2026 NUTRITION (SMART) SURVEY DISSEMINATION & ENDORSEMENT WORKSHOP

FDMN Camps Cox's Bazar and Bhasan Char

Date: 28 Oct 2026

Implemented By: ACF

Funded By: UNICEF and WFP

SMART

Standardized Monitoring and Assessment of Relief and Transitions

A simplified and standardized cross-sectional survey method used in ALL contexts, from humanitarian crises to development contexts.

SMART survey is primarily used to determine:

- Nutritional status of 6–59m children
- Number of deaths over a period of time (death rates).

ACTION AGAINST HUNGER / ACTION CONTRE LA FAIM

SMART Delivers

- **Simplified, Clear Guidance**
- **Address Key Issues**
- **Emphasizes representative and Quality Data**
- **Standardized Methodology**

Background information
COX'S BAZAR

People. Protection. Nutrition. A Safer Tomorrow.



Multiple humanitarian needs

Humanitarian needs in the refugee camps in Cox's Bazar are driven by **multiple factors** including the protracted Rohingya refugee crisis and vulnerability to **climate-induced natural hazards** such as cyclones, floods, landslides, and thunderstorms.

Growing constraints

The situation is aggravated by **funding constraints**, limited health and nutrition care.

GFA Ration size has been changed. Children age group has been changed to **24–35 months** for Nutritional value voucher in 2026

Continued new arrivals

New arrivals continued to seek safety in Bangladesh throughout 2024 and 2025 due to escalating conflict in Rakhine State.

Worsening wasting

The Standardized Expanded Nutrition Survey (SENS) 2023 reveals worsening malnutrition among children with wasting at a critical prevalence level of **15.1 per cent**, increasing from **12.3 per cent** in 2022.

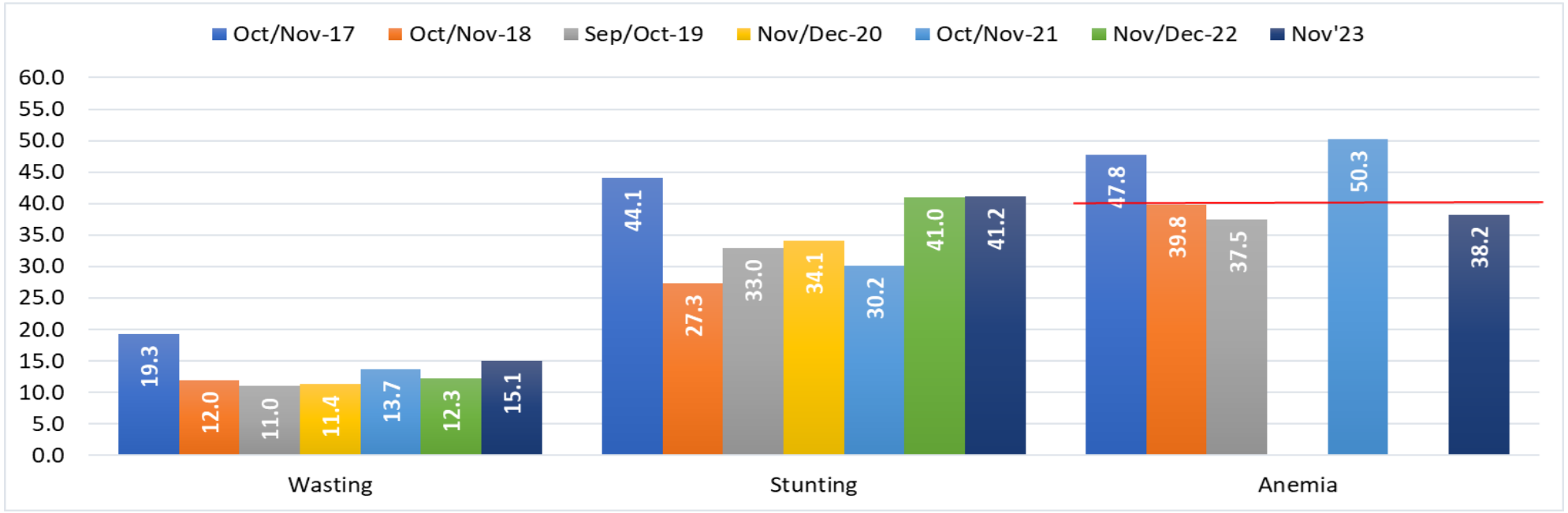
Increased admissions

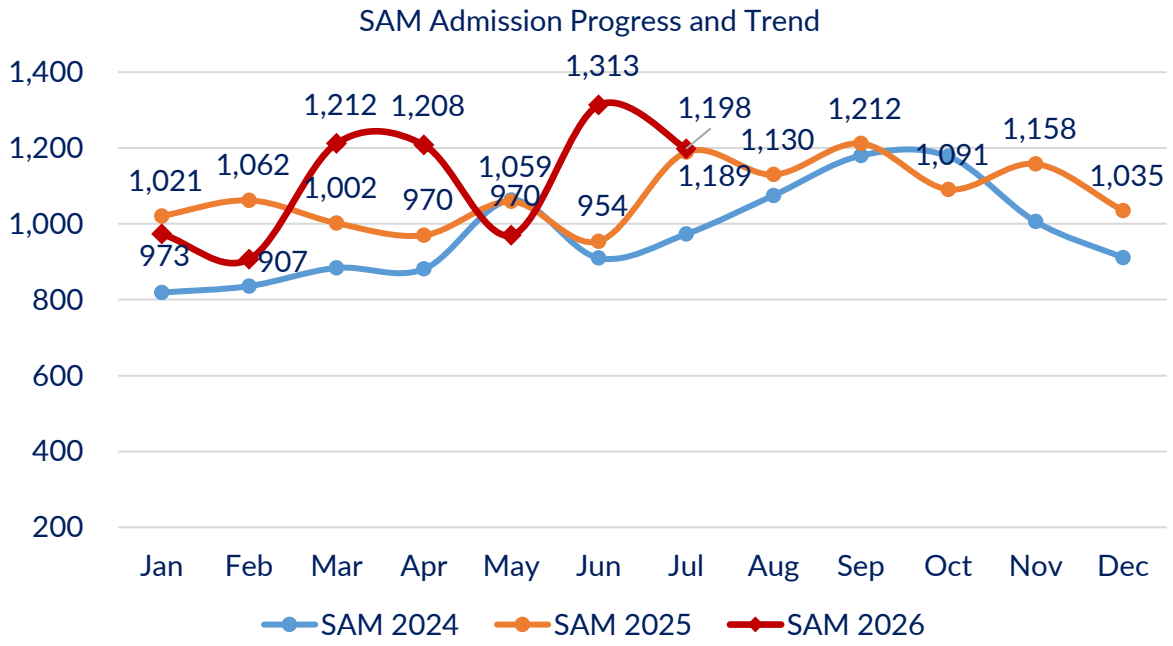
For the period 2025 & 2026, admissions of children aged 6–59 months with **severe and moderate wasting increased**.

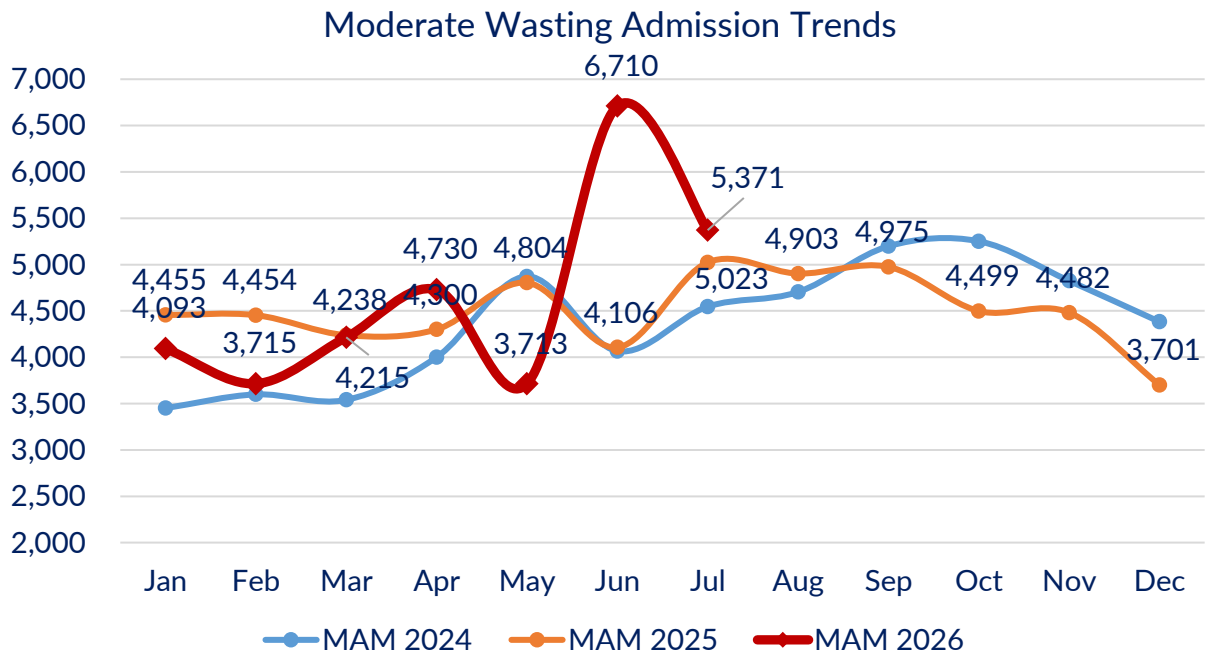
High stunting prevalence

Chronic malnutrition (stunting) remained critical (**41.2 per cent**) and unchanged in 2022 and 2023.

BACKGROUND INFORMATION COX'S BAZAR







BACKGROUND INFORMATION
BHASAN CHAR ISLAND

A safer home. A healthier tomorrow.



Establishment

Bhasan Char was established by the Government of Bangladesh to host families of the Rohingya community from Myanmar.

Aimed at addressing the overcrowding in **Cox's Bazar.**

Population and Relocation

With the MoU between Government of Bangladesh and UNHCR (on behalf of the UN) in place, UN operations have been developed on the island and as of 31 October 2022 some **30,000** refugees have been relocated there.

Current population is **33,514** (according to UNHCR data portal).

Climate Risks

Bhasan Char is vulnerable to climate risks such as cyclones, storms, frequent lightning and flooding due to monsoon and tidal surges.



Malnutrition Challenges

At Bhasan Char and similar to Cox's Bazar, malnutrition remains a problem.



Nutrition Survey Findings (SENS 2024)

The Standardized Expanded Nutrition Survey (SENS) conducted in September 2024 in Bhasan Char shows:

8.5% Global Acute Malnutrition (GAM)

0.6% Severe Acute Malnutrition (SAM)

7.9% Moderate Acute Malnutrition (MAM)

RATIONALE FOR CONDUCTING THE SURVEY

1 Generate current, representative nutrition evidence



- Update available nutrition data
- Reflect the current situation
- Children under five
- Pregnant & breastfeeding women
- Cox's Bazar and Bhasan Char

2 Track changes in the nutrition situation



Measure changes over time in:

- Acute malnutrition
- Stunting
- Mortality
- IYCF practices
- Selected maternal nutrition indicators

3 Capture the specific context of FDMN camps



- Distinct population & geographic setting
- Food security
- Living conditions
- Access to services
- Not mainland camp data

4 Identify priority needs and vulnerable groups



- Identify nutrition-related needs
- Vulnerable population groups
- Groups needing greater attention
- Support targeted programming

5 Assess nutrition service coverage and gaps



Generate evidence on access to and utilization of key preventive and lifesaving nutrition services, including IYCF, CMAM, supplementary feeding and micronutrient interventions.

6 Support programme adaptation anocoordination



Enable the Nutrition Sector and partners to review and adapt interventions based on the findings and use a common evidence base for coordination and advocacy.

7 Inform the 2027 JRP and resource planning



Provide reliable Bhasan Char Cox's Bazar & specific evidence to support priority-setting, target setting, resource allocation and advocacy for the 2027 Joint Response Plan.

8 Maintain standardized and comparable evidence



Use the SMART methodology to generate standardized indicators that can be compared with previous assessments, where methodology and population groups are comparable.

Better data.
Better decisions.
Better nutrition outcomes for children and women in Cox's Bazar and Bhasan.

Survey Objectives



- To estimate the prevalence of malnutrition in children aged 6-59 months.
- To estimate the prevalence of acute malnutrition among pregnant and breastfeeding women (PBW) using MUAC.
- To estimate the under-five mortality rate and crude mortality rate.
- To estimate the prevalence of key morbidities and health-seeking behavior among children aged 6-59 months.
- To estimate the coverage of vitamin A supplementation, deworming, and measles vaccination among children aged 6-59 months.
- To estimate the coverage and utilization of IFA/MMS among adolescent girls and PBW and prevalence of dietary diversity among women of reproductive age (15-49 years).
- To investigate key IYCF practices among children aged 0-23 months.
- To assess key hygiene and sanitation practices, including critical handwashing behaviors, soap availability, toilet/latrine access and use, open defecation, and child feces management.

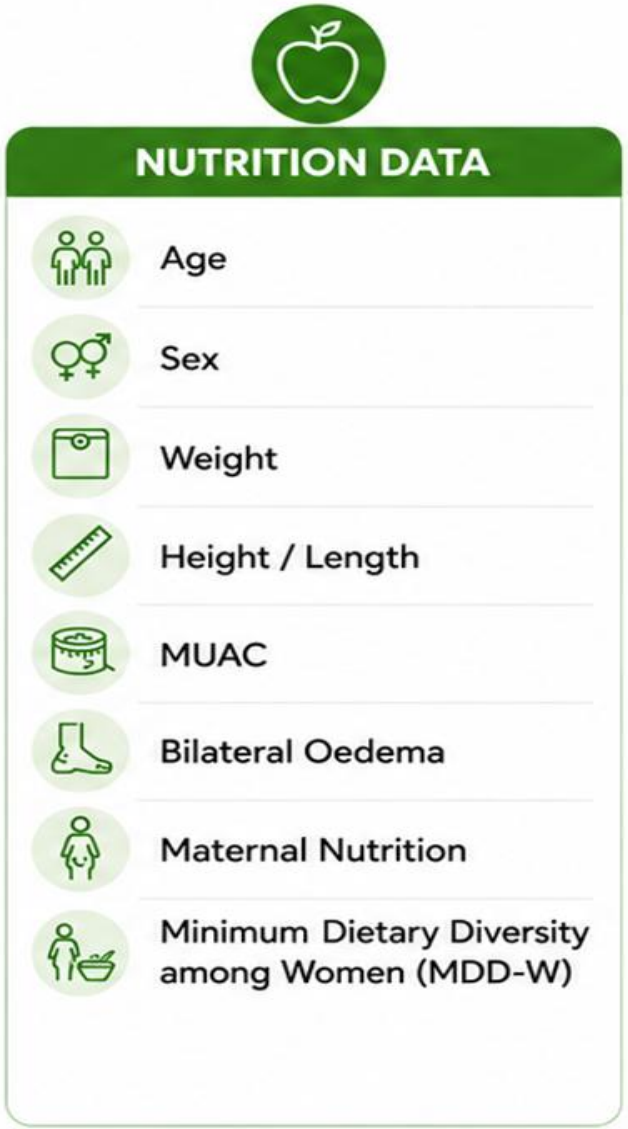
Survey Timing

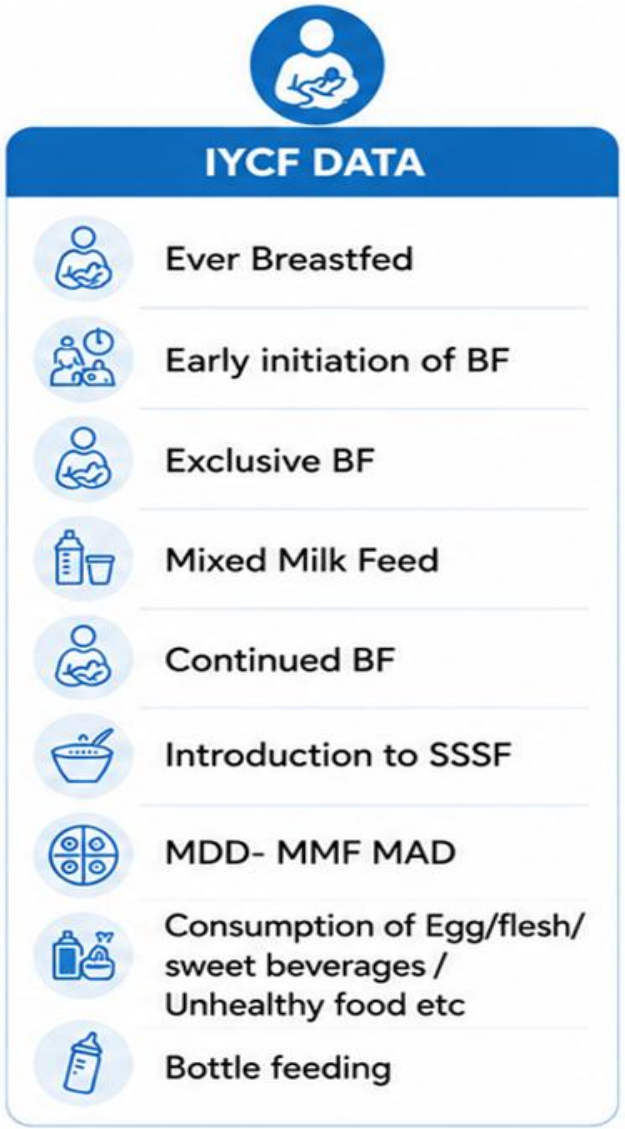
- ✓Survey Type: Full Nutrition and Mortality SMART Survey
- ✓Survey Period: September-October 2026
- ✓Location: Cox's Bazar Refugee Camp and Refugee Camps in Bhasan Char
- ✓Setting: Camps
- ✓Target Population: Rohingya Refugees
- ✓Survey Training: 5 days (Sept 1st -6th 2026)
- ✓Data Collection Duration: 11 Days in Cox's Bazar (Sep 7th – 19th 2026), and 6 days in Bhasan Char (Sep 23rd - 29th 2026)
- ✓Number of Teams: 6 teams

SAMPLE SIZE DETERMINATION COX'S BAZAR

Anthropometric Parameters	Values Cox's Bazar	Values Bhasan Char	Rationale
Estimated prevalence %	19.5	11.7	UNHCR SENS Cox's Bazar 2023 prevalence was 15.4% (95% CI: 11.9-19.5) UNHCR SENS Bhasan Char 2024 prevalence was 8.5% (95%CI: 6.1-11.7)
±desired precision %	4.0	3.5	As per SMART guidance
Design effect	1.5	1	A Design Effect of 1.5 was used due to differing prevalence rates and humanitarian assistance levels in the two camps, assuming heterogeneity in the population. For BC Considering the (SRS) simple random sampling
Average household size	5.2	4.9	UNHCR SENS survey Cox's Bazar in Nov 2023 / Bhasan Char in 2024
% of children under-five	18.6	18.9	UNHCR SENS survey Cox's Bazar in Nov 2023 / Bhasan Char in 2024
% of non-response households	3	3	Anticipated nonresponse
Children to be included	**615**	**307**	
Households to be included	**729**	**379**	
Mortality Parameters	Values used	Values used	Rationale
Estimated death rate per 10000/day	0.21	0.26	Cox's Bazar SENS survey conducted by UNHCR in November 2023. Bhasan Char SENS survey by UNHCR in Sep 2024.
±desired precision per 10000/day	0.3	0.3	As per SMART guidance
Design effect	1.5	1	Rule of thumb: with assumption of population heterogeneity.
Recall period in days	108	120	EID UL ADHA 28th May 2026
Average household size	5.2	4.9	Based on UNHCR SENS survey Cox's Bazar in Nov 2023
% of non-response households	3	3	Anticipated nonresponse
Population to be included	**1574**	**1153**	
Households to be included	**312**	**243**	
Proposed Clusters	**61**		**12 HHs per day decided after calculating different field steps including Travel**

TYPES OF DATA COLLECTED









Mortality Data: Demography and mortality information has been collected from all surveyed households by using specific recall period.

Survey Team Training

Building Skills for Quality, Reliable and Ethical Data Collection

1 Core Training (5 Days Intensive Residential Training)

1 Training Duration

5 days

Intensive residential training

2 Trained Enumerators



Qualified survey enumerators were trained

3 Training Content

- Survey objectives
- Methodology
- Ethics & safeguarding

4 Anthropometric Measurements



- Weight
- Height/Length
- MUAC
- Oedema

2 Practical Sessions & Standardization

5 Field Procedures



- Field procedures
- Interviewing techniques

6 Survey Tools

ODK

Administration of survey tools (ODK Collect application)

7 Standardization Test



- 2 batches
- 10 children (6–59 months) each

8 Repeated Measurements



- Each measurer: 10 children twice
- Supervisors: same children twice

3 Final Steps Before Deployment

9 Selection of Measurers



Measurers with good precision and accuracy selected

10 Team Assignment



Remaining team members assigned to:

- Mortality
- IYCF
- WASH

11 Pre-testing



Conducted on last day in non-survey areas (4 HHs per team)

12 Equipment Calibration



Calibration before field deployment

QUALITY ASSURANCE / SUPERVISION

Reliable Data • Better Decisions • Healthier Communities

1 Planning Stage

- Protocol review & commitment to data quality
- Sampling frame (updated)
- Training (incl. field & standardization tests)
- Equipment calibration
- Multi-agency supervision team

Protocol Dissemination & Partner Review

Wider partner consultation (including other sectors) to review indicators & questionnaire:

- Health
- WASH
- Child protection
- etc.

2 Training & Preparation

- Field tests
- Standardization tests
- Training of teams
- Equipment ready

ACF · UNICEF · WFP · Nutrition Sector · UNHCR · AIM Taskforce

Daily Data Quality Checks

Conducted by ACF, UNICEF, WFP, Nutrition Sector, UNHCR & AIM taskforce experts

3 SMART Advisor Review

- Completeness check
- Consistency check

4 Data Quality Analysis

ENA Plausibility Check

- Anthropometric data

Excel / EPI Info

- Additional variables reviewed

5 Evening Review Meetings

- Teams & supervisors
- Survey manager
- SMART advisor
- Core task force members
- Address issues in the field

6 Field Monitoring & Corrective Actions

- Supervise standardization tests
- Field testing
- Random field monitoring
- Daily plausibility checks
- Quality control tracker
- Feedback implemented

HIGH-QUALITY, RELIABLE SURVEY DATA

Trusted • Accurate • Actionable

Multiple layers of supervision, daily data verification, SMART quality checks, ENA plausibility assessment, field monitoring and issue tracking ensure the **reliability and accuracy of survey data** throughout the entire process.

ETHICAL APPROVAL AND CONSIDERATIONS

All participants were asked for informed consent, and no one was compelled to provide information for the study; participation was entirely voluntary. Before collecting data, the survey objectives were clearly explained to all participants. Enumerators refrained from collecting data from individuals who decline or show any disinterest in participating.

Enumerators are committed to maintaining the privacy of survey participants' information and data sources. They made every effort to collect data without bias. Households that did not wish to participate in the survey had their wish honored with no implications. Personally identifiable information was not retained in the dataset. All the malnourished and unrolled children found in the survey were referred to for management.

Data Quality – Plausibility Report

Criteria	Flags	Unit	Excel.	Good	Acceptable	Problematic	Cox's Bazar Score	Bhasan Char Score
Flagged data	Incl	%	0-2.5 0	>2.5-5.0 5	>5.0-7.5 10	>7.5 20	0 (0.2%)	0 (0.4%)
Overall Sex ratio	Incl	p	>0.1 0	>0.05 2	>0.001 4	<=0.001 10	0 (p=0.869)	0 (p=0.204)
Age ratio(6-29 vs 30-59)	Incl	p	>0.1 0	>0.05 2	>0.001 4	<=0.001 10	0 (p=0.306)	0 (p=0.165)
Dig pref score - weight	Incl	#	0-7 0	8-12 2	13-20 4	> 20 10	0 (1)	0 (3)
Dig pref score - height	Incl	#	0-7 0	8-12 2	13-20 4	> 20 10	0 (3)	0 (4)
Dig pref score - MUAC	Incl	#	0-7 0	8-12 2	13-20 4	> 20 10	0 (1)	0 (2)
Standard Dev WHZ	Incl	#	<1.1 & >0.9 0	<1.15 & >0.85 5	<1.20 & >0.80 10	>=1.20 or <=0.80 20	0 (0.94)	0 (0.91)
Skewness WHZ	Excl	#	<±0.2 0	<±0.4 1	<±0.6 3	>=±0.6 5	0 (-0.09)	0 (0.06)
Kurtosis WHZ	Excl	#	<±0.2 0	<±0.4 1	<±0.6 3	>=±0.6 5	0 (-0.13)	1 (0.23)
Poisson dist WHZ-2	Excl	#	>0.05 0	>0.01 1	>0.001 3	<=0.001 5	0 (p= 0.962)	0 (p= 0.943)
OVERALL SCORE WHZ =			0-9	10-14	15-24	>25	0	1

KEY SURVEY LIMITATIONS

- **Cross-sectional design:** Provides a point-in-time assessment of demographic, child health, nutrition, Maternal health, and WASH indicators.
- **Causal inference:** Observed changes cannot be causally attributed to specific interventions without triangulation with program data and complementary analytical studies.
- **Subgroup precision:** Estimates for smaller populations, including children under two years and pregnant women, may have reduced precision and require triangulation with routine program data.
- **IYCF indicators:** Interpret findings cautiously due to small sample sizes and wider confidence intervals.

Targets vs Achievement

Survey Implementation Progress

No. of Clusters

Planned clusters	Surveyed clusters	Achieved clusters in %
61	61	100%



Target Achieved

Targeted Households

Planned HHs	Surveyed HHs	Achieved HHs in %
729	720	98.8%



Nearly Complete

Anthropometry Children

Planned children	Surveyed children	Achieved children in %
615	584	95.1%



On Track

Overall Status

Survey implementation is on track with **100%** clusters completed, **98.8%** households surveyed and **95.1%** children measured.

- High coverage
- Strong participation
- Reliable data
- Evidence for action

Targets vs Achievement

Progress towards our goals

Data for a brighter tomorrow

Targeted households

Households reached through the survey

Planned	Surveyed	Achieved HHs in %
379	344	90.8%

90.8% of planned households were surveyed

Anthropometry children

Children reached through the survey

Planned	Surveyed	Achieved children in %
307	273	88.9%

88.9% of planned children were surveyed

Strong progress

We achieved over **90%** of our household target and nearly **89%** of our child target.

HEALTHY CHILDREN
STRONGER COMMUNITIES
BRIGHTER FUTURES

Demographic Information

Parameters	Cox's Bazar	Bhasan Char
Total number of HHs	720	344
Total number children under five	654	306
Total number of children (6-59)m measured	584	273
Average household size	5.6	5.0
Population surveyed	4004	1730
Percentage of children under five	16.3%	17.6%
% of Pregnant women	(61) 1.5%	(24) 1.4%
% of Breastfeeding women with infant < 6 months	(57) 1.4%	(32) 1.8%
% of Breastfeeding women with infant ≥ 6 months	(166) 4.1%	(76) 4.4%
% Adolescent Age group (10-19 years)	(403) 10.1%	(179) 10.3%
% Women of Reproductive age (15-49 yrs)	(702) 17.5%	(207) 12.0%
% of Children 0-5 months	(59) 1.5%	(32) 1.8%
% of Children 6-23 months	(195) 4.9%	(82) 4.7%
% of Children 0-59 months	(654) 16.3%	(305) 17.6%
% of Male members	1976 (49.3%)	852 (49.2%)
% of Female members	2029 (50.7%)	878 (50.8%)

WHO/ UNICEF Classification and Results interpretation

WHO and/ UNICEF Classification for the Severity of Malnutrition by Prevalence among Children under Five

WHO/UNICEF latest public health emergency thresholds for the prevalence of wasting, overweight and stunting

	Prevalence Thresholds Level [%]				
	Very high	High	Medium	Low	Very low
Wasting [WHZ]	≥ 15	10 – <15	5 - <10	2.5- <5	<2.5
Overweight [WHZ]	≥ 15	10 – <15	5 -<10	2.5- <5	<2.5
Stunting [HAZ]	≥ 30	20 - <30	10 -<20	2.5- <10	<2.5

Prevalence of GAM, MAM & SAM among children 6-59 months based on WHZ and/or edema by sex

FDMN Camps Cox's Bazar	All n = 583	Boys n = 293	Girls n = 290	p=value
Prevalence of global malnutrition (<-2 z-score and/or oedema)	**(85) 14.6 %** (12.3 - 17.3 95% C.I.)	(47) 16.0 % (12.6 - 20.2 95% C.I.)	(38) 13.1 % (9.6 - 17.6 95% C.I.)	0.378
Prevalence of moderate malnutrition (<-2 z-score & >=-3 z-score, no oedema)	(73) 12.5 % (10.2 - 15.3 95% C.I.)	(39) 13.3 % (10.0 - 17.4 95% C.I.)	(34) 11.7 % (8.3 - 16.3 95% C.I.)	0.612
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(12) 2.1 % (1.2 - 3.5 95% C.I.)	(8) 2.7 % (1.4 - 5.4 95% C.I.)	(4) 1.4 % (0.5 - 3.6 95% C.I.)	0.294

Both survey areas are classified as having high levels of malnutrition, in accordance with the WHO/UNICEF classification criteria

Bhasan Char	All n = 272	Boys n = 125	Girls n = 147	p=value
Prevalence of global malnutrition (<-2 z-score and/or oedema)	**(37) 13.6 %** (10.4 - 17.6 95% C.I.)	(17) 13.6 % (8.5 - 21.0 95% C.I.)	(20) 13.6 % (9.5 - 19.1 95% C.I.)	0.999
Prevalence of moderate malnutrition (<-2 z-score & >=-3 z-score, no oedema)	(33) 12.1 % (9.0 - 16.2 95% C.I.)	(15) 12.0 % (7.2 - 19.3 95% C.I.)	(18) 12.2 % (8.3 - 17.7 95% C.I.)	0.950
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(4) 1.5 % (0.5 - 3.9 95% C.I.)	(2) 1.6 % (0.4 - 6.4 95% C.I.)	(2) 1.4 %(0.3 - 5.5 95% C.I.)	0.906

P-value indicates statistical significance for difference between boys and girls. P<0.05 indicates significant different

Prevalence of GAM, MAM & SAM among children 6-59 months based on MUAC and/or edema by sex

FDMN Camps Cox's Bazar	All n = 584	Boys n = 294	Girls n = 290	p=value
Prevalence of global malnutrition (< 125 mm and/or oedema)	(27) 4.6 % (3.2 - 6.6 95% C.I.)	(8) 2.7 % (1.4 - 5.2 95% C.I.)	(19) 6.6 % (4.1 - 10.3 95% C.I.)	0.053
Prevalence of moderate malnutrition (< 125 mm & >= 115mm, no oedema)	(22) 3.8 % (2.5 - 5.7 95% C.I.)	(6) 2.0 % (0.9 - 4.4 95% C.I.)	(16) 5.5 % (3.3 - 9.0 95% C.I.)	0.053
Prevalence of severe malnutrition (< 115 mm and/or oedema)	(5) 0.9 % (0.4 - 2.0 95% C.I.)	(2) 0.7 % (0.2 - 2.7 95% C.I.)	(3) 1.0 % (0.3 - 3.1 95% C.I.)	0.684

Bhasan Char	All n = 273	Boys n = 126	Girls n = 147	p=value
Prevalence of global malnutrition (< 125 mm and/or oedema)	(10) 3.7 % (2.1 - 6.4 95% C.I.)	(2) 1.6 % (0.4 - 6.1 95% C.I.)	(8) 5.4 % (2.8 - 10.3 95% C.I.)	0.114
Prevalence of moderate malnutrition (< 125 mm and >= 115 mm, no oedema)	(7) 2.6 % (1.2 - 5.2 95% C.I.)	(1) 0.8 % (0.1 - 5.7 95% C.I.)	(6) 4.1 % (1.9 - 8.7 95% C.I.)	0.142
Prevalence of severe malnutrition (< 115 mm and/or oedema)	(3) 1.1 % (0.4 - 3.3 95% C.I.)	(1) 0.8 % (0.1 - 5.5 95% C.I.)	(2) 1.4 % (0.3 - 5.3 95% C.I.)	0.794

P-value indicates statistical significance for difference between boys and girls. P<0.05 indicates significant different

Prevalence of combined GAM, MAM & SAM based on WHZ and MUAC cut off's (and/or oedema) and by sex

FDMN Camps Cox's Bazar	All n = 584	Boys n = 294	Girls n = 290	p=value
Combined GAM (WHZ <-2 and/or MUAC < 125 mm and/or oedema)	(92) 15.8 % (13.3 - 18.6 95% C.I.)	(47) 16.0 % (12.6 - 20.1 95% C.I.)	(45) 15.5 % (11.8 - 20.1 95% C.I.)	0.891
Combined MAM (<-2 z-score & >=-3 z-score, no oedema) (< 125 mm & >= 115mm, no oedema)	(78) 13.4 % (10.8 - 16.4 95% C.I.)	(38) 12.9 % (9.6 - 17.2 95% C.I.)	(40) 13.8 % (10.3 - 18.2 95% C.I.)	0.758
Combined SAM (WHZ < -3 and/or MUAC < 115 mm and/or oedema	(14) 2.4 % (1.5 - 3.9 95% C.I.)	(9) 3.1 % (1.6 - 5.7 95% C.I.)	(5) 1.7 % (0.7 - 4.0 95% C.I.)	0.354

Bhasan Char	All n = 273	Boys n = 126	Girls n = 147	p=value
Combined GAM (WHZ <-2 and/or MUAC < 125 mm and/or oedema)	(40) 14.7 % (11.4 - 18.6 95% C.I.)	(18) 14.3 % (9.2 - 21.5 95% C.I.)	(22) 15.0 % (10.5 - 20.9 95% C.I.)	0.872
Combined MAM (<-2 z-score & >=-3 z-score, no oedema) (< 125 mm & >= 115mm, no oedema)	(33) 12.1 % (8.2 - 16.0 95% C.I.)	(15) 11.9 % (6.3 - 17.6 95% C.I.)	(18) 12.2 % (6.9 - 17.5 95% C.I.)	0.932
Combined SAM (WHZ < -3 and/or MUAC < 115 mm and/or oedema	(7) 2.6 % (1.3 - 5.2 95% C.I.)	(3) 2.4 % (0.8 - 7.1 95% C.I.)	(4) 2.7 % (1.0 - 7.1 95% C.I.)	0.869

P-value indicates statistical significance for difference between boys and girls. P<0.05 indicates significant different

Prevalence of Underweight among children 6-59m based on WAZ by

FDMN Camps Cox's Bazar	All n = 582	Boys n = 293	Girls n = 289	p=value
Prevalence of underweight (<-2 z-score)	(215) 36.9 % (32.3 - 41.9 95% C.I.)	(94) 32.1 % (26.1 - 38.7 95% C.I.)	(121) 41.9 % (35.7 - 48.3 95% C.I.)	**0.032**
Prevalence of moderate underweight (<-2 z-score and >=-3 z-score)	(160) 27.5 % (23.8 - 31.6 95% C.I.)	(68) 23.2 % (18.4 - 28.8 95% C.I.)	(92) 31.8 % (27.0 - 37.1 95% C.I.)	**0.041**
Prevalence of severe underweight(<-3 z-score)	(55) 9.5 % (7.2 - 12.3 95% C.I.)	(26) 8.9 % (6.2 - 12.5 95% C.I.)	(29) 10.0 % (6.8 - 14.6 95% C.I.)	0.675

Underweight was observed Very High in Cox's Bazar and High in Bhasan char , in accordance with WHO/UNICEF classification criteria

Bhasan Char	All n = 272	Boys n = 125	Girls n = 147	p=value
Prevalence of underweight (<-2 z-score)	(78) 28.7 % (23.3 - 34.7 95% C.I.)	(38) 30.4 % (22.3 - 39.9 95% C.I.)	(40) 27.2 % (20.7 - 34.8 95% C.I.)	0.578
Prevalence of moderate underweight (<-2 z-score and >=-3 z-score)	(61) 22.4 % (17.9 - 27.7 95% C.I.)	(32) 25.6 % (18.5 - 34.3 95% C.I.)	(29) 19.7 % (13.8 - 27.3 95% C.I.)	0.266
Prevalence of severe underweight (<-3 z-score)	(17) 6.3 % (4.0 - 9.5 95% C.I.)	(6) 4.8 % (2.2 - 10.3 95% C.I.)	(11) 7.5 % (4.1 - 13.2 95% C.I.)	0.385

P-value indicates statistical significance for difference between boys and girls. P<0.05 indicates significant different

Prevalence of Stunting among children 6-59 months based on HAZ

FDMN Camps Cox's Bazar	All n = 584	Boys n = 294	Girls n = 290	p=value
Prevalence of stunting (<-2 z-score)	(249) 42.6 % (38.1 - 47.3 95% C.I.)	(127) 43.2 % (37.1 - 49.5 95% C.I.)	(122) 42.1 % (35.9 - 48.5 95% C.I.)	0.809
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(193) 33.0 % (28.8 - 37.6 95% C.I.)	(104) 35.4 % (29.5 - 41.7 95% C.I.)	(89) 30.7 % (25.3 - 36.6 95% C.I.)	0.291
Prevalence of severe stunting (<-3 z-score)	(56) 9.6 % (7.4 - 12.3 95% C.I.)	(23) 7.8 % (5.0 - 11.9 95% C.I.)	(33) 11.4 % (8.1 - 15.7 95% C.I.)	0.201

Both survey areas are classified as having very high levels of Chronic malnutrition, in accordance with WHO/UNICEF classification criteria

Bhasan Char	All n = 271	Boys n = 124	Girls n = 147	p=value
Prevalence of stunting (<-2 z-score)	(82) 30.3 % (24.9 - 36.2 95% C.I.)	(40) 32.3 % (24.4 - 41.3 95% C.I.)	(42) 28.6 % (22.0 - 36.1 95% C.I.)	0.060
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(68) 25.1 % (20.3 - 30.6 95% C.I.)	(31) 25.0 % (17.7 - 34.1 95% C.I.)	(37) 25.2 % (19.2 - 32.3 95% C.I.)	0.980
Prevalence of severe stunting (<-3 z-score)	(14) 5.2 % (3.1 - 8.5 95% C.I.)	(9) 7.3 % (3.6 - 14.1 95% C.I.)	(5) 3.4 % (1.4 - 7.8 95% C.I.)	0.250

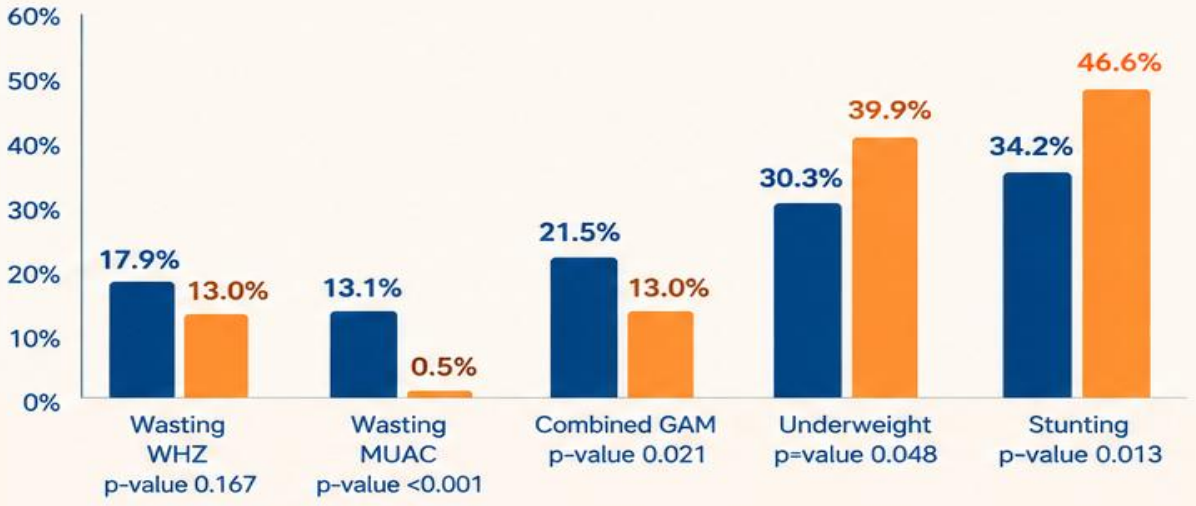
P-value indicates statistical significance for difference between boys and girls. P<0.05 indicates significant different

Comparison of Malnutrition Prevalence Among Children

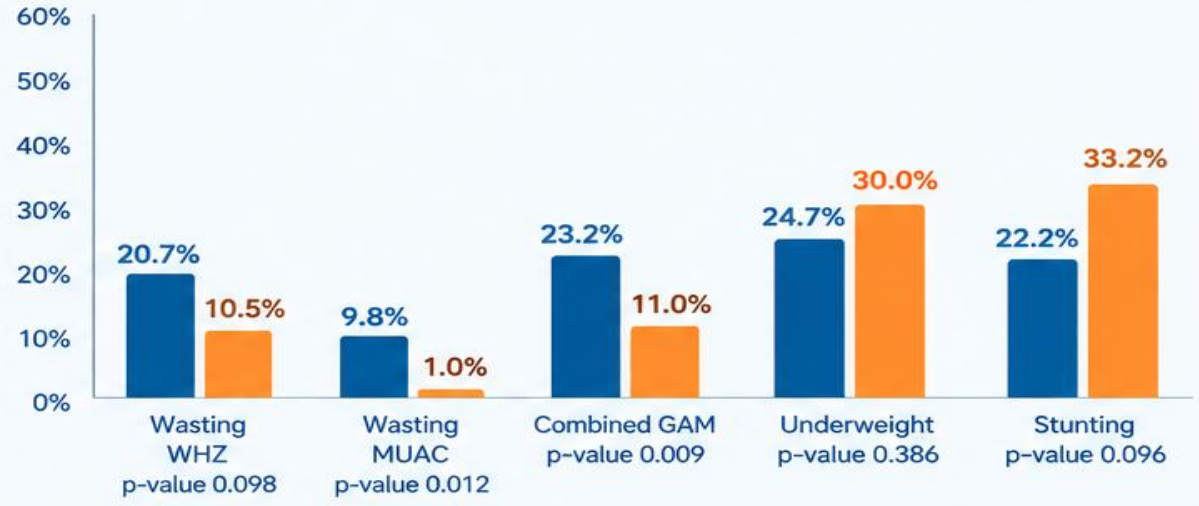
Under 2 Years and Above 2 Years

Better nutrition today for a healthier tomorrow

Cox's Bazar



Bhansan Char



Key Takeaways

- Malnutrition remains a significant concern in both areas.
- Higher prevalence of underweight and stunting is observed among children 24–59 months in both locations.

Wasting

Higher among children under 2 years in both areas.

Underweight

Higher among children 24–59 months in both areas.

Stunting

Higher among children 24–59 months in both areas.

Combined GAM

Higher among children 24–59 months in both areas.

P-values indicate statistical significance for differences between age groups.

P<0.05 indicates significant different

Cox's Bazar and Bhasan Char - Mortality Results

Parameters	Cox's Bazar	Bhasan Char
CDR (deaths/10,000/day)	0.18 (0.09-0.39)	0.05 (0.01-0.35)
U5DR (Deaths in children /10,000/day)	0.85 (0.08-1.35)	0.0
Recall Period (days)	108	120
Causes of death		
Illness/non traumatic	75.0%	(1) 100.0%
Injury/traumatic	12.5%	-
Unknown	12.5%	-
Location of death		
In current location	100%	(1) 100%

Infant and Young Child Feeding (IYCF) Practices

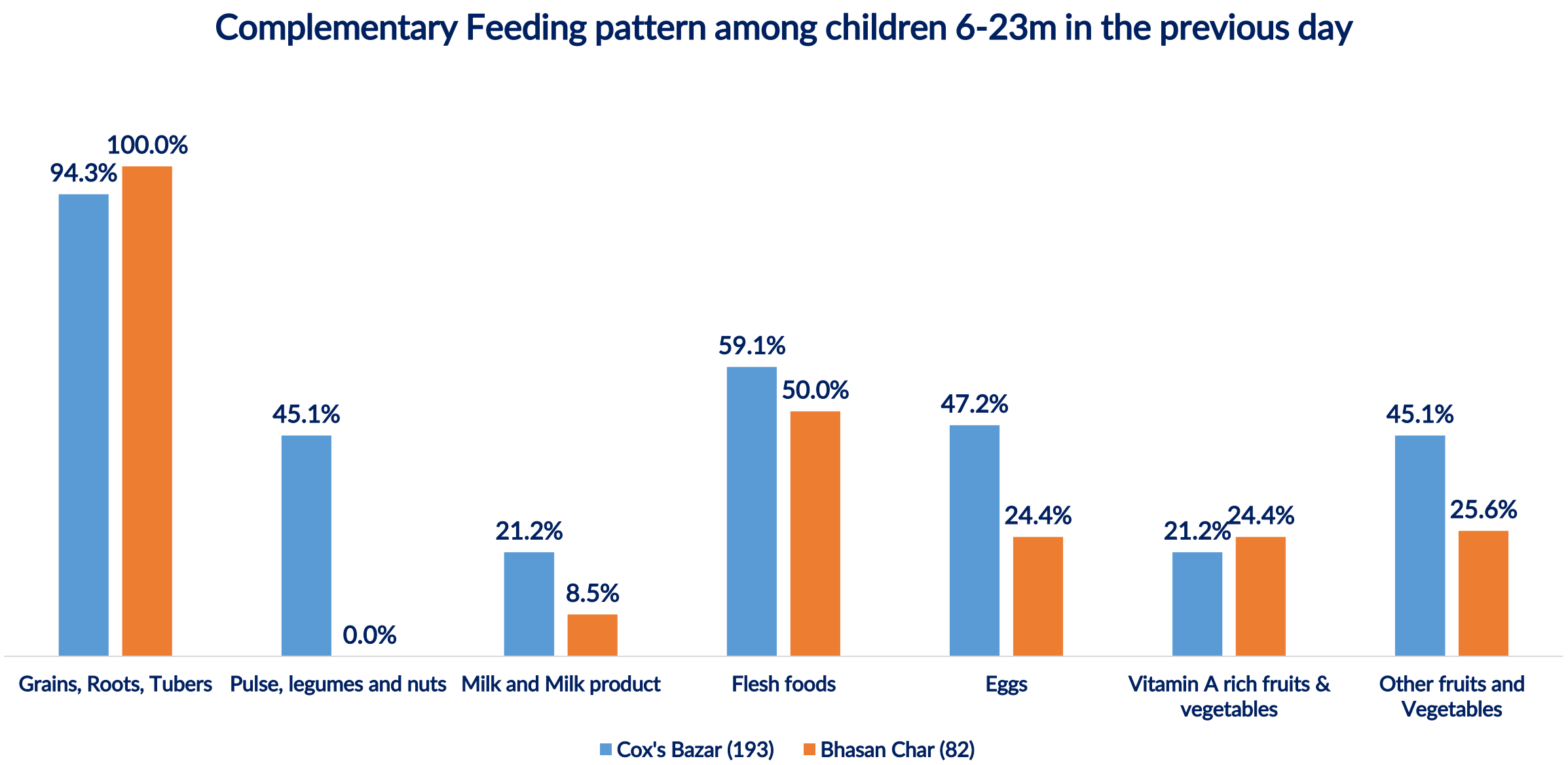
Disclaimer: Infant and Young Child Feeding indicators are being used as proxy indicators. The primary sample size calculation is based on children aged 6–59 months. Therefore, IYCF results should be interpreted with caution and may not be fully representative of the 0–23 months population.

Breastfeeding Practices	Cox's Bazar (numerator) %	Bhasan Char (numerator) %
Early Initiation of breastfeeding for children (0-23 months)	(167) 66.3%	(60) 52.6%
Exclusive breastfeeding for children (0-5 months)	(35) 59.3%	(20) 62.5%
Exclusive breastfeeding for children (0-23 months) within 2 days after birth	(172) 68.3%	(42) 36.8%
Continuation of breastfeeding (12-23 months)	(98) 76.0%	(46) 90.2%
Mixed Milk feeding (0-5 months)/any type of milk	(10) 16.9%	(4) 12.5%

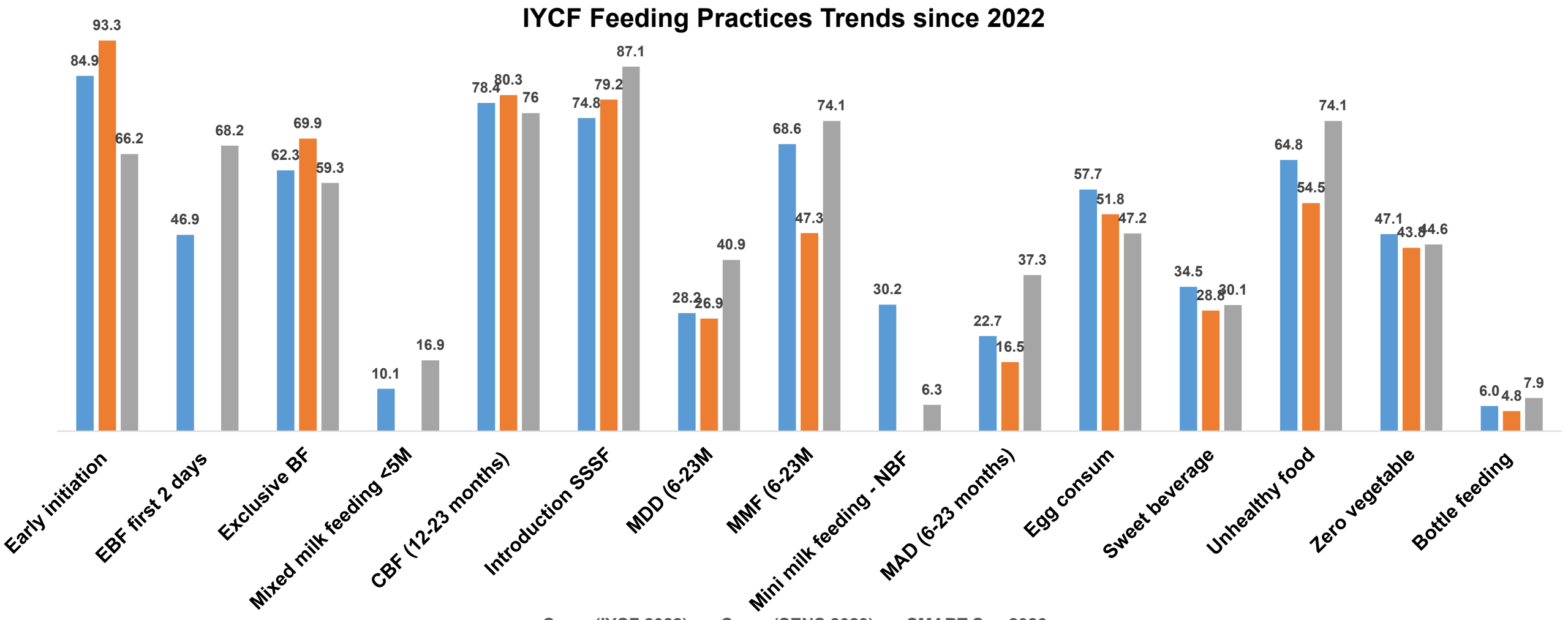
Infant and Young Child Feeding (IYCF) Practices

Complementary Feeding Practices	Cox' Bazar (numerator) %	Bhasan Char (numerator) %
ISSF - Introduction of Solid semi solid food (6-8m)	(27) 87.1%	(11) 100.0%
Minimum Milk feeding Frequency - NBF children (6-23months)	(2) 6.3%	(1) 16.7%
Minimum Dietary Diversity (6-23 months) (>=5 food groups)	(79) 40.9%	(20) 24.4%
Minimum Meal Frequency – breastfed children (6-8 months) (>=2 full meals)	(23) 74.2%	(10) 90.9%
Minimum Meal Frequency – breastfed children (9-23 months) (>=3 full meals)	(101) 62.3%	(58) 81.7%
Minimum Meal Frequency – non breastfed children (6-23 months) (>=4 full meals)	(19) 9.8%	(3) 3.7%
Minimum Meal Frequency – Among children (6-23 months)	(143) 74.1%	(71) 86.6%
Minimum Acceptable diet (6-23 months)	(72) 37.3%	(20) 24.4%
Consumption of Unhealthy foods	(143) 74.1%	(56) 68.3%
Zero Vegetables consumption	(86) 44.6%	(62) 75.6%
Consumption of Eggs	(91) 47.2%	(20) 24.4%
Consumption of Sweet Beverages	(58) 30.1%	(11) 13.4%
Bottle Feeding (0-23m)	(20) 7.9%	(5) 4.4%

Complementary Feeding among children 6-23 months



Infant and Young Child Feeding (IYCF) Practices



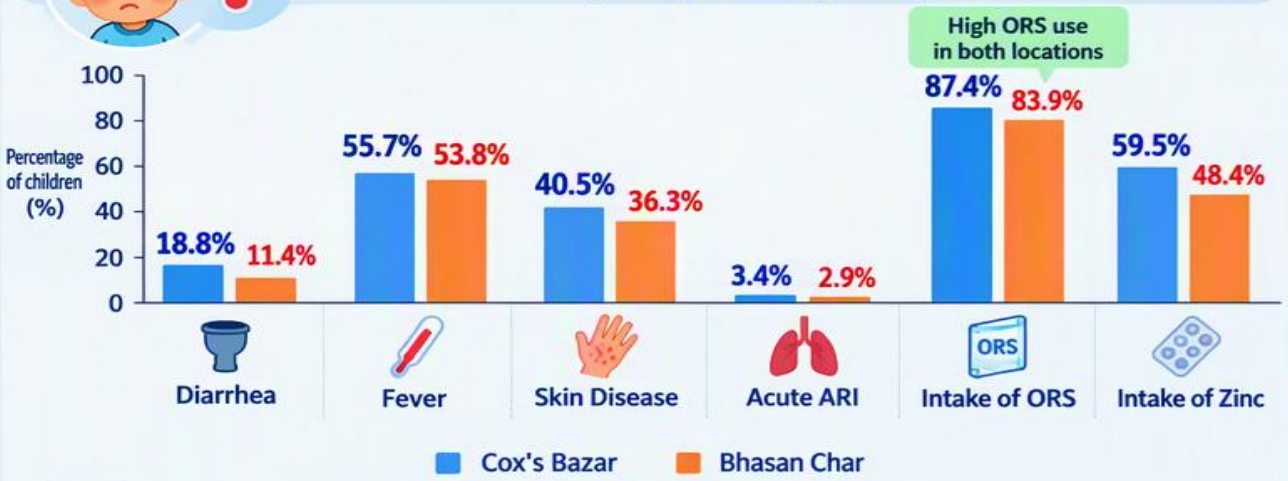
Child Morbidity, Health Seeking Behavior and Immunization Coverage

Among children aged 6–59 months

Healthy Children Brighter Tomorrows

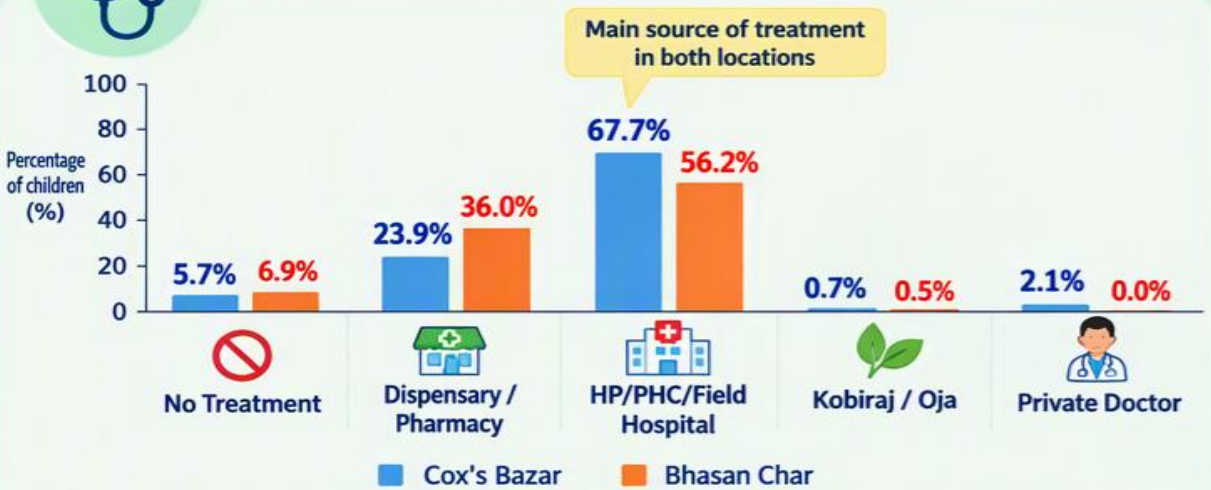
Morbidity prevalence among children 6–59 months

(14 days recall period)



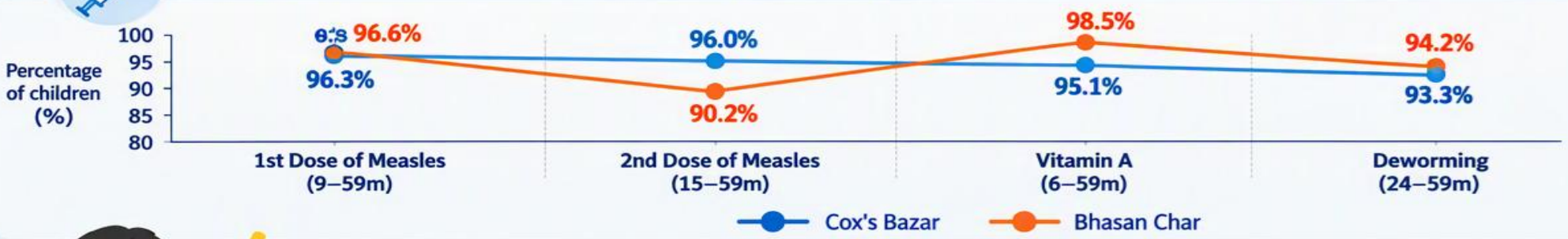
Key insight: ORS coverage exceeded 80% in both locations, while zinc intake was notably higher in Cox's Bazar.

Treatment Seeking Behaviour



Key insight: Formal health facilities were the primary source of treatment in both locations.

Measles, Vitamin A and Deworming Coverage



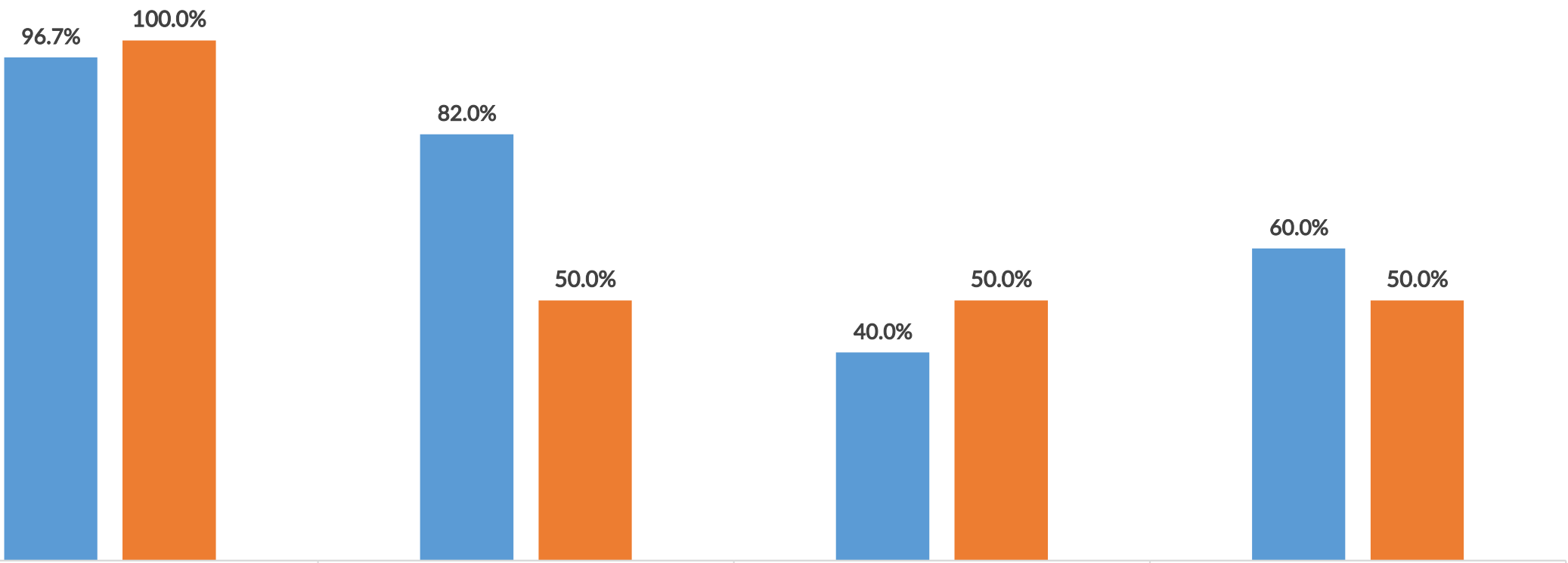
Key insight:
Immunization and supplementation coverage remained above 90% across all indicators.

Child health indicators were broadly comparable across locations, with high ORS utilization and immunization coverage, while treatment-seeking patterns differed by provider preference.

Healthy Children Stronger Communities Brighter Futures

PW ANC enrollment, session coverage and IFA/MMS Consumption

PW ANC enrollment, session coverage and IFA/MMS Consumption



	PW Enrolled in ANC	PW Currently receiving IFA/MMS	Less than 7 tablets consumed last week	7 or more tablets consumed tablets in last week
Cox's Bazar (61)	96.7%	82.0%	40.0%	60.0%
Bhasan Char (24)	100.0%	50.0%	50.0%	50.0%

Maternal Nutrition Status

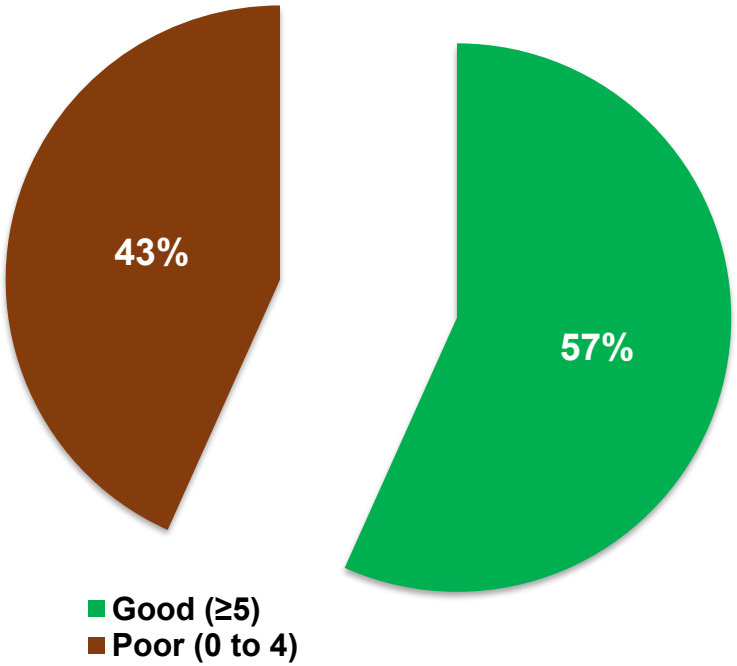
Acute malnutrition among PBW's <230mm	Cox's Bazar (numerator) % (CI)	Bhasan Char (numerator) % (CI)
Among Pregnant Breastfeeding with children <6 months [MUAC < 230 mm]	(10) 8.5% (5.9-11.9)	(6) 10.7% (4.0-21.8)
Among pregnant women s [MUAC < 230 mm]	(7) 11.5% 7.7-16.5)	(4) 16.7% (4.7-37.8)
Among lactating with children <6 months [MUAC < 230 mm]	(3) 5.3% 2.8-9.6)	(2) 6.3% (0.7-20.8)
Among lactating with children>6 months [MUAC < 230 mm]	(8) 4.8% (2.4-9.5)	(5) 6.6% [1-12.2]

Acute malnutrition among PBW's <210mm	(numerator) % CI	(numerator) % CI
Among Pregnant Breastfeeding with children <6 months [MUAC < 210 mm]	0.0%	(2) 3.6% (0.4-12.3)
Among pregnant women s [MUAC < 210 mm]	0.0%	(1) 4.2% (0.1-21.1)
Among lactating with children <6 months [MUAC < 210 mm]	0.0%	(1) 3.1% (0.0-16.2)
Among lactating with children>6 months [MUAC < 210 mm]	(1) 0.6% (0-1.6)	(5) 6.6% [1-12.2]

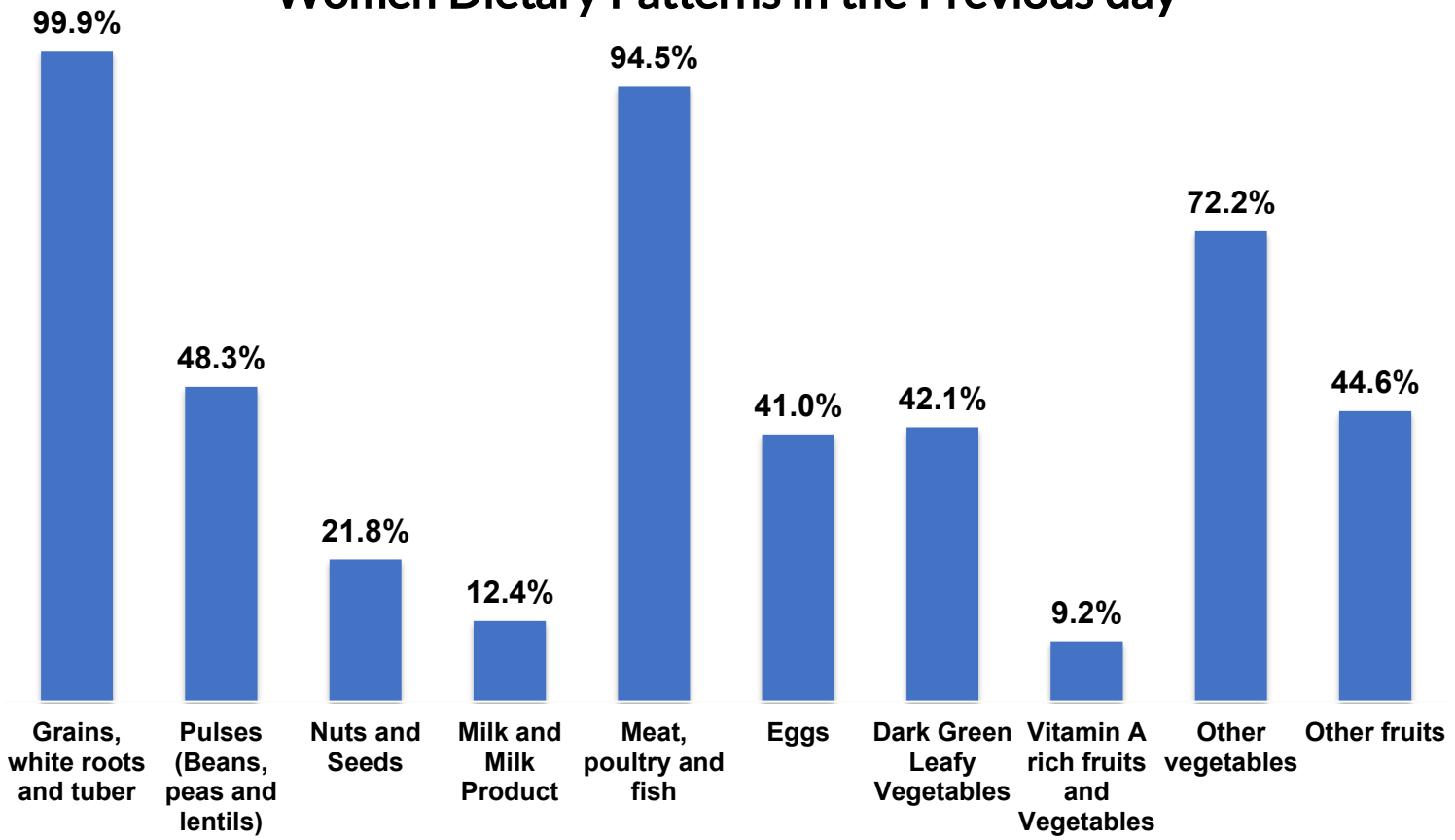
It is worth noting that no pregnant or lactating women (PBW) with a MUAC below 210 mm were identified during the survey, which may be attributable to the small sample size

Women Dietary Diversity Among 15-49 years – Cox's Bazar

Overall Women Dietary Diversity

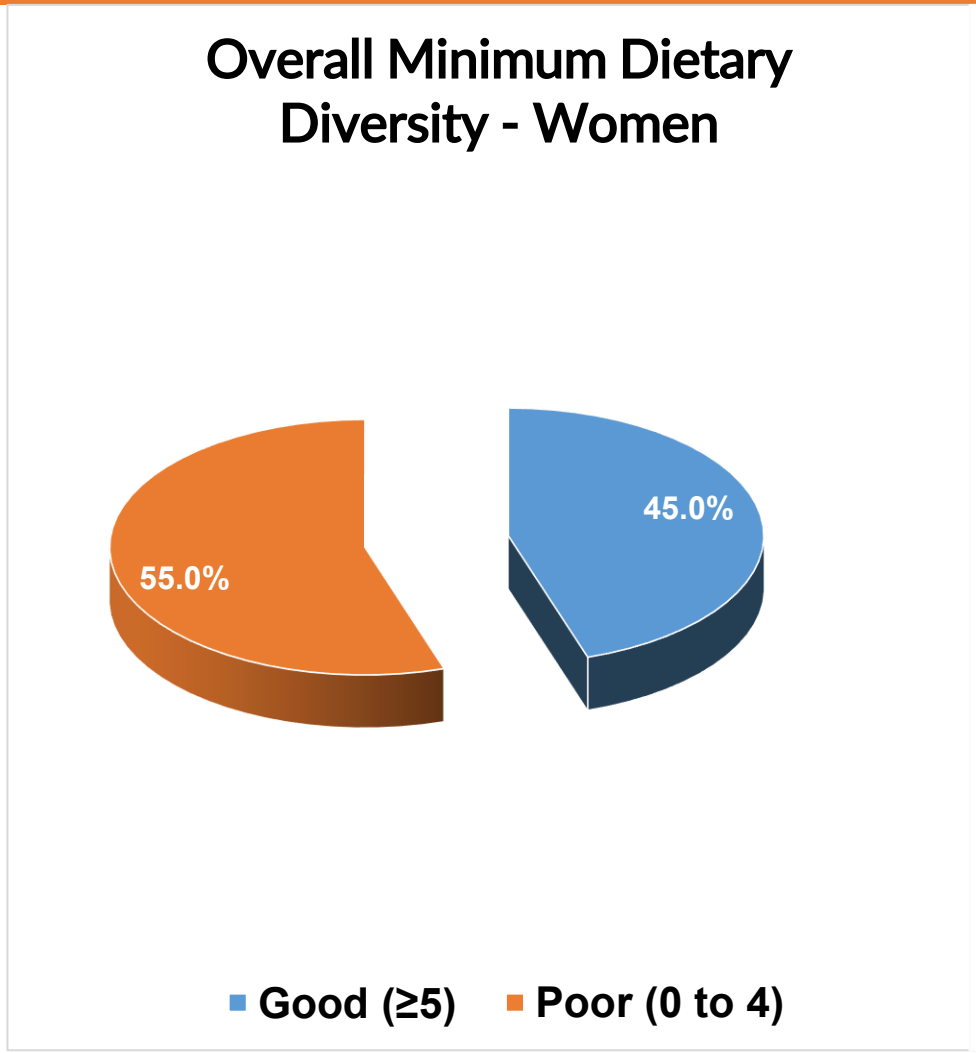


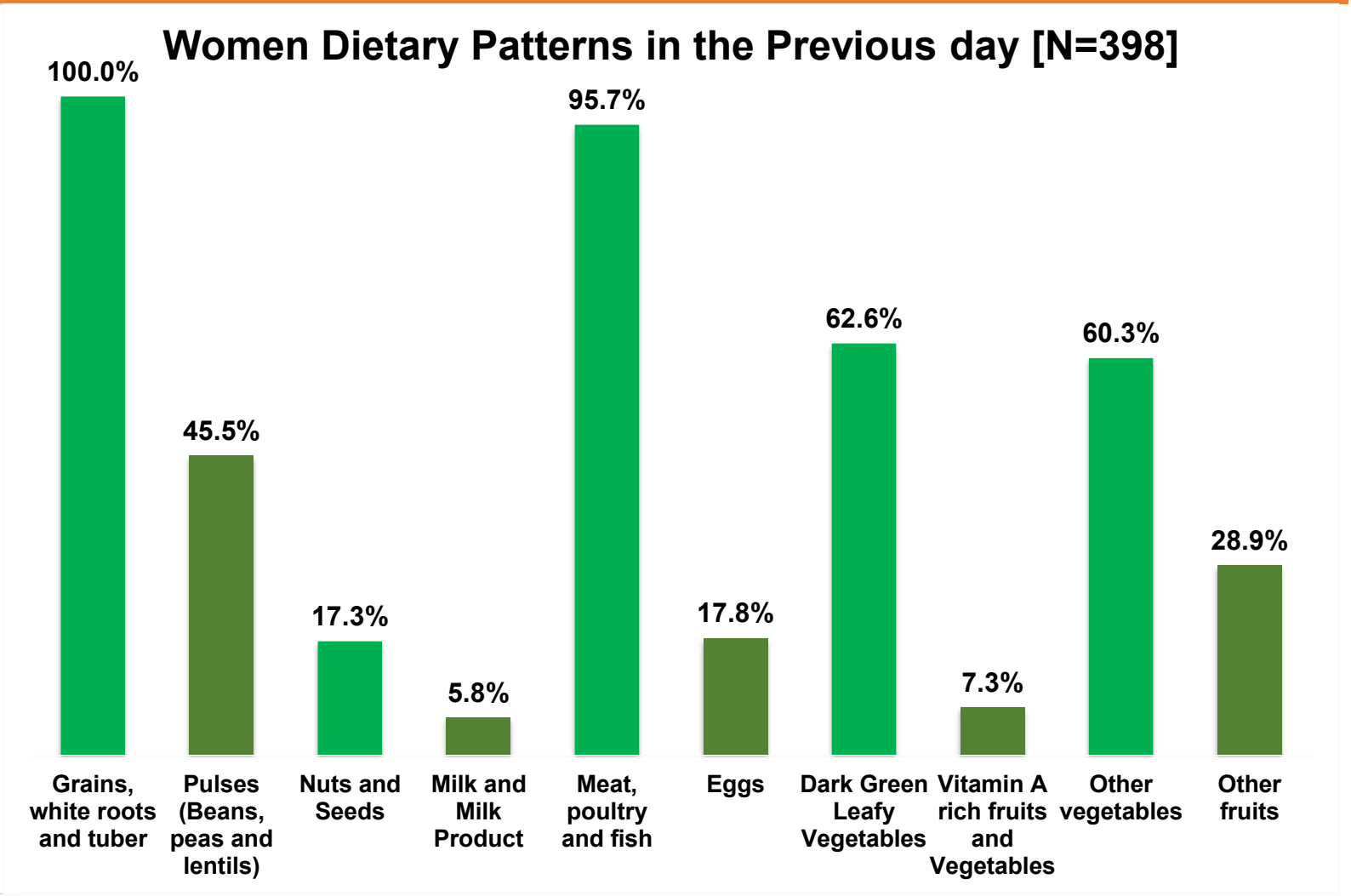
Women Dietary Patterns in the Previous day



Minimum Dietary Diversity Among Pregnant & Breastfeeding Women <6 months child		
Category	#. Women (N=118)	Results
Good (≥5)	**66**	55.9%

Women Dietary Diversity Among 15-49 years – Bhasan Char





Minimum Dietary Diversity Among Pregnant & Breastfeeding Women <6 months child		
Category	#. Women (N=56)	Results
Good (≥5)	27	48.2%

Water, Sanitation and Hygiene

Access, practices and facilities in Cox's Bazar and Bhasan Char

Water source for drinking

	Cox's Bazar (numerator) %	Bhasan Char (numerator) %
Public tap/standpipe	(481) 66.8%	(49) 14.2%
Hand pump	(188) 26.1%	(295) 85.8%
Piped connection to house (or neighbor's house)	(46) 6.4%	0%
Water seller/kiosks	(5) 0.7%	0%

Drinking water source available around the year

	Cox's Bazar (numerator) %	Bhasan Char (numerator) %
Yes	(716) 99.4%	(343) 99.7%

Distance to source of drinking water

	Cox's Bazar (numerator) %	Bhasan Char (numerator) %
Less than 10 minutes' walk/ 10	(570) 79.2%	(325) 94.5%
10–30 minutes' walk/10–30	(85) 11.8%	(18) 5.2%
In the house/on the compound	(65) 9.0%	(1) 0.3%

Treatment of drinking water

	Cox's Bazar (numerator) %	Bhasan Char (numerator) %
Yes	(16) 2.2%	(191) 55.5%

Purification of drinking water

	Cox's Bazar (numerator) %	Bhasan Char (numerator) %
Aquatab	(4) 25.0%	(188) 98.4%
Filtering / use of Water filter	(6) 37.5%	(2) 1.0%
Boil	(6) 37.5%	(1) 0.5%

Figures are shown as (numerator) percentage of the relevant population.

Sanitation Facilities

Type of Sanitation Facilitation being used	Cox's Bazar (numerator) %	Bhasan Char (numerator) %
Latrine with Septic Tank	(140) 19.4%	(343) 99.7%
No Latrine	0%	(1) 0.3%
Latrine with water seal	(483) 67.1%	
Latrine without water seal	(68) 9.4%	
Latrine which pit is broken/unmanaged/mixed with nearby water body	(26) 3.6%	
Bio-Fill Latrine/	(3) 0.4%	
Management of Child Feaces		
Child used latrine	(138) 29.8%	(92) 41.3%
Picked up and threw in latrine	(104) 22.3%	(62) 27.8%
Picked up and thrown out in the open drainage	(91) 19.6%	(21) 9.4%
Child passed excrete on the cloth and washed in the pond/tube well	(46) 9.9%	(16) 7.2%
Picked up and thrown in solid waste pile	(34) 7.3%	(8) 3.6%
Child using bathing facility to defecate	(40) 8.6%	(24) 10.8%
Picked up and thrown out of compound [in open]	(8) 1.7%	

Handwashing Practice

Most Often hand-washing items used	Cox's Bazar (numerator) %	Bhasan Char (numerator) %
Water only	(548) 76.1%	(305) 88.7%
Water and any soap/detergent powder/hand wash	(172) 23.9%	(38) 11.0%
Water and ash		(1) 0.3%
Handwashing during critical times		
After defecation	(421) 58.5%	(308) 89.5%
Before eating food	(231) 32.1%	(122) 35.5%
Before cooking or serving food	(31) 4.3%	(102) 29.7%
After disposing of child's feces/cleaning child	(78) 10.8%	(45) 13.1%
Before Feeding child	(23) 3.2%	(12) 3.5%
Other Specify	(34) 4.7%	(1) 0.3%

GAM % – Wasting and Stunting Trends

Among Children Under 5 Years in FDMN Camps



Latest Results (Sep'26)

Wasting
14.6%
Under 5 children

Stunting
42.6%
Under 5 children

Change Since 2017

Wasting
19.3% → 14.6%
↓ 4.7 pp

Stunting
44.1 % → 42.6%
↓ 1.5 pp

Key Takeaways

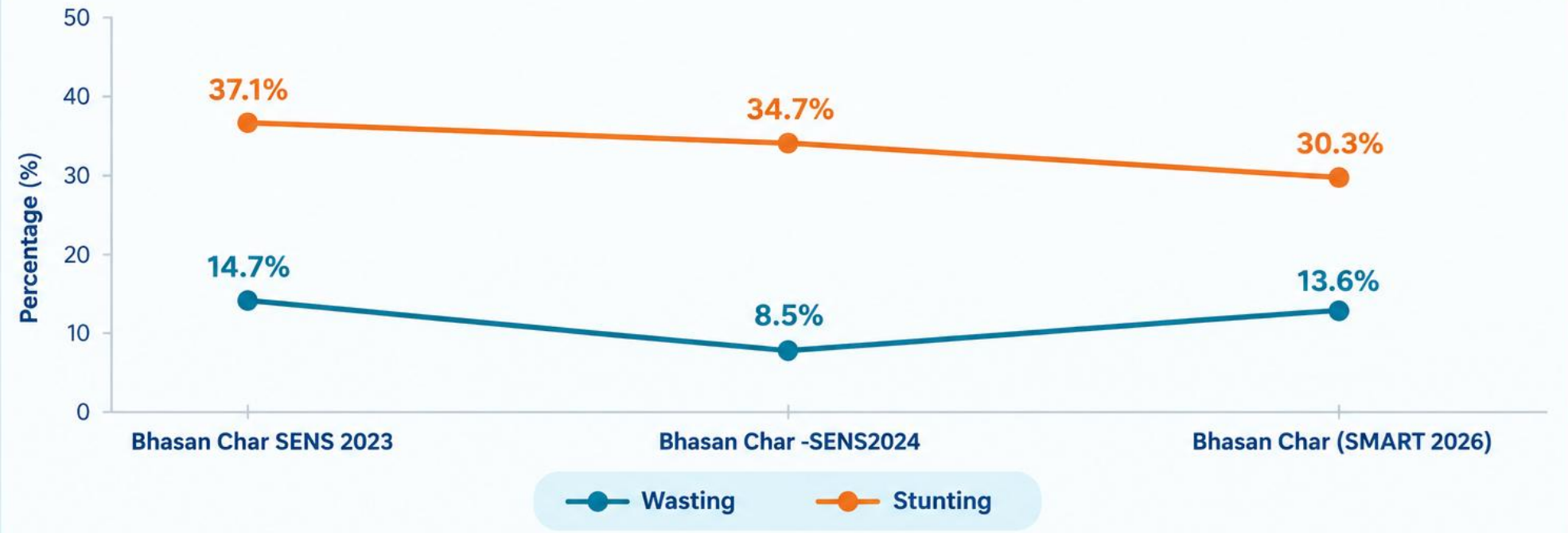
Stunting remains high
Above 40% since 2022

Wasting shows fluctuation
Increased to 15.1% in Nov'23, slightly lower at 14.6% in Sep'26

Continued action needed
To prevent wasting and reduce stunting

GAM % Wasting and Stunting Trends in Bhasan Char

Trends in the prevalence of wasting and stunting among children (under 5 years)



Stunting

Shows a steady decline from **37.1%** → **30.3%** (2023 to 2026)

Wasting

Decreased from **14.7%** to **8.5%** (2023 to 2024), then increased to **13.6%** in 2026.

While stunting remains high, wasting showed improvement in 2024 with a slight increase in 2026.

POSSIBLE DRIVERS OF MALNUTRITION

Potential contributing factors identified through field observations and causal analyses

Breastfeeding

Non-optimal breastfeeding practices

Complementary feeding

Non-optimal complementary feeding

Income

Limited access to income sources

Water

Inadequate household water access, availability & quality

Sanitation

Poor sanitation practices

Hygiene

Poor food & environmental hygiene

Disease

Disease outbreaks

Seven potential contributing factors to malnutrition in the camps

Source: Survey team observations, nutritional causal analysis and anaemia causal analysis. Factors are possible contributors, not confirmed causal effects.

FINDINGS AND PROPOSED ACTIONS

Evidence	Recommended program response
WHZ GAM: 14.6% CXB; 13.6% Bhasan Char	Continue wasting treatment, active case finding, referral and essential supplies in both locations.
Combined SAM: 2.4% CXB; 2.6% Bhasan Char	Explain the additional children identified through complementary WHZ and MUAC assessment,and reflect this in service planning.
Stunting: 42.6% CXB; 30.3% Bhasan Char	Strengthen prevention through maternal nutrition, complementary feeding, health, WASH and food-security interventions.
Low reported soap use and handwashing before feeding	Agree targeted Nutrition–WASH actions addressing both supplies and caregiver practices.
Maternal supplementation and dietary gaps	Strengthen ANC–nutrition links, supplementation access and adherence support.

THANK YOU

For any query, please reach out

1. **Aigul Nurgabilova, Nutrition Sector Coordinator, UNICEF anurgabilova@unicef.org,**
2. **Md. Lalan Miah, UNICEF, mlmiah@unicef.org**
3. **Mohammad Ashikullah, WFP, mohammad.ashikulla@wfp.org**