2023 JOINT MULTI-SECTORAL NEEDS ASSESSMENT (MSNA), BANGLADESH

–MULTI-SECTORAL NEEDS INDEX (MSNI) METHODOLOGICAL OVERVIEW

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List of Acronyms

HC: Host community
HH: Household
IOM-NPM: International Organization for Migration-Needs and Population Monitoring
ISCG: Inter-Sectoral Coordination Group
JRP: Joint Response Plan
SCCCM: Shelter-Camp Coordination and Camp Management
WASH: Water, Sanitation, Hygiene

Geographical Classifications

District: Third tier of administration in Bangladesh, forming sub-units of divisions.
Upazila: Fourth tier of administration in Bangladesh, forming sub-units of districts.
Union: The smallest rural administrative and local government unit.

General and specific objectives and research questions

General and specific objectives

The main objective of the 2023 Multi-Sectoral Needs Assessment (MSNA) in Bangladesh was to inform evidence-based strategic planning of humanitarian response activities by the Strategic Executive Group (SEG), the ISCG Secretariat, sectors, and sector partners, through the provision of up-to-date, relevant, and comparable information on the multi-sectoral needs of refugee and host community populations in Teknaf and Ukhiya Upazilas of Cox's Bazar District, Bangladesh.

The assessment had four specific objectives:
1) To provide a detailed overview of the current humanitarian needs and gaps of the refugees and host communities (by sector and across sectors) in Cox's Bazar district, to inform the 2024 Joint Response Plan,
2) To understand accountability to affected populations, including preference for types of and satisfaction with humanitarian assistance as well as needs, and preferences for types of information to be received (only for refugees),
3) To understand the driver and severity of needs of the refugee population and host communities from sector-specific and inter-sectoral perspectives,
4) To identify variations in need among sub-population groups and geographical areas (camps/unions) in order to inform response prioritization and strategic planning, particularly for the most vulnerable people.

Research questions

To achieve these objectives, the MSNA sought to answer the following research questions:
1. What are the households' vulnerability profiles?
2. What are the needs[1] related to health, shelter, WASH, food security & livelihoods, protection, education, accountability to affected people, and service gaps within refugee camps and the host

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[1] Needs should capture the key dimensions of accessibility, availability, quality, use, and awareness.

community?
a) How severe are these needs within and across sectors?[2]
b) What are the main drivers of needs?[3]
c) What is the co-occurrence of needs?[4]
d) How does the household profile affect their access to resources and services?
3. How do sectoral and inter-sectoral[5] needs differ between geographic areas?
4. What are the characteristics of households most in need?
5. What coping strategies are households adopting to meet their needs?
6. What are households' preferred types of assistance and satisfaction with humanitarian assistance? What are households' needs and preferences for types of information to be received for 2024?

Scope and coverage of the assessment

Groups of population and sampling strategy

Households were the unit of analysis for this assessment. Households were defined as a group of people living together, generally sharing food.[6] The interviews were conducted with a consenting adult representative of the household. Enumerator teams consisted of roughly equal numbers of male (85) and female (75) enumerators, paired in male-female sets. During the household survey, each pair of enumerators interviewed one household respondent, with one enumerator from the pair interviewing a household representative of their corresponding gender. This procedure continued with the following household surveys until the desired gender ratio of respondents was achieved, ensuring a balanced representation of both male and female respondents.

Two population groups were identified as priorities as part of the assessment – the refugee households and the host community households. ACTED/REACH carried out data collection for refugee households and IOM/NPM carried out data collection for host community households.

Stratification levels differ across population groups (see Table 2). Survey targets were drawn to obtain statistically representative data with the following stratification:
- For the refugee households: by camp,
- For the host community households: by union.

In line with the geographical coverage and population targeted by the 2024 JRP and subject to refinement during the activity design process, the assessment targeted:
- All registered Rohingya refugee households residing in the 33 camps in Ukhiya and Teknaf, including Kutupalong (KRC) and Nayapara Refugee Camps (NRC) and excluding any refugees that have been relocated elsewhere;

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[2] For the refugee community only.

[3] Needs should capture the key dimensions of accessibility, availability, quality, use, and awareness.

[4] Needs should capture the key dimensions of accessibility, availability, quality, use, and awareness.

[5] Inter-sectoral needs will be assessed for the refugee community only. The sectoral analysis will differ between refugee and host communities.

[6] In line with the definition of a household used in the Bangladesh 2011 Census – "a group of persons, related or unrelated, living together and taking food from the same kitchen".

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- All Bangladeshi households living in the following Unions of Ukhiya and Teknaf: Haldia Palong; Ratna Palong; Raja Palong; Palong Khali; Jalia Palong; Whykong; Nhilla; Teknaf; Sabrang; Teknaf Paurashava; Baharchara.

Table 1: Defining the groups of population

Refugee household	*The refugee population is defined as including all Rohingya households residing in the 33 camps across Ukhiya and Teknaf Upazilas. Bhasan Char is outside of the scope of the assessment.*
Host community household	*The host community population is defined as including all Bangladeshi households residing in the following 11 Unions in Ukhiya and Teknaf Upazilas where refugee camps are located: Haldia Palong, Ratna Palong, Raja Palong, Palong Khali, Jalia Palong, Whykong, Nhilla, Teknaf, Sabrang, Teknaf Paurashava, Baharchhara.*

Table 2: Sampling strategy by group of population

Group of population	Type of sampling	Precision level	Further stratification
Refugee household	Stratified random sampling	Confidence level: 95% Margin of error: 10%	Camp level
Host community household	Stratified random sampling	Confidence level: 95% Margin of error: 10%	Union level

In refugee camps managed by UNHCR, UNHCR provided sample points based on the random selection of households from a comprehensive household address database. In refugee camps managed by IOM, the same process was applied.

Host community households were sampled using randomly generated GPS points over a dataset of Open Street Map (OSM) shelter footprints.

Data collection and geographical coverage

Quantitative data collection took place between the 27th of August and the 17th of September 2023 and covered a total of 3,400 refugee households and 1,149 host community households. In the camps, the household surveys collected data from 18,172 individuals; in the host community, the household surveys collected data from 6,288 individuals.

Households were interviewed through a structured, 50-minute interview, covering all humanitarian sectors except Nutrition. All surveys were conducted in-person through enumerators recruited by ACTED/IOM-NPM.

The surveys were conducted on tablets using the KoBo Collect Android app. Enumerators uploaded the data to the UNHCR server every day.

The sample, including buffer, per camp and per union, consisted of 105 surveys.
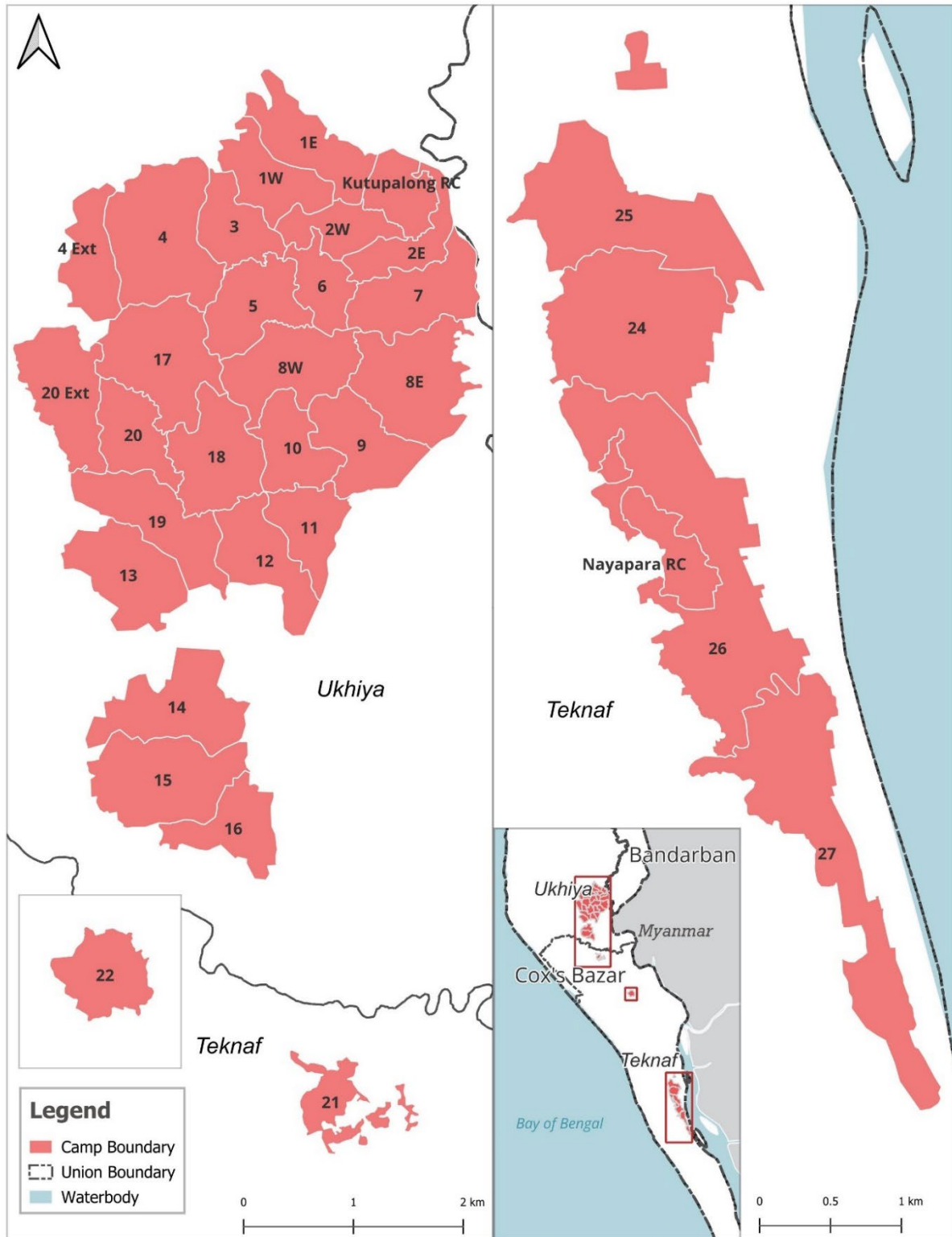
Table 3: Number of households (HHs) interviewed per camp:

Camp	HHs interviewed	Camp	HHs interviewed	Camp	HHs interviewed
Camp 1E	107	Camp 8W	104	Kutupalong RC	103
Camp 1W	101	Camp 9	104	Camp 14	102
Camp 2E	100	Camp 10	105	Camp 15	105
Camp 2W	102	Camp 11	104	Camp 16	104
Camp 3	103	Camp 12	104	Camp 21	104
Camp 4	106	Camp 13	104	Camp 22	102
Camp 4 Extension	100	Camp 17	101	Nayapara RC	103
Camp 5	104	Camp 18	103	Camp 24	101
Camp 6	104	Camp 19	103	Camp 25	100
Camp 7	103	Camp 20	103	Camp 26	104
Camp 8E	105	Camp 20 Extension	102	Camp 27	100
Sample (including buffer)			3,465		
Total number of HHs interviewed			3,400		

Table 4: Number of households (HHs) interviewed per union:

Union	HHs interviewed
Raja Palong	105
Haldia Palong	105
Jalia Palong	105
Ratna Palong	105
Palong Khali	105
Nhilla	105
Sabrang	103
Whykong	105
Baharchara	104
Teknaf	102
Teknaf Paurashava	105
Sample (including buffer)	1,155
Total number of HHs interviewed	1,149

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Figure 1: Geographic coverage of the assessment by group of population (next page)

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Legend

▨ Host Community Union Boundary
⬚ Upazilla Boundary
⬚ District Boundary
☐ Refugee Camps
▨ Waterbody

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Secondary data sources

A secondary data review forms the basis of assessment design. In April-May 2023, sectors conducted a secondary data review exercise to identify outstanding information gaps and ensure the response-wide assessment registry included all recent assessments. This will also serve as a basis for the identification of other data sources to triangulate J-MSNA primary data collection results with. Sources include but are not limited to:

- ISCG, IOM, UNHCR, Joint Response Plan: Rohingya Humanitarian Crisis, 2023
- WFP, Refugee Influx Emergency Vulnerability Assessment (REVA), 2023
- FAO/Food Security Sector, Resilience Index Measurement and Analysis (RIMA), 2022
- ACAPS, Special reports, 2022
- SMSD Sector, Service monitoring camp profiles, 2022
- IOM/NPM, ACAPS, Rohingya Hobor, Trends survey report, 2022
- Population data (Bangladesh Bureau of Statistics – Population & Housing census,[7] UNHCR population factsheet)[8]
- J-MSNA Reports 2019,[9] 2020,[10] 2021[11]
- Geo-spatial data (e.g. OSM shelter footprints dataset)
- Other relevant REACH Initiatives assessments (e.g. Age and Disability Inclusion Needs Assessment, 2021; Assessment of the Education Sector response to the Rohingya Crisis, 2021; WASH Infrastructure Functionality Monitoring, 2022).

Ethical considerations and limitations

Ethical considerations

While vulnerable groups were not specifically targeted by the assessment, refugees or host communities interviewed may have been exposed to protection incidents. The assessment adapted a "do no harm" approach to data collection by working with sector partners to ensure questions and methodology do not pose a risk of re-traumatization or distress to respondents. Any questions deemed as too sensitive to be asked either in-person was not asked. Enumerator trainings included sessions on principles related to respondent safeguarding and how to behave with and refer respondents if survivors of violence, including gender-based violence, violence against children or urgent child protection risks, or PSEA, disclose incidents over the course of the research. Enumerators also received training on ensuring questions are asked in a non-intrusive, sensitive manner to mitigate any unintended harm. Additionally, respondents could skip questions or pause/withdraw from the discussion at any point.

Specific questions related to disability were designed according to the Washington Group - Short Set of Questions on Disability.

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[7] Bangladesh Bureau of Statistics, *Population & Housing Census 2011*, National Volume-2: Union Statistics (Dhaka, 2011). Available here.

[8] UNHCR, *Joint Government of Bangladesh - UNHCR Population Factsheet - Block Level as of May 2023,* June 2023. Available here.

[9] J-MSNA 2019: Host community, available here; Rohingya refugees, available here.

[10] J-MSNA 2020: Host community, available here; Rohingya refugees, available here.

[11] J-MSNA 2021: Host community, available here; Rohingya refugees, available here.

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Participation could not take place without the informed consent of the respondent. A script was presented to all respondents, outlining the nature and purpose of the evaluation, and emphasizing the voluntary basis of participation, ensuring that consent was obtained from interviewees at the start of the interview.

Where personal data was collected, it was not shared with external partners and access to the information was restricted within REACH. Any other personally identifiable information was deleted before publication of the datasets.

Limitations and challenges

- **Unit of analysis**: The unit of analysis of the survey was the household. As such, only limited information was collected relating to the conditions and experiences of specific members of the household. The resulting household data is therefore likely to conceal intra-household differences.
- **Data collection period:** The survey provided information and insights into levels of need at the time when the assessment was being conducted. As such, inter-seasonal differences were not captured by the J-MSNA. Results have to be interpreted in light of the period of data collection, and be triangulated with other data sources for a more in-depth understanding of such differences.
- **Response bias**: Findings captured households' self-reporting, and hence are at risk of bias. Some households might have been inclined to over-report needs thinking it might translate into increased assistance, or might have under-reported challenges due to fear or social norms. These potential biases should be taken into consideration when interpreting findings, particularly those referring to sensitive issues.
- **Subset indicators**: Findings referring to a subset of the total population may have a wider margin of error and a lower level of precision. Therefore, results may not be generalizable with a known confidence level and margin of error, and should be considered indicative only.

Analysis of Living Standard Gaps

For details regarding the indicators and thresholds used in this analysis, please refer to Annex 2.

Each year, REACH facilitates the collection and analysis of crisis-level data across sectors and population groups through Multi-Sector Needs Assessments (MSNA) to support decision-making by humanitarian actors. MSNAs are conducted within a strong partnership framework at sector and inter-sector level. They are timed to inform strategic decision-making milestones along the humanitarian program cycle (HPC), such as the Humanitarian Needs Overview (HNO) and the Humanitarian Response Plan (HRP).

Note: The MSNA data analysis framework is completely independent from the Joint Inter-Sector Analysis Framework (JIAF). While some of the conceptual elements for the MSNA do come from the JIAF 1.1 (e.g. 'Living Standards Gap', indicators, severity categories), the methodology used is different. Furthermore, the JIAF is being developed through an inter-agency group and implemented primarily to produce inter-sectoral PiN (People in Need) (and area-level severity) using different data sources available in-country. Meanwhile, the REACH MSNA analysis method was developed internally by REACH and is implemented

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primarily using household-level data collected through the MSNA. In line with the research questions, the analysis aims to provide a crisis-wide overview of humanitarian needs and the underlying drivers that influence access to basic needs and services.

The methodology relies on a two-step aggregation process (see F*igure 1*):
(1) **Aggregation of indicators at the sector level**: Construction of sectoral Living Standard Gaps (LSG), see Annex 3 for further details;
(2) **Aggregation of sectoral LSGs into a multi-sectoral composite result**: Multi-Sector Needs Index (MSNI), see Annex 4 for further details.

Figure 2: Approach for the MSNA analysis
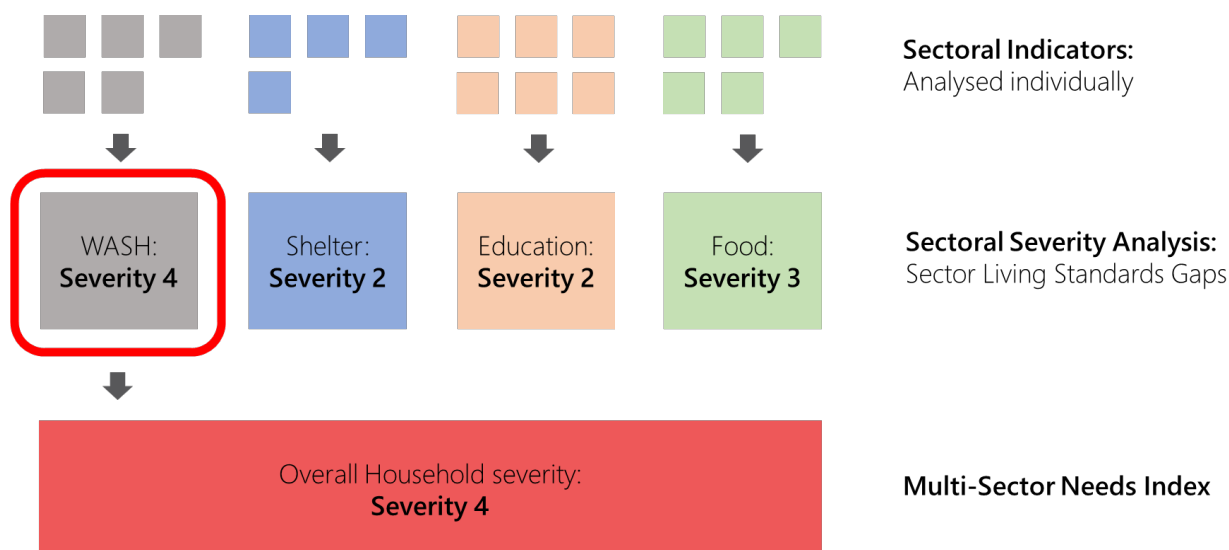
The key analytical components are:
- **Living Standard Gap (LSG)**: signifies a need in a given sector, where the LSG severity score is 3 or higher.
- **Livelihood Coping Strategies Index (LCSI)**: signifies that negative and unsustainable coping strategies are used to meet needs. Households not categorised as having an LSG may be maintaining their living standards through the use of negative coping strategies.
- **Severity**: signifies the "intensity" of needs, using a scale that ranges from 1 (minimal/no gap) to 4 (extreme needs)/4+ (very extreme needs).
- **Magnitude**: corresponds to the overall number or percentage of households in need.
- **The Multi-Sectoral Needs Index (MSNI)** is a measure of the household's overall severity of humanitarian needs across sectors (expressed on a scale from 1 to 4+), based on the highest severity of sectoral LSG severity scores identified in each household.

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The severity scale is based on the type of severity scales that exist in version 1.1 of the Joint Intersectoral Analysis Framework (JIAF), an analytical framework being developed at the global level to improve understanding of the needs of affected populations. This framework measures the gradual deterioration of a household's situation towards the worst possible humanitarian outcome. While the JIAF severity scale includes 5 classes ranging from 1 (none/minimum) to 5 (catastrophic), for the purpose of this MSNA, only a scale of 1 (none/minimum) to 4 (extreme) is used. The "4+" score (very extreme) is used when the data indicates that the situation could be catastrophic. But the term "catastrophic" is not used in this analysis. This is because the data needed to establish a "catastrophic" score is mainly collected at the area level (e.g. mortality rates or malnutrition prevalence), which is difficult to take into account in an analysis at the household or individual level.

The different levels of severity can be broadly defined as follows:
- **Very extreme (4+)**: Indications of total collapse of living standards, with potentially immediately life-threatening outcomes (increased risk of mortality and / or irreversible harm to physical or mental well-being).
- **Extreme (4)**: Collapse of living standards. (Risk of) significant harm to physical or mental well-being.
- **Severe (3)**: Degrading living standards, with reduced access to / availability of basic goods and services. (Risk of) degrading physical or mental well-being.
- **Stress (2)**: Living standards are under stress. Minimal (risk of) impact on physical or mental well-being / stressed physical or mental well-being overall.
- **Minimal (1)**: Living standards are acceptable, at a maximum showing some signs of deterioration and / or inadequate access to basic services. No or minimal (risk of) impact on physical or mental well-being

To construct these scales, some indicators are identified. There are two types of indicators: critical and non-critical indicators.
- **Critical indicators**: Critical indicators are those that by themselves can indicate any severity above 1, i.e. severity levels 2 to 4+ (see definition of severity levels above).
- **Non-critical indicators**: Non-critical indicators are those that are generally indicative of lower levels of severity, and by themselves would not be considered to justify assigning a severity level greater than 1 to a household. In combination, however, the gaps experienced according to the non-critical indicators can indicate severity levels 2 or 3.

Based on the severity scale, LSG scores (by sector) were then calculated by aggregating indicators by sector. A simple aggregation methodology was identified, based on the Multidimensional Poverty Index (MPI) aggregation approach. *For details on the aggregation methodology, please refer to Annex 3.*

The Multi-sectoral Needs Index (MSNI) is a measure of the overall severity of needs experienced by a household over all sectors (expressed on a scale of 1 to 4/4+), based on the highest LSG severity score for a given sector and identified within each household. The MSNI approaches multi-sectoral needs from an overall perspective. A household is considered in need if any of its sectoral LSG score is 3 or higher. Whether a household has very severe need in a single sector or co-occurring severe needs in several sectors, its final MSNI score will remain the same. While this approach makes sense from a response planning

perspective—if a household has an extreme need in a single sector, this may substantiate a humanitarian intervention regardless of the co-occurrence with other sectoral needs—, further analyses are needed to unpack the MSNI and understand these differences in magnitude and severity between households. *For details on the MSNI construction, please refer to Annex 4.*

In addition to the MSNI, the bulletin includes additional analysis on the overall proportion of households by severity, the overall proportion of households in need by sector (i.e., LSG), and the overall proportion of households in need by total number of sectoral LSGs.

Annex 1: Related publications (terms of reference, datasets, dashboards)

All documentation and outputs related to the 2023 MSNA in Bangladesh are available on the REACH Resource Center:
- Terms of reference
- Data Analysis Framework
- Publications
- Dataset and Analysis tables
- Dashboard

All REACH multisectoral outputs can be found *here*.

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Annex 2: Details on the indicators used for the Living Standards Gaps and Capacity Gaps

Please provide here the details of the indicators, response options, and thresholds that were used for the country analysis for each sectoral LSG and for the Capacity Gaps.

Please add references or detailed explanation of the indicators used and how they were calculated if there are composite indicators (e.g., for the FEWS Net matrix, please refer to the FEWS Net guidance).

For examples, see the [2022 MSNA methodological overview for the Libyan population](#) (page 21) and see the [2022 MSNA methodological overview for Haiti](#) (page 19).
All indicators mentioned below are **critical indicators.**

Protection Sector

Indicator	Question(s)	Severity rating				
		1	**2**	**3**	**4**	**4+**
% of HHs with at least one child (<18) not residing in the HH	Does your household have any child (<18 years), son or daughter, who is NOT currently living in the household? What is the reason for why your children/child are/is not living in the household?	No child in the household is living away OR at least one child is not currently living in the household but has left the household to study			At least one child is not currently living in the household AND the child has left the household for the following reasons: ('Married and left the house', 'Left the house to seek employment')	At least one child is not currently living in the household AND the child has left the household for the following reasons: ('Left the house to engage with the army or armed groups', 'Kidnapped/abducted', 'Missing/left and no news', 'Arbitrarily detained')
% of HHs reporting how safe they feel walking alone at night	How safe do you and the members of your household feel walking alone in your area/neighbourhood after dark?	'Very safe'	'Safe'	'A bit unsafe'	'Very unsafe' or 'Never walk alone after dark'	

Education Sector

Indicator	Question(s)	Severity rating				
		1	**2**	**3**	**4**	**4+**
% of households, by proportion of children aged 5-18 enrolled and regularly attending formal school for the 2022-	For the 2022-2023 school year, was he/she enrolled (registered) in formal school? During the 2022-2023 school year, did he/she attend school regularly? During the 2022-2023 school year, what was the main reason he/she did not access formal school?	No child in the HH OR All school aged children (5-18) are enrolled in formal school AND attend	All school aged children (5-18) are enrolled in camps' learning facilities AND attend regularly	At least 1 school aged child is not enrolled in formal school OR nor attending formal school regularly	At least 1 school aged child is not enrolled in formal school/camps' learning facilities OR nor attending formal	

Indicator	Question(s)	1	2	3	4	4+
2023 school year		formal school regularly (HC)		At least 1 school aged child is not enrolled in camps' learning facilities OR nor attending camps' learning facilities regularly	school/camps' learning facilities regularly AND Protection/safety risks while commuting to school OR Protection/safety risks while at school OR Child helping at home / farm OR Marriage and/or pregnancy OR Children join/recruited by armed groups"	
% of households, by proportion of children learning in safe conditions	During the 2022-2023 school year, was he/she able to travel safely to school and learn in safe conditions at the school? During the 2022-2023 school year, was he/she able to learn in acceptable conditions? (i.e. the learning environment met the basic educational needs of learners)	No child in the HH OR All school aged children (5-18) are learning in a protected environment and under acceptable learning conditions		At least one child learning under unacceptable learning conditions	At least 1 child unable to travel safely to school and learn in safe conditions	

Health Sector

Indicator	Question(s)	Severity rating				
		1	2	3	4	4+
% of HHs with an individual with an unmet health care need	During the last 3 months, did any household member had a health problem and needed to access health care? If yes, were they able to obtain health care when they felt they needed it?	There were no healthcare needs in the household (During the last 3 months, did he / she have a health problem and needed to access health care? = no)	All healthcare needs in the household were met ('During the last 3 months, did he / she have a health problem and needed to access health care?' = yes) AND 'If yes, was he / she able to obtain health care when he / she felt they needed it?' = yes	At least one person had an unmet healthcare need ('If yes, was he / she able to obtain health care when he / she felt they needed it?' = no) OR At least one person with healthcare needs met had a WGSS disability level 3/4 ('If yes, was he / she able to obtain health care when he / she felt they needed it?' = yes AND 'WGSS=3 OR 4)	At least one person had an unmet healthcare need ('If yes, was he / she able to obtain health care when he / she felt they needed it?' = no) AND A WGSS disability level 3/4 ('WGSS=3 OR 4)	

WASH Sector

Indicator	Question(s)	Severity rating				
		1	2	3	4	4+
% of HHs by type of primary source of drinking water	What is the main source of drinking water for members of your household?* How long does it take to go there, get water, and come back?	The main source of drinking water is found in: ('improved') AND the time to go to the main water source, get water and come back is 0	The main source of drinking water is found in: ('improved') AND the time to go to the main water source, get water and come back is <30	The main source of drinking water is found in: ('improved') AND the time to go to the main water source, get water and come back is >= 30 minutes	The main source of drinking water is found in: ('unimproved' minus 'surface water')	The main source of drinking water is found in: ('surface_water')
% of HHs reporting having enough water for drinking	In the last 4 weeks, how frequently has there not been as much water to drink as you would like for you or anyone in your household?	Never (0 times)	Rarely (1–2 times)	Sometimes (3–10 times)	Often (11-20 times)	Always (more than 20 times)
% of HHs using a sanitation facility - by type of sanitation facility used	What kind of toilet facility do members of your household usually use?** Do you share this sanitation facility with other households? If yes, how many households in total use this toilet facility, including your own household?	The toilet facility is found IN ('improved') and the household does not share the sanitation facility with other households	The toilet facility is found IN ('improved') AND <20 households share the toilet facility	The toilet facility is found IN ('improved') AND 20-49 households share the toilet facility	The toilet facility is found IN ('unimproved') (regardless of it being shared or not) OR sanitation facility IN ('improved') AND >50 households share the toilet facility	The toilet facility is found IN ('none')
% of HHs with access to functioning handwashing facilities	Can you please show me where members of your household most often wash their hands? Observe availability of water at the place for handwashing. Observe availability of soap or detergent at the place for handwashing. Where do you and other members of your household most often wash your hands? Do you have soap or detergent in your household for washing hands? [if no permission] Can you show it to me?	Handwashing facility is available with water and soap: (wash_handwashingfacility= 'Fixed or mobile handwashing place in dwelling/yard/plot' AND wash_handwashingfacility_observed_water= 'Water is available' AND wash_handwashingfacility_observed_soap= 'Soap or detergent available')	No handwashing facility available OR Only water or only soap available			

* Improved water sources include: public tap/standpipe, piped into compound, piped tap/ tapstand into settlement site, piped to neighbour, piped into dwelling, bottled water, sachet water. Unimproved water sources include: protected well, unprotected well, protected spring, unprotected spring, rainwater collection, tanker truck, cart with small tank/drum, water kiosk, surface water, deep tubewell, shallow tubewell, deep or shallow tubewell (unknown).

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** Improved latrines include: single pit latrine with slab, twin pit latrine with slab, flush latrine, septic tank latrine, bio-fill latrine, bio-gas latrine, flush to piped sewer system, flush to septic tank, flush to pit latrine, flush to open drain, flush to elsewhere, flush to don't know where, composting toilet. Unimproved latrines include: no facility/bush/field, plastic bag, bucket, single pit latrine without slab / open pit, twin pit latrine without slab / open pit, hanging toilet.

Food Security Sector

Indicator	Question(s)	Severity rating				
		1	2	3	4	4+
Food Consumption Score (FCS)	In the last 7 days, on how many days did your household eat…	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance
Household Hunger Scale (HHS)	In the past 4 weeks (30 days): (1) was there ever no food to eat of any kind in your house because of lack of resources to get food? (2) did you or any household member go to sleep at night hungry because there was not enough food? (3) did you or any household member go a whole day and night without eating anything at all because there was not enough food? How often did it happen?	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance
Reduced Coping Strategies Index	During the last 7 days, were there days (and, if so, how many) when your household had to: (1) rely on less preferred and less expensive food to cope with a lack of food or money to buy it? (2) borrow food or rely on help from a relative or friend to cope with a lack of food or money to buy it? (3) limit portion size of meals at meal times to cope with a lack of food or money to buy it? (4) restrict consumption by adults in order for small children (under 5 y.o.) to eat to cope with a lack of food or money to buy it?	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance	FEWSNET Matrix Guidance

Food Consumption Score methodology: The calculation of the Food Consumption Score (FCS) was conducted in line with global standards. The FCS is a "composite score based on dietary diversity, food frequency, and relative nutritional importance of different food groups."[12] The FCS captures households' food access and adequacy.[13]

The following thresholds are the ones used for the FCS in Bangladesh:

Classification of FCS severity			
	Acceptable	Borderline	Poor

[12] WFP, Food Consumption Analysis, 1st edition (February 2008). Available here.
[13] WFP, Consolidated Approach to Reporting Indicators of Food Security (CARI), 2nd edition (November 2015).

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Household's total weighted score	> = 42.1	28.1 - 42	0 – 28

Figure 5. Fully classified food consumption indicator matrix example

	rCSI <4			rCSI 4-18			rCSI >18		
	FCS >35	FCS 21.5-35	FCS <21.5	FCS >35	FCS 21.5-35	FCS <21.5	FCS >35	FCS 21.5-35	FCS <21.5
HHS = 0	1	6	11	16	21	26	31	36	41
HHS = 1	2	7	12	17	22	27	32	37	42
HHS = 2-3	3	8	13	18	23	28	33	38	43
HHS = 4	4	9	14	19	24	29	34	39	44
HHS = 5-6	5	10	15	20	25	30	35	40	45

Source: *FEWS NET*

Household hunger scale methodology: The calculation of the Household Hunger Scale was conducted in line with global standards. The HHS intends to focus on the food quantity dimension of food and not the nutritional quality of the accessed food.

Reduced Coping Strategies Index (rCSI) methodology: The calculation of the rCSI was also conducted in line with global standards.[14] The rCSI captures the quantity or sufficiency of a household's food by asking about a selection of common, less-severe food-related coping mechanisms.

<u>Livelihoods and Skills Development (LSD) Sector</u>

Indicator	Question(s)	Severity rating				
		1	2	3	4	4+
% of HHs using LCSI strategies	During the past 30 days, did anyone in your household have to … because of a lack of food or money to buy food?	No coping strategies were reported to be used or exhausted	At least one 'stress' coping strategy was used or exhausted but no higher coping strategies	At least one 'crisis' coping strategy was used or exhausted but no higher coping strategies	At least one 'emergency' coping strategy was used or exhausted but no higher coping strategies	
% of HHs by type of income sources	Can you estimate your household's income (in BDT) over the last 30 days from each of the following sources?	One or more income 'stable' source of income in: 'Salaried work' or 'Income from own business or regular trade'	One 'stable' income source in: 'Salaried work' OR 'Income from own business or regular trade' AND Multiple 'seasonal/unstable' sources of income in: 'Income from own production'	No 'stable' income source in: 'Salaried work' OR 'Income from own business or regular trade' AND Multiple 'seasonal/unstable' sources of income in: 'Income from own production'	Source(s) of highly 'unstable' income ONLY in: 'Loans or support from family and friends (not including remittances)' OR 'Loans, support from community members' OR 'Charitable donations' OR 'Humanitarian assistance'	

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[14] WFP, "The Coping Strategies Index: Field Methods Manual," 2nd edition (January 2008). Available here.

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			OR 'Government social benefits or assistance' OR 'Income from rent' OR 'Remittances' OR 'Cash for work' OR 'Volunteer engagement in camps' OR 'Casual or daily labour'	OR 'Government social benefits or assistance' OR 'Income from rent' OR 'Remittances' OR 'Cash for work' OR 'Volunteer engagement in camps' OR 'Casual or daily labour'	OR 'Selling relief items'	

Shelter & NFIs

Indicator	Question(s)	Severity rating				
		1	2	3	4	4+
% of HHs living in safe and dignified dwelling	What type of shelter does your household live in? What damage and/or noticeable issues does your enclosure have?	Type of shelter the households live can be found IN ('Pucca' OR 'Semi pucca'') AND 'No damage or noticeable issue' reported OR 'Damage to floors'	(1) Type of shelter the households live can be found IN ('Pucca' OR 'Semi pucca') AND 'Minor damage to roof' OR 'Damage to windows and/or doors' OR 'Damage to walls' OR 'Lack of privacy inside the shelter' OR 'Lack of space inside shelter' OR 'Lack of insulation from cold / heat' OR 'Limited ventilation' OR 'Leaks during rain' OR 'Unable to lock the shelter' OR 'Lack of lighting inside or outside the shelter' OR (2) Type of shelter the households live can be found IN ('Unfinished / non-enclosed building' OR 'Kutcha' OR 'Jhuprie' OR 'Tent' OR 'Makeshift shelter' OR 'Collective shelter') AND 'No damage or noticeable issue' OR 'Damage to floors' OR (3) Camp population AND 'No damage or noticeable issue' OR Damage to floors	Type of shelter the households live can be found IN ('Unfinished / non-enclosed building' OR 'Kutcha' OR 'Jhuprie' OR 'Tent' OR 'Makeshift shelter' OR 'Collective shelter') OR camp population AND 'Minor damage to roof' OR 'Damage to windows and/or doors' OR 'Damage to walls' OR 'Lack of privacy inside the shelter' OR 'Lack of space inside shelter' OR 'Lack of insulation from cold / heat' OR 'Limited ventilation' OR 'Leaks during rain' OR 'Unable to lock the shelter' OR 'Lack of lighting inside or outside the shelter'		Type of shelter the households live can be found IN = 'None (sleeping in open)' OR 'Major damage to roof with risk of collapse' OR 'Total collapse or shelter too damaged and unsafe for living'
% of HHs living in a functional domestic space	Is your household living in a functional domestic space, in terms of: Cooking Sleeping	Out of 4 domestic spaces, 0 or 1 space is non-functional at all	Out of 4 domestic spaces, 2 or 3 spaces are non-functional at all	Out of 4 domestic spaces, ALL 4 spaces are non-functional at all		

	Storing food and water Electricity					
% of HHs who currently have missing NFIs reported	What other core NFIs is your household missing?	snfi_core_nfis='none'	Not selected > snfi_core_nfis='None' or snfi_core_nfis='Don't know' or snfi_core_nfis='Prefer not to answer'			
% of HHs living in crowded places	In total, how many rooms are there in use in this shelter?	HHs living in shelters with 1 room for 1 person	HHs living in shelters with 1 room for 2 persons	HHs living in shelters with 1 room for 3 persons	HHs living in shelters with 1 room for 4 persons	HHs living in shelters with 1 room for >4 persons

Annex 3: Living Standards Gap − Aggregation

The analysis is conducted in 3 steps:

<u>(A) Combination of critical indicators into a final score for the critical component</u>

With the exception of the Food Security LSG, the final sectoral severity score of a household for the critical component will always be the maximum severity level it obtained on any of the included critical sectoral LSG indicators (or combination of indicators) (see Table 3 below as an example).

<u>(B) Combination of non-critical indicators into a final score for the non-critical component</u>

The final sectoral score for the non-critical indicators (where available) will be obtained as follows:

1. Calculate the average of all included non-critical indicators (average of binary values).

2. Assign severity levels as follows:
- Severity level 1: Non-critical indicator average <= 1/3
- Severity level 2: Non-critical indicator average <= 2/3 & > 1/3
- Severity level 3: Non-critical indicator average > 2/3

<u>(C) Combination of the critical and non-critical components into a final sectoral LSG score</u>

The final sectoral LSG score will be the maximum severity level reached across your critical and non-critical components. If no non-critical component is included, it will just be the result of the critical component. Figure 3 below summarizes the aggregation process.

Figure 3: Aggregation of critical and non-critical indicators into a final LSG score

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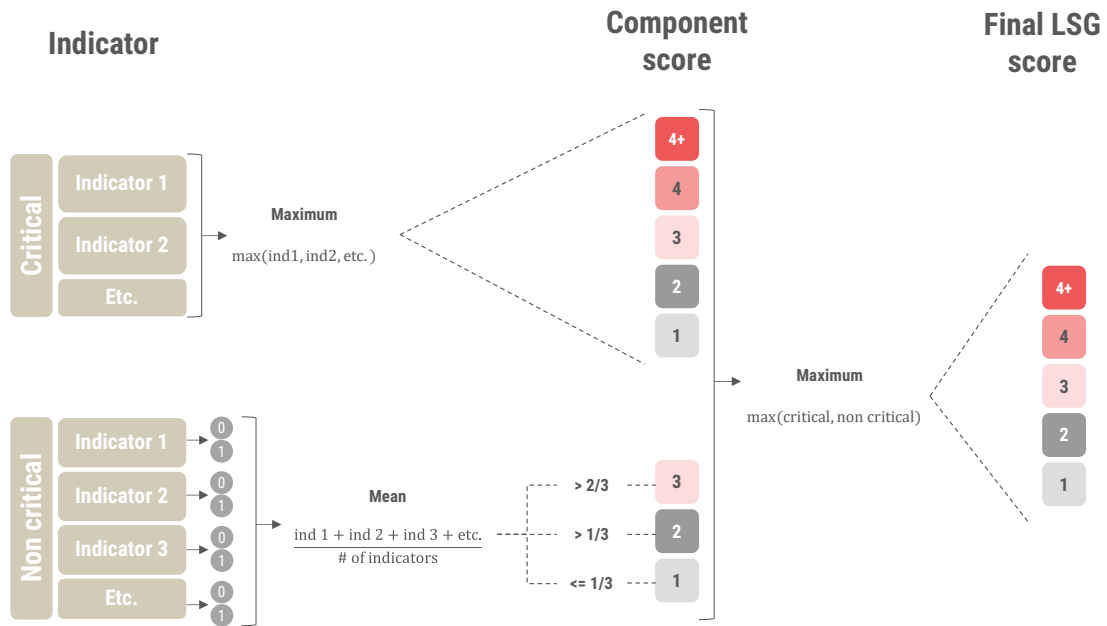
Annex 4: Multi-Sectoral Needs Index – Aggregation

The final 'multi-sectoral severity level' or Multi-Sector Needs Index (MSNI) is obtained for each household as the maximum severity level the household scored across all sectoral LSGs (see Table 4 below):

MSNI = max(Food Security LSG, Livelihoods LSG, WASH LSG, Health LSG, Education LSG, Protection LSG)

Figure 4: Example of MSNI calculation per household

	Sectoral LSG severity score						MSNI
	Food sec	Health	WASH	Protection	Education	Etc.	
HH1	4	4	4	4	3	3	4
HH2	2	2	4	2	1	1	4
HH3	3	3	3	4+	2	1	4+
HH4	2	3	1	1	2	1	3

Annex 5: List of partners

Funded by:
- Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO)
- United Nations High Commissioner for Refugees (UNHCR)
- Global Affairs Canada (GAC)
- International Organization for Migration (IOM)
- U.S. Department of State - Bureau of Population, Refugees, and Migration (BPRM)

Research design/tool development, consulting partners:
- Inter-Sectoral Coordination Group (ISCG)
- International Organization for Migration-Needs and Population Monitoring (IOM-NPM)
- Protection Sector
- WASH Sector
- Food Security Sector
- Health Sector
- Education Sector
- Shelter-Camp Coordination and Camp Management (SCCCM) Sector
- Livelihoods and Skills Development (LSD) Sector

Data collection partners:
- ACTED
- International Organization for Migration-Needs and Population Monitoring (IOM-NPM)

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