondents. Clean drinking water and sanitation facilities are pressing needs for around 10% of the affected population. Mental health and psychosocial support are recognized by 9% of participants as critical areas of assistance. Livestock support and temporary learning facilities for children follow in terms of identified needs.



GRAPH 35: MOST URGENT RELIEF NEEDS

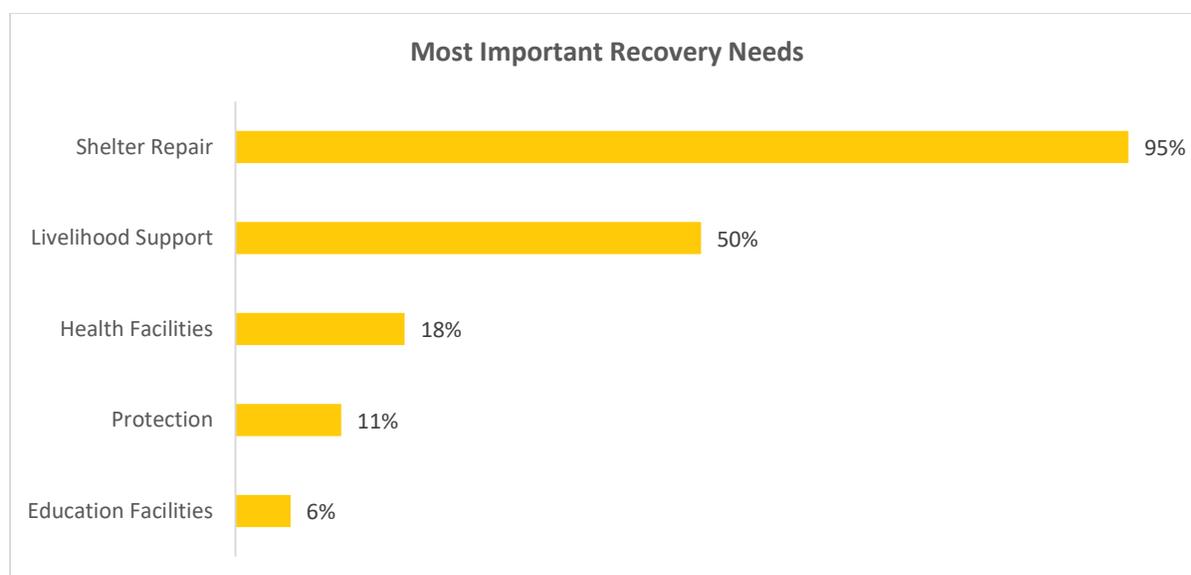
In Barmer, the highest priority is shelter, with 100% of respondents indicating an urgent need for safe housing. Food assistance is also crucial in Barmer, with 68% of individuals requiring immediate support for food security. Cash, clothing, and medical/health support are identified as additional needs. In Jalore, shelter and food are prioritized, with 90% of respondents emphasizing these requirements. Cash, clothing, and medical/health support are also significant needs in Jalore. In Pali, shelter and food remain essential, with 90% and 29% of respondents respectively. The need for MHPSS support has also been expressed by

18% of respondents in Pali. Other important needs across the districts include drinking water, WaSH support, temporary learning facilities for children, livestock support, and mental health and psychosocial support. Addressing these relief and recovery needs is crucial to effectively support the affected populations and facilitate their recovery process.



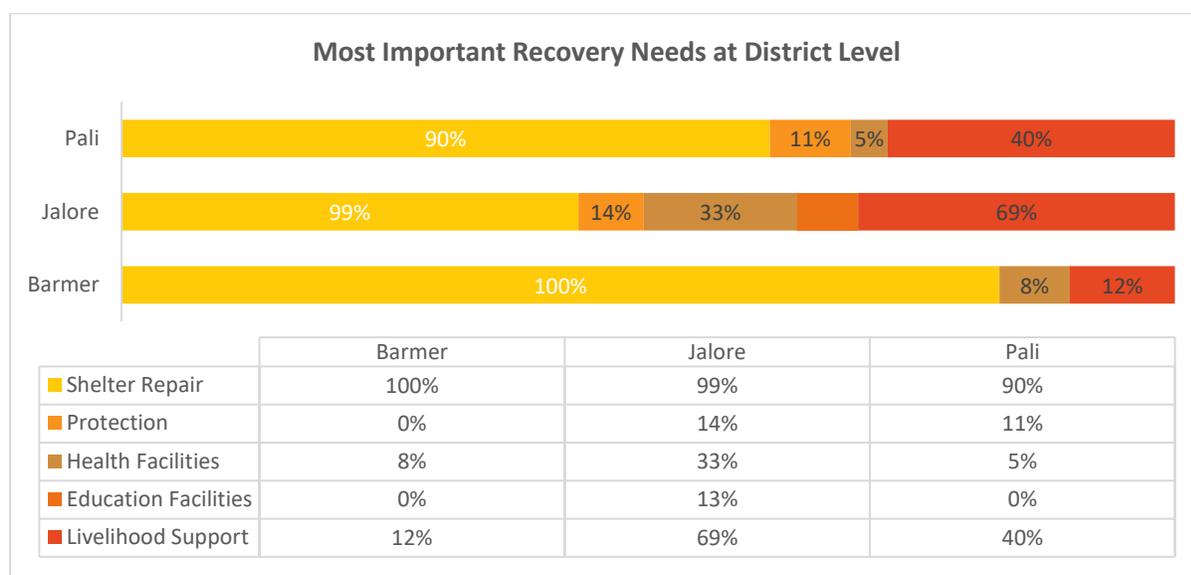
GRAPH 36: MOST URGENT RELIEF NEEDS - DISTRICT WISE

In terms of importance, the highest priority need across all districts is shelter repair, with 95% of respondents emphasizing its urgency. Following closely is the need for livelihood support, identified by 50% of participants. Health facilities are recognized as a significant requirement, prioritized by 18% of respondents. Protection measures are also important, highlighted by 11% of participants. Lastly, education facilities are identified as a need, although with a lower priority of six percent (6%).



GRAPH 37: MOST IMPORTANT RECOVERY NEEDS

In Barmer, the most important recovery need is shelter repair, with 100% of respondents emphasizing its urgency. Livelihood support is the next priority, identified by 12% of participants, and Health facilities are also highlighted but to a lesser extent in Barmer. In Jalore, shelter repair is again a crucial need, with 99% of respondents indicating its importance and Livelihood support follows closely as the second priority, emphasized by 69% of participants. Health facilities, Protection measures, and Education facilities are identified as significant needs but with lower percentages in Jalore. In Pali, shelter repair remains a key priority with 90% of respondents highlighting its importance and Livelihood support is the next urgent need, identified by 40% of participants. Protection Measures and Health facilities are also recognized as a significant requirement but to a lesser extent in Pali.



GRAPH 38: MOST IMPORTANT RECOVERY NEEDS - DISTRICT LEVEL

## 5. RECOMMENDATIONS

### LIVELIHOOD

#### Short-term:

- Provide immediate cash-for-work programs, converged with MGNREGA, and increase the wage rate to compensate for wage loss, creating employment opportunities for affected individuals with primary focus on debris clearance, infrastructure repair, and restoration activities.
- Distribute agricultural inputs and livestock support to farmers and pastoralists to revive agricultural activities and ensure food security.
- Expedite SDRF assistance with special measures to support those without proof of livestock death. Provide fodder to those in need of animal husbandry support.
- Establish temporary marketplaces and facilitate access to markets for local artisans and entrepreneurs to resume economic activities quickly.
- Expedite ex-gratia assistance as per SDRF norms and provide special provisions for families who have lost key earning persons, enabling them to initiate new livelihood activities and rebuild their sources of income.

#### Mid-term:

- Facilitate access to microfinance and credit facilities, including providing access to public credit, for small businesses and entrepreneurs without guarantees and assets for enabling the affected population to rebuild and diversify local economies.
- Daily wage workers are numerous in the areas, and they can be engaged in the various capacities related to cyclone recovery. This is an opportunity for skill development units to run short term course to convert them into skilled human resource to diversify their income sources.
- Form livelihood committee at village and create pooled funds to provide support to affected communities to restart their livelihoods.
- Promote entrepreneurship and skills development programs to empower affected communities and foster self-sufficiency.

#### Long-term:

- Encourage the establishment of community-based cooperatives and value chains to enhance market linkages and improve income generation prospects.
  - Promote sustainable and climate-resilient livelihood options such as eco-tourism, agroforestry, and renewable energy projects.
-

- Veterinary department should ensure seasonal vaccine and veterinary care to the injured and remaining livestock.
- Strengthen vocational training and technical education programs to equip the workforce with skills in emerging sectors and promote economic diversification.

## HEALTH

### Short-term:

- Conduct health assessments and provide emergency medical care, including mobile clinics and medical supplies, to address immediate health needs.
- Mobile Van Health Facilities should be provided in hard-to-reach areas.
- Awareness about basic hygiene promotion hand washing is critical to help prevent the spread of illness and disease.
- Implement disease surveillance systems and early warning mechanisms to monitor and prevent outbreaks of waterborne diseases, vector-borne illnesses, and other health risks.
- Provide mental health and psychosocial support services to individuals and communities affected by the cyclone. Grief and shock are normal in the immediate aftermath of a natural disaster; psychological counselling support is required.
- Special care should be given to people with disability, elderly, pregnant women, and children in terms of accessibility to health services.
- Removal of sludge and other waste should be done properly to reduce risk of long-term diseases. The contamination of water with faeces, silt and debris are likely to affect the areas, leading to rise in cases of diarrhoea, dysentery, and other water-borne diseases. Vaccines are recommended for people, where poor sanitation and unsafe water are common.
- Women/adolescent girls on their period are at greater risk especially the ones who are relocated. No access to clean cloth or sanitary napkins as absorbents of menstrual blood can be there in shelter homes. Awareness of safe and easy access to sanitation, supply of water, free distribution of sanitary napkins/ culturally appropriate sanitary towels to be ensured. Provision of sanitary napkins as essential items.
- Chlorination/disinfection of the water sources at the health facility can be recommended.
- Bed nets can be made available for the indoor patients in mosquito breeding zones.

### Mid-term:

- Strengthen and upgrade health facilities and infrastructure in affected areas, ensuring access to quality healthcare services for the long term.
  - Enhance capacity-building initiatives for healthcare workers, including training on emergency response, trauma care, and psychosocial support.
-

- Communication strategy needs to be developed for creating massive awareness among the community on safe health and hygiene practices during disaster. IEC materials need to be adequately distributed among the affected population for awareness purpose.
- Improve access to essential medicines, vaccines, and medical equipment, establishing robust supply chains and emergency stockpiles.
- Doctors can be deployed for medical checkups after few months of the disaster which will give us an understanding of any post cyclone diseases prevailing in the community.

#### Long-term:

- Develop community-based health promotion programs, focusing on preventive measures, health education, and awareness campaigns.
- Strengthen primary healthcare systems, ensuring comprehensive and accessible services, including maternal and child health, nutrition, and preventive care.
- Alternative arrangement for power supply (generator, fuel etc.) in Health facilities/ Institutions should be made as a sustainable option.
- Invest in healthcare workforce development, including recruitment, training, and retention of qualified healthcare professionals in the affected areas.

## SHELTER

#### Short-term:

- Provide emergency shelter materials, such as tents, tarpaulins, and temporary shelters, to displaced families and individuals.
- Provide shelter kits based on the local construction practices along with the quick guide on repairs.
- Creation of teams of masons at Gram Panchayat level in coordination with local administration to support affected households.
- Establish community-led shelter management committees to coordinate the distribution of shelter materials and ensure equitable access to temporary shelter.
- Advocacy with government for owner-driven reconstruction process for reconstruction of houses.

#### Mid-term:

- Repair and rehabilitate damaged houses, using disaster-resilient construction techniques and materials, to provide safe and durable shelter options.
  - Training of construction workers on cyclone resistant features and safe construction practices.
-

- Strengthen the capacity of local communities in disaster-resistant construction practices through training programs and technical support.
- Develop transitional housing solutions to accommodate displaced families during the reconstruction phase, ensuring access to essential services and livelihood opportunities.
- Preparation of database of vulnerable housing stock should be prioritized for retrofitting or new construction under government support using AI based model and ground verification.

#### Long-term:

- Develop and enforce building codes and regulations that incorporate disaster resilience and safe construction practices, ensuring the long-term safety of housing structures.
- Promote the construction of safe and affordable housing, considering climate-resilient designs and incorporating community input in the planning process.
- Support the establishment of housing finance mechanisms and access to affordable loans to facilitate the reconstruction and acquisition of permanent housing for affected households.
- Enhance land-use planning and zoning regulations to minimize the risk of future disasters and ensure safe settlement locations.
- Facilitate community-driven approaches to shelter reconstruction, encouraging participation, and empowering local communities in decision-making processes.

## EDUCATION

#### Short-term:

- Provide temporary learning spaces in a safe and secure environment equipped with essential teaching materials and supplies to ensure uninterrupted access to education.
  - It is crucial to provide psychosocial support to children and teachers experiencing multiple challenges of cyclone.
  - Ensure children build awareness on their rights and safety and security issues.
  - Provide need-based support to children with disabilities like aids and appliances and customized teaching learning materials.
  - Provide safety kits to adolescent girls and play materials to young children.
  - Provide catch-up classes and remedial support to students to bridge learning gaps caused by disruptions.
  - Engage children through group activities for their well-being (Physical, social, and emotional), educations sector expertise to introduce inclusive non formal and skill education, use of games, arts, and crafts to build the resilience of children aftermath of emergency,
-

- Ration distribution under the provision of mid-day meal through schools and fortified food through Anganwadi centres need to be restored and strengthened to ensure the fulfillment of nutritional needs of children to avoid possibility of malnutrition which might hinder their physical and mental development.
- Mobilise school management committees with respect to their roles and responsibilities and ensure all children have access to learning spaces and are safe.
- Adolescent girls are at more risk for early and forced marriage, sexual harassment, hence creating a safety net for girls would be critical.
- Mapping of children, separated from parents and take appropriate actions with support from government.
- Ensure Childcare facilities.

#### Mid-term:

- Reconstruct and rehabilitate damaged Aanganwadi centres and schools, making them resilient to future disasters, child friendly and ensuring safe learning environments.
- Strengthen teacher training programs, focusing on disaster-resilient pedagogy and the use of technology in remote learning.
- Enhance access to digital learning tools and technologies, ensuring connectivity and providing equal educational opportunities.
- Restoration of electricity is essential to ensure continuity of digital learning.

#### Long-term:

- Integrate disaster risk reduction and climate change education into the curriculum, fostering resilience and environmental awareness among students.
- Enhance education infrastructure development, including the construction of schools, libraries, and educational facilities.

### **WATER, SANITATION, AND HYGIENE (WaSH):**

#### Short-term:

- All the drinking water sources need to be disinfected immediately to make people access to safe drinking water facilities. Additionally, disinfectants (Halogen tablets/ Bleaching powder etc) may be supplied to the required households in the community.
  - Provide immediate access to safe drinking water through the distribution of water purification tablets, disinfectants, water containers/ tanks, and temporary water supply systems.
  - Immediately disinfect all the functional drinking water sources in each community/ village to ensure access to safe drinking water facilities.
-

- Set up emergency sanitation facilities, including latrines and handwashing stations, to prevent the spread of diseases in temporary shelters and displacement camps.
- Minor Repair/ restoration to the damaged piped water supply, handpumps, tube wells, borewells, etc., should be taken up immediately to restore the existing drinking water supply system in the area.
- Conduct hygiene promotion campaigns, emphasizing handwashing practices, safe water storage, and proper waste management.
- Safe water containers (2 Nos. 10 Lt capacity Minimum) with lid and tap should be provided to vulnerable families.
- If toilets of schools, panchayats and other community places are in working condition, it should be opened for people who don't have access to toilets. Panchayat should take responsibility of cleaning and maintaining these facilities, along with provision of adequate water and lighting at night.
- If required temporary Pit latrines or trench latrines may be constructed in the specific designated location with proper disinfection of the area to avoid open defecation and further contamination.
- Ensure supply of Hygiene kits/ WaSH kits (with detergents, soaps, disinfectants, storage/ container, Sanitary Napkins) wherever it is needed in the community/ relief camps.
- Along with the supply of sufficient Hygiene Kits, there is an immediate need to use the IEC materials on hygiene education, especially on personal hygiene and Menstrual hygiene and use of some such IEC materials.

#### Mid-term:

- Repair and rehabilitate damaged water supply systems, ensuring the availability of clean and safe drinking water for households, schools, and healthcare facilities etc.
- Promote hygiene education programs, targeting schools, community centers, and households, to raise awareness about good hygiene practices.
- Conduct Cleanliness Drive in the community to strengthen solid and liquid waste management systems, including waste collection, and safe / proper disposal, cleaning and disinfecting the drains, community water bodies etc., to improve environmental sanitation.

#### Long-term:

- Implement sustainable WaSH infrastructure projects, such as rainwater harvesting systems and improved sanitation facilities, to ensure long-term access to clean water and sanitation services.
-

- Cleaning, disinfection, and maintenance of village ponds should be taken up jointly to ensure that the ponds serve as emergency water sources and not turn into waste dumping areas.
- Develop water resource management plans to ensure efficient use and conservation of water sources, especially during periods of scarcity.
- Promote community-led initiatives and capacity-building programs to sustain hygiene practices and sanitation standards in the long run.
- Advocating and Influencing Govt to adhere resilient WaSH flagship programs along with proper Operation and Management in Place for community WaSH facilities, (On both drinking water and Sanitation) towards its sustainability.

## **PROTECTION:**

### Short-term:

- Establish child-friendly spaces and safe zones for vulnerable populations, providing protection, psychosocial support, and recreational activities.
- State must provide psycho-social care by sending professionals or trained counselors to the affected villages under the monitoring of skilled and experienced senior counselors.
- Strengthen coordination between local authorities, humanitarian agencies, and community leaders to identify and address protection risks.
- Regular inspections and monitoring need to be established with the Social and Outreach Worker from the District Child Protection Units and the Childline service for sustained outreach and engagements.

### Mid-term:

- Facilitate community-level drives for registering the households under social protection programs.
  - Train community members and frontline workers on child protection, gender-based violence prevention, and human rights to build local capacity for safeguarding vulnerable individuals.
  - Form Children's Groups in every village or in every hamlet of village. They can be trained on child rights and protection mechanism.
  - Community PSS and Peer support networks should be facilitated by NYKS and NSS volunteers active in the area.
  - Establish referral systems and safe reporting mechanisms to address incidents of exploitation, and abuse.
  - Enhance community engagement and participation in protection-related decision-making processes, ensuring the inclusion of marginalized groups.
-

Long-term:

- Promote legal and policy reforms to strengthen protection frameworks, including laws against gender-based violence, child exploitation, and discrimination.
  - Develop comprehensive social protection systems that address the specific needs of vulnerable populations, including access to legal aid, healthcare, and social services.
  - Strengthen community-based protection networks and support mechanisms, fostering social cohesion, and resilience against future shocks.
-

## ANNEXURE

### JRNA Report Writing Team & Contributors

Name	Organisation
Ms. Lee Macqueen	NCDHR
Mr. Mintu Debnath	Save the Children
Ms. Seema Rajput	CARE India
Dr. Eilia Jafar	Tanyak
Mr. Mihir Bhatt	AIDMI
Dr. Reeti Tiwari	World Vision India
Dr. Ritu Rana	HelpAge India
Ms. Iyce Malhotra	Action Aid
Mr. Vivek Coelho	World Food Programme
Mr. Purna Mohanty	WaterAid
Fr. Vishal Raymond	IAG Rajasthan
Mr. Cyljo Abraham, Ms Hannah Kezia Jose, Ms. Hephzibah Lakhnopal, Ms. Mishel Mohan, Ms. Nupur Tyagi, Mr. Utkarsh Dwivedi, Ms. Varsha Chaudhary & Mr. Vishnu P.	Sphere India Team: Overall Coordination, Orientation on Data Collection, Data Analysis and Report Writing

### Enumerators

Name	Organization	Name	Organization
Mr. Abhay Singh	IAG Rajasthan	Ms. Kanishka	IAG Rajasthan
Mr. Balveer Singh	IAG Rajasthan	Ms. Lisa Clara Kane	IAG Rajasthan
Mr. Ganeshram	IAG Rajasthan	Mr. Dendra Singh	IAG Rajasthan
Mr. Balu Lal	IAG Rajasthan	Mr. Hanumant Singh	IAG Rajasthan
Mr. Abhishek Gladwin	IAG Rajasthan	Mr. Umedaram	IAG Rajasthan
Mr. Kushal Rawat	IAG Rajasthan	Mr Lunaram	IAG Rajasthan
Mr. Aakash Rawat	IAG Rajasthan		

### JRNA Questionnaire

#### [Household Questionnaire](#)

Locally led by:



Sphere India

*National Coalition of Humanitarian Agencies in India*

Sphere India Secretariat

Flat no. 123, Arun Vihar, Officer Colony, Sector 37,  
Noida | Gautam Buddha Nagar, Uttar Pradesh 201303

[info@sphereindia.org.in](mailto:info@sphereindia.org.in)