



STANDARDIZED EXPANDED NUTRITION SURVEY (SENS) EXECUTIVE SUMMARY

ROHINGYA REFUGEE CAMPS, COX'S BAZAR, BANGLADESH,

OCTOBER – NOVEMBER 2021



This assessment was supported by:



Key Highlights

- Global Acute Malnutrition (GAM) rates among children remain in the **second-highest category (“High”)** with an upper confidence level of >15%, representing “Emergency thresholds”.
- Chronic malnutrition among children was found to be **above the Very High/Critical WHO/UNICEF threshold of ≥30%**.
- Anaemia in children 6-59 months and non-pregnant women remains **a public health concern (>40%)**.
- Low wasting prevalence (<2.0%) was found among women of reproductive age and pregnant and lactating women with a significant reduction since 2017 (as per Middle Upper Arm Circumference (MUAC) criteria).
- Younger children (6-23 months) were more malnourished, and anaemic compared to older children (24-59 months), but the stunting rate was high among the latter group.
- The status of infant and young child feeding (IYCF) varied with both optimal and sub-optimal levels across all camps.
- Crude and under-five mortality rates are well below emergency levels.
- Measles, Vitamin A, and deworming rates were within camp targets of >90% and >95% except in Kutupalong Mega Camp.
- Ownership and utilization of mosquito nets was high (>90%), but ownership and use of treated nets were below the expected targets of >80%.
- Food assistance, complemented by cooking fuel, was found to be universal at 100% except in the Kutupalong Registered Camp. However, selling of food assistance to cover other essential needs remains a challenge, although the rate of re-selling has continued to decrease each year.
- Water quality and quantity are optimal, but sanitation continues to be an issue with unsafe disposal of child stools and wider environmental factors, especially drainage in the camps.

Key Recommendations

- Strengthen community outreach activities using an integrated approach and return to active screening and referrals in the community through volunteers.
- Advocate to return to WHO nutrition programme protocols to allow admission of malnourished children identified by mixed criteria.
- Strengthen BSFP and ANC linkages among pregnant women and intensify health education on the importance of iron and folic acid supplementation and its adherence, both at the community level and during ANC visits.
- Develop a multi-sectoral Social Behaviour Change and Communication (SBCC) strategy across nutrition-specific and -sensitive interventions to address the underlying causes of malnutrition.
- Develop an anaemia strategy to address high anaemia and resulting micronutrient deficiencies.
- Enhance prevention programming and infant and young child feeding (IYCF) practices to address high levels of stunting.
- Ensure availability and accessibility of WHO-recommended LLIN treated mosquito nets across all camps
- Investigate the type of anaemia prevalent among refugees and risk factors to develop appropriate interventions.
- Explore the feasibility of introducing the Baby-Friendly Hospital Initiative in health and nutrition facilities to enhance maternal and childcare services in the camps.
- Explore food fortification options to ensure adequate access and bioavailability of micronutrients and to avert any food diversity-related deficiencies.
- Improve sanitation infrastructure in the camps to address stagnant water and general drainage.
- Strengthen livelihood options in the camp to reduce the sale of food assistance to cover basic needs.
- Improve water systems to ensure adequate water access by all the households within SPHERE standards.

Background and objectives

In 2017, extreme violence in Rakhine State, Myanmar forced an estimated 800,000 Rohingya refugees to flee across the border into Cox's Bazar district in Bangladesh. Since then, the people and Government of Bangladesh have supported them along with the national and international humanitarian community. In October 2021, an estimated 888,000 Rohingya refugees lived in the Cox's Bazar refugee settlements in two registered and 32 makeshift camps.

The Nutrition Sector in Cox's Bazar is coordinating the implementation of nutrition programmes in the Rohingya response in collaboration with UN agencies UNHCR, UNICEF and WFP, implemented by three international NGOs Action Against Hunger, Concern Worldwide, and World Concern/Medair and two national non-governmental organisations (SHED and SARPV). The Nutrition Sector implements prevention and treatment of acute malnutrition programmes, including infant and young child feeding programmes and blanket supplementary feeding programmes, in 46 Integrated Nutrition Facilities commonly referred as INF.

The services include: management of severe and moderate acute malnutrition in children aged 6-59 months and pregnant and lactating women (PLW); Outpatient Therapeutic Programme (OTP) for Children 6-59 months suffering from Severe Acute Malnutrition (SAM); Targeted Supplementary Feeding Programmes (TSFP) for Children 6-59 months and PLWs suffering from Moderate Acute Malnutrition (MAM) and three inpatient care centres for SAM with medical complications; and Blanket Supplementary Feeding Programmes (BSFP) for all other children 6-59 months and PLW who are not covered under the OTP, TSFP and BSFP programmes to prevent both acute and chronic malnutrition.

In October-November 2021, with funding and technical support from UNHCR and WFP, the Action Against Hunger Bangladesh Surveillance Team conducted the standard expanded nutrition surveys (SENS) in the Rohingya refugee camps in Cox's Bazar, Bangladesh as a multi-sectoral exercise carried out on behalf of the Nutrition Sector. The assessment was authorized by the Government of Bangladesh Ministry of Health and Family Welfare through National Nutrition Services (NNS), the Institute of Public Health Nutrition (IPHN), the Cox's Bazar District Civil Surgeon's, and the Office of the Refugee Relief and Repatriation Commissioner (RRRC) and supported by the Assessment and Information Management Technical Working Group comprised of UN agencies (mainly UNHCR, WFP, and UNICEF) and implementing partners¹ working in the camps.

The assessment's main objective was to assess the health and nutrition status of the Rohingya children and women living in camps in the Ukhiya and Teknaf Upazilas. It consisted of three population-representative, cross-sectional surveys using Standardized Expanded Nutrition Survey (SENS) methodology. The first nutrition survey was conducted in the Kutupalong Mega Camp comprising of 32

¹ Working group members include Action against Hunger (ACF), Concern Worldwide (CWW), World Concern/Medair (WCM), Society for Health Extension and Development (SHED), Social Assistance and Rehabilitation for the Physically Vulnerable (SARPV), Care Bangladesh, and Save the Children International (SCI).

newly established camps after the 2017 influx (formerly referred to as Makeshift in the previous SMART nutrition surveys) with an estimated population of 855,444 people. The second survey was carried out in the Kutupalong Registered Refugee camp (estimated population 22,918), and the third survey in Nayapara Registered Refugee camp (estimated population 17,153). The data collected included household demography, anthropometry, anaemia, morbidity, mortality, infant and young child feeding practices, food security, mosquito net coverage, and Water Sanitation and Hygiene (WASH). The assessment provides the evolving nutrition situation among the Rohingya refugees through comparison with the first Emergency Nutrition Assessment Round 1 that was conducted in October-November 2017. It will also inform timely and effective nutrition interventions as part of the ongoing humanitarian response.

Key findings

I. MALNUTRITION SITUATION

The Global Acute Malnutrition (GAM) rate remains within the second-highest tier (High category) with 10-15%. The GAM rate has dropped significantly since 2017 but remains at the same level as in 2018 when the previous survey was conducted.

Children between 6-23 months were more undernourished compared to the older age group (24-59 months). These findings are similar to ACF (Action Against Hunger)'s Nutrition Causal Analysis (December 2019), which indicated that children below two years of age were more vulnerable to acute malnutrition, and vulnerability was inversely related to the age of their mothers. The findings highlight the importance of "the first 1,000 days", from conception until the child reaches two years of age, a critical window in which the health and well-being of a pregnant and lactating woman directly impact the growth and health of her child.

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

Indicators	Prevalence	Kutuplaong Mega camp	Nayapara Registered Camp (RC)	Kutupalong Registered Camp (RC)
Acute Malnutrition by Weight for Height Z-score (WHZ)	GAM	13.7 % (10.5 - 17.7)	12.5% (9.0 - 17.1)	12.2% (8.8 - 16.7)
	MAM	12.4 % (9.4 - 16.2)	10.9 % (7.7 - 15.4)	10.0 % (7.0 - 14.2)
	SAM	1.3 % (0.5 - 3.1)	1.6 % (0.6 - 3.9)	2.2 % (1.0 - 4.8)
Acute Malnutrition by Mid Upper Arm Circumference (MUAC)	GAM	1.7 % (0.9 - 3.2)	3.9 % (2.1 - 7.0) (10)	4.4 % (2.6 - 7.6)
	MAM	1.7 % (0.9 - 3.2)	3.1 % (1.6 - 6.0)	3.3 % (1.8 - 6.2)
	SAM	0.0 % (0.0 - 0.0)	0.8 % (0.2 - 2.8)	1.1 % (0.4 - 3.2)
Acute Malnutrition by combined criteria (WHZ and/or MUAC and /or oedema)	Combined GAM	14.1 % (10.8 - 18.2)	13.7 % (10.0 - 18.4)	13.7 % (10.1 - 18.3)
	Combined MAM ²	12.8%	11.3 %	10.7%
	Combined SAM	1.3 % (0.5 - 3.1)	2.3 % (1.1 - 5.0)	3.0 % (1.5 - 5.7)

*No oedema cases were found in the survey

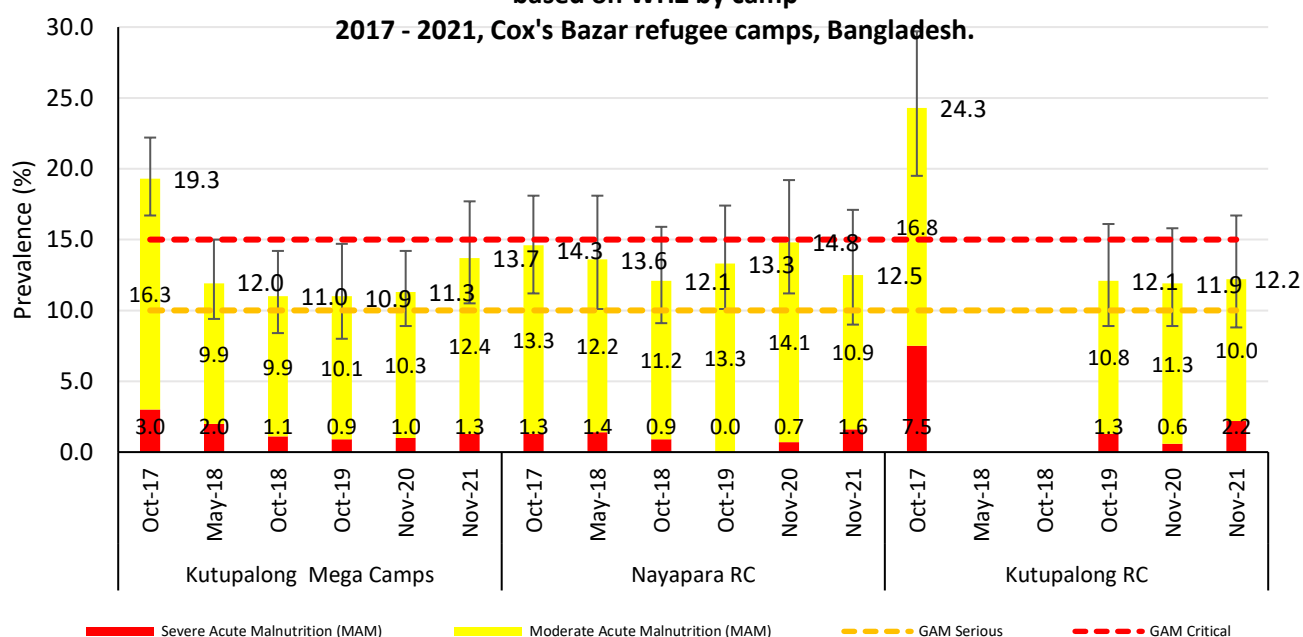
** Weighted prevalence across all camps will be included in the final report

Acute malnutrition by weight for height (WFH) and MUAC are poorly correlated in Bangladesh, including refugee camp areas. This suggests that nutrition stakeholders can use any of the three indicators for

² Based on manual calculation since Emergency nutrition Assessment (ENA) software only provides point prevalence including confidence interval for combined GAM and combined SAM.

decision-making or combined prevalence estimates by weight-for-length/height z-score (WHZ) and/or MUAC and/or oedema – as appropriate for their context ([Md. Lalan Miah 2020](#)).

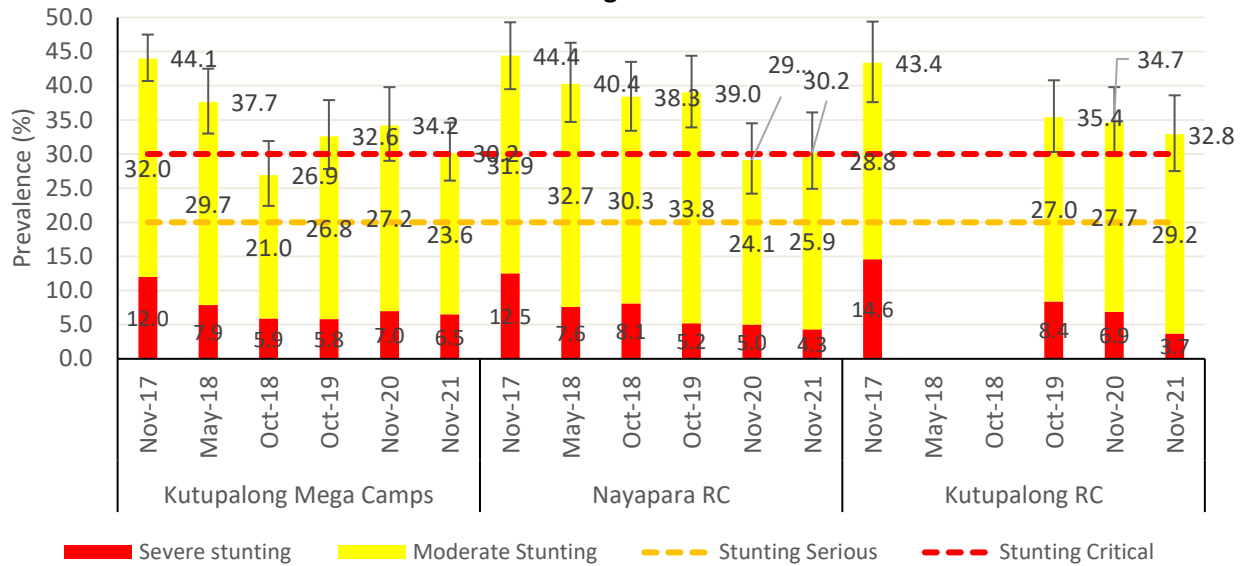
Figure 1: Prevalence of Global, Moderate and Severe Acute Malnutrition (6-59 m) based on WHZ by camp



However, considering aggravating factors, including COVID-19's effects on food security, nutrition, market dynamics and other morbidities, the prevalence could easily tip over to the highest category of **“very high/critical”** (above 15% acute malnutrition), especially in the monsoon season. Therefore, the need for concerted efforts, close monitoring and strengthening of the nutrition interventions as well as multi-sectoral efforts to address malnutrition cannot be overstated.

Chronic malnutrition (stunting) remains very high (above the >30 critical/very serious category) according to the WHO/UNICEF classification with fluctuating trends observed between 2017 and 2021. Older children are more stunted than the younger age group of 6-23 months. These findings align with the general observation in nutrition surveys that acute malnutrition decreases with age while stunting increases with age (ISCG, May 2021). More efforts are needed to bring chronic malnutrition rate to acceptable levels.

Figure 2: Prevalence of Stunting (6-59 m) by camp, 2017-2021, Cox's Bazaar, Bangladesh.

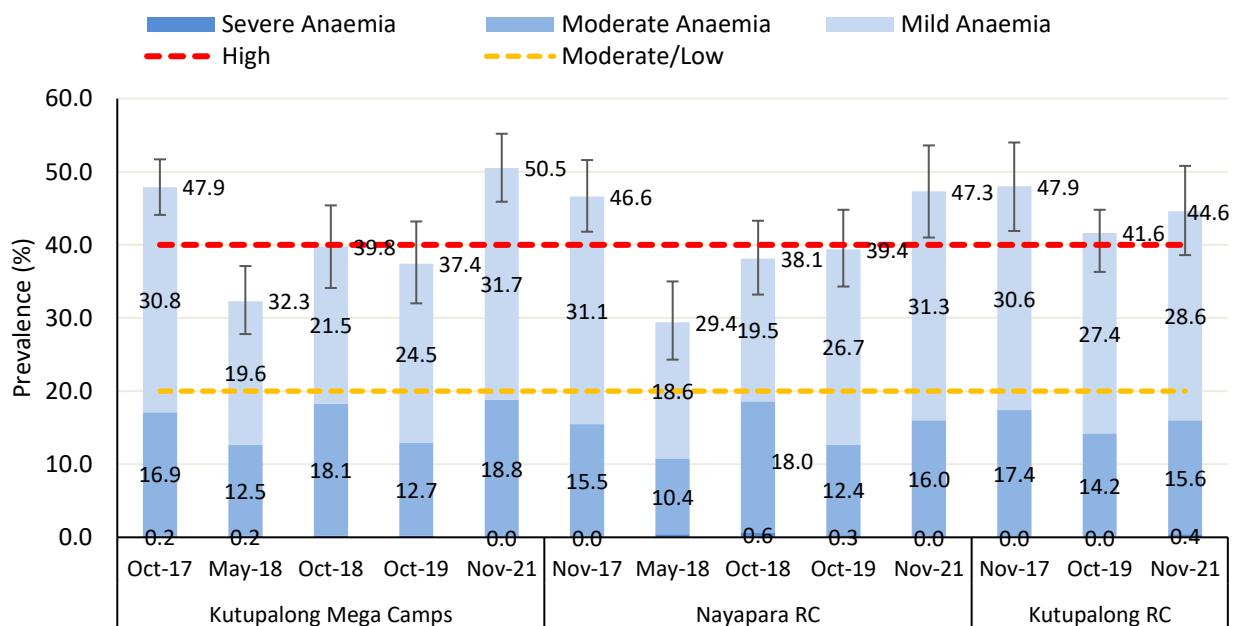


The

Anaemia rates were found to be **High (>40%)** across the three areas with an increasing trend observed over the period which is very alarming. Severe anaemia was found to be low, while moderate anaemia was above 20% across all the camps.

A significantly higher rate of anaemia (>60.0%) was observed among young children (6-23 months) and the highest prevalence was recorded in Kutupalong Mega camp at 72.8%. The anaemia rate among non-pregnant women of reproductive age was also found to be "High" across all camps (e.g., Kutupalong mega camp: 40.3%, Nayapara RC: 39.3%, Kutupalong RC: 41.6%).

Figure 3: Anaemia Categories in Children 6-59 months by camp 2017 - 2021, Cox's Bazar refugee camps, Bangladesh



By contrast, acute malnutrition prevalence in women of reproductive age (15-49 years) based on MUAC is low. A significant reduction occurred between 2017 and 2021, falling from 8.7% to 1.8% in Kutupalong Mega Camps, from 3.5% to 1.1% in Nayapara RC, and from 7.3% to 0.5% in Kutupalong RC. The reduction has been sustained in the past four years for women, but not among children. This suggests that the causes and drivers of malnutrition in women may be different from that of children although they live in the same environment. This discrepancy could be investigated using the [detailed trend analysis](#).

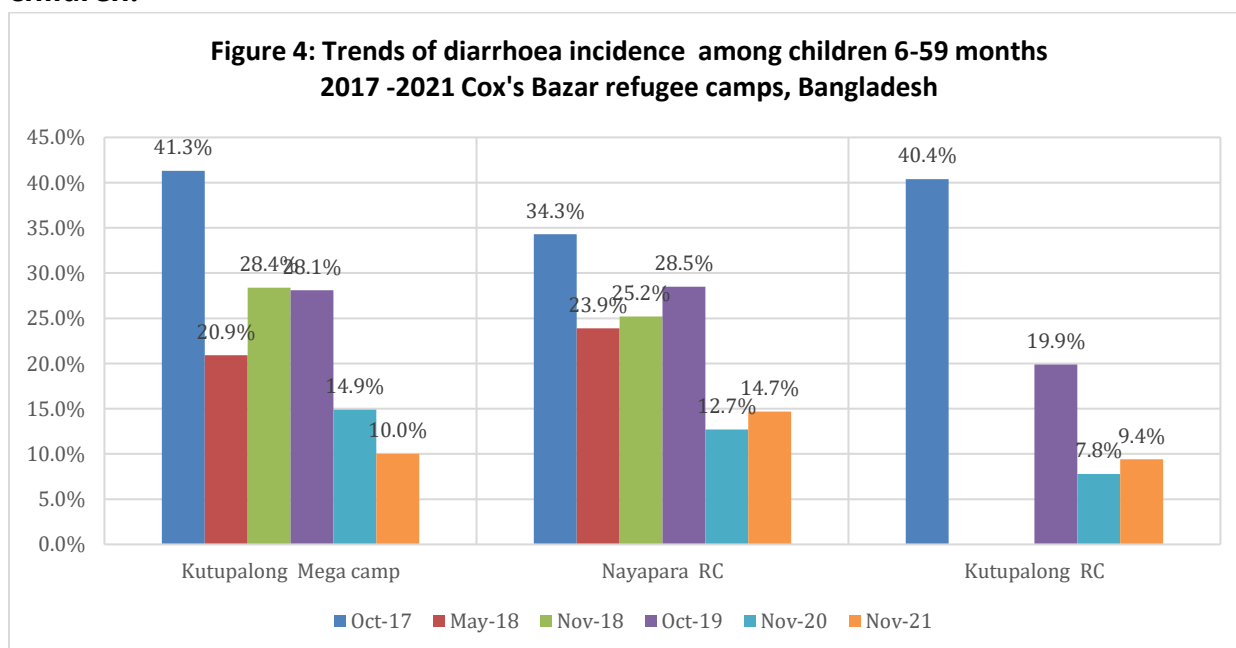
II. HEALTH SITUATION

The health situation is stable as confirmed by **crude and under-five mortality rates** which are well below the emergency levels of above 1 and 2 deaths per 10,000 population per day for crude and under-five mortality rates respectively.

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

Indicator	Kutupalong Mega Camp	Nayapara RC	Kutupalong RC
Crude death rate	0.22 (0.10-0.50)	0.18 (0.08-0.42)	0.18 (0.08-0.40)
Under 5 death rate	0.19 (0.03-1.36)	0.62 (0.17-2.21)	0.80 (0.27-2.31)

Incidence of diarrhoea episodes among children 6-59 months based on two-week recall periods before the survey was relatively low at 10% in Kutupalong Mega Camps and 9.4% in Kutupalong RC, and slightly higher in Nayapara RC at 14.7%, perhaps due to poor sanitation, especially stagnant water caused by poor drainage systems observed in the camps. Diarrhoea incidence was more prevalent among **younger children**.

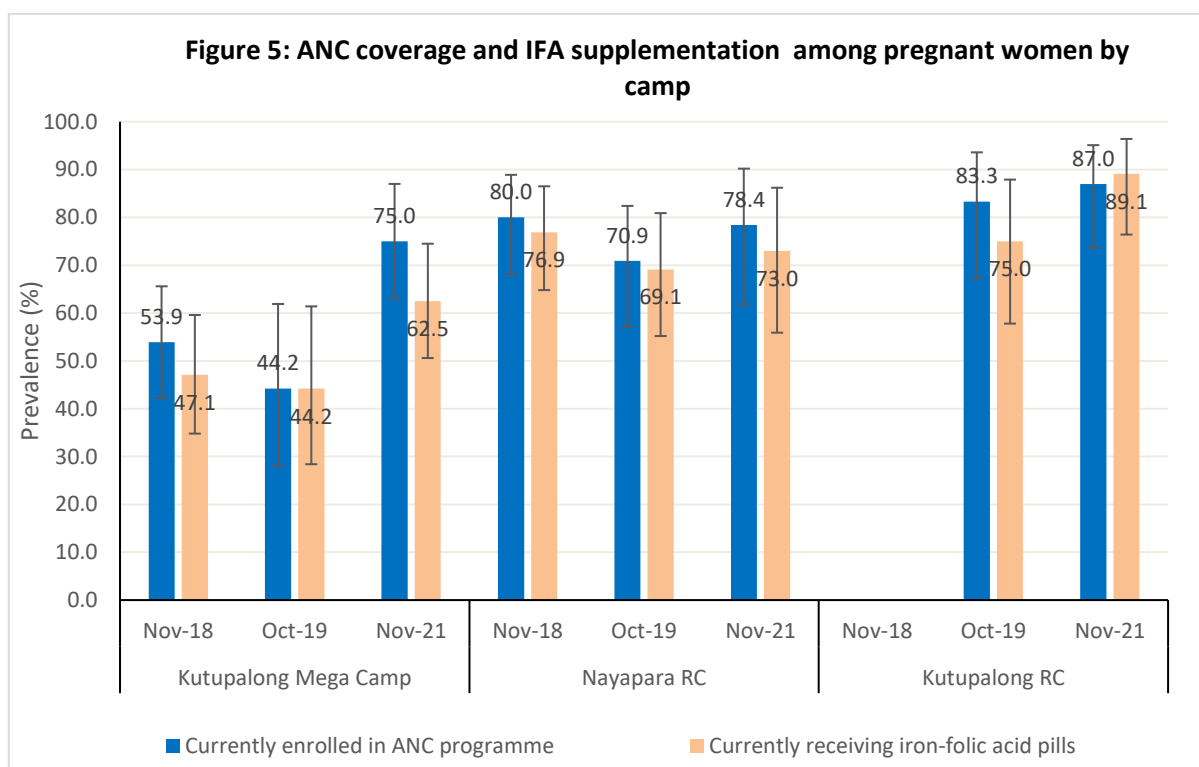


Measles vaccination coverage among children 9-59 months confirmed by card and caregivers' recall was above the 95% expected coverage required to confer immunity to the whole population in Nayapara and Kutupalong RCs at 98.8% and 95.8% respectively and slightly below the threshold at 89.6% in Kutupalong Mega Camp. Trend analysis showed measles coverage was below 95% across all camps in 2017 and 2019 assessments, so the 2021 rate is an improvement.

Vitamin A supplementation within the last six months (verified by card and recall by the mother in children aged 6-59 months) was above the 90% UNHCR target in all camps: Kutupalong Mega camps reached 93.4%; Nayapara RC 90.3% and Kutupalong RC 93.1%. As with measles, trend analysis indicated a general improvement from the low rates observed in 2019.

Deworming coverage among children 24-59 months was found to be high overall, reaching 88.4% in Kutupalong Mega Camp, above 90% in Nayapara (90.3%), and Kutupalong RCs (93.7%)

Antenatal care (ANC) coverage and folic acid supplementation (IFA) were found to be relatively high across all three camp areas. Trend analysis indicated a significant improvement in Kutupalong Mega Camp from 2018 to 2021.



Blanket supplementary feeding programme (BSFP) coverage for children 6-59 months was above 80% in all camps: 82.7% in Kutupalong Mega Camps; 84.1% in Nayapara RC; and 85.9% in Kutupalong RC. BSFP coverage for PLW was low in Kutupalong Mega Camp (71.6%) compared to Nayapara (88.6%) and Kutupalong RCs (91.5%). However, at the time of writing this report, there was an ongoing coverage survey being done, which will provide a better estimate of all programmes including OTP, TSFP, and BSFP across all camps. BSFP coverage results mirror those of ANC coverage across three areas, indicating that

improvement to above 90% across all indicators is possible by strengthening linkages in nutrition programming for children and PLW.

Mosquito net coverage was found to be high – above 90% for both ownership and utilization – in the camps, but the ownership and use of long-lasting insecticide-treated nets (LLIN) was below the expected targets. WHO recommends using LLIN for their superior retention of chemicals that repel mosquitoes and other insects compared to the normal mosquito nets widely available in local markets. The proportion of households owning at least one LLIN was 58.7% in Kutupalong Mega Camp, 42.4% in Nayapara RC and 21.3% in Kutupalong RC against the UNHCR target of >80%.

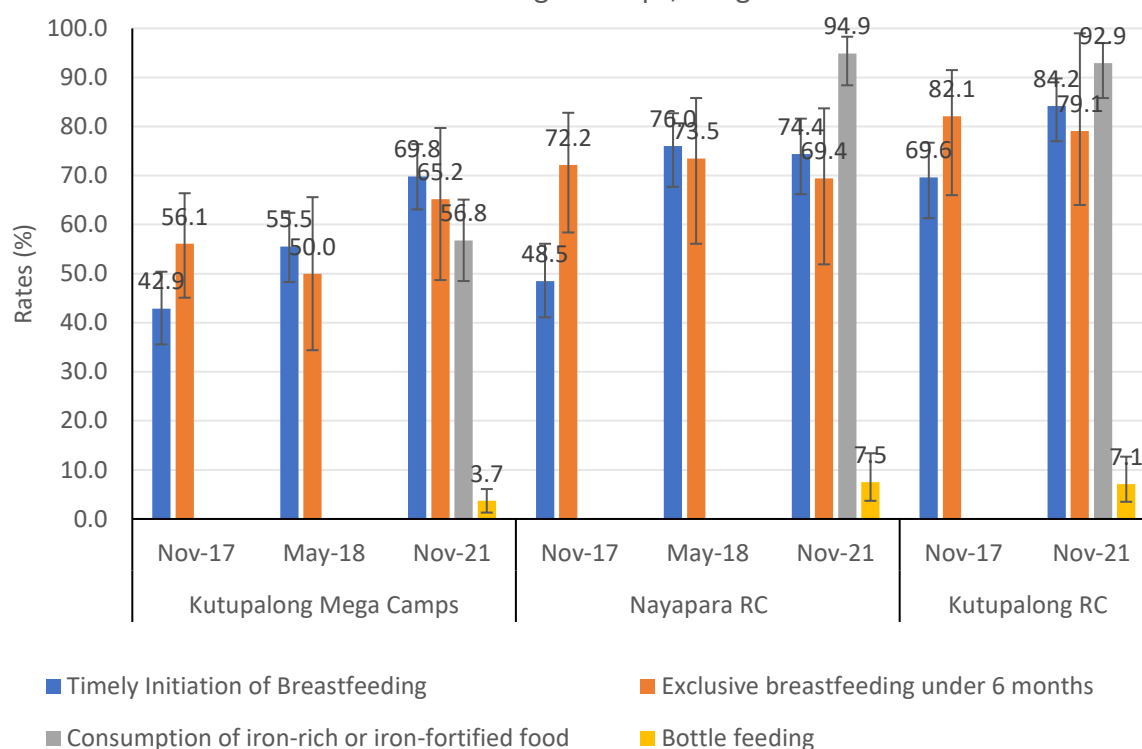
The average number of persons per LLIN is far below the recommended standard of 2 persons per LLIN, with 5.8 persons per LLIN in Kutupalong Mega Camps, 7.8 persons per LLIN in Nayapara RC and 17.2 persons per LLIN in Kutupalong RC. This indicates that most people in a household are not able to sleep under treated mosquito nets, with the highest prevalent in Kutupalong RC.

The utilization of LLIN among vulnerable groups is also low, especially for children (e.g., Kutupalong Mega Camps 41.7%, Nayapara RC 34.7%, and Kutupalong RC 14.6%) and PLW (e.g., Kutupalong Mega Camps 43.8%, Nayapara RC 19.1%, and Kutupalong RC 10.0%).

III. INFANT AND YOUNG CHILD FEEDING PRACTICES (IYCF)

Despite methodological limitations, some key IYCF indicators were assessed to get an overall snapshot of IYCF practices among the Rohingya community. However, interpretation of some indicators should be made with caution due to the low sample size. The SENS revealed a mixed bag of optimal and sub-optimal results against specific UNHCR targets.

Figure 6: Trends of key IYCF Indicators by camp 2017-2021
Cox's Bazar refugee camps, Bangladesh



Timely breastfeeding initiation within one hour was suboptimal in all the camps (target 85%). In Kutupalong Mega Camp, exclusive breastfeeding (target $\geq 75\%$) and consumption of iron-rich or fortified food (target $>60\%$) were also below the target. Bottle-feeding was still a challenge in Nayapara and Kutupalong RCs (target $<5\%$). Observation and discussions with mothers and caregivers indicate pre-lacteal feeds (traditional medications and other concoctions) are given to newborns.

IV. HOUSEHOLD FOOD SECURITY

Food Assistance:

Household-level support with food assistance was found to be universal (100%) in Kutupalong Mega Camp and Nayapara RC, but slightly lower (86.5%) in Kutupalong RC where about 13% reported buying food using their own funds. In Kutupalong Mega Camp, 23.3% of the vulnerable population received additional support equivalent to 3 USD per person per month to be redeemed in WFP Fresh Food Corners.

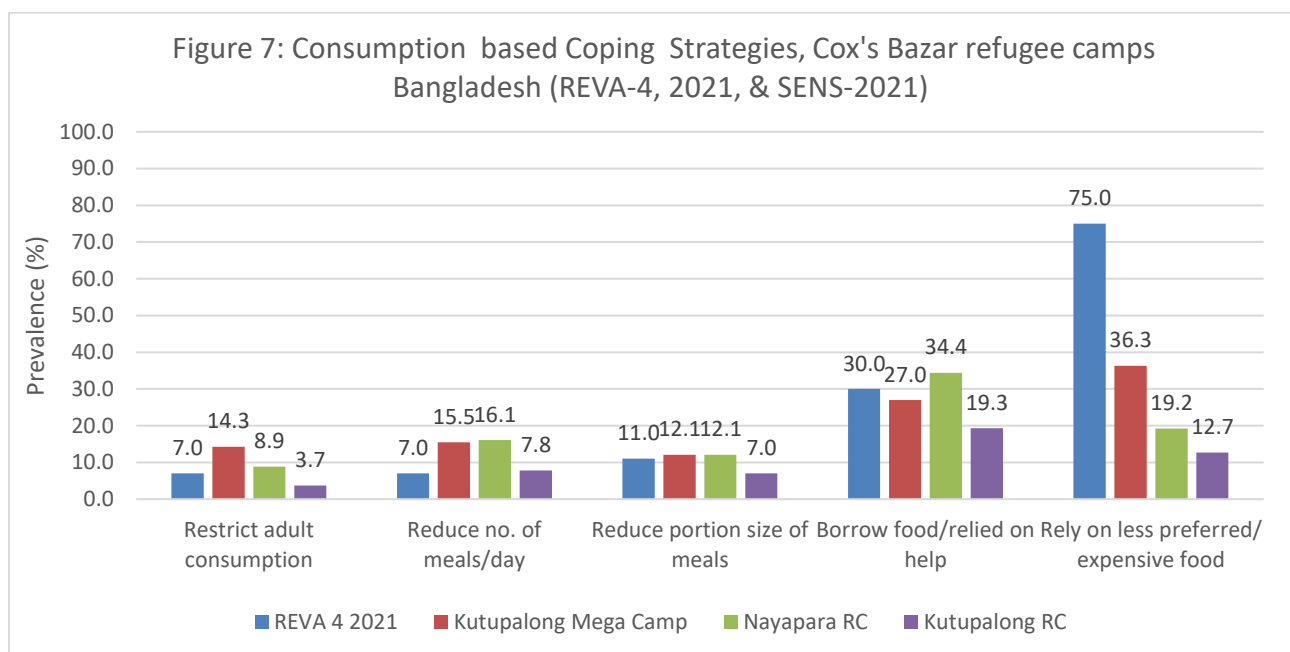
The sale of food assistance to cover essential needs remains a challenge: 17.4%, 18.3%, and 22.3% of households reported selling food in Kutupalong Mega Camp, and Nayapara and Kutupalong RCs, respectively. This is similar to findings from the 2021 UNHCR-WFP Joint Assessment Mission (JAM), which estimated that the sale of food assistance continues to be a generalized coping mechanism for meeting food and non-food needs, driving some refugees to sell up to 20% of food assistance received (UNHCR/WFP, 2021). However, REVA data continues to show a declining trend in food sale behaviours.

Unmet Needs:

The top four unmet needs across the camps were health (approximately 50%), food (approximately 40%), and hygiene, clothes, and debt repayment (approximately 20%). This indicates increased vulnerability.

Livelihood Coping Strategies:

New loans, deferred debt repayment, and reduction in household expenditure were the most common negative livelihoods-based coping strategies across the camps. Approximately 50% of households in Kutupalong Mega Camps livelihood coping strategies, and 30% and 10% in Nayapara and Kutupalong RCs respectively.



Over 80% of refugees in the camps adopted consumption-based coping strategies to deal with food shortages. In [Refugee Influx Emergency Vulnerability Assessment \(REVA\)-4](#), 75% of households relied on less preferred/expensive food as their most common coping mechanism. This was also the most common strategy in SENS findings, but the proportion of households reporting its use was lower, reaching only 36.3% in Kutupalong Mega Camp, and 19.2% and 12.7% respectively in Nayapara and Kutupalong RCs. SENS 2021 and REVA-4 findings align for the other food-based coping mechanisms. The reduced coping strategy index (rCSI) was 3.8, 2.8, and 1.4 in Kutupalong Mega Camp, Nayapara RC, and Kutupalong RC, respectively, indicating households in the registered camps had low or no coping strategies, while those in the mega camp adopt medium coping strategies.

Access to fuel and cooking energy:

All households reported using liquefied petroleum gas (LPG) as the primary source of cooking fuel; however, some households still use firewood alongside LPG, especially when the gas runs out before the next refill distribution cycle. In Kutupalong Mega Camp and Nayapara RC, LPG use was 100% and 99.6%, while in Kutupalong RC it was 91.4%. A small proportion of households, 0.5% and 8.7% respectively, reported using wood as fuel in the Nayapara and Kutupalong RCs. The households reporting receipt of fuel assistance was high in both Kutupalong Mega Camp (99.4%) and Nayapara RC (99.6%). The same was

low in Kutupalong RC (66.8%) mainly due to resistance to get the UNHCR non-food items distributions cards by a group of refugees in the camp.

V. WATER SANITATION AND HYGIENE (WASH)

All households reported access to protected water sources. Households reporting average protected water collection per person per day is above the UNHCR targets of >20 litres. Among households reporting protected water usage of <15 L/P/day, challenges in water access affected 46.9% of households in Nayapara RC, 31.1% in Kutupalong Mega Camp and 23% in Kutupalong RC. Most households reported toilet facilities and access to soap (close, or equal, to 100%).

However, proper disposal of child faeces remains a major concern. Only about one-third of households with a child under five use household or public latrines in Kutupalong Mega Camp (36.4%), Nayapara RC (28.7%), and Kutupalong RC (28.8%) respectively. Of these households, only half dispose child faeces safely, which makes children susceptible to diseases transmitted via the fecal-oral route.

Conclusion

Acute malnutrition is high but stable in the Rohingya camps in Cox's Bazar. Concerted efforts are required to reduce it further to acceptable levels and prevent deterioration to the very high classification, especially during the monsoon season.

Chronic malnutrition remains above the WHO/UNICEF thresholds, and there is a need to improve prevention programmes such as IYCF practices, and to explore and strengthen nutrition-sensitive interventions across various sectors.

Anaemia among children and women has worsened with a significant increase in Kutupalong Mega Camp; this calls for an urgent review of the anaemia mitigation strategy to explore the causes and identify relevant interventions.

While mosquito net coverage is high, the recommended long-lasting insecticide treated (LLIN) mosquito net coverage is sub-optimal, and a distribution strategy needs to be developed and harmonized across the camps.

Water quality and quantity are optimal, but sanitation continues to be a challenge due to environmental factors, especially poor drainage.

Fuel energy coverage is high in the newly established camps and Nayapara RC, but low in Kutupalong RC, and some households continue to use firewood.

Recommendations and priorities

The findings of the SENS were presented to Nutrition Sector partners on 27 December 2021. Based on this assessment, partners elaborated the following recommendations to improve the overall health and nutrition situation in the camps. More detailed activities relating to each recommendation will be included in the report.

Immediate action

- Strengthen community outreach activities using an integrated approach, especially with the new norm of COVID-19, and return to active screening and referrals in the community through volunteers.
- Advocate to return to WHO nutrition programme protocols to allow admission of malnourished children identified by mixed criteria.
- Organize a joint workshop with all relevant sectors to review findings after the report is finalized and develop a joint plan of action to address the underlying causes of high malnutrition levels in the camps.
- Strengthen the capacity of health and nutrition staff on anaemia detection and treatment and invest in equipment for measuring anaemia and ensuring adequate quantities of appropriate treatment.
- Strengthen BSFP and ANC linkages among pregnant women and intensify health education on the importance of iron and folic acid supplementation and its adherence, both at the community level and during ANC visits.
- Improve Vitamin A and deworming documentation as part of monitoring systems during annual campaigns, as well as routine health and nutrition programmes.
- Blanket distribution of mosquito nets in all camps to increase the coverage of LLINs.
- Follow up on low energy access in Kutupalong Registered Camp to address resistance to the non-food item (NFI) beneficiary card.
- Strengthen distribution and sensitization of the community and traders to more fuel-efficient stoves, including recommended brands, such as OMER.
- Strengthen post-distribution monitoring for both food assistance and LPG refills to better understand issues leading to early LPG exhaustion before scheduled refills and inform sensitization messages.
- Distribute water containers to households reporting few containers owned.

Medium-term

- Develop a multi-sectoral Social Behaviour Change and Communication (SBCC) strategy across nutrition-specific and -sensitive interventions to address the underlying causes of malnutrition. For instance,
 - a. Strengthen nutrition education in the camps, emphasizing selection and consumption of iron-rich foods;
 - b. Mobilize community outreach volunteers as a modality to educate communities about efficiently cooking food rations;
 - c. Strengthen vertical/sack gardening interventions to enhance household dietary diversity, which has a significant role in improving nutritional status.
- Develop an anaemia strategy to address high anaemia and resulting micronutrient deficiencies.

- Enhance prevention programming and infant and young child feeding (IYCF) practices to address high levels of stunting.
- Ensure availability and accessibility of WHO-recommended mosquito nets across all camps through
 - a. Advocacy to partners to adhere to WHO LLIN specification during procurement of mosquito nets for refugees;
 - b. Sensitize traders in local markets on LLIN specifications to gradually stock the recommended mosquito nets.
- Pilot energy efficiency training in nutrition centres (especially in areas where the new pressure cooker pilot is being rolled out).

Long-term

- Investigate the type of anaemia prevalent among refugees and risk factors to develop appropriate interventions.
- Explore the feasibility of introducing the Baby-Friendly Hospital Initiative in health and nutrition facilities to enhance maternal and childcare services in the camps.
- Explore food fortification options to ensure adequate access and bioavailability of micronutrients and to avert any food diversity-related deficiencies.
- Improve sanitation infrastructure in the camps to address stagnant water and general drainage.
- Strengthen livelihood options in the camp to reduce the sale of food assistance to cover basic needs.
- Conduct in-depth studies on the number of days fuel lasts as a proxy for fuel consumption to identify the correlation between stove type and health and nutrition indicators.
- Improve water systems to ensure adequate water access by all the households within SPHERE standards.
- Introduce and scale up “Baby WASH” to create a hygienic management of children excreta and environment as children faeces are poorly managed.