USAID
FROM THE AMERICAN PEOPLE

BASELINE SURVEY FOR

EMERGENCY FOOD SECURITY PROJECT (EFSP)

WORLD VISION INTERNATIONAL

MARCH 2020

World Vision

Prepared by:
TANGO International

Commissioned by:
World Vision

GBF

TANGO INTERNATIONAL
TECHNICAL ASSISTANCE to NGOs

DISCLAIMER

The opinions expressed are those of the evaluation team and do not necessarily reflect those of the World Vision. Responsibility for the opinions expressed in this report rests solely with the authors. Publication of this document does not imply endorsement by World Vision of the opinions expressed.

ACKNOWLEDGEMENTS

The evaluation team would like to acknowledge the contribution of World Vision staff at headquarters and in Bangladesh. Special thanks to Sara Leister, Diana Ceci, Noreen Lue, Mohaiminur Rahman Shaheen and Asif Ahmed.

Thank you to the Grameen Bikash Foundation (GBF) and especially Nasir Uddin as a local partner for this baseline assessment and ensuring fieldwork was completed smoothly and produced high quality results.

Acronyms and Abbreviations

ANC	Antenatal care
BDT	Bangladesh Taka
CFW	Cash for Work
CiC	Camp in Charge
EFSP	Emergency Food Security Program
EOPS	End of project status
FCS	Food Consumption Score
FGD	Focus Group Discussion
GBF	Grameen Bikash Foundation
HDDS	Household Dietary Diversity Score
HH	Household
HHS	Household Hunger Score
IGA	Income generating activity
KII	Key Informant Interview
M&E	Monitoring and Evaluation
MCHN	Maternal and Child Health Service
NGO	Non-governmental organization
ODK	Open Data Kit
PIRS	Performance Indicator Reference Sheets
PNC	Postnatal care
PPS	Probability Proportional sample to Size
rCSI	Reduced Coping Strategies Index
USD	United States Dollar
WASH	Water, Sanitation, and Hygiene
WV	World Vision

CONTENTS

TABLES

FIGURES

Project Summary

Project name	Emergency Food Security Program (EFSP) to Refugees and host communities in Cox's Bazar, Bangladesh
Project Location	Cox's Bazar, Bangladesh
Project Phase	Starting
Type of assessment	Baseline Study
Project Target locations	Camps: 1W,1E,3,4,4 Extension, 5,8E, 9,10,11,13,14,16,19,20,24 Host community (five unions, Ukhia: Jalia Palong, Raja Palong, Palong Khali; Teknaf: Baharchhara, Nhila)
Project Target population	26,145 individuals from Host Community (5,229 households) conditional and unconditional cash 170,560 individuals from Refugee Camps (34,112 households) conditional cash and food voucher transfers CCLC 3300 female beneficiaries MTC 4320 participants
Evaluation Purpose	The purpose of the baseline study is to provide data against which to monitor and assess the activity's progress and effectiveness during implementation. The baseline will serve to determine the baseline values for the project outcome and impact indicators. Information gathered through the baseline will be used by implementing staff as benchmarks to identify areas that need attention while also providing baseline values against which to assess the value added by specific activities to achieve intended objectives. The baseline study findings can also be used by operations staff to refine activity implementation and to provide an opportunity to review the redesign against the food and nutrition security conceptual framework and the activity's theory/pathway of change.
Baseline Timeframe	October – December 2019

1. Executive Summary

Purpose and Objective of Baseline. The purpose of this study is to provide baseline values for project outcome and impact indicators for the Emergency Food Security Program (EFSP). The primary goal of EFSP is to improve food security and nutrition status of Rohingya refugees and vulnerable host community members in Cox's Bazar District, Bangladesh. This baseline survey will be used to monitor and assess the activity's effectiveness and progress towards this goal during implementation.

Methods. This mix-method assessment included data collection stratifying refugee and host community members through a quantitative household survey and qualitative key informant interviews and focus group discussions. The design was based on the project's monitoring and evaluation framework in coordination with World Vision. A sample of 671 household surveys was completed, with a non-response rate of 4 percent. Twenty focus group discussions and 20 key informant interviews were completed. TANGO reviewed uploaded data on a daily basis, and ensured data quality through daily in-briefs and de-briefs with research teams during data collection. Data analysis triangulated quantitative, qualitative, and field observation data to ensure a high level of detail and diversity of perspectives are incorporated into the report.

Conclusions. Food security is a prevailing issue. To measure this, three food security measures are utilized, the Food Consumption Score, Household Hunger Scale, and Household Dietary Diversity Score. Host community households are found to be more food insecure than refugee households, and the reduced coping strategies index shows that host community members are applying more severe coping strategies than refugee households on average.

Few households are engaged in income generating activities, and even fewer engaged in two or more income sources. Refugee livelihood options are limited due to the embargo on refugees participating in paid labor outside the camps, and some households resort to selling relief items to generate income. Host community livelihoods are more diverse; however, livelihood stability has decreased. Both groups faced three main challenges; increased cost of food, lack of stable job market, and poor water sanitation and hygiene. Women's empowerment and status is similar in both Host and Refugee communities, wife beating and early marriage occurring, but declining. Women still need permission to leave homes and have limited market participation.

The relationship between refugee and host communities is perceived very differently between the two groups. Refugees are found to perceive a positive relationship and express gratitude for having a safe place to reside. Host community members express growing resentment and fear of refugees.

Baseline Indicator Values. The following table gives a high-level overview of the project indicator baseline values and presents the current status of aggregated results at baseline.

Table 1: Project Indicators

EFSP Project Indicators	Baseline Value (%) (n=671)	Host (%) (n=340)	Refugee (%) (n=331)	Male HoH (%) (n=539)	Female HoH (%) (n=132)
Purpose 1: Increased consumption of diverse and quality foods that meet the nutritional requirements of vulnerable households in Refugee Camps and Host Communities					
EFSP 2. % of households with Food Consumption Score (FCS):					
Poor (0-21 FCS)	**0.7**	0.9	0.6	0.9	0.0
Borderline (>21 to 35 FCS)	**16.6**	26.1***	14.9***	17.1	14.7
Acceptable (>35 FCS)	**82.8**	72.9***	84.5***	82.0	85.3
Intermediate Outcome 1.1: Improved access to and consumption of diverse and nutritious foods for 34,112 refugee HHs and 5,229 host community HHs directly impacted by the refugee influx.					
EFSP4. Prevalence of households with moderate or severe Household Hunger Scale (HHS) score.	**7.8**	10.8	7.2	8.3	6.2
% of households with improved dietary diversity score (HDDS)[1]	**42.3**	47.6	41.4	44.5	35.3
Intermediate Outcome 1.2: Enhanced Refugee and Host Community HHs' capacities to sustainably access to nutritious and diversified food					
% of HHs who have more than two sources of income as a result of project intervention	**6.9**	14.5***	5.6***	2.1	0.5
% of households engaged in income generating activities disaggregated by gendered HH type and by type of activities	**5.5**[2]	22.2***	0.3***	4.5	0.7
Purpose 2: Capacity of Refugees and Host Communities to withstand future shocks enhanced					
EFSP3. Reduced Coping Strategies Index (rCSI)					
% of households above the average reduced coping index score[3]	**43.5**	55.1***	41.4***	46.6	33.6
Mean rCSI score (not a percentage)[4]	**5.4**	6.8***	5.2***	5.5	5.0
Number of Respondents[5]	***671***	*340*	*331*	*539*	*132*

[1] For the purposes of this baseline, "improvement" cannot be measured. For the baseline value for the indicator "% of households with improved dietary diversity score (HDDS)" the reported value (42.3 percent) is the proportion of households with a HDDS score above the average number of food groups.

[2] For disaggregation see Table 8: Improved Livelihood Indictors Baseline Values

[3] For disaggregation see Table 7: Reduced Coping Strategies Index (rCSI)

[4] The rCSI raw scores are calculated by multiplying the frequency with which a behavior was used by a universally used severity weight, then summing the weighted scores for each coping strategy. The maximum raw score for the rCSI is 56, i.e. a household that used all five strategies every day for the last 7 days would have a raw score of 56.

[5] "n" refers to the number of respondents in each category. For each listed project indicator, the sample size is the same for each of the five categories.

Recommendations. It is recommended that these baseline findings be used by operations staff to refine activity implementation and redesign indicator objectives and targets against the food and nutrition security conceptual framework and the activity's theory/pathway of change. All indicator targets are found to be either exceeded or too ambitious at baseline. It is recommended that all indicator targets are reviewed to ensure monitoring targets measure planned outcomes and targets are feasible in the relatively short project timeframe.

Organization of the report. The introduction provides a general overview of the EFSP project design and objectives at the baseline stage, outlines the purpose and objective of the baseline survey, and includes a background on the current food security and nutrition context in Cox's Bazar District, Bangladesh. The methodology section includes the sampling strategy, survey and interview design, data collection, management, and quality control, team training and limitations. The findings section presents the data analysis and values to be used to monitor and assess the activities progress and effectiveness during implementation. The findings section is organized around the specific baseline objectives and includes subsections on background characteristics and demographics of the study population; project indicators; improved food security and nutrition (including maternal health and coping strategies); improved livelihoods (including market opportunities, challenges, and women's empowerment and status); and the relationship between host and refugee community. The indicator targets section presents a comparison of baseline values against the planned end of project status target for the project indicators, and evaluates the feasibility and appropriateness of planned targets based on baseline values. The conclusions and recommendations include a top-level summary of baseline findings and recommendations for activity implementation and design from now to project closure.

*****

1. Introduction

A. Background on EFSP

The overall goal of the Emergency Food Security Program (EFSP) is to improve food security and nutrition status of Rohingya refugees and vulnerable host community members in Cox's Bazar District, Bangladesh. In this regard, World Vision (WV) will work towards fulfilling two project purposes and expected outcomes as shown below.

Purpose 1: Improved access to and consumption of diverse and nutritious foods for 34,112 refugee HHs; while also addressing the short-term food security needs and strengthening the medium-term livelihoods recovery of 5,229 of the most vulnerable host community HH's directly impacted by the refugee influx.

- Intermediate outcome 1.1: Improved access to and consumption of diverse and nutritious foods for 34,112 refugee HHs and 5,229 host community HHs directly impacted by the refugee influx
- Intermediate outcome 1.2: Enhanced Refugee and Host Community HHs' capacities to sustainably access nutritious and diversified food

Purpose 2: Capacity of Refugees and Host Communities to withstand future shocks enhanced.

- Intermediate outcome 2.1: Community assets and infrastructure restored in Host com-munities through CFW.
- Intermediate outcome 2.2: Community savings groups strengthened
- Intermediate outcome 2.3: Social cohesion reinforced between host community and refugee HHs

B. Objectives of Baseline Survey

The purpose of the baseline study is to provide data against which to monitor and assess the activity's progress and effectiveness during implementation. The study serves to determine the baseline values for the project outcome and impact indicators.

Specific objectives the baseline has been designed to address are:

- Provide an information base against which to monitor and assess an activity's progress and effectiveness during implementation;
- Assess and measure changes in household's livelihood situations and challenges, including marketing opportunities and challenges;
- Assess and measure changes in women's empowerment and status; and
- Assess and measure changes in relations between host communities and refugee communities.

Information gathered through the baseline will be used by implementing staff as benchmarks to identify areas that need attention while also providing baseline values against which to assess the value added by specific activities to achieve intended objectives. The baseline study findings can also be used by operations staff to refine activity implementation, and to provide an opportunity to review the redesign against the food and nutrition security conceptual framework and the activity's theory/pathway of change.

C. Food Security and Nutrition Context

Findings from the 2018 Refugee influx Emergency Vulnerability Assessment (REVA2) indicate that 88 percent of the overall Rohingya refugee population remains reliant on life-saving assistance, with new arrivals and old unregistered refugees demonstrating the highest levels of food insecurity, 94 percent and 88 percent of households, respectively.[6] Economic vulnerability remains the main driver of food insecurity, with 78 percent of Rohingya refugee households unable to meet the monetary value needed to cover their essential needs. Approximately 60 percent have expenditures falling below the survival value of the minimally acceptable food basket.

Findings from emergency nutrition assessments rounds conducted by Action Against Hunger indicate the prevalence of acute malnutrition among children aged 6-59 months has decreased significantly in makeshift settlements, from 19.3 percent in Round 1 (Oct-Nov 2017) to 11 percent in Round 3 (Oct-Nov 2018), and remains below the WHO emergency threshold (15 percent) in Nayapara camp, from 14.3 percent Round 1 to 12.1 percent in Round 3. Further, the mortality rates are below the WHO emergency threshold of 1/10,000 persons/day in both sites.[7, 8]

Chronic malnutrition (stunting) among children aged 6-59 months has declined in makeshift camps (26.9 percent) but remains near the WHO critical threshold (40 percent) in Nayapara camp (38.3 percent). The prevalence of anemia among children 6-59 months has decreased, indicating a public health problem, with 39.8 percent in makeshift camps and 38.1 percent in Nayapara camp respectively. While the two-week prevalence of diarrhea and acute respiratory infections among children 6-59 months of age have decreased in both sites, the disease burden remains a concern given the crowded camp environment (28.4 percent in makeshift camps; 25.2 percent in Nayapara camp).

Despite humanitarian efforts, four in ten Rohingya households are found to have unacceptable food consumption outcomes, with highest rates among old unregistered (50 percent) and new arrivals (44 percent). Thirty percent of host community households also have unacceptable food consumption. Among Rohingya refugees, female-headed households, households with disabled, households with no income and with numerous children are the most vulnerable. Among the host communities, small-sized

[6] WFP. May 2019. Refugee influx Emergency Vulnerability Assessment (REVA2). https://fscluster.org/sites/default/files/documents/wfp-0000106095_0.pdf
[7] https://reliefweb.int/report/bangladesh/emergency-nutrition-assessment-coxs-bazar-bangladesh-april-28-may-28-2018
[8] https://reliefweb.int/sites/reliefweb.int/files/resources/181223-ENA-R3-Infographic.pdf

households or households with three or more children under five years of age are more prone to be food insecure.

REVA2 findings indicate that coping patterns have changed with an increase number selling assets and part of food assistance (40 percent) with a higher number borrowing money to meet food and essential needs (70 percent). Findings further indicate that the food value of the e-voucher, although in line with humanitarian principles, does not capture the actual preferences of Rohingyas, who systematically buy larger quantities of rice and pulses and resell them to access fresh fish, dry fish and vegetables.

2. Methodology

This baseline assessment of the Emergency Food Security Project (EFSP) collected data in both host and refugee communities in Cox's Bazar, Bangladesh. As a mixed-method assessment, the data collection exercise included two key components:

1. A quantitative data collection exercise, through a participant-based household survey;
2. A qualitative data collection exercise, involving key informant interviews (KIIs) and focus group discussions (FGDs) with beneficiaries and local stakeholders, combined with semi-structured direct observation.

The mixed method baseline assessment design was based on project activities and outcome/output indicators outlined in the project's Monitoring and Evaluation (M&E) framework, included in Annex 8. The quantitative survey consisted of household interviews and sampled beneficiary households. Survey respondents were identified from the sample households. Qualitative data was used to triangulate the household survey findings. Qualitative data collection consisted of focus group discussions, key informant interviews and direct observation.

A. Sampling Strategy

Quantitative design

The overall sampling strategy for this survey follows FFP guidance in the scope of work. Following that guidance, an overall sample of at least 678 has been used.[9] Maintaining this overall sample size requirement, the baseline study was stratified across host communities and refugee camps in two sub-districts (Upazillas) of Cox's Bazaar (Ukhiya and Teknaf) following two-stage stratified cluster sampling design. The purpose of this stratification is to provide sufficiently precise estimates of indicators for the two sub-groups. The minimum required sample size 350 households per stratum (host and refugee) was estimated with 10% attrition using the statistical procedure suggested in FTF Participant Based

[9] The sample size is to detect a change of 10 percentage points from baseline to endline, with 95% confidence and 80% power, a design effect of 2, and non-response rate of 10 percent.

Sample Survey Guide (PaBSS).[10] Detail sample size calculation procedure is given in Annex 6. Clusters (wards/sub-blocks) were selected using Probability Proportional sample to Size (PPS) procedure. The endline sample size will be recalculated on the basis of actual information obtained from the baseline results. The baseline sample is large enough to detect the desired level of change from baseline to endline under the parameters of statistical precision provided by FFP.

The two-stage sampling involved the selection of 14 wards from all 5 unions of the host communities and 14 sub-blocks from 25 camps of the refugee communities at stage-one. In stage-two, equal number of samples (25 participating households) was drawn randomly from the beneficiary sampling frame in a sampled cluster (ward/sub-block). The PPS cluster sampling procedure and equal cluster sample size (25 households) ensured that households in the different clusters have the equal chance[11] to be selected in the sample. The sampling frame for the quantitative survey was constructed based on the participant register to appropriately reflect the target population. Households, community members, community leaders and stakeholders (government and non-government), wholesaler and market owners are the primary units of the overall sampling frame for the qualitative data collection. Ultimately, 671 surveys were completed, with a non-response rate of 4%. This is reflected in Table 2 below.

Table 2: Quantitative Sample Size

	PROGRAM COMMUNITIES				TOTAL	
	Host		Refugee			
	#	%	#	%	#	%
Sample Size	350		350		700	
Response cases	340	97.1%	331	94.6%	671	96%
Non-response cases	10	2.9%	19	5.4%	29	4%

Qualitative design

Qualitative data was collected via 20 key informant interviews (KIIs) and 20 focus group discussions (FGDs), equally distributed across the same strata used for the household survey. 10 FGS and 10 KIIs took place with refugee populations within the camps, and 10 FGS and 10 KIIs with host community members. The sampling strategy for the FGDs was purposive and focused on identifying members from 'typical' households to participate in the sessions. In addition, TANGO included at 1-2 FGDs per strata that focused on 'positive deviants' to understand the available/potential resilience capacities that can be

[10] Participant-Based Survey Sampling Guide for Feed the Future Annual Monitoring Indicators, Diana Maria Stukel, PhD, September 2018 (page 115)

[11] When samples from different sized clusters are used and sampling is taken with the same probability, the chances of selecting a member from a large cluster are less than selecting a member from a smaller cluster. This is known as probability proportional to size (PPS). For example, if one sample had 20,000 members, the probability of a member being selected would be 1/20000 or .005 percent. If another sample had 10,000 members, the chance of a member being selected would be 1/10000 or .01 percent.

utilized by participants and may be an area of focus for the World Vision EFSP program. More detailed sample information is included in Appendix 6.1.

B. Data Management and Analysis

Data Collection and Entry

For quantitative data, electronic data capture devices, equipped with ODK (Open Data Kit) software were used for data collection. The survey tool is included in Annex 1. The use of mobile devices and an electronic questionnaire form improved data quality by allowing data validation rules and consistency checks to be integrated in the data collection process. Mobile devices reduced the data entry burden as data were entered immediately at the interviewer level and records are uploaded to a cloud server using the built-in internet connectivity of the devices. Qualitative data was collected through FGDs and KIIs using semi-structured tools outlining key topics and sub-topics included in Annex 2. Interviews were completed by one team consisting of a facilitator and note-taker. All qualitative data was captured using matrices included in Annex 3.

Data Quality Control

TANGO International subcontracted the Grameen Bikash Foundation (GBF) as a local partner for this baseline assessment, which was responsible for organizing qualified individuals to conduct the quantitative and qualitative data collection and overseeing fieldwork logistics and security. During data collection, the GBF Team Leader, Survey Coordinator and supervisors conducted daily in-briefs and de-briefs with quantitative and qualitative survey teams. In-briefs incorporated feedback on data quality and team members' performance based on TANGO review of uploaded data and interviewer logs. During debriefings, the Team Leader, team supervisors and the GBF Survey Coordinator reviewed specific questions/topics in completed tools for consistency, reliability and accuracy before uploading data to TANGO. The GBF Survey Coordinator and team supervisors utilized additional data quality monitoring controls. One such control for the quantitative survey was re-interviewing a selected number of interviews per day, based on a condensed survey limited to a subset of critical questions. Supervisors also verified that non-response households are unavailable, or truly opted out of participation. Throughout data collection regular communication between GBF, TANGO, and World Vision ensured encountered challenges were solved in line with the established baseline protocols.

Data Analysis

TANGO conducted the survey data analysis during and after field work. Quantitative data was analyzed using software STATA 15.1. The logframe indicators were analyzed using the FFP Indicators guideline[12] and FAO Diet Diversity calculation guideline[13]. The analysis includes descriptive statistics and indicator analysis with statistical hypothesis testing to compare host and refugee households. A 95% confidence

[12] USAID Food for Peace Indicators for Emergency Program Performance Indicator Reference Sheets, February 2019

[13] Guidelines for Measuring Household and Individual Dietary Diversity, FAO, 2013

interval and design effect was also computed for the logframe indicators only. The significant differences are shown with an asterisk (*) symbol as follows:

*** for p<0.01, ** for p<0.05 and * for p<0.10

The EFSP baseline survey sample was drawn using two-stage stratified cluster sampling process. Clusters were equally allocated among strata (Host and Refugee). At the first stage, a sample cluster was selected independently with probability proportional to the cluster's population in each stratum. The values of the logframe indicators were estimated combining data from two strata. The computation of indicator values for total has been adjusted with sample weights for the unequal probabilities of selection for different strata (host and refugee). Weights are equal to the inverse of the probability of selection. Non-response weights also used to correct the estimates. Following are the statistical formulas used to estimate sample weights (detail cluster weights are given in Appendix 6.2):

1. ***Sample weights for stratification (w_s):*** $W_s = \left(\frac{N_j}{n_j}\right) \times \left(\frac{n}{N}\right)$

   Where, N_j = No. of HHs in j^{th} stratum, n_j = Sample size of j^{th} stratum, n= $\sum n_j$ and N=$\sum N_j$

2. ***Sample weights for non-responses (w_n):*** $W_n = \frac{n_i}{(n_i - n_{ri})}$

   Where, n_i = sample size for the i^{th} cluster and n_{ri} = number of non-responses in i^{th} cluster

3. ***Combined sample weights[14] :*** *W= Ws x Wn*

Qualitative data was analyzed through topline review using MS Excel templates. The team adopted a strategy of triangulation by examining the issues through various lenses and different perspectives, including data collected through literature review, baseline survey, KIIs and FGDs.

C. Team Training

TANGO conducted a four-day quantitative and qualitative team training through a combination of classroom training, practice and a field test. Trainings for qualitative and quantitative teams were conducted in parallel with real-time coordination between the two TANGO trainers to ensure consistent and accurate knowledge transfer across the overall baseline team. The detailed training schedule is included in Appendix 6.4. The training covered technical, logistical, and leadership components. Technical aspects included interview and body language techniques, handling tablets and data management, and data quality control measures. The training was designed to guide the team on supervisor and enumerator roles and responsibilities, rules, behaviors and ethics (including gender sensitivity), respondent selection, detailed review of the survey, and direct observation tools and mock interviews/role playing. The training also covered aspects of interviewer and respondent bias, how to establish informed consent, and build essential trust with respondents and key informants.

[14] Detail cluster sample weights are given in Annex-III

D. Limitations

I. The performance indicator reference sheets (PIRS) for the WV EFSP project were not yet available at the time of this baseline. TANGO utilized the USAID Food for Peace Indicators for Emergency Program Performance Indicator Reference Sheets as updated in February 2019.

II. Field teams initially had difficulty identifying and locating specified refugee households included in the sample due to government restrictions on mobile connectivity in the camps, which meant respondent HHs could not be contacted. This issue was identified on the first day of fieldwork, and World Vision country office and field staff were mobilized to assist the field team on site in locating sampled households. This extra effort by WV helped facilitate the low non-response rate in the completed survey sample.

III. The project was able to construct the sampling frame for 84% of the targeted project participants for the Refugee camps prior to start the data collection. Therefore, the participants from the camp in Teknaf were not possible to include in the baseline sample. The status of the project participants is assumed to be same for all camps at the baseline. Also, the baseline and endline are not designed for panel data collection. A new set of random sample will be drawn from all camps in Endline. Therefore, this exclusion of participants in the Teknaf camp will not affect to measure the project impact and outcome at the endline.

3. Findings

The following section presents the baseline findings to be used to monitor and assess the activities progress and effectiveness during implementation. This section is organized around the baseline objectives and includes subsections on: background characteristics and demographics of the study population; project indicators; improved food security and nutrition (including maternal health and coping strategies); improved livelihoods (including market opportunities, challenges, and women's empowerment and status); and the relationship between host and refugee community.

A. Background Characteristics and Demographics

Survey and interview participants included host and refugee community members. Qualitative focus group discussions and key informant interviews were disaggregated by gender and included diverse subsections of the sample population to capture baseline information from a variety of perspectives. Qualitative data, including the composition of all interviews, is included in Annex 7. Table 3 shows the characteristics of the survey respondents. The majority of survey respondents (74.5 percent) were EFSP beneficiaries and the household head (57.0 percent). Survey respondents included both male (41.0 percent) and female (59.0 percent) respondents. The average age of the respondents was 37.2 years old. The majority of refugee respondents were female (94.0 percent). This is because the EFSP project is primarily targeting women, and the sample was drawn from project rosters.

Table 3: Background Characteristics and Demographics of Survey Respondents

BACKGROUND CHARACTERISTICS	PROGRAM COMMUNITIES				ALL	
	Host		Refugee			
	#	%	#	%	#	%
A. SAMPLE AND RESPONSES						
Sample Size	350		350		700	
Response cases	340	97.1%	331	94.6%	671	96%
Non-response cases	10	2.9%	19	5.4%	29	4%
B. SAMPLE EFSP BENEFICIARY PROFILE						
A1. Sex of the beneficiary						
Male	222	65.3%	20	6.0%	242	36.1%
Female	118	34.7%	311	94.0%	429	63.9%
A2. Age of the beneficiary						
Mean	41.1		33.4		37.3	
Median	40.0		30.0		35.0	
Minimum	17.0		16.0		16.0	
Maximum	90.0		85.0		90.0	
A3. %of prime respondents were EFSP beneficiaries	248	72.9%	252	76.1%	500	74.5%
A4. % of prime respondents who were EFSP beneficiaries were <u>also</u> HH head	177	71.4%	108	42.9%	285	57.0%
C. PRIME RESPONDENT'S PROFILE						
C1. Who were the prime respondents?						
EFSP Project participants	248	72.9%	252	76.1%	500	74.5%
Household Head (not EFSP participant)	37	10.9%	51	15.4%	88	13.1%
Spouse (not EFSP participant)	45	13.2%	19	5.7%	64	9.5%
Son/daughter (not EFSP participant)	7	2.1%	6	1.8%	13	1.9%
Other household member (not EFSP participant)	3	0.9%	3	0.9%	6	0.9%
C2. Sex of the prime respondents						
Male	193	56.8%	82	24.8%	275	41.0%
Female	147	43.2%	249	75.2%	396	59.0%
Others	-	-	-	-	-	-
C3. Age of the prime respondents						
Mean	39.8		34.5		37.2	
Median	39.0		30.0		35.0	
Minimum	16.0		16.0		16.0	
Maximum	90.0		85.0		90.0	

B. Project Indicators

The following table gives a high-level overview of baseline project indicator values. Details for each value are included in the descriptive sections below. The indicators included in this baseline were agreed upon between TANGO and World Vision during the inception phase, based on the EFSP monitoring and evaluation framework, included in Annex 8 of this report.

Table 4: Project Indicators

EFSP Project Indicators	Baseline Value (%)	Host (%)	Refugee (%)	Male HoH (%)	Female HoH (%)	95% Confidence Interval
Purpose 1: Increased consumption of diverse and quality foods that meet the nutritional requirements of vulnerable households in Refugee Camps and Host Communities						
EFSP 2. % of households with Food Consumption Score (FCS):						
Poor (0-21 FCS)	**0.7**	0.9	0.6	0.9	0.0	(-0.1%, 1.5%)
Borderline (>21 to 35 FCS)	**16.6**	26.1***	14.9***	17.1	14.7	(10.5%, 22.6%)
Acceptable (>35 FCS)	**82.8**	72.9***	84.5***	82.0	85.3	(77.5%, 89.0%)
Intermediate Outcome 1.1: Improved access to and consumption of diverse and nutritious foods for 34,112 refugee HHs and 5,229 host community HHs directly impacted by the refugee influx.						
EFSP4. Prevalence of households with moderate or severe Household Hunger Scale (HHS) score.	**7.8**	10.8	7.2	8.3	6.2	(2.8%, 12.7%)
% of households with improved dietary diversity score (HDDS)[15]	**42.3**	47.6	41.4	44.5	35.3	(33.9%, 50.7%)
Intermediate Outcome 1.2: Enhanced Refugee and Host Community HHs' capacities to sustainably access to nutritious and diversified food						
% of HHs who have more than two sources of income as a result of project intervention	**6.9**	14.5***	5.6***	2.1	0.5	(4.6%, 9.3%)
% of households engaged in income generating activities disaggregated by gendered HH type and by type of activities	**5.5**[16]	22.2***	0.3***	4.5	0.7	(2.6%, 4.6%)
Purpose 2: Capacity of Refugees and Host Communities to withstand future shocks enhanced						
EFSP3. Reduced Coping Strategies Index (rCSI)	**43.5**	55.1***	41.4***	46.6	33.6	(32.4%, 54.5%)
% of households above the average reduced						

[15] For the purposes of this baseline, "improvement" cannot be measured. For the baseline value for the indicator "% of households with improved dietary diversity score (HDDS)" the reported value (42.3 percent) is the proportion of households with a HDDS score above the average number of food groups.

[16] For disaggregation see Table 8: Improved Livelihood Indictors Baseline Values

EFSP Project Indicators	Baseline Value (%)	Host (%)	Refugee (%)	Male HoH (%)	Female HoH (%)	95% Confidence Interval
coping index score[17]						
Mean rCSI score (not a percentage)[18]	**5.4**	6.8***	5.2***	5.5	5.0	(4.6, 6.2)
N	***671***	*340*	*331*	*539*	*132*	

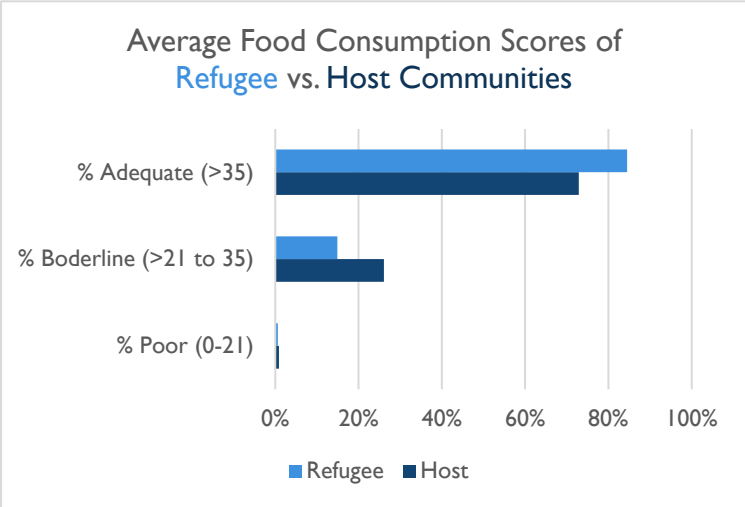
C. Improved Food Security and Nutrition

To create baseline values for EFSP project purpose one: "Increased consumption of diverse and quality foods that meet the nutritional requirements of vulnerable households in Refugee Camps and Host Communities", three food security measures are utilized; the Food Consumption Score, Household Hunger Scale, and Household Dietary Diversity Score. In conjunction, these measures allow an overall understanding of the food security status of the sample.

The Food Consumption Score (FCS) is a composite score based on dietary diversity, food frequency, and the relative nutritional importance of different food groups. To collect FCS data, a questionnaire is used to ask respondents about the frequency of their households' consumption of nine food groups over the previous seven days. To calculate the FCS, the consumption frequencies are summed and multiplied by the standardized food group weight, and households are then be classified into three groups based on their weighted scores - poor, borderline, or acceptable - using the World Food Program's recommended cutoff points.[19] The data is presented in Table 5. At baseline, the FCS indicated that the majority of both refugee (84.5 percent) and host community (72.9 percent) respondents had acceptable food consumption score. Relatively few (0.7 percent) had poor FCS. This is illustrated in Figure 2 below. This would indicate that respondents are consuming foods from a variety of food groups with relative frequency. FCS scores did not vary greatly between male and female headed households.

[17] For disaggregation see Table 7: Reduced Coping Strategies Index (rCSI)
[18] The rCSI raw scores are calculated by multiplying the frequency with which a behavior was used by a universally used severity weight, then summing the weighted scores for each coping strategy. The maximum raw score for the rCSI is 56, i.e. a household that used all five strategies every day for the last 7 days would have a raw score of 56.
[19] USAID Food for Peace. February 2019. Indicators for Emergency Program Performance Indicator Reference Sheets. P. 7.

Figure 2: Food Consumption Score



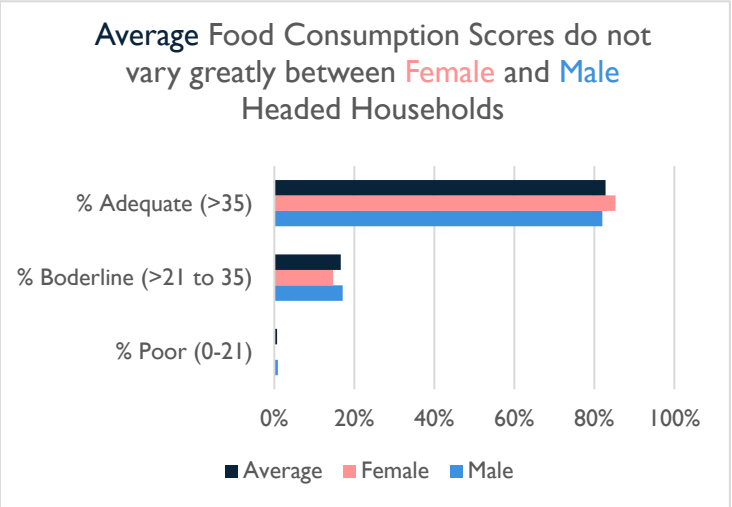
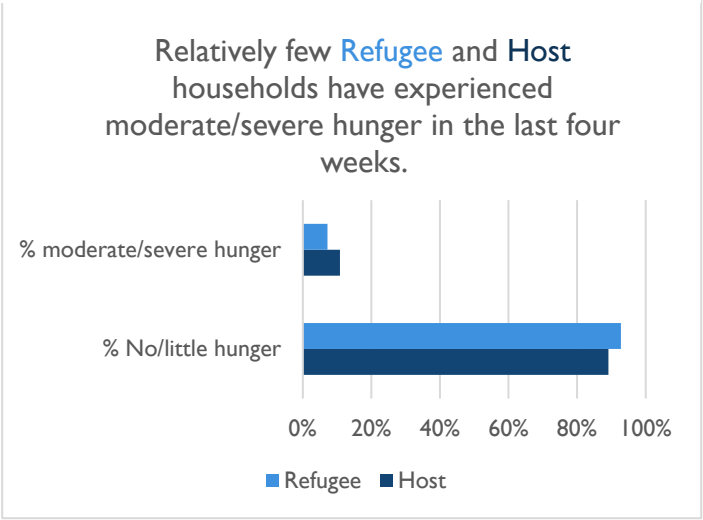


Figure 1: Household Hunger Scale

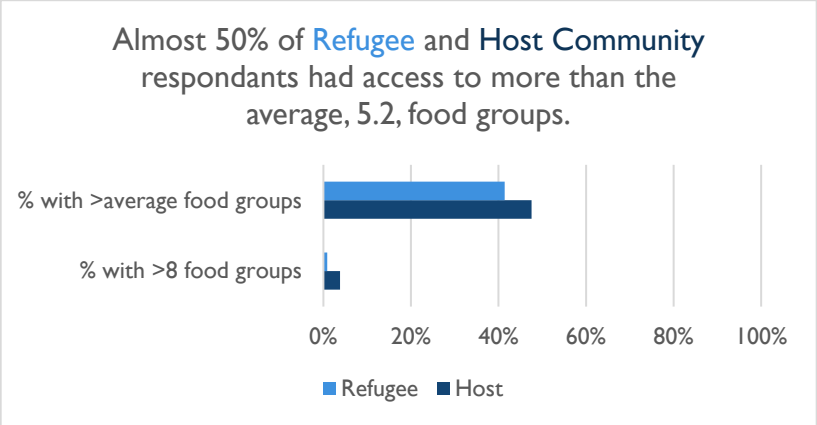


The Household Hunger Scale (HHS) is a food deprivation scale that measures the percent of households experiencing hunger. To collect data for this indicator, the person in the household in charge of food preparation is asked about the frequency with which three events were experienced by any household member in the last four weeks: 1. No food at all in the house 2. Went to bed hungry 3. Went all day and night without eating.[20] The HHS found that the majority (92.2 percent) of respondents had experienced no or little hunger in the last four weeks. The data is presented in Table 5.

[20] USAID Food for Peace. February 2019. Indicators for Emergency Program Performance Indicator Reference Sheets. P. 12.

The Household Diet Diversity Score (HDDS) is meant to provide an indication of household economic access to food, thus items that require household resources to obtain, such as condiments, sugar and sugary foods, and beverages, are included in the score. Individual scores are meant to reflect the nutritional quality of the diet. HDDS includes an aggregation of 12 total food groups, including: cereals; white tubers and roots; vegetables; fruits; meat; eggs; fish and other seafood; legumes; nuts and seeds; milk and milk products; oils and fats; sweets, spices, condiments and beverages. There are no established cut-off points in terms of number of food groups to indicate adequate or inadequate dietary diversity for the HDDS. Because of this it is recommended to use the mean score or distribution of scores for analytical purposes and to set program targets or goals.[21]

Figure 3: Household Dietary Diversity Score



The survey found that nearly half of refugee (41.4 percent) and host community (47.6 percent) respondents had above the average number of food groups (5.2 food groups). Very few (1.3 percent) had more than eight food groups on average. The data is presented in Table 5.

All three food security indicators show that there is relatively little difference in the food security between male and female headed households, regardless of refugee or host community status. The results of the FCS and HHS demonstrate that the majority of both refugee and host communities had access to sufficient amounts of adequately diverse foods. Both FCS and HHS show the refugee population is more food secure than the host communities, and this difference is statistically significant. HDDS however, shows that the host community consumes food from a statistically significant larger number of food groups (5.4 food groups) than refugee respondents (5.2 food groups), indicating that host community diets are more diverse than refugee households' diets, although with minor differences. This is supported by qualitative findings, which show that host and refugee communities are facing similar food security challenges including increased price and decreased availability of vegetables and other staple foods. Interviews with both refugee and host community members found that households have difficulty consistently accessing sufficient amounts, diversity, and quality of foods to adequately feed their families. Several focus group discussions with host community members estimated that 10% of the community is food insecure year-round. All groups reported food insecurity is most acute during rainy season, taking place from July – October. During this period there is a higher than usual shortage of

[21] FAO. 2010. Reprint 2013. Guidelines for Measuring Household and Individual Dietary Diversity. Prepared by Gina Kennedy, Terri Ballard and Marie Claude Dop Nutrition and Consumer Protection Division, Food and Agriculture Organization of the United Nations. ISBN 978-92-5-106749-9.

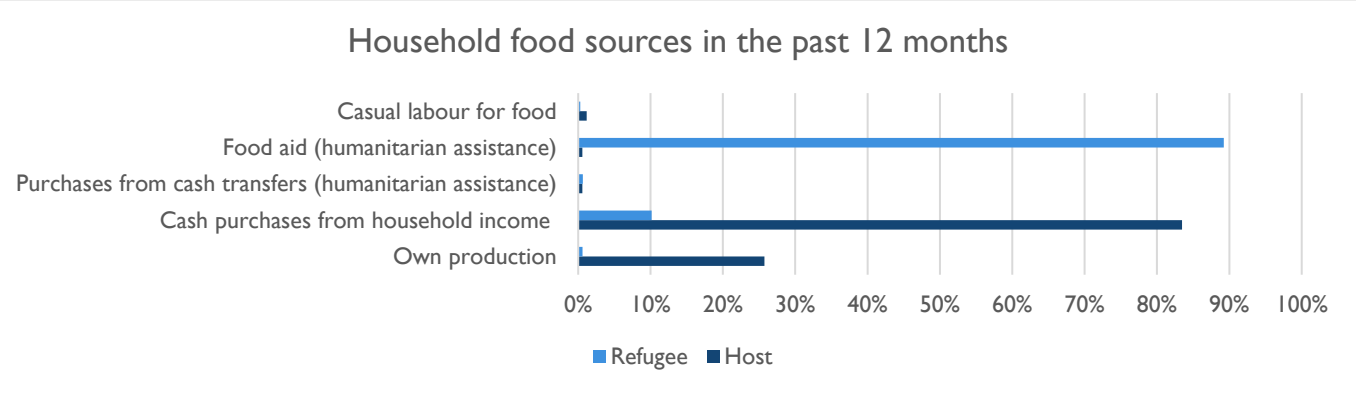
food. Refugee households cited the reason for increased food insecurity during the rainy season is due to a lack of available jobs during that time. Host community households reported food shortages are due to the increase in customers due to the influx of refugees and decrease of production. There are many reported cases in which households have to skip meals or eat smaller amounts of food.

Table 5: Improved Food Security Indicator Baseline Values

INDICATOR		PROGRAM COMMUNITIES			GENDERED HOUSEHOLD TYPE				ALL		
		Host	Refugee	Sig.	FNM	MNF	M&F	CNA	**Value**	95% CI	Deft.
1. % of households with poor, borderline, and acceptable Food Consumption Score (FCS)	***Average Score (FCS)***	***42***	***46***	*****	***42.9***	***39.1***	***45.7***	-	***45.2***	***(43.9, 46.9)***	***1.883***
	% Poor (0-21)	0.9%	0.6%		0.0%	0.0%	0.8%	-	0.7%	(-0.1%, 1.5%)	1.187
	% Borderline (>21 to 35)	26.1%	14.9%	***	18.7%	37.5%	15.9%	-	16.6%	(10.5%, 22.6%)	2.057
	% Acceptable (>35)	72.9%	84.5%	***	81.3%	62.5%	83.3%	-	82.8%	(77.5%, 89.0%)	2.070
2. Prevalence of households with moderate or severe Household Hunger Scale (HHS) score.	***Average Score (HHS)***	***0.44***	***0.27***	*****	***0.31***	***-***	***0.30***	-	***0.29***	***(0.15, 0.44)***	***2.447***
	% No/little hunger	89.2%	92.8%		90.3%	100.0%	92.4%	-	92.2%	(87.3%, 97.2%)	2.319
	% moderate/severe hunger	10.8%	7.2%		9.7%	0.0%	7.6%	-	7.8%	(2.8%, 12.7%)	2.319
3. % of households with improved dietary diversity score (HDDS)	***Average Score (HDDS)***	***5.4***	***5.2***	******	***4.9***	***5.0***	***5.2***	-	***5.2***	***(4.9, 5.5)***	***2.355***
	% with >8 food groups	3.8%	0.9%	**	0.0%	3.1%	1.5%	-	1.3%	(0.5%, 2.2%)	0.963
	% with >average food groups	47.6%	41.4%		36.1%	43.8%	43.2%	-	42.3%	(33.9%, 50.7%)	2.135
n		***340***	***331***		***68***	***7***	***596***	-	***671***		
7. % of beneficiaries who have received key nutrition messages	IYCF	10.9%	27.5%	***	23.0%	0.0%	25.9%	-	25.8%	(15.3%, 36.2%)	1.558
	Nutrition counselling	17.8%	35.9%	***	50.0%	0.0%	33.4%	-	34.0%	(22.9%, 45.1%)	1.537
	Cooking demonstration	8.1%	18.1%	*	23.0%	0.0%	16.8%	-	17.0%	(10.9%, 23.1%)	1.059
8. % of beneficiaries who can name 3 key nutrition messages (IYCF, NC, CD)		6.7%	17.1%	**	23.0%	0.0%	15.8%	-	16.1%	(9.7%, 22.4%)	1.136
n		***74***	***108***		***6***	***-***	***176***	-	***182***		

Interviews show that the primary source of food is different for refugee and host community members, and is supported by survey data. This is illustrated in Figure 4, below. Refugee households are heavily dependent on humanitarian assistance food aid for access to food, 89.0 percent of refugee households reported that food aid is their primary source of food. Interviews with refugee community members emphasized their dependence on humanitarian food aid and asserted that the amount of relief they receive has been decreasing over time, particularly in the last six months. In the past, refugees reported receiving spices, dry fish, and moshur-pulse (red gram), which they no longer receive. The majority of focus group discussions with female refugees found that the primary food aid received is rice, and that the amount isn't sufficient for feeding their entire families, particularly households consisting of 5-6 members.

Figure 4: Household food sources, main and others combined, in past 12 months

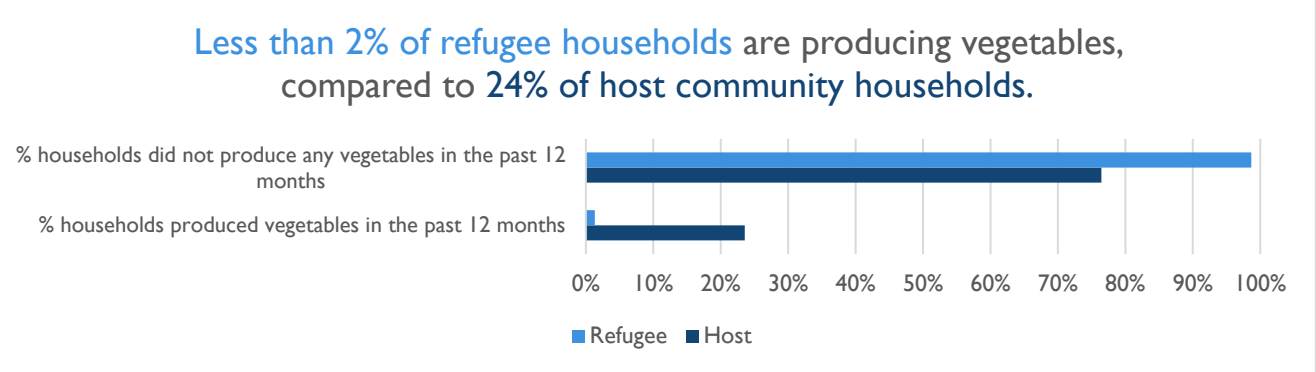


Despite the fact that relatively few refugee households (10.1 percent) reported accessing food through cash purchases from household income, nearly all interviews reported the price of vegetables has tripled in the last few years and cited this is a major challenge to household food security. Refugee interviews reported that the majority of shop owners are host community members, and that the availability of vegetables has decreased with the increase of customers. FGDs with female refugees found that men will often leave the camp to purchase vegetables from host community members, and women will sometimes exchange the rice they've received as food aid for vegetables produced by host community members, citing that they can exchange 200g of rice for one bundle of kangkong. Host community members reported that because of this practice, the price of rice has dropped significantly. Host community members are found to primary access food via cash purchases from household income (83.5 percent) and their own production (25.7 percent). The increased price of vegetables and other staple foods has particularly impacted host community members, who report that due to the influx of customers, their own production is not sufficient to meet market demands, thus, due to high and growing demand and low availability, prices are increasing. Vendors are responding to changing market conditions, namely dramatic increased demand relative to supply, resulting in an increase in price. Food is now coming from other areas such as Satkania, Lohagora and Chittagong. One male FGD estimated that 80% of the food sold at market is from outside traders. Host community members

report that only male household members purchase and sell at the markets, and women will cultivate vegetables for home and commercial production.

Host community interviews found that there has been a shift in household cultivation practices. Interviews with female host community members found that before 2017, women were producing vegetables for both home consumption and to sell for additional household income. Now, the amount cultivated is insufficient to fulfill these needs, and host community members must purchase additional vegetables from the market. Host community members reported in focus group interviews that the land has become degraded as a result of the refugee presence. The majority of both refugee and host community households are not found to be producing their own vegetables through home or kitchen gardens at baseline. More host community households (23.6 percent) are practicing home gardening than refugee households (1.3 percent). Interviews with host community members however indicate the number of host community households practicing household cultivation of some kind is likely much higher, as two focus group discussions asserted that roughly 90% of host community households practice homestead gardening.

Figure 5: Households practicing vegetable gardening



Focus group interviews with refugee households support the survey findings. Very few refugee households reported producing homestead vegetables. Those that did were in camp extension areas, which the research teams observed to be different from other camps sampled at baseline. In the extension areas research team observation found that refugee households had enough space/land for vegetable cultivation to use for household consumption. In the extension area interviews found that refugee households, particularly the women, were producing vegetables such as bottle gourd, bitter gourd, and Indian spinach. Female refugee respondents reported that they are "eager to grow" if they can have access to land, seeds and fertilizer.

Nutrition

The data show that a minority of beneficiaries have received key nutrition messages through cooking demonstrations, nutrition counseling, and infant and young child feeding. Refugee households and households with a female head are more likely to have reported receiving key nutrition messages already. Female refugee focus groups reported that they had some awareness of basic nutrition, primary health, and sanitation issues due to awareness sessions organized by Oxfam. Overall, however

the data show that there is limited awareness of nutrition for both refugee and host community households.

Table 6: Nutrition and Maternal Health Indicators

INDICATOR	PROGRAM COMMUNITIES			GENDERED HOUSEHOLD TYPE				ALL		
	Host	Refugee	Sig.	FNM	MNF	M&F	CNA (Child, no adult)	**Value**	95% CI	Deft.
8. % of beneficiaries who can name 3 (at least 3) key nutrition messages (based on the knowledge of 7 MCHN practices)	***54.4%***	***57.1%***		***62.0%***	***0.0%***	***56.3%***	-	***56.7%***	***(38.1%, 75.3%)***	***3.463***
1. At least 4 ANC check-up during pregnancy	58.9%	42.5%	***	40.4%	0.0%	45.0%	-	44.7%	(34.2%, 54.2%)	1.954
2. First PNC visit with 72 hours of delivery	25.6%	21.9%		16.6%	0.0%	22.8%	-	22.4%	(15.7%, 29.1%)	1.492
3. More food intake during pregnancy	50.2%	51.6%		67.5%	0.0%	50.3%	-	51.4%	(34.5%, 68.3%)	3.133
4. More day-time rest during pregnancy	40.4%	45.8%		36.5%	0.0%	45.7%	-	45.1%	(29.0%, 61.1%)	2.985
5. Baby should put to mother's breast immediately/within one hour after delivery	67.4%	74.4%		77.9%	0.0%	73.2%	-	73.5%	(61.7%, 85.4%)	2.483
6. Up to 6 months of age the baby should be exclusively breastfed	43.4%	34.8%	*	53.4%	0.0%	34.8%	-	36.0%	(23.3%, 48.6%)	2.439
7. From 6 months of age the baby should start with solid/semi-solid food	14.0%	16.0%		15.6%	0.0%	15.8%	-	15.8%	(8.8%, 22.7%)	1.767
9. % of beneficiaries who feel it is important to source and utilize nutritious food, specifically for women of child bearing age.										
Women of child bearing age	58.5%	63.2%		55.5%	0.0%	63.0%	-	62.6%	(45.2%, 79.9%)	3.305
Children U5	63.0%	74.3%	**	70.8%	0.0%	73.0%	-	72.8%	(60.8%, 84.9%)	2.503
Women or children or both	70.6%	76.3%		70.8%	0.0%	75.9%	-	75.6%	(64.4%, 86.7%)	2.397
n	***172***	***190***		***19***	***-***	***343***	***-***	***362***		

Less than 20% of refugee households and less than 10% of host community households can name three key nutrition messages at baseline. Households with a female head are more likely (29.9 percent) than those with a male head (13.8 percent) to be able to name three key nutrition messages (Infant Young Child Feeding practices, nutrition counselling messages, and cooking demonstrations). This is supported by qualitative findings which show that both refugee and host community households have limited understanding or awareness of nutrition, and female focus groups had slightly more awareness than male focus groups, particularly regarding child nutrition and maternal health. The minimal awareness does not appear to translate to a lack of value. Over 50 percent of respondents reported that they feel it is important to source and utilize nutritious food for women, children, women of child bearing age, and children under five particularly.

Focus group discussions emphasized that due to poverty, households often have to compromise on the type and quality of foods that are eaten. Even in cases where a household has moderate knowledge of nutrition, focus groups reported they cannot practice it properly due to their inability to afford sufficient diverse foods and are "only filling up stomach". FGDs with refugee households found that their diet largely consists of rice and pulses because these are received as distributions. They did not take vegetables and fruits regularly and reported low diversification in their diet. FGDs with host community households diet consists of potato, radish, sweet gourd, yard long bean, red amaranth, ridge gourds, ladies' finger, country bean, bottle gourd, and kangkong. A key informant interview with a camp health worker supported these findings, and reported that Main diet is rice, vegetable, pulse, and minimal animal protein intake.

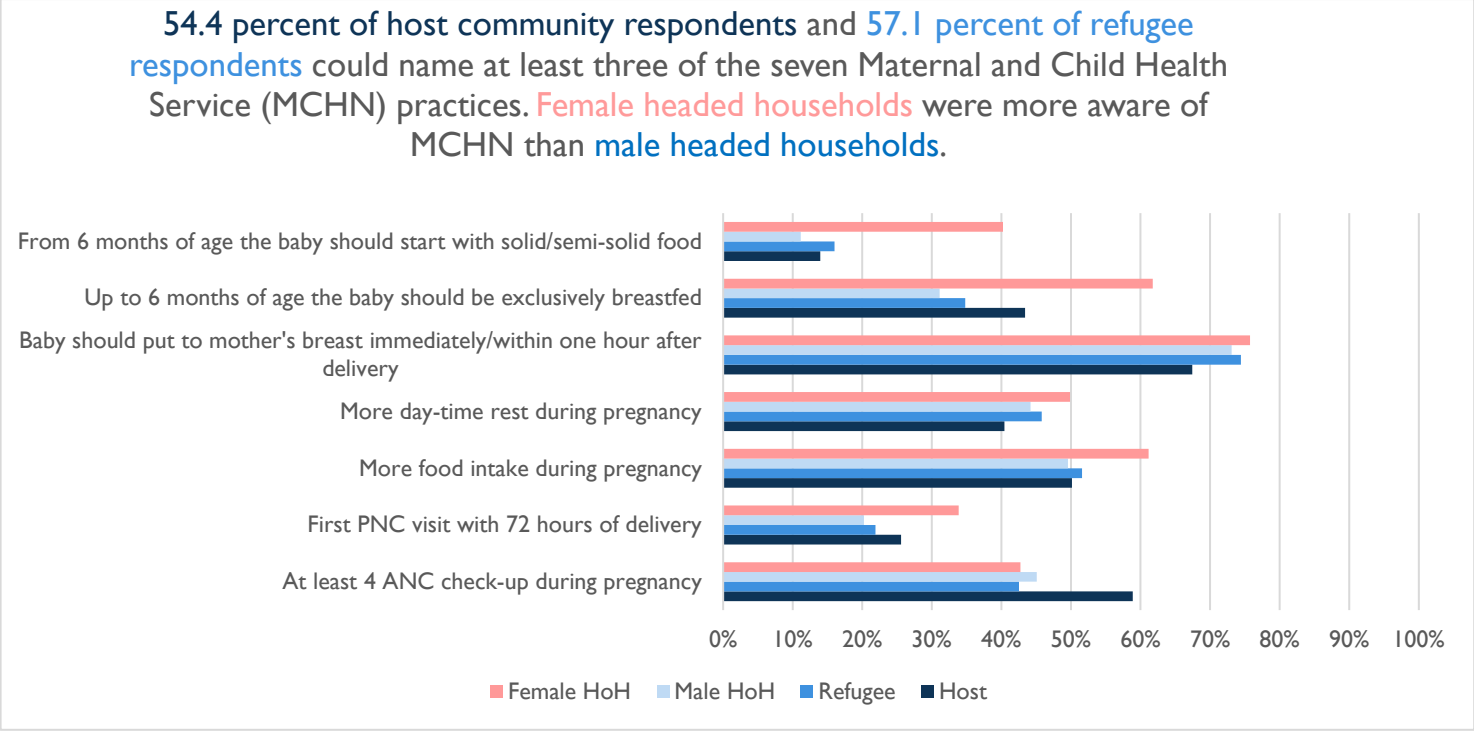
Regarding sensitization and uptake of key health and nutrition messages, baseline findings indicate that female headed households have more awareness of maternal and child health, child nutrition and feeding practices as compared to male headed households. The majority of the planned community cooking and learning centers and multipurpose training centers described in the EFSP technical narrative target women. "Men's coffee corner" sessions are planned to take place once weekly. Four of the six planned multipurpose raining centers are designated for women. Taking into consideration the normalized gender-based violence and male's lower awareness of health and nutrition messages, it is recommended that the proportion of programming designed for male beneficiaries be reexamined to ensure project goals will be met by planned activities in the 18-month timeframe.

Maternal Health

54.4 percent of host community respondents and 57.1 percent of refugee respondents could name at least three of the seven Maternal and Child Health Service (MCHN) practices. Only two of the seven practices were found to have a statically significant difference in response between refugee and host community members. More host community members (58.9 percent) than refugees (42.5 percent) reported that women should have at least four ANC check-ups during pregnancy. More host community members (43.4 percent) also reported that babies should be exclusively breastfed up to six months of age than refugee respondents (34.8 percent).

Antenatal care (ANC) is the systemic supervision of women during pregnancy to monitor the progress of fetal growth and to ascertain the well-being of the mother and the fetus. The components of ANC include: risk identification; prevention and management of pregnancy-related or concurrent diseases; and health education and health promotion. Postnatal care (PNC) is the care given to the mother and her newborn baby immediately after the birth and for the first six-eight weeks of life. The main purpose of providing optimal postnatal care is to avert both maternal and neonatal death, as well as long-term complications. Interviews with both refugee and host community members reported that households have a much better understanding and practice of antenatal care (ANC) than postnatal care (PNC). This was supported by a key informant interview with a camp health worker who stated that most pregnant and lactating women (PLW) maintain the ANC schedule and properly receive service and medicine but do not maintain the PNC schedule.

Figure 6: Reported knowledge of the seven MCHN practices



Interviews with refugee and host community members found that both male and females understand the importance of visiting the health center 3-5 times for ANC check-ups, and that during pregnancy it is important for women to have more rest and food than usual. There is variability in the adherence to ANC schedules. One FGD with female refugees reported that they know pregnant women should go to hospital for checkups every month but they don't follow it fully, and very few receive ANC 2/3 times during pregnancy. An FGD with female host community members reported that they know pregnant women need to take additional rest, need less hard work and extra nutrient food but they do not take extra food due to the high cost. Most groups also reported that men/husbands have a positive

attitude to take care of the women during pregnancy. Interviews with refugee and host community members show that PNC is not strictly adhered to, and perceived to be only necessary in the advent of an illness or severe issue with the baby or mother.

Coping Strategies

When livelihoods are negatively affected by a shock or stress, households may adopt various mechanisms (strategies) to cope with reduced or declining access to food as a result of the shock/stress. The Reduced Coping Strategies Index (rCSI) is a proxy indicator of household food insecurity that is based on a list of behaviors (coping strategies). The index reflects both the frequency of each behavior (i.e. how many times the coping strategy was used by any member of the household) and severity (i.e. how serious the strategy). The rCSI is based on a list of five food-related coping strategies that the household used in the seven days prior to the survey. The rCSI raw scores are calculated by multiplying the frequency with which a behavior was used by a universally used severity weight, then summing the weighted scores for each coping strategy.[22] In its simplest form, monitoring changes in the rCSI score indicates whether household food security status is declining or improving. There are no universal thresholds for rCSI, but the higher the rCSI, the more severe the coping is applied by a household. The rCSI raw scores are calculated by multiplying the frequency with which a behavior was used by a universally used severity weight, then summing the weighted scores for each coping strategy. The maximum raw score for the rCSI is 56, i.e. a household that used all five strategies every day for the last 7 days would have a raw score of 56. Higher rCSI indicates a worse food security situation and vice versa. At baseline, the average rCSI for host community households is 6.8, and 5.2 for refugee households. 55.1 percent of host community respondents and 41.4 percent of refugee respondents are above the mean rCSI score. This indicates that on average host community members are applying more serve coping strategies than refugee households.

Table 7: Reduced Coping Strategies Index (rCSI)

REDUCED COPING STRATEGIES INDEX (rCSI)	PROGRAM COMMUNITIES			GENDERED HOUSEHOLD TYPE				ALL		
	Host	Refugee	Sig.	FNM	MNF	M&F	CNA (Child, no adult)	**Value**	95% CI	Deft.
Mean	***6.8***	***5.2***	*****	***5.9***	***3.8***	***5.4***	**-**	***5.4***	***(4.6, 6.2)***	***2.868***
Median	6.0	4.5		5.0	5.0	4.5	-	4.5		
Standard Deviation	4.62	3.29		3.42	3.05	3.59	-	3.57		
Minimum	0.0	0.0		0.0	0.0	0.0	-	0.0		
Maximum	30.0	19.0		18.0	7.0	30.0	-	30.0		
% above the mean	55.1%	41.4%	***	44.9 %	38.3 %	43.3 %	-	43.5%	(32.4%, 54.5%)	2.806
	340	***331***		***68***	***7***	***596***	**-**	***671***		

[22] USAID Food for Peace. February 2019. Indicators for Emergency Program Performance Indicator Reference Sheets. P. 10.

FGDs with refugees find that they have various coping mechanisms available to increase their food security resilience. For example, during periods in which they do not have sufficient food, which typically occurs in the last week of the month, they are able to borrow cash and some food items from their neighbors, which they later return when they are able. Refugee FGDs also reported that roughly 5% of their community members have family members working abroad in Malaysia or the Middle East and sending remittances to their family members in the camp. These external sources of support are important examples of the social capital and networks available to refugee households. This is especially important as interviews with refugees found that there is a lack of financial services in the camps. There are no reported savings groups activities or opportunities for formal lending. Interviews with host community members however found that they do have access to savings groups and loans, but did not report examples of utilizing their social capital/networks in times of stress.

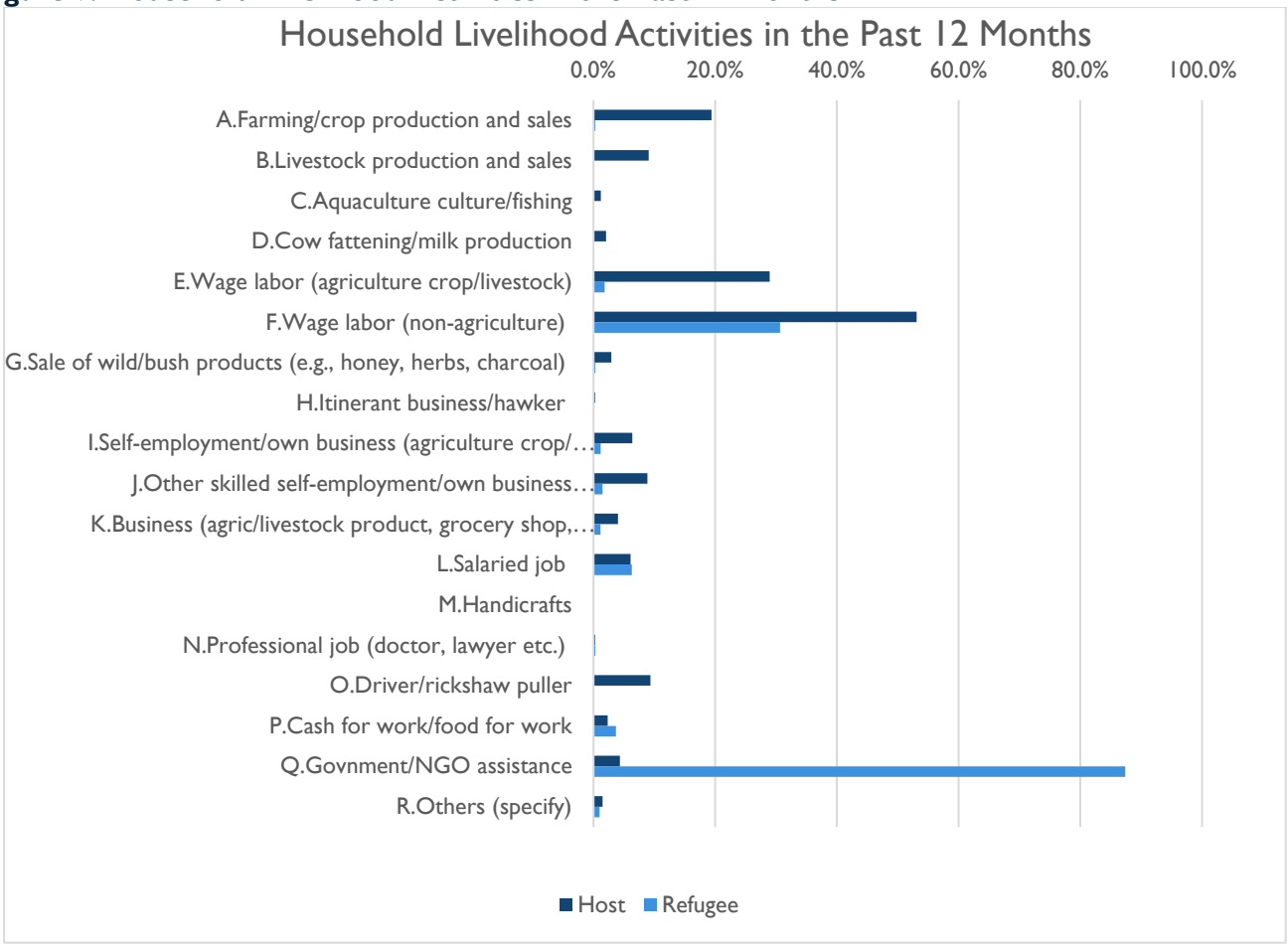
D. Improved Livelihoods

The data show that very few households are engaged in income generating activities (IGA). Less than one percent (0.3 percent) of refugees are engaged in IGA and less than 25 percent (22.2 percent) of host community members are engaged in IGA. On average, host community members have 1.55 income sources, whereas refugees have 0.47 income sources. 14.5 percent of host community members and 5.6 percent of refugees have more than two income sources at baseline.

Table 8: Improved Livelihood Indictors Baseline Values

INDICATOR		PROGRAM COMMUNITIES			GENDERED HOUSEHOLD TYPE				ALL		
		Host	Refugee	Sig.	FNM	MNF	M&F	CNA (Child, no adult)	**Value**	95% CI	Deft.
4. % of HHs who have more than two sources of income as a result of project intervention	***Average income sources***	***1.55***	***0.47***	*****	***0.23***	***0.24***	***0.70***	-	***0.63***	***(0.56, 0.71)***	***1.243***
	>2 income sources	14.5%	5.6%	***	0.0%	0.0%	2.0%	-	6.9%	(4.6%, 9.3%)	1.177
5. % of households engaged in income generating activities disaggregated by gendered HH type and by type of activities		22.2%	0.3%	***	0.7%	0.0%	4.1%		3.6%	(2.6%, 4.6%)	0.662
	Goat rearing	9.5%	-	***	0.0%	0.0%	1.6%		1.4%	(0.9%, 1.9%)	0.548
	Poultry rearing	17.0%	0.3%	***	0.7%	0.0%	3.2%		2.8%	(1.9%, 3.7%)	0.677
	Dry fish production	-	-		-	-	-		-	-	-
	Tailoring	0.3%	-		-	-	0.1%		0.0%	(-0.05%, 0.1%)	0.544
	Weaving	-	-		-	-	-		-	-	-
	Handicraft	-	-		-	-	-		-	-	-
	Others (Specify)	-	-		-	-	-		-	-	-
	None	77.8%	99.7%	***	99.3%	100.0%	95.9%		96.4%	(95.4%, 97.4%)	0.662
n		***340***	***331***		***68***	***7***	***596***	***-***	***671***		

Figure 7: Household Livelihood Activities in the Past 12 Months



Refugee Livelihoods. At baseline, refugee livelihoods are almost entirely dependent on humanitarian relief/aid. 87.4 percent of refugees' report government/NGO assistance as a primary livelihood activity in the past 12 months. FGDs with refugees found that food and other necessary commodities are received through aid organized through the camps. FGDs with both male and female refugees asserted that the amount of relief received has been decreasing, and women noted that some relief items such as soap, and sleeping mats has stopped altogether. Interviews found that in order to generate some income refugee households are selling relief commodities, particularly pulse because they don't prefer to eat it and oil. Male household members sell these relief commodities to businessmen from the host community.

Refugees reported that there are very few work opportunities within the camp, and the only coveted opportunities that do exist are a small number of NGO positions that only highly qualified and highly educated individuals qualify for. Key informant interview with an NGO worker reported that some educated youth are working as volunteers with various NGOs, and Ganoshyastha Kendra in particular

has paid health volunteers who receive 12000 TK/month, the equivalent of $141.55 USD[23]. Women are not involved in work outside of their homes due to social barriers and "shyness". Paid labor is occasionally available in the camps for short terms projects. FGDs reported that male refugees typically get two to three days of paid labor per month within the camp, and this usually consists of construction work/physical labor. For this they receive an average wage of 350 TK/day, the equivalent of $4.13 USD/day. Focus groups with male refugees asserted that only 80% of the males in the camps get access to work. Only males above the age of 60 are excluded from work within the camp altogether. Key informant and focus group interviews with refugees indicate that the government prevents refugees from working outside of the camp. Interviews with male refugees find this a point of frustration, as wages are significant higher (50 TK/day higher) outside of the camp. Although it is illegal for refugees to engage in any paid work outside of the camps there are instances in which male refugees do work outside of the camps in host communities. One FGD reported that they work at a nearby rice field for seeding and transplanting. For this they get 400 TK/day, the equivalent of $4.72 USD. In the past, it was more common for refugees to pursue work outside of the camps, although due to the embargo by the government interviews find they are more fearful of possible repercussions. Interviews with refugees clearly demonstrate that all respondents want to have access to regular work. One male FGD reported that they are ready to get involved in any type of work even cleaning up garbage or repairing latrines.

Host Community Livelihoods. Livelihoods for host community members are more diverse than those of the refugees, however, interviews with host community households find that a significant shift has occurred in host community livelihoods as a result of the refugee presence. Male FGDs with host community members found that "massive change occurred after arrival of Rohingya" and they have been forced to change their occupation/livelihood. FGDs found that before the arrival of Rohingyas both men and women used to collect fire wood and sell them in local market which garnered about double the amount made from agricultural labor, however, now the forest areas are "fully destroyed because of the Rohingya". Host community members are reportedly participating in a variety of income generating activities, including agricultural production, homestead gardening, physical labor/construction work, fish capture, day laborers in earthen work, poultry rearing, taxi driving, rickshaw puller, harvesting sand, small businesses and for women work as a maid.

Host community members reported that as a result of the influx of refugees willing to work for lower wages, wages have decreased. Host community members are reportedly being forced out of job options that had previously been available to them because refugees are willing to work the same jobs for lower wages. A female FGD noted that "initially when Rohingyas arrived in 2017 male members could got works as day labor in camps but now NGOs don't employ any labor from host community as they get cheaper labor from Rohingyas". FGDs with males estimate that 95% of host community

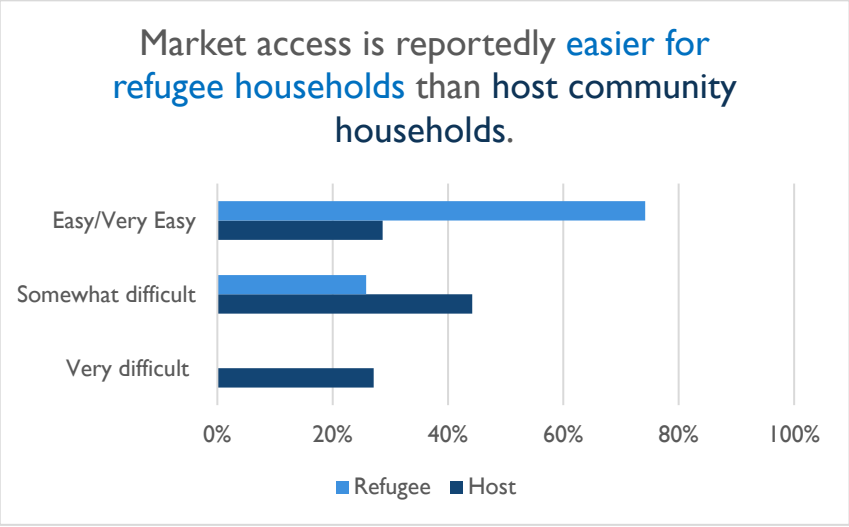
[23] All conversions of Bangladeshi Taka to United States Dollar were completed on November 21 2019 at the exchange rate of 1 BK to 0.012 USD.

members are still involved in agricultural work, particularly in rice fields. For this, males make 400 TK/day including lunch or 500 TK/day excluding lunch. FGDs assert that refugee males are working the same job for only 300 TK, which is decreasing the opportunities for host community members to work, and that prior to 2017 they were receiving 600-700 TK/day for the same work. A similar instance is cited by female host community members, who explained that roughly 5% of women in the host community worked as housekeepers/maids 8-10 days a month for 200-250 TK/day. They report that refugee women are taking those positions for only 100-150 TK/day and they have effectively lost their employment opportunity there. FGDs with female host community members find that work within the camps is limited due to education requirements that the majority of women in the host community do not meet, and only one or two community members are currently engaged in work in the camp.

Market Opportunities

Host community members consistently reported that there has been a decrease in access to the labor market due to the increasing numbers of refugees. Female host community members reported they foresee potential to increase their income earning opportunities through vegetable and poultry production, due to a new market being created to serve the influx of customers consisting of refugee and NGO staff, especially at Ukhia upazilla.

Figure 8: Ease of Market Access



Market access is reportedly easier for refugee households than host community households. On average, the closest market where they can sell vegetables, livestock and other products is 3.6 km away for host community households and only 0.6 km away for refugee households. 74.2 percent of refugees reported accessing a market to be easy or very easy. Only 28.7 percent of host community households reported market access to be easy or very easy. 27.1 percent of host community households reported market access to be very difficult, while zero percent of refugees reported market access to be difficult.

Challenges

Interviews with refugee and host community members consistently identified three main challenges: the increased cost of food, especially vegetables; the lack of a stable job market; and poor water, sanitation and hygiene (WASH).

Increased cost of food commodities. As discussed in the "improved food security and nutrition" section of the report, food security is an issue for both refugee and host community households. The primary reason cited in interviews is not due to a lack of access to food, but to an increase in prices for food, particularly for fish and vegetables. Interviews consistently reported that since 2017 vegetable prices have increased 2-3 times due to the increase in customers. As both host community and refugee households report that poverty and a lack of income/work opportunities is an issue, increasing food prices is a serious challenge.

Lack of stable job market. As discussed in the "improved livelihoods" section of the report, reliable access to wage labor is limited for both host community and refugee men. Women of both groups primarily only work within the home, although female host community members have also reported instances of participating in income generating activities outside of the home (primarily assistance in agricultural labor, home gardening, and work as maids). The lack of a stable job market is cited as a source of frustration and limiting the potential growth and health of host community and refugee households.

WASH. FGDs and KIIs with NGO and health workers find that hygiene conditions, particularly in the refugee camps is not good. WASH is a challenge for both refugee and host community members, particularly access to functional latrines and potable water. Focus groups with refugees found that an unhygienic environment is one of their main challenges in caring for their children. However, interviews with refugees and KIIs with workers in the camps found that there is adequate access to functional latrines at baseline. However, male FGDs reported that the latrines are likely to require updates and maintenance in the near future. Female refugees reported that there are often very long lines for the latrines, especially in the morning, and that sometimes after using the latrine there are not taps or water with which to wash their hands. An FGD with male host community members reported that they estimate 80% of host community members do not have sanitary latrines. Female host community members reported that the number of sanitary latrines is not sufficient, and open defecation is also practiced in their communities.

FGDs and KIIs with health workers find that handwashing is not commonly practiced, and soap is not commonly utilized in hand washing or bathing. This is supported by baseline survey data which show that over 90 percent of refugee and host community respondents report handwashing after defecation/using the latrine and before eating, although less than 50 percent do so before feeding children or breastfeeding, less than 35 percent before food preparation, and less than 30 percent after cleaning baby's defecation. FGDs asserted this is due to a lack of access to soap, although researchers observed that soap is available and doesn't appear to be the actual problem. This is supported by KIIs with health workers who stated that the habit and custom to wash with soap is not present in either the refugee or host community. KIIs with health workers find that this had caused various diseases to spread, particularly among children.

Access to potable water is a challenge for both refugee and host community households. Interviews with both host community and refugee households found that although tube wells are present, they are often not functioning or the water is contaminated. Thus, the majority of refugee and host community members collect their drinking water, and during dry period they must travel far distances to collect water. In the camps, refugees reported that they do not drink the water from the tube wells that have been provided near their homes because it is "iron water". In one FGD, refugees reported that the women collect water from a single source operated by a motor driven solar panel which functions once a day between 4-5pm, and the water produced from this source is insufficient to meet the needs of their household. FGDs in a host community found that a canal providing water for the community has become polluted with waste water and sand coming from the nearby camp. Overall, access to potable water is a challenge for both host community and refugee households.

Women's Empowerment and Status

Women's empowerment and status is found to be similar in refugee and host communities at baseline. For the purpose of this baseline women's empowerment and status is analyzed through: movement and decision making; early marriage; violence against women; and family planning.

Movement and Decision Making. Both refugee and host community male and female FGDs report that women, particularly married women, are not able to leave their homes without the permission of their husbands. An FGD with male host community members explained that in general women aren't restricted to go outside the home, however for new cases that come up women do need permission to leave the home for those cases. One male refugee FGD explained this is due to the rules of Islamic Sharia. Several FGDs with female host community members reported that it is a typical practice for their husbands to check their mobile phones, often on a daily basis to monitor who they are communicating with. Male refugees reported in FGDs that women's mobility has increased since 2017, because women are now going to the CIC office, health center, receive relief, participate in different NGO's awareness meetings and trainings, and pointed out that educated female refugees are working as volunteers with different NGOs. Overall, women only participate in work inside the home, although in host communities male FGDs reported that women can also work in homestead gardening and/or in agricultural labor to help her husband. Female FGDs reported that women do not participate in community level initiates or decision making. The majority of FGDs with men and women found that typically males make household decisions without consulting their wives. This was especially the case in refugee communities. A few FGDs with both men and women found that households do make decisions jointly. This is supported by the baseline survey data which find that mothers of children under five are more likely than fathers to report that decisions on child health and nutrition and pregnant and lactating women health and nutrition are made by their husband, rather than themselves. This is presented in Table 9 below.

Table 9: MATERNAL AND CHILD HEALTH DECISION MAKING

BACKGROUND CHARACTERISTICS	PROGRAM COMMUNITIES		ALL	
	Host	Refugee		
	%	%	#	%
% with make decisions for child health and nutrition				
Respondent: Mother of Children U5				
Yourself	24.3%	30.8%		29.9%
Spouse	36.5%	37.0%		37.0%
Yourself and spouse/partner jointly	38.1%	32.2%		33.0%
Yourself and others jointly	1.2%	0.0%		0.2%
Others (specify)	0.0%	0.0%		0.0%
n	*164*	*180*		*344*
Respondent: Father of Children U5				
Yourself	19.8%	11.4%		12.1%
Spouse	19.8%	33.8%		32.6%
Yourself and spouse/partner jointly	60.3%	54.9%		55.4%
Yourself and others jointly	0.0%	0.0%		0.0%
Others (specify)	0.0%	0.0%		0.0%
n	*5*	*9*		*14*
Respondent: All (Farther, Mother)				
Yourself	24.1%	29.9%		29.1%
Spouse	36.0%	36.9%		36.8%
Yourself and spouse/partner jointly	38.7%	33.3%		34.0%
Yourself and others jointly	1.2%	0.0%		0.2%
Others (specify)	0.0%	0.0%		0.0%
n	*169*	*189*		*358*
% with make decisions for PLW health and nutrition				
Respondent: Mother of Children U5				
Yourself	14.3%	23.8%		22.5%
Spouse	45.6%	43.8%		44.0%
Yourself and spouse/partner jointly	37.0%	32.5%		33.1%
Yourself and others jointly	3.2%	0.0%		0.4%
Others (specify)	0.0%	0.0%		0.0%
n	*164*	*180*		*344*
Respondent: Father of Children U5				
Yourself	19.8%	33.6%		32.4%
Spouse	19.8%	22.9%		22.6%
Yourself and spouse/partner jointly	60.3%	43.6%		45.0%
Yourself and others jointly	0.0%	0.0%		0.0%
Others (specify)	0.0%	0.0%		0.0%
n	*5*	*9*		*14*
Respondent: All (Farther, Mother)				
Yourself	14.4%	24.3%		23.0%
Spouse	44.8%	42.8%		43.0%
Yourself and spouse/partner jointly	37.7%	33.0%		33.6%
Yourself and others jointly	3.1%	0.0%		0.4%
Others (specify)	0.0%	0.0%		0.0%
n	*169*	*189*		*358*

Early Marriage. Early marriage is still taking place in both refugee and host communities. FGDs with refugees find that early marriage is still a common practice, reportedly due to poverty and social pressure. One FGD with male refugees explained that neighbors usually arrange to marry their daughters at a very early age, so the social pressure to allow their daughters to marry early is strong. FGDs with both refugee and host community female members reported that instances of early marriage are decreasing, but not altogether absent. In the camps, this decrease is reported to be due to the requirement to get permission from the Camp in Charge (CiC) individual. FGDs with women in the host communities reported that instances of multiple marriages/polygamy have risen in the last few years. Regardless of the age at the time of marriage, both refugee and host communities still require dowries. Host community FGDs did not comment on the cost of dowry or if this is a challenge, however FGDs with refugees found that the minimum dowry amount is 50000 BT, the equivalent of $589.78 USD, and cited several examples in which the guardians cannot allow their daughters to marry yet because they can't afford the dowry.

Gender Based Violence. FGDs with all groups reported that husbands beat wives during quarrels. One male FGD with host community members states that "everybody beats his wife occasionally due to some trivial issues". FGDs with refugees note that wife beating is not positive and is a cause of poverty, and female refugees report that wife beating is common as a result of multiple marriages. Female host community members report that although still common, wife beating and assault of women is decreasing, and men are more supportive as compared to the past.

Family Planning. Clear information about decision making regarding family planning is not available from FGDs or survey data. However, key informant interviews with health workers and camp workers find that it is common for women to become pregnant again when their previous child is only 6-8 months old. KIIs assert that the majority of women in the camps believe utilizing family planning methods is a great sin, and estimate that 99% of male refugees do not utilize any family planning method, and 2% of female refugees utilize injections or birth control pills, sometimes secretly from their husbands. KIIs find that women claim they do not have the right to make pregnancy decisions, and husbands decide when they will become pregnant or not. FGDs with male refugees found that there is an awareness that it is more difficult to adequately care for their children when they have too many, and this is a family planning issue.

E. Social Cohesion between refugee and host communities

The relationship between refugee and host communities is perceived very differently between the two groups. Overall, interviews with refugees found that they are grateful to the host community and thankful to be in a safe location and believe there is currently a positive relationship between the camp and host community. Interviews with host community members, however, find a growing resentment to the refugees due to the largely negative impact(s) the camp and influx of refugees has had on host community livelihoods.

Figure 9: Quotes from FGDs on Relationship between Refugees and Host Community

Different perspectives of refugee and host community members	
"*Over there [in Myanmar] we could not sleep even for a night every moment we especially the young girls passed with high risk of sexual violence. We cannot forget the scenario when several people were fired in front of us. Even our cows, goats although were taken out. Now we are secured enough we have food security; we have houses to stay and we are fully secured. So, we are grateful to the government and other organizations.*" – Male Refugee "*We are grateful to Bangladesh that we can save our lives.*" – Female Refugee	"*Rohingyas are the more ferocious and cruel nation in the world, they can do any harm to anyone.*" – Male Host Community member "*Because of the Rohingya our lives are being destroyed in many ways and even it affects our family bonding, income and crop production opportunities: husbands intend to visit camp for establish illegal relation, we strongly expect their immediate departure.*" – Female Host Community Member

Interviews with refugee's report that there is currently a good relationship between the camp and host community, although the government has suggested the refugees not leave the camp, and FGDs report that in some cases host communities have asked refugees not to come into their villages. FGDs with male refugees find their main frustration is in the inability to leave the camp and conduct business outside the camp. FGDs with female refugees find that women feel more secure and safe from sexual harassment than they did in Myanmar, and don't want to return to their own country.

Interviews with host community members more explicitly highlight a shift in the relationship between host community members and refugees. Host communities report that in 2017, the relationship between the camp and host community was positive, and host communities were provided food, clothes, and shelter and had "good feelings" about the refugees. Now, however, issues have arisen that they believe are created by the refugees, and they are "decreasing hospitality or welcoming mind". Several reasons were cited for this, including that refugee presence has destroyed forest and cultivation lands, refugees don't purchase goods from shops owned by host community members, cause traffic jams, increased prices of basic commodities, deal drugs and are frightening. The overarching reason cited for negative attitudes towards the refugees however was because there isn't any visible effort or behavior which indicates that the Rohingya will ever leave the country, and will become permanent citizens.

4. Indicator Targets

The following section evaluates the extent to which the indicator End of Project Status (EOPS) targets as outlined in the EFSP monitoring and evaluation framework are realistic in the project context and timeframe. All indicator targets are found to be either exceeded or too ambitious at baseline. Two out of six indictor targets have already been exceeded at baseline. Four out of six indicator targets seem to be unrealistically ambitious due to baseline values. The indicators, baseline value, end of project status target, and a short summary of the current status of the baseline value against planned targets is illustrated in Table 10 below.

Table 10 Indicator Target Feasibility at Baseline

	EFSP Project Indicators	BL Value	End of Project Status (EOPS)	Current Status
Purpose 1: Increased consumption of diverse and quality foods that meet the nutritional requirements of vulnerable households in Refugee Camps and Host Communities				
1	EFSP 2. % of households with poor Food Consumption Score (FCS)	0.7%	EOPS: at least 80% of targeted house-holds/individual attaining Acceptable Food Consumption Score (FCS > 35)	**Exceeded**. At baseline, 84.5% of refugee and 72.9% of host community members attained an acceptable food consumption score. Overall, 82.8% had acceptable FCS. As the target has already been exceed at baseline, it is recommended this is revised.
	% of households with borderline FCS	16.6%		
	% of households with acceptable FCS	82.8%		
Intermediate Outcome 1.1: Improved access to and consumption of diverse and nutritious foods for 34,112 refugee HHs and 5,229 host community HHs directly impacted by the refugee influx.				
2	EFSP4. Prevalence of households with moderate or severe Household Hunger Scale (HHS) score.	92.2%	EOPS: 90% of the targeted household have little to no hunger in the past 30 days preceding the evaluation	**Exceeded.** At baseline, 92.8% of refugees and 89.2% of host community members report little to no hunger in the last 30 days. 7.2% and 10.8% respectively report moderate/severe hunger. However, the Indicator and EOPS do not align. The indicator is the % HHs with *moderate or severe HHS*, and the target is % HHs with *little to no hunger*. It is recommended this is revised.
3	% of households with improved dietary diversity score (HDDS)	42.3%	EOPS: 80% of HH which access and consume more than eight different food types	**Off-Track.** At baseline, 41.4% of refugees and 47.6% of host community members consumed above the average number of food groups. Only 0.9% of refugees and 3.8% of host community members consumed more than eight different food types. The target 80% of households who consume more than eight different types of food is likely too ambitious and not achievable within 18 months.

Intermediate Outcome 1.2: Enhanced Refugee and Host Community HHs' capacities to sustainably access to nutritious and diversified food				
4	% of HHs who have more than two sources of income as a result of project intervention	6.9%	EOPS: 60% of HHs have more than two sources of income as a result of project interventions	**Off-Track**. At baseline 5.6% of refugees and 14.5% of host community members had two or more income sources. The target 60% of households to achieve >2 livelihoods is likely too ambitious and not achievable within 18 months.
5	% of households engaged in income generating activities disaggregated by gendered HH type and by type of activities	5.5%[24]	EOPS: 50% of the targeted households engaged in IGAs	**Off-Track**. At baseline 0.3% of refugees and 22.2% of host community members are engaged in IGA. This overall is 5.5% of households. The target 50% of the targeted households engaged in IGAs is likely too ambitious and not achievable within 18 months.
Purpose 2: Capacity of Refugees and Host Communities to withstand future shocks enhanced				
6	EFSP3. Reduced Coping Strategies Index (rCSI)	43.5%[25]	EOPS: 80% of targeted HHs have low coping index	**Off-Track**. As there is no universal threshold for rCSI it is recommended to use the average as the threshold for "low", thus at baseline, 55.1% of host community respondents and 41.4% of Refugees (an average of 43.5% overall) are above the average coping index score. The target 80% of HHs have low coping index is likely too ambitious and not achievable within 18 months.

[24] See Table 8: Improved Livelihood Indictors Baseline Values
[25] See Table 7: Reduced Coping Strategies Index (rCSI)

5. Conclusions and Recommendations

This baseline provides the information base against which to monitor and assess EFSP activity progress and effectiveness through implementation. This baseline can be used at midterm and end line to assess and measure changes in household's livelihood situations and challenges, including marketing opportunities and challenges; assess and measure changes in women's empowerment and status; and assess and measure changes in relations between host communities and refugee communities. At this stage baseline conclusions can be drawn in the areas of food security, livelihoods, women's empowerment and status, the relationship between host and refugee communities and indicator targets.

Food Security. Interviews with refugee and host communities show that food security is a prevailing issue. To create baseline values for EFSP project purpose one: "Increased consumption of diverse and quality foods that meet the nutritional requirements of vulnerable households in Refugee Camps and Host Communities", three food security measures are utilized, the Food Consumption Score, Household Hunger Scale, and Household Dietary Diversity Score. Host community households are found to be more food insecure than refugee households, and the reduced coping strategies index shows that host community members are applying more severe coping strategies than refugee households on average. All three food security indicators show that there is relatively little difference in the food security between male and female headed households, regardless of refugee or host community status. Refugee households are largely dependent on humanitarian food-aid, while host community households are dependent on purchasing food and home production. The market and production practices have shifted since the 2017 arrival of the Rohingya, negatively impacting host community food security status. Focus group discussions emphasized that due to poverty, households often have to compromise on the type and quality of foods that are eaten. Even in cases where a household has moderate knowledge of nutrition, focus groups reported they cannot practice it properly due to their inability to afford sufficient and diverse foods.

Livelihoods. Baseline data show that very few households are engaged in income generating activities, and even fewer engaged in two or more income sources. Refugee livelihood options are limited due to the embargo on refugees participating in paid labor outside the camps, and some households resort to selling relief items to generate income. Host community livelihoods are more diverse; however, livelihood stability has decreased. Host community members report that wages and job/paid labor opportunities have decreased due to presence and willingness of Rohingya to earn less for the same labor.

Women's empowerment and status. At baseline women's empowerment and status is found to be similar in refugee and host communities. Both groups report that women must seek permission to move outside of their homes, and typically do not participate in the market and work within the home. Decisions on household expenditure, family planning, and child nutrition are cited as being made by the

male head of household, sometimes in consultation with his wife. Early marriage, although reported to be in decline, is still present in both refugee and host communities. Interviews with refugees asserted that the Camp in Charge individual now requires households get permission before marriage, which has decreased early marriage. Gender based violence is present in both refugee and host communities, which report that wife beating during disagreements is still common, although it appears sensitization to this issue is beginning, as FGDs did report that wife beating is not positive.

Social Cohesion. The relationship between refugee and host communities is perceived very differently between the two groups. Overall, interviews with refugees found that they are grateful to the host community and thankful to be in a safe location and believe there is currently a positive relationship between the camp and host community. Interviews with host community members, however, find a growing resentment to the refugees due to the largely negative impact(s) the camp and influx of refugees has had on host community livelihoods. Host community frustration with refugees appears to be centered on the fact that host communities do not believe the refugees intend to leave and act as permanent citizens.

Recommendations. It is recommended that these baseline findings be used by operations staff to refine activity implementation and redesign indicator objectives and targets against the food and nutrition security conceptual framework and the activity's theory/pathway of change. All indicator targets are found to be either exceeded or too ambitious at baseline. Two out of six indictor targets have already been exceeded at baseline. Four out of six indicator targets seem to be unrealistically ambitious due to baseline values. This would indicate that the initial understanding of the current context is not in alignment with reality of baseline. It is recommended that all indicator targets are reviewed to ensure monitoring targets measure planned outcomes and targets are feasible in the relatively short project timeframe. Specific recommendations for the baseline indicators are outlined in Table 11.

Table 11: Indicator Recommendations

	EFSP Project Indicators	Recommendation
1	EFSP 2. % of households with poor Food Consumption Score (FCS) % of households with borderline FCS % of households with acceptable FCS	**Revise Indicator**. As the target has already been exceed at baseline, it is recommended the indicator is revised to focus on borderline food consumption scores (>21 to 35 FCS). Or, the target could be revised from 80% to 90% of HHs with acceptable level of FCS.
2	EFSP4. Prevalence of households with moderate or severe Household Hunger Scale (HHS) score.	**Revise Indicator.** The Indicator and EOPS (% of the targeted household have little to no hunger in the past 30 days) do not align. It is recommended this is revised to ensure alignment between the indicator and the target against which it will be measured. If the indicator is revised to be in alignment with the EOPS, it is recommended to revise the target from 90% to 95% of HHs with little to no hunger for the 18-month project.
3	% of households with improved dietary diversity score (HDDS)	**Reduce Target.** The target 80% of households who consume more than eight different types of food is likely too ambitious and not achievable within 18 months.
4	% of HHs who have more than two sources of income as a result of project intervention	**Reduce Target**. The target 60% of households to achieve >2 livelihoods is likely too ambitious and not achievable within 18 months.
5	% of households engaged in income generating activities disaggregated by gendered HH type and by type of activities	**Reduce Target**. The target 50% of the targeted households engaged in IGAs is likely too ambitious and not achievable within 18 months.
6	EFSP3. Reduced Coping Strategies Index (rCSI)	**Revise Indicator and Reduce Target**. As there is no universal threshold for rCSI it is recommended to use the average as the threshold for "low". The target 80% of HHs have low coping index is likely too ambitious and not achievable within 18 months.

6. Appendix

6.1 Sample Size Calculation

Quantitative design

The baseline study was conducted in two sub-districts (Upazillas) of Cox's Bazaar (Ukhiya and Teknaf). World Vision proposed a two-stage cluster sampling procedure where the clusters were selected using Probability Proportional sample to Size (PPS) procedure. The two-stage sampling involved the selection of villages/wards from 5 unions of the host communities and camps from the refugee communities (25 camps). Equal number of samples were drawn randomly from the beneficiary sampling frame in a sampled cluster. The PPS sampling procedure and equal cluster sample size ensured that households in the different clusters had the same chance to be selected at both levels of evaluation points (baseline and end of project evaluation). The sampling frame was constructed based on the participant register to appropriately reflect the target population. Households, community members, community leaders and stakeholders (government and non-government), wholesaler and market owners were the primary units of the overall sampling frame.

Sampling formulae and size

The sampling units were heterogeneous between host communities and refugee camps. The total 678 samples selected across the host and refugee communities might be a reason of bias/skewed estimates of the indicators. Also, characteristics of the clusters would be different in case of considering ward/village from the 5 unions of the host communities and camps from the refugee communities. In this situation, stratification is recommended for host and refugee sampling frames with representative sample sizes for accurate estimates of the indicators. Stratum sample size estimation is proposed for point estimation at baseline and endline, such that the combined sample size is equal to the sample size (678) estimated to measure 10 percentage points change for the totals. Therefore, following is the FFP recommended formula has been used to estimate stratum sample size (host and refugee):

$$n_{initial} = \left\{ \frac{Z^2 \times P \times (1-P)}{MOE^2} \right\}$$

Where,

- $\mathbf{n_{initial}}$ = minimum required initial sample size (before adjusting finite population correction).
- **p** = an estimate of the true (but unknown) population (project participant) proportion at baseline=**50%**[26] **(0.50).**
- **Z** = critical value for from normal probability distribution (Z-score corresponding to the 95% of confidence level) **[Z = 1.645 at 95% confidence level].**
- *MOE* = margin of error (acceptable percentage error) = 0.065 (6.5%).

[26] P attains maximum sample size when it is 50%, recommended when any prior estimate is not available.

- **d** = Design effect[27] , two-stage PPS cluster sampling procedure is proposed and in that case design effect might be close to two **[d = 2].**
- $\mathbf{N_f}$ = non-response factor [**1.10**] (assumes there will be 10% non-response rate).

Using the above formula and the parameters the estimated initial sample size for a stratum is $n_{initial}$ = 160[28]. Thus, the design effect (2) and non-response factor (1.10) adjusted final stratum sample size is $n_{stratum}$ = 352 ≈ 350. The total estimated sample size for ESFP baseline is n = 350+350 =700, which is slightly higher than the estimated sample size 678 to measure 10 percent point change for the totals.

There are total 45 wards in 5 unions of host communities and 25 camps in refugee communities. Fourteen wards (cluster) from the host communities and 14 camps (clusters) from the refugee communities will be selected using PPS method with a cluster sample size 25[29], equal for each of the 28 selected clusters. Appropriate sampling weights will be used for the stratification during the data analysis.

Table 12 shows the summary of the proposed revised sample size and sampling approach:

Table 12: Proposed revised sampling approach

Items	Host	Refugee	Total
No. of EFSP project participants	5,229 HHs (26,145 individual)	34,112 HHs (170,560 individuals)	39,341 HHs (196,705 individuals)
No. of clusters	45 wards in 5 unions	25 camps	70
Sample size	350	350	700
No. of PPS sampled cluster	14	14	28
Cluster Sample size	25	25	25

Qualitative design

For the collection of qualitative data, TANGO proposes to conduct 20 key informant interviews (KIIs) and 20 focus group discussions (FGDs), equally distributed across the same strata used for the household survey. For this exercise a single data collection team comprising of one facilitator and one note taker will suffice. It is estimated the team will conduct 2 KIIs and 2 FGDs per day, and thus be able to conduct all KIIs and FGDs within 15-day period, including time required for travel and data management.

Focus groups will consist of 6-8 participants, last maximum 90 minutes and will be gender disaggregated. The FGDs will focus on adults from host and refugee households participating in the program. KIIs will consist of 1-2 participants, last maximum 60 minutes and in case of 2 participants will also be gender disaggregated. Potential KIIs include informal and formal community/camp leaders, marker actors, local government officials,

[27]The loss of effectiveness by the use of cluster sampling, instead of simple random sampling, is the **design effect**. The design effect is basically the ratio of the actual variance, under the sampling method actually used, to the variance computed under the assumption of simple random sampling.
[28] Finite population correction is not required since the initial sample size 160 is less than 5% of the total number of program participants.
[29] The USAID/FFP guideline recommended range of cluster sample size is 15 to 35. Higher cluster sample size yields larger design effect. Therefore, cluster sample size 25 has been considered.

government/NGO/CBO staff involved in nutrition/health services, and World Vision staff. Direct observation will focus on service delivery and related to food security and nutrition status, and general living conditions. Semi-structured tools outlining key topics and sub-topics, along with excel-based data entry templates, will be developed for each data collection exercise: FGD, KII and direct observation.

The sampling strategy for the FGDs will be purposive with a focus on identifying members from 'typical' households to participate in the sessions. In addition, TANGO proposes to include at least 1-2 FGDs per strata that focus on 'positive deviants' to understand the available/potential resilience capacities that can be utilized by participants, and that may be an area of focus for the World Vision EFSP program. The final KIIs will be selected from a list of key informants prepared during the inception phase. For both FGDs and KIIs, accessibility within the time allocated to the field work will be a main consideration in sampling decisions. A detailed qualitative sampling plan will be prepared as part of the inception phase.

6.2 Sample Weights for Strata and Clusters

Sample weights for Strata and Clusters

Stratum	Total stratum HH	Stratum Sample size	Stratum weights
Host	4,945	350	0.297
Refugee	28,360	350	1.703
Total	**33,305**	**700**	**1.000**

Upazila/Camp	Union/Block	Ward/ Sub-Block (Cluster)	Sample size	Response	Non-response	Non-response weight	Stratum weights	Final weights
Teknaf	Baharchhara	Ward-1	25	25	0	1.00000	0.297	0.29695241
Teknaf	Baharchhara	Ward-5	25	25	0	1.00000	0.297	0.29695241
Teknaf	Baharchhara	Ward-7	25	24	1	1.04167	0.297	0.309325427
Teknaf	Baharchhara	Ward-9	25	25	0	1.00000	0.297	0.29695241
Teknaf	Nhila	Ward-4	25	25	0	1.00000	0.297	0.29695241
Teknaf	Nhila	Ward-9	25	25	0	1.00000	0.297	0.29695241
Ukhia	Jalia Palong	Ward-2	25	24	1	1.04167	0.297	0.309325427
Ukhia	Jalia Palong	Ward-5	25	25	0	1.00000	0.297	0.29695241
Ukhia	Jalia Palong	Ward-8	25	24	1	1.04167	0.297	0.309325427
Ukhia	Palong Khali	Ward-4	25	24	1	1.04167	0.297	0.309325427
Ukhia	Palong Khali	Ward-7	25	25	0	1.00000	0.297	0.29695241
Ukhia	Raja Palong	Ward-3	25	21	4	1.19048	0.297	0.353514773
Ukhia	Raja Palong	Ward-5	25	25	0	1.00000	0.297	0.29695241
Ukhia	Raja Palong	Ward-7	25	23	2	1.08696	0.297	0.322774358
CAMP-3	Block-A	AA 21	25	24	1	1.04167	1.703	1.774007907
CAMP-3	Block-C	DD½ 2	25	23	2	1.08696	1.703	1.851138685
CAMP-3	Block-D	DD½ 7	25	25	0	1.00000	1.703	1.70304759
CAMP-3	Block-F	DD½ 19	25	25	0	1.00000	1.703	1.70304759
CAMP-4	Block-B	B16	25	24	1	1.04167	1.703	1.774007907
CAMP-4	Block-D	UU2	25	25	0	1.00000	1.703	1.70304759
CAMP-4	Block-F	PP12	25	24	1	1.04167	1.703	1.774007907
CAMP-15	Block-A	AA6	25	22	3	1.13636	1.703	1.935281353

CAMP-15	Block-D	D1	25	21	4	1.19048	1.703	2.027437608
CAMP-15	Block-D	D5	25	24	1	1.04167	1.703	1.774007907
CAMP-15	Block-E	E6	25	24	1	1.04167	1.703	1.774007907
CAMP-16	Block-A	A2	25	23	2	1.08696	1.703	1.851138685
CAMP-16	Block-B	B6	25	24	1	1.04167	1.703	1.774007907
CAMP-16	Block-D	D8	25	23	2	1.08696	1.703	1.851138685

6.3 Definition and Calculation of EFSP Indicators

The performance indicator reference sheets (PIRS) for the WV EFSP project were not yet available at the time of this baseline. TANGO utilized the USAID Food for Peace Indicators for Emergency Program Performance Indicator Reference Sheets as updated in February 2019.

6.4 Team Training Agenda

Quantitative Team Training for EFSP Project Baseline Survey 2019
Cox's Bazar, Bangladesh
Venue: Lighthouse Family
October 13-16, 2019

DURATION	TOPIC		FACILITATION
	Quantitative	**Qualitative**	
	Day 1 (October 13, 2019), Monday	**Day 1 (October 13, 2019), Monday**	
8:30 – 9:00	Registration	Combined session	GBF
9:00-9:15	Welcome and Introduction	Combined session	GBF/WVI
9:15-9:30	Purpose of the study and methods	Combined session	TANGO
9:30-10:30	EFSP project brief	Combined session	WVI
10:30-11:00	***Tea break*** *(Split quantitative and qualitative team after tea break)*		GBF
11:00 – 11:30	Baseline Quantitative survey and sampling methodology	Baseline Qualitative survey and methodology	TANGO
11:30-12:30	General guidance, norms, ethics, tablet/Mobile phone distribution, tips on using of mobile device, orientation on ODK software, mobile phone setting	Orientation on the methods of qualitative data collection and review of Topical Outlines	TANGO
12:30-13:00	Review of the hard copy questionnaire and ODK questionnaire	Orientation on the methods of qualitative data collection and review of Topical Outlines	TANGO
13:00-14:00	***Lunch and Prayer break***		GBF
14:00 - 15:30	Review of the hard copy questionnaire and ODK questionnaire	Orientation on the methods of qualitative data collection and review of Topical Outlines	TANGO
15:30 – 16:00	***Tea break***		GBF
16:00 – 17:00	Review of the hard copy questionnaire and ODK questionnaire and closing of Day-1	Orientation on the methods of qualitative data collection and review of Topical Outlines	TANGO
Day 2 (October 14, 2019), Tuesday		**Day 2 (October 14, 2019), Tuesday**	
9:00 – 9:30	Recap of day-1	Qualitative Field Testing	GBF/TANGO/WVI
9:30 – 10:30	Review of the hard copy questionnaire and ODK questionnaire		
10:30-11:00	***Tea break***		
11:00 – 13:00	Review of the hard copy questionnaire and ODK questionnaire		
13:00-14:00	***Lunch and Prayer break***		
14:00 – 15:30	Review of the hard copy questionnaire and ODK questionnaire		
15:30 – 16:00	***Tea break***		
16:00 – 17:00	Review of the hard copy questionnaire and ODK questionnaire and closing of Day-2		

DURATION	TOPIC		FACILITATION
	Quantitative	Qualitative	
Day 3 (October 15, 2019), Wednesday			
9:00 – 9:30	Recap of day-1	Qualitative tools revision	WVI/GBF/ TANGO
9:30 – 10:30	Review of the hard copy questionnaire and ODK questionnaire		
10:30-11:00	***Tea break***		
11:00 – 13:00	Review of the hard copy questionnaire and ODK questionnaire	Qualitative tools revision	TANGO
13:00-14:00	***Lunch and Prayer break***		GBF
14:0 0– 15:30	Class room practice	**14:00-14:30:** Closing of qualitative training	TANGO/GBF
15:30 – 16:00	***Tea break***		GBF
16:00 – 17:00	Class room practice		TANGO/GBF
Day 4 (October 16, 2019), Thursday			
8:00 – 13:00	Field practice		WVI/GBF/ TANGO
13:00-14:00	***Lunch and Prayer break***		GBF
14:00 – 15:30	Discuss on field practice findings and tools adjustment		TANGO/GBF
15:30 – 16:00	***Tea break***		GBF
16:00 – 16:30	Discuss on field practice findings and tools adjustment		TANGO/GBF
16:30 – 17:00	Closing the training		WVI/GBF

7. Annex

Annex 1 Quantitative Survey Tool

Annex 2 Qualitative Survey Tool

Annex 3 Qualitative Data Entry Matrices

Annex 4 Inception Report

Annex 5 Quantitative Data

Annex 6 Detailed EFSP Topline Indicator Analysis Tables

Annex 7 Qualitative Data

Annex 8 EFSP Monitoring and Evaluation Framework