Refugee influx Emergency Vulnerability Assessment (REVA) – Technical Report

Cox's Bazar, Bangladesh, August 2018
(Data collection in November 2017)

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Introduction

1.1. The Rohingya Crisis

Cox's Bazar has been the center of one of the world's most protracted refugee situations. Since the 1990s and before August 2017, the Bangladeshi government has been hosting more than 200,000 Rohingya refugees. On 25 August 2017, a new round of conflict in the Northern Rakhine state of Myanmar has resulted in an overwhelming number of new influx in the Cox's Bazar district. According to figures from Inter Sector Coordination Group (ISCG), 671,500 new arrivals are reported as of 15 March 2018. The Bangladeshi Immigration and Passports Department has registered, as of 23 March, 1,092,136 people through biometric registration.

The massive influx of the new arrivals is eroding already poor food security and other basic needs situation of the Rohingya refugees and the Bangladeshi nationals in the host communities around Ukhia and Teknaf sub-districts. Under-nutrition rates are critically high, and protection concerns are rising especially with the high number of women and children. Basic services such as water, health, sanitation, and shelter in the camps and new settlements are outstretched. With the monsoon season, damages and further limitations of the infrastructures and livelihoods were observed, and it further deteriorated basic needs situation of the refugees as well as the Bangladeshis in the host communities.
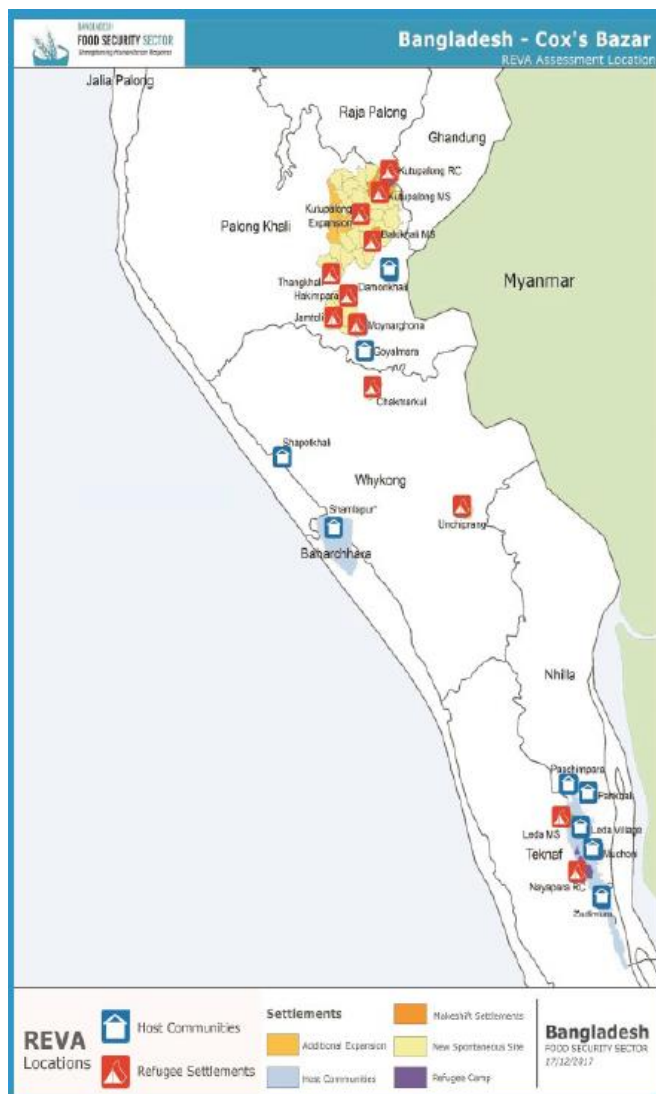
To address the needs, humanitarian organizations are providing food and non-food life-saving assistance. As of 25th March 2018, Approximately 685,400 refugees have been reached with food assistance, and 329,382 have received High Energy Biscuits when crossing the border. In terms of livelihoods, 4,000 households in host communities and 2,400 refugee households have received livelihood support including income generating activities and agricultural inputs. Approximately 8,000 refugee households have also received self-reliance support and 61,972 Rohingya households, and 1,600 households in host communities participated in food assistance for assets activities. Estimated number of 560,532 individuals have been reached with nutrition assistance, and 26,890 children with severe acute malnutrition (SAM) were identified and admitted to therapeutic feeding centers. At least 80 percent of the overall refugee population are highly or entirely relying on life-saving assistance, and without the support, would drastically fail to meet the basic needs. Moreover, additional assistance is needed to reach the most vulnerable with fresh food in order to increase dietary diversity

through different modalities such as food voucher and livelihood programs need to be scaled up among the most impacted host communities, including marginalized farmers, herders and fishermen.

In response, the Joint Response Plan (JRP) was launched by ISCG on 16 March 2018. It requests USD951 million to provide life-saving assistance to 1.3 million Rohingya refugees and the Bangladeshis in the host communities. The priority needs in the plan, which covers the March-December 2018 timeframe, include food, water and sanitation, shelter, and medical care.

1.2. Assessment objectives and implementation

In response to the crisis, WFP Vulnerability Analysis and Mapping (VAM) team and the Food Security Sector have conducted the Refugee influx Emergency Vulnerability Assessment (REVA) to understand the priority needs of the Rohingya refugees and the Bangladeshis in the host communities. The assessment aims to answer how many people are food insecure and socio-economically vulnerable and their depth, what their characteristics are, and what the priority actions necessary to improve their lives and livelihoods. The assessment also aims to inform the development of local Minimum Expenditure Basket for market-based interventions.

Objectives of the assessment are to 1) assess the severity of food insecurity and other basic needs of the displaced Rohingya and host communities; 2) profile the food insecure and most vulnerable groups; 3) provide recommendations for addressing priority needs and targeting; and 4) inform the setup of a food security and nutrition monitoring system; 5) and inform the Minimum Expenditure Basket.

Many partners, including UNICEF, FAO, IOM, UNHCR, ACF, Save the Children have contributed during the design and implementation of the assessment, which will be a key piece to inform the humanitarian response plan for 2018. The design of the assessment was also discussed through consultation with various sectors including health, nutrition, WASH, shelter, education, and so on.

1.3. Methodology

Sampling strategies

The assessment covered new arrivals since 25 August 2017, unregistered refugees that arrived prior to 25 August 2017, officially registered refugees, as well as 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.

The sampling stratum was based on refugees' time of arrival to Bangladesh. During field visits and from secondary information, it became clear that the refugees tend to move around within settlements and thus it was not ideal to use geographical locations as sampling stratum. Therefore, WFP and Food Security Sector used time of arrival as the sampling stratum: new arrivals since August 2017, arrivals between October 2016 to August 2017, unregistered protracted Rohingya population (influx before October 2016 who are not registered), protracted registered refugees(influx before October 2016 who are registered), and Bangladeshi host community. The table below shows the details of the sampling design.

	New influx since August 2017	All other groups
Confidence interval	90%	90%
Level of precision	+-5%	+-7%
Prevalence of key indicator	50%	50%
Design effect	1.5	1.5
Sample size	420	220 per group

In the end, a total of 2,046 households were interviewed, including 432 local resident households in host communities. Tables below illustrate the number of surveys completes. As designed, the research is significant at the level of the time of arrival of the refugees and host communities in Ukhia and Teknaf.

Survey design

Displaced Rohingya	
New arrivals in settlements/camps	576
New arrivals in host communities	353
Arrivals Oct'16 to 24 Aug'17	191
Unregistered protracted (prior to Oct'16)	260
Registered protracted refugees	234
Total displaced	**1,614**
Displaced Rohingya	
Refugee camps	311
Makeship camps	479
Kutupalong Expansion	224
New Settlements	247
Host communities (coastal)	221
Host communities (other)	132
Total displaced	**1,614**
Local population	
Host community Ukhia	214
Host community Teknaf	218
Total host	**432**
Total sample	**2,046**

The survey modules include identification, demography, arrival information, education and health, food consumption and sources, coping strategies, assets, shelter and WASH, income and livelihoods, expenditure, major constraints and priorities, assistance and preferences, protection and gender. Partners from all relevant sectors contributed to the assessment design. The questionnaire was tested and validated by field visits.

Method of data collection

To conduct the survey, 45 enumerators were hired. Enumerators were divided into five groups to cover different geographical locations.

Five enumerators were assigned a supervising role to each group. ACF, Caritas, Christian Aid, Mukti, Save the Children, and World Vision supported the data collection by providing a portion of the enumerators. The answers on the paper survey were then inputted into digital format by enumerators using Kobo toolbox on tablets and laptops for data cleaning and analysis.

Data cleaning and analysis

Data triangulation and cleaning was conducted by cross-comparing different sections of the survey that is closely related. Indicator level data cleaning was also conducted. For example, any answers to the questions surpassing the possible value was matched to the maximum value. Further data cleaning and data analysis were conducted using SPSS statistical software.

Limitations and challenges

When asking Livelihood Coping Strategies section, there was a high prevalence of "Not Available" responses. This may be because many respondents did not have the resources that are needed to resort to that negative coping. Thus, cautious interpretation of the section is necessary.

1.4.   Overview of households interviewed

HH-Size: Around 65 percent of the sample has a medium-sized household consisting of 4-7 members. Big-sized households, composed of eight (or more) members are found particularly among registered protracted refugees (26 percent). New arrivals households have an average size of five members. For all other refugee groups already residing in Bangladesh the average size of the family increases by one member and equates the size of the local households, which is composed on average of six members. The size of the family may also be impacted by the common practice, among previously displaced households, to host newly displaced peers who do not belong to the original household. Indeed, nearly one out of two among the registered protracted refugees and October arrivals hosted newly displaced population.

From a gender perspective, it is interesting to highlight that women-headed households tend to have a lower household size (on average one member less) across all the sampled groups.
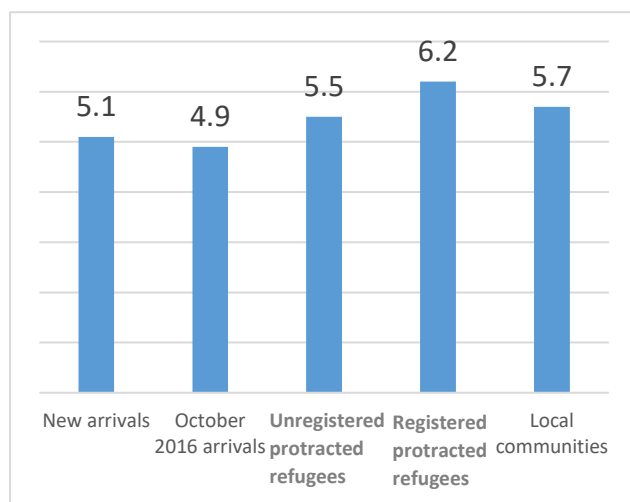
Figure 1: Average Household size
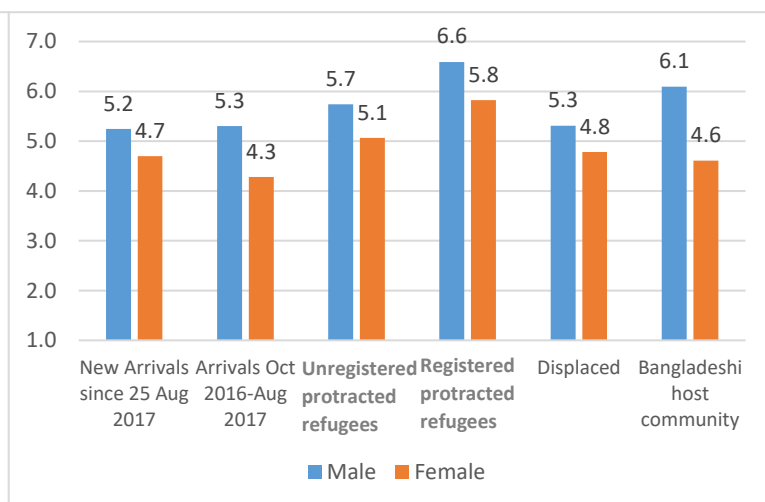
Figure 2: Household size by gender of the head of household

The analysis of households' composition revealed the presence of different vulnerable groups, particularly among the refugees. All the sampled cohorts are characterized by a significant presence of pregnant and/or lactating (PLW) women, which shows the highest share among new arrivals and unregistered protracted Rohingya population (34 percent). This indicator is mainly driven by the presence of lactating women, which accounts for more than 25 percent in refugee households and 20 percent in host communities.

The presence of a member in the household suffering from a chronic illness was also assessed. Data show the highest presence of chronically ill members in host communities (29 percent) and

unregistered protracted Rohingya population(25 percent). In this regard, women-headed households show a higher presence of chronically ill members compared to households headed by men, both among displaced and host communities (12 percent vs 9 percent and 19 percent vs 14 percent respectively). The latter also register the highest share of elderly members (22 percent) compared to refugees (16 percent).

Finally, the presence of disable members is also reported, particularly among the unregistered protracted Rohingya population (19 percent) with no major differences in terms of gender.
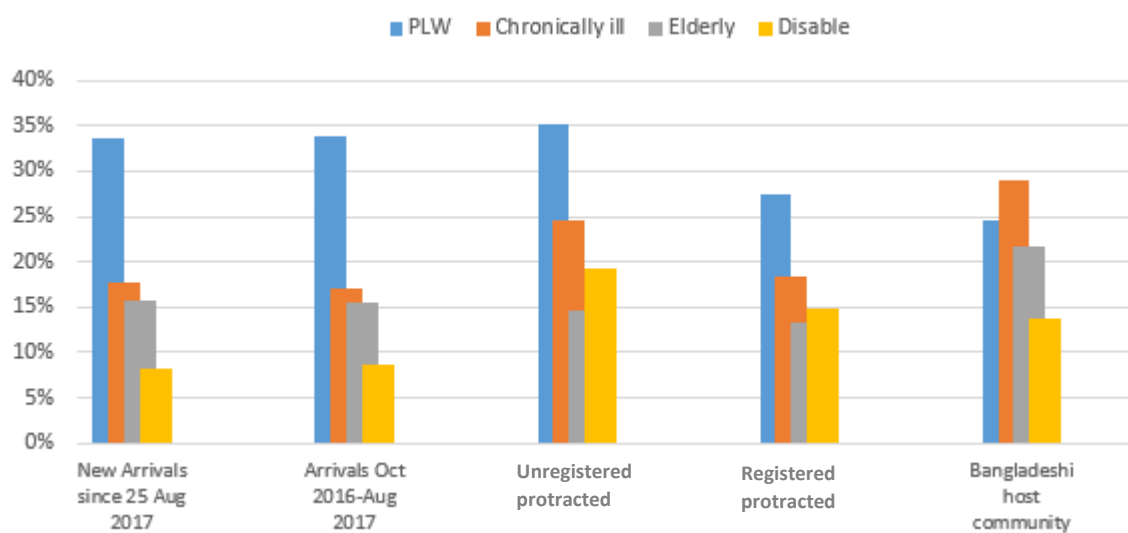
Figure 3: Presence of vulnerable members
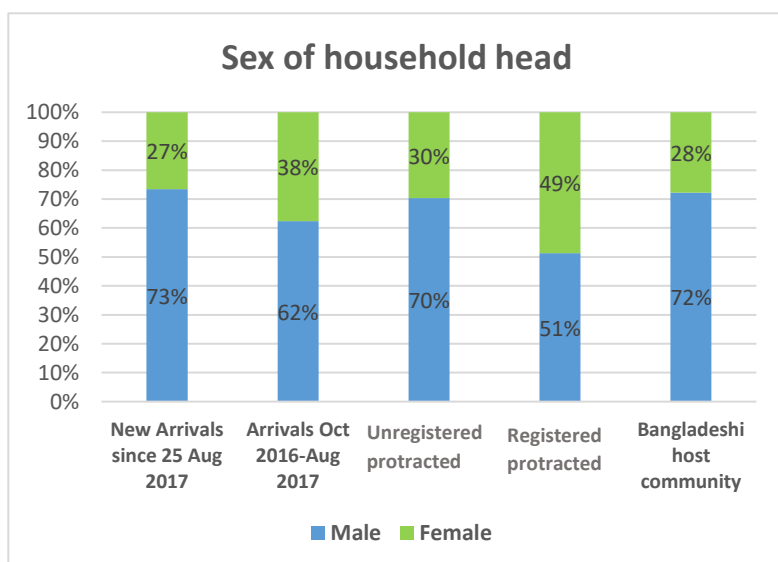
Figure 4: Sex of household head

Sex of household's head: Overall, a higher prevalence of male heads of households is registered among the surveyed groups of refugees - regardless of the time of arrival – and host community. The highest prevalence of female-headed households is found among registered protracted refugees (49 percent) and October arrivals (38 percent). All the other groups show a similar gender distribution with female-headed households being found only in 30 percent of the cases.

Marital Status: The analysis of household heads' marital status shows interesting differences in terms of gender. Standard monogamous marriage is the most reported marital status, regardless of the gender of the head. More than 95 percent of men's household heads are married. The majority of men has a single spouse with polygamous marriages only accounting for less than 5 percent. The share of married women leading the household falls to nearly 40 and 50 percent of the total women-headed households among host communities and refugees, respectively. Around four out of ten women-headed households in host

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communities and new arrivals are led by widows. Interestingly, the analysis found a significantly higher prevalence of separated/divorced women, particularly host communities and protracted refugees (above 10 percent) compared to new arrivals (4 percent).

Age of household head:
Reported household heads' age follows a normal distribution both among displaced and host communities. Refugees have younger household heads. The average age of households' heads among refugees is 40
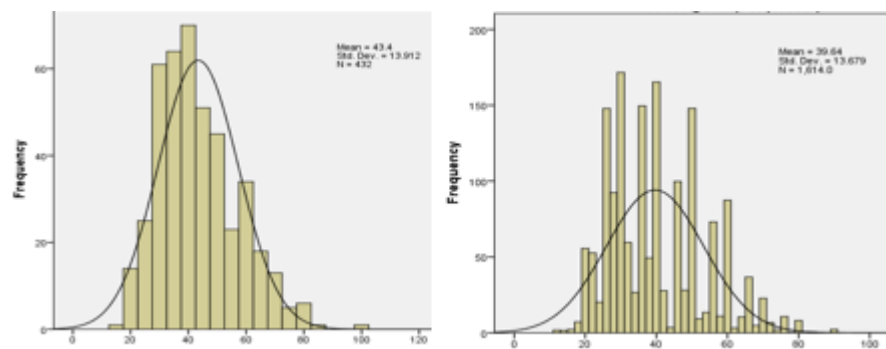
Figure 5: Age of household head distributions – Host Communities vs Refugees

years compared to 43 years among host communities. Refugees arriving between October 2016 and August 2017 tend to have slightly younger households' heads (36 years old). Female household heads are generally younger compared to their male counterparts, with the highest gap found among host communities (female: 39 vs male: 45).

Composition of the households: Population pyramids for the sample reflect patterns of a developing nation characterized by high birth rates and short life expectancy resulting in low population growth. Age pyramids for displaced households and host communities show similar structures and no major dissimilarities in terms of gender. The results suggest that one out of two refugees is below the age of fifteen. The presence of children among refugees' households is significantly higher compared to host communities, which in return show a higher prevalence of members in the 15-49 age group. As a result, a slightly younger population structure is found among refugee households. In particular, it is worth noting that this group shows a nearly double share of children below five years old (19 percent) compared to host communities (11 percent).
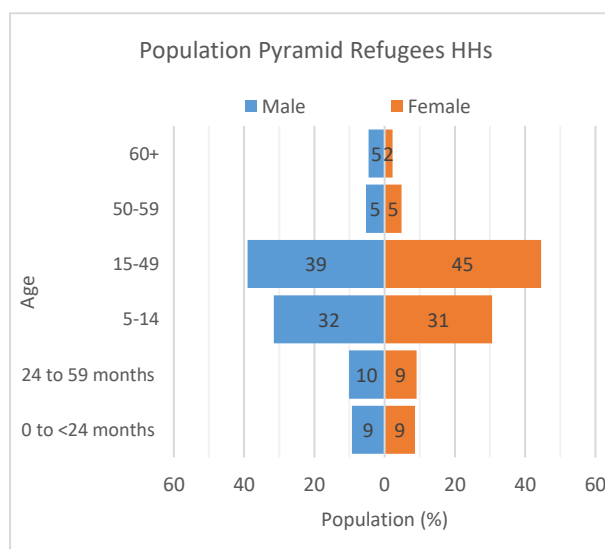
Figure 6: Population pyramids - REFUGEES
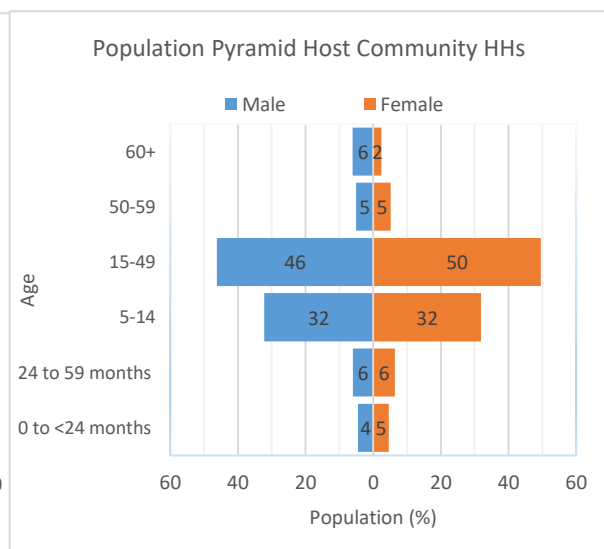
Figure 7: Population pyramids - HOST COMMUNITIES

A higher presence of women in the 15-49 age group is also observed for both cohorts. Such difference is especially evident among refugees, most likely because of splitting of nuclear families into sub-nuclear households stemming from the food distribution system applied at the time of data collection.

Finally, the overall share of individuals falling into the 60+ age group is below 4 percent and registers a higher presence of men.
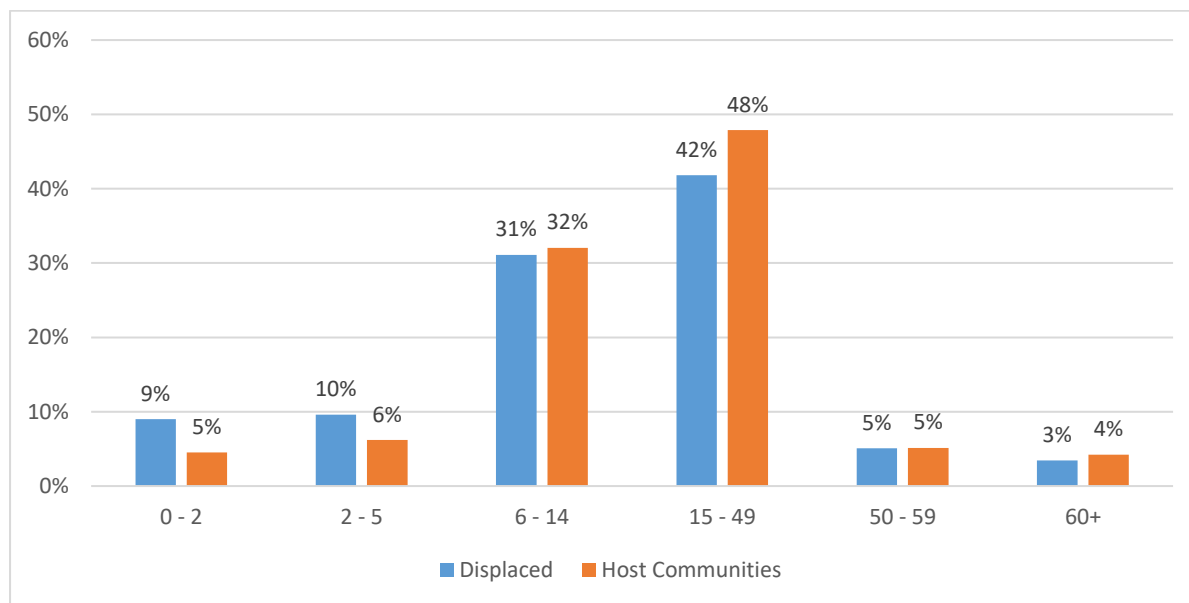
Figure 8: Age group cohorts for refugees and host communities

2. How many are food insecure?

As of December 2017, around **80 percent Rohingya refugees** in Cox's Bazar and **38 percent of Bangladeshi host communities**[1] in the areas with the highest presence of refugees are vulnerable to food insecurity, and therefore highly to entirely relying on life-saving assistance. Among the refugees, the new arrivals have the highest prevalence of vulnerable households. While
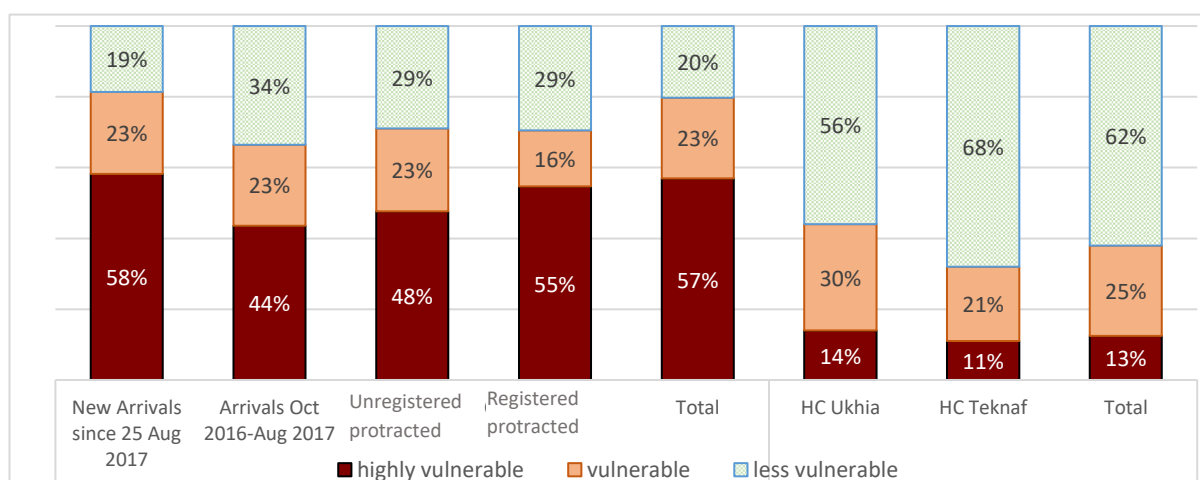
Figure 10: Prevalence of households vulnerable to food insecurity

their access to food is at least partially covered by food assistance – 97.5 percent declared benefitting from it – vulnerability to food insecurity remains strongly associated to limited financial resources,

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[1] REVA covered the seven following areas/villages with the highest presence of refugees: Baharchhara, Jalia Palong, Nhilla, Palong Khali, Raja Palong, Teknaf, Paurashava, Whykong.

which is reflected into their low expenditure patterns on essential food and non-food items. Economic vulnerability is particularly high among the new arrivals and the unregistered refugees who arrived before October 2016.

Among the 'less vulnerable' new arrivals, the adoption of coping strategies affecting livelihoods such as sale of jewellery, borrowing money, spending savings, and buying food on credit, is high.

About 16 percent of the new arrivals are currently using their savings, mostly generated from the sale of assets prior to, or during the displacement. Their food security status would quickly deteriorate once their coping capacity is exhausted, or should food assistance decrease.

Refugees living within host communities are comparatively better- off than those in camps, expansion site or new settlements. As expected, they benefit from informal income opportunities linked to agricultural casual labour and fishing.

Box 1: Definition of vulnerability to food insecurity

The overall classification of vulnerability is based on the combination of two indicators:

- **Current food consumption status**: based on Food Consumption Score groups (poor, borderline, acceptable)
- **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 (SMEB), between SMEB and Minimum Expenditure Basket (MEB), above MEB).

As a result, these households access more frequently a more diversified diet than those only or mainly relying on food assistance. This is even more evident among refugees living in Teknaf, as opposed to those in Ukhia.

Concerning the Bangladeshi host communities, higher levels of vulnerability are observed among the population living in Ukhia compared to those in Teknaf. This is mainly associated with much higher prevalence of population with unacceptable food consumption (10 percent difference) and comparatively lower purchasing power (5 percent difference). Anecdotal evidence suggests that refugees in Ukhia may have been affected by inflation of main commodities linked to surge of demand since the arrival
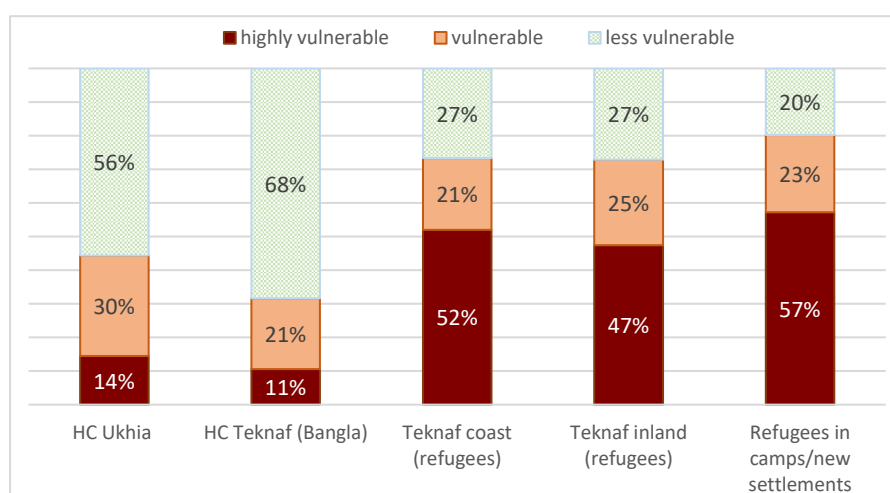
Figure 11: Vulnerability to food insecurity in host communities

of refugees in the main expansion sites and settlements, in a context of restrained livelihood opportunities, as opposed to Teknaf.

Access to income-generating activities is strongly associated with food security. Among refugees, 78 percent of those who only rely on external assistance are vulnerable to food insecurity against 72 percent of those learning some form of income. Limited access to remittances and savings are also

strongly associated with vulnerability, for both refugees and Bangladeshi population in host communities.

Finally, Bangladeshi 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). In light of the homogeneous coverage of food assistance, the sex of household head is not a decisive factor among the different refugee groups.

2.1 Food consumption, food sources and dietary diversity

Around seven refugee households out of ten have access to an acceptable diet[2]. A similar prevalence of acceptable food consumption is observed among host communities. While the number of meals per day and the frequency of consumption of food groups are relatively high, dietary diversity is very problematic. In particular, access to nutrient-rich foods such as fruits, milk, meat is extremely low to non existent for both refugees and host communities.

Food assistance and food consumption

Food assistance among refugees plays a key role to ensure access of refugees to an acceptable diet: around 55 percent of refugees not benefitting from it have a poor or borderline diet against 31 percent of beneficiaries. In particular, only 27 percent of new arrivals not benefitting from food assistance have acceptable food consumption against 71 percent of beneficiaries. Similar trends are observed across all groups of refugees regardless of the time of arrival.

Furthermore, the use of **e-vouchers** – targeting only unregistered protracted Rohingya population in 2017, and currently extended to other groups of refugees - enhances access to more diversified and nutritious food and limits poor FCS. Food assistance also reduces adoption of **coping strategies**: 73 percent of non-beneficiaries adopted at least one food-related coping strategy - such as reduction of portions, meals, or consumption of less preferred foods - as opposed to 68 percent of beneficiaries. Food assistance covers equally female-headed and male-headed households, justifying the limited difference in prevalence of unacceptable FCS between the two groups.
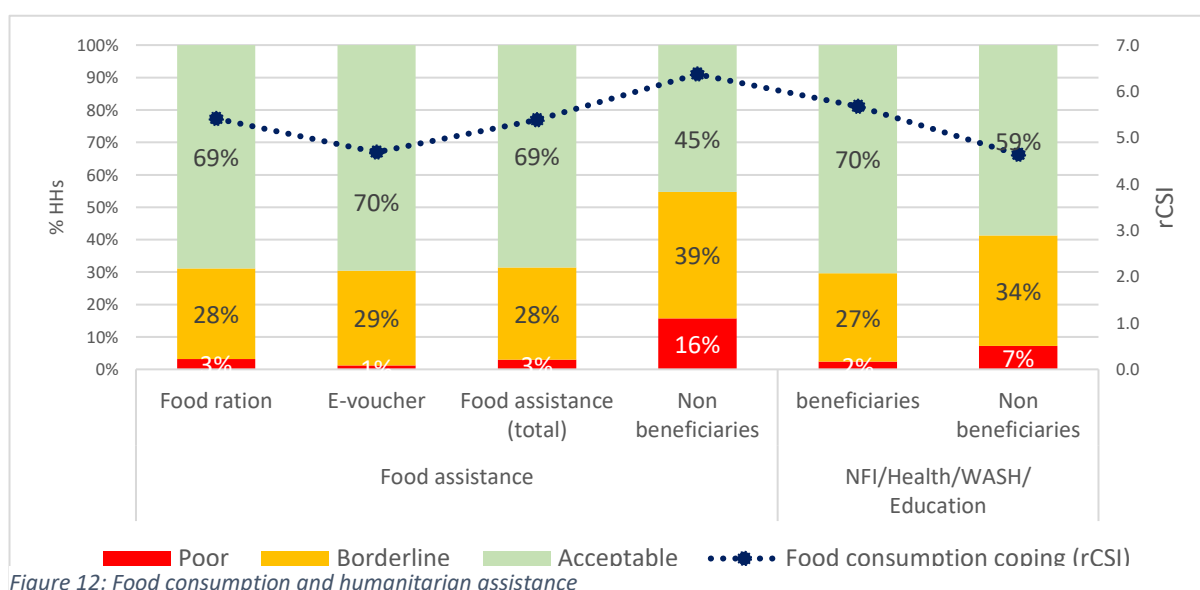
Figure 12: Food consumption and humanitarian assistance

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[2] Measured through the Food Consumption Score, a proxy indicator of food access reporting on frequency, diversity and nutritional value of food items consumed by households in the week prior to the interview.

Distribution of **non-food items, cooking fuel, and severe acute malnutrition treatment feedings** is also conducive, although to a lesser extent than food assistance, to acceptable FCS. Beneficiaries of such items spend comparatively less on firewood and significantly more on health services.

Who has unacceptable food consumption?

Among the Rohingyas, the registered protracted refugees are those with the highest prevalence of acceptable food consumption, whereas **unregistered protracted Rohingya population** are the worst off. This is mainly linked to coverage and entitlement of food assistance: 100 percent of registered refugees arriving before October 2016 declared having received food assistance in the month prior to the interview, against 97.5 percent of new arrivals, 90 percent of refugees arriving between October 2016 and August 2017, and finally 'only' 66 percent of unregistered protracted Rohingya population.

Furthermore, registered protracted refugees benefitted extensively from WFP's voucher programme enhancing access to a more diversified diet and to a voucher value based on the entitlement of 2,100 Kcal/day, per household member. At the time of data collection, all other groups of beneficiaries were supplied an in-kind ration of 1,600 Kcal/day per capita. The entitlement has been since scaled-up to 2,100 Kcal. Also, significant efforts to ensure more adequate coverage of unregistered refugees were made by humanitarian actors since the time of data collection.
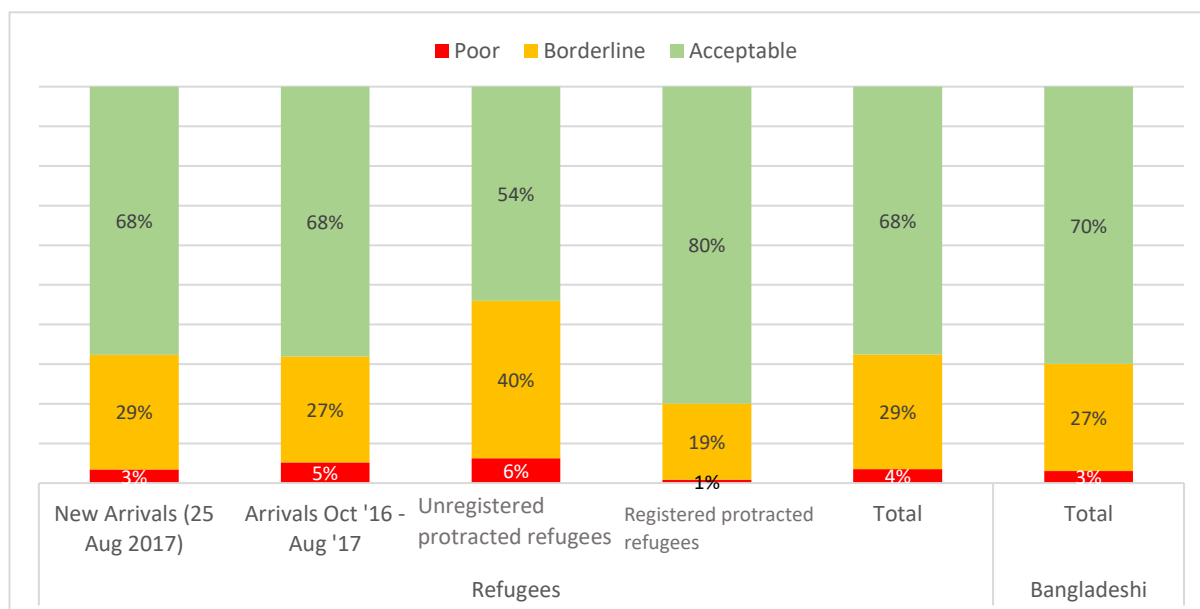
Figure 13: Food consumption by time of arrivals of refugees, and host communities

Among the **host communities**, the population of Ukhia faces more challenging physical access to food than the one in Teknaf (35 and 25 percent unacceptable food consumption, respectively). This is strongly correlated with physical access and regular consumption of fish. In Teknaf, 43 percent of the population living in coastal areas practice fishing; around 72 percent of them have acceptable food consumption. Similar results are observed among refugees (21 percent practice fishing, 82 percent of them have acceptable food consumption).

Households headed by women are significantly more likely to have unacceptable diet than those headed by men (38 vs 27 percent, respectively). Among the refugees, no significant difference based on the sex of household head is observed. Only exception, unregistered protracted Rohingya populationwho do not benefit from high coverage of food assistance; among this group, female-headed households have a 9 percent higher proportion of unacceptable food consumption than homologue men-headed ones (52 and 43 percent, respectively).

Dietary diversity

The vast majority of refugees (65 percent) and of host communities (61 percent) does not have access to a minimum acceptable dietary diversity. On average, refugee's households consume 3.6 food groups per day against 3.7 of Bangladeshi, hence not reaching the minimum acceptable standard levels.

Refugees and Bangladeshi have similar dietary patterns: staples and oil are consumed by both groups on a daily basis; vegetables or pulses each day; meat, fish or eggs 3 to 4 days/week. Bangladeshi have a higher access to fish (both physical and economic) and meat, whereas refugees tend to consume more frequently vegetable sources of proteins (i.e. lentils and split beans). Fruits and dairy consumption is negligible across all groups.

Figure 14 shows the average days per week a given food is consumed by different categories of refugees and host communities. It is interesting to notice that dietary diversity of women in reproductive age (15-49 years) perfectly overlays to HH dietary diversity (see green and blue lines in the graph), suggesting a homogeneous intra-HH food distribution and consumption of food. Anecdotal evidence from key informants however suggest that women often reduce their consumption in favour of adult males and, even more so, of children.
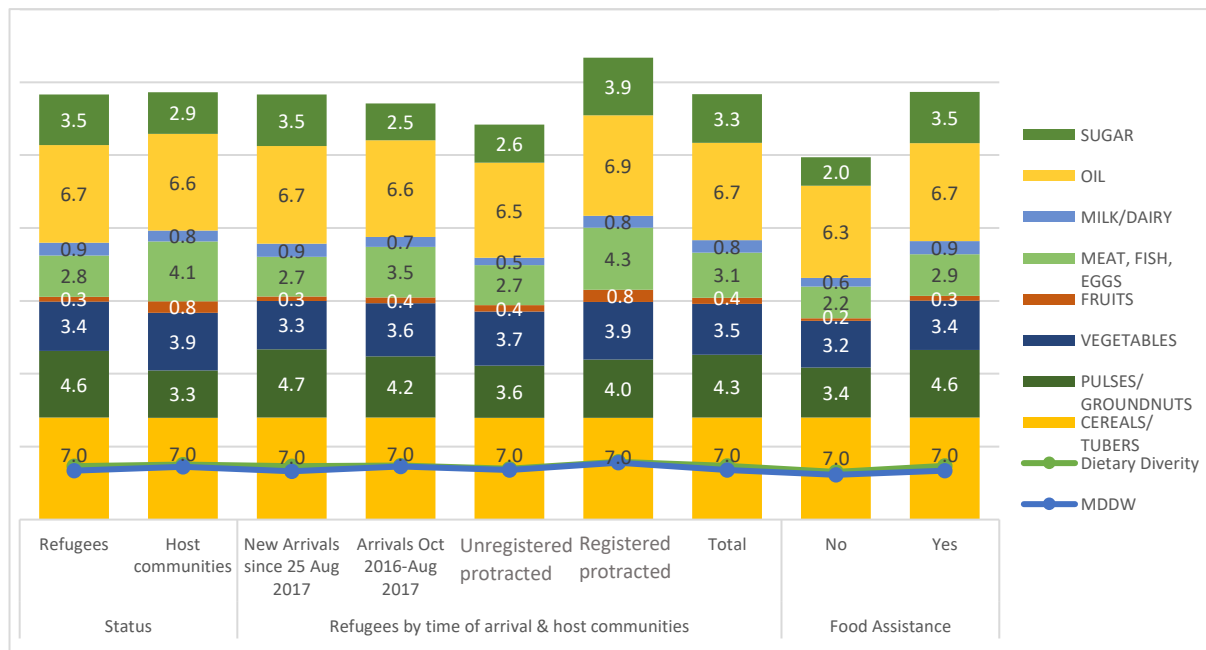
Figure 14: Average weekly consumption of food groups (avg. number of days per household)

Household and women dietary diversity is lower among single-headed mothers (3.6 and 3.07, respectively).

Refugees benefitting from food assistance have a much higher level of dietary diversity (3.7 food groups consumed per day by the average household against 3.4 of non-beneficiaries). Registered refugees beneficiaries of e-vouchers register even higher consumption of meat, pulses and sugar, lower of oil (dietary diversity: 3.8). Refugee household practising agriculture, livestock herding and small trade tend to have slightly more diversified diets.

As for food consumption score, no difference in terms of dietary diversity patterns is observed between female and male-head of refugee households, nor along HH size lines. Conversely, dietary diversity of male-headed household within host community is much higher than the one of households

headed by women (3.82 vs 3.55, respectively), especially concerning meat/fish/eggs consumption (4.2 days/week against 3.7) and vegetables (4.1 vs 3.6).

2.2   Coping strategies

Coping patterns reflect the range of mechanisms adopted by refugees and host communities to withstand a situation of hardship. Therefore, indicators of coping are a direct and indirect proxy of food access (or limited access to food) as well as of economic vulnerability triggering the adoption of such mechanisms.

Overall, around 90 percent of refugees and 89 percent of Bangladeshi host communities adopted at least one coping strategy regardless of the type (food or livelihood-based). The highest prevalence of adoption - and highest vulnerability - is again observed within the unregistered refugees arriving before October 2016 with almost all refugees resorting to at least one coping mechanism. Livelihood-based coping strategies are generally more frequently adopted than food-related coping.
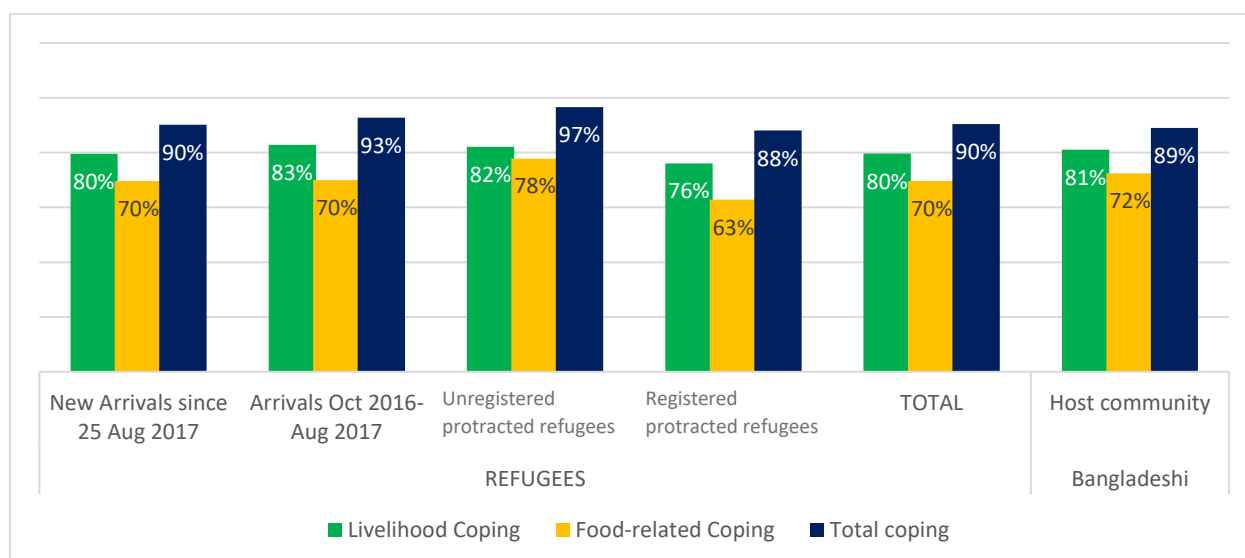
Figure 15: Prevalence of adoption of livelihood-based coping (green), food-related coping (orange) or any of the two (blue)

Box 2. Livelihood-based vs food-related coping indicators

Two sets of indicators are used to capture the coping capacity of a given households and groups of households: the **reduced coping strategy index (rCSI)** captures the frequency and severity of adoption of food-related coping strategies such as consumption of less preferred (i.e. less nutritious or expensive) foods; the **livelihood-based coping strategy indicator (LCSI)** captures instead the adoption of mechanisms affecting the capacity of households' to produce a sustainable income in the medium to long term.

Most common Food-related coping strategies

Consumption of less preferred food and borrowing food are the most common food-related coping strategies among both refugees and Bangladeshi. It was then followed by reducing the number and portion of meals by both groups. The frequency of adoption of food-related coping strategies was

slightly higher among refugees, especially among the female headed households and households with single mothers.

The lowest prevalence of people adopting each strategy, as opposed to the higher prevalence of people adopting at least one food-related coping mechanisms, suggest that most families adopt two or more coping mechanisms.
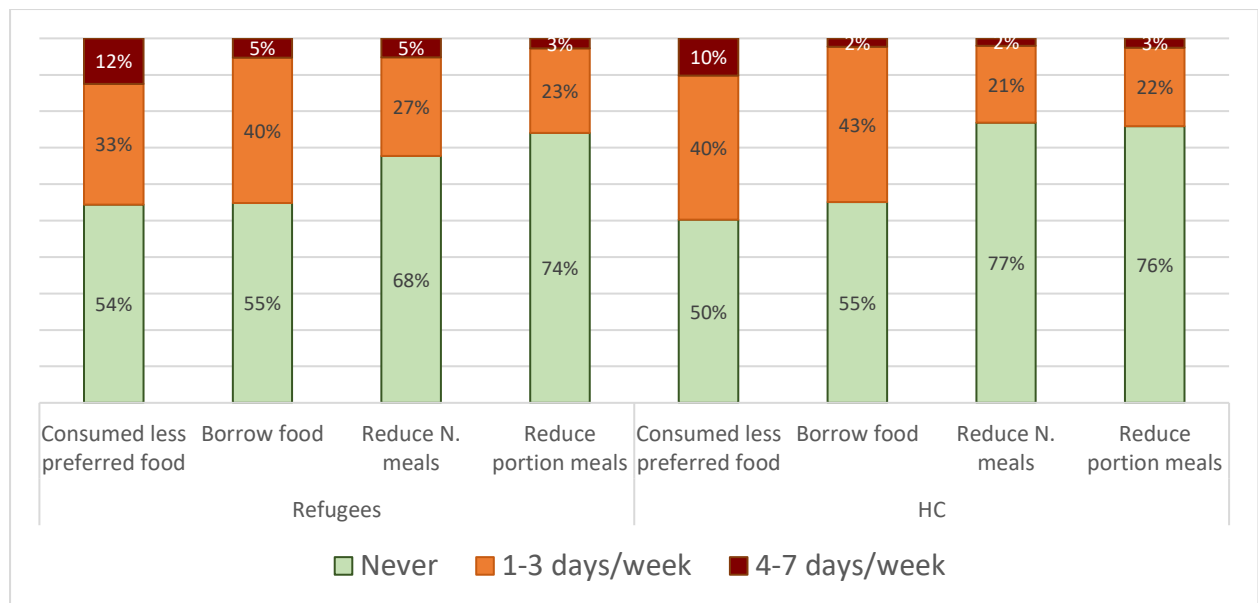
Figure 16: Most common food-related coping strategies

The reduced Coping Strategy Index of both refugees and Bangladeshi is generally low showing that the frequency and severity of food-related coping strategies adopted are not seriously high. Refugees have slightly higher rCSI than the Bangladeshi, with extremely homogeneous values among all categories of arrival. The only exception, unregistered protracted Rohingya population register a rCSI of 2 which is not only lower than the other groups of refugees but also significantly lower than Bangladeshi host communities. In other words, food assistance provided to unregistered protracted Rohingya populationis extremely successful to limit their hardship, and their need to adopt food-related as well as livelihood-based coping mechanisms to access food.
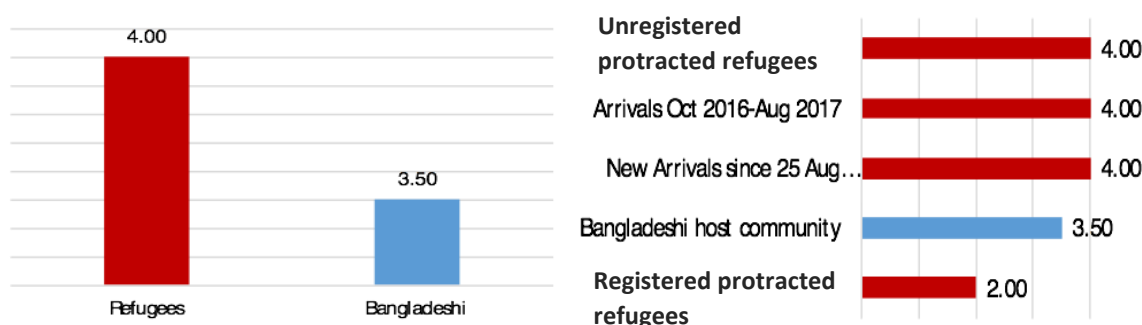
Figure 17: Median rCSI by category and by arrival time

Finally, the median values if rCSI score of the households with single mothers is more than twice the score of the ones without single mothers. This suggests that households with single mothers are much more vulnerable in terms of food security.

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Most common Livelihoods-based coping strategies

Both refugees and Bangladeshis in the host communities had high frequency of **borrowing money** to buy food, reaching 36 percent and 51 percent respectively. Albeit still high, relatively lower frequency observed in the refugee group may be attributed to the food assistance they receive.

Second most adopted livelihood coping strategy for both refugees and Bangladeshis was to **spend savings**, reaching 24 percent and 23 percent respectively. **Selling jewelry** was also quite common among both groups, refugee's frequency being slightly higher than the Bangladeshi population. This is in line with the qualitative reference that many refugees deplete their financial sources they brought from Myanmar such as jewelry and savings during the journey and within few months of settlement in the camps.
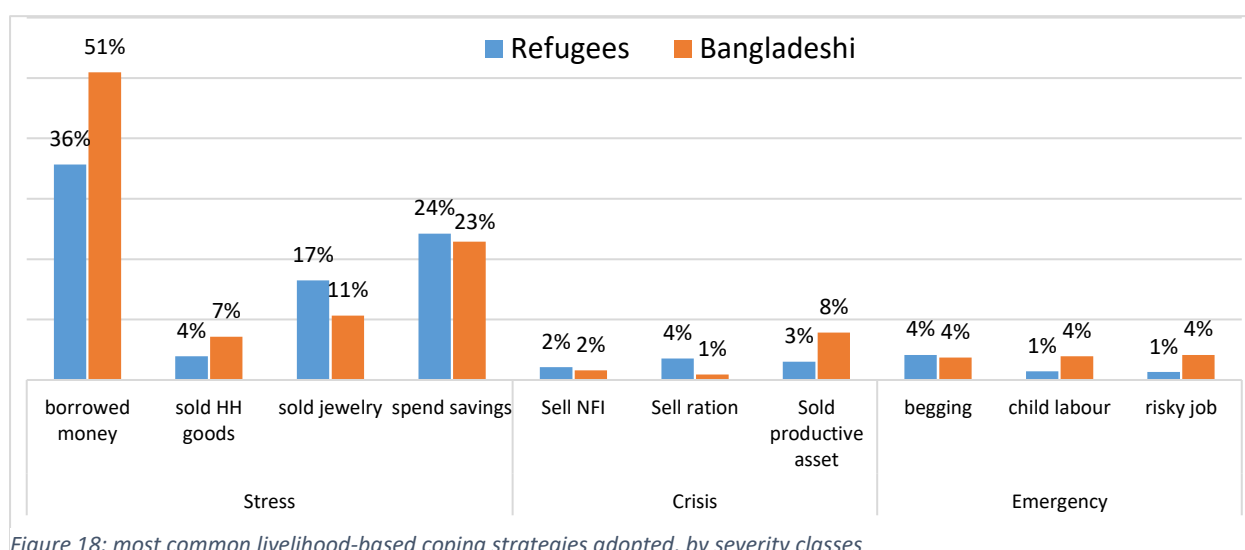
Figure 18: most common livelihood-based coping strategies adopted, by severity classes

The high prevalence of sale of productive assets among the typically agricultural Bangladeshi host community in Teknaf and Ukhia is symptomatic of the vulnerability local population face to have acceptable access to food in the short term and of the potential problems they will face in the medium to long term once exhausted the productive assets.

As many of the livelihood coping may not be applicable to a large number of refugees due to the low availability of assets, social and economic resources rooting from their displacement, the frequency of the livelihood coping may not reflect the actual situation on the ground. It is therefore plausible to assume that in a more 'stabilized' context the frequency of adoption of such strategies would be higher, especially for the refugees. Figure 18 and 19 below present the actual prevalence of adoption of coping mechanisms affecting livelihoods (orange) as well as the cases where strategies were not adopted due to the previous depletion of assets or opportunities to do so (blue).
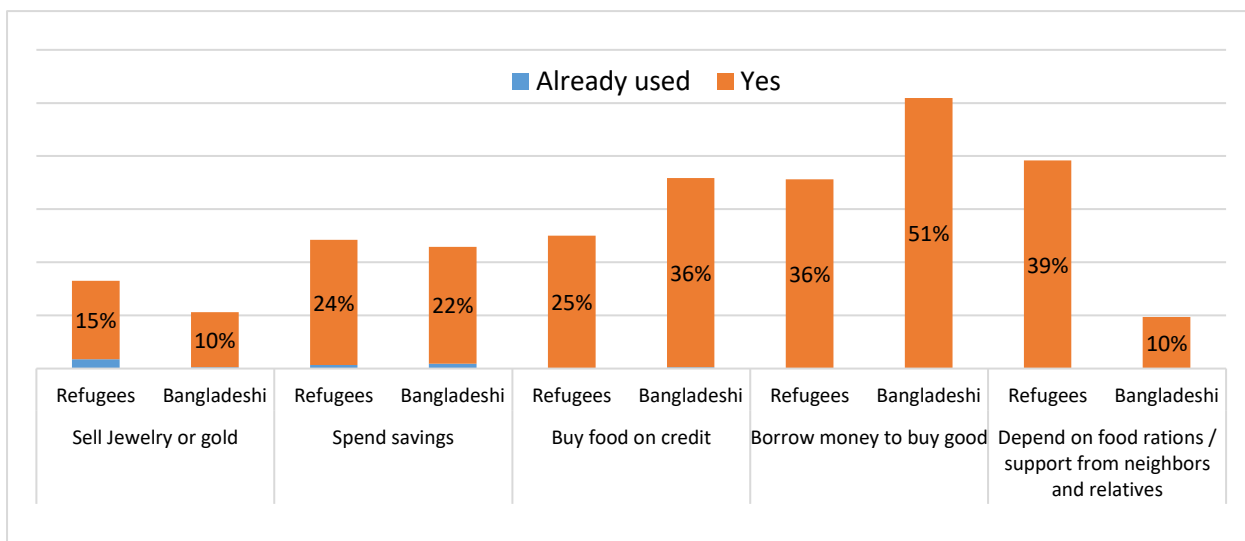
Figure 19: Most common livelihood coping of refugees and host communities

Borrowing money and buying food on credit are the most commonly used coping strategies for both Rohingya refugees and the Bangladeshis in the host communities. In particular, over 50 percent of Bangladeshi borrow money to buy food and over one third buy food on credit

Refugees also principally relied on food assistance or other types of external support. Rohingya displaced depend more on selling jewellery and gold brought from Myanmar, food rations, and support from relatives.

Coping and assistance

Food assistance targets the most vulnerable refugees – including especially the new arrivals – and prevents them from spending savings, selling jewellery, and borrowing. However, food assistance is not enough to cover for food and other basic needs. In the absence of food assistance, most likely, the proportion of adoption of such mechanisms would be significantly higher.
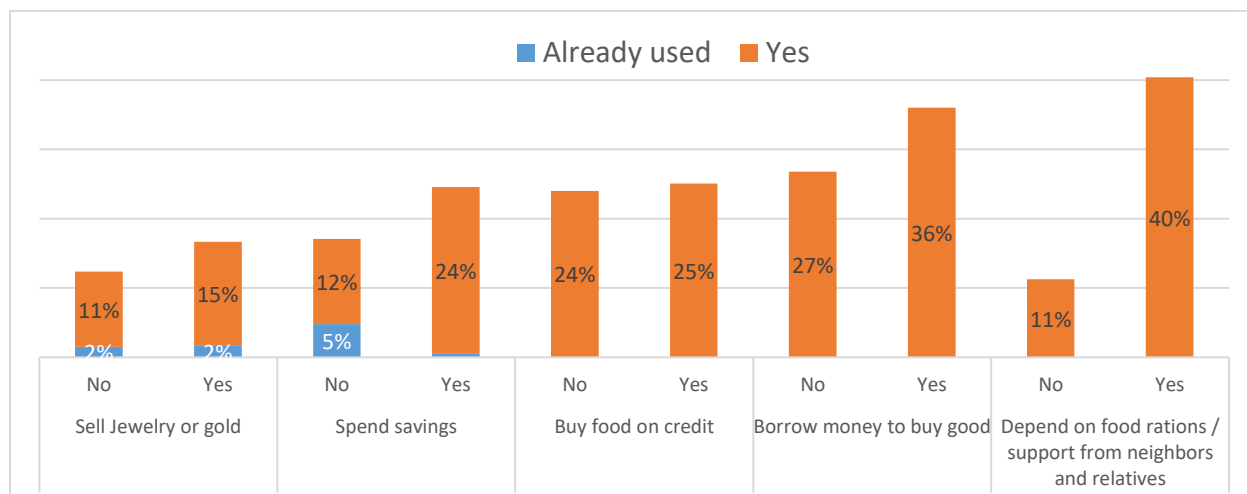
Figure 20: Most common livelihood coping strategies for assisted (Yes) and non-assisted (no) refugees

2.3 Economic Vulnerability

For the purpose of the REVA study, the economic vulnerability was estimated based on the capacity of the household to meet the per capita Minimum Expenditure Basket (MEB). The estimated value of the MEB was the result of the sum of the food basket and the monetary value of non-food items established at the national level for the Bangladeshi population. Similarly, a Survival MEB (SMEB) was established based on the monetary value of WFP e-voucher basket providing 2,100 kcal per capita. Based on these assumptions, households were divided into three groups:

- Households with per capita expenditure below the SMEB;
- Households with per capita expenditure between SMEB and MEB;
- Households with per capita expenditure above MEB.

The analysis offers two scenarios to assess economic vulnerability:

1) *The current* economic vulnerability which includes the monetary value of assistance;
2) A simulated scenario, which, by excluding the monetary value of assistance, aims to assess economic vulnerability if assistance would be removed.
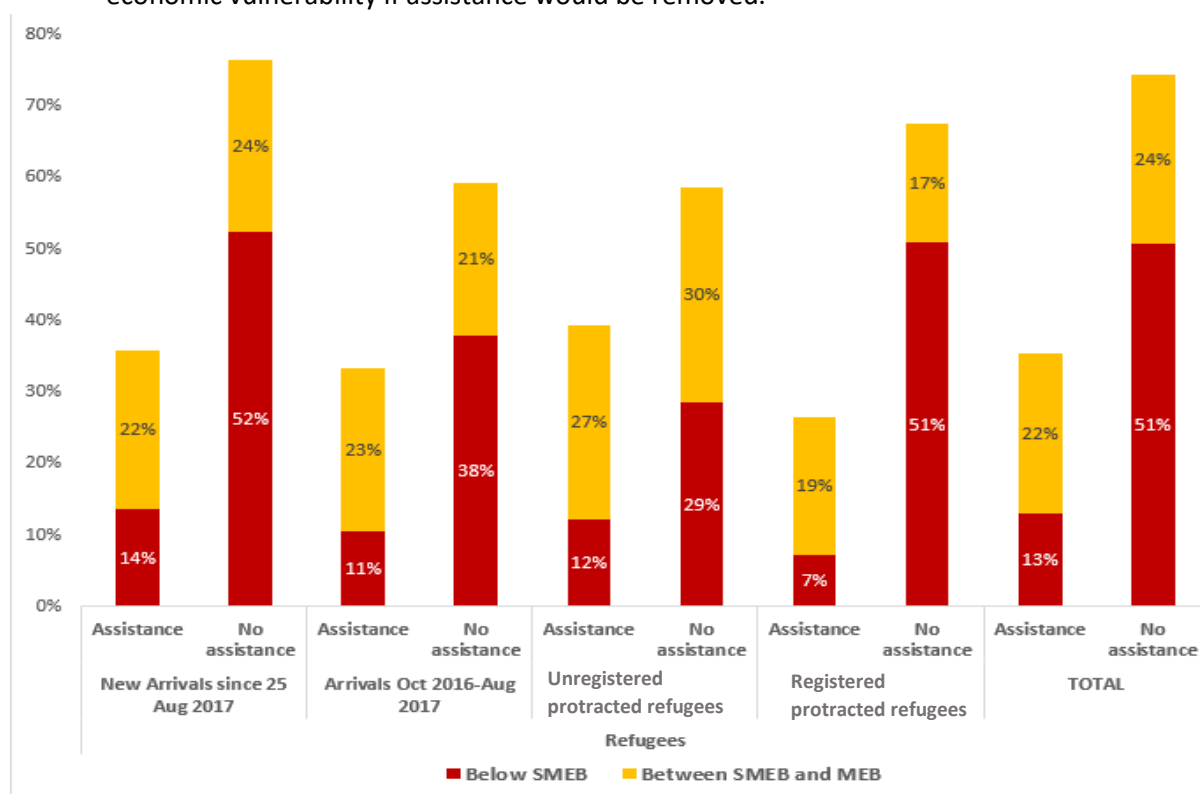
Figure 21: Refugees economic vulnerability with and without assistance

The analysis shows that, currently, unregistered protracted Rohingya population and new arrivals have the highest share of households falling below both the SMEB and MEB, meaning that they are not able to satisfy their very basic needs due to their extremely low financial capacities.

In case external assistance was not provided, economic vulnerability would increase from 35 percent to 75 percent and new arrivals, together with registered protracted refugees, would be the most economically vulnerable groups. Particularly, these groups would register the highest increase of households below the SMEB with respectively +629 percent and +271 percent, suggesting that they are highly to entirely relying on life-saving assistance to meet their basic food and non-food needs. The reasons behind this dependence are multiple. Anecdotal information suggest that registered protracted refugees, together with the new arrivals, experience a general lack of freedom of

movements, which hampers livelihood opportunities as well as firewood fetching. Unregistered protracted Rohingya population face the same challenges with the addition that, at the time of data collection, they were not covered by the same levels of food assistance due to issues linked to their identification.

Nearly nine out of ten refugees did not have any savings at the time of data collection, which indicates a high use of coping strategies. Once these savings will be depleted and no alternative income sources are found, their situation could further deteriorate.

This highlights the crucial role that assistance plays in determining refugees' economic vulnerability, which represents the major driver of food insecurity, particularly among the new arrivals and unregistered protracted Rohingya population. It is estimated that around 80 percent of the total refugee population would not be able to meet their food requirements without the assistance provided.

The massive scale-up of assistance in response to the new influx had a strong positive impact also on refugees' food consumption levels, which remain overall acceptable except for unregistered protracted Rohingya population who did not benefit from adequate food assistance and for whom 45 percent of households having an unacceptable (poor and borderline) food consumption is observed.
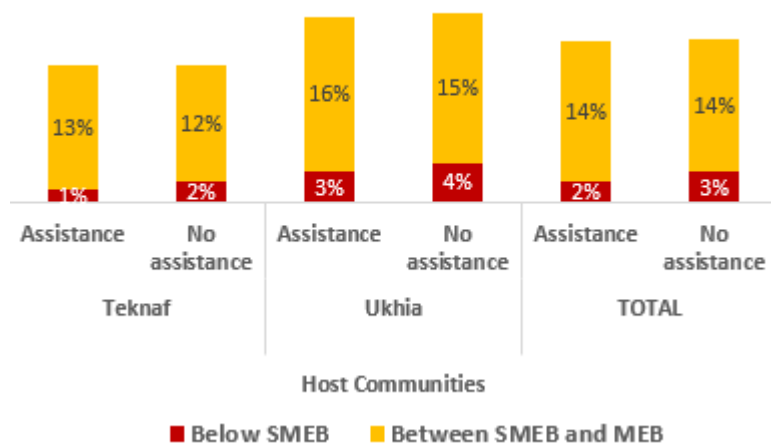
Figure 22: Host Communities economic vulnerability with and without assistance

Economic vulnerability situation is extremely different among host communities where more than 80 percent has a monthly expenditure above the MEB. However, although with a different magnitude, economic vulnerability also affects host communities, particularly Ukhia and Teknaf which experience the highest concentration of Rohingya refugees and are absorbing significant numbers of new arrivals. Data show that Ukhia is the sub-district with the highest share of households in the host community falling below both the SMEB (3 percent) and MEB (16 percent). This is mainly due to the increasing concentration of population and to its proximity to the makeshift settlements, which are quickly expanding with the new influx, thus putting a strain on host population.

3. Who are the most vulnerable to food insecurity?

The table below illustrates the most important characteristics of vulnerable households. The prevalence of the vulnerability to food security is summarised based on the each characteristics of the households. These findings will inform future targeting by developing group-specific criteria.

Core characteristics of vulnerable and highly vulnerable	NEW ARRIVALS (August)	NEW ARRIVALS (October)	UNREGISTERED PROTRACTED ROHINGYA POPULATION	REGISTERED PROTRACTED REFUGEES	HOST COMMUNITIES
Demography					
Female headed households	84%	71%	72%	65%	45%
Separated/divorced	65%	58%	75%	67%	69%
Widow(er)	87%	73%	76%	60%	49%
Presence of disabled/chronically ill	75%	81%	67%	72%	38%
Presence of members aged less than 15 yrs old	83%	68%	72%	71%	39%
Presence of 3 children (0-15 yrs old) or more	90%	74%	78%	78%	45%
Presence of Pregnant or Lactating women	87%	64%	80%	75%	37%
Medium size (4-7)	83%	68%	71%	70%	39%
Big size (8-10)	89%	83%	85%	80%	31%
Very big size (11+)	100%	100%	75%	78%	67%
Education					

No education level – female members	84%	70%	72%	75%	39%
No education level – male members	86%	68%	79%	76%	38%
Working capacity/livelihoods					
Dependency: 2+ dependants (<15 and/or >60)	88%	74%	75%	76%	42%
Absence of working men	82%	74%	75%	72%	54%
Depending on domestic work	83%	100%	88%	68%	69%
Depending on begging	96%	100%	83%	100%	88%
Depending on Zakat	76%	67%	100%	0%	0%
Depending on remittances	79%	79%	20%	29%	8%
Asset ownership					
No items	88%	83%	79%	91%	39%

Female-headed households: The massive coverage of food assistance among refugees (96 percent) reduces any significant difference of vulnerability to food insecurity between female-headed (83 percent are vulnerable) and male-headed households (79 percent). Within host communities, 45 percent of female-headed HHs are vulnerable to food insecurity against 35 percent of male-headed ones, with peaks in Teknaf inland (46 vs 27 percent).

Separated/divorced or widow(er): Single parents are generally more exposed to vulnerability to food insecurity. Single mothers are more prone to food insecurity among refugees arriving after Oct 2016 and unregistered protracted Rohingya population. Results however are not significant, except for the case of single separated/divorced within the host community. Conversely, households headed by separated/divorced head among the different refugee groups are significantly less prone to be vulnerable/food insecure. Data show a certain, yet not significant correlation between vulnerability and having a widow(er) as head of the household.

Presence of disabled/ chronically ill: around 81 percent of refugee households arriving after Oct 2016 with disabled/chronically ill members are vulnerable to food insecurity, against 70 percent or less in the other groups of refugees, and 38 percent of Bangladeshi host communities.

Presence of members aged less than 15 yrs old / 3 children (0-15 yrs old) or more: in a context where food security is related to external aid (not modulated on HH size at the time of data collection) and on the limited additional income from temporary and occasional activities, the presence of inactive members, such as children (and to a lower extent elderly), is significantly associated with food insecurity status of households. This is even more evident among new arrivals refugees (in light of the almost entire dependence on food assistance) and groups utterly depending on their means and income such as unregistered protracted Rohingya population and host communities.

Presence of pregnant or lactating women: The presence of PLWs is significantly correlated with vulnerability of the households only for the new arrivals. Similar trends – yet not statistically significant – are observed across all categories of refugees.

Household size: for all categories of refugees, a much higher proportion of vulnerable households is observed among those comprising four members or more, even more so for 7+ members. For the first threshold, new arrivals are showing a strong correlation especially due to low access to any source of income and non-modulated food assistance on size at the time of data collection. Among HCs, significant differences are only observed for very big size HHs.

Education: Intuitively, education is correlated to food security. In light of the homogeneously low education patterns among refugees and host communities, significant correlations with vulnerability are only observed between households with at least one member with secondary degree among refugees. Not surprisingly, the presence of one secondary level degree among female members within host communities is associated to less vulnerability. The difference is mainly related to the generally higher education levels of men within host communities as opposed to refugees. Finally, unregistered refugees arriving before Oct 2016 with at least the minimum literacy levels are significantly more likely to be food secure than the illiterate ones. This category of refugees relied mainly on their own capacities and income to survive. Hence, the comparative advantage of accessing a minimum level of education is higher than among other groups of refugees more dependent on external help.

Dependency category: at least 2 dependants (age below 15 or >60 yrs old) per working member: Low dependency ratio correlates with food security: Across all categories of refugees and host communities, the presence of maximum one dependant per working member equates to low vulnerability to food insecurity, whereas 85 percent of new arrivals with 2 dependants or more are more likely to be food insecure. Among host communities, around 69 percent of those with at least 3 dependants per working members are food insecure.

Absence of working men: the absence of additional income to support livelihoods, such as the one produced by working men, is felt more among communities of refugees depending mainly, if not entirely, on their own income for their well-being. Therefore, protracted refugees and host communities suffer more from

the absence of working men compared to refugees arriving after Oct 2016 who have benefitted considerably from humanitarian support and have not yet fully engaged in potential income generating activities.

Income source: considering the aggregated group of refugees, the access to income generating activities (IGA) is significantly correlated with food security: 72 percent of those depending on at least one IGA are vulnerable against 78 percent of those only relying on external help. Only exception, registered protracted refugees: 28 percent of those accessing an income are food secure against 36 percent of those with no income. Among host communities, an intuitive correlation exist despite significance does not arise. Dependence on domestic work is often correlated to vulnerability. Anecdotal evidence of extremely low wages of domestic workers could explain the reason. Although uncommon, the reliance on remittances is associated to low vulnerability: among the less vulnerable, 7.5 percent of new arrivals, 17 percent of registered protracted refugees and 6 percent of host communities access remittances against less than 5 percent in the other groups.

Assets: absence of any items is only common among new arrivals. Hence, significant correlation to food insecurity is only found within this group. Conversely, the absence of kitchen items is a predictor of vulnerability to food insecurity across all categories of refugees, while it is not for host communities given the extremely low number of households who do not own them. In addition, among new arrivals the presence of non-kitchen related goods (beds, floor mats, table/chairs) is associated to food security whereas the presence of kitchen items is less relevant. Despite some intuitive frequency correlation with absence of vulnerability, other productive items such as sewing machines, means of transport, generators etc., are not sufficiently common to detect a significant correlation.

3.1. Who are the least vulnerable to food insecurity?

In line with the above-mentioned objective of informing future targeting, the analysis also focused on the identification of the characteristics of the least vulnerable to food insecurity. The table below illustrates the most important findings:

Core characteristics of less vulnerable	REFUGEES	HOST COMMUNITIES
Household size	Less than 3 members	
Low dependency rate	No dependants or one dependant per working member	
Children below 15	Below two	Below four
Other vulnerable profiles	Absence of pregnant or lactating women	
Duration of displacement	11 month or more	Not Applicable
Income	Dependence on at least one income generating activity, especially if non-agricultural casual labour, agriculture production/sales, remittances	Dependence on small businesses, agriculture production/sale, remittances
Education	At least one member with secondary level education	

4. Nutrition

4.1 Child Malnutrition

A thorough nutrition survey was conducted by members of the Nutrition sector in Kutupalong registered camp and Nayapara registered camps, as well as in the Makeshift (including Kutupalong camp expansion, new settlement sand makeshift camps) between October and November 2017. Preliminary results indicate a serious public health emergency among Rohingya children (6-59 months) in Cox's Bazar. The prevalence of acute malnutrition among all children 6-59 months of age (measured through weight for height) significantly exceeds the WHO emergency threshold (15 percent). Surprisingly, prevalence of GAM is higher in Kutupalong registered camp where most of the registered protracted refugees live. This group has benefitted from two decades of food and non-food related assistance, including the scaling up of WASH and health infrastructural interventions that followed the latest surge in arrivals since 25 August 2017.

Table 1: Preliminary results from the nutrition SMART survey (NUT cluster, Oct/Nov 2017)

Preliminary findings of the Emergency Nutrition Assessment

SURVEY INDICATOR	Kutupalong RC (n=405) Total population 24,499 Oct 22 - 28	Makeshift (n=1,305) Total population 720,902 Oct 29 - Nov 20	Nayapara RC (n=584) Total population 38,997 Nov 20 - Nov 27
Global Acute Malnutrition children 6-59 months	24.3% [19.5-29.7]	19.3% [16.7-22.2]	14.3% [11.2-18.1]
Severe Acute Malnutrition children 6-59 months	7.5% [4.9-11.2]	3.0% [2.2-4.2]	1.3% [0.5-2.9]
Stunting children 6-59 months	43.4% [37.6-49.4]	44.1% [40.7-47.5]	44.4% [39.5-49.3]
Anemia (Hb<11.0g/dL) children 6-59 months	47.9% [41.9-54.0]	47.9% [44.1-51.7]	46.6% [41.8-51.6]
Measles Vaccination Coverage children 6-59 months	55.0% [49.4-60.5]	45.3% [38.5-52.3]	88.0% [84.5-90.8]
Cholera Vaccination Coverage all persons ≥ 1 year	78.1% [76.3-79.8]	88.5% [84.0-91.9]	87.3% [86.0.-88.4]
Diarrhea children 6-59 months	40.4% [34.1-46.1]	41.3% [36.5-46.2]	34.3% [30.0-39.1]

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

Furthermore, nearly 50 percent of children suffered from anaemia (Hb<11.0g/dL) which represents a severe public health problem according to WHO threshold (<40 percent). Only 9 percent of children 6-23 months in Kutupalong registered camp has a Minimum Acceptable Diet[3], as compared to 16 percent in Nayapara registered camp and 6 percent in the makeshift areas. The report states that the proportion of households covered by General Food Distribution varies from 53 percent of new arrivals in Kutupalong registered camp to 44 percent in Nyapara registered camp, to 83 percent in the makeshift. According to findings from the REVA, 96 percent of new arrivals and 91 percent of refugees overall benefitted 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. Also, the nutrition survey suggests that only around 25 percent of children 6-59 months are covered by BSF

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[3] The indicator assesses the acceptability of a child's diet based on its micronutrient adequacy and meal frequency.

programmes in registered camps and 13 percent in Makeshift. More recent data suggest that coverage of BSFP programmes has more than doubled over the past few weeks.

According to the conclusions of the report, the high prevalence of malnutrition, diseases, poor Infant and Young Child Feeding practices and anemia highlight the need to *scale up a Multi-sectoral efforts* to provide access to nutrition and health services including treatment for acute malnutrition, and actions to prevent malnutrition including psychosocial support, safe water and sanitation, appropriate shelter, and micronutrient dense food products.

The REVA investigated some among the main plausible determinants of acute and chronic malnutrition. The area of analysis allowed to compare findings from the registered camps (collapsed Kutupalong and Nayapara) and the situation in the other informal settlements, formal makeshifts and Kutupalong camp expansion (collapsed). Overall, results show an extremely high level of morbidity: around 80 percent of households reported having children suffering from diseases in the 30 days prior to the interview. Secondary data from surveys conducted under WHO's Early Warning Alert and Response System (EWARS) suggest that the most common diseases among refugee children in the camps are: acute respiratory infections (29 percent); unexplained fever (28 percent) and Acute Watery Diarrhoea (21 percent). Access to improved water sources reaches almost 100 percent in light of the big efforts of UNHCR and camp managers to set hand-pumps and tube wells, especially in the past three months. However, Proximity of communal latrines and water points enhances contamination of water table. A joint WHO/ Bangladesh Department of Public Health research in the camps showed that 86 percent of water sample positive to E.coli and 36 percent very highly contaminated. Unfortunately, only a small fraction of refugees treat water before domestic use. This is also associated with the scarcity and high prices of firewood and cooking fuels.

Conversely, access to food at the household level does not seem excessively problematic for the vast majority of refugees living in these areas. Around 75 percent of households in registered camps have access to an acceptable diet and 65 percent in the other sections of the camps. Relatively high access to food is mainly associated with the major surge in food assistance in the past two months. Also, access to a well-diversified food is not extremely problematic. On average, households consume 3.7 different food groups each day. Intra-household distribution of food is seemingly equitable among all members including women and children. More information on the matter will have to be provided by future assessments to corroborate such findings given the anecdotal evidence provided by partners on lower consumption from women, especially women in reproductive age. As far as children's complementary feeding diet is concerned, the findings from the REVA suggest that 17 percent of adults in the registered camps and 14 percent in the other areas tend to reduce their own consumption in favour of their children's. Despite the high prevalence of children 6-23 months old with not acceptable MAD, data from the REVA seem to suggest that children's access to food is not extremely low.
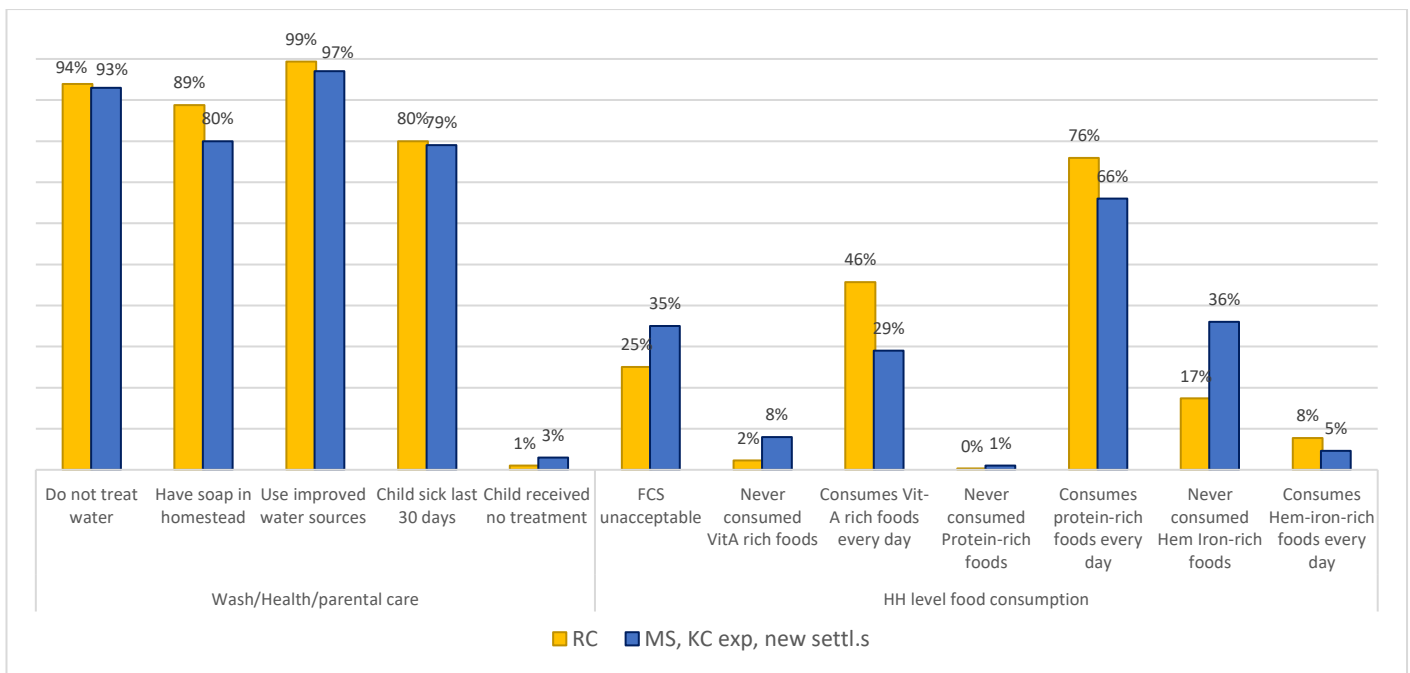
Figure 23: WASH/Food consumption in Registered Camp and Makeshift

In conclusion, households and children's food consumption among refugee communities in registered camp and makeshift areas do not seem extremely problematic. Conversely, the quality of drinkable water associated with low adoption of any form of treatment could be among the main determinants of morbidity and malnutrition.

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.

4.2 Minimum Dietary Diversity for Women (MDD-W)

The MDD-W is a proxy for access to a nutritious and well-diversified diet of women in reproductive age (WRA - 14-59 years old). In each sampled household, women were asked if they had consumed ten defined food groups in the 24 hours prior to the interview. In accordance with the FAO/FANTA MDD-W guidance[4], those consuming more than five different groups are considered accessing a minimally diversified diet whereas the remainder is not reaching the MDD-W.

> **Box 3. MDD-W calculation and relevance**
>
> MDD-W is a dichotomous indicator indicating whether or not women 15-49 years of age have consumed at least five out of the following ten food groups the previous day or night: *i. Grains, white roots and tubers, and plantains; ii. Pulses (beans, peas and lentils); iii. Nuts and seeds; iv. Dairy; v. Meat, poultry and fish; vi. Eggs; vii. Dark green leafy vegetables; viii. Other vitamin A rich fruits and vegetables; ix. Other vegetables; x. Other fruits.*
>
> The proportion of women 15–49 years of age who reach this minimum in a population is used as a proxy indicator for higher micronutrient adequacy, one important dimension of diet quality.

'Only one in four women in reproductive age has a minimum dietary diversity.'

Overall, 24 percent of women surveyed achieved the minimum dietary diversity with higher values among host community households than refugee households, reaching 30 percent and 24 percent, respectively. The mean MDD-W score – with values ranging from 0 to 1 - was higher in host communities compared to refugee households reaching 3.61 and 3.39, respectively.

As mentioned in section .., the mean MDD-W and mean household dietary diversity do not differ much – on average, refugee women consume 3.4 food groups (out of 10) against 3.7 of their households (out of 12)[5] - suggesting that intra-household distribution of food is reasonably homogeneous.

Owing this to better access to markets and income generating activities, Bangladeshi women in host communities tend to consume comparatively more frequently meat or animal products, whereas refugees access proteins mainly through lentils and beans (pulses). More frequent consumption of vegetables and fruits is also observed among Bangladeshi women, while dairy, nuts, and fruits consumption between both categories. Fundamentally, women's dietary patterns reflect main differences observed in the broader analysis of food access at the household level.
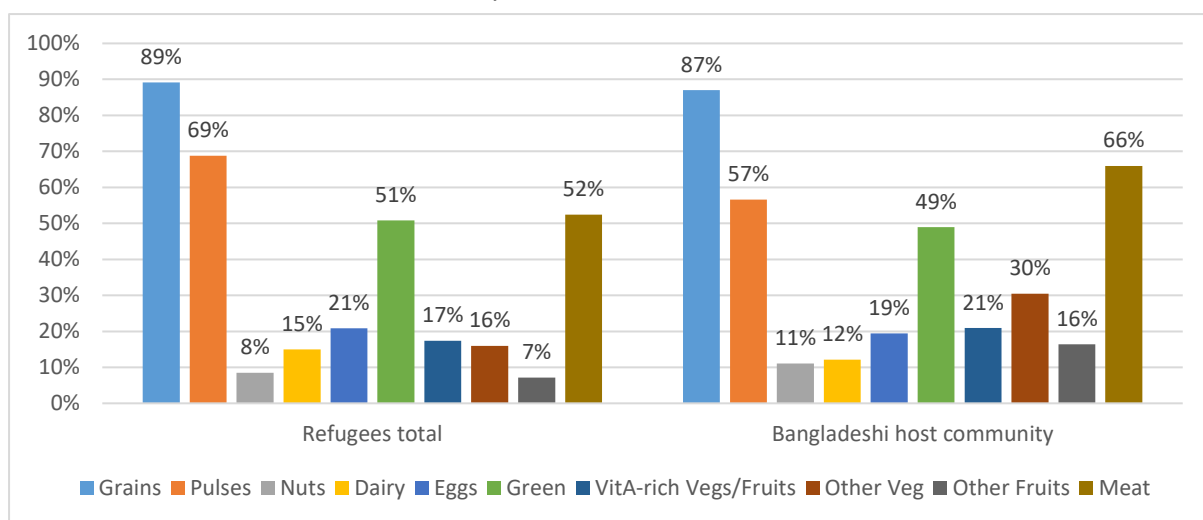
Figure 24: Percentage of women consuming MDD-W relevant food groups in the 24 hours prior to the interview
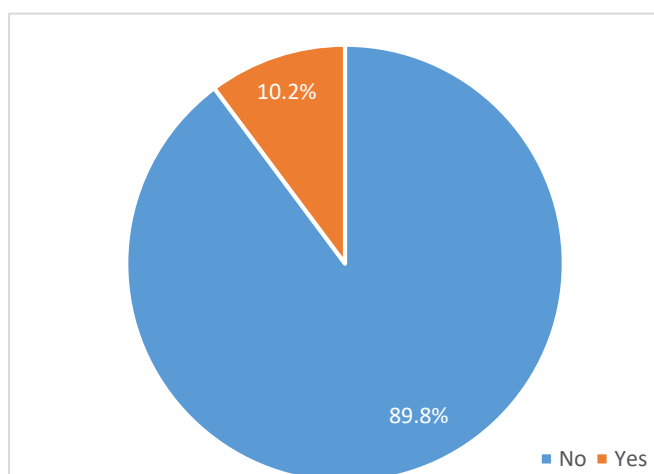
Figure 25: Reduced women consumption to prioritize other members

The absence of relevant levels of disparities in intra-household consumption between men, women, and children is also corroborated by a more thorough analysis of coping patterns.

Close to 90 percent of respondents in the interviewed households declared that adult women do not reduce their food consumption to prioritize other members, including children or adult men. Although results are straightforward about this, anecdotal evidence and qualitative data collected show that cultural elements may have biased such information, suggesting

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[5] The two methodologies (household dietary diversify score and MDD-W) have slight differences in the list of food groups but follow similar approaches in the calculation.

that in fact, women tend to sacrifice their consumption in favour of other members more than data would suggest.

Prevalence of MDD-W varies significantly among the different categories of refugees. As expected, women among the registered protracted refugees benefitting from the e-voucher entitlements have access to a more diversified diet; one-third of them has access to MDD-W, while new arrivals since August 2017 and unregistered protracted groups have the lowest prevalence of women in the households achieving minimum dietary diversity. Registered protracted refugee women are more likely to access a minimally acceptable diet than host communities are. Similarly, women in registered protracted groups have the highest MDD-W score of 3.88, followed by women in host communities and October 2016 groups (3.61). Women in new arrivals groups had the lowest MDD-W score of 3.28.

Figure 26: Percentage of refugee women achieving MDD-W by time of arrival
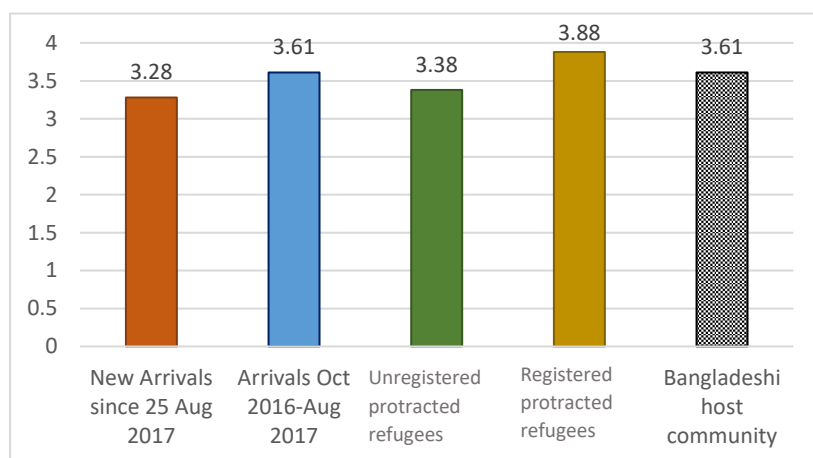
Figure 27: Mean MDD-W score by time of arrival

While differences on MDD-W among women of the various categories must be highlighted, it is important to emphasize how the vast majority of women across all groups – including within host communities – do not meet their minimum dietary requirements. Indeed, the average consumption of food groups is very far from the acceptable threshold of five, hence suggesting that women's diet lacks over one of the key sources of micro and macronutrients enabling them to reach a minimally balanced diet.

As an example, the below figure shows how the consumption of fruit and vegetable groups, among the main sources of key vitamins, is extremely limited. On average, women consume less than one source[6] of fruits or vegetables per day. The figure was slightly higher for older women in registered protracted groups and host communities.
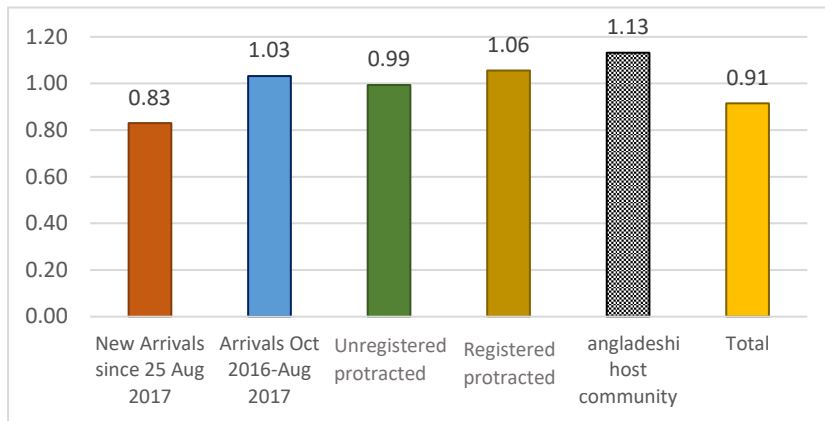
Figure 28: Mean number of fruit/vegetable groups

As expected – due to limited income – refugee women among the new arrivals had the lowest frequency of consuming the food groups.

4.3. Access to micro-nutrients at the household level

Refugees – especially if new arrivals or unregistered protracted Rohingya population– have extremely problematic access to key micronutrients such as Vitamin A and Hem iron, as well as to sources of proteins. The situation is slightly better among host communities, although it remains still problematic. The frequency of consumption of foods with high content of easily absorbable iron is extremely low across all Bangladeshi and Rohingya respondents.

Figure 29 shows the average number of days in a week each nutrient – Vitamin A, Hem iron, protein - is consumed within Bangladesh and refugee households disaggregated by the time of arrival. Registered refugees, who are mostly assisted by food vouchers, have access to a well-diversified diet hence justifying the highest intake of Vitamin A and Protein (49 and 80 percent of these refugees, respectively, consume on a daily basis food rich in the two nutrients). New arrivals who are assisted by food distribution – including lentils and split peas - also has the relatively high amount of protein consumption. Food and voucher assistance have the highest impact on improving protein consumption among other nutrition groups. A higher proportion of unregistered refugees are not
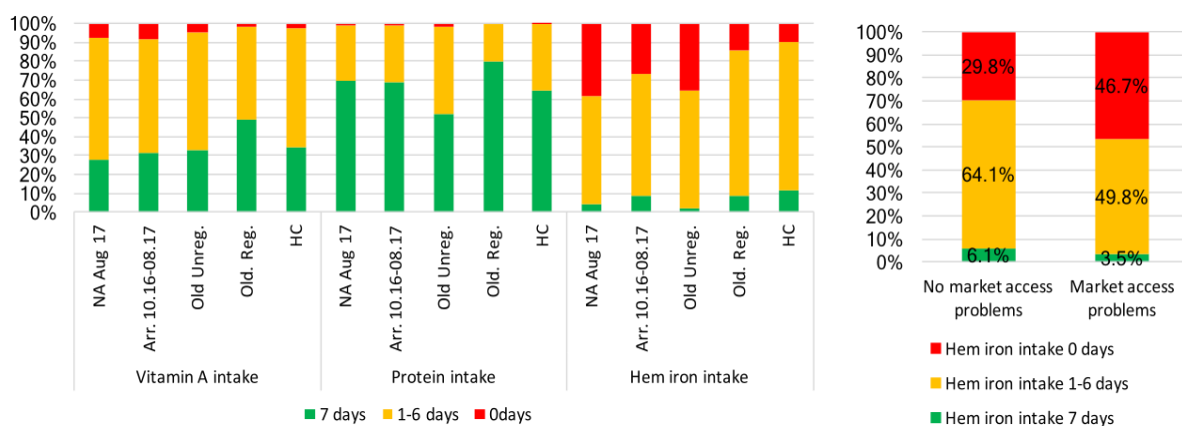
Figure 29: Weekly consumption of Vitamin A, Hem iron, Protein for refugees (by category) and Bangladeshi host communities

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[6] Considering the four potential groups: green leafy vegetables, Vitamin-A (orange) vegetables/fruits, other fruits, other vegetables.

eating protein and Hem iron and are thus at higher risk of undernutrition and micronutrient deficiencies.

Hem iron intake has direct relations with market accessibility. As shown in the figure above, about 47 percent of the people who reported to have market access problems did not consume any Hem iron during the 7day recall period, against 30 percent of those who did not face any problems. The 17 percent gap between these two categories is far higher than for the other nutrients.

As a matter of fact, new arrivals since August 2017 and unregistered protracted Rohingya population reported both the peak of observations of people reporting market access restrictions and the lowest consumption of foods rich in Hem iron. Enhancing consumption of split peas and lentils must be therefore encouraged to make sure that these refugees access such micro-nutrient, even more so considering the extremely worrying outcomes on the prevalence of anaemia among the infant and young children aged below five years.
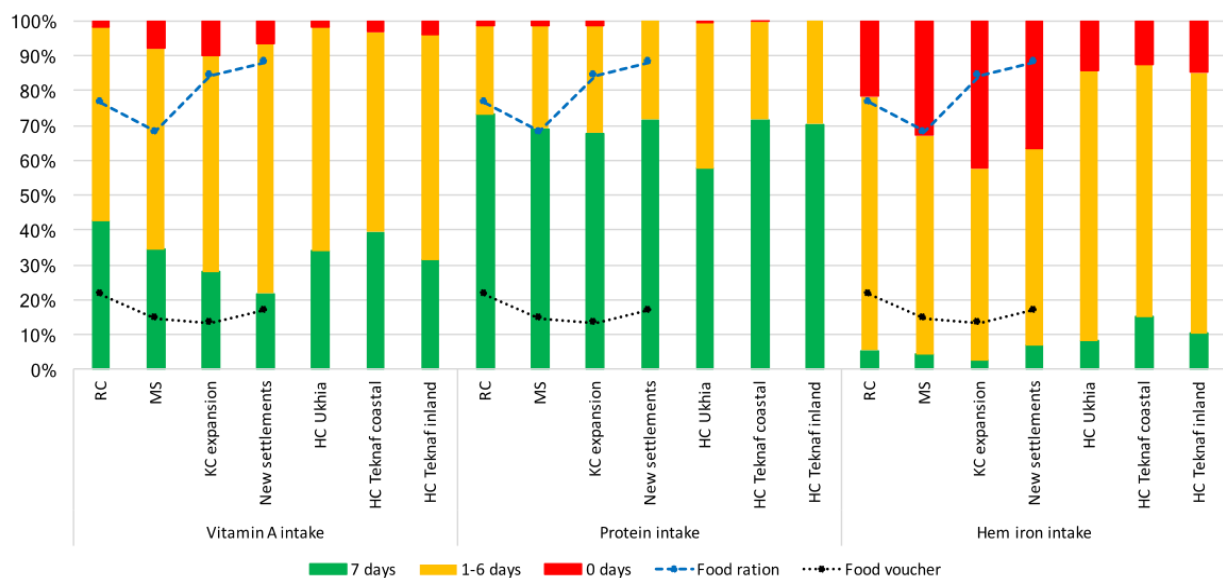
Figure 30: Access to nutrients and type of assistance

In line with the considerations above, it is not surprising how benefitting from food assistance enhances access top micro-nutrients. It is however extremely striking to see to what extent access to micro-nutrients is boosted by access to food vouchers. The figure above shows micro/macronutrients intake in different locations such as registered camps, makeshift camps, expansions, new settlements and host communities. The comparative analysis of the prevalence of food vouchers beneficiaries (black line) and the categories of consumption (e.g. 1 through 6 days or 7 days) in the stacked columns have very similar shapes from one category of refugee/host communities to the next.

In other words, the absence of vouchers is a good predictor of limited or no access to nutrient-rich foods while food voucher assistance increases the intake of nutrients significantly. This is particularly true in the case of Vitamin A and Hem iron, while it applies less to proteins given that refugees and host communities can access the latter nutrient group through a wide number of available food sources including food distribution or markets.

5. Access to Basic Services

The massive increase in the number of refugees is putting under severe strain the provision of basic services. Access to shelter, water, sanitation and other essential basic services such as healthcare and education is essential to ensure that refugees' lives are not put at risk. Without these basic needs being met, the risk to increase refugees' vulnerability is extremely high. The lack of basic minimum services and the difficult living conditions, in fact, undermine the dignity of Rohingya refugees and expose them to serious threats such as disease outbreaks and/or the recourse to negative coping strategies.

5.1 Access to cooking fuels

Access to cooking fuel is a key concern among Rohingya refugees. The analysis found that firewood is the main source of energy for cooking, both for refugees (90 percent) and for households in the host communities (96 percent). As the main source, around 60 percent of the new arrivals and host communities depend on the collection of firewood; the remaining, primarily purchase it in the market. Only 8.5 percent of the refugee population received it as part of the assistance. Firewood was identified as insufficient by both the refugees (18 percent) and host communities (10 percent). Moreover, the market assessment[7] highlighted high price variations for firewood depending on the locations. To exacerbate the already fragile refugees' vulnerability status, more than 40 percent of the new arrivals relies on the provision of basic non-food items such as cooking utensils, which represent one of their major concerns.

The analysis shows that firewood is one of the most common non-food expenditure for both refugees and the local population in host communities, thus adding additional pressure on refugees' economy. In particular, it represents refugees' second highest expenditure after food with an average of 1,050 BDT spent per month, against 510 BDT spent by the host communities. This can be explained by the fact that local households experience fewer limitations on movements and are freer to move around and collect it for free.

Limited availability and access to a reliable source of cooking fuel are one of the major concerns, especially for the most vulnerable refugee groups. In fact, the collection of firewood for selling, which represents an unsustainable income source particularly for unregistered protracted Rohingya population (14 percent), raises a number of protection risks: results show that households facing firewood shortages report a higher number of insecurity episodes (19 percent) compared to those who do not (14 percent). The possible tensions over firewood possession between refugees and host communities should also not be neglected in the long period.

A lack of cooking energy also affects the utilization dimension of food security. Scarcity and high prices of firewood, in fact, severely affect refugees' ability to treat water, with the resulting negative impacts on their health and nutritional status due to the consumption of contaminated water and/or of bad prepared food. Moreover, nearly 12 percent of the new arrivals resorted to unsustainable livelihood coping strategies such as selling a portion of the assistance received in order to meet other basic needs such as the provision of other food items not covered in the basket, the coverage of health-related costs as well as the increase of firewood availability. Similarly, the reduction of the number of meals eaten per day, which is probably due, among other reasons, to the will to save firewood stocks, was a

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[7] Market Assessment in Cox's Bazar conducted by WFP VAM and Food Security Sector, November 2017.

coping strategy adopted by 30 percent of the new arrivals and by 38 percent of the unregistered protracted Rohingya population during the 30 days prior to the assessment.

Considering the above-mentioned findings, it is crucial that safe access to sufficient quantities of firewood is granted to refugees and that cooking fuel becomes an integral component of the assistance.

5.2 Shelter, Water and Sanitation

5.2.1 Shelter

REVA analysis also assessed shelter conditions for both refugees and host communities. Results show that households in the host communities own their dwelling in 82 percent of the cases. On the contrary, nine out of ten new arrivals live in makeshift shelters.

Those who can afford it are building shelters using bamboo structures covered with poor-quality plastic sheeting roofs while refugees who do not have the financial resources to purchase the necessary materials are staying in the open air.

Poor shelter conditions represent one of the three major constraints faced by the new arrivals. They also lack basic, essential non-food items such as clothes and cooking utensils and only one out of five of the new arrivals reported having been supported by emergency shelter assistance, which is also needed for the refugees arrived prior to the recent influx who are finding their shelters deteriorating over time due to the poor quality of the materials used. Registered protracted refugees living in pre-existing camps have more improved shelters with mud-raised walls.

Shelters are usually built in rows against hilly deforested areas, which exacerbates the potential devastating impact of the next cyclone season (April-June) and increases refugees' vulnerability to the risk of floods and landslides. Moreover, the already fragile situation could further deteriorate due to the potential displacements caused by poor shelter conditions and extreme weather events.

New arrivals spent on average 516 BTD on bamboo and housing materials, an amount which is four times higher compared to registered protracted refugees (144 BTD) and unregistered protracted Rohingya population (117 BTD), and to households in the host community (114 USD). This allows inferring that, in the absence of any means of living, they used an important part of their available savings to satisfy their life-saving needs.

On average, seven additional people, which do not belong to the household, live under the same roof, suggesting that shelters are being shared by different refugee families. This raises a number of concerns. In fact, high density of refugees entails multi-dimensional consequences on refugees' lives, which undermine their self-resilience and further compromise an already fragile situation.

Limited access to basic services in terms of poor WASH conditions, lack of privacy due to overcrowding, and inability to respond to the different needs of the various vulnerable groups, such as pregnant and lactating women, people with disabilities and children, make new arrivals and the overall refugee population highly reliant on life-saving assistance.

In these conditions, there is limited scope to build refugees' self-resilience, and the provision of adequate shelter assistance in terms of site improvement, robust materials and the establishment of key communal services (i.e. latrines) is urgently required.

5.2.2 WASH

Poor WASH conditions in terms of inadequate quality of water, lack of sanitation and poor hygiene jeopardize the safety and the health of the entire refugee population and represent a major challenge. New arrivals already experienced water and sanitation issues during their journey, as reported by 14 percent of the refugees. Their massive influx put WASH facilities under a severe strain, which is causing progressive deterioration of water, sanitation and hygienic conditions.

The analysis found that tube wells are the main source of water for both refugees (79 percent) and host communities (93 percent). Refugees in the registered camps are able to access water also through storage tanks (25 percent) and piped water tap (21 percent).
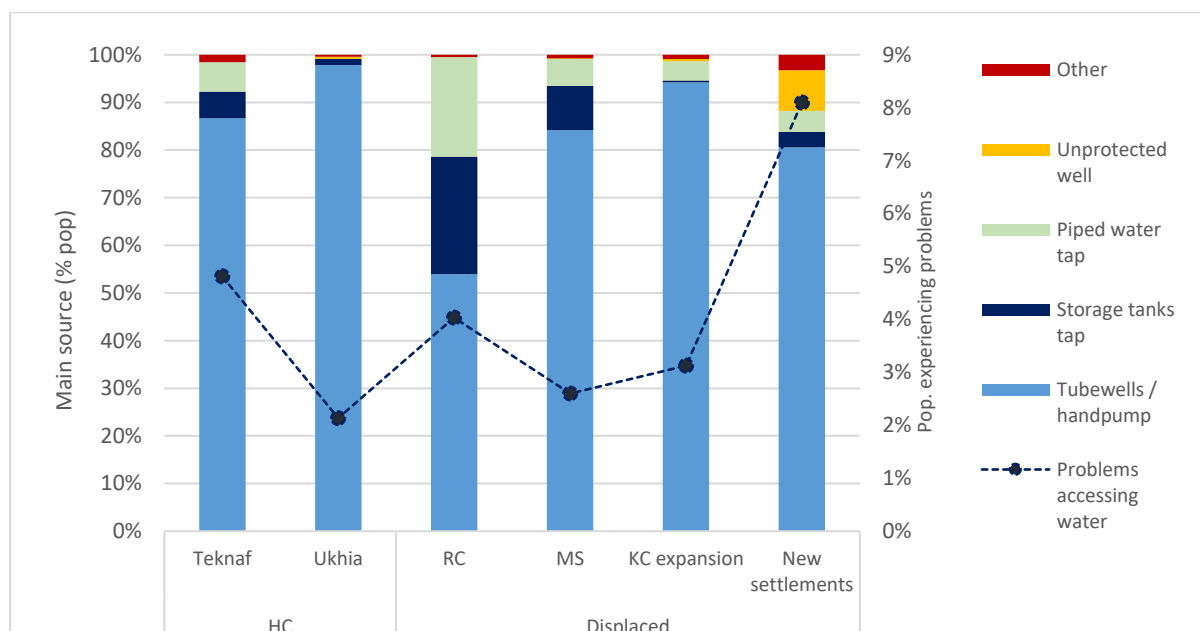
Figure 31: Main sources of water in HC, camps and new settlements

Although the totality of households relies on improved water sources, the greatest concern is represented by the quality of drinking water, which can still be contaminated in different ways, thus threatening refugees' health. This brings into the picture the issue of 'water safety'. In fact, as shown by a joint WHO/Bangladesh Department of Public Health research in the Kutupalong and Balukhali extension sites between September and November, more than 86 percent of water samples tested positive for E. coli bacteria. The situation may be even more severe in the new settlements, where 12 percent of the refugees fetches water from unimproved water sources such as surface waters, unprotected wells and unprotected springs. The risk of contamination is increased, at the source level, by the proximity of communal latrines to shelters and by the low water table of catchment areas, and at the household level, by unsafe hygiene practices. The inadequate hygiene and sanitation conditions in the camps and settlements caused by the massive population surge has highly increased the risk of water-borne diseases. New arrivals in the Kutupalong expansion site reported the quality of water as one of the main problems (34 percent).

Overall, nearly half of the total refugee population (46 percent) faces problems accessing water compared to 37.5 percent in the host communities where access to water is particularly challenging for host households in Teknaf inland (51 percent) compared to households in Ukhia (33 percent).

Table 2: Access to water: main constraints by geographic location

Zone	Insufficient N. WPs	WPs not functioning	Waiting time at WP	Distance to WP	Restricted access to WP	Lack of storage containers	Do not like taste quality etc	Safety/ harassment reaching WP
HC Teknaf	17%	8%	22%	37%	5%	3%	4%	4%
HC Ukhia	9%	10%	5%	16%	2%	4%	7%	0%
RC	12%	4%	13%	6%	4%	2%	2%	1%
MS	14%	3%	23%	19%	2%	5%	7%	1%
KC expansion	44%	27%	32%	65%	4%	14%	39%	1%
New settlememt	39%	9%	27%	50%	5%	5%	10%	2%

Long distances to water points represent a major challenge especially for new arrivals (62 percent) and local populations (72 percent). An insufficient number of water points and waiting times are also mentioned as main problems by both refugees and host communities. Those issues are less problematic for households in Ukhia, which, on the contrary, experience broken pumps (34 percent), and quality of water (24 percent) as the main challenges. New arrivals in new settlements (67 percent) and Kutupalong expansion sites (63 percent) also face problems of storage due to a lack of water containers.

The analysis found that 94 percent of households do not treat water before drinking it regardless of their status or geographic location. Only 1.7 percent of refugees treats water for children, and only 4 percent does it for the whole household. Scarcity and consequently high prices of firewood are certainly among the main reasons behind this practice.

The use of soap is common thanks also to the distribution of WASH assistance, which benefitted 40 percent of new arrivals and registered protracted refugees, and to the provision of hygiene kits, which were distributed to 30 percent of the overall refugee population.

Access to improved sanitation facilities is very limited. Latrines inside the dwellings represent the most common type of sanitation in the host communities (67 percent). On the contrary, almost the totality of refugees relies on unimproved facilities regardless of their time of arrival. Overall, 63 percent of refugees use communal latrines while 31 percent shares the sanitation facility with the neighbours close to their shelter. Due to a lack of latrines and overcrowding, open defecation is also a common practice. Moreover, the proximity of latrines to shelters and hand pumps continues to aggravate an already fragile sanitary situation by increasing the risks of faecal contamination of the water. The construction of latrines also does not respect, in many cases, the standards and the guidelines, which suggest a minimum depth of five feet. Similarly, a lack of sludge management increases the number of not functioning latrines, which contributes to a further deterioration of hygienic conditions. Finally, the risk of disease outbreaks could significantly increase in view of the upcoming monsoon/cyclones season.

Table 3: types of sanitation facilities by geographic location

Area	Inside the dwelling/ own compound	Shared with neighbors close to compound	Communal	Open space
HC Teknaf	49.0%	24.5%	22.2%	4.4%
HC Ukhia	60.9%	14.3%	4.9%	19.8%
RC	2.5%	27.9%	69.6%	0.0%
MS	2.1%	25.8%	72.0%	.1%
KC expansion	3.6%	39.7%	54.5%	2.2%
New settlements	5.3%	32.0%	61.5%	1.2%

Overall, the analysis highlighted how WASH represent a major concern and a priority area for intervention to fulfil basic human needs of both refugees and host communities. In preparation for the monsoon/cyclones season, WASH interventions should be scaled-up to ensure adequate coverage especially in areas with high risk of flooding landslides and/or cyclones through the creation of additional water points and latrines. Moreover, systematic checks of water quality should also be conducted in order to minimize the risk of waterborne diseases particularly for (pregnant) women, children and youth.

5.3 Health

The challenges faced by the health sector remain a primary concern.
Health issues already represented one of the main challenges that new arrivals faced during their journey, as expressed by 22 percent of the respondents. The massive influx overburdened local health facilities which were not prepared to respond and this severely affected refugees and host communities' access to health.
Across all sites, poor WASH conditions, overcrowding and the risk of faecal contamination caused by the proximity of communal latrines to shelters pose a serious health hazard. Moreover, overcrowding from new arrivals and the distribution of health facilities increase inequalities in the access and provision of health services. Overall, nearly 80 percent of the refugee population reported having household members (including children) suffering from diseases at the time of the data collection.
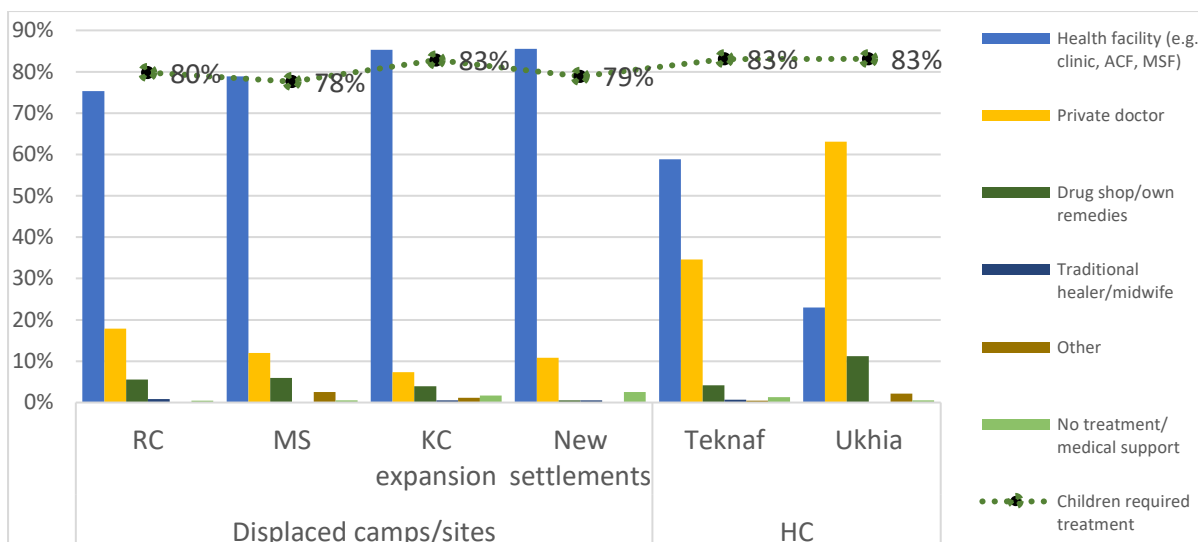
Figure 32: Proportion of HHs with children requiring treatment in the past 30 days and most commonly utilized health service delivery systems

When in need of medical treatment, they relied on health facilities (e.g. clinics, ACF, MSF) in 82 percent of the cases with no substantial differences based on the arrival profile. On the contrary, host communities mainly relied on private doctors (65 percent) when medical support was needed. One out of two households in the host communities did not choose a health facility when seeking treatment because of the inadequate treatment received. A lack of information (18 percent) about the location of health facilities is also reported. This can be explained by the fact that some areas have very limited access to health care services, which are more concentrated in the proximity of the camps. Long distances (6 percent) exacerbated by poor road conditions and high costs (7 percent) are among the factors hindering host communities' access to health facilities. Host communities also reported a higher presence of chronically ill members (29 percent) than refugees (18 percent). These factors considerably increased their monthly per capita expenditure on health (206 BDT) that is 2.3 times higher, compared to refugees (89.5 BDT). In addition, one out of three households in the host communities fell into debt to cover health-related costs.

The potential increasing incidence of diseases and health care needs during the monsoon season is a growing concern, especially for the most vulnerable groups. Particularly high is the presence of pregnant and lactating women among new arrivals (34 percent) and unregistered protracted Rohingya population (35 percent). The last-mentioned group also registers the highest share of members with a chronic illness (25 percent) and with disabilities (19 percent).

5.4 Education

The analysis identified education as one of the priority needs. The massive influx put existing education centres under a severe strain and strongly weakened their ability to meet children's educational needs. In this emergency context, education plays a crucial role by raising children awareness on lifesaving issues such as: food, water, sanitation, health. Moreover, education contributes to reducing risk exposure by protecting children from physical dangers, the resorting to negative strategies and by helping them cope with the shocking situation they experienced. Nearly half of the new arrivals, for example, reported cases of unaccompanied children who fled alone after having suffered the loss of their families.

Children account for nearly 60 percent of the total refugee population. Around 60 percent of new arrivals have school-aged children (age 6 to 14) in the household, while the highest presence is found among old refugee groups and host communities, as illustrated in the figure below.

As of 2017, the literacy rate in Cox's Bazar (39.3 percent) is considerably lower than the national average (72.8 percent). The large influx further deteriorated an already fragile situation, putting education facilities under a severe strain. The analysis found that new arrivals have both the lowest literacy and primary attendance rates, with significant differences between
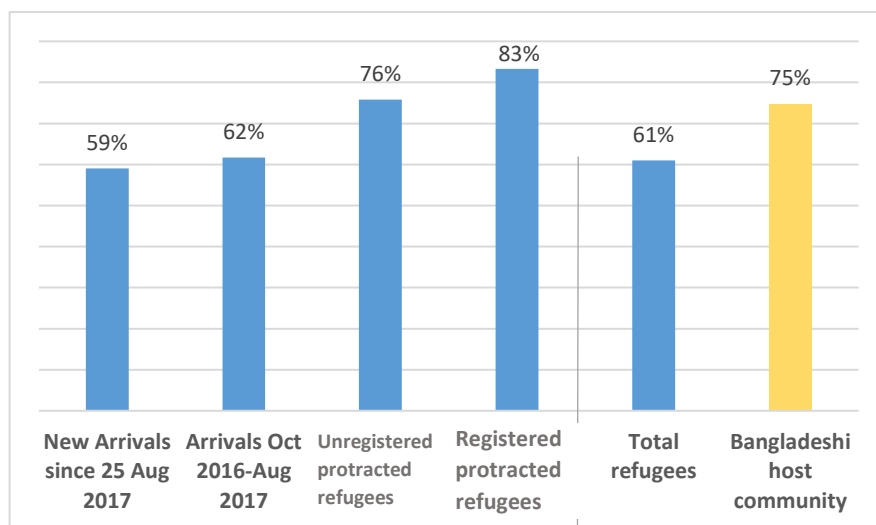
Figure 33: Presence of school-aged children (age 6 to 14)

males (53 percent) and females (48 percent). On the contrary, registered protracted refugees show levels of education similar to host communities: both groups show the highest literacy rates and the highest shares of households with a primary and secondary education level. Among the refugee groups sampled, registered refugees are the ones benefitting the most from assistance in the education sector, particularly food for learning (18 percent) and education spaces for children (21 percent).

Overall, primary school represents the highest education level for literate households, regardless of gender. Among new arrivals, religious schools also play a major role, especially for women. Secondary education confirms an overall higher presence of male members, except in the host communities where the presence of women with a secondary education level is higher (22.5 percent vs 17 percent of men). Household members with a tertiary education (or above) are only found among males in the host communities (3.4 percent).

Data show that host communities have the highest expenditure on education with 296 BDT per month, followed by registered refugees (235 BDT). This can be justified considering two different aspects. First, as previously stated, host communities and registered refugees increase their expenditure by accessing a higher level of education (secondary and tertiary) and private facilities. Second, the influx significantly impacted access to schools, which were initially used as temporary shelters for refugees and became unable to cope with the influx. Moreover, host communities close to the settlements in the Ukhia Upazila, lack education facilities and struggle to meet the increased transportation costs caused by high congestion and poor roads conditions. The higher number of challenges to face in Ukhia is confirmed by the fact that households in this upazila have a comparatively higher monthly expenditure on education. As an example, host communities in Ukhia spend on average 379 BDT while the amount spent by host communities in Teknaf is 220 BDT. A similar situation is found among new arrivals refugees in Ukhia who spend 148 BDT, an amount seven times higher compared to other refugee locations.

Both refugees and host communities experience several major constraints. Literacy rates, school attendance, high costs already represented major challenges in Cox's Bazar, which shows really poor performance in the education sector compared to the national average. Registered refugees, in particular, reported overcrowding (22 percent) as one of the main challenges.

Nearly half of the new arrivals referred to the absence of education facilities as the main constraint and expressed their willingness to attend schools (30 percent) once established. Overall, lack of financial resources is cited as one of the main reasons contributing to reducing children's access to school, especially in host communities (66 percent).

School attendance is also impacted by the high incidence of child labour, which is one of the highest in Cox's Bazar. In this regard, school attendance is hampered by the fact that adults do not see the advantages of sending children to school and rely on them for generating additional income and coping with the growing employment challenges they face. A gender analysis showed that this is particularly true for boys while girls are mostly in charge of taking care of household works and collection of firewood. This practice explains the high levels of drop-outs.

Protection concerns were also raised as one of the main reasons restricting girls from going to school, especially in the makeshift settlements.

To make things worse, the vast majority of refugees lacks identity cards, which prevents them from being recognized from the legal point of view. As a result, they are not entitled to enrol in public schools and/or to obtain exam certificates after they attended informal education programmes provided by various humanitarian actors. The absence of identity documentation restricts refugees' freedom of movement and cuts them out not only from formal education but also, consequently, from legal livelihood opportunities, which may increase the risk of resorting to negative coping mechanisms.

Deprivations in education multiply the risk of lifelong consequences on children's lives. Without this basic need being met, refugees' ability to build a sustainable future is at stake. Education interventions should:
- strengthen existing capacities and implement sustainable interventions to extend education services to all segments of the population, including host communities, which have been largely impacted by the influx;
- raise parents' awareness of the importance of education;
- incorporate the gender dimension by recruiting female teachers and by creating gender-separated classrooms;
- take into account the requirements of children with special needs;
- build cross-sectoral interventions by complementing schooling with WASH, health and nutrition education.

6. Livelihoods

6.1 Income sources

Understanding the livelihood patterns of both refugees and host communities is crucial to have a clear comprehension of dynamics related to access to food. In this context, the limitation of freedom of movement and restrictions is a major challenge for refugees' capacity to access labour opportunities. Those refugees who manage to produce an income, regardless of the amount, are significantly more likely to have an acceptable food consumption and to be less economically vulnerable. In other words, they are more likely to be food secure.

Table 4: Main income sources mentioned by refugees and host communities

Income sources (proportion of frequency of observations by households)	Refugees				Host communities
	New Arrivals since 25 Aug 2017	Arrivals Oct 2016-Aug 2017	Unregistered protracted	Registered protracted	
Food assistance	62%	48%	29%	73%	0%
Zakat/informal support	37%	32%	19%	17%	10%
other cash assistance	25%	17%	3%	4%	2%
non-agricultural casual labour	23%	39%	40%	29%	32%
savings	16%	11%	6%	3%	5%
unskilled wage labor	14%	22%	26%	18%	19%
domestic work	13%	15%	21%	26%	30%
agricultural/fishing casual labour	8%	15%	17%	10%	34%
skilled wage labour	6%	8%	20%	18%	16%
begging	6%	7%	7%	2%	4%
gathering/selling firewood/natural resources	6%	16%	13%	4%	10%
Agriculture/fishing/livestock	5%	4%	7%	6%	35%
remittances from abroad	5%	4%	3%	7%	4%
Petty trade/small business	4%	9%	14%	17%	18%
sale of assistance	3%	3%	2%	5%	0%
handicrafts/artisanal work	2%	2%	3%	4%	3%

Around 47 percent of **refugee households** do not have any access to income-generating activities and depend entirely on external aid from humanitarian agencies, friends, relatives, or from the Zakat. This proportion is slightly higher among the new arrivals (50 percent), while it decreases while passing from the Oct 2016 arrivals (22 percent) to registered protracted refugees (19 percent) and eventually to the unregistered protracted Rohingya population (10 percent). Domestic work and non-agricultural casual labour are the main sources of income for these groups of refugees.

Among the refugee populations engaged in some income generating activities, only 15 percent work on a seasonal or permanent basis, while 85 percent produce an income only on a temporary, often daily basis. Overall, the most common sources of income are: food assistance (60 percent); other cash assistance (23 percent); assistance from friends/relatives (22 percent); and Zakat (19 percent). With

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BOX. 4: RELIANCE ON SAVINGS

Around 15 percent of refugees have access to savings and consider them one of their main sources of income. Such proportion decrease from 16 percent among the new arrivals after 25th Aug 2017, to 11 percent among refugees arriving after between Oct 2016 and Aug 2017. Only 5 percent of refugees arriving before Oct 2016 depend on savings, even less among the registered ones (3 percent). Same levels (only 5 percent) are observed among host communities.

The presence of savings is significantly correlated to food security among refugees and, and activities conducive to their creation should be encouraged – such as non-agricultural casual labour (28 percent of households produce savings depend on them); unskilled wage labour (20 percent); domestic work (15 percent); and agricultural/fishing casual labour (13 percent). As expected, households headed by a woman are significantly less likely to produce savings: only 28 percent of households producing savings are headed by a woman, against 36 percent of those with no savings.

the exception of non-agricultural casual labour – providing some income to one in four refugee households - none of these are productive, nor sustainable income sources. As mentioned, those refugees who are able to produce additional income - mainly through casual or domestic labour, skilled labour, petty trade, and sale of firewood - are more likely to be food secure (22 percent, against 27 percent of those who do not have access to IGAs). The table above shows that only a very small proportion of the refugee population is engaged in such activities, especially among the new arrivals.

Around one-third of refugees rely on non-agricultural casual labour, conducted inside or outside the camp. Gathering and selling firewood is extremely low. Access to income is proportionate to the duration of displacement. As soon as the refugees arrive, they tend to rely mainly on external aid and savings. After a few months, refugees tend to increase their knowledge of the context and develop their networks. Hence, a higher proportion of households getting some income from casual labour, skilled wage labour and domestic work is observed among protracted refugees and arrivals between October 2016 and August 2017. Refugees[8] have the know-how and experience to conduct income sources that are common in Ukhia and Teknaf. The figure below shows the evolution of livelihoods for refugees before and after their displacement. The proportion of households who depended on casual
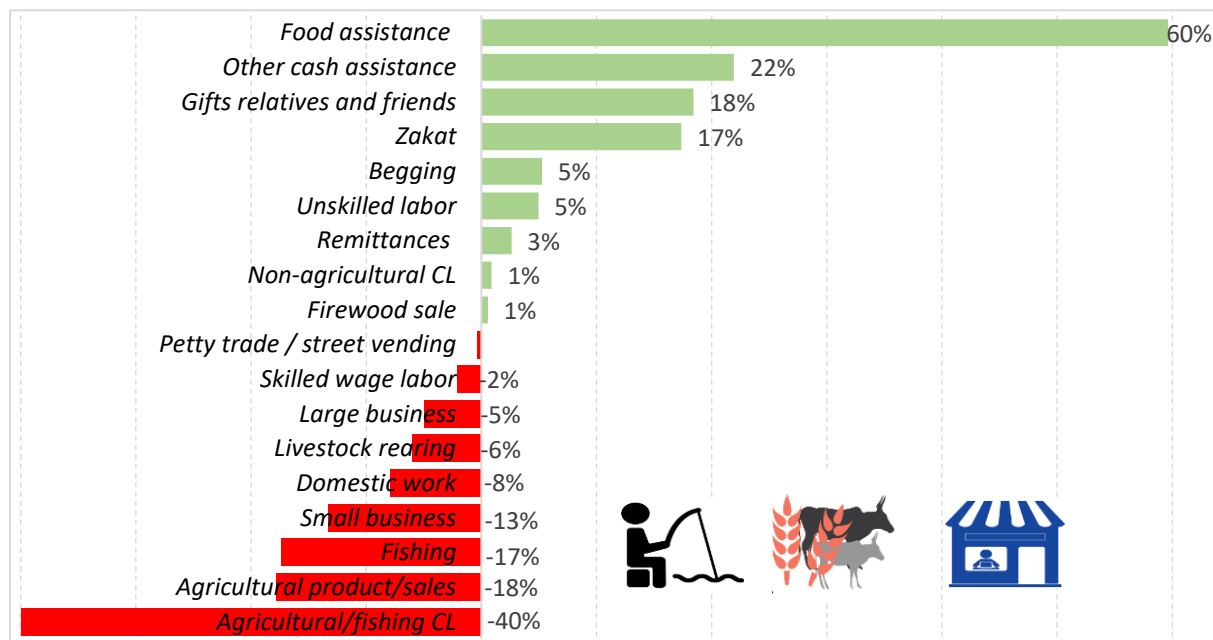
Figure 34: Evolution of livelihoods for refugees' pre/post displacement

labour related to agriculture and fishing decreased after displacement by 40 percent, while direct agricultural production and sale decreased by 18 percent and fishing by 17 percent. Conversely, Rohingya saw a massive increase in dependence on non-productive activities such as food assistance, other cash assistance, gifts and Zakat.

The refugees who have at least one member involved in income sources related to agriculture, fishing, livestock herding are more likely to have an acceptable food consumption. This is justified from the combination of additional income and enhanced physical access to fish and other foods.

Many refugee women continued practising the same jobs as before the displacement, mainly non-agricultural casual labour and domestic work. Unfortunately, though, the proportion of women occupied in domestic work decreased from a 19 percent (pre-displacement) to 13 percent. Similar

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[8] The comparative analysis on livelihoods is valid for refugees who arrived after 25th Aug 2017.

trends are observed for women working on non-agricultural casual labour: the proportion decreased from 13 percent to 7 percent since the displacement.

Unskilled labour, domestic work, agriculture and fishing are the main income activities practiced by **host communities**. While man mainly practice casual labour (56 percent overall, 39 percent agricultural/fishing-related) and fishing (26 percent), women are mainly involved in domestic work (29 percent) and non-agricultural casual labour (7 percent). However, the high enrolment of women on skilled and casual labour in HCs advise towards livelihood support for women's group at both HC and refugees' level.

Fishing is not only practiced by communities living in coastal areas of Teknaf but also by inland populations living in Ukhia and Teknaf. While families of refugees who practice fishing tend to consume more fish than those who do not reply on fishing – 88 percent consumed fish the week before the interview against 76 percent on average among all refugees - and not necessarily to sell it, Bangladeshi fishermen's families tend to use the income deriving from sale of fish to meet their food and non-food related basic needs. As a result, the proportion of refugees practicing fishing with unacceptable food consumption is much lower than Bangladeshi fishermen's families (19 percent and 36 percent, respectively).
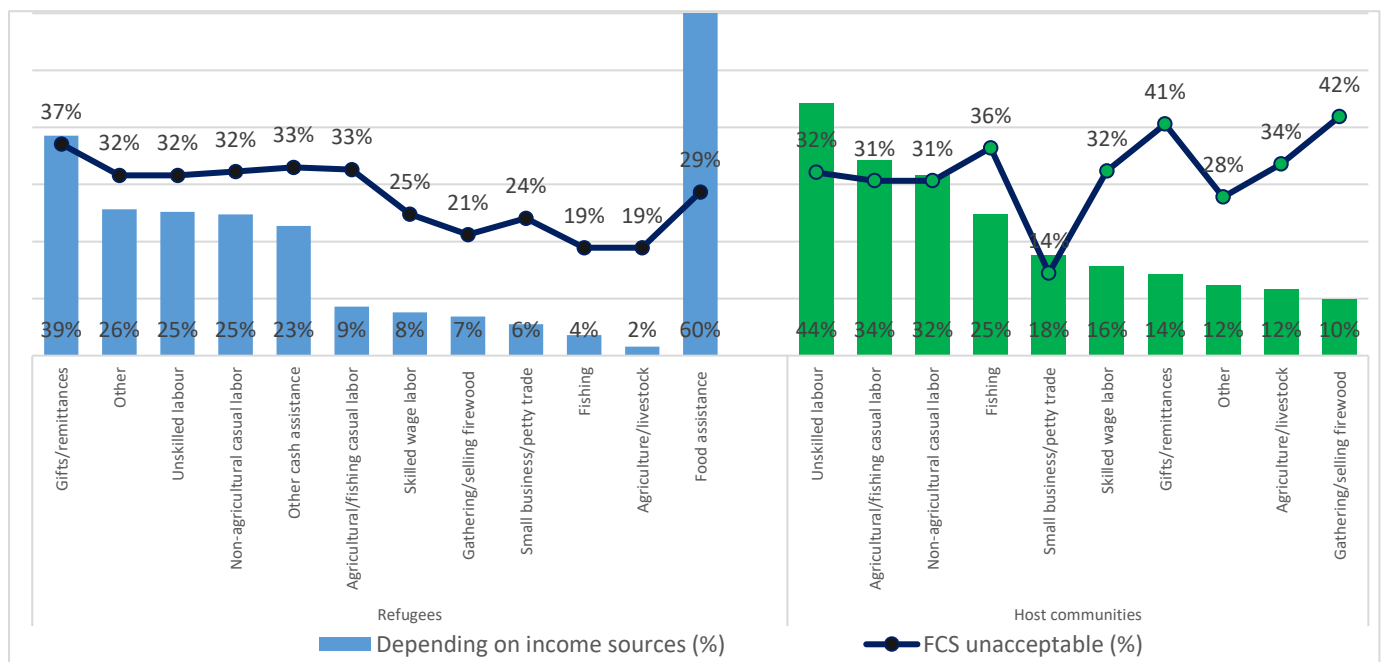
Figure 35: Evolution of livelihoods for refugees, before and after displacement

With reference to figure 35 above, the only income source strongly associated with systematically better access to food among host communities is petty trade and small business, which are often related to food sale. Although not scarce, the available and most common working opportunities are not extremely profitable.

Among the most common income sources, domestic workers (24 percent), casual labourers (19 percent), fishermen (17 percent) and small traders (17 percent) are the ones with the highest proportion of economically vulnerable HHs. Host community households relying on remittances, savings, direct agriculture and petty trade register the higher proportion of better off.
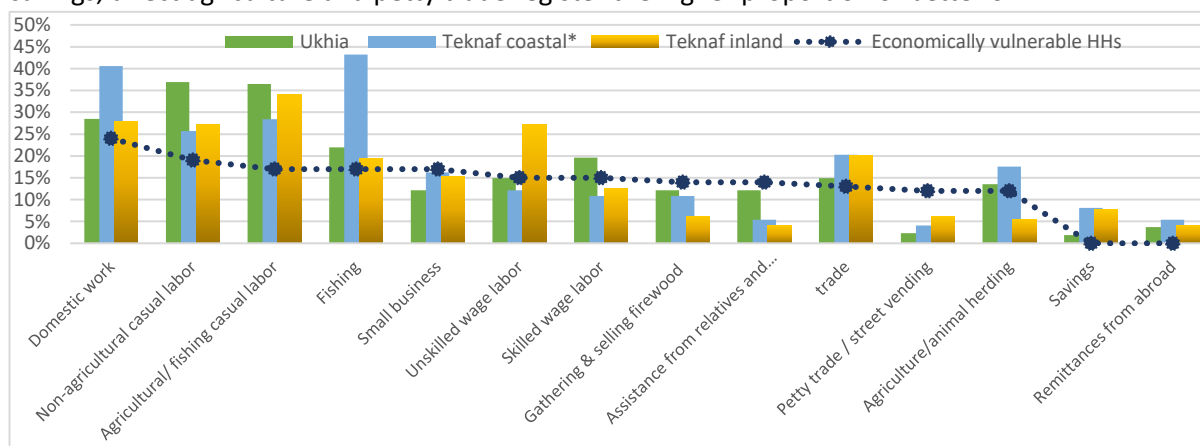
Figure 36: Main income sources among host communities

6.2 Expenditure patterns

As a result of negligible financial resources and high coverage of food assistance among refugees, direct expenditures on food accounts for only 530 BDT per capita per month (6.4 US$) against 14.5 US$ pc/month among host communities. Expenses on food are comparatively higher among unregistered old refugees and post-October 2016 arrivals. While food assistance is essential to cover access to key commodities such as rice, pulses and oil, refugees rely on their resources to purchase fish and vegetables from local markets and small shops in the camps. In order to diversify their diet, around 56 percent borrow money to buy food. A high proportion of people selling their food rations do so to buy other foods (mainly fish and vegetables).

As expected, own production of food is negligible among refugees. Fish and cereals are the only commodities produced or collected, but the estimated value is extremely low across all groups of Rohingya refugees regardless of their time of arrival or location. Surprisingly, also among host communities, the value of own production of food (mainly rice and fish) is extremely low. This is
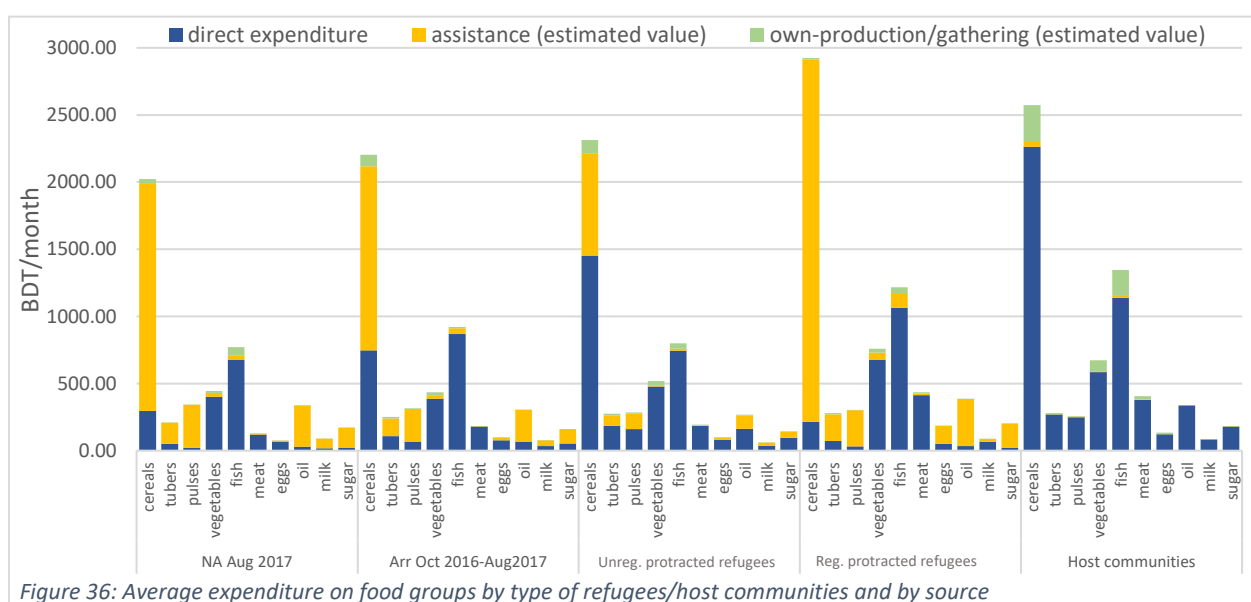
Figure 36: Average expenditure on food groups by type of refugees/host communities and by source

partially because the data collection was done in the post-harvest season. However, scaling up livelihood support programmes would enhance physical access to main commodities protecting host communities and refugees from fluctuating prices in local markets.

Among refugees, households headed by women spend significantly less on cereals (-129 BDT/month on average), fish (-100 BDT), vegetables (-29 BDT) and meat (-21 BDT). Among host communities, the gap is even higher: on average, each male-headed household spend 658 BDT more than female-headed ones on the purchase of cereals, 364 BDT more on fish, 186 BDT more on meat and 128 BDT more on vegetables.

Only 6.5 US$ pc/month or 38 percent is allocated on average by refugees to purchase non-food items, against almost 10 US$ among host communities. Firewood, tobacco and medical expenses are the main non-food items purchased. Repayment of debts is also relatively common, especially among registered protracted refugees and host communities. This can be seen as a complementary indicator of vulnerability and economic stress considering that indebted households will have fewer resources available to meet their needs. Bangladeshi also dedicate a considerable part of their budget to the education of children (see section 5.4). It is interesting to notice that, with the exception of firewood, own production and gathering of other non-food items is negligible to non-existent among all categories of refugees and host communities.

Among the refugees, the sale of food assistance and borrowing to access these items is very common. Again, direct expenditures on NFIs are much lower among registered protracted refugees, who have benefitted from the distribution of cooking fuel, while the imputed value of firewood from gathering – mainly conducted by children - is high among host communities and new arrivals with serious repercussions on protection.
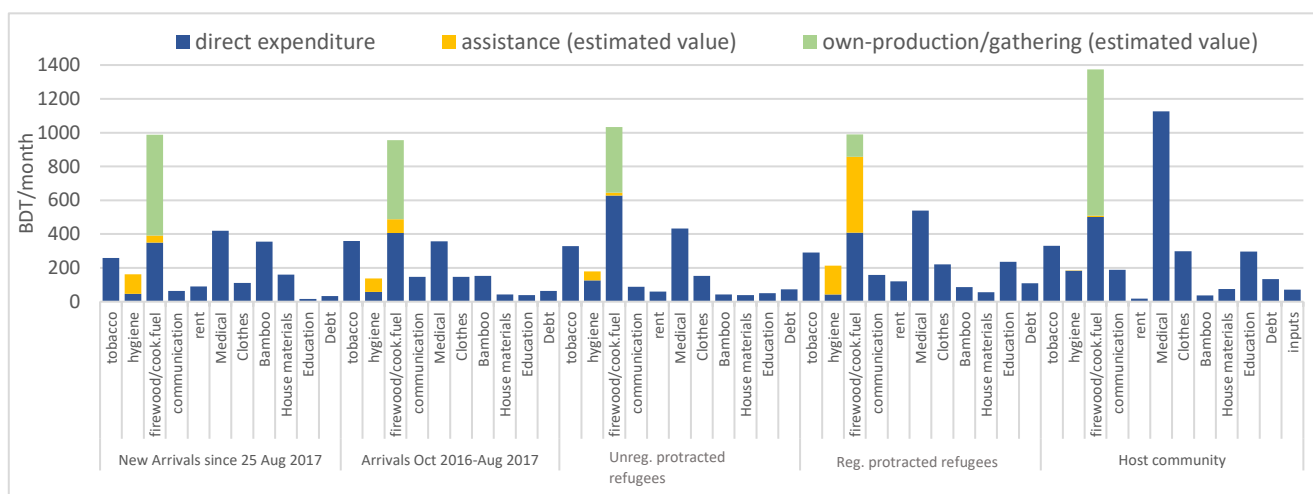
Figure 37: Average expenditures on non-food items by type of refugees/host communities and by source

Expenditure patterns are relatively homogeneous among the different socio-demographic groups of refugees. Expenses are proportionate to household size, presence and number of children, the presence of unaccompanied minors and disabled. In particular, the actual expenditures on food is relatively higher among households with 3 or more members (+27 percent) and hosting unaccompanied minors (+76 percent). Direct expenditure on NFIs is relatively homogeneous around 2,000 BDT per month, with the exception of households of big size (+35 percent) and households hosting single mothers (+34 percent). Female-headed households tend to have very similar expenditure patterns, both in terms of the type of foods and in absolute value, as male-headed households. However, direct expenditure on non-food items is comparatively lower, especially concerning the purchase of tobacco; house materials; bamboo and firewood.
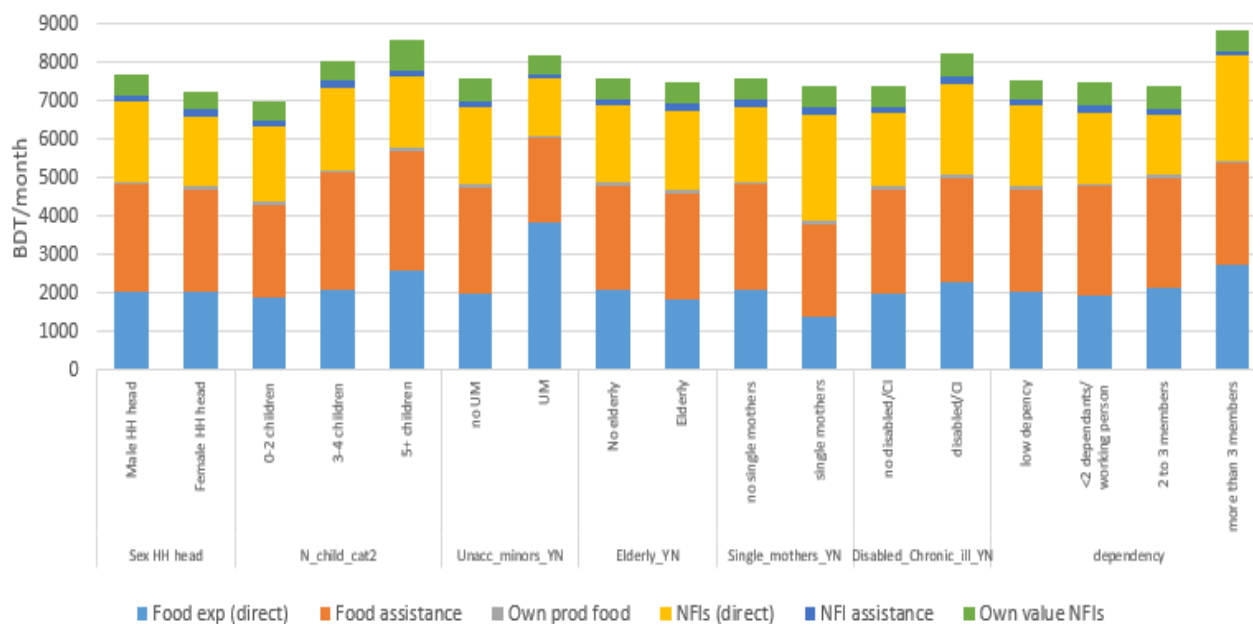
Figure 38: Expenditures patterns by demographic characteristics

6.3   Asset ownership

The new arrivals – who account for the vast majority of the total refugee population – embarked on a hazardous journey across the border into Bangladesh to flee violence and human rights violations. The long distances and the length of the journey allowed them to bring only a few 'easy-to-grab', 'easy-to-carry' belongings. Nearly half of them was unable to bring along any asset from the country of origin (51 percent). Around 95 percent of new arrivals who were able to bring assets moved to carry along savings, brought either in the form of money (76 percent, I.E. 37 percent of all new arrivals) or as jewellery/gold items (43 percent, I.E. 21 percent of all new arrivals). Overall, 46 percent of refugees brought along cash and/or jewellery/gold. Only a few households were able to bring kitchen items and/or electric devices.
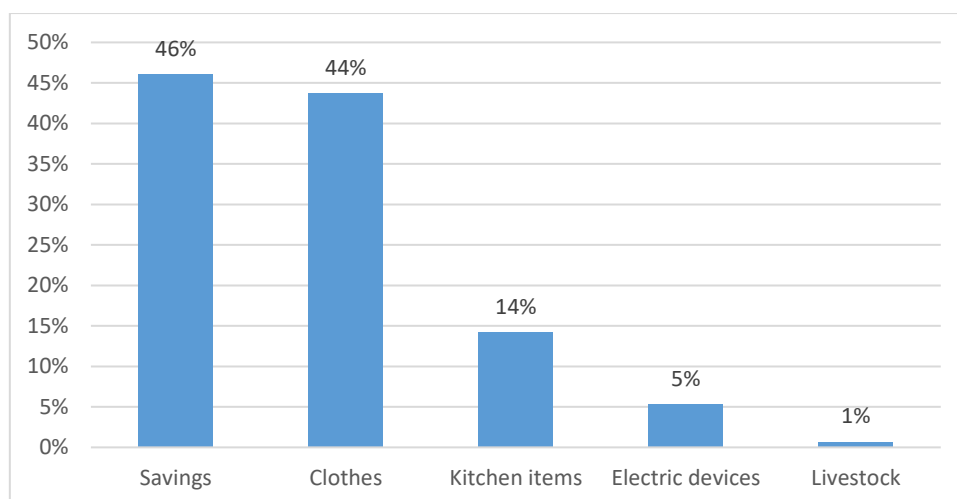
Figure 39: New arrivals - assets brought from Myanmar

For the purpose of this analysis, assets were categorized into eight broad categories:

1. **Kitchen items**: cooking items, kerosene/LPG stoves, mud stoves;
2. **Savings**: cash, jewellery, gold and other savings.
3. **Electric devices**: mobile phone, torchlight, generator, radio, solar panel;
4. **Livestock**: poultry and other livestock;
5. **Household assets**: beds/mattress, floor mats, tables/chairs, shelves, mosquito net, blankets;
6. **Productive assets**: sewing machines, machetes/knives, market stall, fishing/agricultural inputs;
7. **Transport**: motorcycle, bicycle/rickshaw, tom-tom, boat, truck;
8. **Other assets**: stockpile of woods, water storage containers.

The analysis found substantial differences in terms of asset ownership between the sampled groups, except remarkable similarities – both in terms of the type of assets and proportion of population owning them - between host communities and registered protracted refugees. This is symptomatic of some extent of integration of the latter in the local socio-economic and productive context. Conversely, new arrivals exhibit the lowest levels of ownership across all the asset categories. It is also interesting to notice how, in a few months, the arrivals since Oct 2016 could gain some relevant difference in access to electric devices and other productive assets (+20 percent) as opposed to new arrivals and use them to create some minimum level of savings (+4 percent).
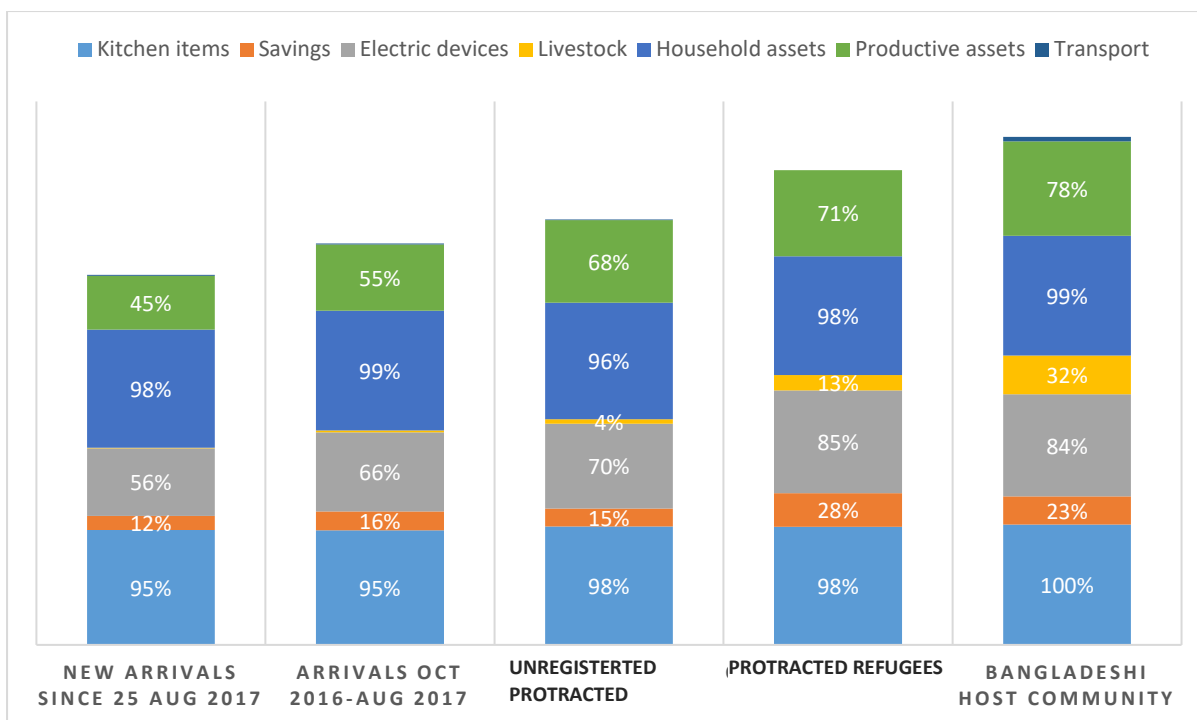
Figure 40: Assets ownership by the time of arrival

Major differences are found when looking at savings and ownership of electrical devices, livestock and productive assets. Registered protracted refugees and households in the host communities show the highest saving capacity with 28 percent and 23 percent, respectively. The share of households owning savings among those groups is more than double when compared to new arrivals, which show the lowest ownership of savings. The most remarkable difference is found in terms of livestock ownership,

One-third of host communities own livestock, a 2.5 times proportion higher compared to registered protracted refugees (13 percent). New arrivals also have considerably lower ownership of productive assets (45 percent) compared to host communities (78 percent) and other refugee groups, which strongly affects their self-sustaining capacities. A similar situation characterizes the possession of electric devices, such as phones, solar panels and torchlights: among new arrivals, only one out of two households own an electrical device. This share significantly increases in host communities where electric devices are owned by 84 percent of the host community households.

With the goal of estimating new arrivals' asset ownership evolution, a comparative analysis was conducted. Ownership of assets during the journey or at time of arrival was compared with asset ownership at the time of data collection. Possession of kitchen items significantly increased from 14 percent to 95 percent. The reason behind this increase may be found in the provision of stoves and other cooking items as part of assistance. The ownership of electric devices, such as mobile phones, solar panels and torchlights, also registers an increase, passing from 5 percent during the journey to 56 percent. Not surprisingly, a significant reduction of savings is observed. The number of households reporting savings possession decreased from 46 percent to 12 percent. This finding is confirmed by the fact that 96 percent of the new arrivals used savings as a strategy to satisfy their basic needs. To

conclude, no major differences are found in terms of livestock ownership, which remained stable across the two periods.
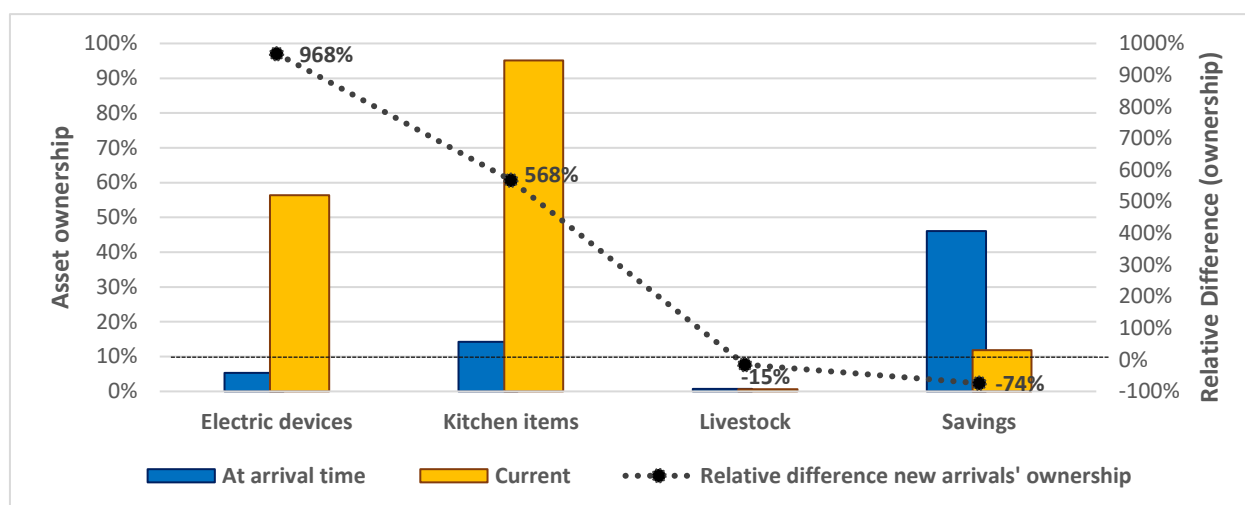
Figure 41: new arrivals - asset ownership evolution (time of arrival in C's B. vs current)

6.4   Market access

There are 30 functional markets in the Ukhia and the Teknaf regions. Since October 2017, some key food & non-food commodities prices from twelve sampled retail and wholesale markets are being monitored biweekly for food price analysis. The 12 markets were randomly selected among those supplying mostly the Rohingya communities as well to the Bangladeshi host communities – six in Ukhia Upazila and six in Teknaf Upazila, along with three big wholesale markets in Chittagong region (Chaktai, Reazuddin & Khatunganj) are also monitored. The Chittagong region markets are acting as a service provider or mostly in big wholesale sourcing hub. The main commodities that are monitored are staple foods; vegetables; pulses; fishes; spices; non-food items; labour wage etc.

The price of the main staple - rice - followed a mixed trend over the pre-and post-harvest. During October-November 2017, rice price was around 38 BDT/Kg whereas in November/December 2017 the average price was 36.5 BDT/Kg (January 46.8 BDT/Kg, February 44.5 BDT/Kg) and again from March 2018, the price followed a little bit downwards 44.2 BDT/Kg. A seasonably net increment of rice price 5.8 BDT/Kg (+15 percent) was observed between pre- and post-harvest seasons. Such trend is however supposed to have a meaningful impact on the people in this region who do not have a relevant income and diversified sources and on the refugees depending on markets for some food and non-food supplies.

Detailed markets prices can be accessed through the link below.

https://public.tableau.com/profile/wfp.vam.cxb#!/vizhome/FSS-MPM-VAM-CXB/Story1

Key Findings: Market Monitoring
Alongside the commodities price, the following issues are also monitored: major access modalities to food and non-food items by Rohingya refugees; food and non-food items that retailers are selling the most to the Rohingya refugee; the most on selling commodities by Rohingya, to whom Rohingya sell goods; reasons for selling goods; major constraints/challenges that traders are facing.

The following major features are revealed from the market-monitoring brief;

- The major exchange modalities to access food and non-food items practised by the Rohingya refugees are the sale of assistance and cash purchase. Barter with local communities and traders is also relatively common.
- The Rohingya refugee mostly purchases fresh vegetables, dried fish and eggs from markets; and in terms of non-food (NFI), medicine, firewood and bamboo are the most frequently supplied items.
- Red lentil, oil and rice are the most frequently sold commodities by the Rohingya to the host community, and mostly sourced from their rations. The sale is done through middle-men nearby their households and villagers on the surroundings of the camps.
- The main reason for selling is to make some cash to access others emergency basic needs such as NFI, medical needs and food non provided by external assistance.
- The major challenges are faced by the shoppers are cost instability of commodities, supply and demand problems and road congestion.

7. Protection

Respondents were asked if they have heard of others in their current location being affected by insecurities other the three months prior to the survey. They were also asked if so, which demographic groups in terms of gender and age were the most affected.

Table 5: Insecurity by gender

	females(18+	female(<18)	all females	males(18+)	male(<18)	all males	all
Harassment	20.0%	11.4%	19.3%	22.4%	2.9%	2.3%	21.8%
Discrimination	41.3%	2.3%	9.9%	11.2%	0.0%	4.0%	31.3%
Theft and robbery	26.8%	1.1%	2.2%	8.8%	2.2%	.5%	58.3%
Being approached by human smugglers	4.6%	16.8%	0.0%	16.2%	29.7%	1.6%	31.2%
Being approached by drug traffickers	5.7%	1.8%	0.0%	54.8%	8.0%	9.3%	20.4%
Physical violence and abuse	32.1%	16.4%	25.8%	13.7%	1.2%	3.2%	7.5%
Abduction	21.1%	37.8%	.5%	16.0%	3.9%	.7%	19.9%
Limitations on movement	19.8%	.3%	2.7%	18.4%	.3%	20.4%	38.1%
House, land property destruction	21.7%	0.0%	0.0%	40.9%	0.0%	0.0%	37.4%
Lost child (more than 1 day)	3.5%	14.7%	7.1%	0.0%	21.9%	12.6%	40.2%
General unsafe feeling	19.3%	1.6%	10.9%	1.8%	.4%	3.1%	62.8%
Tensions displaced – host community	5.1%	.9%	.9%	1.7%	0.0%	0.0%	91.4%
Misuse of food or nutrition assistance	62.3%	12.8%	0.0%	0.0%	2.9%	0.0%	22.0%

Theft and robbery, limitations on movement, lost child, general unsafe feeling, and tensions between refugees and Bangladeshis in the host communities seem to affect all gender and age groups. Lack of labour opportunities, a collection of firewood, food assistance seem to be some of the major factors for the tensions between the two groups.

Harassment, discrimination, abduction, physical violence and abuse most commonly affected all female groups. Discrimination, physical violence and abuse, and misuse of food or nutrition assistance

especially affected female adults. Among all age and gender groups, female children were in most fear of abduction.

Drug traffickers mostly approached adult males. Adult males were also reported to be the most affected by house/land/property destruction, most likely because the house and land properties are viewed as properties of adult males. Male children were the most affected group when it came to human smuggling.

Table 6: Insecurity by geographic locations

	RC	MS	KC expansion	New settlements	HC Ukhia	HC Teknaf coastal	HC Teknaf inland	Total
Q11.2.3 Theft__robbery	4.7%	7.7%	7.1%	3.6%	12.5%	6.5%	9.5%	7.2%
Q11.2.8 Limitations on movement	6.3%	6.3%	7.1%	5.7%	6.0%	.8%	3.2%	5.9%
Q11.2.1 Harassment	12.5%	3.4%	6.3%	4.9%	6.6%	2.0%	5.7%	5.8%
Q11.2.6 Physical violence__abuse	6.2%	4.3%	4.5%	4.5%	2.9%	1.5%	2.4%	4.0%
Q11.2.2 Discrimination	5.2%	2.9%	4.0%	4.5%	2.6%	1.3%	1.0%	3.4%
Q11.2.4 Being approached by human smugglers_	5.2%	2.9%	3.6%	.8%	4.7%	.2%	4.1%	3.1%
Q11.2.11 General unsafe feeling	4.0%	1.6%	3.1%	2.4%	4.9%	2.4%	2.0%	2.9%
Q11.2.7 Abduction	4.1%	1.1%	3.1%	2.4%	4.0%	0.0%	0.0%	2.4%
Q11.2.12 Tensions displaced - host community	4.1%	2.0%	.9%	2.4%	2.6%	.1%	2.4%	1.9%
Q11.2.10 Lost child (more than 1 day)	3.4%	3.1%	.9%	1.2%	.9%	0.0%	1.0%	1.4%
Q11.2.5 Being approached by drug traffickers	6.5%	1.5%	.4%	0.0%	1.3%	.2%	1.5%	1.1%
Q11.2.9 House, land property destruction	0.0%	.6%	1.8%	0.0%	.9%	.2%	0.0%	.8%
Q11.2.13 Misuse of food or nutrition assistance	3.4%	.5%	.9%	.4%	.9%	0.0%	0.0%	.8%

Theft, robbery, limitation of movement, and harassment were the most common protection issue across all the locations surveyed.

Registered camps had the highest prevalence of protection issues. 12.5 percent of the respondents reported having heard of harassment issues, which is much higher than in other locations. Respondents in registered camps also heard of more drug trafficking issues. It seems that the drug trades are more common in the registered camps. Generally, most protection issues tended to have a higher prevalence in registered camps, possibly owing to the density of the population, lack of privacy, and more controlled movement.

Ukhia host community reported the highest prevalence of theft and robbery, 12.5 percent of the respondents reporting to have heard of the protection issue. Ukhia host community also had a higher prevalence of any other protection issues compared to other host communities. Tackling protection problems should therefore not be inclusive only to the registered and makeshift camps.

Teknaf host community (coastal) had the lowest prevalence of protection issues, possibly owing to the relatively better access to income activities and food sources such as fishing.

While the survey has limitation since the prevalence of hearing about the protection issues also depends on the information available to the respondents, it still gives us a good idea on what kind of protection issues are common where and who are affected.

8. Main constraints, priority needs and assistance

Food assistance allows the vast majority of refugees to meet the minimum food needs. However, most refugees cannot access essential non-food related needs due to poor or non-existing financial resources. At the same time, higher financial resources of Bangladeshi living in host communities ensure relatively higher access to food and mitigates food insecurity in the absence of direct food assistance. However, financial resources are not sufficient to meet all food and non-food related needs for the vast majority of Bangladeshi living in areas with a high presence of refugees.
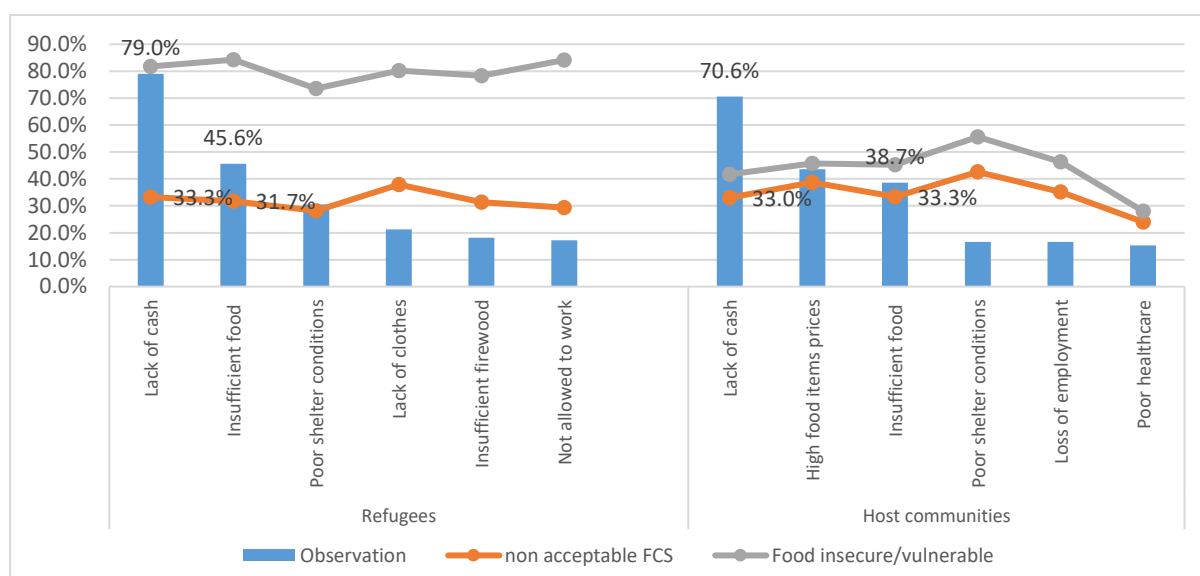
Figure 43: Self-reported main constraints and main outcome indicators

The figure above shows how low income and cash is for most refugees and host communities the main challenge to access basic needs. Refugees also complain about insufficient food and shelter conditions, while Bangladeshi identify food prices volatility – also in light of demand-driven inflation – as one of the main constraints for their well-being.

In light of the massive deployment of food assistance, **lack of cash among refugees does not translate into proportionately unacceptable food consumption patterns.** Indeed, only around 42 percent of refugees declaring lack of cash as the main constraint has a non-acceptable food consumption, against 47 percent of host communities, where people depend entirely on their budget to access food. In line with the previous consideration, a 14 percent difference is observed between refugees declaring insufficient food as one of the main constraints and those with unacceptable food consumption; this is also symptomatic of food not meeting the cultural preference or habits of respondents, alongside a quantity-related judgement. A much thinner difference concerning this is observed among host communities, where people are entirely responsible for the variety and quantity of food they are able to bring to the table.

Steady proportions of unacceptable food consumption among people declaring access to cash or other basic needs (shelter, NFIs, clothes) as the main constraints denote that refugees are compromising on food to access such needs, which are important for them. Despite food assistance, their poverty levels do not allow them to access such needs hence the gap between overall food insecurity (grey line, boosted by economic vulnerability) and food access (orange line). Conversely, poverty and food access lines are much more adherent within host communities where exposure to market prices volatility and absence of assistance food hinder access to sufficient and well-diversified food.

Almost the entire refugee population (96 percent) benefitted from the provision of assistance, with the new arrivals being the most assisted group (98 percent). The figure below shows the extent of the coverage of food rations, high-energy biscuits, as part of food distributions activities. Food voucher was also provided as part of the assistance mostly to registered protracted refugees (30 percent). New arrivals and unregistered protracted Rohingya population also declared receiving e-voucher (15 percent) .
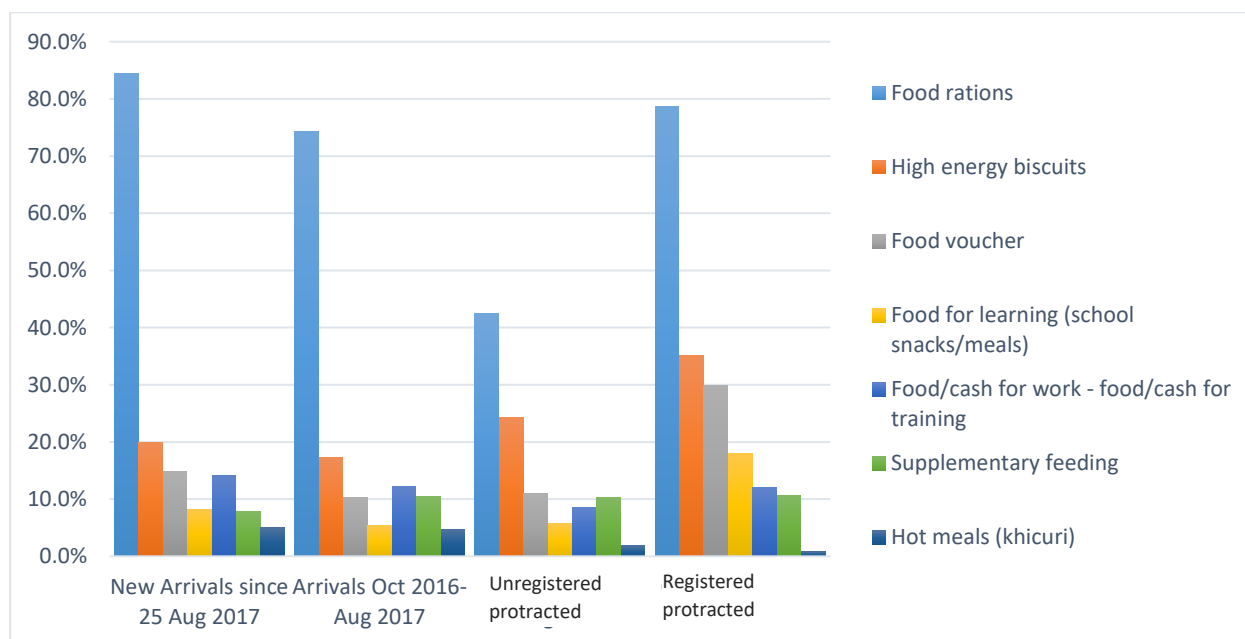
Figure 44: Type of assistance received

Overall, government/army (79 percent) and UN agencies/NGOs (87 percent) represent the main providers of food assistance, which mainly targeted new arrivals. Data show that unregistered refugees are the group benefitting less from the provision of assistance. The help from relatives/friends is the third most common source of assistance particularly among registered refugees (27 percent) while religious bodies only accounting for 5 percent of the total assistance provided with no major differences across the sampled groups.

When asked about the suitable modality of future assistance, respondents claimed that the provision of food is the preferred modality, followed by cash. Refugees have to walk an average time of 30 minutes to reach the distribution point. Selling and/or sharing the assistance received is not a common practice among refugees and it is only practiced by 11 percent and 5 percent respectively.
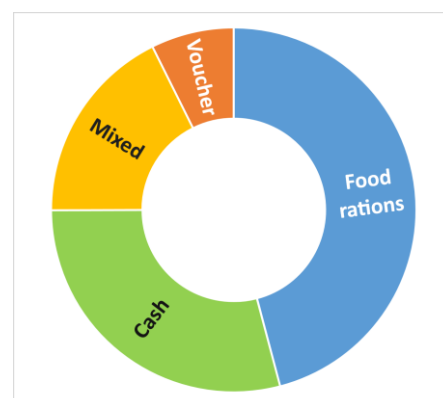
Figure 45: Preferred Modality of Assistance

Nutrition assistance only reached 13 percent of the new arrivals and 27 percent of the October arrivals/registered refugees. Unregistered refugees were the group benefitting the most by nutrition interventions, which were received in 43 percent of the cases. In the majority of the cases, households

were provided with Suji pusti (WSB++) for the treatment of children. This suggests that nutrition prevention and treatment programmes targeting the most vulnerable groups should be expanded[9].

The provision of non-food assistance also played a crucial role and reached almost 80 percent of the total refugee population. Medical services (55 percent) and the provision of non-food items (cooking utensils, blankets etc.) (58 percent) represent the main types of non-food assistance received. WASH and hygiene kits were also provided and reached 39 percent and 31 percent of the refugees respectively. Shelter assistance was mostly received by new arrivals and by registered refugees. The latter is also the ones benefitting from the provision of education services/ child-friendly spaces (21 percent) and firewood (50 percent). To conclude, money allowances were received by nearly 40 percent of the new arrivals as part of non-food assistance.

Food assistance alone is not sufficient to ensure the food and nutrition security of refugees in the short, medium, to longer-term. Transitioning from food rations to food vouchers or cash, will expand people's freedom to choose and would further strengthen households' capacity to satisfy their basic needs. However, programmatic interventions should also take into account the gender perspective, considering that decisions on how to use cash in the household are mostly taken by male members (57 percent) while female members normally decide how to utilize food in the family (60 percent).

Self-reliance and livelihood support programmes should be immediately scaled-up to help refugees reducing their economic vulnerability and reliance on assistance.

9. Conclusions

Recent evolving of refugee influx in Cox's Bazar is a multi-faceted challenge, which requires a multi-sectoral approach to mitigate the current food security, nutritional challenges as well protection and gender issues for both host and Rohingya refugee communities that's are clearly depicts and covered in this study. These challenges are very first growing in natures; moreover there is a tremendous political implication on cross-border tension, unresolved departure issues as well exposed to natural disasters in the coming months, may aggravate the situation furthermore.

It is notable that more than eighty percent of new arrivals would not be able to meet their food requirement without the assistance provided. In addition, the new arrivals who are considered "less vulnerable" adoption some negative coping mechanism; such as the sale of jewellery, borrowing money, sending savings, and buying food on credit, is high. Their food security status could quickly deteriorate once their coping capacity is exhausted. Moreover, 38 percent local host communities are also vulnerable to food insecurity. A massive scale-up of food assistance and introducing a food voucher system in some camps make the refugee food secure, as a result, food consumption is not the major driver of the overall vulnerability classification. However, this study reveals economic vulnerability is the main driver of food insecurity, in accordance to that, further programme design should look on self-reliance issues and livelihoods based interventions both in refugees' camps and in host communities.

Insights on households' vulnerability to food insecurity are one of the focus of this study, and it shows larger households and households with a high number of children are the most vulnerable among the refugee households. This study also illustrates host communities vulnerability as well. These findings will guide further needs based targeting as well in cases of resource shortfall occur.

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[9] Surge of nutrition prevention and treatment programmes took place since data collection.

The study shows that food assistance plays a crucial role to ensure minimum acceptable diet among refugees and it is notable that, refugee households who are receiving food assistance far much better than those are not assisted. Female-headed households in the host communities had a significantly higher prevalence of unacceptable food consumption compared to male-headed. Besides, dietary diversity is low for both the refugees and host communities, which has a negative effect on nutritional outcomes. On the other hand, it is evident that food voucher assistance has a positive impact on increasing refugees' dietary diversity and nutrient intake by providing them with diverse food options and it is also suggested that nutrient intake is correlated with the transfer modality. Thus food voucher should be scaled-up where feasible.

This study evident that the prevalence of food-related coping strategies, is as high among the host communities as among the refugees. Food assistance is the key divers among the refugees not to apply much food coping strategies compared to those who are not benefiting from assistance. In contrast, still, 7 in 10 households are forced to adopt one or more food-related coping strategies. Moreover, host communities are highly impacted by the influx and show similar levels of stress compared to the refugees.

This assessment shows that the financial capacity of both new arrivals and protracted 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 under 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 livelihoods opportunities created. Overall, food is the main form of expenditure among refugees and host communities. Both allocate two-thirds of their monthly budget to food when the estimated value of assistance and own production is included. With the increased demand from refugees, there is a scope to implement livelihood programmes with a focus on agriculture aiming to enhance host communities from own production and provide increased income opportunities.

Acute malnutrition rates among children 6 to 59 months old, high level of morbidity, risks of water contamination and limited diversified food access are of great concern. Further cross-sectional surveys are required to have a deeper understanding of the main direct and indirect determines of malnutrition among children 6-59 months in the camps. These should be extended to host communities for comparative analysis.

Overall livelihood opportunities and job markets in this small peninsula are not that much, in addition, the refugees' movement is restricted thus affecting their livelihoods. Besides, host communities, the most important income source is casual labour-they are now facing increased competition and pressure on wages due to increased labour force availability. Therefore, creating & expansion of job opportunities by livelihoods support programmes, self-reliance initiatives, and or by other means will be the main way-out as well challenges for both development communities and host government in the coming phage in case resource shortfalls occur.

Regarding the markets functioning, this study shows that relatively they are operational and has the capacity to be extended furthermore if demand is increased. At the same time, the purchasing power of both Bangladeshi and the refugees is likely deteriorated due to increasing competition in the unskilled labour market and abridgement of job opportunities in this locality.

Theft and robbery, and harassment were the most common protection issues reported for both the refugees and the local communities. Women and girls among the new arrivals are more likely to be affected by physical violence and abuse. Therefore actionable measure need to be considered where tend to be happening.

At last, it is essential to keep up further monitoring food security and nutritional status of refugees and host communities with a holistic approach lead by multi-sectoral inputs to further informing programmes design, fundraising and appropriate initiatives.

10.   Recommendations

Food assistance is playing a crucial role in ensuring adequate food access among refugees who have limited access to financial resources and labour opportunities. Transitioning from food rations to food vouchers or cash, where families have the choice, would further strengthen households' capacity to access high-quality food. However, food assistance alone is not sufficient to ensure the food and nutrition security, as well as other basic needs of refugees in the short-, medium-, to longer-term.

Self-reliance and livelihood support programs should be scaled-up immediately to help refugees and host communities, respectively, reduce their economic vulnerability. These should be linked to disaster risk reduction and mitigation initiatives such as land consolidation and water regulation inside the camps and expansion sites. The majority of refugees living inside the camps, makeshifts and expansion sites are exposed to natural hazards such as flash flooding and landslides projected to happen during the forthcoming rainy season.

Nutrition prevention and treatment programmes targeting the most vulnerable groups should be further expanded. Important investments must be made to ensure there is sufficient access to clean water and sanitation facilities. Increased distribution of non-food items, especially cooking fuel, would immediately reduce the sale of food assistance and the exposure of children and adult females to protection risks. Below, a list of key action points recommended by sector to address the immediate and longer-term needs and to ensure adequate access to food and other basic needs of refugees and host communities.

Food and nutrition assistance

REVA reveals that at least 80 percent of the overall refugee population are vulnerable to food insecurity and would not be able to meet their minimum dietary requirements without the assistance provided. In addition, the 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 is extremely alarming and exceeds the WHO emergency threshold.
As a backdrop of the above, it is recommended to:
- Continue non-conditional General Food Distribution (GFD) and scale up to cover the latest new arrivals (including contingency for additional new arrivals) and unregistered protracted Rohingya population. Where possible, a transition from GFD to e-vouchers programme is encouraged in all areas to facilitate access to a more diversified and nutritious diet.

- Further scale-up of Blanket Supplementary Feeding Programmes (BSFPs) targeting children under five and pregnant and lactating women as well as integrated severe and moderate acute malnutrition treatment programmes is recommended among refugees. These activities should be accompanied with appropriate nutrition messaging and awareness campaigns especially with regards to parental care practices and initiatives aimed at enhancing access to clean water and at improving overall hygienic conditions.

- Scale-up assistance to host communities with a focus on conditional transfers (for example, food for work (FFW) / food assistance for assets (FFA) in line with DRR/M preventive response and initiatives to mitigate the impact of the upcoming rainy and cyclone season. Besides, community kitchen/cooked food for the refugees with the actors from the ground would be an alternative during a disastrous environment. 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.

- Introduction of needs-based targeting can be considered when the situation stabilizes and only based on clear indications from future assessments. 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 help coordinate the rolling out if and where esteemed appropriate.

- Set up a monthly or bi-monthly thorough monitoring system to assess the evolution of outcome indicators and socio-economic characteristics of vulnerable people (refugees and host communities) over time and space.

Livelihoods and other basic needs

The analysis shows that displacement affected significantly to fully the opportunity of refugees to produce an income and determined an almost entire reliance on external formal food and non-food related aid. Only a limited portion of refugees are engaged in livelihoods activities, which are in most of the cases only temporary, and cover mainly casual labour, fishing, petty trade etc. In contrast, host communities are facing increased competition for the recurrent influx and pressure on wage due to increased labour force availability and may be exposed to more volatile prices of food and other basic needs. Therefore, REVA recommends:

- To 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.

- To scale up significantly vocational training, socio-economic empowerment initiatives and self-reliance activities among refugees especially for women and youth. Programmes that aim to create social cohesion opportunities for the most marginalized in the camps are recommended, including common cooking spaces, multipurpose facilities, nutrition and food

processing learning centres, childcare spaces, etc. Link skills creation strategies to concrete livelihood support schemes inside and outside of the camps, prioritizing those activities linked to camp management and disaster prevention ahead of the rainy season.

- To scale-up the distribution of cooking fuel, especially among the new arrivals and unregistered protracted Rohingya population 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.

In addition, more in-depth insight and monitoring mechanism system taking into consideration living conditions and constraints affecting livelihoods must be put in place during the impending rain and cyclone season around the refugee camps & host communities, may lead an appropriateness of a livelihoods based programmes where it is needed; possibly food assistance for assets (FFA).

Health

Besides the prevailing, the emergency threshold of GAM rate and higher stunting prevalence, the emergency nutrition assessment shows there is an extremely high level of morbidity; around 80 percent of households reported having household member including children suffering from diseases. Furthermore, despite the enormous efforts from partnersthe hygienic conditions in the camp remain challenging and open to risks of increased morbidity. Hence, it is recommended the following:

- To ensure easy access to health facilities for all, across all sites, and to ensure the presence of qualified staff, medical equipment, and medicines.

- To conduct campaigns or initiatives aimed at increasing awareness among refugees on existing services.

- To install more health facilities in a coordinated manner: I.E. where is it necessary for susceptibility of diseases (like; water-borne diseases, skin diseases) around the camps as well as the host communities.

- To improve access to essential life-saving primary and secondary health services for crisis-affected populations, aimed at reducing avoidable morbidity and mortality and also ensuring the prevention of, preparation for and response to outbreaks of diseases with epidemic potential and other health emergencies

- To make sure that all initiatives and strategies are defined in concertation with the relevant sectors of concern for health: WASH, nutrition, food security, shelter among others.

Protection

The study shows a high occurrence of protection issues like theft; robbery; harassment; physical violence among refugees and host communities. In addition, tension cited a big protection issue in the near future between the local and with the refuges. Therefore, is it recommended:

- To strengthen protection measures and mechanisms, and to systematically include protection 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.

- To enhance an effective interaction between local authorities and protection officers of all partners involved aimed at limiting exposure of refugees to human trafficking, drugs abuse, tension among or between refugees and host communities etc.

Further analyses

The rapidly evolving context of refugees as well as host communities, and socio-economic dynamics of these areas requires the capacity of humanitarian response to adapt to changing needs. This, in return, requires that a solid monitoring system of vulnerability among refugees and host communities is put in place. This shall include the relevant set of approaches, tools and indicators to monitor food and nutrition security. With regards to this last point, it is recommended to:

- Conduct further thematic analyses using the REVA findings (i.e. expenditure patterns, basic needs, protection, and gender dimensions) by establishing a monitoring system to assess the food security and nutrition situation continuously.
- 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.
- To make sure that any survey's design mirrors specific programmatic needs for implementing information-based multi-sectorial interventions in a well harmonized, effective and efficient fashion that covers both for the refugees and for the host communities.

ANNEXES

Section 1: DEMOGRAPHY

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Count
Sex HH head	1) Male	73.4%		62.3%		70.3%		51.3%		72.2%		1326
	2) Female	26.6%		37.7%		29.7%		48.7%		27.8%		720
	<18	0.5%		0.0%		0.0%		0.0%		0.2%		11
	18-30	33.8%		46.5%		29.5%		25.2%		20.4%		652
Age HH head	31-45	35.2%		30.1%		43.0%		46.2%		43.8%		781
	46-60	23.3%		20.3%		21.4%		24.4%		24.5%		463
	61+	7.1%		3.1%		6.1%		4.3%		11.1%		139
	1) Single	3.3%		4.1%		3.7%		2.6%		2.3%		74
	2) Married (with one spouse)	80.2%		77.0%		78.9%		72.6%		78.9%		1578
Marital status HH head	3) Married (with more than one spouse)	3.5%		1.0%		5.4%		7.7%		3.5%		71
	4) Separated/ divorced	1.2%		2.5%		3.7%		6.4%		3.0%		64
	5) Widow or widower	11.8%		15.3%		8.3%		10.7%		12.3%		259
Average HH size			5.0		4.9		5.6		6.2		5.7	2046
Single mothers		4.0%		2.7%		6.5%		4.7%		2.8%		92
Single fathers		0.1%		0.5%		0.4%		0.4%		0.2%		5
Disabled/Chronically ill		22.8%		21.7%		36.4%		30.3%		35.0%		571
Disabled female		4.1%		5.2%		9.8%		8.1%		6.9%		122
Disabled male		4.2%		4.1%		11.0%		9.0%		7.2%		136
Chronically ill female		11.8%		10.9%		13.6%		12.0%		19.0%		266
Chronically ill male		8.8%		8.1%		15.5%		9.8%		14.1%		220
Under 15yrs		87.8%		89.1%		94.7%		93.2%		88.4%		1832
Unaccompained minors		1.6%		1.6%		1.8%		3.8%		1.6%		41
Unaccompained female		1.6%		1.1%		1.5%		3.0%		1.6%		36
Unaccompained male		0.0%		0.5%		0.7%		1.7%		0.7%		11
Separated minors (<18) female		2.2%		1.5%		2.9%		1.7%		1.6%		42
Separated minors (<18) male		0.7%		0.5%		1.8%		0.4%		0.7%		19
PLWs		33.7%		33.9%		35.2%		27.4%		24.5%		651
Elderly		15.8%		15.5%		14.6%		13.2%		21.8%		336
Reasons presence children <18 separated from parents living in the household	1) Sent by parent(s)	36.8%		31.2%		45.0%		30.0%		31.3%		52
	2) They do not have any other caretakers (for example, parents deceased, separated from parent(s), etc.)	42.4%		64.7%		45.0%		60.0%		56.3%		87
	3) Prefer to stay with others	20.8%		4.1%		10.0%		10.0%		12.5%		22
	low depency	54.4%		50.2%		50.0%		65.8%		64.4%		1169
Dependency categories classes	at least 2 members per working person	31.1%		33.8%		34.7%		24.8%		24.3%		597
	2 to 3 members	10.7%		11.4%		12.7%		6.8%		7.6%		207
	more than 3 members	3.9%		4.6%		2.6%		2.6%		3.7%		73
Hosted (other) displaced?	1) Yes, newly displaced since August 2017	10.0%		44.8%		45.4%		56.8%		10.2%		477
	2) Yes, other displaced	0.6%		1.6%		1.5%		3.0%		0.5%		21
Displaced still living in your household		41.5%		21.3%		41.6%		38.0%		51.1%		185
Are they planning to stay or move one in the near future?	1) Stay	51.7%		61.5%		64.6%		36.5%		26.1%		89
	2) Plan to move in the near future	48.3%		38.5%		35.4%		63.5%		73.9%		96

Section 2: ARRIVAL INFORMATION

		New Arrivals since 25 Aug 2017	Arrivals Oct 2016-Aug 2017	Unregistered Protracted Rohingya population	Registered Protracted Refugees	TOTAL
		Column N %	Column N %	Column N %	Column N %	Count
Origin	1) Maungdaw	71.9%	82.9%	55.6%	47.8%	1117
	2) Buthidaung	22.5%	15.2%	33.2%	37.2%	347
	3) Rathedaung	5.3%	1.9%	7.5%	8.4%	98
	4) Other	0.4%	0.0%	3.7%	6.6%	27
Duration displacement	1 month	12.8%	1.7%	.4%		119
	2-3 months	83.1%	3.3%	.4%		791
	4-7 months	1.4%	3.7%	0.0%		17
	8-10 months	0.9%	7.1%	1.2%		24
	11-13 months	0.2%	64.4%	2.5%		127
	14-24 months	0.8%	18.7%	2.7%		44
	2+ years	0.7%	1.1%	92.7%	100.0%	434
Transport mode	1) Walking	98.1%	98.4%	100.0%		1089
	2) Swimming	9.4%	8.8%	0.0%		87
	3) Boat	88.3%	93.3%	88.9%		1017
	4) Public transport/truck	33.2%	38.5%	55.6%		344
	5) Bike/Rickshaw	1.5%	2.8%	0.0%		20
	6) Motorcycle	0.3%	1.6%	0.0%		5
	7) Tom Tom	33.2%	35.9%	0.0%		360
What were you able to bring	Nothing	45.4%	47.6%	22.2%		514
	Clothes	43.7%	43.9%	66.7%		472
	Kitchen items	14.4%	13.7%	11.1%		152
	Money/savings	36.6%	35.4%	55.6%		388
	Jewelry/gold	20.8%	24.6%	33.3%		256
	Electric devices	5.5%	2.2%	11.1%		52
	Chicken	0.2%	1.1%	0.0%		5
	Cow	0.5%	0.0%	0.0%		2
	Other	0.5%	1.1%	0.0%		6
Main concerns during displacement	Lack of information	63.6%	66.1%	66.7%		688
	Lack of food	77.6%	82.9%	44.4%		878
	Health concerns	21.7%	20.2%	0.0%		242
	Water and sanitation	14.1%	9.9%	0.0%		141
	Exploitation/harassment	12.9%	10.0%	55.6%		149
	Exchange rate	9.1%	7.5%	11.1%		93
	Bribes	4.4%	2.2%	0.0%		45
	Lack of cash	27.1%	27.0%	33.3%		292
	Bringing vulnerable family members	5.0%	7.5%	22.2%		61
	Safety risks	48.3%	46.0%	55.6%		551
	Uncertain future	13.1%	14.2%	0.0%		172
Household members/relatives/friends still remain in your place of origin	1) Yes	23.2%	33.2%	23.9%		259
	2) Don't know	3.9%	4.5%	8.0%		45
Encountered children <18 travelling without caretakers	0) No	47.8%	42.8%	60.1%		491
	1) Yes	44.7%	53.2%	39.9%		532
	2) Don't know	7.6%	3.9%	0.0%		87

Section 3: EDUCATION & HEALTH

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Count
	1) None	52.2%		48.6%		41.9%		27.8%		24.1%		836
	2) Knows how to read and write	1.8%		2.7%		5.7%		3.8%		4.2%		60
	3) Primary	20.4%		22.2%		32.4%		47.4%		41.0%		609
Highest education FEMALE	4) Secondary	2.3%		.5%		2.0%		12.4%		22.5%		152
	5) Vocational training	0.1%		0.0%		0.0%		0.0%		1.2%		6
	6) Tertiary and above	0.2%		0.0%		0.6%		0.0%		0.2%		4
	7) Other (e.g. religious school)	23.1%		26.0%		17.3%		8.5%		6.9%		376
	1) None	47.4%		43.3%		42.9%		22.5%		23.7%		759
	2) Knows how to read and write	2.5%		1.6%		3.9%		5.7%		4.1%		61
	3) Primary	25.2%		25.0%		29.3%		47.1%		41.6%		629
Highest education MALE	4) Secondary	9.4%		8.6%		8.5%		16.7%		16.9%		216
	5) Vocational training	0.0%		0.0%		0.0%		0.4%		1.0%		5
	6) Tertiary and above	0.6%		0.5%		0.4%		0.9%		3.4%		24
	7) Other (e.g. religious school)	14.9%		20.9%		15.0%		6.6%		9.2%		268
% girls attending school			60.1%		80.2%		77.1%		84.6%		85.2%	2046
% boys attending school			67.4%		84.7%		77.9%		88.5%		81.8%	2046
	1) No facility	47.0%		19.1%		21.5%		11.1%		17.4%		113
	2) Facility too crowded/not suitable	9.8%		8.0%		1.9%		22.2%		5.8%		41
	3) Lack of teachers	9.1%		2.4%		5.6%		8.3%		0.0%		19
	4) School too far away	16.1%		8.0%		10.3%		13.9%		5.8%		47
	5) Health conditions do not allow	2.4%		2.8%		7.4%		2.8%		2.9%		16
Reasons no school	6) Children need to work	18.9%		32.7%		42.1%		44.4%		56.5%		142
	7) Children need to take care of household chores/relatives	19.5%		24.7%		19.6%		16.7%		26.1%		86
	8) Family does not see the need	15.9%		35.4%		48.6%		36.1%		26.1%		105
	9) Lack of cash	23.1%		36.7%		35.5%		33.3%		65.2%		136
	10) Just arrived but planning to attend	34.2%		8.0%		8.5%		0.0%		1.4%		67
	11) Lack of information	16.2%		8.0%		1.9%		2.8%		1.4%		37
	12) Safety risks	8.1%		19.5%		13.0%		19.4%		8.7%		46
Household members required medical attention		79.5%		72.7%		76.0%		73.5%		82.2%		1610
	1) Health facility (e.g. clinic, ACF, MSF)	82.9%		81.5%		76.6%		77.1%		24.2%		1083
	2) Private doctor	9.9%		10.7%		12.7%		20.0%		64.8%		394
Medical support where?	3) Drug shop/own remedies	3.6%		6.3%		8.2%		1.8%		9.3%		82
	4) Traditional healer/midwife	0.7%		0.0%		0.0%		0.6%		0.0%		7
	5) Other	1.2%		0.7%		2.0%		0.0%		1.4%		17
	6) No treatment/medical support	1.7%		0.7%		0.5%		0.6%		0.3%		18
	1) Too far	5.8%		9.3%		3.2%		4.0%		6.1%		22
	2) Too expensive	1.2%		0.0%		0.0%		0.0%		7.0%		9
	3) No proper treatment/medicine	82.9%		67.4%		72.6%		88.0%		49.1%		181
Why not a health facility?	4) Don't know where to go	3.6%		4.7%		8.2%		0.0%		17.5%		31
	5) No time	0.0%		9.3%		6.4%		4.0%		1.8%		7
	6) Prefer other options	4.1%		0.0%		3.2%		0.0%		8.8%		16
	7) Other	2.3%		9.3%		6.4%		4.0%		9.6%		19

Section 4: FOOD CONSUMPTION AND FOOD SOURCES

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Count
Food Consumption Groups (FCS)	Poor	3.5%		5.2%		6.3%		0.9%		3.0%		71
	Borderline	29.1%		27.3%		39.7%		19.2%		27.1%		563
	Acceptable	67.4%		67.5%		54.0%		79.9%		69.9%		1412
Dietary Diversity			3.7		3.7		3.5		3.9		3.7	2046
MDDW			3.3		3.6		3.4		3.9		3.6	2046
Cereals or tubers (7 days)			7.0		7.0		7.0		7.0		7.0	2046
Pulses and groundnuts (7 days)			4.6		4.2		3.6		4.0		3.3	2046
Milk and milk products (7 days)			1.1		0.7		0.5		0.8		0.8	2046
Eggs, meat, fish, shells (7 days)			2.6		3.2		2.5		4.1		3.8	2046
Vegetables (7 days)			3.4		3.6		3.7		3.9		3.9	2046
Fruits (7 days)			0.3		0.4		0.4		0.8		0.8	2046
Sugar (7 days)			3.4		2.5		2.6		3.9		2.9	2046
Oil (7 days)			6.7		6.6		6.5		6.9		6.6	2046
Condiments (7 days)			6.5		6.6		6.7		6.7		6.7	2046
N. meals last day ADULTS Female			2.6		2.6		2.5		2.8		2.8	2046
N. meals last day ADULTS Male			2.3		2.4		2.4		2.6		2.6	2046
N. meals last day CHILDREN 6-17 Female			1.4		1.4		1.6		1.9		1.8	2046
N. meals last day CHILDREN 6-17 Male			1.4		1.5		1.6		1.9		1.7	2046
N. meals last day CHILDREN 2-5 Female			0.9		0.9		0.9		0.8		0.8	2046
N. meals last day CHILDREN 2-5 Male			1.0		1.0		1.2		0.9		0.7	2046
FG Vitamin A	0 time (never consumed)	8.0%		8.4%		5.0%		1.7%		2.5%		105
	1-6 times (consumed sometimes)	64.0%		60.5%		62.4%		49.6%		63.2%		1253
	7 times or more (consumed at least daily)	28.0%		31.1%		32.6%		48.7%		34.3%		688
FG Protein	0 time (never consumed)	1.0%		1.1%		1.5%		0.0%		0.2%		13
	1-6 times (consumed sometimes)	29.1%		30.4%		46.9%		20.1%		35.6%		630
	7 times or more (consumed at least daily)	69.9%		68.5%		51.6%		79.9%		64.1%		1403
FG Hem Iron	0 time (never consumed)	38.6%		26.5%		35.3%		14.5%		10.2%		531
	1-6 times (consumed sometimes)	57.5%		64.7%		62.5%		76.9%		78.0%		1380
	7 times or more (consumed at least daily)	4.0%		8.8%		2.2%		8.5%		11.8%		135
Food sources	1) Purchase (cash)	94.5%		98.5%		99.1%		94.4%		99.3%		1971
	2) Purchase (credit)	2.3%		1.1%		2.4%		3.0%		4.2%		48
	3) Food assistance (GFD)	78.0%		51.2%		23.2%		11.1%		.2%		920
	4) Food assistance (food card)	16.0%		21.7%		16.7%		96.2%		0.0%		429
	5) Army distributing food	52.3%		54.8%		23.8%		3.0%		.7%		687
	6) Support from relatives/friends	8.9%		15.1%		15.7%		6.0%		5.3%		210
	7) Barter and exchange	3.2%		3.2%		2.0%		0.9%		0.9%		50
	8) Borrowing	1.5%		4.8%		2.6%		0.9%		0.7%		31
	9) Begging/scavenging	1.5%		2.6%		1.8%		0.9%		2.8%		51
	10) Gathering of wild foods (plants/insects)	0.9%		1.5%		3.1%		2.1%		5.3%		71
	11) Hunting/fishing	0.6%		0.0%		0.7%		0.9%		5.6%		62
	12) Own production	0.5%		2.1%		1.7%		3.4%		16.7%		93

Section 5: COPING STRATEGIES

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL	
		Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Count
Reduced Coping Strategy Index (rCSI)		5.3		6.2		5.9		4.0		5.0		5.2	2046
Rely less expensive food			46.1%		41.5%		45.0%		40.6%		49.8%		939
Borrow food			45.1%		48.9%		55.9%		32.5%		44.9%		903
Reduce meals			32.2%		35.0%		41.0%		21.8%		23.1%		598
Reduce portion			26.2%		26.0%		28.2%		18.8%		24.1%		504
Restrict adult consumption			12.7%		15.6%		17.7%		15.4%		14.1%		290
Send hh members eat elsewhere			7.4%		11.0%		11.3%		6.4%		7.2%		157
Restrict consumption women			9.9%		8.3%		14.4%		10.3%		10.9%		205
Restrict consumption men			7.4%		8.0%		9.4%		5.1%		7.4%		140
Max coping severity	No coping		20.0%		16.1%		17.2%		23.9%		18.5%		368
	Stress		25.7%		31.8%		28.2%		18.4%		32.4%		550
	Crisis		46.1%		43.0%		44.5%		49.1%		34.3%		913
	Emergency		8.2%		9.0%		10.2%		8.5%		14.8%		215
Sell hh goods			4.0%		1.0%		5.5%		2.6%		7.2%		85
Sell jewelry			17.0%		17.1%		12.9%		9.4%		10.6%		281
Spent savings			25.1%		24.0%		15.6%		16.2%		22.9%		433
Bought food credit			23.5%		31.6%		44.4%		29.5%		35.9%		619
Borrowed money to buy food			34.1%		48.8%		51.4%		36.3%		50.9%		859
Sell productive assets			3.2%		2.7%		3.3%		0.9%		7.9%		80
Reduce essential non food expenditure			4.2%		7.7%		3.7%		6.8%		8.6%		114
Withdrew child school			1.0%		0.5%		2.2%		2.1%		6.9%		55
Child under15 work			1.1%		3.1%		3.3%		2.6%		5.1%		67
Child 15 17 work long hours hazard conditions			1.2%		2.7%		3.7%		2.1%		3.9%		47
Adult work long hours hazard cond			2.8%		6.1%		10.2%		6.0%		13.0%		146
Marriage child below18			0.3%		1.5%		1.1%		1.3%		0.7%		15
Inter marriage			0.4%		0.5%		0.9%		1.7%		1.4%		20
Begging			4.4%		4.8%		1.8%		0.9%		3.7%		84
Illegal job			1.3%		0.5%		1.7%		1.7%		4.2%		39
Sold house land			0.0%		0.5%		0.7%		0.9%		1.6%		13
Reduce exp agr inputs			1.3%		0.0%		1.7%		1.3%		2.3%		27
Depending food rations relatives			40.3%		29.9%		28.4%		38.9%		9.7%		655
Sell firewood			4.3%		9.0%		8.8%		4.3%		6.9%		121
Sell food rations			3.5%		3.7%		3.1%		5.1%		0.9%		78
Sell non-food items from assistance			2.0%		1.5%		2.8%		5.1%		1.6%		51
Sell labor in advance			2.5%		3.7%		9.0%		3.8%		7.9%		101

Section 6: SHELTER & WASH

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Count
Own or rent this dwelling/building	1) Rent	5.6%		14.3%		5.2%		.4%		1.4%		128
	2) Lease	0.4%		0.5%		0.4%		0.0%		2.1%		14
	3) Own	0.0%		0.0%		0.0%		0.0%		81.7%		353
	4) Do not own and live for free	94.0%		85.2%		94.5%		99.6%		14.8%		1551
Asked a fee to set up shelter		9.7%		17.4%		12.7%		2.6%		4.9%		194
Shelter shared with others		11.0%		25.0%		26.4%		22.2%		8.1%		309
Number of rooms			1.5		1.7		2.1		2.2		2.4	2046
People not in the household living under same roof			6.5		5.1		5.3		5.8		7.3	2046
Source drinking water	1) Piped water tap	4.6%		8.8%		11.8%		19.7%		3.5%		147
	2) Storage tanks tap	3.0%		7.8%		17.9%		27.8%		3.0%		178
	3) Tubewells / handpump	88.1%		82.3%		69.9%		52.1%		92.8%		1674
	4) Protected spring	0.4%		0.0%		0.4%		0.0%		0.5%		6
	5) Unprotected well	2.5%		0.5%		0.0%		0.0%		0.2%		24
	6) Unprotected spring	0.2%		0.0%		0.0%		0.0%		0.0%		2
	7) Surface water (paddy fields, puddle, pond, stream)	1.2%		0.5%		0.0%		0.4%		0.0%		15
	8) Water truck	0.0%		0.0%		0.0%		0.0%		0.0%		0
	9) Bottled water / sachet	0.0%		0.0%		0.0%		0.0%		0.0%		0
Problems accessing water	Yes	50.7%		36.3%		44.3%		52.1%		37.5%		904
	1) Lack of sufficient water points	43.2%		43.3%		47.8%		50.8%		32.7%		392
	2) Water points not functioning	18.5%		15.8%		7.5%		14.8%		24.1%		149
	3) Waiting time at water points	35.3%		51.1%		77.5%		65.6%		32.7%		420
	4) Distance to water points	60.3%		40.9%		37.5%		38.5%		71.6%		505
	5) Restricted access to water points	5.3%		11.0%		10.5%		11.5%		10.5%		76
	6) Lack of storage containers	9.6%		16.0%		10.8%		8.2%		9.9%		92
	7) Do not like taste/quality	24.7%		21.9%		3.3%		7.4%		13.6%		138
	8) Safety harassment reaching or at the water point	2.9%		0.0%		5.1%		3.3%		3.7%		33
Treat water	1) Yes, for children only	1.6%		2.1%		3.5%		2.1%		1.6%		35
	2) Yes, for everyone	4.3%		2.7%		6.1%		3.4%		3.9%		83
Soap to wash hands	Yes	80.8%		70.1%		83.4%		93.2%		88.2%		1711
Type of latrine	1) Inside the dwelling/own compound	3.8%		2.6%		2.9%		4.3%		66.9%		354
	2) Shared with neighbors close to compound	35.4%		25.1%		26.1%		30.3%		16.2%		571
	3) Communal	58.8%		72.3%		70.6%		65.4%		4.6%		1042
	4) Open space	2.0%		0.0%		0.4%		0.0%		12.3%		79
Source of energy for cooking	1) Firewood	89.8%		91.7%		94.5%		83.8%		96.1%		1878
	2) Kerosene	0.4%		1.1%		0.4%		0.4%		0.2%		8
	3) LPG	6.5%		3.0%		4.8%		6.8%		2.1%		92
	4) Fire fuel briquette/compressed rice husk	3.1%		3.7%		0.4%		8.5%		1.2%		62
	5) Electricity/solar panel	0.1%		0.0%		0.0%		0.0%		0.5%		3
	6) Other	0.0%		0.5%		0.0%		0.0%		0.0%		1
	7) None	0.1%		0.0%		0.0%		0.4%		0.0%		2
Source firewood	1) Buying	35.9%		37.3%		53.3%		38.5%		41.7%		816
	2) Gathering/collecting	59.4%		60.6%		42.0%		9.4%		57.9%		1047
	3) Support from relatives and friends	1.4%		1.1%		0.0%		0.4%		0.5%		17
	4) Borrow	0.2%		0.0%		0.4%		0.0%		0.0%		2
	5) Sharing with neighbors/relatives/friends	0.7%		0.0%		1.1%		0.9%		0.0%		12
	6) Relief	1.4%		1.0%		3.2%		48.7%		0.0%		140
	7) Do not have/use	0.9%		0.0%		0.0%		2.1%		0.0%		12
Possession of beds and / or sponge mattress	0) No	91.3%		90.3%		94.1%		80.3%		73.6%		1772
	1) Yes, received as assistance / / access for free/share	4.8%		6.1%		3.3%		3.4%		1.9%		77
	2) Yes, own purchase/own made/rent	3.9%		3.6%		2.6%		16.2%		24.5%		197

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Count
	0) No	32.7%		24.5%		27.6%		19.2%		19.4%		536
Possesion of floor mats	1) Yes, received as assistance / / access for free/share	51.0%		46.3%		20.3%		23.9%		5.1%		702
	2) Yes, own purchase/own made/rent	16.3%		29.2%		52.0%		56.8%		75.5%		808
	0) No	89.9%		82.2%		58.2%		33.8%		44.0%		1417
Possesion of table chair	1) Yes, received as assistance / / access for free/share	5.4%		6.9%		5.9%		8.1%		3.5%		108
	2) Yes, own purchase/own made/rent	4.7%		10.9%		36.0%		58.1%		52.5%		521
	0) No	98.9%		98.9%		98.2%		97.4%		98.6%		2016
Possesion of radio	1) Yes, received as assistance / / access for free/share	0.8%		0.5%		0.0%		0.0%		0.5%		12
	2) Yes, own purchase/own made/rent	0.4%		0.5%		1.8%		2.6%		0.9%		18
	0) No	97.9%		96.3%		96.9%		83.8%		80.6%		1891
Possesion of shelves and / or other elevated storage	1) Yes, received as assistance / / access for free/share	0.8%		1.1%		0.0%		3.8%		1.6%		25
	2) Yes, own purchase/own made/rent	1.2%		2.6%		3.1%		12.4%		17.8%		130
	0) No	11.2%		14.3%		8.4%		8.1%		3.2%		176
Possesion of cooking items	1) Yes, received as assistance / / access for free/share	43.4%		46.2%		17.7%		22.6%		4.4%		597
	2) Yes, own purchase/own made/rent	45.3%		39.5%		74.0%		69.2%		92.4%		1273
	0) No	79.0%		77.2%		76.4%		79.5%		81.9%		1618
Possesion of kerosene or LPG stove	1) Yes, received as assistance / / access for free/share	5.7%		5.3%		3.1%		7.3%		2.3%		96
	2) Yes, own purchase/own made/rent	15.3%		17.4%		20.4%		13.2%		15.7%		332
	0) No	24.2%		23.3%		13.1%		22.6%		15.0%		418
Possesion of mud stove	1) Yes, received as assistance / / access for free/share	11.5%		9.0%		9.2%		11.5%		5.6%		181
	2) Yes, own purchase/own made/rent	64.3%		67.6%		77.7%		65.8%		79.4%		1447
	0) No	98.7%		97.9%		98.5%		98.7%		97.9%		2014
Possesion of generator	1) Yes, received as assistance / / access for free/share	0.5%		0.5%		0.4%		0.4%		0.0%		8
	2) Yes, own purchase/own made/rent	0.7%		1.5%		1.1%		0.9%		2.1%		24
	0) No	93.6%		90.4%		92.1%		89.7%		81.0%		1846
Possesion of stockpile of woods	1) Yes, received as assistance / / access for free/share	1.4%		1.1%		0.4%		3.8%		0.2%		26
	2) Yes, own purchase/own made/rent	5.0%		8.6%		7.6%		6.4%		18.8%		174
	0) No	63.3%		51.9%		57.6%		38.5%		44.2%		1112
Possesion of sufficient water storage containers	1) Yes, received as assistance / / access for free/share	20.4%		22.0%		10.7%		12.8%		3.7%		310
	2) Yes, own purchase/own made/rent	16.2%		26.1%		31.7%		48.7%		52.1%		624
	0) No	82.0%		81.0%		75.7%		56.8%		84.3%		1609
Possesion of solar panel	1) Yes, received as assistance / / access for free/share	5.8%		5.3%		4.2%		9.4%		1.9%		106
	2) Yes, own purchase/own made/rent	12.2%		13.7%		20.1%		33.8%		13.9%		331
	0) No	98.9%		98.4%		97.8%		95.7%		94.2%		1990
Possesion of functioning electrical devices (refrigerator, DVD player, television)	1) Yes, received as assistance / / access for free/share	0.5%		1.6%		0.0%		0.9%		0.9%		13
	2) Yes, own purchase/own made/rent	0.7%		0.0%		2.2%		3.4%		4.9%		43
	0) No	97.2%		96.8%		92.6%		87.2%		93.1%		1939
Possesion of sewing machine	1) Yes, received as assistance / / access for free/share	1.3%		1.1%		1.5%		3.4%		1.4%		30
	2) Yes, own purchase/own made/rent	1.5%		2.1%		5.9%		9.4%		5.6%		77
	0) No	17.7%		10.4%		15.5%		10.7%		12.0%		336
Possesion of mosquito net	1) Yes, received as assistance / / access for free/share	66.6%		61.7%		40.1%		65.0%		31.3%		1092
	2) Yes, own purchase/own made/rent	15.6%		27.8%		44.4%		24.4%		56.7%		618

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Count
Possesion of sufficient blankets	0) No	26.8%		27.8%		30.0%		23.1%		31.5%		614
	1) Yes, received as assistance / / access for free/share	63.8%		50.7%		35.7%		44.0%		7.2%		884
	2) Yes, own purchase/own made/rent	9.4%		21.5%		34.3%		32.9%		61.3%		548
Possesion of machete or large knife	0) No	59.6%		46.7%		36.7%		34.6%		31.0%		952
	1) Yes, received as assistance / / access for free/share	12.4%		12.5%		12.2%		8.5%		3.5%		182
	2) Yes, own purchase/own made/rent	28.0%		40.7%		51.1%		56.8%		65.5%		912
Possesion of market stall	0) No	98.4%		97.9%		97.1%		94.9%		95.8%		1992
	1) Yes, received as assistance / / access for free/share	1.0%		0.5%		0.7%		0.4%		0.7%		15
	2) Yes, own purchase/own made/rent	0.6%		1.5%		2.2%		4.7%		3.5%		39
Possesion of motorcycle	0) No	99.8%		99.1%		100.0%		100.0%		99.3%		2038
	1) Yes, received as assistance / / access for free/share	0.1%		0.5%		0.0%		0.0%		0.2%		4
	2) Yes, own purchase/own made/rent	0.1%		0.5%		0.0%		0.0%		0.5%		4
Possesion of bicycle or rickshaw	0) No	99.9%		99.5%		100.0%		100.0%		97.2%		2031
	1) Yes, received as assistance / / access for free/share	0.0%		0.0%		0.0%		0.0%		0.5%		3
	2) Yes, own purchase/own made/rent	0.1%		0.5%		0.0%		0.0%		2.3%		12
Possesion of car / tom tom / boat / truck	0) No	99.4%		99.5%		99.6%		100.0%		98.8%		2035
	1) Yes, received as assistance / / access for free/share	0.5%		0.0%		0.4%		0.0%		0.2%		5
	2) Yes, own purchase/own made/rent	0.1%		0.5%		0.0%		0.0%		0.9%		6
Possesion of fishing tools and inputs	0) No	99.3%		99.5%		98.2%		98.7%		85.6%		1958
	1) Yes, received as assistance / / access for free/share	0.2%		0.0%		0.4%		0.0%		0.9%		8
	2) Yes, own purchase/own made/rent	0.5%		0.5%		1.5%		1.3%		13.4%		80
Possesion of agriculture tools and inputs (pesticides, fertilizers)	0) No	99.1%		99.0%		98.5%		97.0%		84.5%		1960
	1) Yes, received as assistance / / access for free/share	0.8%		0.0%		0.0%		0.4%		0.7%		8
	2) Yes, own purchase/own made/rent	0.1%		1.0%		1.5%		2.6%		14.8%		78
Possesion of seed for planting	0) No	98.8%		99.0%		98.9%		96.2%		88.2%		1969
	1) Yes, received as assistance / / access for free/share	1.1%		0.0%		0.4%		2.6%		1.2%		21
	2) Yes, own purchase/own made/rent	0.1%		1.0%		0.7%		1.3%		10.6%		56
Possesion of agricultural land	0) No	99.3%		99.5%		99.6%		99.6%		91.7%		2002
	1) Yes, received as assistance / / access for free/share	0.6%		0.0%		0.4%		0.4%		0.9%		10
	2) Yes, own purchase/own made/rent	0.1%		0.5%		0.0%		0.0%		7.4%		34
Possesion of other rental land	0) No	99.1%		99.5%		99.6%		99.6%		92.4%		2004
	1) Yes, received as assistance / / access for free/share	0.7%		0.0%		0.4%		0.0%		0.7%		9
	2) Yes, own purchase/own made/rent	0.1%		0.5%		0.0%		0.4%		6.9%		33
Possesion of poultry	0) No	99.8%		98.5%		98.0%		92.7%		76.2%		1916
	1) Yes, received as assistance / / access for free/share	0.1%		0.5%		0.0%		0.9%		1.9%		12
	2) Yes, own purchase/own made/rent	0.1%		1.0%		2.0%		6.4%		22.0%		118
Possesion of other livestock	0) No	99.6%		99.5%		98.3%		93.2%		84.5%		1955
	1) Yes, received as assistance / / access for free/share	0.3%		0.0%		0.4%		0.9%		1.2%		10
	2) Yes, own purchase/own made/rent	0.1%		0.5%		1.3%		6.0%		14.4%		81
Possesion of cash, other savings (jewelry, gold)	0) No	88.4%		84.3%		85.3%		72.2%		76.6%		1694
	1) Yes, received as assistance / / access for free/share	2.6%		0.5%		1.5%		2.1%		1.4%		39
	2) Yes, own purchase/own made/rent	9.0%		15.2%		13.3%		25.6%		22.0%		313
Possesion of mobile phone	0) No	58.8%		48.2%		42.7%		27.8%		20.1%		921
	1) Yes, received as assistance / / access for free/share	10.7%		13.6%		9.9%		12.4%		8.3%		197
	2) Yes, own purchase/own made/rent	30.5%		38.2%		47.4%		59.8%		71.5%		928
Possesion of torchlight	0) No	80.4%		83.6%		82.9%		76.1%		71.5%		1604
	1) Yes, received as assistance / / access for free/share	11.5%		9.0%		9.2%		10.7%		2.8%		192
	2) Yes, own purchase/own made/rent	8.0%		7.3%		7.9%		13.2%		25.7%		250

Section 7: INCOME / LIVELIHOOD SOURCES

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Count
Income last 30 days (BDT)		1858		3434		4568		4530		8747		2046
Number of sources of income (last 30 days)		0.9		1.5		1.5		1.4		1.8		2046
1) Regular			11.5%		12.0%		25.5%		41.1%		43.4%	414
2) Seasonal			5.3%		13.5%		13.8%		13.7%		17.0%	184
3) Temporary			85.1%		78.7%		69.9%		51.3%		45.8%	1047
Daily rate		223		246		278		261		327		2046
Current income source	Non-agricultural casual labor		23.0%		39.5%		40.0%		29.1%		31.7%	576
	Agricultural/fishing casual labor		7.8%		15.2%		16.6%		9.8%		34.3%	330
	Domestic work		12.7%		15.0%		21.2%		26.5%		30.3%	389
	Unskilled wage labor		14.5%		22.0%		25.6%		17.5%		18.5%	354
	Petty trade / street vending		1.1%		2.1%		2.9%		2.1%		3.9%	41
	Small business		3.2%		7.0%		10.3%		14.5%		13.9%	158
	7) Large business		0.3%		0.0%		0.7%		0.0%		1.2%	10
	8) Skilled wage labor		6.4%		8.0%		19.9%		17.5%		15.7%	229
	9) Fishing		3.5%		2.5%		5.9%		4.3%		24.8%	207
	Remittances from abroad		4.6%		4.1%		3.3%		6.8%		4.2%	91
	Handicrafts/artisanal work		2.2%		1.6%		2.9%		3.8%		3.5%	50
	Agricultural production and sales		1.2%		1.1%		0.0%		0.4%		7.6%	47
	Livestock rearing		0.6%		0.5%		0.7%		1.3%		5.1%	34
	Savings		16.3%		10.6%		6.1%		3.4%		4.9%	190
	Begging		6.4%		6.9%		7.2%		2.1%		3.7%	124
	Food assistance (including voucher)		62.0%		47.7%		28.7%		73.1%		.2%	940
	Other cash assistance		25.0%		16.5%		2.9%		4.3%		2.1%	291
	Sale of assistance		2.9%		3.1%		1.7%		4.7%		0.5%	57
	Assistance from relatives and friends		22.2%		20.7%		17.0%		14.1%		8.3%	382
	Gathering and selling firewood or other natural resources		6.2%		15.5%		12.7%		4.3%		10.0%	179
	Zakat		20.5%		15.4%		4.2%		3.4%		3.0%	240
Current income main involved	1) Male		75.4%		84.4%		86.7%		80.8%		88.7%	1630
	2) Female		17.5%		25.1%		22.5%		30.3%		15.5%	450
	3) Both		31.5%		25.3%		13.3%		37.6%		9.5%	519
Before displacement - income source	non-agricultural caboour		18.7%		14.5%							201
	agricultural/fishing casual labour		37.8%		37.2%							426
	domestic work		17.0%		15.7%							206
	unstilled wage labor		8.2%		7.7%							86
	petty trade/street vending		1.3%		1.6%							24
	small business		13.7%		13.9%							142
	large business		4.1%		4.8%							45
	skilled wage labour		7.7%		5.2%							77
	fishing		16.8%		9.3%							207
	remittances from abroad		1.5%		1.6%							19
	handicrafts/artisanal work		2.4%		1.1%							24
	agricultural production and sales		14.8%		16.1%							202
	livestock rearing		5.3%		3.7%							61
	savings		0.5%		0.5%							5
	begging		0.8%		0.5%							10
	food assistance(including voucher)		23.0%		29.7%							241
	other cash assistance		0.6%		0.5%							9
	sale of assistance		0.6%		0.0%							7
	assistance from relatives and friends		2.4%		3.7%							28
	gathering and selling firewood/natural resources		4.9%		5.3%							55
	zakat		1.1%		1.1%							12
	other		0.7%		1.6%							7

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Count
Before displacement - income main involved	male		90.4%		94.6%							799
	female		8.6%		6.9%							96
	both		11.4%		9.0%							104
Remittances (last 3 months or less)	Yes		13.8%		11.5%		11.3%		17.9%		6.9%	224
Remittances (past year/prior to displacement)	Yes		10.9%		10.4%		0.0%		0.0%		0.0%	110
Borrowed money	Yes		49.8%		72.2%		64.8%		46.2%		64.1%	1158
	1) To buy/pay for FOOD		55.9%		60.3%		61.8%		48.1%		37.9%	592
	2) To buy/pay for SHELTER/RENT		7.9%		5.2%		0.6%		0.9%		1.8%	41
	3) To buy/pay for FIREWOOD		0.5%		0.6%		0.6%		0.9%		0.4%	7
Reason for borrowing money	4) To buy/pay for HEALTH		14.1%		19.8%		22.0%		19.4%		36.5%	272
	5) To buy/pay for OTHER ESSENTIAL HOUSEHOLD NEEDS		16.1%		11.1%		12.0%		25.0%		14.1%	186
	6) To buy/pay for SOCIAL EVENT		2.3%		1.5%		1.4%		0.9%		1.8%	20
	7) To buy/pay for OTHER		3.2%		1.5%		1.7%		4.6%		7.6%	40

Section 8: EXPENDITURES

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Count
Food Expenditure Share (Share of expenditures on food items)		63.4%		66.6%		64.9%		67.7%		59.0%		2046
Levels representing proportion of expenditure on food	< 50%		18.6%		8.4%		13.7%		5.6%		19.7%	295
	50% - 65%		36.1%		34.7%		36.0%		34.6%		49.8%	814
	65% - 75%		21.5%		33.0%		28.0%		30.8%		22.9%	523
	75% or more		23.9%		23.9%		22.3%		29.1%		7.6%	414
MEB categories	highly vulnerable		52.4%		37.9%		28.6%		50.9%		3.2%	754
	vulnerable		24.0%		21.3%		29.9%		16.7%		13.7%	428
	less vulnerable		23.6%		40.9%		41.5%		32.5%		83.1%	864

Section 9: MAJOR CONSTRAINTS

		New Arrivals since 25 Aug 2017	Arrivals Oct 2016-Aug 2017	Unregistered Protracted Rohingya population	Registered Protracted Refugees	Bangladeshi host community	TOTAL
		Column N %	Column N %	Column N %	Column N %	Column N %	Count
Experienced difficulties in past 3 months	Yes	86.3%	85.2%	73.1%	59.4%	75.5%	1623
	1) Lack of cash	79.5%	80.0%	76.2%	67.6%	70.6%	1234
	2) Insufficient food (quantity/quality)	45.4%	51.2%	59.8%	26.6%	38.7%	691
	3) Poor quality/quantity of drinking water	13.1%	12.0%	10.6%	7.9%	12.9%	199
	4) Poor quality/quantity of WASH facilities (washrooms etc.)	10.4%	7.6%	9.4%	6.5%	12.0%	160
	5) Poor shelter conditions	31.4%	33.6%	19.5%	13.7%	16.6%	417
	6) Lack of schools/education opportunities	1.2%	2.4%	2.0%	3.6%	2.1%	29
	7) Lack of clothes	21.4%	24.5%	14.6%	19.4%	6.1%	301
	8) Lack of hygiene materials	5.9%	3.1%	4.8%	2.9%	4.6%	86
	9) Lack of cooking utensils, pots, pans	6.5%	4.3%	2.5%	7.2%	1.5%	114
	10) Issues related to healthcare	7.0%	7.3%	10.9%	12.9%	15.3%	168
	11) Insufficient firewood	18.1%	20.6%	14.4%	20.9%	9.5%	253
	12) Family separation	1.5%	0.5%	1.5%	3.6%	1.8%	31
Main difficulty	13) High food items prices	9.2%	4.3%	12.9%	24.5%	43.6%	285
	14) High non-food items prices	2.8%	1.3%	0.0%	5.8%	4.6%	47
	15) Loss of employment	5.8%	6.6%	14.1%	11.5%	16.6%	150
	16) Not allowed to work	17.2%	15.0%	19.2%	18.0%	2.8%	227
	17) Restrictions to freedom of movements	8.9%	8.7%	12.4%	16.5%	1.8%	130
	18) Sickness/death of HH member	2.0%	1.8%	4.8%	2.9%	3.7%	48
	19) Heavy rains and floods	0.9%	0.0%	1.0%	0.0%	0.6%	12
	20) Crop failure	0.0%	0.0%	0.0%	0.7%	0.9%	4
	21) Coss of livestock	0.8%	0.0%	1.0%	0.7%	1.5%	16
	22) Animal attacks	0.5%	0.6%	0.0%	0.7%	0.6%	8
	23) Having to move/relocate	0.2%	1.2%	1.3%	0.7%	0.9%	10
	24) Influx of the new arrivals	0.2%	2.4%	1.8%	4.3%	10.1%	51
	25) Safety risks/discrimination	4.0%	3.1%	1.0%	2.2%	5.2%	58
	26) Other	1.0%	1.9%	0.5%	0.7%	4.3%	30
Problems accessing markets	Yes	8.9%	4.1%	7.4%	9.8%	6.5%	159

Section 10: ASSISTANCE

		New Arrivals since 25 Aug 2017		Arrivals Oct 2016-Aug 2017		Unregistered Protracted Rohingya population		Registered Protracted Refugees		Bangladeshi host community		TOTAL
		Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Column N %	Mean	Count
Food Assistance	Yes	97.5%		90.1%		66.1%		100.0%		9.5%		1512
1) Food for learning (school snacks meals)		8.2%		5.3%		5.7%		17.9%		0.9%		143
2) Food cash for work , food cash for training		14.1%		12.2%		8.5%		12.0%		0.9%		206
3) Supplementary feeding		7.8%		10.4%		10.3%		10.7%		.2%		148
4) Food rations		84.5%		74.3%		42.5%		78.6%		1.9%		1227
5) Food voucher		14.9%		10.3%		11.1%		29.9%		0.0%		261
6) High energy biscuits		20.0%		17.2%		24.3%		35.0%		5.8%		393
7) Hot meals (khicuri)		5.1%		4.7%		1.8%		0.9%		0.9%		71
1) Government army		83.1%		68.6%		38.7%		43.2%		2.3%		1121
2) UN agency/NGOs		88.8%		77.9%		57.3%		96.6%		7.2%		1373
3) Religious body		5.2%		5.1%		3.5%		6.0%		0.5%		80
4) Relative(s)/friend(s)		9.7%		16.5%		16.2%		27.4%		3.5%		238
Time to walk to distribution point			31		29		26		27		16	2046
Share food provided		4.1%		13.0%		5.9%		8.5%		0.2%		99
	1) New arrivals (Since October 2016)	70.5%		63.6%		59.3%		55.0%		100.0%		59
	2) Other displaced	25.3%		24.1%		34.5%		35.0%		0.0%		29
With whom share food	3) Non-displaced	4.2%		12.3%		6.2%		10.0%		0.0%		11
	1) Yes, some	9.9%		11.6%		5.4%		11.1%		0.5%		174
Assistance sold or exchanged	2) Yes, all	1.3%		0.5%		0.4%		0.9%		0.0%		10
	1) Male members	26.8%		26.2%		24.2%		17.5%		25.5%		490
	2) Female members	58.8%		63.7%		59.8%		70.5%		63.4%		1294
Who normally decides how to utilize food in the family	3) Jointly (both male and female members)	14.4%		10.1%		16.0%		12.0%		11.1%		261
	1) Male members	59.7%		53.1%		54.6%		47.9%		57.4%		1110
	2) Female members	26.6%		38.0%		29.7%		34.2%		31.0%		665
Who normally decides how to utilize cash in the family	3) Jointly (both male and female members)	13.7%		9.0%		15.6%		17.9%		11.6%		270
	1) Food rations	44.3%		52.8%		58.3%		59.0%		39.6%		957
	2) Voucher	7.5%		4.9%		8.4%		6.4%		6.2%		140
	3) Cash	29.8%		28.3%		19.8%		23.5%		44.8%		620
Preferred modality of assistance	4) Mixed	18.4%		14.1%		13.4%		11.1%		9.4%		306
Benefit from nutrition intervention		12.9%		26.5%		42.7%		26.9%		1.2%		344
Nut product: 1) Suji pusti and oil (WSB+ and oil)		3.8%		6.8%		13.5%		12.0%		0.7%		113
Nut product: 2) Suji pusti (WSB++) for women (prevention)		2.2%		2.7%		7.0%		7.3%		0.2%		62
Nut product: 3) Suji pusti (WSB++) for children (treatment)		7.3%		17.0%		23.2%		9.0%		0.5%		176
Nut product: 4) Plumpy nut (RUTF)		1.3%		2.1%		1.8%		0.4%		0.0%		22
Children screened	Yes	12.0%		24.8%		34.5%		17.8%		1.3%		256
	1) Green	10.6%		28.5%		26.6%		30.8%		40.0%		60
	2) Yellow	22.1%		28.8%		28.2%		15.4%		0.0%		57
	3) Red	27.6%		21.3%		18.0%		23.1%		20.0%		57
MUAC colour	4) Don't know	39.7%		21.3%		27.2%		30.8%		40.0%		82
	0) No, only used for intended group	90.4%		71.5%		78.1%		76.3%		100.0%		193
	1) Yes, with other household members	9.6%		25.9%		20.7%		23.7%		0.0%		45
NUT rations shared	2) Yes, with other people outside this household	0.0%		2.6%		1.2%		0.0%		0.0%		2
Non-food assistance in the past 3 months	Yes	79.6%		67.3%		52.1%		69.9%		12.7%		1217
	1) Money allowances	37.8%		14.2%		4.6%		6.0%		3.2%		418
	2) Education child friendly space services	9.7%		12.7%		7.0%		20.9%		.2%		184
	3) Medical services	57.1%		47.0%		38.8%		45.7%		2.8%		842
	4) Treatment of severe malnutrition	7.8%		6.7%		8.7%		7.3%		1.2%		124
	5) Hygiene kit	32.0%		31.1%		19.8%		32.5%		.2%		494
	6) Dignity kit or other clothes	9.9%		10.5%		.4%		2.6%		0.0%		137
Type of non-food assistance received	7) Shelter	19.0%		12.9%		6.8%		15.4%		.2%		263
	8) WASH (including hygiene)	41.1%		26.8%		12.2%		40.6%		2.1%		555
	9) Firewood	6.9%		3.1%		3.7%		50.0%		.2%		223
	mats, cooking utensils etc.)	61.6%		41.5%		23.9%		29.5%		4.9%		810
	11) Livelihoods assistance (agriculture; livestock; fishing; etc.)	1.7%		0.5%		0.7%		3.0%		0.5%		28
	12) Counselling	0.6%		1.1%		0.0%		0.0%		0.0%		6
	13) Other	1.0%		0.0%		0.0%		0.4%		0.0%		22

Section 11: PROTECTION

		New Arrivals since 25 Aug 2017	Arrivals Oct 2016-Aug 2017	Unregistered Protracted Rohingya population	Registered Protracted Refugees	Bangladeshi host community	TOTAL
		Column N %	Column N %	Column N %	Column N %	Column N %	Count
Heard of others affected by any kind of insecurity over the last 3 months		16.7%	26.2%	24.4%	17.5%	18.8%	385
Harassment		6.1%	5.7%	2.9%	5.1%	5.8%	106
Discrimination		4.0%	3.1%	3.7%	1.3%	1.9%	56
Theft / robbery		6.4%	9.0%	8.9%	4.7%	9.7%	150
Being approached by human smugglers		2.6%	3.7%	4.3%	2.6%	4.6%	59
Being approached by drug traffickers		1.0%	2.1%	1.5%	1.7%	1.2%	27
Physical violence / abuse		4.7%	3.7%	4.1%	2.6%	2.1%	69
Abduction		2.7%	3.1%	2.0%	4.3%	1.2%	43
Limitations on movement		6.7%	9.5%	8.5%	7.3%	2.1%	122
House, land property destruction		0.9%	1.1%	1.1%	0.0%	0.5%	13
Lost child (more than 1 day)		1.4%	3.1%	3.7%	0.9%	0.7%	32
General unsafe feeling		2.9%	2.1%	1.5%	2.6%	3.5%	51
Tensions displaced - host community		1.7%	1.5%	2.0%	1.7%	2.3%	37
Misuse of food or nutrition assistance		0.8%	1.0%	1.7%	0.4%	0.5%	14
Other		0.1%	1.1%	0.4%	0.0%	0.2%	5
Were you ever asked for money or other favours in return for food or any non-food assistance		5.3%	3.1%	2.6%	3.8%	3.0%	79
By who	1) Community leader	9.4%	100.0%	42.9%	50.0%	76.9%	25
	2) Military	0.1%	0.0%	14.3%	12.5%	7.7%	4
	3) UN/NGOs	64.8%	0.0%	42.9%	12.5%	7.7%	31
	4) Religious leader	16.4%	0.0%	0.0%	0.0%	0.0%	5
	5) Other	9.3%	0.0%	0.0%	25.0%	7.7%	7
Most affected protection	1) Adult females (18+)	28.1%	30.6%	31.4%	34.2%	11.5%	85
	2) Female (<18)	14.5%	9.9%	4.7%	26.3%	12.8%	46
	3) All females	14.4%	5.6%	3.1%	5.3%	9.0%	29
	4) Adults males (18+)	22.9%	13.7%	17.1%	10.5%	19.2%	76
	5) Male (<18)	5.6%	15.5%	13.3%	15.8%	15.4%	42
	6) All males	13.8%	3.8%	4.7%	5.3%	5.1%	28
	7) All	51.0%	54.2%	49.1%	52.6%	64.1%	206

Section 12: MOBILE MONITORING

		New Arrivals since 25 Aug 2017	Arrivals Oct 2016- Aug 2017	Unregistered Protracted Rohingya population	Registered Protracted Refugees	Bangladeshi host community	TOTAL
		Column N %	Column N %	Column N %	Column N %	Column N %	Count
Functioning mobile phone number	Yes	45.8%	51.9%	59.7%	72.6%	82.6%	1169
Why not	1) Lack of money	82.6%	79.2%	76.4%	81.2%	73.3%	698
	2) Phone was stolen	0.8%	2.2%	1.8%	3.1%	2.7%	13
	3) Phone is not functioning	6.9%	1.1%	7.8%	3.1%	8.0%	43
	4) No mobile connectivity	0.5%	1.1%	0.0%	0.0%	1.3%	5
	5) No ability to recharge battery	0.4%	0.0%	0.0%	1.6%	0.0%	2
	6) Do not have photo Identification to buy	1.1%	9.7%	4.1%	3.1%	0.0%	28
	7) Other	2.7%	1.1%	4.2%	1.6%	1.3%	19
	8) No need	4.8%	5.6%	5.6%	6.3%	13.3%	69
Mobile connectivity current place of living	Yes	69.0%	74.7%	75.8%	83.3%	85.6%	1551
Able to recharge mobile	Yes	78.2%	84.5%	80.8%	87.0%	83.1%	935

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