



Joint Rapid Needs Assessment Bihar Flood 2021

JULY 13, 2021



Images: Flooded village of Tetariya Block, District East Champaran

Joint Rapid Needs Assessment Report
Bihar Flood 2021

State Inter Agency Group (IAG) - Bihar

Address: Bihar IAG, C/o Yugantar, MIG 296, Near Shivaji
Park, Kankarbagh Colony, Patna, Pin - 800020

Phone: +91 9835263772

E: sanjaypandeyindia@yahoo.com

Sphere India Secretariat

Sphere India Secretariat I B-94 I Sector 44 I Noida – 201301,
Uttar Pradesh I India

Phone: +91 120 4268157

E: info@sphereindia.org.in

Acknowledgement

This Joint Rapid Needs Assessment (JRNA) would not have been possible without the cooperation and constant support of the volunteers, local member organizations of Bihar Inter-Agency Group, district officials, line departments and PRI members 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 UNICEF field office Bihar, our members and partners such as Action Against Hunger, ActionAid India, ADRA, Caritas India, CRS, Doctors For You, Oxfam India, Plan India, Samajik Vikas Avm Vikas Kendra, Save the Children India, Unnati, World Vision India, Yuganter and all Sphere India and Bihar Inter-Agency Group Members for providing valuable inputs and coordinating the assessment process and providing logistical support.

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

Sphere India and Bihar IAG

13th July 2021, 13:00 hrs.

Joint Needs Assessment

As per Sphere India and State Inter Agency Group Bihar Standard Operating Procedures, adapted to address the COVID 19 pandemic scenario prevailing in Bihar, Joint Rapid Needs Assessment (JRNA) were conducted across the highly flood affected three districts of the state; East Champaran, West Champaran and Muzaffarpur through secondary sources, field visits, personal interviews, observations, focus group discussions and information provided by local CBOs. Also, on ground information was collected using smart phones through data collection mobile application and collated by core team. The aim was to gather information on Humanitarian Response initiatives, disseminate the information to other State, National and International level agencies, collation & analysis of the findings as well as recovery needs. This was truly an initial experience of a Multi Disaster with COVID 19 as a pandemic plus severe floods which has driven thousands of families to relocate and spend day and night under tarpaulins. However, the Humanitarian Response activities need to be seen with a different lens than conventional approach of Disaster Management activities.

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 41 volunteers deployed by the Partners of the State Inter Agency Group- Bihar; Caritas India, Plan India, Save the Children India, Samajik Sodh Avm Vikas Kendra and World Vision India, information gathered from the Community Based Organisations (CBOs), other agencies 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 Bihar IAG (inter agency platform for agencies working in risk reduction and humanitarian response/ recovery work and to promote GO-UN-NGO coordination in the state) any humanitarian organisation as a collective directly or indirectly. It is interpreted only for assessment purpose.

Note

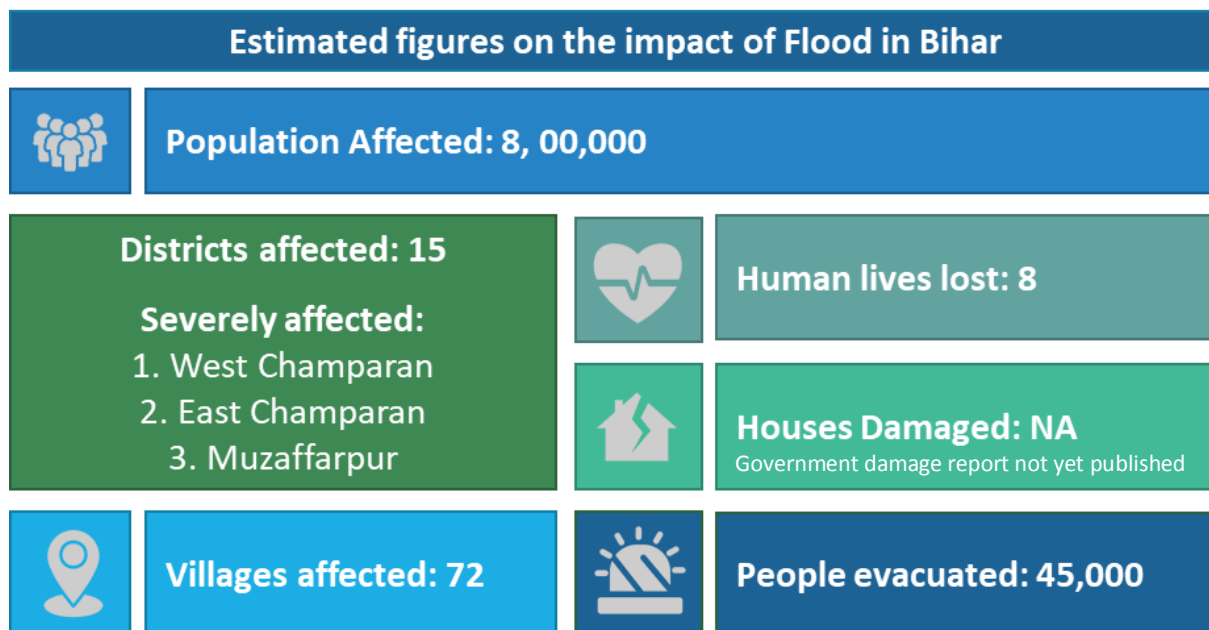
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1. BACKGROUND

Bihar is one of the worst affected states due to floods in India. Almost every year floods severely damages property, both movable and immovable, destroys standing crops and food grains and badly cripples the infrastructure in Bihar. The loss of life and limb caused due to flood events cannot be compensated. However, in monetary values, it costs several crores every year. The flood brings untold miseries to the people as they have to leave their damaged houses and spend a long time in relief camps, raised platforms or in temporary shelters. Government has to allocate huge amount for rehabilitation, and relocation of people which requires diversion of capital required for maintaining production.



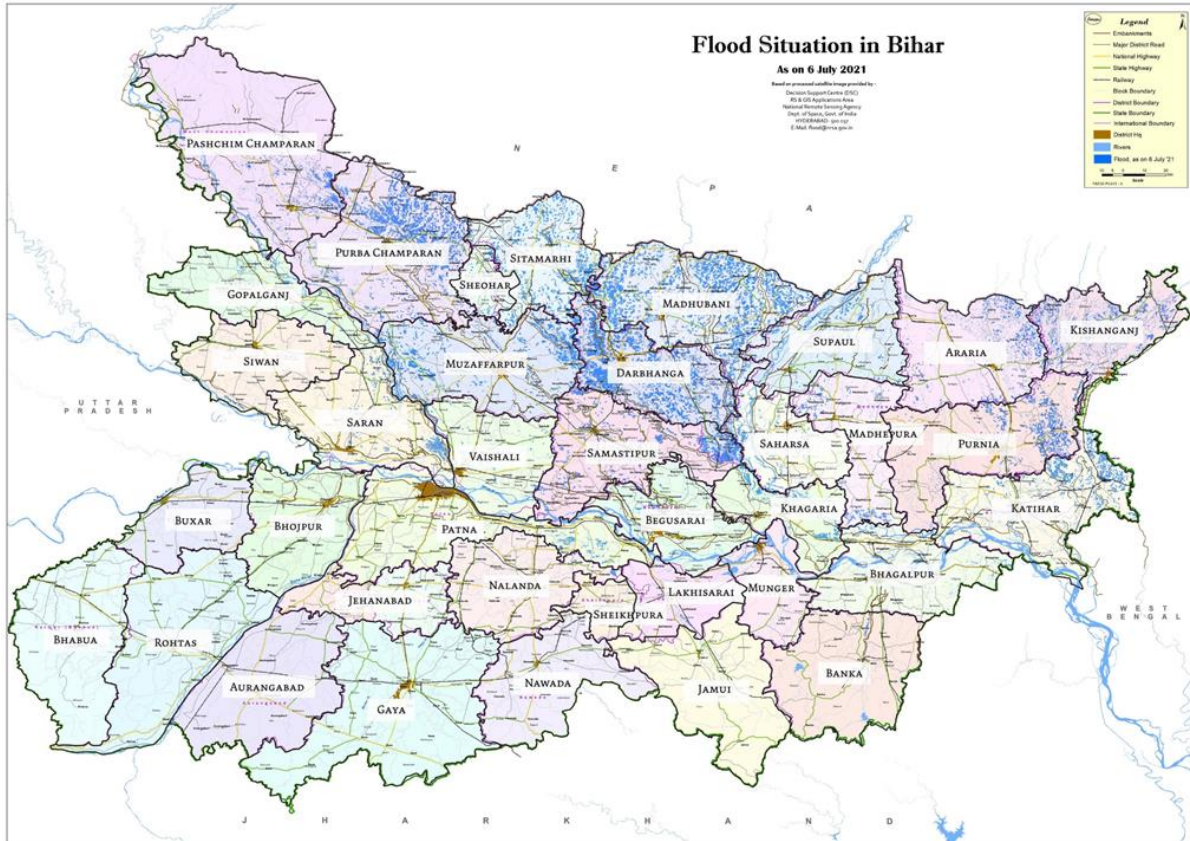
Source: Media Reports

As this year, Bihar has received above normal rainfall with beginning of south-west monsoon. The state experienced unusual flooding which started by mid of June. Several districts in the state have been hit hard by floods. The Bagmati, Gehumi, and Kamla rivers have been in full spate for nearly a fortnight in Bihar's Darbhanga and flooded across several blocks in the Darbhanga district. Officials reported 79 villages across six blocks have been affected by floods in the district and a population of 58,000 has been impacted.

Flash floods have hit Bihar's East Champaran district since water levels of the river Gandak have increased due to the rain. In the district 45,061 residents of 52 villages have so far been affected by the floods and 1,154 residents have been rescued from marooned areas with the help of National Disaster Response Force (NDRF) and State Disaster Response Force (SDRF) teams. Other affected areas include Nalanda, Motihari, Khagaria, Muzaffarpur, Chhapra, Patna, Saharsa and Bettiah.



Source: Media Reports



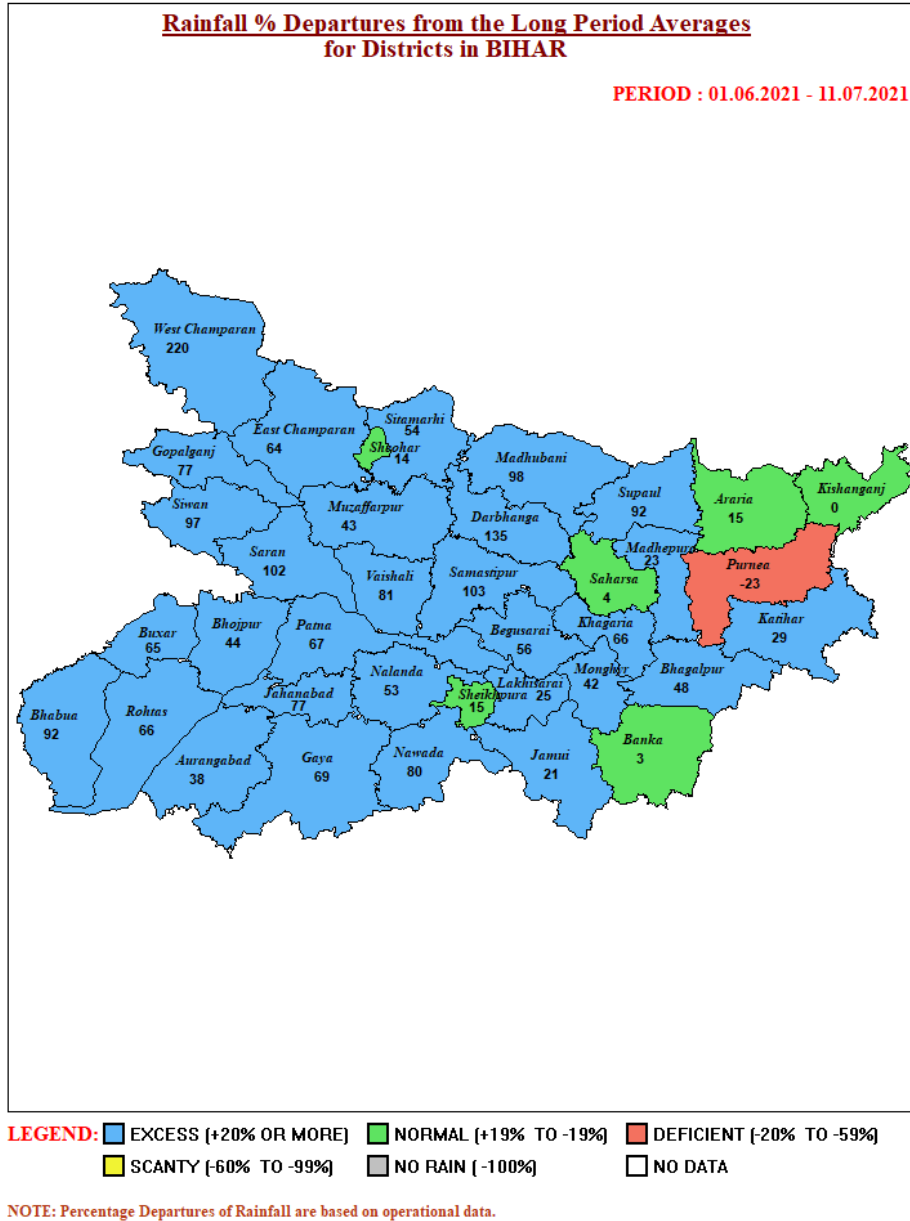
Map 1: Flood Situation in Bihar - 06th July 2021

Ganga Basin – Bihar

In the last 24 hours (10th July, 2021) rivers of Nepal such as Mahakali, Karnali and Kosi recorded light to moderate rains at many places with isolated heavy rains. Hydrological situation in middle and lower parts of these rivers and other rivers originating in Nepal and Indian border of Nepal passing through Bihar and Uttar Pradesh is as detailed below. Rivers Ghagra and Rapti is flowing in above normal flood situation in districts Barabanki & Gorakhpur of Uttar Pradesh respectively. River Gandak is currently flowing in severe flood situation in district Gopalganj and in above normal flood situation in Purba Champaran & Muzaffarpur. Bagmati river in districts Muzaffarpur & Darbhanga is flowing in severe flood situation and above normal flood situation at Sitamarhi. River Adhwarais in severe flood situation in Dharbhanga district. River Kamla is in above normal flood situation in Madhubani district. Kosi river is flowing in severe flood situation in district Khagaria, and in above normal flood situation in Supaul. River Burhi Gandak is flowing in severe flood situations in districts Purba Champaran, Samastipur and Muzaffarpur and above normal flood situation in Khagaria. Parman River is also in severe flood situation in district Araria. River Mahananda is flowing in above normal flood situations in districts Purnia & Katihar. As per rainfall realised and rainfall prediction for east Nepal, water levels are expected to rise in Ghagra, Gandak, BurhiGandak & other North Bihar rivers, which are already in high stage & falling very slowly.

Rainfall (5-11th July, 2021)

INDIA METEOROLOGICAL DEPARTMENT MC PATNA



Heavy rainfall at isolated places had occurred over northern parts of Bihar on 5th July, over NE. NC & NW parts of Bihar, on 6th July; Heavy rainfall at one or two places over NW parts on 7th July; Very heavy rainfall occurred over NW and NC parts on 8th July and Very heavy rainfall in Northern parts on 9th July, Heavy to Very heavy rainfall occurred at one or two places over NW& NC parts on 11th July during the week.

2. OVERVIEW OF JOINT RAPID NEEDS ASSESSMENT REPORT

The report provides an overview of the results based on the Joint Rapid Need Assessment, the methodology and the context in which the survey was undertaken. The findings in this document reflects an understanding of impact on the services and infrastructure, immediate, short term and long term needs of the community.

2.1. Methodology:

The Joint Rapid Need Assessment in Flood affected areas of Bihar has been conducted to identify the urgent, mid-term and long-term needs of affected community based on Food & Nutrition, Health, WASH, Shelter, Livelihood and Protection, and to flag out the vulnerability of affected community to access the basic services and entitlements.

It was done through joint efforts from Inter-Agency Group Bihar, UNICEF field office for Bihar, Sphere India with the field support from local organizations; Volunteers support from Caritas India, Save the Children India, World Vision India, Plan India and Samajik Sodh Avm Vikas Kendra and Technical Support from Unicef Bihar office, ADRA, Action Against Hunger, Unnati, Oxfam India, Save the Children India and Doctors For You. PRI Members, Government led institutions, line departments were providing support and necessary information & data.

During JRNA, urgent needs of affected communities have been identified through direct data collection from the field, government's damage assessment reports, pre-disaster information from respective line departments, secondary data from various sources, media reports and discussions with grassroots functionaries.

Data was collected based on the indicators of the specific tools/questionnaires used during the interviews/ discussions.

The methodology was based on:

- a) Structured one-one interviews with affected households (ensuring prioritize random households from most affected villages).
- b) Structured village level information gathering from most affected villages based on Food & Nutrition, Health, WASH, Shelter, Education, Livelihood, Protection and accessibility of community towards basic services and entitlements.
- c) Structured Relief Camp level information gathering from relocated families living on embankments and on road as informal setting based on safety, Food & Nutrition, Health, WASH, Shelter, Education, Livelihood, Protection and accessibility of community towards basic services and entitlements.
- d) To understand about health and education services in depth, few Hospitals and Schools were also surveyed through structured institution level information gathering to understand the loss and disruption in the services and urgent needs.

- e) Brief discussions with Gram Panchayat Members, local CSOs & NGOs who had pre-disaster existence in the area and also assist community with relief post disaster.
- f) Individual interviews with mixed group of community members to capture more qualitative information.
- g) Secondary data to examine the observation and facts.

2.2. Rational behind the Sampling for Assessment:

To validate the findings and observations and to capture the quantitative and qualitative impact of the disaster on households living in affected areas, the sample for the assessment included the affected households, affected villages, feedback from various stakeholders, and feedbacks from local CSOs & NGOs who had pre-disaster existence in the area and also assist community with relief post disaster have been recorded.

Accordingly, out of all affected villages and households, 27 villages and 318 households were taken as sample of most affected community from three most affected districts East Champaran, West Champaran and Muzaffarpur and have been assessed and documented based on the instruments/tools/questionnaires. For better clarity about displacement related issues and disruption in services 6 Health facilities, 10 Schools, and 5 camps also have been surveyed.

Secondary data analysis based on information disseminated by government departments, media reports, reports from other national or local organization, information provided grassroots CBOs also has added the quality and authenticity to this need assessment process through opportunity to investigate questions using large-scale data sets that are often inclusive of under-represented groups.

3. Primary Data Collection

The data collection process was initiated by documenting interviews of 318 Households and filling the 27 village forms, 6 hospitals, 10 schools and 5 relief camps based on exhaustive questions consisting Food & Nutrition, Health, WASH, Shelter, Education, Livelihood, Protection, and geographical challenges. These all questionnaires have been filled through KoBoCollect Tool, wherein format designed by national level experts and incorporation of suggestions from local humanitarian actors were incorporated.



VOLUNTEER CONDUCTING SURVEY IN AFFECTED AREA

In this process, a team of experts have transferred final questionnaires to KoboCollect Tool and trained the volunteers on how to use it and operate.

3.1. Quantitative Data Analysis

Five sets of questionnaires i.e. Household level, Village level, Relief Camp level, School level and Health Facility level Interviews of Stakeholders/ Service Providers were developed, which were tested in previous disasters in country, and as per their feedbacks formats were modified and finalized. For optimizing the resources, proper use of advance technology was followed during the survey. All sets of questionnaires were used through mobile based application KoboCollect Tool. Which provided sufficient opportunity to the data collectors to access the data immediately transfer on spread sheets.

In order to keep the assessment neutral and unbiased, local volunteers were engaged physically visits and record the responses, for this all civil society group members of Inter-Agency Group Bihar deputed trained volunteers to collect data monitored by partner CSOs. These 45 volunteers were trained to efficiently use the Mobile based Application KoBoCollect Tool, and provided inbuilt forms to fill during interview of responders.

For keeping interview process more open, other than assessment related questions, participants were encouraged to provide insights from their own experience, learning and perspectives about vulnerability of their area and immediate needs of affected community.

Once data was collected from KoBoCollect Tool, an internal team cleaned the data under the supervision of experienced Manager. And responses were analysed and highlighted in form of graphs and charts for proving better clarity to readers.

A trained Report Writers' team from ADRA, Action Against Hunger, Unnati, Oxfam India, Save the Children India, Doctors For You, UNICEF Bihar office, Bihar Inter-Agency Group, and Sphere India

was engaged since the initial stage, which prepared report based on received information, interviews, secondary data analysis, and general observations of surveyors.

This Joint Need Assessment Report has been prepared with the structure consisting immediate, mid-term and long term sectoral needs of community, their existing capacity to cope -up with the situation, attention required for preparedness and issues which required urgent attention of advocacy.

4. SECTORAL ASSESSMENT & RECOMMENDATIONS

4.1. WATER SANITATION AND HYGIENE PROMOTION (WASH)

Bihar is India's most flood-prone state; 76% of people living under the recurring threat of flooding. Though flooding has been an annual feature in the state of Bihar, people have learnt to cope and live with it. Water Sanitation and Hygiene (WASH) remains to be the area requiring huge improvement across all the 38 districts. Water Sanitation and Hygiene (WASH) is the major sector of every community especially during and post disaster stages because WASH covers most important factors of human life. This year as the northern parts of Bihar are reeling under the floods, major concern for affected population remain to be the access to safe/clean drinking water and sanitation facilities. People in the affected areas have been pushed to use contaminated water for drinking and washing purposes as the major source of drinking water for the people of Bihar is ground water through handpumps and tube wells which remain to be largely impacted and inundated in the flood water. Another fact is, there is huge damage occurred to hand pumps in the area. It leads the scarcity in drinking water facilities in the affected area.



Affected population living in vulnerable conditions to outbreak of water-borne diseases

Sanitation is another major concern of Humanitarian aid; Bihar is not at all ODF state since there are many urban and rural belts which are practicing open defecation. This is the situation in non-emergency situation therefore the situation will be crucial during emergency time. All the public and private toilets in the affected areas have been inundated forcing people living in relief camps, river embankments and highways to defecate in open spaces mostly in flood water thus contaminating water more near the flood shelters. WASH sector and humanitarian intervention is very essential during the recovery stage of response. In any disaster situation finding a place to defecate is not easy when nearby area are water-logged or the pit latrines overflow. The concern also arouses in disposal of children's excreta of below 6 years old. If the open defecation during the flood situation is high, there are high chances of epidemical outbreak like diarrhea, leptospirosis etc.

The dual factors of COVID-19 and the disaster striking impact the scenario of affected populations having access to safe drinking water and WASH facilities makes the lives of people more difficult. This situation leaves people to be able to ensure no minimum basic protocols of COVID-19 such as washing hands, keeping the surroundings clean/ sanitized, eat clean food and use clean drinking water.

Assessment Findings

- From the Joint Needs Assessment, it was observed that non availability of safe drinking water was a major concern in the area, as 90% of the respondents did not have access to safe drinking water, as illustrated in Figure 1. Due to excessive flood damages, 27% of the respondents do not have access to water supply infrastructure, while 11% lost solid and liquid waste disposal infrastructure.

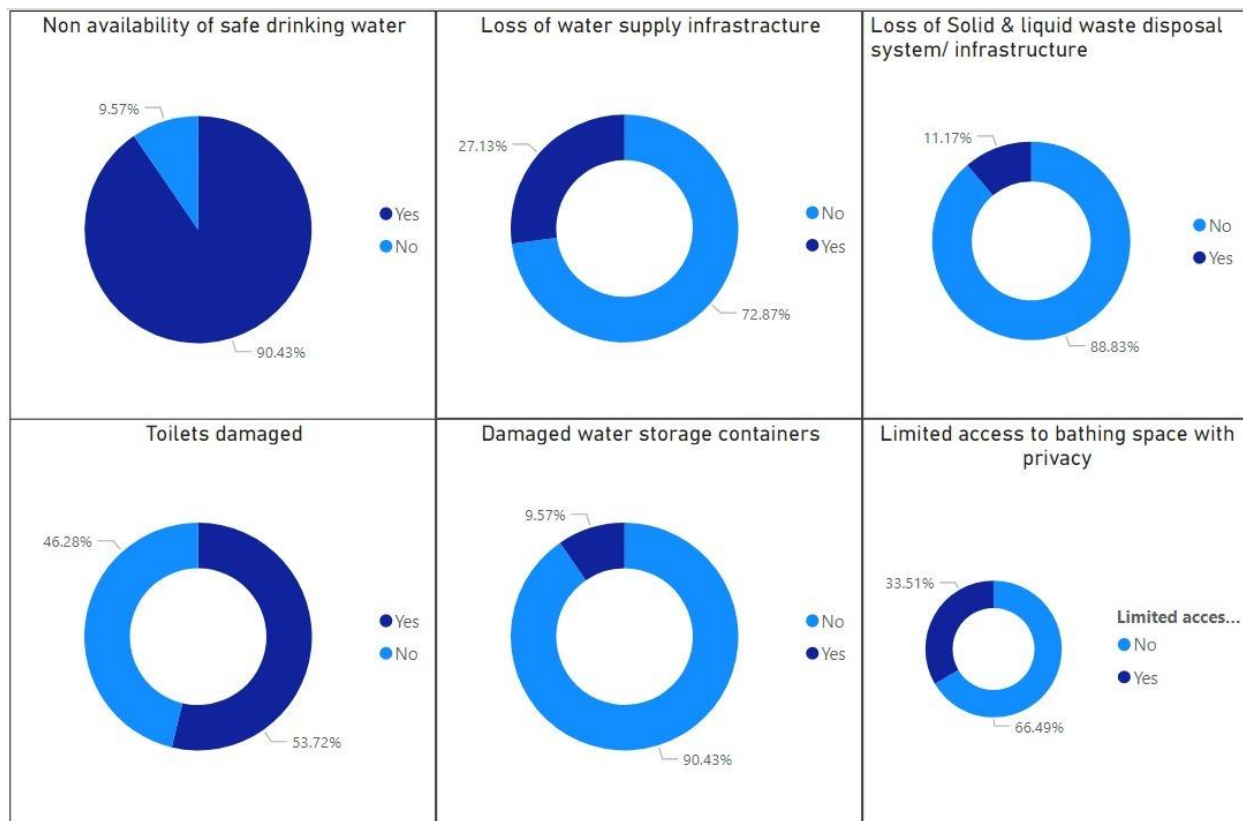


Figure 1: Status of WASH Infrastructure

- Over 50% respondents reported that the toilets have been damaged in the area and 33.5% reported limited access to bathing space with privacy (Figure 1).
- Visible solid waste and waste water was also reported in the affected areas by a significant majority of the respondents, the same was confirmed by the volunteers.
- Due to water logging and flooding people in affected areas who were using household toilets and community toilets have to use open spaces post disaster.
- In surveyed villages, over 2000 Toilets were damaged due to flooding out of which 1448 were fully damaged.

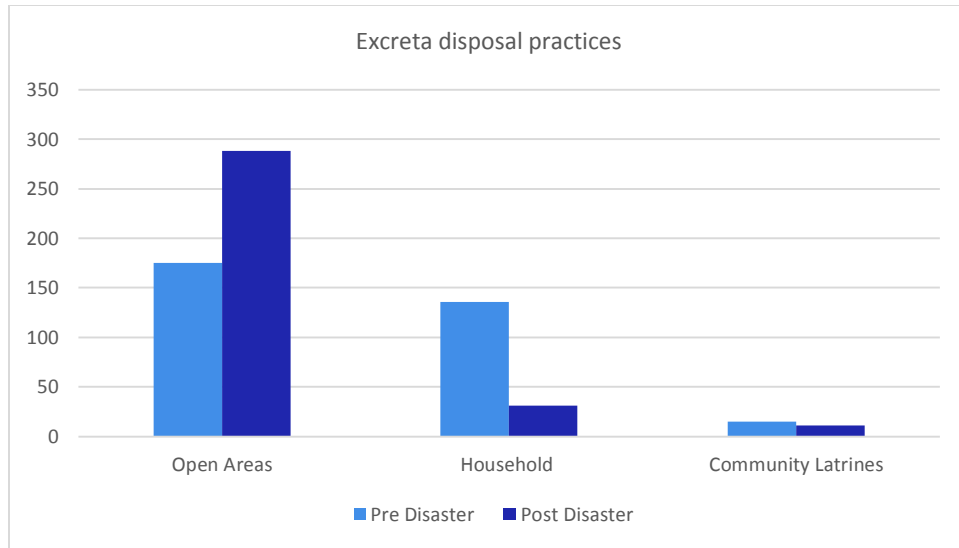


Figure 2: Excreta disposal practices

- In some villages of Banjariya block in East Champaran, it was reported that the water available at source is only enough for 1-2 weeks for all groups in the population.
- While in most of the villages surveyed, it was reported that water source was either contaminated or at risk of contamination due to waterlogging, flooding of handpumps and overflowing drains and waste disposal in open areas.
- Over 5000 HH in the Villages surveyed are without access to safe drinking water due to disaster. Figure 3 illustrates the access to water for marginalized groups in 27 villages surveyed across 3 districts.

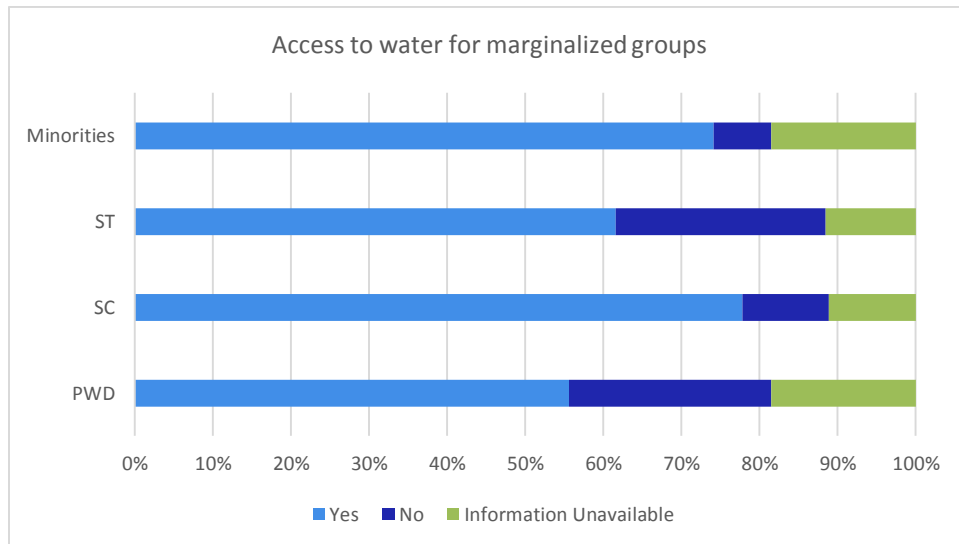


Figure 3: Access to water for marginalized groups

- 76% of adult women and adolescent girls reported unavailability of pads or other materials to be used during menstruation and 54% responded that they were hesitant to dispose pads/clothes and they have disposing menstrual waste in open areas.

- Figure 4 illustrates the practice on menstrual hygiene pre disaster and around 45% of the respondents still have access to them.

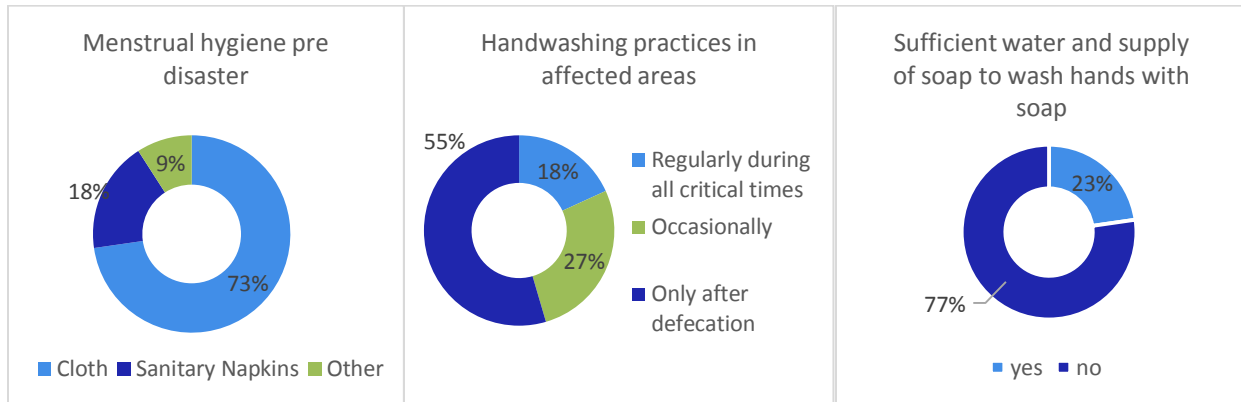


Figure 4: Hygiene practices in affected areas

- As shown in Figure 5, over 50% of the respondents reported that there is no waste collection mechanism in the area and it is generally thrown out on streets or burned.

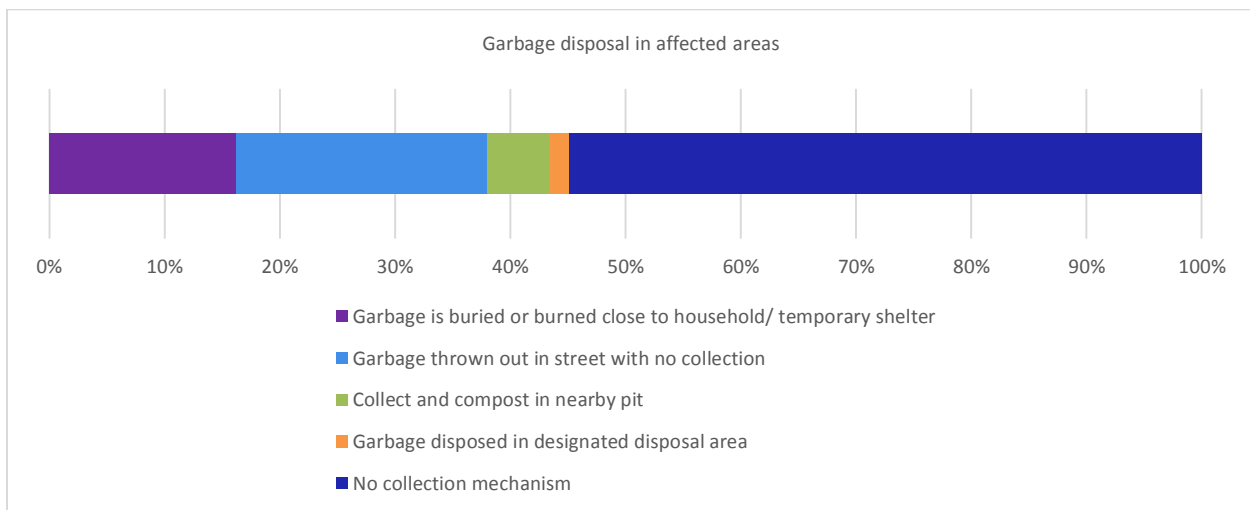


Figure 5: Garbage disposal in affected areas

Recommendations

Immediate Support Required:

- Immediate measures should focus on providing safe drinking water, domestic water and sanitation facilities. Cleaning up of waste should also be in priority. Some of the specific measures can be –
- Immediate water supply through tankers should be mobilized in affected villages. This is to meet the demand of drinking water which has been occurred due to displacement of affected community on embankments or on road and damage to infrastructure. Point-of-use chlorine drops/ tablets should be made available with proper education on its use, in order to increase availability of potable water for the time being.

- Damages to the piped water supply, handpumps, tube wells, borewells, etc., should be started so as to restore the natural water supply of the region quickly.
- Safe water containers (2 Nos. 10 Lt capacity Minimum) with lid and tap should be provided to vulnerable families.
- Toilets of public buildings and community places should be opened up for people who don't have access to toilets. And arrangement of temporary or mobile toilets would also be a good option to fill the gaps. Panchayat should take responsibility of cleaning and maintaining these facilities, along with provision of adequate water and lighting at night.
- Debris, agriculture waste, animal carcass and other hazardous waste should be cleaned, considering COVID-19 guidelines. Many of the villages have been cut off due to debris, road broken or blockages. As a result, services for debris cleaning have not been able to reach isolated location such as agricultural fields for cleaning up the waste. Therefore, this cleaning up of roads, fields, etc., is to be done not only for hygiene, but also for increasing connectivity.
- PPE kits should be provided to sanitation workers to ensure their health and safety.
- Hygiene kit including sanitizer, soap, tooth brush, tooth paste, anti-septic liquid, sanitary pads, detergent should be provided to vulnerable families, to address the needs of women, adolescent girls and children.
- A temporary arrangement of waste disposal and bathing spaces for females should be created on embankments where these affected families have taken shelter.

Mid-Term and Long-Term Interventions Required:

Medium and Long-term measures should address the development of the water and sanitation system into a resilient and sustainable one. These include not only improving the infrastructure, but also the capacity building of the local community to address small emerging needs themselves. These include –

- Alternative power supply for water system can also be explored, for example- solar panels. These can be constructed for pumping stations to reduce dependence on electricity or diesel power.
- Training of youth from the community on doing basic repairs to the piped water system, handpumps and tube wells can be done. Create trained cadre of women plumbers would bring huge change in terms of immediate services and adding income generation. Meanwhile, efforts can also be directed towards training of community in well cleaning. Both these trainings involve relatively simple techniques that can easily be learnt by the community and implemented. This will help in increasing their capacity so that in case of such a situation next time, the community can begin restoring their water supply till the time accessibility is restored and external help can be procured.
- Longer term agreements with suppliers for storage and supply of basic non-perishable hygiene items including menstrual absorbents, following minimum standards in emergencies.

- 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
- Awareness building and discussions need to be done with women and adolescent girls regarding menstrual health. This can be linked with the services provided by ASHA, Anganwadi workers and school teachers.

4.2. SHELTER

As affected people are currently living on embankments or on roads and their villages are still submerged, damage of houses cannot be measured accurately, but as per previous experiences there are chances of huge damage of kutchha houses, severe cracks on pakka houses and filling of debris and silt gathered inside all the houses and public buildings.



Assessment Findings

- A significant number of houses, shelters have suffered various degree of damage due to incessant rainfall and inundation leading to displacement of people and loss of properties and assets.
- Out of the total survey respondents 12% are currently living on Elevated road/Embankment in East Champaran and 65% Muzaffarpur respectively (Figure 6).

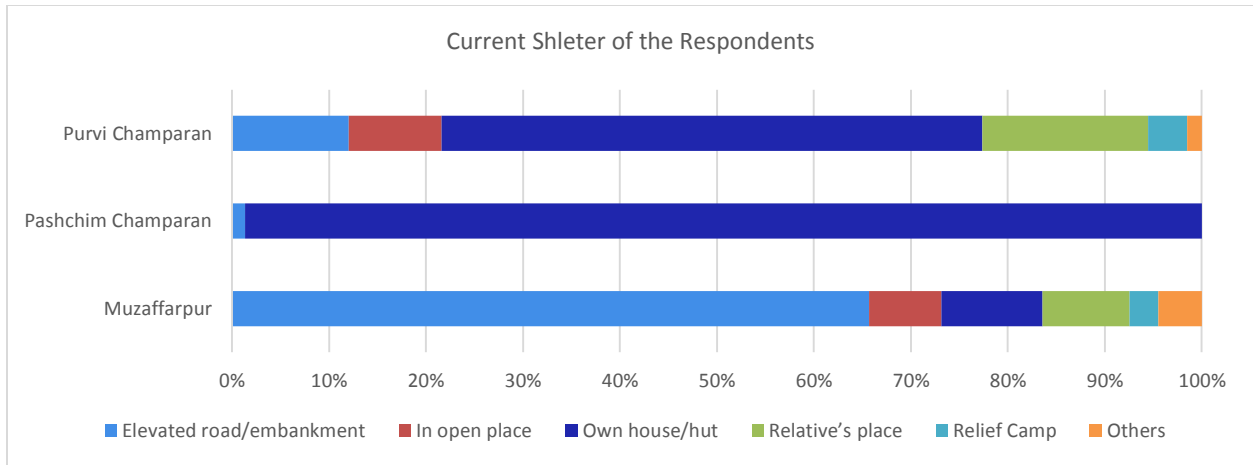


Figure 6: Current Shelter of the Respondents

- In East Champaran (Figure 7) houses were either inundated or fully damaged for over 50% of the respondents. In Muzaffarpur 70% of the respondents houses were fully flooded or inundated, While in West Champaran 70% houses were fully damaged and in need of rebuilding.
- As there is no rooms in camps; people have made their own tents on embankments or elevated roads after their homes were damaged.
- People residing on embankments have no adequate supply of food, drinking water and other WASH equipment, especially covered dustbins as there is no proper waste disposal facilities.

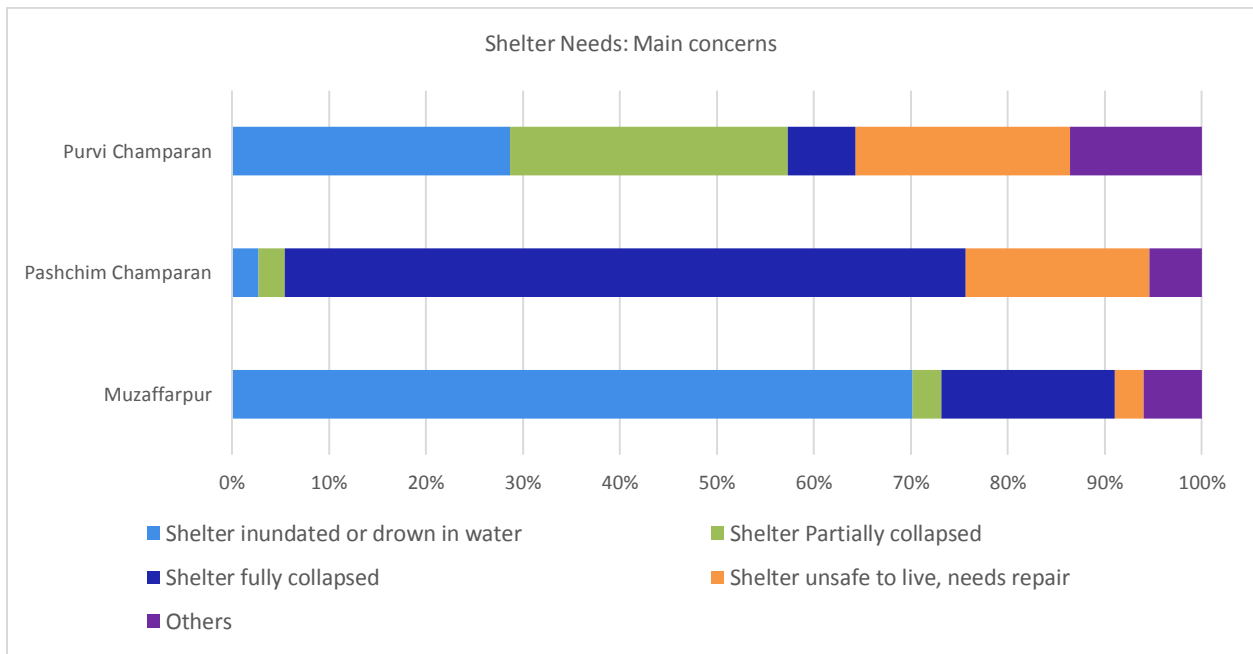


Figure 7: Main concerns in Shelter

- Out of the assessed villages, it was reported that a total of over 3500 houses were damaged with 2300 fully damaged and 1254 partially damaged shelters. It was also reported that 1732 households in the villages were in immediate need of shelter in East Champaran, 403 in West Champaran and 285 in Muzaffarpur (Figure 8).

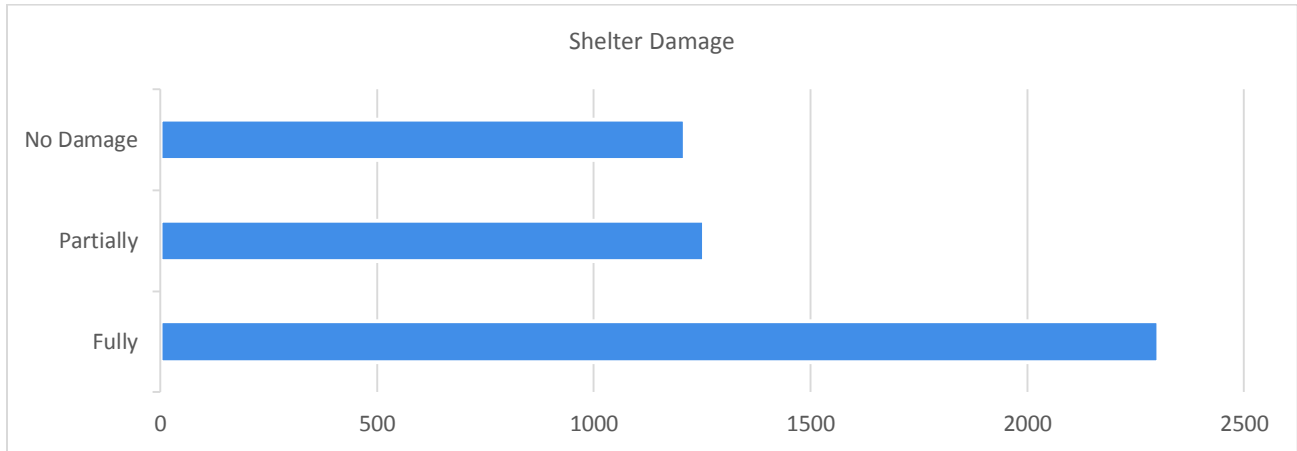


Figure 8: Shelter damage in assessed villages

- Out of total 340 respondents in HH surveys across 3 districts, over 50% reported that they don't have access to hygiene items like soaps/ tooth brush and toothpaste/ comb etc, whereas 63% don't have access to COVID 19 prevention materials like Masks and sanitisers (Figure 9).
- Over 65% respondents have access to bedding, blankets etc, while 72% have access to clothing items. 51% of the people surveyed did not have access to cooking stove.

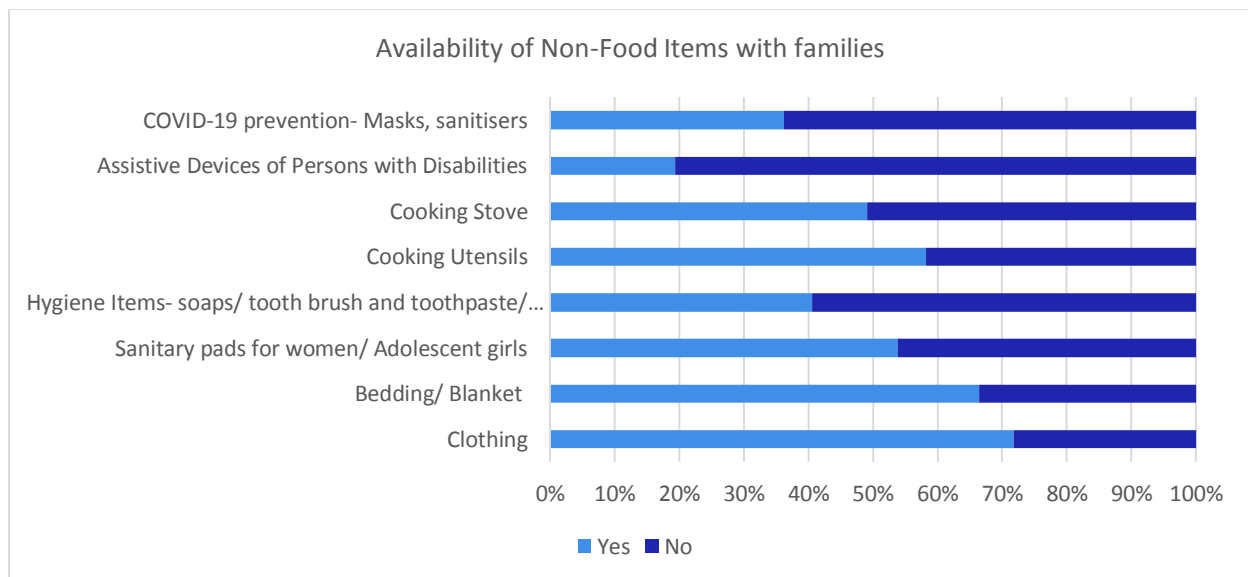


Figure 9: Availability of Non-Food Items with families

Recommendations

Immediate Support Required:

- A thorough damage and needs assessment needs to be conducted by the government especially covering those who live in houses near embankments and river beds.
- Ensure safe living space for families whose houses are completely destroyed following Covid appropriate guidelines.
- Shelter kits need to be prepared and distributed while keeping in mind the local construction practises of the communities in the area.
- Cleaning of flood affected houses to remove the river depositions, it can be taken under cash for work activities.
- Teams of masons can be created to support the affected households at the Gram Panchayat level in coordination with the local administration.
- Guidance on the repairing of houses needs to be prepared and disseminated to provide knowledge support to the affected households.
- The process of reconstructing needs to be an owner-driven process to enable households to rebuild their own houses which requires advocacy with the government.
- Community should be made aware about; not to return home until authorities have advised that it is safe to do so and take extreme caution in terms of electricity and electrical equipment, proper disinfection and ensuring the safe building.

Medium term actions required:

- Semi-permanent temporary housing arrangements needs to be made for the affected households where they can stay for a period of 2-3 years. This is because reconstruction of houses and restoration of livelihoods often takes time and lack of shelter is an added vulnerability in such situations. For this, locally available and existing materials can be used to create structures with elevated plinth, door, roof and walls to ensure safety during long-term housing recovery.
- Preparation of database of vulnerable housing stock which should be prioritize for retrofitting or new construction under government support using AI based model and ground verification.
- Linkages with PMAY or any other government schemes for reconstruction of houses.
- Analysis of local construction practices and identify interventions which will ensure disaster resilience features.

Long term and resilience building:

- The review and revision of the building rules for urban and rural areas needs to be prioritised for enhancing disaster resilience of constructions in various zones.
- Develop awareness materials on safe construction practices for different zones and make them available at the municipal and panchayat levels.
- Community led disaster risk management trainings and programs for various villages and linking it to local development plans.

4.3. HEALTH

With the impact of COVID pandemic in place, flood has results in increase in vulnerability of the community. However, immediate health effects can be seen in terms of infections, mental health problems, damage to health infrastructure etc. The longer-term health effects result from displacement, shortages of safe water, injuries, disruption of access to health services and delayed recovery.



Assessment Findings

- Out of 340 respondents surveyed, 22% reported that wither them or their family member are facing health problems. Out of which 76% are suffering from communicable disease, while 9% are COVID 19 positive (Figure 10).
- 40% of the respondents reported that there is a Health facility in their area and 37% shared that the nearest facility has been damaged due to the floods (Figure 11).

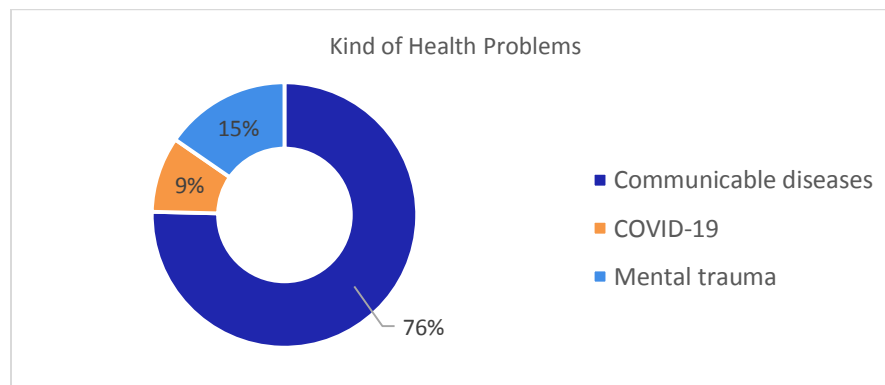


Figure 10: Kind of Health problems

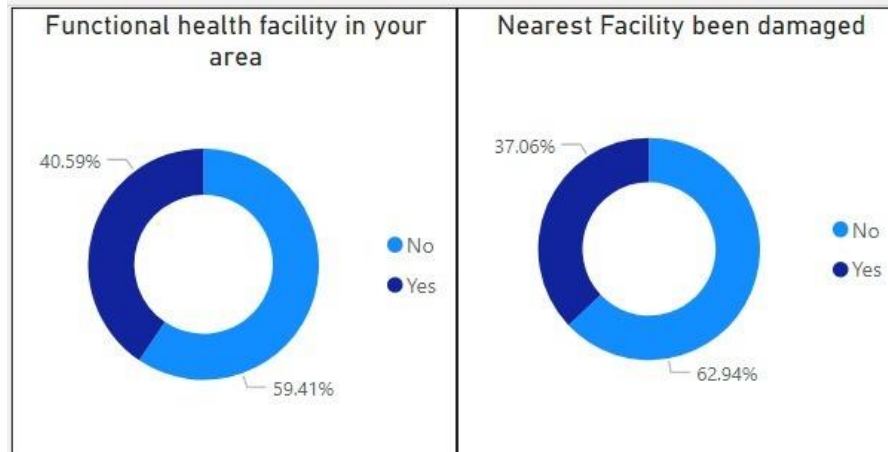


Figure 11: Health facility in the affected areas

- There is an urgent need of medical camp as its getting difficult for people to travel through boats to the nearest hospital.
- There is an immediate need of ANM for women.
- There are no COVID 19 protocols been followed, there are no provisions for people showing symptoms of COVID 19 as medical kits are not available.
- 6 Hospitals were surveyed across 4 blocks in 2 districts (East Champaran and Muzaffarpur). 50% of the hospitals didn't face any issue with providing medical aid post disaster. While the other three hospitals faced flooding. One had flooding more than 3 ft. depth. While the other two had it less than 3 feet depth and both of them also faced partially damaged walls and along with this, one hospital faced damages to power supply and its bed and linen as well.
- Among the surveyed lot, one hospital reported 45 Covid +ve cases and another one reported 5 COVID +ve cases. Except for one, all the other hospitals followed COVID-19 safety protocols.
- Almost all the hospitals have adequate ORS packets and anti- fever tablets available. Some hospitals had availability of Polio vaccine. 3 hospitals had chlorine tablets. Other medications that were available in hospitals are Antibiotics, Zinc tablets, Vitamin A tablets, BCG, DPT, Anti Retroviral, etc. Other medical things such as dressing materials, PPE kits are available in 2 of the hospitals.
- Figure 12 shows the medicines which were not available in the surveyed hospitals.

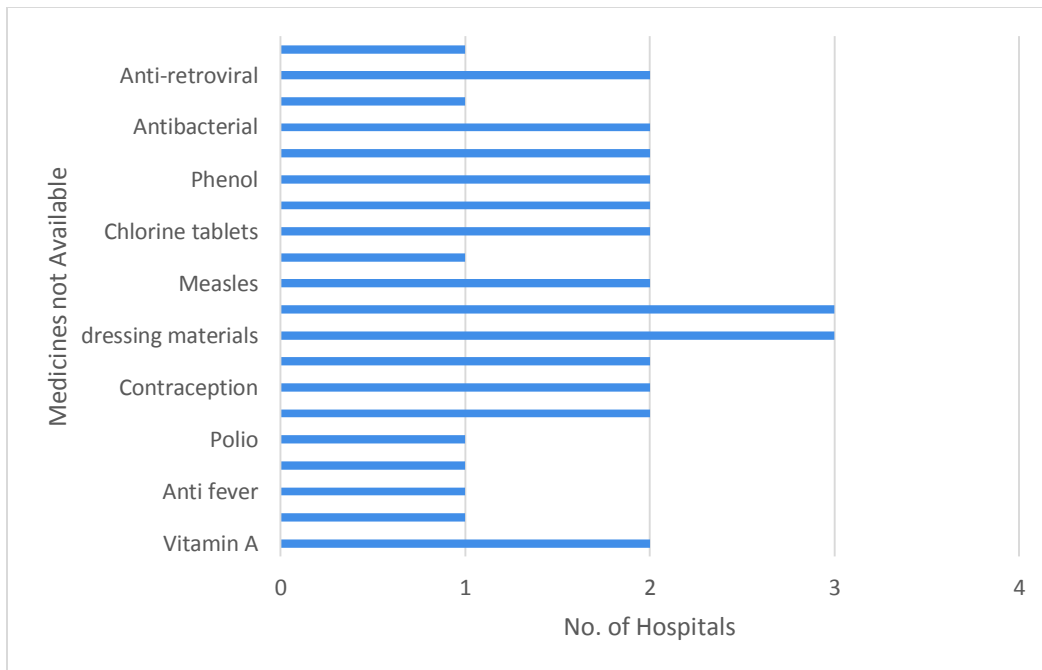


Figure 12: Medicines not available

Recommendations

Immediate needs:

- Access to services like routine immunisation and outpatient consultations must be ensured.
- Removal of sludge and other waste to 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 raise the cases of diarrhea, dysentery and other water-borne diseases. Vaccines are recommended for people, where poor sanitation and unsafe water are common.
- The functionality of health centres must be maintained as there are chances of outbreak of diseases immediately and the prevailing pandemic.
- Awareness to resume the COVID preventive measures like wearing of masks, hand washing/ cleaning. Provision of masks as essential items
- Awareness about basic hygiene promotion hand washing is critical to help prevent the spread of illness and disease.
- Monitoring of COVID 19 patients and health facilities must be strengthened in affected areas.
- Pregnant women must be treated with priority, ones which are being relocated to shelter homes should be tracked and provided with ANC and PNC services. Special care should be given to people with disability, elderly and children in terms of accessibility to health services.
- Mobile Van Health Facilities should be provided in hard-to-reach areas.

- Doctors can be deployed for arranging medical camps in the affected areas or where the health facilities are far from the villages.
- To resume COVID vaccination as soon as possible
- IEC materials on safe health & hygiene practices need to be distributed among the affected population through relief & medical camps.
- Grief and shock are normal in the immediate aftermath of a natural disaster; psychological counselling support is required
- Women/adolescent girls on their period are at greater risk especially those 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
- ASHA/ANM/MPHW can be trained for basic health check-up like temperature checking, symptoms of COVID, checking oxygen saturation in the community randomly as chances of infection increase as relief operations are going on in the affected areas and many people form out of district and other people are visiting the affected area. Community level awareness can be initiated through panchayats.

Mid-term needs:

- Communication strategy need to be developed for creating massive awareness among the community on safe health & hygiene practices during disaster.
- IEC materials need to be adequately distributed among the affected population for awareness purpose.
- Inter-sectoral coordination and preparedness need to be strengthened for handling mass casualty and necessary arrangements for transportation of patients to health facilities.
- ASHA/ANM/MPHW can be trained for basic health check-up like temperature checking, symptoms of COVID, checking oxygen saturation in the community randomly as chances of infection increase as relief operations are going on in the affected areas and many people form out of district and other people are visiting the affected area. Community level awareness can be initiated through panchayats.
- These frontline workers can also support the restoration of Covid-Care Centres which were started under the “Meri Panchayat Corona Mukh” initiative of Bihar Government.
- Doctors can be deployed for medical checkups after few months of the disaster which will give us any post flood diseases prevailing in the community and also for monitoring the NCDs.

Long-term needs:

- Health facilities/Institutions in disaster prone areas need to be mapped and preparedness measures (constitution of medical teams etc.) further to be strengthened
- Alternative arrangement for power supply (generator, fuel etc.) in Health facilities/ Institutions should be made as a sustainable option.
- Shock/ grief are normal in the immediate aftermath of disaster, which directly impact the health of the people resulting in physical trauma and emotional trauma. Loss of life, shelter and livelihoods has both short/long term mental health effect, which delay rehabilitation of affected areas and delay the return to normalcy, especially that the COVID 19 is still a matter of grave concern. Services related to mental health like counselling support etc should be in health facilities.
- Lack of or disrupted food supplies can lead to long term food shortages and malnutrition, among the newborns, infants and elderly populations. So, nutritional needs to be look after for a longer period of time in severely affected areas.
- Need for integration of emergency medical services with the primary health care system.
- The health professionals to be trained on disaster management. Capacity building of the health professionals is needed.

4.4. EDUCATION, CHILD PROTECTION & WELFARE

Bihar has been severely affected by the unprecedented second wave of the coronavirus and an early flood struck in the month of June only. Schools, ICDS Centres were closed since the outbreak of the first wave which continues to date. The pandemic further dips down the literacy rate of Bihar which is already at a very dismal stage. Among all the Indian states, Bihar has the lowest literacy rate and is considered one of the most educationally backward states. The 2011 census has recorded the literacy rate to be only 61.8% compared to 73 % for the entire country. Male literacy is 71% while the female literacy rate is abysmally low at 51.50 %. The figure shows that education has been one of the lowest-performing sectors in the state. Around 5 crore population of Bihar belongs to the age group of 0-18 years and most of which 3 yrs. -18 yrs. related to ECCE¹ and other different level of education as proposed in NEP². Their education and well-being have been fully shattered since March 2019 to date due to the outbreak of the COVID-19 Pandemic.

¹ ECCE-Early Childhood Care and Education

² NEP-New Education Policy 2020



CHILDREN IN AFFECTED AREA

The twin disaster Pandemic and flood in parts of Bihar further exacerbate the poor learning outcomes. AWC3 and schools have been mostly closed since then. The added burden of COVID 19 cases in the state along with the flooding disrupted school routines and inaccessibility to the learning cycle, loss in education days, damage to school infrastructure and education material at home. Further to this non-availability of vaccine for Children aggravate their vulnerability in a current multi-facet disastrous situation. Since the schools' campuses are locked for a long time and classes have been shifted to the online portal. This added another misery into the education as most of the students do not have access smartphone, laptop, television, etc which prevent them to attend the class. Apart from this technical shortcoming at the teacher's level also add woos into online education. Around 50 % of teachers did not have adequate knowledge and experience of online teaching platforms⁴. Only 26 % of students in government schools in Bihar from class 1 to class 12 able to access online classes through Doordarshan⁵. E-learning is not at all a case of good education whose major thrust would be providing learning opportunities but not think about learning outcomes.

Key Damages and Losses to the education sector-

- **Loss of Learning Resources:** As the heavy rain coupled with severe flood and sometime flash floods washed away most of the household and school resources, large number of students are confronted with problem to continue their education due to loss of learning material.

³ AWC-Aangan Wadi Center

⁴ Source: Myths of Online Education, Field Research Group, Azim Premji University. Survey was conducted in September 2020 in 5 States: - 1. Chhattisgarh, 2.MP,3.Rajasthan , 4.Karnataka, 5.Uttarakhand

⁵ Dainik Bhaskar 10th January 2021.

- **Unsafe Water and Sanitation:** With the damage to drinking water and sanitation facilities in most of the schools, the school remain an unsafe place in terms of drinking water and sanitation practises and thus students are exposed to several health issues by attending schools.
- **Lack of Nutrition:** As many schools are now not able to provide mid-day meals in a dual disasters situations of COVID-19 and floods, students are facing nutrition issues due to the absence of proper meals.

Assessment Findings

- Closure of schools for a prolonged period COVID-19 and recent flood is significantly hampering the child education and well-being.
- Few schools have sustained damages to their infrastructures
- Students of poor households with Kutcha houses have lost books, copies and study materials. This has mostly impacted students of higher classes.
- Since the schools are closed, the Mid Day Meal (MDM) supply are also closed. It has closed the possibility for students to have good food.
- Majority of the respondents in affected area reported major concern regarding education as stopping of classes due to COVID 19. 22% people also reported that schools are not accessible and 27% reported that online classes are not happening due to electricity failure (Figure 13).

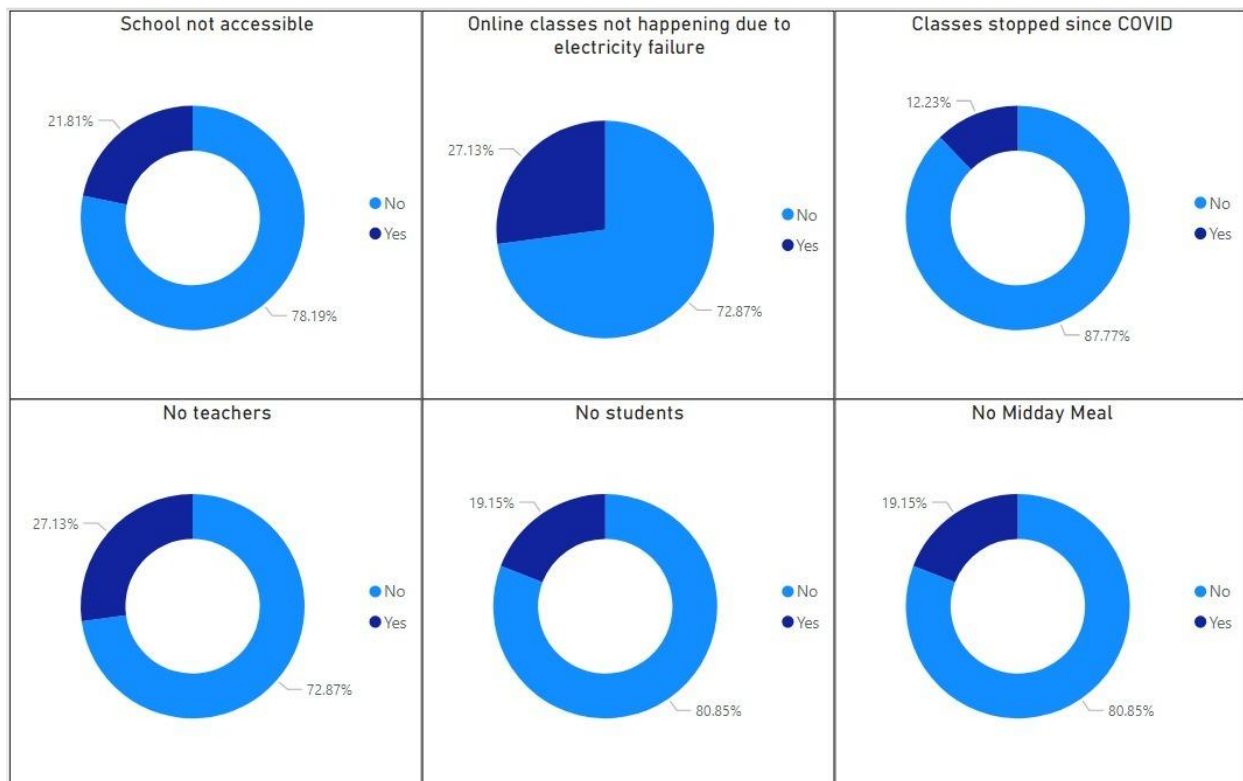


Figure 13: Main concerns regarding Education

- 37% respondents also reported infrastructure damages in schools due to floods. Schools surveyed in villages in the affected areas were either damaged, flooded or Debris and silt had entered inside the school.
- Some schools in the villages that were surveyed are also being used as shelters during the floods and were also used as COVID 19 quarantine and isolation centres.
- It was reported that disinfection materials and equipment in the COVID 19 context and learning materials are also needed in the schools surveyed.

Recommendations

Need for disinfection

The schools that suffered water logging and damage or breakage of infrastructure are also severely prone to spread several water-borne diseases and thus it is also a very important factor that these schools get disinfected before they start functioning. Schools that are being converted to relief shelters are also at a high risk of spreading infections, if there are people which infectious medical conditions. As a result disinfection remains at a supreme priority in these areas. The immediate support to the schools with disinfection materials and equipment with proper training is essential. In addition, continuous risk communication (IEC materials) to the children, teaching and non-teaching staffs and community is important to reduce further any health risk.

Lack of WASH (safe water and sanitation and Hand Washing) facilities

As drinking water sources such as wells, Hand Pumps and piped water supply have faced damages and contamination, establishing safe drinking water and potable water facilities (age appropriate) in schools is required to ensure water quality for drinking and cooking purposes. Repair and restoration of water supply in toilets and reconstruction of damaged toilets (separate for boys and girls) in schools is essential for hygiene and sanitation needs of both girls and boys. The toilets in schools need to have adequate safety and privacy for girls and boys. Potable water is a key element to ensure menstrual hygiene management for adolescent girls in schools. Waste management and excreta disposal in schools need to take into account school water source to ensure non-contamination of water source and sustainability of water needs.

Short term:

- Promotion of Hand washing and provision of Hand washing facilities.
- Establish temporary learning centres and child friendly spaces for at least 30% of the affected population with the maintained of COVID-19 appropriate protocol.
- Sanitization facilities (Equipment's, Material at school level) is need at school level for classroom, office sanitization.
- Mask, Sanitizers are needed for students, teachers.
- Thermometer (IR) is needed at school level to regular temperature check-up of students who are coming to schools.
- Provide learning and teaching material to students and teachers.
- A thorough damage assessment of school infrastructure for repair and rehabilitation.

- Start MDM in schools of affected areas.
- Assess damages of school teaching learning materials.
- State health authority visit the education institution for prevention of Pandemic COVID-19.

Mid-term

- There is a need for Coordination for ensuring inter-sectoral linkages among, Education, WASH, food & nutrition, shelter & health at schools/learning spaces.
- Rehabilitation and/or repair of school infrastructure and material.
- Since many of the students have lost / damaged their education material during flood there should be provision of replacing course materials to students.

Long Term

- Mainstreaming DRR measures in school construction and have space for makeshift schools in view of the flood situation in these districts.
- Inclusion of COVID-19 appropriate behaviour in School safety programme.
- Inclusion of appropriate Social and behaviour change communication (Promotion of hand washing, wearing of mask, appropriate physical distancing) in the light of COVID-19 into the Safe Saturday school safety programme.
- Strengthening the e-learning platform at community and household level.



SCHOOLS AFFECTED BY FLOOD

(All this recommendation would potentiality strengthen to mitigate the impact of likely third wave of COVID-19 also.)

4.5. FOOD SECURITY & NUTRITION

Situational Analysis

Recently National Family Health Survey (2014-19) has been released by the Ministry of Health and Family Welfare which presents the actual status of maternal and child health indicators of

17 states, one of them being Bihar. Some indicators have improved but others declined. Even the indicators which have improved are still way behind the average. An analysis of the survey indicators for Bihar is presented below.

Average indicators, which have shown improvement

Ante Natal Care services have increased to 52.9% from 34.6% but need to be strengthened further. As per the survey, a total of 89.5% pregnancies were registered and 76.5% out of total birth were institutional deliveries. Vaccination for children has increased from 61% to 71%. Stunting & underweight have decreased from 48.9% to 42.9% and 43.9% to 41% respectively, but both the indicators stand high when compared with other states. Exclusive breast-feeding is at 58.6%, which was earlier 53.4%. Complementary feeding practices have increased from 31% to 39%. Women with poor Body Mass Index (affecting their reproductive capacity) is 25.6%. **Use of family planning services has doubled in Bihar from 24.1% to 55.8% which is worth applauding.ⁱ**

Poor-performing Indicators

The prevalence of children under the age of 6 affected by anemia has increased to 69.4% from 63.5%. Pregnant women affected by anemia are 63.1% which is an increase from 58.3%. Sex ratio for children under 5 years of age decreased from 934 to 908, which is also one of the lowest in India. Iron Folic Acid consumption during pregnancy stands very low at 18% though the same has increased from 9%. Infant Mortality Rate remains high in Bihar, 47 deaths per 1,000 live births saw a decrease by one point only. Maternal Mortality Rate is 149 per 100000 births which is quite high.ⁱⁱ Severe wasting and wasting have increased by 1% to 2% respectively. Severe wasting being 8.8% and wasting being 22%. Breast feeding within an hour of birth has decreased from 34.9% to 31.1%.

Water Sanitation Hygiene Indicators

Access to sanitation has increased from 26.5% to 49.4% but still is one of the lowest amongst the 17 states been surveyed. Bihar also performs poor in **proportion of women using hygienic methods of protection during menstrual period, which is 59% being the lowest amongst the 17 states.ⁱⁱⁱ**

Emergency affecting the services

The ones who are going to be most affected by the floods are going to be the most vulnerable, i.e. women, adolescent girls, and children. Many are displaced and are under temporary rehabilitation by the government. The devastating upheaval will take a toll, not only on the health of the women and children but also their security. This brings the focus regarding reaching to them with the required services. The emergency would have a negative effect on the indicators. Pregnant women will not get access to ante natal care services, immunization of both pregnant women and children will get affected, and institutional deliveries will decrease. Infant and young child feeding (IYCF) practices, especially complementary feeding after 6 months is going to get

affected. The high risk pregnant women may go unattended. All this will drastically affect the nutrition status of the children under 5 resulting in higher IMR.



FOOD RATION DISTRIBUTION BY LOCAL NGOS

Assessment Findings

- According to the data gathered from Joint Rapid Needs assessment food availability is a concern, as 53% respondents do not have stored food grains and 78% do not have access to vegetables and food items in affected areas (Figure 14).

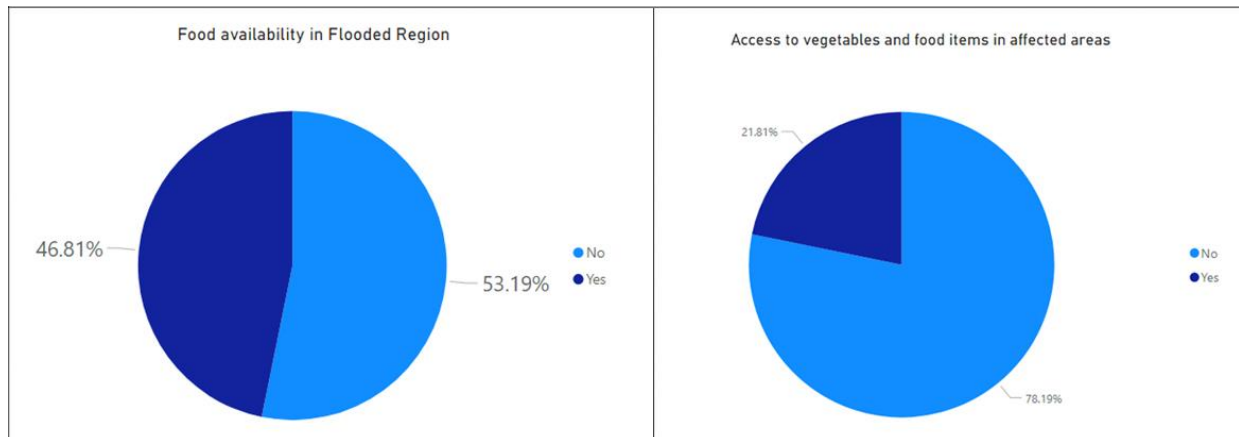


Figure 14: Food Availability in affected areas

- Functionality and access to Markets was cited as one of the major concern related to Food and Nutrition by respondents, as 48% of the respondents did not have access to Markets.

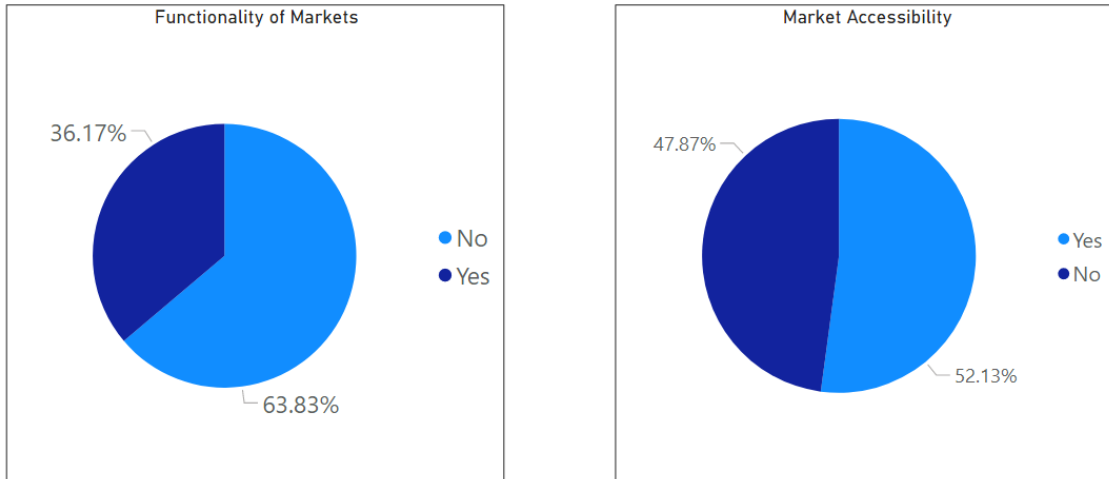


Figure 15: Functionality and accessibility of Markets

- Furthermore, 85% of the respondents felt not having enough food was a major concern and while studying the data it was noted a significant portion of the population have do not have access to cooking facilities. Around 60.4% of the surveyed households do not have adequate cooking utensils, as shown in Figure 16.

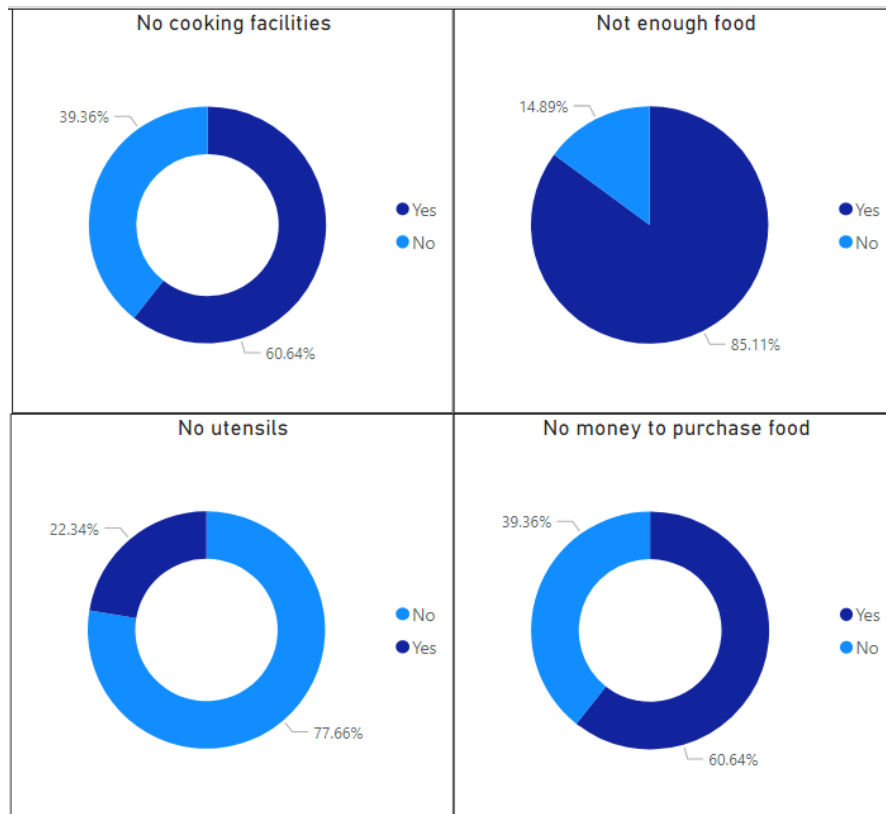


Figure 16: main concerns related to food and nutrition

- 3482 Families are facing problems of food in the affected villages surveyed. Figure 17 shows food availability at HHs in affected areas.

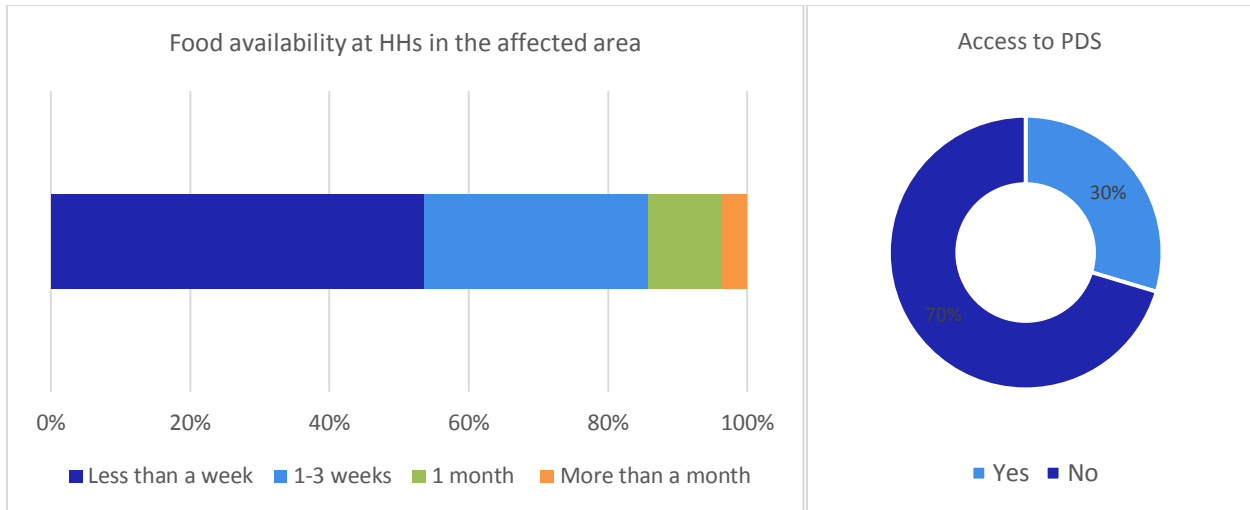


Figure 17: Food availability and access to PDS

- During the assessment, over 95% of the respondents shared that Food is the most urgent relief need (Figure 18).

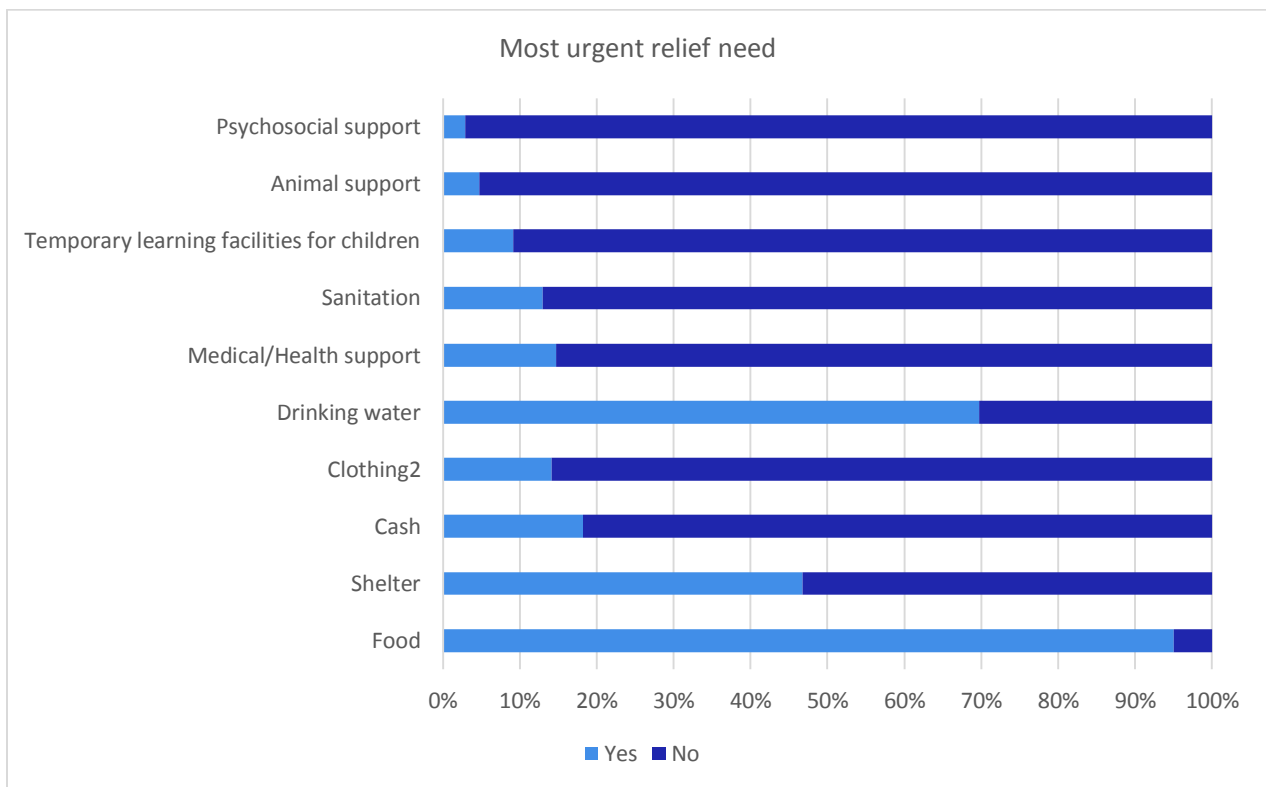


Figure 18: Most urgent relief need

Recommendations

The grievous situation requires multipronged approach, strong political will, health system strengthening, community mobilization, awareness, and strategic plan to address the situation.

The strategy to overcome the consequences of flood should be planned keeping the Nutrition and WASH Indicators mentioned above, thus the following recommendation is to be considered:

Anemia being high in both pregnant mothers and under 5 children, with very low consumption of IFA, demands inevitable provisions of ante natal care (ANC) services for the displaced pregnant women. As we observe that Bihar has IMR of 47 per 1000 and MMR of 149 per 100000 births, both being high, the health department should specifically focus on the provisions of ANC and immunization services to be made available at the nearest possible accessible place for the affected population. The quality of services imparted should be closely monitored. The emergency will also lead to unsafe abortion practices which may increase IMR or MMR which needs to be monitored. Health centre offering safe abortion services at minimal prices should be promoted. Department can also consider promoting contraceptives use.

Amongst infant and young child feeding practices, breast feeding within an hour of birth, and complementary feeding after 6 months of age need to be strengthened by focusing on creating awareness and making provisions of necessary food packet as substitute to complementary feeding is to be promoted.

In India most of the states are on the way of reducing wasting but in Bihar it has increased which should be a serious concern. The flood and related destruction might lead to further increase in wasting hence the situation demands efficient and focused ANC and IYCF practices.

WASH conditions have improved but Bihar still has to go a long way to reach the national average. Provision of safe drinking water is to be promoted. Bihar performs very poor in provision of safe hygienic options during menstruation for adolescent girls and women which will worsen during this emergency. It is very necessary to strengthen provision of safe drinking water, toilets for women, and strengthening menstrual hygiene management practices.

COVID 19 infection has already hit the food and nutrition security, thus it is a challenge for the family heads to provide for the necessities of the family members. This calls for wage loss compensation to the families during the emergency.

The necessary services that need to be strengthened:

- Share guidelines on maternal and child care emergency services with Auxiliary Nurse Midwives (ANM), Accredited Social Health Activist (ASHA), and Anganwadi workers
- AAA and other workers to take support of members of Samitis active at village or ward level
- Run Mobile Health Care Unit with ANC services in the affected area
- Map areas with no maternal and child health care services
- Identify facilities that provide proper ante-natal care, delivery and abortion facilities
- Build capacity of local Registered Medical Practitioners (RMPs) and gather support in rendering services and awareness in the needful direction

- Identification of the pregnant women and malnourished children and associate them to nearest centre for services
- Strengthen ambulance service and call centre for immediate attention
- Distribution of contraceptives and sanitary napkins should be made along with necessary medicines and food packets
- Take Home Ration (THR) supply to be monitored
- Self Help Group (SHGs) who were providing meals at AWC and have become nonfunctional have to be mapped and reactivated through needful intervention
- Participation of local self-governance to be encouraged
- Nutrition Rehabilitation Centre (NRC) services should follow COVID 19 protocol and should have proactive services with necessary equipment, medicines, and supplements
- Awareness regarding the symptoms of malnutrition, importance of ante natal care services, importance of treatment at Nutrition Rehabilitation Centre (NRC) to be promoted with promoting consumption of IFA, IYCF activities need to be undertaken

4.6. LIVELIHOOD

Due to high rainfall in Bihar and Nepal high tide had impacted the lives and livelihood of the affected community. Agriculture is being utmost source of income generation and main source of livelihood also serving the nutrition to the body. In the month of June when farmers started raising nursery for paddy and also sowing seed through DSR technique were washed away by the flood water and two concurrent floods had severe impact on the staple crop. Apart from the on-farm activity the off farm activity like Animal husbandry is severely affected due to shortage of fodder and safe spaces. Animals are also being affected with foot and Mouth disease. Small and marginal business like petty shops, poultry, goat rearing are also being affected as people didn't move from one place to place for procurement of items, selling of chicks and goats. Fisheries was affected most as all the hearts and nuts were washed away and these are non-recoverable loss. MNERGAs job were already being suspended due to COVID-19 and lockdown.

These area which are high flood prone area where the migration is quite high and covid-19 had already witnessed job loss especially to poor and marginal section and their hope is also shattered after the flood. Still there are few intervention by the government on agriculture, horticulture, animal husbandry, fisheries etc. to recover the loss. Every year the flood affected community facing this kind of loss and due to which forced migration have been trends in these areas and this source of income is also barred due to rising cases of COVID-19. Though the migrants have the skill sets but the input like raw materials, tools etc. are not available with them to generate income for food sufficiency.

Assessment Findings

- Nearly 90% of households reported damage to farm lands due to destruction of crops and 26% also reported loss of livestock/cattle (Figure 19).

- Communities also incurred significant losses to other assets due to the crisis as 26% of the households report damages, while 44% reported markets are not functioning.
- Over 80% of the respondents also feel that livelihood support is the most important recovery need for them (Figure 21).

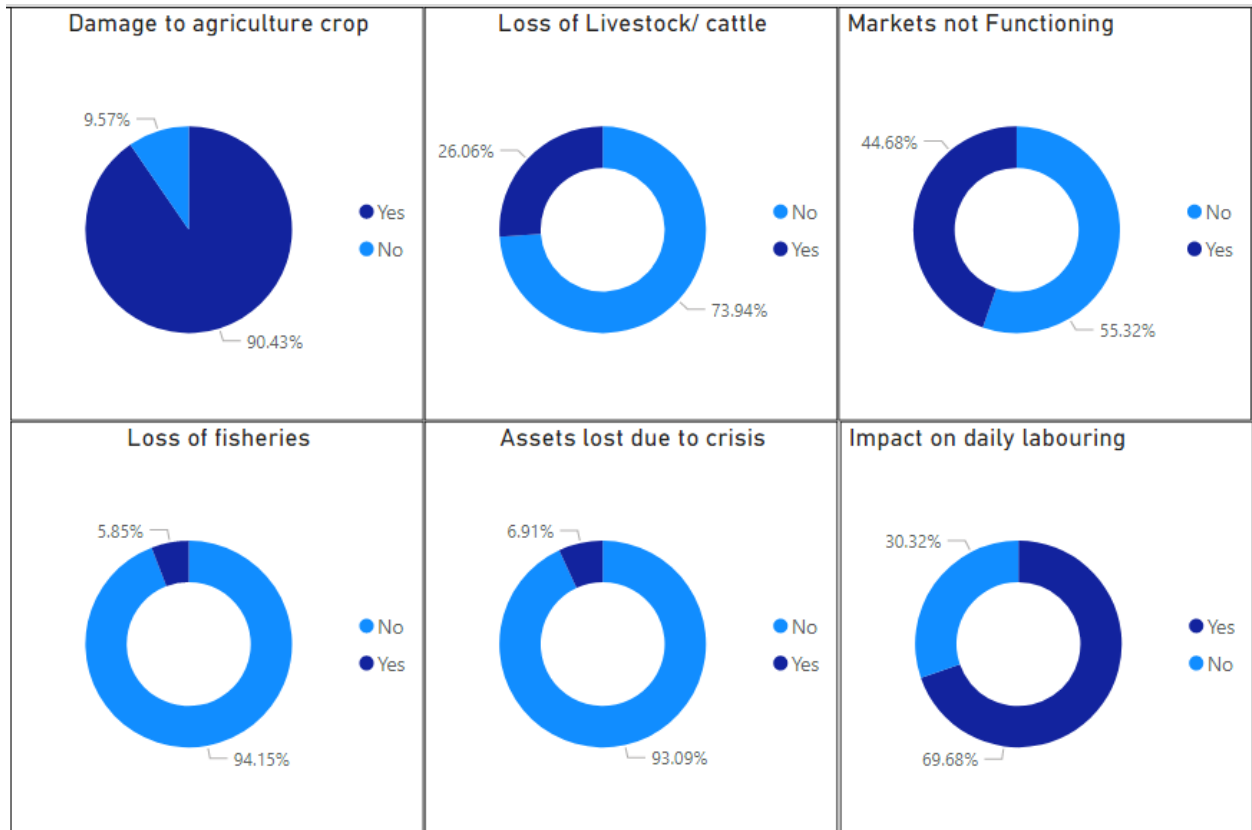


Figure 19: Main concerns regarding Livelihood

- Majority of the respondents are engaged in labor work for employment and they reported an impact on daily laboring work post disaster. Figure 20 shows the average HH incomes of the respondents.

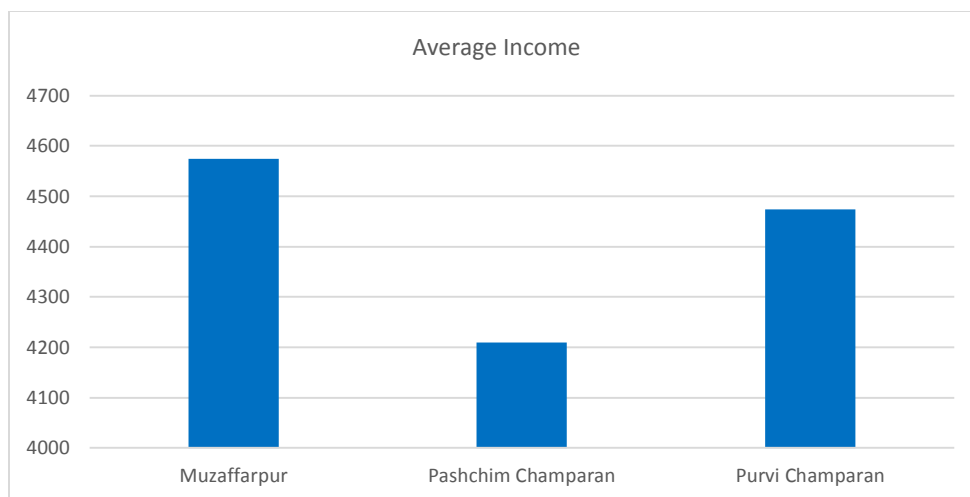


Figure 20: Average income in affected areas

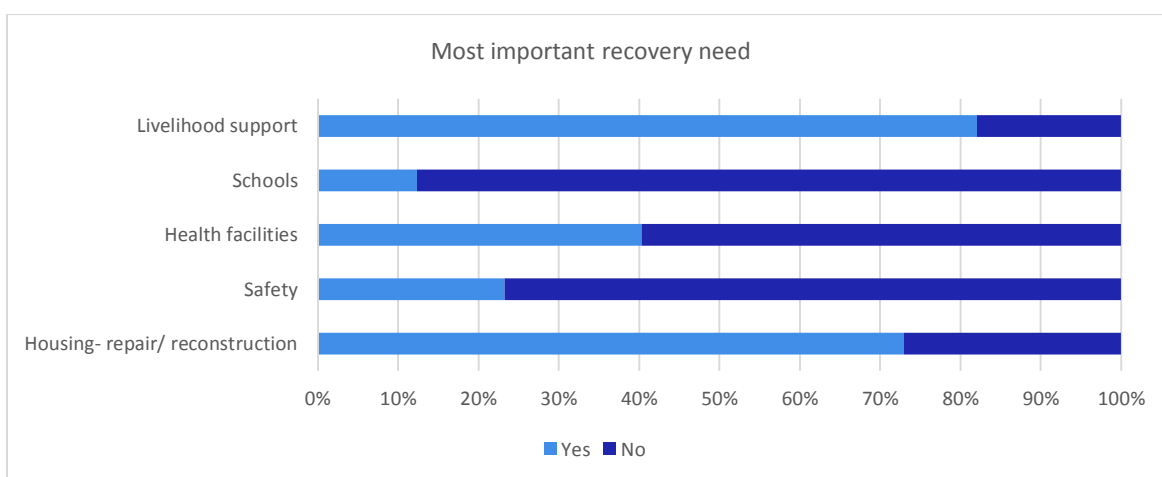


Figure 21: Most important recovery need

Recommendations

- Provide training on goat rearing, micro enterprises like petty shops in disaster scenario.
- Conditional cash transfer for buying tools using vouchers system (to strengthen local markets)
- Training to farmers on High raised nursery raising and also on alternative techniques for nursery raising (to reduce the nursery raising period)
- Kitchen garden, mushroom farming also as alternative to recover the income with shorter period of time. Both of these require less time.
- Distribution of seed, vermicompost and pesticides to farmers.
- MNREGA work like repairing of houses, repairing of embankments, road etc. can be started immediately.
- Cash for work for repairing of houses, clearing of debris, road repairing can be promoted.
- Adequate compensation should be provided to them to meet their damage and further supported to restore it.

- Form livelihood committee at village and plan revolving fund to provide support to affected communities to restart their livelihoods.
- Veterinary department could ensure seasonal vaccine and veterinary care the injured and remaining livestock.
- Small pond fishing is one of the partly source of livelihood in these villages many of them lost the fishes other accessories. Provision of Fish seeds can provide them short term relief.
- Engaging of local Artisans with productions through providing raw materials, repairing of tools, market linkages. Engaging Women Self Help Groups in small scale income generation activities (For ex. Mask stitching).
- Families who lost key earning person either in COVID or in flood, should be provided special provision to initiate new livelihood.

4.7. PROTECTION

Bihar flood this year have caused major damages across 15 districts, with severe affects being seen in three. Families have been isolated and stranded due to flooded waters, they are struggling to survive and even the basic items of survival are unavailable. In this situation, broadly speaking, those in need of protection are women, children, transgender, elderly, Persons and Disability, and socially and religiously marginalized groups. If these groups are looked at in further details, it will be noticed that those with overlapping vulnerabilities are most in need of protection, for example- a disabled Dalit woman is far more vulnerable to abuse and exploitation post disaster than a woman of a higher caste household. Therefore, need for social protection is maximum for those groups that are socially, religiously or economically marginalized and lack social capital.



FIGURE 22 AFFECTED COMMUNITY LIVING IN VULNERABLE CONDITIONS

Migrant laborers returning due to the second wave of Covid-19 has increased challenge and risks for the women and children of marginalized communities, elderly and disabled since they are more prone to health issues, and exploitation. The needs to identify the needs of children to be looked as per sex, age and background, and provide them assistance. There is urgent need to engage with some recreational activities, psychosocial support and nutritious food at some child friend space under supervision of trained person.

Relief support has been started in the form of community kitchens, medical camps, emergency shelters, etc. However, there is a general situation of chaos, and in this chaos, maintain the safety of small children, women, adolescent girls, old women, disabled children and girls, and transgender population is a major challenge. With large groups of people staying together in emergency shelters and using community toilets, maintaining the privacy and safety of women, adolescent girls and children is almost impossible, especially in situations of power outages. Girls are also seen to be walking long distances in search for clean water, which isolates them from a group and makes them easy targets for abuse and violence. Since water is a scarce commodity in the current situation, the ability of Persons with Disability, especially those who have no social support, to access water and reach places of relief distribution is also difficult. In most situations, relief materials are provided at one location, and the able-bodied are usually able to get to it first. It also might happen those early warnings do not reach them, maybe due to their disability, or due to their isolation from the rest of the community. Sexual, verbal & Physical abuse of children by people of power, position during emergency situations like flood become very common. It is important to assess the same like by relief workers, police etc. and provide them timely support.

Schools- primary and secondary- have been flooded, along with anganwadis and health centres. Public Distribution System has also stopped functioning, which have contributed to food and nutrition related issues in children, and vulnerable women groups- pregnant, lactating, etc.

Mahadalit families are facing food crisis on day-to-day basis. As they do not have reserve or surplus food security, they are facing hunger and resulting in malnutrition of children and women. Pregnant women are forced to live in crowded and huddled temporary shelter and facing health and psyche- social issues. Infant and children are facing shortage of milk and other nutrient supplements and also the most vulnerable group most susceptible to water borne infections.

Assessment Findings

- Loss of livelihood or damage to agricultural tools/assets impacts the economics of the house. Data from the survey shows that majority of the families are reliant on daily labour work have been impacted and 90% have also suffered loss to agriculture crops and 26% Livestock/cattle loss.
- Data shows that average income in HHs in all 3 districts is around Rs. 5000. The yearlong pandemic and now the floods will put additional burden on these people which may result in forcing them to marry off their adolescent daughters or migrate to bigger cities in search of work.

- 25% of the respondents from the 3 districts shared that the electricity is not operational in their village, while 23% reported issues with communication.
- Out of the assessed villages, it was reported that a total of over 3500 houses were damaged with 2300 fully damaged and 1254 partially damaged shelters. It was also reported that 1732 households in the villages were in immediate need of shelter in East Champaran, 403 in West Champaran and 285 in Muzaffarpur.
- Respondents who were residing in the self-made plastic shelters on river embankments shared that there is no aid from the government so far and they have no adequate supply of food, drinking water and other WASH equipment, especially covered dustbins as there is no proper waste disposal facilities.
- Respondents residing in temporary shelters like schools reported that there is no availability of proper drinking water in the camp and the shelters are not cleaned regularly.
- There is no electricity connection available in most of the surveyed areas due to which the bathrooms and hallways are improperly lit and Emergency facilities like candles or others are also not available.
- In camp settings, there is no availability of Sanitary napkins, beds, and clean cloth for pregnant women. There is no child friendly or psycho-social help provided and respondents were not aware about assisting helpline numbers like child line or Women helpline.

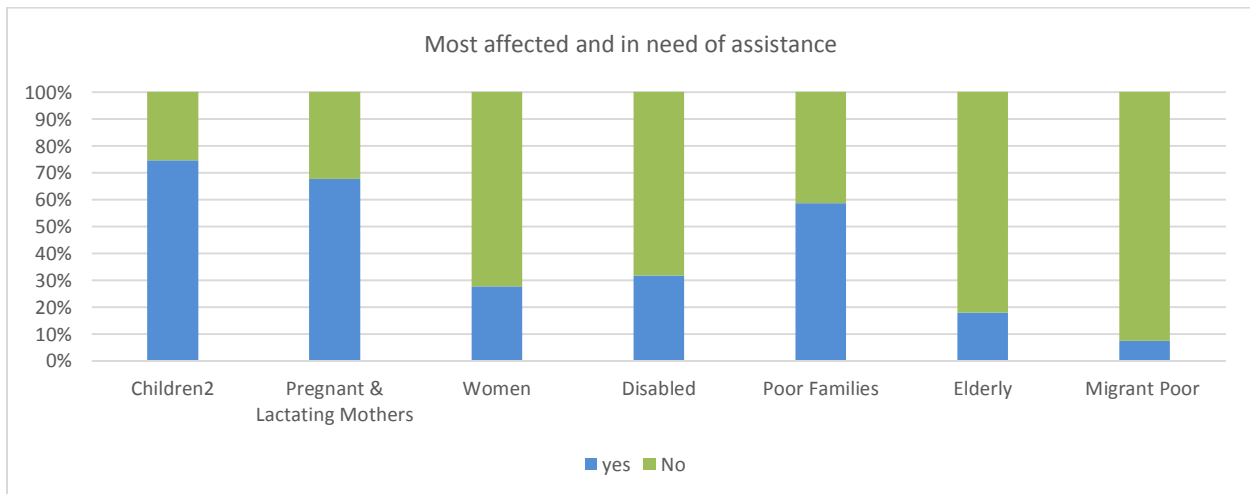
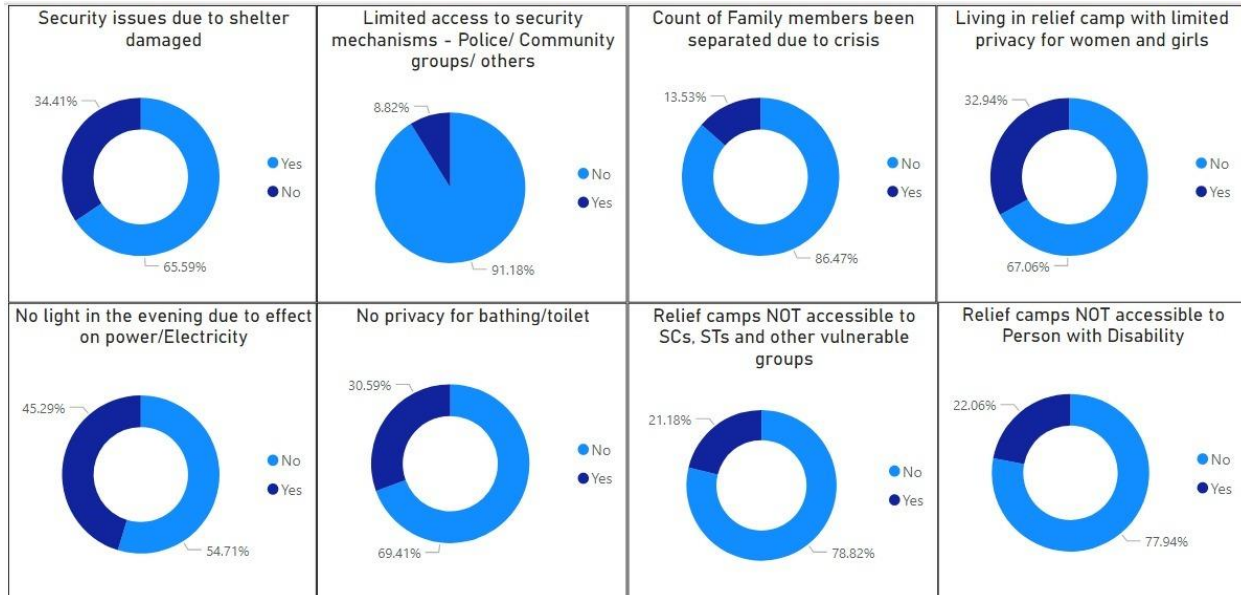


Figure 23: Most affected and in need of assistance

- As seen in Figure 22, which illustrates the section of the population in the affected areas who were most affected and are in need of assistance, children and pregnant & lactating mothers were affected the worst and are in need of assistance in form of basic necessities, medical care, safety etc.

- According to the respondent keys concerns regarding protection in affected areas are limited access to security mechanisms and privacy for women and girls due to damaged shelter (Figure 23).



Recommendations

Immediate Actions

- Reintegrated separated and unaccompanied children with their caregivers and ensure their safe wellbeing. Regular inspections and monitoring needs to be established with the Social and Outreach Worker from the District Child Protection Units and the Childline service for sustained outreach and engagements.
- In case there are NGOs working in the areas, CPCs should be strengthened towards better gatekeeping mechanisms.
- Community PSS and Peer support networks should be facilitated by NYKS and NSS volunteers active in the area.
- Information regarding social protection/Family based alternative care schemes including foster care, sponsorship.
- Setup child friendly spaces for children and promote psychosocial well-being of children. Conduct sessions for children and caregivers on Psychological First Aid and counselling and seek counselling from Govt. setup mental health helplines.
- Form Children's Groups in every village or in every hamlet of village. They can be trained on child rights and protection mechanism.
- Collaborate with community level stakeholders, children and other humanitarian actors to identify and analyze existing and protection risk for children like dangers, injuries, child labour issues, physical and mental treatment, abuse and mental health distress.

- Immediate assistance to be provided to those whose houses are either fully damaged or partially damage as this would pose risk of security to children, adolescent girls and women
- Ensure Child friendly, disabled Friendly Sanitation facilities at all relief camps.
- Ensure separate toilets for men and women to minimize the risk of sexual violence against women, adolescent girls and specially children.
- Volunteers from each village need to be identified and oriented regarding Child protection issues and engaging children creatively and meaning fully for few hours ensuring all COVID- 19 related protocols.
- Children Groups, opinion leaders, Anganwadi workers and AW helpers who are currently busy with COVID-19 duties can support in forming such groups. They would also supervise these groups from time to time.
- Counselling support should be provided immediately with trained professionals on ground or telephonically to parents
- Children who are facing difficulty like lack of parents' care, missing their peers from school, learning loss due to closure of AWC and Schools, should be provided with Psycho-social support on ground with trained volunteers.
- A drive can be started on sensitization and awareness generation on the probability in increase in Child Trafficking, Child labour and Child marriage cases. The DCPUs and BCPUs can be instrumental in awareness generation and monitoring of such activities.
- A committee at every village can be formed who can act as sentinels and report any such incidents to District Child protection Unit or Child Line.
- Child Protection Committees or Child Group members of these villages should be made aware of the possible increase of such incidents so that they can be on alert. NGOs working in these areas should extend support in raising awareness, monitoring and reporting such incidents to local authorities.
- In the current situation, items of basic necessity are needed for women and children- sanitary pads/cotton pads, medicines for pregnant and lactating women, midwife services and midwife kits, food for infants and breastmilk substitute, sanitation kits for children to ensure they stay safe from water-borne diseases and other infections
- Providing drinking water to children and women, widows, single women households, and elderly women, clothes for children, girls, women and elderly women, and slippers, bed sheets, tarpoline sheets and pepper spray for protection.
- Arrangements to send critically ill infants to the nearest NICU should be done.
- Reaching out to women-led, single women, widow households, elderly women on a priority basis for relief and support.
- Profiling of the persons who have received relief from NGOs can be done by the NGOs that are providing relief. This will help in understanding the people who have received relief and those who might be left out.

- Relief to Persons with Disability must be provided as a priority. Persons with Disability need to be provided support for reconstruction of house.
- Facilitation for social protection schemes of the government also needs to be done for Persons with Disability, since they may face issues with documents and bank account.
- An assessment of specific needs of PwD can be done post-disaster. In case of any special needs like medicines, or support items (walking sticks, spectacles, etc.) without which, they cannot function, can be arranged.

Medium-Term Actions

- Conduct in-depth child protection rapid need assessment, collect data by age/gender and disability. Identify major protection issues like dangers, injuries, physical and maltreatment, SGBV issues, mental health distress, child who are engaged in child labour and those children who are separated and unaccompanied.
- Develop a child protection response plan base on protection principles and protection mainstreaming with other sectors. Support existing child protection system in addressing protection issues and train them on protection issues and response to protection issues through proper channel. Develop a comprehensive child protection information management system.
- Assessment of new widows, women who have been disabled, children who have dropped out from school, children who have been pushed into child labour, children who have been disabled, children who have been orphaned/separated from their families, etc., needs to be done to understand the socio-economic changes in the demography of a region post disaster. This will also help in providing specific targeted relief to households, with full coverage.
- Tracking of transgender population and ensuring their protection through vigilance teams and police also needs to be done.
- As mentioned earlier, Anganwadi and PDS functioning has been halted. Therefore, to ensure food and nutritional support to children and women, especially adolescent girls, pregnant and lactating women, mid-day meals and Take-Home Ration to be restarted.
- It is very important to ensure the pension allowance to the old destitute elderly women and women with disabilities is restarted. After floods, they will have even less resources than they did before, and therefore, require this support for sustenance.
- Girls may be at an increased risk of child marriage for economic reasons. Child labour can also increase. Increase in domestic violence after slight normalcy is returned may also be noticed. Increased exposure of women and children to abuse and violence is also possible. Vigilance through volunteers and responders can be set up. Women police officers can be deployed to these locations, especially to accompany those women who are returning home. Village-wise counting of the number of women, adolescent girls and children can be done to avoid abduction and trafficking.

- Women needing shelter support- materials cost and construction- needs to be identified and provided relevant help. Facilitation for support to women residing on public land also needs to be provided.
- Buddy system can be utilized, where one person is linked with every Person with Disability. This 'buddy' should also be trained on how to deal with and help a Person with Disability, without taking away their dignity. This buddy can also be responsible of ensuring that all relief and support for cyclone response and recovery is also received by the person he has been assigned to.

Long-Term Actions

- Alternative family care/foster care for orphaned children needs to be set up if it doesn't already exist. ASHA and anganwadi workers can be utilized to conduct an assessment of such children and link them with those services.
- Restoring the functioning of SHGs needs to be done to ensure economic recovery.
- Agricultural inputs, loans and other support to female farmers can be provided.
- Children with Disability might be considered an economic burden now that they are not able to attend school. Therefore, protection mechanism for such children can be developed.
- A Person with Disability Support Network can be established in each Gram Panchayat during the recovery phase so that, not only is there a support mechanism, but also allows for a social capital to form for such persons. This might help in increasing their resilience in a later disaster.
- This network can also be utilized to come up with actions that will make disaster management more inclusive for such groups.

Annexure

1. Demography of affected districts

Table 1 Census, 2011

District	Population	Sex Ratio	Literacy	Density
Pashchim Champaran	3,935,042	909	55.70 %	753
Purvi Champaran	5,099,371	902	55.79 %	1285
Muzaffarpur	4,801,062	900	63.43 %	1514

2. JRNA Report Writing Team

Report Writing			
Mr. Imran Majid	ADRA	Mr. Chandan	Oxfam India
Ms. Chaynika Pasari	Unnati	Dr. Ravikant Singh	Doctors For You
Mr. Ashish Singh	Unnati	Ms. Nivedita Guhathakurta	CRS
Mr. Rafay Eajaz Hussain	Save the Children	Mr. Sarabjit Singh Sahota	UNICEF
Mr. Mukul Kumar	Save the Children	Mr. Banku Bihari Sarkar	UNICEF
Ms. Shringar Bedi	Action Against Hunger	Mr. Prasanna Ash	UNICEF
Data Collection and Analysis			
Mr. Midhun P Chandrababu	Sphere India	Mr. Diwakar Chaubey	Sphere India
Mr. Gaurav Suyal	Sphere India	Ms. Nupur Tyagi	Sphere India
Ms. Lekha Chacko	Sphere India	Ms. Apurba Raychoudhury	Sphere India
Editors			
Ms. Nupur Tyagi	Sphere India	Ms. Divya Gupta	Sphere India
Dr. Henna Hejazi	Sphere India	Mr. Vikrant Mahajan	Sphere India

3. List of Coordinators and Volunteers involved in data collection

Name	Organization	Name	Organization
Mr. Mukul Kumar	Save the Children	Mr. Rakesh Kumar	Plan India
Mr. Hamid Raza	Save the Children	Ms. Rani Kumari	Plan India
Mr. Girindar Thakur	Save the Children	Mr. Avinash Kumar	Plan India
Dr. Suman	Save the Children	Mr. Abhishek Kumar	Caritas India
Mr. Shiv Balak	Save the Children	Mr. Suman Kumar	Caritas India
Mr. Md. Safi	Save the Children	Mr. Surendra Ram	Caritas India
Mr. Rampravesh	Save the Children	Mr. Munna Ram	Caritas India
Mr. Shailendra Ram	Save the Children	Mr. Dheeraj Paul	Caritas India
Mr. Pramila Chaurasia	Save the Children	Mr. Amit Den	Caritas India
Mr. Md. Shakib	Save the Children	Mr. Atendra Panday	Caritas India

Mr. Krishna Kumar	Save the Children	Mr. Ravi Kumar	Caritas India
Mr. Amar Kumar	Samajik Sodh Avm Vikas Kendra	Mr. Sumit Kumar	Caritas India
Mr. Indrajeet Sharma	Samajik Sodh Avm Vikas Kendra	Ms. Rekha Devi	Word Vision India
Mr. Raja Shroff	Samajik Sodh Avm Vikas Kendra	Mr. Vikash Ranjan	Word Vision India
Mr. Sudisht Kumar	Samajik Sodh Avm Vikas Kendra	Mr. Sanjay Pathsham	Word Vision India
Mr. Raviranjana Kumar	Samajik Sodh Avm Vikas Kendra	Mr. Munna Kumar	Word Vision India
Mr. Deependra Bajpai	Samajik Sodh Avm Vikas Kendra	Mr. Yashmin Khatoon	Word Vision India
Mr. Jahangir	Word Vision India	Mr. Satish Kumar	Word Vision India
Mr. Mohan Singh	Word Vision India	Mr. Subodh Kumar	Word Vision India
Mr. Sabnam Bharti	Word Vision India	Mr. Rajgir Kumar	ActionAid India
Mr. Rajan Kumar	Word Vision India	Mr. Sandheer Kumar	ActionAid India
Mr. Abdhesh Kumar	Plan India		

4. Field photographs

[Click here for field photographs](#)

Courtesy: IAG Bihar, NGO partners in Bihar

5. JNA Questionnaire

[Click here for questionnaire](#)

6. Media reports

[Click here for media reports](#)

7. List of IAG Bihar Members and other local NGOs

[Click here for members list](#)

8. Situation Report by District Administrations of affected areas.

District Muzaffarpur:

समाहरणालय, मुजफ्फरपुर
(जिला आपदाकालीन संचालन केंद्र)
प्रपत्र 1

जिला का नाम :- मुजफ्फरपुर। दिनांक :- 13.07.2021

क्र.सं.	प्रभावित प्रखण्डों का संख्या				अवतक मूल्यों की संख्या	शून्य	शून्य
	(प्रभावित प्रखण्डों का नाम)						
01	कटरा, औराई, मौनापुर, मोतीपुर, मुगहरी, बंदरा, मायाघाट, कोटी एवं घुरीन				10		
02	प्रभावित पंचायतों की संख्या				11		
	पूर्ण				11		
	आंशिक				72		
	कुल				83		
03	प्रभावित वार्डों की संख्या				461		
04	प्रभावित जनसंख्या(लाख में)	कल तक	आज नये प्रभावित	अवतक प्रभावित जनसंख्या	14		
	मनुष्य	227249	40310	267559			
	पशु	4290	1645	5935			
	प्रभावित क्षेत्रफल(हेक्टेयर में)						
	प्रतिवेदित तिथि को						
	अवतक(Cumulative)						
05	कृषि योग्य	शून्य	शून्य	शून्य	15		
	नैर कृषि योग्य	शून्य	शून्य	शून्य			
	कुल	शून्य	शून्य	शून्य			
06	क्षतिग्रस्त फसल क्षेत्रफल (हेक्टे 0 में)	शून्य	शून्य	शून्य			
07	क्षतिग्रस्त फसलों का अनुमानित मूल्य(₹0 लाख में)				शून्य		
	क्षतिग्रस्त मकानों की संख्या						
	प्रतिवेदित तिथि को						
	अवतक(Cumulative)						
08	कच्चा मकान	पूर्ण	0	0	16		
	आंशिक	पूर्ण	0	0			
	पक्का मकान	पूर्ण	0	0			
	आंशिक	पूर्ण	0	0			
	शोधड़ी				0		
	पशु शोध				0		
09	क्षतिग्रस्त मकानों का अनुमानित मूल्य(₹0 लाख में)				शून्य		
10	क्षतिग्रस्त सार्वजनिक संपत्ति का अनुमानित मूल्य(₹0 लाख में)				शून्य		
	अवतक(Cumulative)						
	स्वास्थ्य केंद्र	पूर्ण	0	0	17		
	वलाये जा रहे स्वास्थ्य केंद्रों की संख्या	पूर्ण	0	0			
	ईलाज कराये गये व्यक्तियों की संख्या	पूर्ण	0	0			
	वितरित हेल्थजेल की संख्या	पूर्ण	0	0			
	छिड़के गये डिसिनेंज पाउडर की मात्रा(KG)	पूर्ण	0	0			
	पशु कैंप की संख्या	पूर्ण	0	0			
	उपचार किये गये पशुओं की संख्या	पूर्ण	0	0			

Relief distribution

क्र.सं.	वितरित GR(Gratuitous Relief) की राशि / Rs. 6000/ per family	प्रतिवेदित तिथि को	अवतक(Cumulative)
19	वितरित GR(Gratuitous Relief) की राशि / Rs. 6000/ per family	0	1600pkt
20	Dry Ration Packet की संख्या (चना, वूडा, गुड़, सलू, नमक, चीनी इत्यादि)	शून्य	शून्य
21	फूड पैकेट की संख्या(बावल, दाल, आलू, सोयाबीन, हल्दी इत्यादि)	1060	20513
22	वितरित पॉलिथीन शीट्स की संख्या	शून्य	शून्य
23	अन्य साग्रणी(KG/LTR/संख्या)	शून्य	शून्य
24	अन्य साग्रणी(KG/LTR/संख्या)	शून्य	शून्य
25	अन्य साग्रणी(KG/LTR/संख्या)	शून्य	शून्य

झापांक 466 / आ0प्र0, दिनांक 13/07/2021

प्रतिलिपि :- अपर सचिव, आपदा प्रबंधन विभाग, बिहार, पटना को सादर सूचनाार्थ प्रेषित।

प्रतिलिपि :- आयुक्त के सचिव, तिरहुत प्रमण्डल, मुजफ्फरपुर को सादर सूचनाार्थ प्रेषित।

प्रतिलिपि :- जिलाधिकारी, मुजफ्फरपुर को सादर सूचनाार्थ प्रेषित।

प्रतिलिपि :- अपर समाहर्ता, जिला आपदा प्रबंधन, मुजफ्फरपुर को सादर सूचनाार्थ प्रेषित।

प्रभासी यदोधिकारी
जिला आपदाकालीन संचालन केंद्र
मुजफ्फरपुर।

District East Champaran:

जिला आपातकालीन संचालन केंद्र

पूर्वी चम्पारण, मोतिहारी।

बाढ़ 2021, दिनांक-12.07.2021

1	नदी का जलस्तर				
	नदी का नाम	Danger level	Highest Flood level	Actual level 4:00 PM	STATUS
	बाल्मिकीनगर बैराज (गंडक)	109.667 mtr	112.40 mtr	107.68 mtr status-F	Below DL
	लालबकैया (गोआबारी)	71.12 mtr	73.80 mtr	69.80 mtr status S	Below DL
	गंडक चटिया	69.147 mtr	70.04 mtr	68.10 mtr status-F	Below DL
	ललबेगिया सिकरहना	63.195 mtr	67.02 mtr	63.74 mtr status-S	Above DL
	डुमरिया घाट (गंडक)	62.02 mtr	64.10 mtr	63.10 mtr status-S	Above DL
	अहिरौलिया (बूढी गंडक)	59.62 mtr	61.17 mtr	59.83 mtr status-F	Above DL
3	प्रभावित प्रखण्डों की सं०/नाम-	11. मोतिहारी. बंजरिया. सुगौली. अरेराज. संग्रामपुर. केसरिया. चिरैया, पीपराकोठी, पकड़ीदयाल, तेतरिया, मधुबन			
4	प्रभावित पंचायत की सं०-	75			
5	प्रभावित गांवों की सं०	174			
6	पानी से घिरे गांव की सं०	142			
7	प्रभावित जनसंख्या अब तक (मनुष्य)	673389			
8	प्रभावित जनसंख्या अब तक (पशु)	5882			
9	वितरित पॉलिथीन सीट्स अब तक	23467			
10	चलाये गये मोटर बोट की सं०	12			
11	चलाये गये नाव की सं० (सरकारी)	4			
12	चलाये गये नाव की सं० (निजी)	96			
13	वितरित ड्राई राशन पैकेट की संख्या	चूड़ा - 37.87 क्वीन्टल, चिनी - 7.37 क्वीन्टल (प्रखण्ड-संग्रामपुर, केसरिया)			
14	आज सामुदायिक रसोई में भोजन करने वाले की सं०	रसोई की सं०-51 भोजन करने वाले की सं०-46843			
15	निष्क्रमित आबादी की सं०	कुल- 7596			
18	NDRF CAMP	कुल-3 (मोतिहारी, पकड़ीदयाल, संग्रामपुर.)			
19	NDRF टीम का भ्रमण क्षेत्र	बंजरिया-1 टीम, संग्रामपुर-2 टीम, पकड़ीदयाल-1 टीम,			

जिला आपातकालीन संचालन केंद्र

पूर्वी चम्पारण, मोतिहारी।

बाढ़ 2021, दिनांक-13.07.2021

1	नदी का जलस्तर				
	नदी का नाम	Danger level	Highest Flood level	Actual level 8:00 AM	STATUS
	बाल्मिकीनगर बैराज (गंडक)	109.667 mtr	112.40 mtr	107.59 mtr status-S	Below DL
	लालबकैया (गोआबारी)	71.12 mtr	73.80 mtr	69.85 mtr status-F	Below DL
	गंडक चटिया	69.147 mtr	70.04 mtr	68.02 mtr status-S	Below DL
	ललबेगिया सिकरहना	63.195 mtr	67.02 mtr	63.60 mtr status-S	Above DL
	डुमरिया घाट (गंडक)	62.02 mtr	64.10 mtr	63.10 mtr status-S	Above DL
	अहिरोलिया (बूढी गंडक)	59.62 mtr	61.17 mtr	59.75 mtr status-F	Above DL

Supported by

