Standardised Expanded Nutrition Survey (SENS) Executive Summary

ROHINGYA REFUGEE RESPONSE COX'S BAZAR BANGLADESH

NOVEMBER- DECEMBER 2022

This assessment was supported by:

BACKGROUND

Bangladesh has been hosting Rohingya refugees for over four decades, with violent events and discriminatory treatment in their homeland of Myanmar forcing large numbers of the minority group to flee for safety in Bangladesh at different times, from 1978 through today. In 2017, a massive influx of some 700,000 Rohingya into the Ukhiya and Teknaf areas of Cox's Bazar has brought the population of the camps to 945,953 refugees. The majority reside in the Kutupalong mega camp (a large settlement of 31 camps in Ukhiya) with an estimated population of 877,639 refugees. Nayapara Registered Camp (NRC) hosts the second largest[1] population with 23,035 refugees, and Kutupalong Registered Camp (KRC) is home to 17,634 refugees. In addition, an estimated 27,000 refugees reside on the island of Bhasan Char, where they have been relocated by the Government of Bangladesh. Of the surveyed population, 18.4% are children under five years, 6% are pregnant and lactating women (PLW) and 4% are elderly.

The nutrition survey was conducted 7 November to 3 December 2022, led by UNHCR in collaboration with UNICEF and the World Food Programme (WFP). Concern Worldwide implemented the survey with support from Action Against Hunger and Nutrition Sector partners Eco-Social Development Organization (ESDO), Gonoshasthaya Kendra (GK), Relief International (RI), Society for Health Extension and Development (SHED), and Social Assistance and Rehabilitation for the Physically Vulnerable (SARPV). The surveys were approved by National Nutrition Services (NNS), and the offices of the Refugee Relief and Repatriation Commissioner (RRRC) and the Civil Surgeons in Cox's Bazar. Technical support was provided by the Nutrition Sector Assessment and Information Management Technical Working Group (AIMTWG) comprised of UN agencies and implementing partners.

HIGHLIGHTS

The overall prevalence of Global Acute Malnutrition (GAM) rates among children 6-59 months remains High according to WHO/UNICEF classification (10 - <15% = high).

12.3%
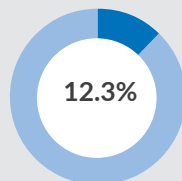
Chronic malnutrition (stunting) among children is very high/critical based on WH0 /UNICEF threshold of ≥30%.

>35%
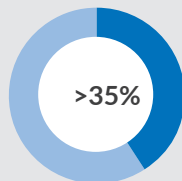
Nutrition status by Mid upper arm Circumference (MUAC) <210mm) among pregnant and lactating women overall prevalence of <2.0%

< 2%
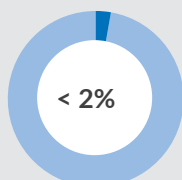
Crude and under-five mortality rates are well, below emergency levels of CMR rates of <1 death/10,000/day and U5MR rates of <2 death/10,000/day.

<0.2 CMR   **<0.4** U5MR
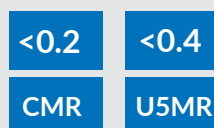
Measles vaccination coverage among children 9-59 months and vitamin A supplementation coverage among children 6-59 months was acceptable with over 85%.

>93% Measles Vaccination   **<85%** Vitamin A Coverage
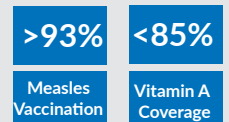
Antenatal care (any single visit) and Iron Folic supplementation was >75%

> 75%
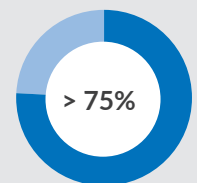
Access to protected sources of drinking water across all the camps was above 95%.

> 95%
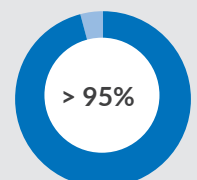
Ownership of any types of mosquito net > 95% but long-lasting insecticide treated nets (LLIN) was less than 50% (UNHCR standards of >80%.)

>95% Mosquito Net   **<50%** LLIN

[1] Joint Government of Bangladesh - UNHCR Population Factsheet (as of September 30, 2022)
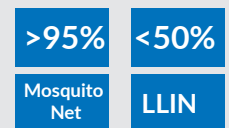
METHODOLOGY

Three cross-sectional nutrition surveys were conducted following UNHCR Standardised Expanded Nutrition Survey (SENS) guidelines. In the mega camp, a two-stage cluster sampling was employed while simple random sampling was applied in NRC and KRC. The surveys were conducted with a representative sample of 1,617 households including anthropometric measurements for 1,136 children aged 6-59 months and 2,208 women of reproductive age.

OBJECTIVES

The objectives of the survey were to determine the health and nutrition status of children aged 6-59 months and of pregnant and lactating women (PLW) aged 15-49 years. The main indicators included household demography, anthropometry, health and nutrition indicators of children and women of reproductive aged 15-49 years, morbidity, mortality, mosquito net coverage, and access to safe water

Total Sample Size Surveyed

	Kutupalong Mega Camps	Nayapara RC	Kutupalong RC
Women of reproductive age 15 - 49 years surveyed	801	706	701
Children 6-59 months surveyed	555	306	275

The survey findings will inform nutrition programmes through the design of responsive interventions while also shaping multi-sectoral recommendations and action plans aimed at improving the overall nutrition status of the refugees and maternal, infant, and young child health.
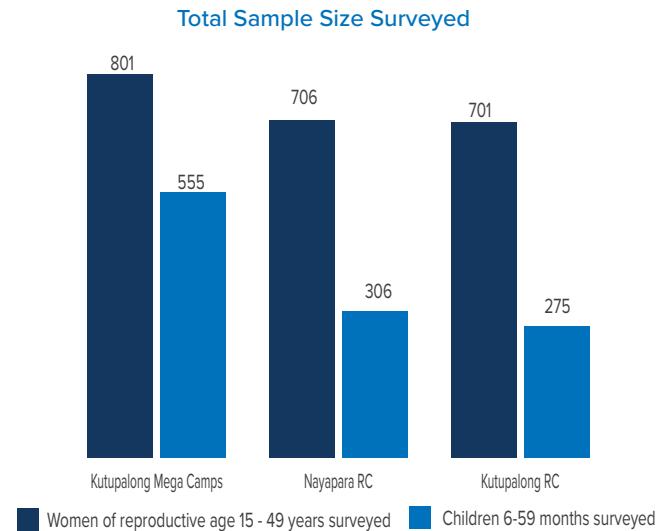
SUMMARY OF THE SURVEY RESULTS

NUTRITION STATUS OF CHILDREN

Global acute malnutrition (GAM): Based on weight for height (WHZ), the prevalence of acute malnutrition among children 6-59 months was found to be 12.3% across all camps, showing a slight reduction from 2021 when prevalence was at 13.7%. However, the reduction shows no significant statistical difference (P=0.6). The prevalence of malnutrition in the camps is classified as high according to WHO/UNICEF classification (10 ≤15% = high). The survey specific results of GAM prevalence are 9.2% in KRC, 10.3% in NRC and 12.4% in the mega camp. According to the WHO/UNICEF classification, only KRC has medium GAM prevalence (5 ≤10% = medium).

Moderate acute malnutrition (MAM): The MAM prevalence fell between 8.8% to 11.7%, with the highest rate observed in the Kutupalong mega camp at 11.7%. No major change in MAM prevalence has been observed over the years. However, it is important to note that moderately malnourished children form the biggest caseload of malnutrition in all camps, hence more priority should be given to lowering MAM rates.

Severe acute malnutrition (SAM): The SAM prevalence meets the UNHCR target of 2% of below in camp settings. Across all three surveys, the overall prevalence was 0.3-0.7% with the high of 0.7% observed in the mega camp. Overall prevalence fell from 1.3% in 2021 to 0.7% in 2022. The summary of malnutrition rates using different parameters is shown in table 1.

Table 1: Prevalence of acute malnutrition, Cox's Bazar Rohingya camps, Bangladesh

Indicator	Category	Kutupalong Mega Camps	Nayapara RC	Kutupalong RC
Acute Malnutrition by Weight for Height Z-score (WHZ)	GAM	12.4 %	10.3 %	9.2 %
		(9.5 - 16.1)	(7.4 - 14.2)	(6.3 - 13.2)
	MAM	11.7 %	10.0 %	8.8 %
		(9.0 - 15.1)	(7.1 -13.9)	(6.0 - 12.7)
	SAM	0.7 %	0.3 %	0.4 %
		(0.3 - 1.9)	(0.1 - 1.9)	(0.1 - 2.0)
Acute Malnutrition by Mid Upper Arm Circumference (MUAC)	GAM	2.5 %	2.6 %	1.5 %
		(1.5 - 4.3)	(1.3 - 5.1)	(0.6 - 3.7)
	MAM	2.2 %	2.6 %	1.5 %
		(1.2 - 3.9)	(1.3 - 5.1)	(0.6 - 3.7)
	SAM	0.4 %	0.0 %	0.0 %
		(0.1 - 1.5)	(0.0 - 1.3)	(0.0 - 1.4)
Acute Malnutrition by combined criteria (WHZ and/or MUAC and /or oedema)	Combined GAM	13.2%	11. 5%	9.9%
		(10.2 - 16.8)	(8.1 - 15.3)	(6.9 - 14.0)
	Combined MAM**	*12.3%	10.8%	9.5%
	Combined SAM	0.9%	0.7 %	0.4%
		(0.4 - 2.1)	(0.2 – 2.4)	(0.1 - 2.0)

*No oedema cases found in the survey

**Based on manual calculations since Emergency nutrition Assessment (ENA) software only provide point prevalence including confidence interval for Combined GAM and combined SAM.

**Trends of acute malnutrition in the last 5 years**

Acute malnutrition trends in the three categories GAM, MAM, and SAM shows significant improvements in wasting over the past five years (2017 –2022) as shown in figure 1 below.

Figure 1: Trends of acute malnutrition among children 6-59 months, 2017 -2022
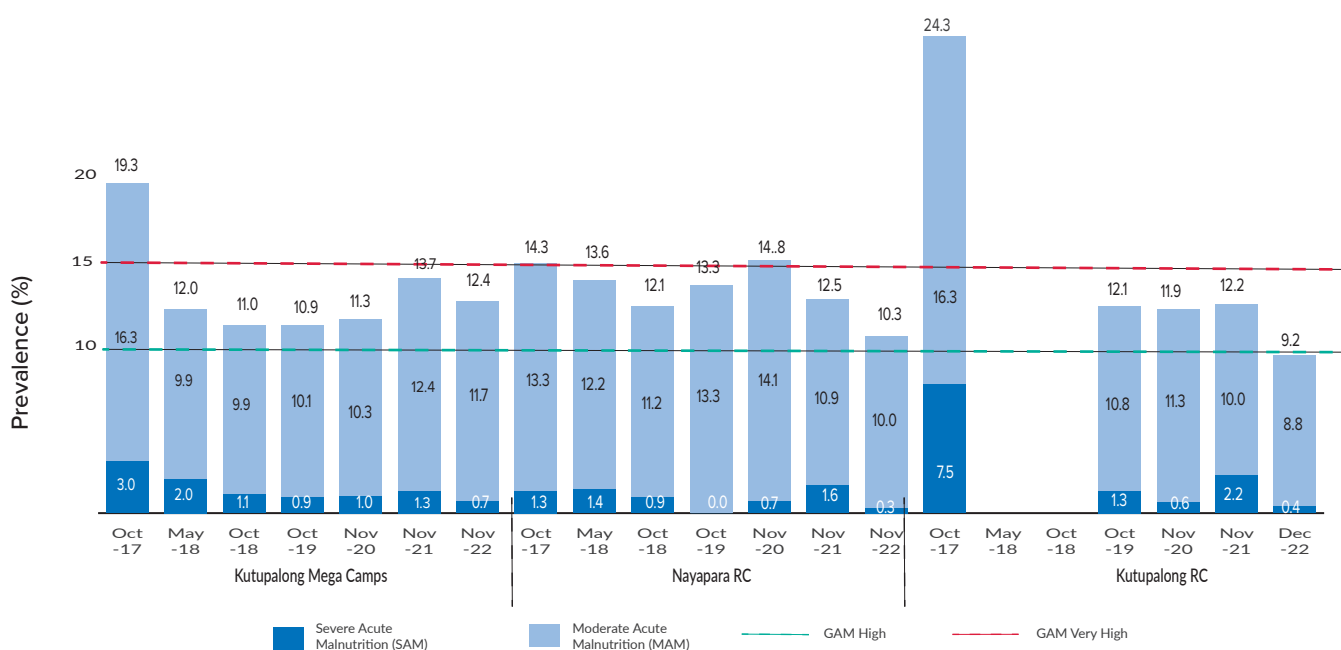
Chronic malnutrition (stunting):

The prevalence of stunting was found to be above 35% among children aged 6-59 months, which is classified as very high according to the WHO/UNICEF (≥30%). Stunting increased significantly across all camps, from 30.2% in 2021 to 41.0% in 2022, with a p-value of 0.002 (<0.05).Findings showed the mega camp at 41.2%, NRC at 37.1% and KRC at 36.5%.

Trends of chronic malnutrition among children 6-59 months, 2017 -2022
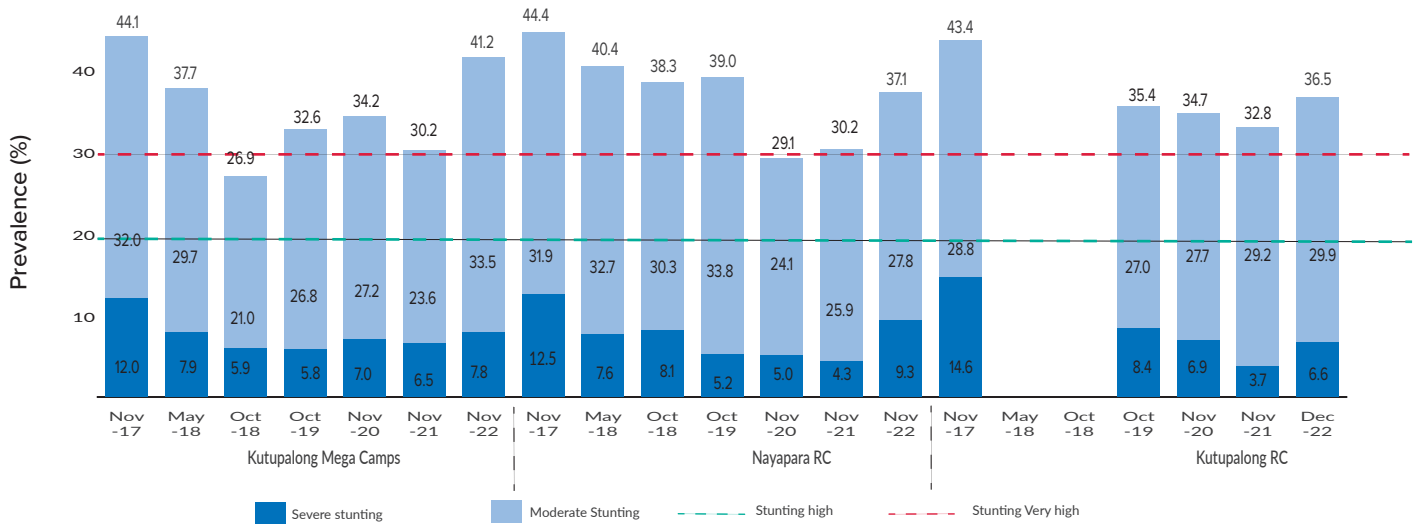
* Stunting rates are depended on age therefore interpretation of this findings should be done with caution due to age estimation as observed in the previous surveys.

A detailed analysis, focused on growth monitoring, of nutrition programme data collected several months before the nutrition survey indicated a high level of stunting. This increase may be attributed to the impact of COVID-19 restrictions on nutrition, food security and social protection programmes. In the operation, treatment of acute malnutrition was considered any critical services and the Nutrition Sector adopted interim guidelines in programme implementation where anthropometric measurements(weight and height) except MUAC only was used for admission and growth monitoring was suspended except in camps where WFP was piloting the nutrition sensitive E-voucher programme. Community based nutrition programmes such as group health education sessions, mother to mother support groups were suspended. Globally, some reports have shown the negative impact of COVID-19 on chronic malnutrition due to the food insecurity and lack of general access to services and recovery to normal after the pandemic.

NUTRITION STATUS OF PREGNANT AND LACTATING WOMEN

Nutrition Status By MUAC:
Wasting remained low among pregnant and lactating women, with overall prevalence from 0-2.6%. In the mega camp, there was a slight increase from 0.9% in 2021 to 1.4% in 2022. In KRC, there was an increase from zero cases in 2021 to 2.6% in 2022, while there were zero cases of low MUAC in NRC in both years.

HEALTH SITUATION

Health indicators included in the survey were mortality over the three months recall period and incidence of diarrhea among children 6-59 months in the two weeks preceding the nutrition survey.

Mortality rates:
The mortality rates were observed to be below the emergency levels of above one death per 10,000 population per day for crude mortality rate (CMR) and two deaths per 10,000 population for the under-5 mortality rate (U5MR). Survey specific rates showed an increase in U5MR from 0.19 in 2021 to 0.35 in 2022 in the mega camp, while there were decreases in NRC and KRC, falling from 0.62 to 0 and 0.8 to 0 respectively. Despite the COVID-19 pandemic and frequent surges of diseases in the camps, the mortality situation was found to be stable

[2] The impact of covid-19 on the reduction of Child Stunting over the next two decades
[3] Child malnutrition and COVID-19: the time to act is now

**Table 2: Crude and under 5 death rate, Cox's Bazar Rohingya camps, Bangladesh**

Indicator	Kutupalong Mega Camps	Nayapara RC	Kutupalong RC
Crude death rate (CDR)	**0.19**	**0.04**	**0.16**
	(0.08-0.4)	(0.01-0.21)	(0.07-0.37)
Under 5 death rates (U5MR)	**0.35**	**0.00**	**0.00**
	(0.08-1.46)	(0.00-1.04)	(0.00-1.07)

Incidence of diarrhoea:

The incidence of diarrhea among children aged 6-59 months in the two weeks before the survey was less than 15% in all three survey areas, with a slightly higher incidence among children aged 6-23 months, with 22.9% in KRC and 21% in NRC.

Management of diarrhoea using ORS and Zinc tablet:

The survey found out that more than 80% of children who had diarrhea received ORS in the mega camp and KRC, and 76.5% received ORS in NRC. Similarly, NRC had the lowest rate of zinc use for diarrheal episodes at 47.1%, while the mega camp and KRC had less than 70%.

Trends of diarrhoea incidence among children 6-59 months, 2017 -2022

Legend:
- Oct/Nov'17
- Apr/May'18
- Oct/Nov'18
- Sept/Oct'19
- Nov/Dec'20
- Oct/Nov'21
- Nov/Dec'22
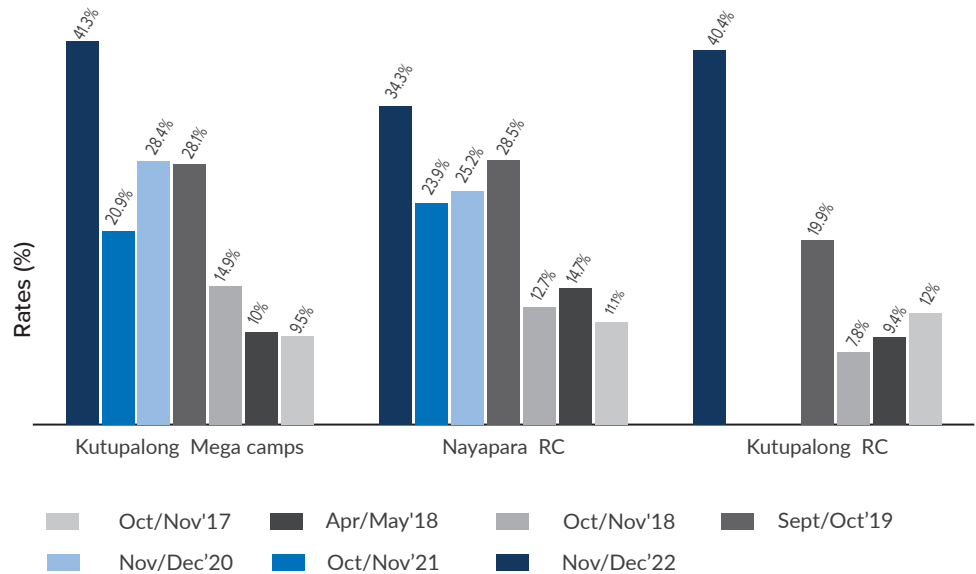
HEALTH AND NUTRITION PROGRAMME COVERAGE

The key indicators among children under five years included measles vaccination, Vitamin A supplementation and deworming coverage within six months of the survey. In the refugee camps, WFP and partners continue to implement prevention of malnutrition programmes: firstly, blanket supplementary feeding programmes covering children aged 6-23 months in the mega camp and children aged 6-59 months in the registered camps. Secondly, a nutrition-sensitive e-voucher programme (conditionally worth 3 USD as a top-up to monthly food e-vouchers), linked to growth monitoring and nutrition education, targeting children aged 24 -59 months. The programme was successfully piloted in 2021-2022 and scaled up to all 31 camps comprising the Kutapalong- and Teknaf mega camp in June 2022.

Among pregnant and lactating women, indicators included enrolment in antenatal care (ANC), iron folic acid (IFA) supplementation and blanket supplementary feeding programmes. The findings of the programme coverage are shown below

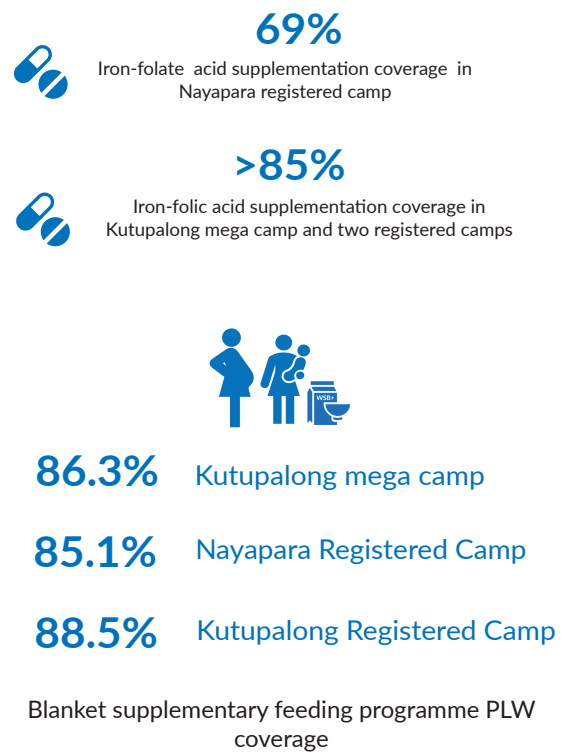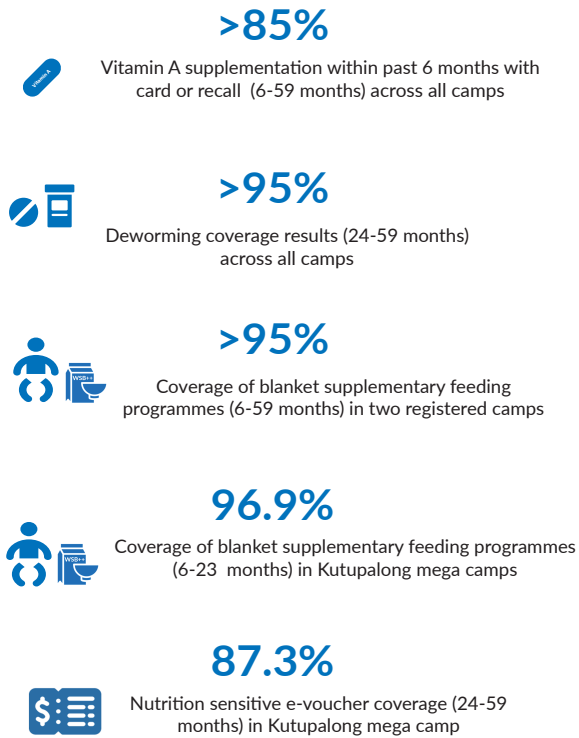| Children 6-59 months |
|---|
| **>93%** |
| Measles vaccination with card or recall (9-59 months) across all camps |

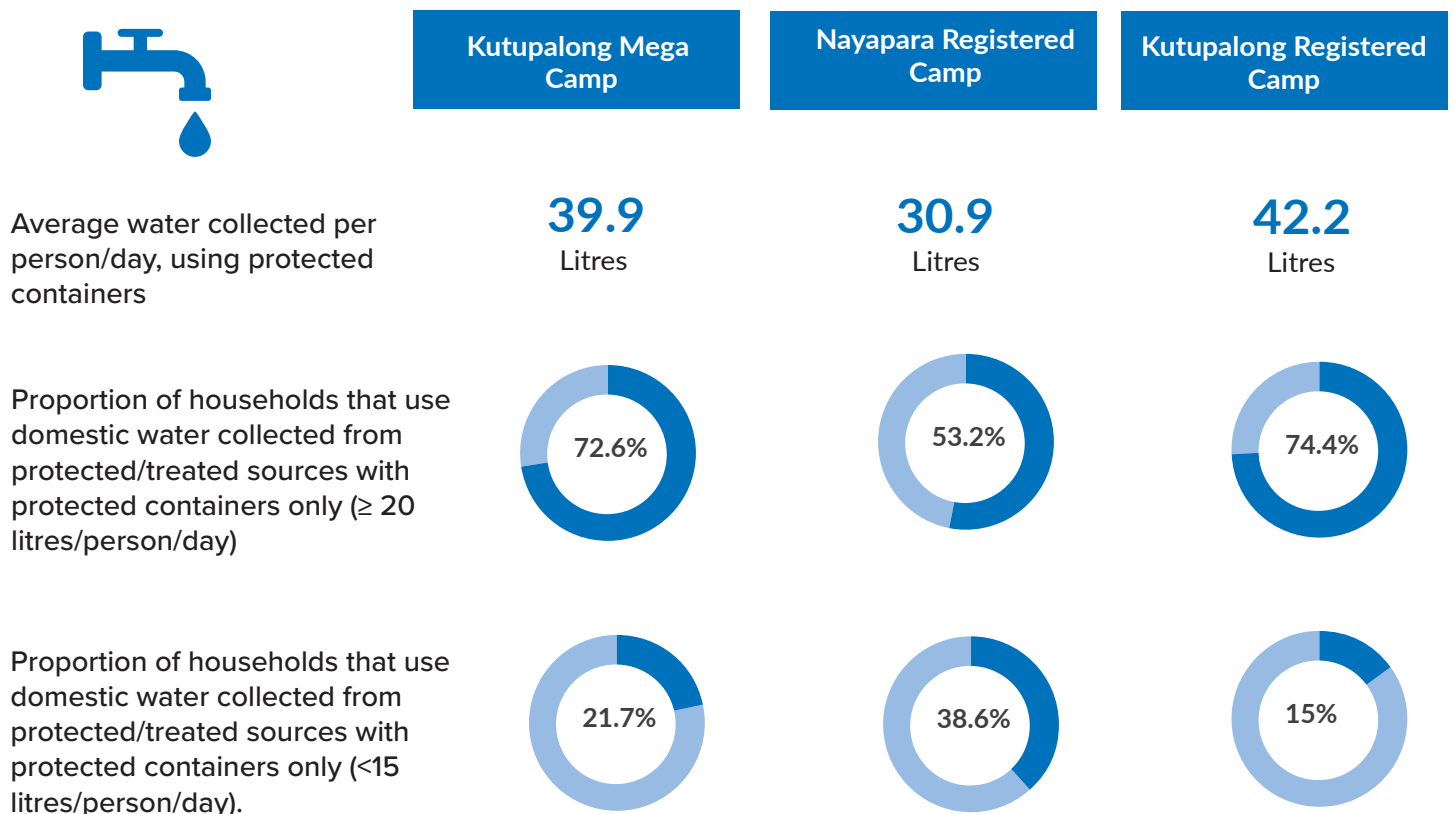| Pregnant and Lactating Women (PLW) |
|---|
| **72.4%** Nayapara Registered Camp |
| **93.4%** Kutupalong mega camp and Kutupalong Registered Camp |
| Pregnant women enrolment in antenatal care |

>85%

Vitamin A supplementation within past 6 months with card or recall (6-59 months) across all camps

>95%

Deworming coverage results (24-59 months) across all camps

>95%

Coverage of blanket supplementary feeding programmes (6-59 months) in two registered camps

96.9%

Coverage of blanket supplementary feeding programmes (6-23 months) in Kutupalong mega camps

87.3%

Nutrition sensitive e-voucher coverage (24-59 months) in Kutupalong mega camp

69%

Iron-folate acid supplementation coverage in Nayapara registered camp

>85%

Iron-folic acid supplementation coverage in Kutupalong mega camp and two registered camps

86.3% Kutupalong mega camp

85.1% Nayapara Registered Camp

88.5% Kutupalong Registered Camp

Blanket supplementary feeding programme PLW coverage

WATER SANITATION AND HYGIENE (WASH)

The population's access to and use of water, sanitation and hygiene facilities and soap were surveyed across all the camps. The main sources of drinking water were piped connection to their own shelter or their neighbours', public taps, hand pumps and tube wells. Above 95% households reported access to protected sources of drinking water with 100% coverage in the two registered camps and 99.7% in the mega camp.

	Kutupalong Mega Camp	Nayapara Registered Camp	Kutupalong Registered Camp
Average water collected per person/day, using protected containers	**39.9** Litres	**30.9** Litres	**42.2** Litres
Proportion of households that use domestic water collected from protected/treated sources with protected containers only (≥ 20 litres/person/day)	72.6%	53.2%	74.4%
Proportion of households that use domestic water collected from protected/treated sources with protected containers only (<15 litres/person/day).	21.7%	38.6%	15%

Post emergency standard of average potable water is ≥20 L/Person/Day

MOSQUITO NET COVERAGE

The survey sought to determine rates of ownership and utilization of mosquito nets of all types and specifically of long-lasting insecticide-treated nets (LLINs). The findings indicated high mosquito net ownership of 95% and above across all the camps. However, the proportion of households owning at least one treated LLIN was below the UNHCR standard of 80% coverage.

Proportion of households with atleast one MN (anytype/LLIN) by camp
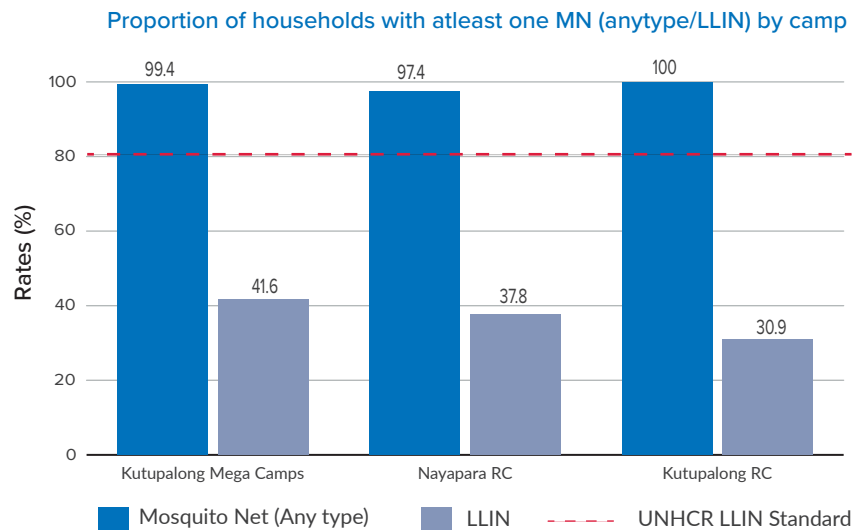
CONCLUSION AND INTERPRETATION OF THE RESULTS

The survey findings indicate that, although there has been a slight reduction in the overall prevalence of acute malnutrition among children living in the Cox's Bazar Rohingya camps, the rate is still classified high, as per the WHO/UNICEF classification of 10-15%. Stunting also remains high, above the critical levels of 30% or more as observed in the past three years. The results depict a concerning state of malnutrition in the camps, considering aggravating factors such as surges in disease outbreaks, catastrophic weather conditions, and reduced availability of humanitarian funding all of which could affect the implementation of nutrition services.

There was a reduction of diarrhea incidence among children 6-59 months. However, the rate was slightly higher among younger children aged 6-23 months, with an observed incidence of 20% in the registered camps. More focus should be given to this age group, as the majority of the children enrolled in the nutrition programmes are younger children.

In terms of health and nutrition programmes coverage, most indicators such as vitamin A supplementation, deworming, blanket supplementary feeding coverage among children and pregnant and lactating women (PLW) were good. Additionally, access to and coverage of antenatal care (ANC) and iron folic acid (IFA) supplementation was good except in Nayapara Registered Camp.

Access to protected sources of drinking water was above 95%, indicating good coverage of safe drinking water sources in the camps. The average amount of water collected per household was within UNHCR targets for post-emergencies targets of 20 litres/person/day (lpppd) or above in all the surveyed camps, indicating an increase from 2021. The proportion of households that use domestic water collected from protected/treated sources with protected containers only (≥ 20 lpppd) was above 70% in KRC and the mega camp, while it was lower in NRC with 53.2% coverage. Houses collecting water with protected containers only (<15 lpppd) was highest in NRC at 38.6% coverage. This reflects the chronic water crisis in NRC where the piped water system does not provide adequate water supply to the camp. Ongoing efforts are being made by the WASH sector to address this problem, and more is needed.

Mosquito net coverage was 90% and above, showing high availability of mosquito nets of any type. However, ownership of long-lasting insecticide treated (LLIN) mosquito net coverage was found to be sub-optimal and continues to be a gap in the operation. At the time of the survey, there was a planned mass distribution by the Government of Bangladesh, and there will be increased focus on enhancing community utilization of the treated mosquito nets.

RECOMMENDATIONS AND PRIORITIES

More efforts and resources to reduce malnutrition are required through the strengthening of programmes for the prevention of acute and chronic malnutrition, as well as ensuring multi-sectoral linkages — such as improving quality management of early childhood diseases and strengthening food security and dietary diversity at the household level, with a focus on improving infant and young child feeding indicators. To ensure the sustainability of the short and medium-term actions in the Rohingya response, long-term solutions are also required, including increased livelihood and self-reliance opportunities, and strong community engagement to promote the adoption of appropriate feeding/nutrition practices and safe WASH practices. Multi-year funding is also needed for sustainability. Also to enhance effectiveness, a causal analysis is needed to understand the multi-factorial nature of malnutrition and its impact on nutrition programming.

Recommendations and priorities

The following areas were identified as priorities to be addressed:

1. Stronger collaboration, advocacy, and investments in nutrition-sensitive sectors such as (health, food security, WASH, and protection) is important to develop and implement a joint multi-sectoral action plan.

2. Critical technical and programmatic perspectives, review ongoing and current treatment and prevention of malnutrition programmes .The review can identify areas to strengthen to ensure quality of interventions and better health and nutrition outcomes.

3. Review the risk factors contributing to high rates of stunting among children aged 6-59 months through analysis of stunting drivers from previous assessments. Determine the association between wasting and stunting among Rohingya children resulting from the impact of COVID-19 on nutrition programmes. Based on the analysis, the Sector and partners should develop clear recommendations and activities.

4. Strengthen linkages with Health Sector partners to improve quality in the management of early childhood diseases and to ensure mental health and psychological support to mothers in the infant and young child feeding programmes. Ensure adequate follow-up of malnourished children and support to other children in the nutrition programmes.

5. Strengthen coordination among all health and nutrition partners and communication with the refugee population to raise awareness on the persistent high levels of acute malnutrition among children under five years. Create community-based action plan to address root causes of malnutrition and improve treatment outcomes.

6. Scale up and increase investments in nutrition prevention approaches, including social behaviour change programmes.

7. Ensure access to water and maintain SPHERE standards, focusing on improved WASH access in Teknaf where a high proportion of households fall below global standards.

8. Advocate for blanket mosquito net coverage across all camps and carry out community sensitization campaigns to improve use of long-lasting insecticide-treated mosquito netsmulti-sectoral action plan with those sectors.

SENS EXECUTIVE SUMMARY

ROHINGYA REFUGEE RESPONSE COX'S BAZAR BANGLADESH

NOVEMBER- DECEMBER 2022

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