Refugee influx Emergency Vulnerability Assessment (REVA) - Summary Report

Cox’s Bazar, Bangladesh, December 2017
Overall vulnerability to food insecurity

Since 25 August 2017, Cox’s Bazar district of Bangladesh has experienced a large influx of Rohingya refugees fleeing violence that erupted in Rakhine State in Myanmar. As of November 2017, four in five of the new arrivals are fully dependent on external assistance, while 19 percent can at least partially meet their own needs. The situation is only slightly better among the refugees who arrived prior to August 2017.

Overall, it is estimated that at least 80 percent of the overall refugee population are highly to entirely relying on life-saving assistance. Among those new arrivals who are considered “less vulnerable”, adoption of coping strategies affecting livelihoods such as sale of jewelry, borrowing money, spending savings, and buying food on credit, is high. Their food security status could quickly deteriorate once their coping capacity is exhausted, which makes close monitoring essential. Local host communities are among the poorest within Bangladesh and findings of the REVA show that 38 percent are vulnerable to food insecurity.

Economic vulnerability is the main driver of food insecurity, especially among the new and older registered refugees. About 16 percent of the new arrivals are currently using their savings which were mostly generated from sales of assets prior to or during the displacement. Once these savings have been depleted and no alternative income sources are found, their situation could further deteriorate.

Due to the massive scale-up of food assistance over the past three months in response to the new influx, food consumption is not the major driver of the overall vulnerability classification. However, higher levels of unacceptable (poor or borderline) food consumption were observed among the older unregistered refugees who did not benefit from adequate food assistance at the time of data collection.

Households headed by women within host communities are more vulnerable to food insecurity (45 percent are vulnerable or highly vulnerable) than those headed by men (35 percent). The sex of household head is not a decisive factor among the different refugee groups.

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1 The overall classification of vulnerability is based on the combination of current food consumption status (Food Consumption Score groups: poor, borderline, acceptable) and economic vulnerability based on per capita expenditure (excluding the estimated value of the food assistance provided) using set thresholds of the minimum acceptable expenditure basket on food and non-food items (below Survival Minimum Expenditure Basket, between SMEB and MEB, above MEB).

Cox’s Bazar districts registered, since 25 August, a large influx of Rohingya refugees fleeing violence and human rights violations. Not only has the pace of new arrivals made this the fastest growing refugee crisis in the world, the concentration of refugees in Cox’s Bazar is the highest in the world. Moreover, the area is surrounded by local communities with high poverty rates that have been largely impacted by the refugee crisis\(^3\).

In response, the WFP Vulnerability Analysis and Mapping Unit (VAM) and the Food Security Sector (FSS) have jointly led the *Refugee influx Emergency Vulnerability Assessment (REVA)* to better understand the priority needs of the displaced Rohingya and host communities. ACF, Caritas, Christian Aid, Mukti, Save the Children, and World Vision supported the data collection. The objectives were to assess how many people are food insecure and socio-economically vulnerable, what are their characteristics, and what are the actions required to improve their lives and livelihoods. Partners from all relevant sectors contributed to the assessment design, including food security, nutrition, shelter, health, education and protection. The assessment covered new arrivals since 25 August 2017, unregistered refugees that arrived prior to 25 August 2017, officially registered refugees, as well as local residents in host communities. Geographically, the following locations were covered across Ukhia and Teknaf sub-districts: registered camps, makeshift camps, new extensions, new settlements and host communities. A total of 2,046 households were interviewed, including 432 local resident households in host communities.

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Who are the most vulnerable?

For the purpose of the present study, households’ vulnerability to food insecurity is defined by the combination of its current food consumption status (Food Consumption Score groups) and the economic vulnerability based on per capita expenditure against set thresholds (SMEB, MEB).

The REVA aimed to characterize the vulnerable population among the new arrivals, older unregistered refugees, older registered refugees, and local populations in host communities. This analysis was conducted in order to guide the development of practical criteria for needs-based targeting when the situation stabilizes or prioritization in case resource shortfalls occur.

Findings show that households that are vulnerable, or highly vulnerable, have quite distinct characteristics compared to those that are less vulnerable. It is important to note that only some indicators are applicable across the various groups covered. For any future targeting, this needs to be considered and group-specific criteria developed. The table below illustrates the most important characteristics of vulnerable households.

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**One of the key characteristics of the vulnerable displaced population is household size. This can be explained by the fact that general food assistance was originally only provided to cover the needs of five people. Since then, food rations have been adjusted to take into account higher food requirements of larger households.**
The new arrivals – who account for the vast majority of the total population of refugees – embarked on a hazardous journey across the border into Bangladesh to flee violence and human rights violations. On average, the journey took 6 days and people had to walk long distances allowing them to bring only few ‘easy-to-grab, easy-to-carry’ belongings such as clothes, money and jewelry. Only two-third of households were able to bring some clothes and very few brought cooking utensils. Overall, only every second household was able to bring valuable assets such as money or jewelry.

About 9 in 10 families interviewed reported taking a boat to cross the river, while the remaining 10 percent were forced to swim or used a makeshift raft. The average costs incurred was approximately 2,600 BDT per person, equivalent to around 31 USD.

Besides their inability to meet food and other basic needs, most families encountered serious protection concerns during their journey. The four main concerns faced were: 1) lack of food; 2) lack of information to reach the destination; 3) safety concerns; and 4) lack of cash. Exploitation/harassment and bribes were also frequently reported.

Valuables brought from Myanmar

- **None**: 51%
- **Money/savings**: 37%
- **Jewelry/gold**: 21%
- **Electric devices**: 5%
Food consumption
Among all refugees and local residents surveyed, approximately 70 percent had an acceptable diet, with little differentiation between the groups when assistance status is not considered.

Female headed households in the host communities had significantly higher prevalence of unacceptable food consumption (38 percent) compared to male-headed (27 percent). In light of the high coverage of food assistance among both female and male-headed households, no significant differences were found between the different refugee groups.

Refugee households who are receiving food assistance fare much better than those not assisted. Among the non-assisted new arrivals, 54 percent have a poor or borderline diet, meaning that they are eating less than the minimum required to live a healthy life. Poor food consumption reflects a diet of poor quality and quantity which mainly consists of the consumption of rice, fats, and some greens.

Dietary diversity is low for both the refugees and host communities, only reaching three to four food groups per day; rice and oil are consumed on a daily basis, as well as either vegetables or pulses. Access to meat, fish and eggs is extremely limited while fruits and dairy consumption is almost non-existent. Among the refugees, only one in four women (15 and 49 years) has access to a minimum diversified diet, and one in three among the local population in the host communities.

"FOOD ASSISTANCE PLAYS A CRUCIAL ROLE TO ENSURE MINIMUM ACCEPTABLE DIET AMONG REFUGEES, ESPECIALLY AMONG THE NEW ARRIVALS AND OLD REGISTERED REFUGEE GROUP"

6 REFUGEE INFLUX EMERGENCY VULNERABILITY ASSESSMENT (REVA)
The older registered refugees, who are receiving food vouchers (which they can redeem at contracted retailer shops) have the highest intake of micro- and macronutrients including Vitamin A and heme iron. Higher proportions of the new arrivals and older unregistered refugees are not consuming Vitamin A and heme iron rich foods and are thus at higher risk of micronutrient deficiencies. Data suggest that the nutrient intake is correlated with the transfer modality and partially with the higher value of assistance. Food voucher assistance has a positive impact on increasing refugees’ dietary diversity and nutrient intake by providing them with diverse food options, and should be scaled-up where feasible.

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4 At the time of REVA, the food voucher covered 2,100 calories per capita, while the in-kind food ration covered about 1,600 calories per capita.
Food coping strategies

Many families are changing their consumption behaviors in order to compensate for food shortfalls. Overall, 7 in 10 households are forced to adopt one or more food-related coping strategies, which is an indicator of stress. The prevalence is as high among the host community as among the refugees.

Host communities are impacted by higher food prices and increased competition over jobs which were reported as major constraints by 44 percent and 16 percent, respectively, of the local resident households. Overall, nearly every second household relies on less preferred food and every fourth reduced their portion size. Adults restricting their consumption is also common, more common among female family members compared to male members.

Overall, displaced households benefiting from assistance are much less likely to apply food coping strategies compared to those who are not.

**GRAPH 5: Food coping strategies among assisted and non-assisted new arrivals**
**Socio-economic vulnerability**

The assessment captured all major food and non-food expenditure and divided households into 3 groups based on the household’s capacity to meet the per capita minimum expenditure basket (MEB)\(^5\):

- Households with per capita expenditure below the survival minimum expenditure basket (SMEB)
- Households with per capita expenditure between SMEB and MEB
- Households with per capita expenditure above MEB

The analysis was conducted twice: the first included the monetary value of assistance to assess the current socio-economic vulnerability, and the second, excluded the monetary value of assistance to assess the socio-economic vulnerability, if assistance were to be removed.

The results show that financial capacity of both the new arrivals and older refugees is extremely low. Therefore, all groups of refugees are largely relying on external assistance to meet their basic needs. More than 50 percent of the new arrivals and registered refugees fall below the SMEB threshold and would not be able to afford to buy the minimum food requirements if no external assistance was provided and no additional livelihood opportunities created.

\(^5\) At the time of the analysis, the MEB for the Rohingya population was not yet established. The REVA therefore used the following assumptions: The SMEB threshold was based on the monetary value of the WFP e-voucher basket that is providing 2,100 calories per capita. The value for the MEB was the sum of the food basket plus the monetary value of the non-food-items of the MEB established for the Bangladeshi population at national level developed by the Food Security Cluster (FSC). The findings from REVA will help inform the development of the updated MEB by the inter-agency working group and help guide multipurpose cash interventions.
The graph below illustrates the average household expenditure on food items taking into account purchase and the estimated value of consumption from assistance and own production. Overall, the main expenditure is on cereals, which is mainly rice, followed by fish, mainly dry fish which is commonly consumed as a condiment in soups. Food assistance plays a large role for refugees, while own production is negligible. While this is not surprising for refugees, own production and fishing also plays a minor role among local host communities. With the increased demand from refugees, there is scope to implement livelihood programmes with a focus on agriculture aiming to enhance host communities consumption from own production and provide increased income opportunities.

**GRAPH 8:** Expenditure patterns (values of assistance and own production included)

**GRAPH 9:** Average monthly expenditure (direct and imputed from assistance/own production)
A nutrition survey was conducted during October/November 2017 by members of the Nutrition Sector in Kutupalong and Nayapara refugee camps, as well as makeshift camps (including Kutupalong expansions and the new settlements). Preliminary results indicate a prevalence of global acute malnutrition (GAM) among all children of 6-59 months (measured through weight-for-height) ranging from 14.3 to 24.3 percent and thus exceeding the WHO emergency threshold of 15 percent in two out of three areas covered. Surprisingly, prevalence of GAM is highest in the Kutupalong Registered Camp where most of the old registered refugees live, which can be partially explained by the high presence of new arrivals at the time of the assessment.

Nearly 50 percent of children suffered from anemia which represents a severe public health problem according to WHO thresholds. Only 9 percent of children 6-23 months in Kutupalong Refugee Camp have a Minimum Acceptable Diet, as compared to 16 percent in Nayapara Refugee Camp, and 6 percent in the areas classified as makeshift areas.

The report states that the proportion of households covered by General Food Distribution varies: 53 percent of new arrivals in Kutupalong Refugee Camp, 44 percent in Nayapara Refugee Camp, 83 percent in the makeshift camps. According to findings from the REVA, 96 percent of new arrivals and 91 percent of refugees overall are benefitting from food assistance. The recent scaling-up of food assistance that is taking place since late October can help explain the different data on coverage between the two surveys.

Preliminary findings of the Emergency Nutrition Assessment

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>Kutupalong RC (n=405) Total population 24,499 Oct 22 - 28</th>
<th>Makeshift (n=1,305) Total population 720,902 Oct 29 - Nov 20</th>
<th>Nayapara RC (n=584) Total population 38,997 Nov 20 - Nov 27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe Acute Malnutrition</td>
<td>7.5% [4.9-11.2]</td>
<td>3.0% [2.2-4.2]</td>
<td>1.3% [0.5-2.9]</td>
</tr>
<tr>
<td>Stunting</td>
<td>43.4% [37.6-49.4]</td>
<td>44.1% [40.7-47.5]</td>
<td>44.4% [39.5-49.3]</td>
</tr>
<tr>
<td>Anemia (Hb&lt;11.0g/dL) children 6-59 months</td>
<td>47.9% [41.9-54.0]</td>
<td>47.9% [44.1-51.7]</td>
<td>46.6% [41.8-51.6]</td>
</tr>
<tr>
<td>Measles Vaccination Coverage</td>
<td>55.0% [49.4-60.5]</td>
<td>45.3% [38.5-52.3]</td>
<td>88.0% [84.5-90.8]</td>
</tr>
<tr>
<td>Cholera Vaccination Coverage</td>
<td>78.1% [76.3-79.8]</td>
<td>88.5% [84.0-91.9]</td>
<td>87.3% [86.0-88.4]</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>40.4% [34.1-46.1]</td>
<td>41.3% [36.5-46.2]</td>
<td>34.3% [30.0-39.1]</td>
</tr>
</tbody>
</table>

Source: Emergency Nutrition Assessment conducted by Nutrition Sector, October—November 2017

6 A DHS nutrition survey conducted in Rakhine State (Myanmar) in 2015 shows GAM prevalence 13.9 percent among children 6-59 months, SAM 3.7 percent.
7 At the time of the nutrition assessment, the population of roughly comprised of 50 percent old registered and 50 percent, new arrivals. The new arrivals were later moved to the other sites.
Based on a preliminary analysis, the following factors are among the main plausible causes of acute malnutrition:

- **Extremely high level of morbidity**: around 80 percent of households reported having household members including children suffering from diseases in the 30 days prior to the interview. Between 35 to 40 percent of children suffered from diarrhoea.

- According to REVA, access to improved water sources reaches more than 96 percent of the new arrivals thanks to the immense efforts by actors involved in WASH to establish hand-pumps and tube wells. However, the proximity of communal latrines and the low water table of catchment areas increase risks of water contamination. A joint WHO/Bangladesh Department of Public Health research in the Kutupalong and Balukhali extension sites between September and November showed that more than 86 percent of water samples tested positive for E. coli bacteria. The situation may be more severe in the expansion sites, where a higher proportion of refugees fetches water from unprotected wells. Only 4 percent of refugees treat their drinking water, which is also caused by the scarcity and high prices of firewood.

- **Limited access to food** was only a temporary problem; the majority of refugees in the areas covered by the nutrition survey had an acceptable diet thanks to the major surge in food assistance over the previous months. Dietary diversity could be further improved with the transition from in-kind assistance to food vouchers.

Further cross-sectional surveys are required to have a deeper understanding of the main direct and indirect determinants of malnutrition among children 6-59 months in the camps. These should be extended to host communities for comparative analyses.

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**Livelihood activities**

The displacement had a major impact on the livelihood activities that households are engaged in. Compared to all other groups, the new arrivals are largely dependent on external support from both formal and informal sources. Prior to their displacement, they had comparable livelihood activities to the host communities, engaging in unskilled labor, small businesses, farming, and fishing. For host communities, the most important income source is casual labor – they are now facing increased competition and pressure on wages due to increased labor force availability.

Only 2.9 percent of the new arrivals mentioned sale of food assistance as one of their three income sources and none as their main income source. However, roughly 12 percent of the new arrivals reported to sell some parts of their ration in order to meet other basic needs; mainly to buy other food items not covered in the basket (mostly condiments), firewood, and to cover health related costs. While only 2 percent mentioned remittances as their main income source, around 14 percent of the new arrivals and older unregistered refugee groups reported benefiting from remittances from abroad.

There is a clear differentiation across gender lines. Overall, women are less involved in income-generating activities when compared to men and tend to engage more in petty trade and paid domestic labor – these are considered coping strategies and are potentially associated with protection risks. Before displacement, more women were actively involved in higher skilled activities such as small business and skilled wage labor.
Households depending on formal or informal assistance, begging, spending their savings, and relying on paid domestic work as their main income source are amongst the most vulnerable groups to food insecurity and socio-economic vulnerability. Households involved in agriculture, fishing, small business ownership, and those receiving remittances as the main income are among the least vulnerable.
Access to markets

According to REVA findings, only about nine percent of the refugees interviewed have problems accessing markets. This is also reflected in the recent market assessment conducted by WFP VAM and the Food Security Sector in November 2017. While few refugees have easy access to the six larger markets that primarily serve the host communities (Kutupalong, Balukhali, Thangkhali, Palongkhali, Leda and Nayapara), small traders have shown great flexibility and expanded their activities throughout the entire refugee settlements, including the newly established areas.

Commodities such as rice, wheat flour, hand soap, lentils and soybeans are mostly available in the markets due to strong supply chains from Chittagong. While at the moment, the majority of the refugees rely on in-kind food rations, there are plans to move them gradually to the food voucher programme which has been successfully rolled-out among the registered refugee population.

自己的生产食物对难民起到一个非常重要的作用，然而，它在寄宿社区中也极其低。扩大生计支持项目能够增强物理对主要商品的获取，同时保护寄宿社区和难民避免市场价格的波动。

9 Market Assessment in Cox’s Bazar conducted by WFP VAM and Food Security Sector, November 2017.
Firewood is the main cooking fuel for 90 percent of the refugees and nearly all of the host community families interviewed. As main source, around 60 percent of the new arrivals and host communities depend on the collection of firewood, the remaining primarily purchased it in the market. Only the registered refugees receive fire briskets as assistance.

During the market assessment, firewood was identified as insufficient by both the refugees and host communities. Locally gathered commodities such as firewood and bamboo also show high price variations, depending on the locations.

On the demand side, purchasing power of both Bangladeshis and the refugees is likely to deteriorate due to increasing competition in the unskilled labor market. Since unsustainable income sources such as spending savings and selling items brought from Myanmar are expected to decline in the coming months, labor supply will further increase. Given that refugees tend to receive lower wages than Bangladeshis for similar work, some sort of resentment between the two groups may occur in the future, but for the time being tensions between the two communities appears to be very limited.

**Protection risks**

Theft, robbery and harassment were the most common protection issues raised by refugees and Bangladeshi nationals. Limitations on movements were cited by 7 to 8 percent of the interviewed refugees.

Physical violence and abuse most commonly affected females of all ages, and abduction mostly affected females under 18. Other protection issues included being approached by human smugglers which affected both genders under the age of 18. Tensions between the refugees and host communities was only cited by 2 percent which is generally illustrating a welcoming and supportive culture by the local community.

The table on page 16 summarizes the most common protection issues faced by refugees and host communities.
Food and nutrition assistance
Continue non-conditional General Food Distribution (GFD) and scale up to cover the latest new arrivals (including contingency for additional new arrivals) and older unregistered refugees. Where possible transition from GFD to e-vouchers programme in all areas to facilitate access to a more diversified and nutritious diet.

Further scale-up of Blanket Supplementary Feeding Programmes (BSFPs) among children under five and pregnant and lactating women as well as integrated severe and moderate acute malnutrition treatment programmes (where possible) is recommended. These food and nutrition activities should be accompanied with appropriate nutrition messaging and awareness campaigns.
Scale-up assistance to host communities with a focus on conditional transfers (for example, cash-for livelihood training). Focus on host communities with the highest concentrations of refugees. Ensure that the most vulnerable groups such as female-headed households, single-mothers, households with disabled chronically ill members are included.

The introduction of needs-based targeting can be considered when the situation stabilizes. At the same time, livelihood support needs to be scaled-up especially among refugees within host communities and less vulnerable refugees within camps. Where targeting or prioritization will be implemented, close monitoring should be conducted among those who received reduced levels of assistance or had to be excluded.

Joint cash distribution pilots could also be considered in contexts of high market availability and stable food prices. The Food Security Sector and Cash Working Groups could play an important coordinating role in this regards.

Livelihoods and other basic needs
Implement programmes supporting income generating activities among the host communities. In particular, scale-up programmes enhancing agricultural production capacities and strengthening local food supply chains, including post-harvest handling and marketing capacity enhancement. These would have positive impacts on the host community’s food consumption while reducing price pressure and ensuring higher food diversity in local markets.

Vocational trainings, socio-economic empowerment initiatives and self-reliance activities to be scaled up among refugees especially for women and youth. Programmes that aim to create socializing opportunities for the most marginalized in the camps, including common cooking spaces, multipurpose facilities, nutrition and food processing learning centres, childcare spaces, etc.

Distribute cooking fuel, especially among the new arrivals and older unregistered refugees and invest in programmes supporting the provision of high energy stoves.

Enhance water and sanitation conditions, including replacing/rehabilitating broken hand pumps and scaling up in the new settlements, ensuring appropriate distances to latrines; In addition, regularly monitor the microbiological quality of water and take appropriate actions if necessary.

Health
In light of the high levels of morbidity, it is recommended to ensure easy access to health facilities for all, across all sites, and to ensure presence of qualified staff, medical equipment, and medicines. It is also important to increase awareness among refugees on existing services.

Protection
Ensure protection measures are considered across the entire operation and response. For example, strategize on how to improve access to alternate cooking fuels, WASH facilities, health facilities, distribution points, retailer shops, etc., hence limiting exposure to major risks especially for women, children and youth.

Further analyses
Conduct further thematic analyses using the REVA findings (i.e. expenditure patterns, basic needs, protection, and gender dimensions). It will also be important to establish a monitoring system to continuously assess the food security and nutrition situation.

Conduct joint Nutrition and Food Security latest after one year into after the 2017 influx to update the information and allow a more holistic analysis of underlying causes.
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