Refugee influx Emergency

Vulnerability Assessment (REVA 4)

Technical Report

April 2021
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List of abbreviations
BRAC Bangladesh Rural Advancement Committee
ECMEN economic capacity to meet essential needs
FCS food consumption score
HEB high energy biscuits
IOM International Organization for Migration
LFP labour force participation
LPG liquid petroleum gas
MDDI multidimensional deprivation index
MEB minimum expenditure basket
NGO non-governmental organization
REVA refugee influx emergency vulnerability assessment
RIC Resource Integration Centre
SMEB survival minimum expenditure basket
UNHCR United Nations High Commissioner for Refugees
VAM WFP Vulnerability and Mapping Unit
WFP World Food Programme
Acknowledgements

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Much appreciation to the Bangladesh host community and the Rohingya refugee households for opening up to the interviews and providing information on their welfare. The efforts of all the field enumerators and supervisors to conduct face-to-face interviews while complying with health and safety guidelines related to the COVID-19 pandemic is also really appreciated.

The REVA report was prepared by Afsana Iffat Khan, Mahathir Sarker, Geophrey Sikei and Susana Moreno (VAM, Cox’s Bazar).
Executive summary

Since November 2017, WFP and the Food Security Sector have been conducting the Refugee influx Emergency Vulnerability Assessment (REVA) annually. The REVA aims to monitor food security situation and vulnerability levels of the Rohingya population living in the camps in Ukhiya and Teknaf subdistricts of Cox’s Bazar district and the adjacent host community potentially affected. Three years after the influx, the COVID-19 pandemic struck resulting in a double-layered crisis on top of the refugee crisis. The pandemic hit hard the local economy and forced significant adjustments in the humanitarian response. REVA-4 captures the cumulative effects of these two crises.

The 4th round of REVA was conducted in November - December 2020 and, constitutes a panel survey of 2019 REVA sample, with a total of 2415 household face to face interviews. The sample is representative for three population strata: Registered Rohingya, unregistered Rohingya and host community residing adjacent to the camps in Ukhiya and Teknaf subdistricts.

Levels of vulnerability: Overall vulnerability has increased compared to 2019 and, practically, all Rohingya population (841,841)\(^1\) and half of the host community is considered moderate to highly vulnerable. Among Rohingya, 86 percent of households are highly vulnerable (749,297)\(^2\), 16 percent more than in 2019. In the host community, households that are moderate to highly vulnerable increased from 41 percent in 2019 to 51 percent in 2020.

Food consumption has also deteriorated in both communities and almost half of Rohingya and one third of host community households had inadequate food consumption, compared to 42 and 21 percent in 2019, respectively.

Despite assistance, 49 percent of Rohingya and 27 percent of host community households are not able to afford their basic needs (consuming below the minimum expenditure basket-MEB). If assistance were removed, 96 percent of Rohingya and one third of host community households would not be able to cover the MEB. Economic vulnerability has also worsened compared to 2019, especially in host community that shows a 9 percent increase.

One third of host community and 62 percent of Rohingya households engage in crisis or emergency livelihood coping strategies to cover food and non-food needs, compromising their future productivity and coping capacity. Households incurring debts have increased in the host community from 41 percent in 2019 to 53 percent.

Characteristics of the most vulnerable: Non-registered refugees depict high vulnerability relative to registered refugees and host community, with the latter showing comparatively lower levels of overall vulnerability.

Among Rohingya, vulnerability is significantly higher in households with any of the following characteristics: high dependency ratio, with children under five years old, having members with disabilities or chronically ill, in households where the head has not completed primary education, households with no active working member, with no male of working age in family, as well as in households with more than 5 members. No differences were found by gender of household head.

In the host community, higher levels of vulnerability were found in household headed by females, in household heads with no primary education completed, in households with high dependency ratio, with more than 5 children, with high crowding index, without any active working member and in those with female breadwinners.


\(^2\) Non-registered refugees: 727,532 + registered refugees: 21,765.
Why are they vulnerable?

**Rohingya households:** Lack of adequate food meeting their preference drives them into engaging in negative coping strategies like sell of assistance and incurring debts. There is limited access of preferred foods from the local markets with their access to food mainly limited to the food basket provided by WFP, which does not cover all their needs or preference.

_Lack of livelihood opportunities:_ restricted access to livelihood opportunities continue to pose a threat to the camp pollution, as the limited self-reliance activities by the humanitarian actors remain inadequate to meet their basic needs. The reduction of humanitarian operations to align with COVID-19 preventive measures limited even more the self-reliance opportunities in the camps. Livelihood constitutes the second main concern for the Rohingya, and for what they showed the highest levels of dissatisfaction. Income deprivation was also very high among refugees.

**Limited coping capacity:** As displaced population, savings and number and type of assets they could carry on during their journey were limited and likely mostly depleted across the first 3 years of the emergency. Their social network and options to cope with an unforeseen shock are also reduced, confirmed by the 36 percent of households that reported no means to cope with an economic emergency compared to 8 percent in the host community. Borrowing money or buying food on credit are the most common livelihood strategies adopted to cope with a lack of food or money.

**Health:** Social distancing and isolation to prevent COVID-19 spread have not been easy to follow in the camps, where population density reaches 60,000 persons per km², one and a half times more than the world’s most densely populated city of Manila³. High risk of COVID-19 spread within the camps remain. Morbidity rates remain high, reported by 60 percent (same as 2019) of households who had at least a family member being sick 30 days prior to the survey. Households’ health expenditure share increased, and health was the main reason 36 percent of households got into debt, compared to 28 percent in 2019.

**WASH:** Although most households had access to improved sources of drinking water and improved latrines, each latrine is shared by 11 households on average and 50 percent of households still reported difficulties to access water and 60 percent faced challenges with sanitations services, despite showing an improvement compared to 2019. Distance to water and sanitation facilities, queuing time, overcrowding, insufficient number and functionality of water points or cleanliness of latrines remained major problems households contend with.

**Host community:** COVID-19 preventive measures, including the 2-month lockdown, resulted in a slowdown in economic activity, with daily laborers being the most affected, yet they constitute majority of the working population within the host community economy. These disruptions substantially affected households’ ability to access food from markets due to eroded purchasing power. Resultantly, economic vulnerability levels in the host community went up in tandem with trends observed in other parts of the country. Reduction in labour activity and income also altered priority needs within the host community compared to 2019, with food considered the main priority in 2020 followed by livelihoods and water.

**Health:** Health is the main reason why host community households (38 percent) got into debts, an increase from 21 percent in 2019, when food was relatively more important. Health is also the service for which host community reported the lowest levels of satisfaction. With 70 percent of households with at least one-member sick in the 30 days prior the survey, half of households faced difficulties accessing health care mainly related with cost of treatment (36%), followed by distance to the facility (11%). On a multidimensional scale, health was also the dimension that host community households showed highest deprivation on, followed by income.

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³ Aid & International Development Forum (AIDF) (aidforum.org) 2018
WASH: Households drink water from improved sources directly without any sort of treatment and 30 percent of households use kutcha latrines or open field as sanitation facility. Water and sanitation are the services with the highest percentage of high dissatisfaction reported by households; one forth households faced sanitation problems and 40 percent reported difficulties to access water. Distance to water points, insufficient number of facilities or malfunction were the problems most mentioned.

**Rohingya and host community:** Both communities are impacted by education level of household members. Households heads with completed primary education show significantly lower levels of vulnerability and are more likely to have regular incoming sources and participation in self-reliance activities. Three-quarter of Rohingya household heads and 57 percent in the host community never went to school. Considering only female household heads, the percentage of non-school attendance rose to 88 percent and 77 percent, for refugee and host households respectively. The magnitude of the impact of COVID-19 on education can only be evaluated once schools reopen, but it was clear that most school going kids were not attending school due to COVID-19 restriction. Besides, other socio-cultural barriers and economic reasons like child labour were cited as reasons for non-attendance of schools even if they were to be opened.

**Recommendations**

**Rohingya**
- Maintain at least current levels of assistance and adjust according to needs to avoid further deterioration of key vulnerability indicators.
- Efforts to optimize the food assistance provided should continue by considering household food preferences in the food basket and food availability inside camps. Increase number of fresh food corners, facilitate the e-voucher redemption in different shops and multiple times, strengthen awareness and sensitization of adequate food and feeding practices, as well as supporting households to cover essential non-food needs would contribute to reduce the sale of food assistance and other negative coping mechanisms.
- Increased coverage and diversification of self-reliance activities. Special focus on skills building especially for women and young members without experience and considering household specific needs when designing opportunities.

**Host community**
- Scale up livelihood activities with a focus on resilience and skill building for participants.
- Strengthening market linkages between local smallholder farmers and food assistance aid ecosystem, like in the case of farmers markets and fresh food corners, to boost livelihood opportunities in the host community and better food access in the camps while improving social cohesion.
- Sensitization required in access to available microfinance and formal credit channels.

**Rohingya and host community**
- Promote school attendance through awareness, sensitization and school feeding programmes. Special attention should be given to Rohingya girls.
- Improve access to water and sanitation by increasing the number of water points and improved sanitation facilities while ensuring their maintenance in function and conditions as well as population awareness of best hygiene practices. Improved access to water and sanitation constitute potential areas for improvement through SRA.
- Strengthen health prevention and coverage while improving access to treatments.
- Contribute to reduce the gender gap in participation in self-reliance activities, through awareness, sensitization, skills building and diversification of activities.
1. Introduction

1.1 Context

Since the 1970s, the district of Cox’s Bazar has seen intermittent influxes of forcibly displaced Myanmar nationals, driven by waves of persecution in their home country. The largest influx occurred in August 2017, when over 726,000 people – including more than 400,000 children – arrived in the sub-districts of Ukhiya and Teknaf. As of February 2021, about 877,710 Rohingya currently live in these two subdistricts⁴, outnumbering the Bangladeshi population by a ratio of 3:1 in the Ukhiya-Teknaf region. These figures include 35,519 Rohingyas from Myanmar who were previously registered in Kutupalong or Nayapara refugee camps. Unregistered Rohingyas from the most recent influx are concentrated in 32 camps⁵ in the two sub-districts, forming a pseudo-economy embedded within the pre-existing local economy that is almost entirely sustained by external humanitarian assistance.

Three years into a crisis that had begun to assume a protracted and more stable nature, the COVID-19 pandemic occurred. In Cox’s Bazar, the pandemic triggered a dual humanitarian crisis in which lockdowns disrupted regular income and livelihood opportunities in host and Rohingya communities. Following 8 April 2020 government directive, aid operations not deemed critical were suspended or reduced, while critical life-saving assistance was adapted to continue within the regulations introduced to curb the spread of COVID-19. The approval to resume essential self-reliance activities was communicated on 12 July 2020.

1.2 COVID-19 crisis

The first official case of COVID-19 in Cox’s Bazar was detected on 24 March 2020, and two days later, the Government of Bangladesh established a country-wide lockdown to restrict communal transmission causing substantial disruption to the regular income and livelihood opportunities of most households. The camp economy faced similar disruptions in terms of economic and market access. By the 8th of April, the RRRC adopted the critical service directive in the camps and humanitarian activities were reduced to critical operations only. The WFP e-voucher food assistance programme continued uninterrupted, but commodity vouchers were used in place of value vouchers to ensure minimal footprint and contact in public spaces⁶. Despite the challenges related to the pandemic, the transition of beneficiaries from in-kind to e-voucher food assistance continued throughout 2020, and by February 2021, 99 percent of the Rohingya population were receiving assistance through e-vouchers.

Health, public information and awareness-raising programmes were scaled up in response to COVID-19. Farmers’ market initiatives had to be temporarily discontinued along with other non-critical operations. Learning centres and most self-reliance activities in camps and livelihood activities in host communities – which were critical in supporting households’ consumption needs – were all suspended, deepening household vulnerability. As humanitarian operations have been crucial to Rohingya and host communities during the crisis, the contraction in activities affected both populations albeit to varying degrees. The WFP food assistance programme had begun to move beneficiaries back to value vouchers from December 2020; at the time of this assessment, almost all households were still receiving fixed food baskets through commodity vouchers introduced during the lockdowns.

As the Rohingya crisis continues, WFP and other humanitarian actors have been refocusing efforts to ensure the resilience of aid-delivery processes and to better address aspects related to self-reliance in order to build the economic resilience of crisis-affected populations to market and external macroeconomic shocks.

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⁴ UNHCR fact sheet March 2021: https://reliefweb.int/sites/reliefweb.int/files/resources/GoB%20UNHCR%20Population%20Factsheet%20202010301_v7.pdf
⁵ 30 non-registered camps and the 2 registered camps of Kutupalong and Nayapara.
⁶ Differences between e-voucher and commodity voucher detailed in the annex.
1.3 Purpose
In November and December 2020, WFP in collaboration with partner organizations collected data for the fourth round of the Refugee influx emergency vulnerability assessment (REVA-4). Besides the core objectives of reporting on the current food security, nutrition and socio-economic vulnerabilities of Rohingya and host community households in Ukhiya and Teknaf, the REVA also attempted to gauge the impact of COVID-19 on these populations. The exercise was led by the WFP Vulnerability Analysis and Mapping (VAM) team and the Food Security Sector in Cox’s Bazar. This report highlights the main findings of the assessment and presents recommendations for improving the humanitarian response to the Rohingya crisis.

1.4 Study objectives
The main aim of the study is to monitor the food security and vulnerability situation of the Rohingya population in the camps of Cox’s Bazar and the host community adjacent to the camps in Ukhiya and Teknaf.

Specifically, the assessment has the following objectives:

- Assess the severity of food insecurity and the status of livelihoods and other essential needs of Rohingyas and host communities adjacent to the camps, including trends since the 2017 influx;
- Profile the most vulnerable groups, tracking movements in and out of vulnerability for panel households and ascertaining the determinants of increased/decreased vulnerability;
- Understand the lasting impacts of COVID-19 lockdowns, regulations and assistance modality changes on camp populations and nearby host communities; and
- Provide recommendations for addressing priority needs, building resilience and improving targeting.

2. Methodology
2.1 Sampling design
To construct a panel database, the households interviewed for REVA-4 were the same as those surveyed for the third round of REVA (REVA-3) in 2019. The populations of concern for REVA-3 were the Rohingya living in camps and the Bangladeshi households residing in Ukhiya and Teknaf sub-districts within a one-hour walking distance of the camps, considered as the host community. The original REVA-3 sample was selected following a two-stage cluster method proportional to population size for each of the five strata, which were defined according to nationality, place of residence (for the host community), time of arrival at the camps (for the Rohingya population) and registration status.\(^7\)

The required information was drawn from the UNHCR database of Rohingya registration by year of arrival and the International Organization for Migration (IOM) database, which tracks the movement of people within the camps. Further details of sampling methodology can be found in REVA-3 (WFP, 2020).\(^8\)

For the 2020 assessment, REVA-3 identification information was cross-matched with the most recent available data in the UNHCR registry and WFP’s SCOPE databases to update household location and understand the scale of population movement within the sample. The exercise reached 89 percent of the REVA-3 sample, generating a final sample size of 2,415 households (see Table 1). The sample size is statistically representative at each stratum with a 95 percent confidence level, a design effect of 1.5 and a margin of error of 5 percent.\(^9\) The five REVA-3 strata have been merged into three for

\(^7\) The five strata are registered Rohingya who arrived before October 2016; unregistered Rohingya who arrived before October 2016; newly arrived Rohingya after August 2017; the host community in Ukhiya; and the host community in Teknaf.


\(^9\) The sample size of the registered Rohingya and host community strata are representative with a margin of error of 6 percent.
REFUGEES INFLUX EMERGENCY VULNERABILITY ASSESSMENT – REVA 2020

**Refugee influx Emergency Vulnerability Assessment** – REVA 2020

The unregistered Rohingya stratum largely consists of those who arrived after August 2017 while the officially registered Rohingya stratum includes those residing in Kutupalong and Nayapara refugee camps.

<table>
<thead>
<tr>
<th>Stratum</th>
<th>Targeted sample (REVA-3 achieved sample)</th>
<th>Achieved Sample</th>
<th>Ratio</th>
<th>Attrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unregistered Rohingya</td>
<td>1,535</td>
<td>1,393</td>
<td>0.58</td>
<td>8 percent</td>
</tr>
<tr>
<td>Registered Rohingya</td>
<td>672</td>
<td>569</td>
<td>0.23</td>
<td>15 percent</td>
</tr>
<tr>
<td>Host communities</td>
<td>495</td>
<td>453</td>
<td>0.19</td>
<td>8 percent</td>
</tr>
<tr>
<td>Total</td>
<td>2,702</td>
<td>2,415</td>
<td>1</td>
<td>11 percent</td>
</tr>
</tbody>
</table>

Table 1: Targeted and achieved sample in REVA-4

**2.2 Data collection**

The WFP VAM team recruited and trained 35 enumerators, who were divided into six groups to cover different geographic catchments (see Annex for the updated catchment map). Each team comprised five enumerators and one supervisor. Data collection in the field was supported by UNHCR, World Vision, Save the Children, BRAC, RIC and the Cox’s Bazar Food Security Sector through the provision of field volunteers who assisted the enumerators in identifying sample households in the camps. REVA-4 field data collection was conducted from 7 November to 3 December 2020.

The study was conducted using an extensive quantitative household survey that measured key essential needs indicators, supplemented with qualitative findings gathered through focus group discussions and key informant interviews. The focus group discussions were designed to enhance understanding of trends seen in the survey data; 13 focus group discussions were conducted in the Rohingya camps and host communities to elicit contextual information used to triangulate some of the quantitative data.

**2.3 Limitations**

- The assessment was conducted within a far more restrictive environment than previous rounds of REVA. The COVID-19 pandemic posed a considerable threat in Rohingya camps simply because of the population density and high levels of public-facility sharing. Consequently, the field data collection team sought to complete surveys within the shortest time possible, keeping contact with households and communities to a minimum. This constrained the amount of information that could be collected, and the survey was shortened to collect only indicators deemed essential.
- Panel respondent tracking also had to be limited to households who could be confirmed and located using community partner databases in the field; one survey attempt per household was made, with no revisits.
- At the time of the survey, most of the Rohingya caseload was receiving assistance through commodity vouchers (a predefined set of items in the food basket). This limited households’ ability or freedom to choose food items to buy or redeem from the retail outlets. As such, this sample population was deemed unsuitable for recomputing the minimum expenditure basket (MEB).
- Just like any primary data collection exercise, responses are based on self-reported information provided by household members and therefore an inherent bias cannot be ruled out. To mitigate this potential bias, households were informed prior the interview of the confidentiality of the information collected.
3. Study findings

3.1 Demographics

Around 8 out of 10 Rohingya households have a male household head compared with 9 out of 10 Bangladeshi households (see Table 2). Most Rohingya and host community households are composed of between four and seven members. Households led by women in both communities tend to have fewer members than those led by men.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Rohingya</th>
<th>Host communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender of household head</td>
<td>Female</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>79%</td>
</tr>
<tr>
<td>Household size</td>
<td></td>
<td>5.1</td>
</tr>
<tr>
<td>Household size category</td>
<td>1–3 members</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>4–7 members</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>8+ members</td>
<td>12%</td>
</tr>
<tr>
<td>Presence of person(s) with disabilities</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>Household with unaccompanied minors</td>
<td>0.01%</td>
<td>-</td>
</tr>
<tr>
<td>At least 1 household member is chronically ill</td>
<td>12%</td>
<td>19%</td>
</tr>
<tr>
<td>Single mother</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Presence of children under 5</td>
<td>55%</td>
<td>44%</td>
</tr>
<tr>
<td>Households with elderly person(s) (60+ years)</td>
<td>16%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 2: Demographic characteristics of Rohingya and host community households

The population pyramid reveals a very young Rohingya population and a host community population whose age distribution is skewed in favour of working-age people (Figure 1). A cumulative 57 percent of the host community population is aged between 16–60 years. In contrast, 48 percent of the Rohingya population falls within this age group, which implies that the majority of the population are children.

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10 At the population level, 3 percent of Rohingya and 4 percent of host community members report facing difficulties. Note that the REVA asks about difficulties in performing day-to-day activities; it does not ask about disabilities. This is a new approach of asking questions related to disability, using the Washington Group Short Set of Questions (WGQ-SS).
3.2 Overall vulnerability

Levels of vulnerability

Overall vulnerability within the populations is determined through a combination of three key indicators: food consumption score (FCS), economic capacity to meet essential needs (ECMEN) and livelihood coping mechanisms (LCS).

Overall vulnerability in the camps continues its increasing trend since 2017: from 80 percent of moderately and highly vulnerable households found in 2017, to 88 percent in 2018, 94 percent in 2019 and 96 percent in 2020. In 2020, Rohingya households experienced the largest increase in high vulnerability since 2017 (16 percent), reaching the highest percentage since the influx. The high vulnerability levels among Rohingya reflects the limited economic opportunities and work restrictions, further compounded by the COVID-19 crisis. The lockdown and government directive to curtail humanitarian services to critical only, resulted in the suspension or reduction of activities that were crucial in supporting refugees’ consumption needs, like self-reliance activities.

In the host community, levels of vulnerability have also gone up and experienced the largest increase since 2017, with 51 percent of the population assessed as moderately or highly vulnerable, up from 41 percent in 2019\(^1\). This increase can be attributed to the economic contractions experienced during COVID-19 lockdowns, which led to a decline in economic activity across most sectors and more so in the informal sector, which absorbs most of the labour force. The reduction of households’ income combined with increased food prices diminished household’s purchasing power and capacity to meet essential needs. Whilst the survey was done at a time when the economy was on a path towards recovery, the residual impacts of the contraction on the economy continued to be felt, with many poor households still struggling to reintegrate into the economy.

![Figure 2: Overall vulnerability levels in 2019 and 2020 within the Rohingya and host community](image)

Who are the most vulnerable?

The determinants of household vulnerability\(^2\) continue to follow patterns observed in REVA-3. Consistent with the findings of numerous empirical studies in Bangladesh, host community households led by women are generally among the poorest and most vulnerable. Their economic conditions vary considerably depending on factors such as marital status, the social context of female leadership and access to productive resources, and most importantly, their ability to go out and generate income (Table 3: Determinants of vulnerability in Rohingya and host communities). Other observable

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\(^1\) Similar patterns of increasing poverty levels were also recorded nationally induced by the lockdowns and livelihood disruptions.

\(^2\) Determinants of vulnerability were identified through a logistic regression analysis.
characteristics of vulnerability include households with more than five children, those with high dependency ratios and households whose main breadwinner is a woman. The latter mainly reflects the concentrations of women in fragile low-income jobs within the local economy as domestic help, tailors, street hawkers and farming laborers. Participation in social safety net programmes would somewhat mitigate this effect.

In the Rohingya camps, high vulnerability is exhibited among households with at least one member with a disability or a chronic illness; households with children under 5; those with adolescent girls; and those with over five members. Households with no working age males, without an active income-earning member and those involved in irregular earnings also present high vulnerability. Focus group discussions listed the following households as most vulnerable, in descending order: households with elderly members, those led by women, those led by children and those with a person(s) with disability. The persistent lack of economic opportunities drives Rohingya households into high vulnerability at a significantly faster rate than other socio-demographic attributes. The likelihood of Rohingya households having high vulnerability declines over time in the camps: those who are newly arrived have nearly double the vulnerability levels of those who have spent longer in the camps, which could indicate that better integration of the registered Rohingyas with the host economy mitigates the drivers of vulnerability.

<table>
<thead>
<tr>
<th>Household characteristics</th>
<th>Rohingya</th>
<th>Host community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Households led by women</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Households with member(s) with difficulties</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Households with children under 5</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Households with between 1 and 5 children</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Households with more than 5 children</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Households with adolescent girls</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Households with children aged 5–14 years</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Households with 5+ members</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>High dependency ratio</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>High crowding index</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Presence of chronically ill member</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Economic factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absence of an active working member</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Absence of male member of working age</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Female breadwinner(^{14})</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Table 3: Determinants of vulnerability in Rohingya and host communities

Vulnerability transitions: movements in and out of vulnerability

The subdistricts of Ukhiya and Teknaf have been exposed to a chain of recent crises. The assessment therefore examined how the welfare status of specific households fared during this period. While overall year-on-year vulnerability levels give a picture of the broader population and immediate needs, the transitions of households in and out of vulnerability provide an indication of resilience and a measure of how successful planned interventions have been.

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\(^{13}\) Households with a female breadwinner may or may not have a female household head. Female breadwinner households are those households who reported having a female member as their main income earner, regardless of whether they were the household head or not.

\(^{14}\) Women tend to engage in low-return activities and those perceived as non-essential such as tailoring, rearing hens/ducks or gardening. Most of their income comes from remittances or help from relatives.
Overall, two thirds of Rohingya households retained their previous vulnerability levels; however, 24 percent became more vulnerable between 2019 and 2020. There was relatively less stability in the host community, where half of the households retained their previous levels, 18 percent saw improvement and 30 percent entered the highest vulnerability category (Figure 3).

Sixty-three percent of Rohingya households remained highly vulnerable from 2019 to 2020 while 23 percent fell into the highest vulnerability category from being assessed as moderately or less vulnerable in 2019 (Table 4).

One out of three host community households continued to be classed as less vulnerable, potentially indicating a high resilience to the recent market shocks. The largest movement is seen in 22 percent of the host population falling into the moderately vulnerable group from being assessed as less vulnerable in 2019. However, there were also some positive outcomes with 13 percent of the population transitioning to the less vulnerable category after being deemed moderately vulnerable in 2019 (Table 4).

Among host communities, the movements of households into lower levels of vulnerability significantly correlate with participation in the Vulnerable Group Development programme run by the Government of Bangladesh and assistance received from non-government programmes. Some of these programmes may be components of host community resilience building and livelihoods initiatives that have been scaled up recently as an extension of the humanitarian response in Cox’s Bazar.
3.3 Food consumption

A typical food plate

<table>
<thead>
<tr>
<th>CARBOHYDRATES (70%)</th>
<th>~70% of calories on a typical plate comes from rice, the main source of carbohydrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLANT PROTEINS (4%)</td>
<td>Lentils and chickpeas are the main sources of plant protein, but these are locally eaten as a thin soup (dal) supplying only 4% of calories</td>
</tr>
<tr>
<td>FAT (14%)</td>
<td>Derived from cooking oil used in curries</td>
</tr>
<tr>
<td>ANIMAL &amp; FISH PROTEINS (5–8%)</td>
<td>Mostly fresh or dry fish (being cheaper than meat), followed by eggs and meat</td>
</tr>
</tbody>
</table>

*Figure 4: A typical food plate based on expenditure patterns*

A typical food plate was constructed based on host community and Rohingya households’ food expenditure patterns converted into per capita caloric intakes in order to represent a typical meal (Figure 4). The total caloric intake may vary between the two populations but the proportion of different foods and food groups on the plate is quite similar. Carbohydrates make up around 70 percent of the food plate, with very limited consumption of plant and animal proteins. The per capita consumption of dry fish – which is provided as assistance and consumed in very small quantities, mainly to add flavour – prompted analysts to consider it as a condiment rather than a significant source of protein, contributing negligible caloric benefits.

Significant expenditure was reported for salt and spices, even though they have no caloric value. Rohingya households spend around BDT 65 per person per month on spices, compared with BDT 28 for host community households. The difference is driven by differing taste profiles between the populations and the tendency to use flavouring to compensate for the lack of variety of food available to them. So even though they do not add nutritional value, condiments have significant value in making the limited food available palatable, given local tastes and preferences.

**Food consumption score**

**Overall trends:** Food consumption outcomes have declined for host and Rohingya communities compared to 2019: for the Rohingya, the proportion of households with acceptable food consumption decreased from 58 percent in 2019 to 50 percent in 2020. For the host community, 67 percent of households had acceptable food consumption compared to 79 percent in 2019. The deterioration in food consumption is reflected in the increase in the share of households with borderline consumption, as the proportion of households with poor consumption continued to shrink from 4 percent in 2019 to 1 percent in 2020 (Figure 5). This increased share of unacceptable food consumption may be driven by economic and operational contractions caused by COVID-19 lockdowns, whose residual effects continued to be felt even after restrictions were lifted. For the Rohingya, the transition from value to commodity vouchers, low preference of some food items in the food basket (such as yellow split peas and loitta dry fish) and an inability to smooth out...
consumption until the next distribution cycle affected consumption outcomes. Related to the later, households reported lower consumption towards the end of the distribution cycle.

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Food consumption scores within different population segments: Registered Rohingya have better consumption outcomes than those unregistered (Figure 6). This could be attributed to the former being more settled, better connected and, consequently, having better access to opportunities in the local labour markets. There is no significant difference in the food consumption patterns of Rohingya households led by men and those led by women, which could reflect the universal coverage of food assistance. Among the host communities, however, households led by men reported markedly better consumption outcomes than those led by women, potentially the result of better access to economic opportunities in the local labour markets.

Dietary diversity

Household dietary diversity scores among Rohingya remain similar to 2019 levels (non-registered: 5.1; registered: 5.3) but decreased in the host community from 5.4 to 5.1. Consumption frequency\textsuperscript{15} fell for both population groups, especially for pulses, sugar and vegetables. Animal protein consumption also decreased in the host community, which experienced a greater drop in consumption frequency compared to the Rohingya population. Despite changes, the dietary patterns exhibited by Rohingya and Bangladeshi households were like 2019 findings, with higher consumption frequency of

\textsuperscript{15} Consumption frequency is defined as the average number of days each food group is consumed at the household level in the seven days preceding the survey. Food groups considered: staples, pulses, meat/fish/eggs, dairy, vegetables, fruits, oil and sugar.
pulses among Rohingya households and more frequent consumption of vegetables, animal protein (meat/fish/eggs), fruit and dairy products in the host community (Figure 7). The source of animal protein also differs: among unregistered Rohingya it largely comes from eggs received as assistance, while for host community households and registered Rohingya, it is more diversified comprising mainly fish, eggs and meat. Dietary diversity shows significant negative correlation with the selling of assistance, the adoption of negative coping strategies and larger household sizes (>3).

**Micronutrient-rich food groups:** Consumption of food groups rich in protein, vitamin A and haem iron is lowest among unregistered Rohingya (Figure 8). Registered Rohingya have a better intake of vitamin A (mainly from vegetables) and protein (from plant and animal sources). About 23 percent of unregistered Rohingya households reported not consuming iron-rich foods at all in the seven days before the survey, compared to 8 percent of registered households. The consumption of iron-rich foods was lower in Rohingya households than in Bangladeshi households. Within the camps, fresh food corner beneficiaries were more likely to eat foods rich in vitamin A and protein more frequently in a given week than non-beneficiaries. Fresh food corner beneficiaries were also less likely to sell non-food assistance and were highly likely to divert some expenditure towards non-food items, which the non-beneficiaries were unable to do.

Access to any type of income increased the likelihood of households consuming micronutrients – especially protein and iron for the Rohingya population and iron for host communities. The correlation with income explains the differences observed between registered and unregistered households and between the Rohingya and host communities.

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16 The survey used the following vitamin A-rich food groups: dairy, organ meat, eggs, orange vegetables and fruits and green leafy vegetables. The protein-rich food groups were pulses, dairy, flesh meat, organ meat, fish and eggs. The haem iron-rich food groups were flesh meat, organ meat and fish.
3.4 Coping strategies

When faced with a crisis or shock, people tend to adopt various mechanisms in their day-to-day decision making and activities in order to cope with resource constraints. The coping indicators are measures of access to food and economic opportunities and the extent and nature of coping strategy adoption varies based on severity of the shock and pre-existing household vulnerabilities. Two kinds of coping indicators are considered when determining household vulnerability: consumption-based coping strategies and livelihood-based coping strategies. Trends in credit dependency also provide context to indications of how populations are coping.

**Food consumption-based coping**

Consistent with 2019 findings, 80 percent of Rohingya households and 40 percent of host community households were adopting consumption-based coping strategies to deal with food shortages in 2020. There was a 7 percent increase in the share of Rohingya households relying on less preferred foods, possibly a result of the commodity vouchers being used at the time of survey. Trends in the adoption of different consumption-based coping strategies in 2020 were similar to 2019. For host communities, food-based coping strategies were also being used but at a much lower scale than previous years (Figure 9).

**Livelihood-based coping strategies**

Nine out of ten Rohingya households and six out of ten Bangladeshi households reported adopting at least one livelihood-based coping strategy (LCS). For the host community, there was evidence of an increased use of stress coping strategies compared to 2019. In both populations, the high shares of stress coping were driven by more households buying food on credit, borrowing money to buy food and spending savings (Figure 10).

The majority of Rohingya continued to rely on crisis coping mechanisms, though the share fell by almost 10 percentage points compared to 2019 (Figure 10), as fewer households reported selling food assistance and relying on friends or relatives as their only source of food or income (Figure 11). In 2020, Rohingya households continued the transition to e-vouchers, beneficiaries of which have been shown to be less likely to sell assistance than in-kind beneficiaries, the e- voucher food assistance modality increased from about 54 percent in December 2019 (REVA 3) to 97 percent in November 2020 (REVA 4).

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17 Defined as strategies adopted by households that involve reducing household food consumption in order to deal with a lack of food or money to buy food.

18 Strategies that erode productive capacities over time and impact a household’s future ability to meet essential needs.

19 The REVA-4 data collection was conducted from 7 November to 3 December 2020. Although camp residents had begun to return to value vouchers in December, almost all households were still receiving the fixed food baskets provided under commodity vouchers that were introduced during the lockdowns.

20 See Annex for LCS classification and definitions.

21 Households under e-voucher food assistance modality increased from about 54 percent in December 2019 (REVA 3) to 97 percent in November 2020 (REVA 4).
vouchers allow beneficiaries more flexibility in the purchase of preferred food types and volumes, reducing the need to sell.

Similar to trends in other welfare indicators, the registered Rohingya fared better than unregistered Rohingya in terms of coping strategies, although seven out of ten households adopted some form of livelihood-based coping behaviour. Rohingya households with no active working members were highly likely to adopt livelihood-based coping strategies. Among households that have some income from work, traders and businessmen were less likely to adopt livelihood-based coping strategies than other earners, largely day labourers. In host communities, regular wage workers (monthly salaried, formal occupations) were found to be resorting significantly less to livelihood-based coping behaviour than those involved in irregular, seasonal or self-employed work.

Trends in the purchase of food on credit from shops correlate with reports on the duration of food rations: Rohingya households who reported that the food ration did not last were more likely to borrow money to buy food. Households with no active working member or with at least one child aged under 5 were also more likely to borrow.

Over 95 percent of Rohingya households adopt livelihood coping strategies in order to access food. Among the host community, access to food is slightly less cited as a reason (84 percent), while access to healthcare (8 percent) features more significantly than in camps.
Credit dependency: reasons and sources of credit

Credit dependency among Rohingya was found to persist at previously high levels. Among host communities, the share of the population who had contracted debt increased by almost 15 percentage points in 2020 (Figure 12). Unlike the year before when high credit dependency among the Rohingya population was largely driven by the unregistered group, this year both registered (56 percent) and unregistered Rohingya (66 percent) reported high debt contraction rates, apparently due to the widespread impacts of lockdowns on the local economy.

Both Rohingya and host community households contracted debts to meet food and health expenses, but those needs were more pronounced among the former. Nine out of ten Rohingya households reported having incurred debts for either food or health expenditure, with almost none of the households reporting debt contraction for productive expenses.

In comparison, 31 percent of host community households who had taken out credit cited more productive reasons such as financing a business (12 percent), expenditure on agricultural inputs (7 percent), construction/repair (3 percent) and education (2 percent). A comparison with 2019 highlighted that the increase in credit dependency in the host community may have been driven by debt contracted for health expenditure, and a small share for business financing (Figure 13). This could point towards the impacts of the pandemic.

Close to 90 percent of Rohingya households reported that their main source of credit was friends or relatives inside camps; 5 percent reported using credit provided by grocery shops in camps. Among the host community, a similar skew towards borrowing from friends or relatives was observed (79 percent). This indicates not only the existence of strong social capital, but also a high dependence on it during times of crisis.
Coping with a future emergency

In order to better understand their resilience to or ability to absorb unforeseen shocks, households were asked how they would cope with an unforeseen future emergency expense. Close to half of Rohingya and host community households said they would seek to borrow from friends or relatives. The other responses revealed the different means available to each population. Thirty-six percent of Rohingya households reported not having any means of coping with an emergency expense of BDT 10,000; only 8 percent of host community households reported the same (for a BDT 25,000 expense). Host community households also demonstrated higher self-sufficiency, because drawing from current earnings (34 percent) and own savings (23 percent) figured among their top five strategies (Figure 14).

Facing limited income-generating activities in camps, a third of the Rohingya population would not know how to cope with an emergency expense. It is crucial to build awareness of how the humanitarian response in camps can help mitigate the impacts of emergency expenses and/or provide support in managing them in order to ensure that this large share of the population does not turn to extreme coping, or even crime, when cornered by circumstance.

3.5 Expenditures and economic vulnerability

Expenditures on food and non-food consumption are prerequisites for measuring poverty and vulnerability and determining differences in consumption patterns. Table 5 presents aggregate expenditures per capita for two scenarios: actual cash purchase from the markets without assistance, and expenditure after factoring in the value of assistance. Under the first scenario, Rohingya households spend significantly less per month – BDT 735 per capita (USD 9) – than host community households, BDT 2378 per capita (USD 28). Including the imputed value of food assistance, aggregate expenditures for Rohingya households rise to BDT 1908/capita/month (USD 23), which demonstrates how critical humanitarian assistance is in supporting the consumption needs of Rohingya households. Unregistered Rohingya, most of whom arrived during the recent influx, continue to be the least well off in terms of consumption, followed by registered Rohingya; host community households are relatively better off.

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22 The emergency expense thresholds were set at BDT 10,000 for Rohingya households and BDT 25,000 for host community households to reflect the income levels and poverty lines for the two populations.
Overall expenditure patterns

Expenditure patterns across both populations remained comparable to previous years, with food taking a disproportionately large share of monthly expenditure. Excluding the estimated value of assistance, Rohingya households spend 64 percent of their monthly budget on food while host community households spend 65 percent.

Including the estimated value of assistance, the share of monthly budget on food increases to 77 percent for the Rohingya households, which exceeds the severe economic vulnerability threshold of 75 percent. This depicts a trend of increasing vulnerability within the camp population, in the absence of sustainable livelihood solutions. The promotion of farm and non-farm labour market participation remains an important strategy for improving the livelihoods and food security of the camp population.

The scale-up in the provision of liquid petroleum gas (LPG) to all Rohingya households has continued to drive down fuel expenditure, which represents an almost negligible share of the monthly budget (0.5 percent). Rohingya households continue to incur healthcare costs, mainly related to transportation to health facilities and over-the-counter purchase of medicine.

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In Rohingya communities, two thirds of households reported food expenditures of more than 75 percent of total expenditure. In host communities, the majority (40 percent) reported spending 65–75 percent of their total budget on food, which was also concerning. Only 8 percent of host community households and 1 percent of camp residents reported food expenditure of less than 50 percent.

**Food expenditure breakdown**

Cereals, mainly rice, continue to dominate the diets of both Rohingya and host community households (Figure 16), accounting for 41 percent of the value of the food budget of Rohingya households. Another 17 percent is spent on fish, reflecting the importance of this food item in their consumption basket, followed by vegetables at 10 percent, and meat/eggs at 8 percent.

WFP established farmers’ markets and fresh food corners to increase the routine purchase and consumption of fresh foods including vegetables and fish. Spices are another important element, accounting for about 5 percent of the monthly budget for both Rohingya and host community households. Expenditure on dairy products was virtually nil.

**Trends in expenditure**

As in many contexts, the poor consistently spend less on non-food items. Expenditure trends over time portray a pattern of decreasing expenses on non-food items for the Rohingya population (Figure 18), revealing growing levels of poverty and vulnerability in the camps. Rohingya households’ expenditure on food has largely remained constant over time, unsurprisingly so as the bulk of their food needs continue to be met by assistance. WFP has adjusted the food transfer value over time in response to food inflationary pressure, which has helped cushion aid-dependant households against price spikes and maintain a relatively stable level of consumption.
In the host community, expenditure on food items has gradually risen, reflecting changing food prices, with 2020 recording the highest price spikes due to pandemic-induced disruptions to the food supply chain. A similar trend was observed for the registered Rohingya, who interact more with the local markets in the host community.

![Graph showing trends in food and non-food expenditure, 2017-2020](image)

**Figure 18: Trends in food and non-food expenditure, 2017–2020**

**Economic vulnerability**

To track economic vulnerability over time, REVA-4 employed a similar methodology to that used in previous rounds of the assessment. The economic capacity of households to meet essential needs (ECMEN) was determined by estimating the proportions of households with consumption above and below the minimum expenditure basket (MEB). Previous rounds of REVA used the national MEB established for the Bangladeshi population of Cox’s Bazar and Chittagong in 2018, adjusted for inflation. This study used the MEB determined in REVA-2 (2018) and adopted by the Cox’s Bazar transfers working group in 2019. WFP adjusted its food assistance transfer value based on the REVA-2 recalculated MEB in early 2019. A survival minimum expenditure basket (SMEB) was also determined as the threshold for the food component of the MEB.

The households were divided into three categories:

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

Two scenarios were then used to assess economic vulnerability:

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24 The MEB is defined as what a household requires in order to meet their essential needs, on a regular or seasonal basis, and its average cost.

25 The 2018 MEB was higher than the previous one with higher thresholds for the overall MEB and food MEB. A higher MEB threshold implicitly pushed many households into higher vulnerability category.

26 The expenditure data from REVA-4 reflects the consumption patterns of households receiving commodity vouchers. The data does not reflect real household preferences since these vouchers limit households’ choices to 14 pre-identified food items, which has a direct impact on households’ expenditure. The data is therefore not comparable to previous data used for MEB computation, which was gathered from households receiving value vouchers. Therefore, a decision was made, after consultation with RBB VAM team, not to recompute MEB with this dataset.

27 The REVA-2 MEB threshold was set at BDT 1,736/capita/month, with a food MEB threshold of BDT 1,138/capita/month. Since this MEB is already higher than the one used for REVA-3, it was not adjusted further for inflation while computing vulnerability, in order to compare vulnerability levels over time. However, for transfer value considerations, an inflation adjusted MEB of BDT 1,824/capita/month, with a food component of BDT 1,196/capita/month is recommended.
Current economic vulnerability, which includes the monetary value of assistance; and

A simulated scenario that excludes the monetary value of assistance in order to assess economic vulnerability if assistance were removed.

Economic vulnerability remains high in the camps despite the current levels of humanitarian assistance: 49 percent of Rohingya households still have consumption below the MEB (Figure 19), a 3-percentage point increase from 2019. Unregistered Rohingya remain the most economically vulnerable population, likely due to their limited access to economic opportunities in the camps.

When the value of assistance is discounted, economic vulnerability increases significantly, resulting in 96 percent of Rohingya households consuming below the MEB (Figure 19). The fragility of the camp economy cannot be overstated: aid is the pillar of this economy; without it, almost all households would not be able to meet their basic consumption needs. Increased economic vulnerability was also evident in the host community, where 33 percent of households had consumption below the MEB compared to 26 percent in 2019.

The increase may have been driven by temporary employment or income losses experienced during the lockdown, the effects of which continue to be felt during the economic recovery phase. In addition to reduced incomes in the host communities, increased prices have diminished household purchasing power and ability to afford the MEB. By October 2020, average price of rice coarse was 52 percent higher than previous year, price of vegetable oil was 32 percent higher and lentils masur price was about 22 percent higher than same month in 2019. This is likely to heighten food insecurity in the host community and in the absence of universal food assistance such as that provided in the camps, it may translate into negative coping mechanisms that push more people into the poverty trap. Livelihood programmes therefore remain an important support for the host population, preventing them from becoming more vulnerable especially in the wake of the pandemic-induced disruption to the local economy.
3.6 Local economy

Access to active, regular and diverse income-generating activities was found to be a key driver of household wellbeing. Involvement in regular wage employment, trade, service-based self-employment and farming (subsistence and commercial) significantly correlates with the non-adoption of negative coping mechanisms and lower levels of vulnerability.

The local economy within the Rohingya camps continues to provide very limited avenues for income generation through work; the few jobs available are largely derived from the humanitarian response. In the context of the pandemic lockdowns, the stability and/or formality of income sources may prove to be an even more important driver of household resilience.\(^{28}\)

Despite their proximity, the camp and host community local economies are dependent on entirely different sectors of employment (Figure 20) and the communities are very differently constructed. Primary income-generating activities for Rohingya households largely involve unskilled labour and clerical jobs; those in host communities cover a more diverse portfolio with labourers, drivers, land-owning farmers, fishermen and shop owners. Construction is the main employment sector for Rohingya households, whereas the host community has an agriculture-dependent economy.

Sectoral disaggregation within the Rohingya population (Figure 21) highlights important distinctions in skill levels between the registered and unregistered population: the high skew towards construction and other unskilled labour was largely driven by the unregistered population. The registered Rohingya demonstrated relatively more balanced engagement in a diverse range of industries, with notably high involvement in administrative and support services as salaried jobholders.

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**Figure 20: Sectors of employment in Rohingya and host communities**

28 The Cox’s Bazar urban assessment conducted by WFP in June 2020 found that workers on a monthly salary were more protected in terms of job retention and earning stability during the lockdowns than day labourers and the self-employed.
Three out of five Rohingya households with an income-generating activity were engaged in elementary occupations – their primary activity was unskilled labour: this share was more than half in unregistered camps (58 percent) and much lower among the registered Rohingya (33 percent) and hosts (27 percent). The skill gaps observed through the nature of the main income-generating activities reported by households significantly correlate with the main breadwinner’s educational attainment and age: older and more educated breadwinners tend to carry out more formal or regular work.

### Labour force participation, employment and unemployment

Labour force participation in camps increased in 2020, driven by new entrants and significantly higher unemployment.

While labour force participation\(^\text{29}\) in the Rohingya and host communities is comparable, employment rates are generally different: 42 percent of the working age labour force in the Rohingya community were not working at the time of survey, compared to 14 percent in the host community.

Labour force participation has increased from 2019 levels for Rohingya\(^\text{30}\) and has remained stable for the host community.\(^\text{31}\) However, the rise in Rohingya labour force participation has been driven by increasing unemployment; unemployment has risen by 5–6 percent for both communities.

\(^\text{29}\) Labour force participation is defined as the share of the population aged above 15 that is working or actively looking for work (unemployed).

\(^\text{30}\) Changes in labour force indicators are presented in comparison with findings from the World Bank’s Cox’s Bazar panel survey (CBPS) baseline conducted in 2019, which is representative of Rohingya and host communities in Cox’s Bazar. The CBPS and REVA produce comparable statistics on the overall Rohingya population. For host communities, the REVA sample is comparable to the CBPS high exposure host sample, comprised of the population living in Ukhiya and Teknaf sub-districts.

\(^\text{31}\) According to the CBPS, overall labour force participation was 33 percent in camps and 42 percent in host communities in the Ukhiya-Teknaf sub-district.
Large gender gaps persist in labour force participation in both communities: seventy percent of Rohingya men participate in the labour force compared with just 10 percent of Rohingya women; host communities show similar trends. Female labour force participation in camps remained comparable to 2019 levels (about 10 percent) though female unemployment rates tripled (from 22 percent to 59 percent) since 2019. Meanwhile, the employment and unemployment rates of men have remained unchanged. This indicates that there are more women in the current camp economy who are looking for work but remain unemployed.

Determinants of female labour force participation include woman’s age, education level and marital status, gender of household head and having children under 5 years old (Table 8). Women in their 20s are likely to participate in the labour force in both communities, as well as women in their 40s in host communities, and in their 50s in the camps. Rohingya women with secondary education attainment (partial or completed) were more likely to participate in the labour force. In host community women with post-secondary education had higher odds of participating in the labour force, plausibly due to more opportunities for those with better education. Marriage was found to be a negative driver in female labour force participation in both communities.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Rohingya</th>
<th>Host communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Age</td>
<td>21-30 years</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>41-50 years</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>51 years and above</td>
<td>X</td>
</tr>
<tr>
<td>Education</td>
<td>Secondary education (partial or complete)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Higher secondary and/or above</td>
<td>X</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single/never married</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Widowed/Separated/Divorced</td>
<td>X</td>
</tr>
<tr>
<td>Household Head</td>
<td>Male HHH</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Female HHH</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Single female HHH</td>
<td>X</td>
</tr>
<tr>
<td>Children</td>
<td>Presence of child under 5</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 7: Gender disaggregated labour force indicators

Table 8: Determinants of female labor force participation (red=negative driver; green=positive driver)
Men and women are engaged in different types of economic activity: men are more inclined towards engaging in daily wage labour or running small businesses/shops while women are more involved in home-based activities or relatively more secure salaried jobs (Figure 22).

**Main income-generating activities in host communities and camps**

Sixty-two percent of income sources in camps are related to work-based activities, mainly informal daily wage labour (accounting for 50 percent), petty trade and street vending (10 percent), and a negligible 2 percent from agriculture (Figure 23: Sources of household income in Rohingya and host communities). One third of income sources in camps are derived from the adoption of negative coping mechanisms. There is very little diversification in the camp economy. In contrast, 88 percent of income sources in host communities are generated from work-based activities. Similar to camps, wage employment accounts for half of the sources but income from farming, livestock rearing, fishing and trade also features prominently in the local host economy. Only 12 percent of host community income sources are derived from non-work-based sources, mostly from remittances (4 percent) and cash-based assistance from the government or non-governmental organizations (3 percent).
Rohingya households reported earning an average BDT 3,404 per month (Figure 24). Within camps, registered Rohingya reported receiving twice as much income at BDT 6,959 per month. Host community households reported average household income at BDT 13,661 per month, more than three times higher than the average Rohingya household.

Based on wage structure and the regularity or stability of activities, primary income-generating activities have been grouped into three categories: daily wage labour, monthly salaried work and self-employed trade or services. Daily wage labourers, an irregular income activity, was the most common activity among Rohingya households, particularly among unregistered Rohingya (Figure 25).

The number of days worked and wage rates for each category of income-generating activity highlights underlying factors of income differential between the Rohingya and host communities (Table 9). On average, day labourers work for 9 days/month in unregistered camps, 14 days/month in registered camps and 19 days/month in the host community. In contrast, regular monthly salaried workers work an average 26 days/month across all population groups.

<table>
<thead>
<tr>
<th></th>
<th>Daily rate</th>
<th>Monthly earnings</th>
<th>Daily rate</th>
<th>Monthly earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(BDT)</td>
<td>(BDT)</td>
<td>(BDT)</td>
<td>(BDT)</td>
</tr>
<tr>
<td>Daily labour</td>
<td>350</td>
<td>2,770</td>
<td>450</td>
<td>8,610</td>
</tr>
<tr>
<td>Monthly salaried work</td>
<td>-</td>
<td>5,610</td>
<td>-</td>
<td>14,611</td>
</tr>
<tr>
<td>Self-employed traders</td>
<td>-</td>
<td>3,000</td>
<td>24</td>
<td>-</td>
</tr>
<tr>
<td>&amp; service workers</td>
<td></td>
<td></td>
<td></td>
<td>12,000</td>
</tr>
</tbody>
</table>

Table 9: Average days worked, wage rates and monthly earnings for different income-generating activities

Daily labour wage rates for Rohingya were relatively lower than host community one, while monthly earnings across all categories were significantly lower in the camp economy due to the lower number of days worked (Table 9). There was a significant correlation between the stability of main income-generating activity and total household income levels for both populations. This correlation was stronger for Rohingya households, probably because irregular work – mostly daily wage labour – generated fewer days of work per month in camps than in the host community.
Livelihoods and vulnerability levels

Overall household vulnerability is significantly correlated with household income levels and nature of main income-generating activities (for those that had one). Average household income is lowest among the highly vulnerable households and highest among those less vulnerable (Figure 26). In each vulnerable category, average income is significantly higher in host communities than in camps.

High vulnerability is also associated with a higher share of daily labour in the Rohingya and host economies. Households classified as less vulnerable are associated with a high proportion of monthly salaried jobs in the Rohingya community (53 percent) and with self-employed work in the host community (Figure 27).

Impacts of COVID-19 lockdowns on Rohingya and host community livelihoods.

Bangladesh began to experience the effects of the pandemic in February and went into a nationwide lockdown from 26 March to 31 May. Figure 28 demonstrates the shrinkage of economic activity in the host community and camp economies due to the mobility and business restrictions imposed to control the spread of COVID-19. The drops in activity levels began in February and peaked between April to July; a return towards pre-February levels began in August.\(^\text{32}\)

The trends observed are in line with the findings of previous studies that show drops in the main economic activities during and after the lockdowns with informal daily wage labourers effectively losing almost all income during the peak of the

\(^{32}\) Bangladesh announced a two-month national lockdown starting on 27 March 2020. The lockdowns were gradually lifted from June 2020.
lockdown. The recovery in activity levels is only representative of the efforts of the local economy in trying to restart operations. It does not reflect the impacts that households faced during and after the lockdowns due to the observed contractions.

Although the trend in the loss and recovery of economic activity was similar for the Rohingya and host communities, the impact of reduced economic activity was significantly more pronounced in the camp economy (Figure 28). The host community local economy operated at about 50 percent capacity at the peak of the lockdown while overall camp activities contracted to less than 30 percent as result of the suspension of all non-critical operations.

Day labourers in both populations faced the harshest livelihoods losses during the COVID-19 lockdown, whereas monthly salaried workers were most protected. The steeper and relatively longer decline in the economic activity of the Rohingya population significantly correlates with their higher share of irregular daily wage-based employment. For a day labourer, a day with no activity means no income; formal salaried jobholders have a better chance of an organization covering their salaries despite business closures. The reduction in non-critical humanitarian activities during the lockdown contributed to the contraction of self-reliance activities in the camps, which are highly dependent on the aid economy (Figure 29). The recovery in humanitarian operations revived the camp economy implying an aid dependent as opposed to a resilient camp economy.

![Figure 29: Activity levels in 2020 for major income-generating activities (only for households with a main income-generating activity)](image)

Local sectoral impacts: activity and average income levels

Sectoral impacts were estimated based on the share of households in those sectors who faced periods of inactivity (for the main income-generating activities) and the subsequent losses in household incomes. Transportation and construction suffered the worst impacts of the 2020 lockdowns in terms of activity levels and lost household income. Administrative and support services, comprised of jobholders with formal monthly salaries, were largely unaffected.
together with workers in the education sector (teachers and teaching assistants), who have been protected despite school closures being one of the most sustained impacts of the lockdown.

It is important to consider the pre-existing fragilities of the work available in these sectors in order to estimate the potential impact. For example, a 55 percent drop in income for households earning from unskilled construction work is more severe than a 48 percent drop in income for transport workers, who are among the highest earning workers in the economy.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Min. activity level</th>
<th>Max. average household income drop</th>
<th>Aggregate impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>26%</td>
<td>55%</td>
<td>High</td>
</tr>
<tr>
<td>Transportation</td>
<td>38%</td>
<td>48%</td>
<td>High</td>
</tr>
<tr>
<td>Water supply; sewage; waste management</td>
<td>47%</td>
<td>35%</td>
<td>High</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>56%</td>
<td>34%</td>
<td>Medium</td>
</tr>
<tr>
<td>Human health and social services</td>
<td>50%</td>
<td>24%</td>
<td>Medium</td>
</tr>
<tr>
<td>Wholesale, retail trade</td>
<td>58%</td>
<td>32%</td>
<td>Medium</td>
</tr>
<tr>
<td>Agriculture, forestry, fishing</td>
<td>53%</td>
<td>23%</td>
<td>Medium</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>58%</td>
<td>25%</td>
<td>Low</td>
</tr>
<tr>
<td>Education</td>
<td>63%</td>
<td>22%</td>
<td>Low</td>
</tr>
<tr>
<td>Administrative and support services</td>
<td>75%</td>
<td>13%</td>
<td>Low</td>
</tr>
</tbody>
</table>

*Table 10: Aggregated impacts of COVID-19 lockdowns by sector*

Most of those able to retain certain activity levels during the lockdown inside camps were self-employed traders and service workers such as street hawkers and small tea shop or grocery owners. However, WFP’s monthly market monitor conducted during this period highlighted large drops in earnings for traders and business owners due to the dual impact of reduced business hours and decreased consumer purchasing power caused by the economic contraction. These findings underscore the fragility of livelihood activities in the camps, which indicates a need to think more broadly about ways to strengthen livelihood resilience in these settings.

3.7 Asset ownership

Asset ownership data was collected under three broad categories for REVA-4: productive agricultural assets, productive non-agricultural assets and non-productive/household assets (see details in Annex). Asset ownership for Rohingya and host community households has remained unchanged since 2019, with no notable cases of depletion or accumulation (Figure 30).

Patterns in productive asset ownership among the host community reflect an agriculture-dependent economy in Ukhiya –Teknaf. However, the low ownership of advanced agricultural assets such as irrigation pumps and fishing boats is a cause for concern.37

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37 REVA-3 findings highlighted that fishing regulations imposed by the Government had led to households adopting alternative income sources, which could explain their aversion to making large investments in assets such as fishing boats.
Asset ownership correlates significantly with better food consumption and the non-adoption of negative coping strategies. Household income levels and the stability of the main income-generating activity correlate with the number of assets owned by Rohingya and host community households, although the correlation is weaker for the former. Asset ownership in camps mainly results from basic needs provision and self-reliance interventions targeted towards the most vulnerable; this means that there is no direct relation between asset affordability and ownership in camps.

### 3.8 Other essential needs

#### Education

Ninety-three percent of Rohingya household heads and 98 percent of host community household heads have not completed secondary education. Across the two populations, no female household heads were found with an educational level higher than high school. Whilst 24 percent of Rohingya male household heads have an educational qualification above secondary level, the same is true for only 6 percent of host community male household heads. There are clear gender differences with regard to educational attainment, possibly due to social discrimination towards girls’ education coupled with other socio-cultural beliefs and practices.
School closures have been one of the longest impacts of the COVID-19 pandemic. Seventy percent of school-age children in host communities and 78 percent in the Rohingya population reported not studying at the time of the survey. The main reasons given for this were largely COVID-19 related: either school closures or concerns over contracting the virus.

Significant gender differences were found in school attendance in the camps but not in the host community. Among the Rohingya community, 40 percent of school-age girls were not attending school in November for non-COVID-19 related reasons compared with 16 percent of boys (Figure 32), implying the even when schools reopen, they wouldn’t be going to school: a concern that warrants attention.

Aside from COVID-19, main reasons for girls not attending school in the camps were family and social restrictions (59 percent) and marriage (7 percent). For boys, the need to work, age and financial constraints were the main causes reported for non-attendance (Figure 32).

Reasons behind school-age children not attending school in host communities also differ by gender: family and social restrictions are the most frequent cause for girls whereas for boys, it is the need for children to work. The cost of education also seems to be a common hindrance to school attendance (Figure 32).

Water, sanitation and health (WASH)

**Drinking water:** For both communities, the most used sources of drinking water are tube wells/underground water (reported by 55 and 79 percent of refugees and host community households respectively), followed by piped water taps (31 percent of refugees and 12 percent host households) and storage tank taps (13 percent of refugees and 4 percent host households). Ninety-eight percent of Bangladeshi households’ drink water directly without any treatment in contrast to 81 percent of Rohingya households.

**Sanitation facilities:** Around 30 percent of host community households use *kutcha*-type latrines or open fields for defecation compared to 1 percent of Rohingya households. However, although the average number of households sharing the same latrine has decreased compared to 2019, still each latrine in the camps is shared by 11 households (the average is nine households in registered camps), compared to one latrine per household in the host community.

**Hygiene:** Eighty-eight percent and 84 percent of Rohingya and host community households respectively washed both hands with soap after defecation. Only 4 percent of Rohingya households with children under 5 wash their hands only with water after defecation, compared to 10 percent in the host community.

**Water and sanitation problems:** Half of Rohingya households and 40 percent of host community households reported problems accessing water, which constitutes an improvement from 2019 when 60 percent of Rohingya households and 50 percent of those in the host community reported difficulties. The main challenges for the Rohingya population are the distance to water points, lack of sufficient water points, queuing time and the functionality of water points.
The share of households reporting sanitation problems have decreased, particularly in the camps, from 70 percent in 2019 to 59 percent among Rohingya households and from 30 to 27 percent for host community households. The biggest sanitation issues reported by the Rohingya were waiting times, cleanliness, distance from facilities and overcrowding. For the host communities, the main problems cited were malfunctioning and insufficient facilities followed by irregularly cleaned facilities (Figure 33).

**Figure 33: Main water and sanitation problems faced**

Health and access to health services: Morbidity rates and trends persist at 2019 levels. Sixty percent of Rohingya households and 70 percent of host community households reported having at least one member falling sick in the 30 days prior to the survey. Fever/flu were the most common symptom/illness reported. Approximately 20 to 25 percent of households in both communities reported members suffering from gastritis, abdominal pain or chronic illnesses. Reports of diarrhoea were more prevalent in camps (17 percent) than among host communities (11 percent), underscoring the continued need for improvement and scale-up of WASH programmes in those settlements.

The proportion of households with at least one chronically ill member was 12 percent among the Rohingya community and 19 percent in the host community, similar to levels reported in 2019. Ninety-five percent of Rohingya households and 97 percent of host community households had sought treatment for sick members, same as observed in 2019.

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38 The high occurrence of fever/flu reported in the REVA data is potentially driven by seasonality as the survey period for all rounds coincides with the winter flu season in Bangladesh.
In both communities, more than half of the households who had sought medical attention reported encountering difficulties (Figure 34). For the Rohingya households, these were related to overcrowding and the unavailability of treatment, with smaller shares reporting cost of medication and distance to facilities as issues. In host communities, the biggest concern was the high cost of medication.

In the absence of universal health coverage, access to health services for Bangladeshis effectively implies reliance on out-of-pocket expenditures. The gaps in the public health delivery system are also observed in the health-seeking behaviour of host communities, who report opting largely for private and individually run facilities (Figure 35).

**Potential impacts of COVID-19 on access to services:** Rohingya households with members who had upper respiratory infection were more likely to report facing difficulties in health centres and restrictions in accessing water points. A significant share of those with members who had had fever/flu and/or pneumonia reported facing harassment in accessing sanitation facilities. These patterns may indicate public fear of contracting COVID-19.

**Protection**

The share of households reporting insecurity incidents has doubled in the camps, where it is more than twice that of the host community. On the contrary, the proportion of host community households reporting protection concerns has halved compared to 2019, which could be related with less movement of the population as COVID-19 preventive measure (Figure 36), especially during the lockdown period.

Rohingya households reported high levels of insecurity due to limitations on movement and robberies followed by harassment and killings. Robbery was the major concern in the host community, followed by killing/murders. The most severe reports of killings and abductions came from Teknaf-based host communities and camps, which have been previously flagged for security threats.
The growing number of reports of insecurity has been driven by the registered Rohingya population, at 60 percent. Twenty-three percent of unregistered Rohingya households reported insecurity in 2020, down from 29 percent in 2019. The registered population reported high rates of harassment and physical violence faced directly or indirectly.

The five most common insecurities cited in camps were faced by all members of the family, regardless of gender. However, gender differences were observed in the type of insecurity concern. Harassment and discrimination were reported more often by women, while men made more references to killings, murder, theft and robbery (Figure 37).

### 3.9 Multidimensional deprivation index (MDDI)

The multidimensional deprivation index (MDDI) is a measure of poverty that can be constructed at the household or individual level. It is designed to complement monetary poverty measures by weighing levels of deprivations related to factors deemed essential to human development. For REVA, the key dimensions identified as critical for welfare are education, health, food access, income and living standards. A set of 14 indicators were used to examine the interaction of those dimensions with household wellbeing. Measuring multidimensional deprivation helps to capture what proportions of households’ experience overlapping deprivations and of what intensity.

The REVA-4 findings reveal that 60 percent of Rohingya households and 33 percent of host community households are multidimensionally poor. This represents an increase from 2019 of 13 percentage points for Rohingya households and 10 percentage points for the host community.

The main drivers of growing multi-dimensional deprivation are constraints in education, health, food access and income opportunities: all dimensions that were substantially affected by the COVID-19 pandemic and containment measures put in place by the Government.

**Income deprivation** is highest in the Rohingya population, with close to 68 percent of households deprived (Figure 38), largely due to the scarcity of income-earning opportunities and restrictions that continue to impede free participation in the labour market. Women-led households in the Rohingya camps show the highest deprivation in the income dimension, at 79 percent, reflecting the challenges they face in accessing income-earning activities.

**Food access** deprivation was faced by about 51 percent of the refugee community, mainly related to desire for other food items not provided as part of the assistance package, coupled with their limited purchasing power.
Health remained the dimension of relatively highest deprivation in the host community and in the camps. This finding is corroborated by the increased indebtedness primarily to finance healthcare expenses, and more so for the host community.

Educational deprivation is high for households in the Rohingya community (59 percent) and the host community (63 percent). This seems to be a result of the pandemic response, which involved a total shutdown of all educational facilities not only in Cox’s Bazar but throughout the country. Anecdotally, the closure of schools may have given some parents a strong pretext to engage their children in labour-related activities. The risks for teenage girls are even higher, as they are more likely to be forced into early marriages, eroding the gains made over the years in promoting education.

3.10 Assistance

Assistance programmes overview

Due to the lockdowns introduced by government to curb spread of COVID-19, humanitarian actors together with the Government of Bangladesh stepped up humanitarian response in support of the populations.

Host community: With no blanket food assistance like in camps, government and humanitarian actors support came in handy to cushion the most vulnerable populations from worse food security outcomes. Three out of four host community households reported receiving some form of assistance in 2020, with a notable increase in the humanitarian footprint. Sixty-one percent of households reported receiving assistance from non-government programmes and a quarter received assistance from vulnerable group development and general relief for COVID-19 programmes both run by government (Figure 39).

Refugee camps: Humanitarian response in camps had to be altered to ensure compliance with COVID-19 health and safety protocols. Due to the high population density in camps, threats of faster transmissions were high in the event ‘business as usual’ modus operandi continued. As such changes were put in place first by government issuing directives for a scale-down on most humanitarian operations, with only critical services allowed to continue operating 39. Humanitarian actors thereafter adapted various modalities to ensure continuance of assistance. Figure 40 shows other assistance received by refugees besides the blanket food assistance that

39 Non-critical operations resumed progressively from late November and early December. This is reflected in the reduced coverage of shelter support, fresh food corners/farmer’s markets, disaster risk reduction (DRR) and site maintenance, engineering and planning activities (SMEP) by the REVA-4
covered all refugees. More households were assisted with high energy biscuits (HEB) and hygiene and dignity kits, whereas entitlement transfer activities decreased. After closure of learning facilities, the school-feeding programme started a blanket distribution of HEB through general food distribution outlets. Rohingya households receiving food assistance also received 25 packets of HEB per month.40

**Food assistance**

The food assistance temporarily shifted from value to commodity vouchers, with the scale-up of the e-voucher programme continuing uninterrupted. Coverage grew to 97 percent of households in November 2020, and as of February 2021, 99 percent of beneficiary households received assistance through e-vouchers. Assistance modality was switched back to value vouchers from December 2020.

The commodity vouchers provided about 14 fixed food items which continued to ensure the typical food basket met the minimum caloric requirement of 2100 kcal/person/day and the nutritional value of items. Local food preferences were considered as much as the fixed basket would allow, which is still more than what in-kind entitlements41 would provide.

Farmers’ market initiative meant to enhance access to fresh foods were also halted and since October 2020, fresh food corners (FFCs) were re-introduced, and by March 2021 they were covering about 14 retail outlets. They provide 100 percent of beneficiaries shopping in those locations direct access to fresh and nutritious food items (vegetables, fruits, eggs, live fish, and chicken), with additional targeted assistance (3 USD) to the 30 percent most vulnerable households42. Fresh food corner beneficiaries were found to be highly likely to have moderate or acceptable food consumption. Those receiving dignity kits showed a similar pattern possibly due to reduced expenditures on dignity items, particularly in households with more female members. Inclusion in any assistance programme in addition to general food assistance enhanced chances of having acceptable food consumption outcomes.

Majority of refugee households (60 percent) reported that their rations would last between 21 – 27 days with the distribution skewed towards the upper end of the spectrum (Figure 41). About 37 percent of households had food rations lasting through the next distribution cycle (+ 28 days). The main reasons advanced for rations not lasting through the next distribution were ration not being enough, reported by 79 percent of households: a 15 percent point increase from 2019 (Figure 42). Unsurprisingly so, with households required to redeem all entitlements at one go, as was the case

![Figure 41: Duration rations would last (% of households)](image)

![Figure 42: Reasons for food ration not lasting](image)

40 The operational assumption in this case was that every household has one child who would usually attend a learning centre for the full month. Originally, HEB were distributed in learning centres based on children’s attendance.

41 In-kind entitlement provided only 3 food items: rice, lentils and cooking oil

42 Households headed by elders, children or females, single headed households with children and households with members with disabilities are entitled to an additional e-voucher of USD 3 to be redeemed in the Fresh Food Corners (FFC). By November 2020, FFC programme was scaling up and had 26,983 beneficiary households; In REVA 4, 14 percent of households were FFC beneficiaries.
during COVID-19 periods, lack of their proper planning of consumption patterns could have contributed to rations not lasting. Focus group discussions revealed uneven food utilization patterns: higher tendency to prepare more food quantities in the early days after ration redemption with rationing kicking in as stock levels diminish towards the later parts of the month (depending on cycle of distribution).

**Sale of assistance**

The percentage of Rohingya households selling portions of their assistance decreased from 53 percent in 2019 to 32 percent in 2020. This reduction is a cumulative effect of different programmatic interventions including increased sensitization efforts, rice cap effects and scale-up of fresh food corners offering fresh foods thereby limiting need to sell. Besides, the continued transition to e-vouchers from in-kind assistance offered a wider range of food items to choose from, likely reducing households’ need for selling (the commodity voucher introduced still offered more diverse foods than a typical in-kind basket).

Most households who reported selling their food assistance did so in order to buy other food items (82 percent) (Figure 43). Other reasons given included to cover the cost of transport back home and to buy other non-food items43.

Around half of all households selling assistance sold it to unknown middlemen they met near the outlet or locality; one third sold it to neighbours or relatives and 17 percent sold it to traders in camp markets. Less than 1 percent sold the assistance in markets outside the camps.

**What is mostly sold:** The food item most frequently sold was oil, followed by rice, pulses and dried fish. Rice capping has reduced the sale of rice both in terms of the number of households selling rice and the proportion of the ration being sold (Figure 44). Focus group discussion findings confirmed that high proportions of yellow split peas and loitta dried fish were being sold due to

**What is bought?** Vegetables and fish of their preference are the food items most frequently bought by households who report selling assistance. Rice, potatoes and spices are also purchased (Figure 45).

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43 Winter clothes, clothes, sweaters, shoes, mosquito nets, light bulbs, children’s toy and cooking utensils were major non-food items for which Rohingya households sold food assistance.
Who sells their food assistance? In the absence of regular income, Rohingya households sell part of their assistance in order to get cash to cover other food and non-food needs. Households with member(s) with disabilities, high numbers of children aged 5–14, chronically ill member(s), and no or few active working male members are more likely to sell assistance in order to access cash. No major differences are seen related to the gender of the household head.

Preferred modality of assistance: about 5 out of 10 Rohingya households preferred a hybrid modality of assistance: e-vouchers and some cash, while a 4 out of 10 households preferred e-vouchers only (Figure 46). Discussions with communities elicited mixed reactions to these preferences. Those preferring the hybrid modality noted that due to unforeseen market shocks that could potentially erode their purchasing power in the event of price spikes, they were safer having both vouchers (as a cushion) and also cash to buy other essential needs. Insecurity related to having more cash at hand also featured during the discussions. Those preferring only vouchers felt they were more protected from any market externalities. Households with higher income levels were significantly more likely to prefer e-vouchers, whereas those with lower income preferred e-vouchers and cash. The preference for the hybrid modality significantly correlates with the absence of active working members in households and lack of enrolment in food or cash for work programmes in the preceding 30 days, implying that those unable to access income through work prefer receiving cash as part of their assistance.

3.11 Satisfaction and self-reported needs

Satisfaction with services

Compared to 2019, the Rohingya population’s satisfaction with services is more moderate, with lower levels of highly dissatisfied or satisfied households. High levels of satisfaction only increased for sanitation and self-reliance. Dissatisfaction with livelihoods continues to be the highest despite the reduction in the share of highly dissatisfied households from 68 to 55 percent (Figure 47).

Continued high dissatisfaction with livelihoods reflects the strains that work regulations place on the Rohingya community. Focus group discussions highlighted the limited livelihood opportunities for elderly people, women and those without experience.

Lower satisfaction levels were reported for food aid, probably driven by the shift to commodity vouchers in most part of 2020.
Dissatisfaction is also high with sanitation and hygiene, household utilities and water services. Cooking fuel provision and information dissemination initiatives showed high satisfaction levels.

Levels of satisfaction among the host community tend to be more moderate than among the Rohingya population; they were found to be higher than in 2019, especially for safety and protection services. Dissatisfaction has increased for sanitation and hygiene services.

Priority needs

Both the Rohingya and host communities reported food and livelihoods as their main priority needs. Other main priorities, such as water, healthcare, shelter, cooking fuel or education were mentioned more pronouncedly by the host community (Figure 48).

The priority needs of the Rohingya population are more skewed towards food and livelihoods than the host community, reflecting the restrictions on income-generating activities in the camps. Basic services such as water, healthcare, shelter, cooking fuel and education are available through assistance in the camps but are not easily affordable or accessible for the host community.

The fact that household items or utilities are a priority need for one fifth of Rohingya households could indicate a deterioration of household items over the years.

Figure 48: Self-reported priority needs
4. Recommendations

Food assistance (camps and host community)

❖ The level of and growing trend in overall vulnerability despite the food and basic needs coverage provided by the humanitarian response confirms the criticality of continuing the provision of blanket food assistance and potential consideration in adjusting them to evolving needs.

❖ The increase in overall vulnerability is a result of the double crisis: refugee crisis and the COVID-19 induced shock. This had significant impact on both refugees and host communities’ lives and livelihoods, through contraction of aid activities in camps and livelihood activities in the host community. To minimize such effects in future, especially in camps, it’s important to make the food assistance system shock responsive, by allowing flexibility in varying the transfer amounts and type of assistance in the event of shocks. Such a modality would cushion populations from experiencing severe food insecurity outcomes and vulnerability. For the host community, there is need to strengthen government or humanitarian capacity to scale up assistance provision especially for the most vulnerable households.

❖ Almost half of the Rohingya refugee caseload and a third of the host community reported unacceptable food consumption outcomes. Food is the main reason why Rohingya households sell assistance and contract debts, and remains the main priority need for Rohingya and host communities. For refugees, the fact that even with current level of assistance, nearly half of them still consume below the MEB underscores the need to revisit the current value of assistance, to ensure MEB of the beneficiaries are met.

❖ Efforts to optimize the food assistance provided should continue by considering household food preferences in the food basket and available fresh food items in e-voucher outlets, facilitate the e-voucher redemption in different shops and at multiple times and strengthen awareness and sensitization of adequate feeding practices. Support to households to cover non-food needs is essential to avoid the sale of assistance to cover these non-food needs.

❖ There is need to step up social behaviour change communication (SBCC) and counselling efforts to promote consumption of more animal protein source, fruits and other iron rich foods which are key to improving household diet diversity and nutrition outcomes.

❖ Fresh food corners have proven to be successful in improving food consumption outcomes, particularly in increased intake of micronutrients. Scale up of this initiative will:
  o ensure proper food consumption from assistance;
  o negate the need for selling assistance, which is currently largely done to obtain fresh foods from local markets; and
  o systematically integrate a larger share of local smallholder farmers into the aid ecosystem, creating livelihoods for host communities.

❖ Explore the feasibility of hybrid modality of assistance, combining e-voucher and cash, in line with Rohingya preferences, especially by vulnerable households with no active working members. The cash would allow households to cover needs without engaging in negative coping strategies, such as selling assistance.

Self-reliance and livelihood activities

❖ The impacts of lockdowns, particularly on day laborers, constituting most of the labor force, highlights the instability and informality of the local economies. It is important to scale up self-reliance (camp) and livelihoods (host) activities with a focus on resilience and skill building for participants. More so, scale up of more female-friendly self-reliance activities in addition to sensitization on opportunities available for women can help bridge pronounced gender gaps in labour market participation, which is more skewed in favour of men.

❖ Current support for self-reliance and livelihood activities ought to have better targeting criteria and consider the diversity of the camp and host community populations in terms of their different capabilities. Such programmes should have a lens on childcare needs of single parents, disabled persons (who incur higher
opportunity cost to participate in such programs relative to non-disabled), and effects of trauma experienced by most people. All these are exogenous factors that could impede effective participation in self-reliance and livelihood programmes.

School feeding

❖ Promote school attendance through awareness, sensitization and school feeding programmes. Special attention should be given to Rohingya girls.

Community involvement

❖ Efforts at involving the voices of community members in certain decision-making processes ought to also continue or stepped up. The model rolled out by WFP of ‘Communication with Communities (CwCs)’ has proved effective in shaping community’s perception around humanitarian services. Engaging community members has been reported as a powerful point of leverage within a community system, changing the “structure of information flows,” resulting in new direct feedback mechanisms created between residents and humanitarian actors and government.

Protection and social cohesion

❖ Insecurity related incidents appear to have gone up in camps in 2020 compared to 2019. This calls for stepping up of protection measures to ensure the camp environment remains safe for everyone. Alongside this is the need to foster more community inclusive programs that drives towards attaining social harmony and cohesion among communities.

Monitoring

❖ Monitoring the situation in camps and host community continues to be crucial to ensure the assistance provided cover the essential needs of these populations. As COVID-19 and lockdown impact fade away and humanitarian operations progressively resume, a certain improvement is expected in camps and host community. However, with their coping capacity diminished and high dependency on assistance or casual labor, the vulnerability of these communities to future shocks will continue to remain high, more so as the monsoon season approaches. While restrictions on livelihoods persist for Rohingya community, close monitoring of how their food security conditions unfold in the coming months is of necessity.
❖ As relocations to Bhasan Char island take shape, it’s important to closely monitor any potential disruptions on refugees’ livelihoods and continued access to essential humanitarian access, both in the camps in Cox’s Bazar and in the Island.

Other sectors

❖ Improve access to water and sanitation facilities while ensuring their maintenance in function and conditions, as well as population awareness of best hygiene practices.
❖ Promote and strengthen health related interventions including coverage and affordability. Sensitization on health seeking behaviors ought to also continue.
❖ Complementary interventions: while it’s beyond the scope of this study to undertake causal relationship between food security, water, sanitation and health services provision, there is need to understand if the challenges in water, sanitation and health services represent critical barriers to improving food security.
5. Annex

Types of occupations by vulnerability category

<table>
<thead>
<tr>
<th>Vulnerability</th>
<th>Rohingya community</th>
<th>Host communities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly vulnerable</td>
<td>Construction labourer 25%</td>
<td>Agricultural day labourer 17%</td>
</tr>
<tr>
<td></td>
<td>Porter 10%</td>
<td>Motor vehicle drivers 7%</td>
</tr>
<tr>
<td></td>
<td>Non-agricultural day labourer 9%</td>
<td>Non-agricultural day labourer 7%</td>
</tr>
<tr>
<td>Moderately vulnerable</td>
<td>Construction labourer 18%</td>
<td>Motor vehicle drivers 11%</td>
</tr>
<tr>
<td></td>
<td>Grocery shop owners 7%</td>
<td>Farmer (on own land) 9%</td>
</tr>
<tr>
<td></td>
<td>Clerical jobholders 6%</td>
<td>Agricultural day labourer 6%</td>
</tr>
<tr>
<td>Less vulnerable</td>
<td>Clerical jobholders 20%</td>
<td>Motor vehicle drivers 11%</td>
</tr>
<tr>
<td></td>
<td>Teachers and teaching staff 10%</td>
<td>Farmer (on own land) 9%</td>
</tr>
<tr>
<td></td>
<td>Construction labourer 9%</td>
<td>Fisherman/fishing labourer 9%</td>
</tr>
</tbody>
</table>

Classification of assets

**Asset classification details**

<table>
<thead>
<tr>
<th>Asset category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productive assets – agricultural</td>
<td>Agricultural tools, water/irrigating pumps, hens, ducks, cattle, goats, sheep, fishing boats and nets</td>
</tr>
<tr>
<td>Productive assets – non-agricultural</td>
<td>Sewing machines, bicycles, rickshaws/vans, motor vehicles (CNG, tom-tom, motorbikes, cars, buses/trucks)</td>
</tr>
<tr>
<td>Non-productive household assets</td>
<td>Kerosene/LPG stove, water tank, solar panel, other electronic devices (DVD player, television etc.), mobile phone, jewellery/gold/silver</td>
</tr>
</tbody>
</table>

Livelihood coping strategies

**Stress strategies:** are reversible coping, preserving productive assets, reduced food intake or increase in debts that reduces a household’s ability to deal with future shocks.

**Crisis strategies:** are irreversible coping often associated with a direct reduction of future productivity.

**Emergency strategies:** are distress coping, are more difficult to reverse or more dramatic in nature than crisis strategies.

<table>
<thead>
<tr>
<th>Stress</th>
<th>Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spent savings</td>
<td>Sell food assistance</td>
</tr>
<tr>
<td>Borrow money to buy food</td>
<td>Adults engaging in risky work</td>
</tr>
<tr>
<td>Buy food on credit</td>
<td>Reduce non-food expenditure</td>
</tr>
<tr>
<td>Sell labour in advance</td>
<td>Children work for long hours</td>
</tr>
<tr>
<td>Sell household’s goods</td>
<td>Child marriage</td>
</tr>
<tr>
<td>Sell jewellery</td>
<td>Accept high risk job</td>
</tr>
<tr>
<td>Rely on support from friends/relatives</td>
<td>Entire HH migrated</td>
</tr>
<tr>
<td>Sell productive asset</td>
<td>Emergency Begging</td>
</tr>
<tr>
<td>Sell non-food assistance</td>
<td></td>
</tr>
</tbody>
</table>
## Changes in food assistance due to the impact of COVID-19

<table>
<thead>
<tr>
<th>Pre-COVID-19 food assistance</th>
<th>Food assistance during COVID-19 related restrictions</th>
<th>Market impact of COVID-19 related restrictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-voucher: collection of 20 items to choose from</td>
<td>Commodity voucher: 14 pre-packaged food items provided in a fixed basket</td>
<td>Unavailability of certain food items due to supply chain disruption</td>
</tr>
<tr>
<td>Basket value USD 10 (value voucher)</td>
<td>Basket value USD 12</td>
<td>Increase in prices of food items</td>
</tr>
<tr>
<td>Value voucher redeemable multiple times a month, allowing households to take only what is needed for short periods of time. Reduced need for storage and lower risk of rotting</td>
<td>Commodity voucher redeemable only once a month to ensure reduced footprint in public spaces and to maintain distancing</td>
<td>Mobility restrictions within camps</td>
</tr>
</tbody>
</table>
For more information, please contact:

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