COX'S BAZAR, BANGLADESH

Joint Multi-Sector Needs Assessment (J-MSNA)

Host Communities in Teknaf and Ukhiya Upazilas

September 2019

V



INTER SECTOR COORDINATION GROUP

COORDINATED BY:



FUNDED BY:



Funded by European Union Civil Protection and Humanitarian Aid



TECHNICAL CONTRIBUTIONS:













Photo credit: © ISCG / Saikat Mojumder

This document covers humanitarian aid activities implemented with the financial assistance of the European Union. The views expressed herein should not be taken, in any way, to reflect the official opinion of the European Union, and the European Commission is not responsible for any use that may be made of the information it contains.

SUMMARY

The district of Cox's Bazar, located in southeastern Bangladesh, faces some of poorest living conditions in the country in part due to underdeveloped critical infrastructure.¹ The Bangladeshi Bureau of Statistics identified Cox's Bazar as one of the country's "lagging districts" in 2017 and estimates the district's headcount poverty rate at 17%.^{2,3} The aforementioned developmental issues have been compounded by the most recent influx of refugees. For decades, Rohingya refugees have been fleeing to Bangladesh from Rakhine State, Myanmar due to periodic outbreaks in violence. An estimated 855,000 Rohingya refugees are now residing in 34 camps in Ukhiya and Teknaf Upazilas in Cox's Bazar District, Bangladesh, roughly two years after the recent influx.⁴ It is in these two Upazilas where refugee populations represent the majority of the population, estimated to outnumber the host community by three-to-one,⁵ and where host communities are assumed to have been most affected by the crisis. Under the leadership and coordination of the Government of Bangladesh, rapid and effective humanitarian action has responded to the life-saving needs of the estimated 855,000 refugees while also responding to potential impacts on affected host communities.

The presence of refugee communities has raised concerns over local environmental degradation, falling wages and rising prices, exerting additional pressures on communities where public services and infrastructure were already lagging behind the national average.⁶ These factors have contributed in part to perceived tensions between Rohingya refugees and host communities.⁷ As the crisis moves beyond the initial emergency phase, comprehensive information on the needs and vulnerabilities of affected host communities is needed in order to inform the design and implementation of effective inter-sectoral programming that focuses not only on managing externalities, but also on enhancing the overall wellbeing, dignity, and self-reliance of host communities.

To this aim, a Joint Multi-Sector Needs Assessment (J-MSNA) was conducted in host communities, in consultation with Upazila Nirbahi Officers (UNO)⁸, to support humanitarian planning and enhance the ability of operational partners, donors and coordinating bodies to meet the needs of affected populations. The J-MSNA was conducted to inform the Inter Sector Coordination Group (ISCG)'s 2020 Joint Response Plan (JRP), with the objectives of: (1) providing a comprehensive evidence base of household-level multi-sectoral needs for the humanitarian 2020 JRP; and (2) providing the basis for joint-multi-stakeholder analysis. The J-MSNA operates upon an analytical framework for multi-sector analysis based on the work undertaken by the Joint Inter-sector Analysis Group (JIAG)⁹, tailored by ACAPS and other participants of ISCG's MSNA Technical Working Group (TWG) of the Information Management and Assessment Working Group (IMAWG) in order to meet the specific needs of the Rohingya Humanitarian Crisis. The J-MSNA serves to measure current humanitarian conditions, perceptions and preferences, and safety and security in affected communities.¹⁰

Ukhiya and Teknaf Upazilas are comprised of a combined population of approximately 100,000 households.¹¹ A total of 1,321 households in host communities were surveyed across 11 unions¹² in these two Upazilas, employing a simple random sampling methodology of shelter footprints provided by OpenStreetMap. Data collection occurred

¹ UNDP, Impacts of the Rohingya Refugee Influx on Host Communities (Cox's Bazar, 2018). Available here (accessed 19 November 2019).

² Ibid.

³ CARE. Host Communities Situational Analysis, 2018. Available here (accessed 20 November 2019).

⁴ Figures for the total population are derived from the Rohingya refugees/Forcibly Displaced Myanmar Nationals (FDMN) registered under the joint Government-UNHCR registration exercise as of 31 December 2019.

⁵ Centre for Global Development (CGD) and International Rescue Committee (IRC), Moving Beyond the Emergency: A Whole of Society Approach to the Refugee Response in Bangladesh (Cox's Bazar, 2019). Available <u>here</u> (accessed 20 November 2019).

⁶ United Nations Development Programme (UNDP), Impacts of the Rohingya Refugee Influx on Host Communities (Cox's Bazar, 2018). Available here (accessed 19 November 2019).

⁷ Multiple studies have sought to understand perceptions of social cohesion between refugee and host communities, including but not limited to: <u>ISCG Light</u> <u>MSNA, MSNA Host Community 2018, Ground Truth Solutions Bulletins, Oxfam Participatory Research on Social Cohesion</u>, and UNDP's *Impacts of the Rohingya Influx on Host Communities*

⁸ The Upazila Nirbahi Officer (UNO) is the chief executive of an Upazila (sub-district) and a mid-level officer of the Bangladesh Civil Service.

⁹ JIAG is developing an analytical framework for inter-sectoral analysis, assisting with the identification of inter-linkages between various drivers, underlying and contributing factors, sectors and humanitarian conditions.

¹⁰ The J-MSNA is not intended to capture information on natural or man-made hazards, legal or rights-based issues, logistics or humanitarian access. It is also not intended to inform long-term development programming.

¹¹ Bangladesh Bureau of Statistics, District Statistics 2011, Cox's Bazar (Dhaka, n.d.). Available here (accessed 19 November 2019).

¹² St. Martin's Island in Teknaf Upazila was not included in the target population. Shahporir Dwip in Sabrang union was inaccessible during data collection and thus not assessed.

from 7 August through 9 September 2019. Each interview was conducted with an adult household representative responding on behalf of the household and its members. The assessment provides findings that are statistically representative at the union level (with a 95% confidence level and 10% margin of error) and aggregated to the overall level for the entire population of Ukhiya and Teknaf Upazilas (excluding unassessed areas), with a 95% confidence level and 3% margin of error.

This J-MSNA was funded by the Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO) and the United Nations High Commissioner for Refugees (UNHCR). The assessment was coordinated through ISCG's MSNA TWG, led by ISCG and comprised of: UNHCR, International Organization for Migration Needs and Population Monitoring (IOM NPM), ACAPS, World Food Programme Vulnerability Analysis and Mapping Unit (WFP VAM), Translators without Borders (TWB), and REACH.

The findings from this report complement other information products from the 2019 J-MSNA to provide a variety of analysis. In addition to the <u>clean household-level dataset</u> and <u>data analysis tables</u> for the Host Community J-MSNA, readers may access summaries of key messages derived from indicator-level findings for both Rohingya refugees and affected host communities living in Teknaf and Ukhiya Upazilas in the <u>2019 J-MSNA Preliminary</u> <u>Findings Presentation</u>. Union-level findings for indicators where notable geographic variation was observed are available at the <u>2019 J-MSNA Dashboard</u>. Finally, the <u>2019 Host Community J-MSNA Factsheets</u> present and visualize key indicators applicable to host communities as a whole, by sector.

This report builds off of these aforementioned publications by exploring how variation in household social and demographic characteristics may lead to significantly different outcomes on a number of sectoral and cross-sectoral key indicators related to household wellbeing, including: access to food, income generation, education, market access, health care, and general safety and security. In conducting this analysis of indicator-level findings through statistical relationship testing, this report seeks to contribute to the growing body of research aimed toward understanding the diversity of needs between different households, as well as the household profiles which may be more vulnerable to facing deprivations in key indicators.

Key J-MSNA findings both on indicators measured during the assessment, as well as from the relationship analysis on diversity characteristics conducted for the present report, include the following:

- 1. J-MSNA findings are not indicative of widespread extreme gaps in basic household-level living standards in host communities. Rather, the proportion of households found to face minimal needs was similar to the proportion facing extreme gaps. The majority of households fell in between the two extremes, suggesting that households may struggle to meet certain isolated needs but do not face extensive gaps across all sectors. This reflects the socio-economic environment that should underpin considerations of host communities' needs:
 - Nearly three-quarters (72%) of host community households are calculated to have an "acceptable" Food Consumption Score (FCS).¹³
 - Almost all households (97%) reported accessing improved water sources¹⁴ (mainly tube wells and piped water / tap stands) as their main source of water for drinking and cooking purposes at the time of data collection.
 - The vast majority of households (86%) reported at least one adult member (aged 18 and above) who worked to earn an income in the 30 days prior to data collection.
- 2. However, there are certain gaps in access to basic goods and services, with many of these concerns appearing to affect host communities in Teknaf and Ukhiya Upazilas as a whole, regardless of who or where they are located:

¹³ The Food Consumption Score is a composite score based on: (1) dietary diversity; (2) food frequency; and (3) relative nutritional importance of nine weighted food groups. The FCS is recorded from a seven-day recall period. In Bangladesh, thresholds for FCS classifications set by WFP are as follows: \geq 42 Acceptable; 28 - 41 Borderline; \leq 27 Poor. For additional information on the FCS, what it shows and how it is calculated, please reference: World Food Programme (WFP), Food Consumption Analysis: Technical Guidance Sheet (Rome, 2008). Available <u>here</u> (accessed 20 December 2019). ¹⁴ "Improved drinking water sources are those that have the potential to deliver safe water by nature of their design and construction" World Health

Organization / UNICEF Joint Monitoring Programme (JMP). Available here (accessed 30 November 2019).

- Estimated dietary diversity remains poor, as approximately one-third (32%) of households are estimated to consume two food groups or fewer in any given day.¹⁵
- Thirty-seven per cent (37%) of households reported not making improvements to their shelter in the six months prior to data collection, despite reporting the need to do so.
- Seventy-seven per cent (77%) of households that reported at least one member with an illness in the 30 days prior to data collection reported engaging in coping mechanisms in order to manage health-related issues.¹⁶ Of the households that reported engaging in any health-related coping mechanisms, 53% reported that they went into debt to pay for health expenditures.
- 3. Households in the assessed host communities reported accessing a diverse range of service providers to meet a variety of needs (such as health, education, or non-food items). These items or services are often associated with incurred costs, particularly for privately-run clinics or privately-run schools. Spending on items and services is underpinned by access to livelihoods and participation in income-generating activities, as well as asset ownership. However, J-MSNA findings show that socioeconomic conditions in host communities are still precarious:
 - Seventy-two per cent (72%) of households reported engaging in coping mechanisms due to a lack of money to meet basic needs in the 30 days prior to data collection.
 - Nearly three-fifths (56%) of households reporting borrowing money or purchasing items on credit (i.e. incurring debt) in the 30 days prior to data collection.
- 4. Findings did not show substantially worse-off conditions or needs in any given area in the assessed host communities. However, certain issues in access to water and education may be exacerbated in Teknaf Upazila.
 - Eighteen per cent (18%) of households reported accessing surface water for drinking or cooking purposes a couple of times or almost every day during the last dry season. Most households reporting the need to do so were concentrated in four unions in Teknaf Upazila, ranging from 25% in Teknaf Sadar union to as high as 35% in Whykong union.
 - The proportion of children and youth (aged 4 24) reported to attend a formal learning programme during the current academic year varied based on union, with lower overall attendance rates for all age ranges reported in unions located in Teknaf Upazila.
- 5. Certain household diversity characteristics had a significant relationship with varied outcomes on indicators related to well-being, particularly in regard to participation in labour markets, practices related to debt incurrence and health expenditures. In other cases, findings seem to highlight issues of particular concern related to gender norms, roles, and dynamics, and their potential effect on access to services in host communities. However, there were numerous wellbeing-related indicators for which no correlation was found with the household social and demographic characteristics under examination in this analysis. Additional targeted research and exploration would be required, including of other diversity characteristics that may be linked to variation in outcomes, before observations may serve as the basis for informing programmatic and strategic decisions.
 - Diversity characteristics related to household gender composition and structure appears to show strong
 association with whether or not households reported any adult members (aged 18 and above) that
 engaged in livelihood activities. Female-headed households and households with no males aged 18-59
 were less likely to report at least one adult member (aged 18 and above) that worked to earn an income
 in the 30 days prior to data collection. Reported labour market participation varied significantly based on
 the gender of the individual, with 47% of males aged five and above reported to be working to earn an
 income in the 30 days prior to data collection compared with just 4% of females aged five and above.

¹⁵ This is an estimate of household dietary diversity based on the reported quantity of food groups consumed during the seven days prior to data collection. The standard module to calculate a Household Dietary Diversity Score (24-hour recall period) was not included in this questionnaire. These findings represent the proportion of households who reported consuming any food group at least six or seven times in the week prior to data collection.
¹⁶ The denominator for this indicator is all households that reported at least one member with an illness serious enough to require medical treatment in the 30 days prior to data collection (n = 1,059).

- No strong association was found between any of the five household diversity characteristics examined in this study and outcomes on food consumption.
- Male-headed households were more likely to report incurring new debts in the 30 days prior to data collection and were more likely to report any health or medical expenses in the 30 days prior to data collection when compared with female-headed households.

The above J-MSNA findings are intended to inform a more holistic, evidence-based approach to inter-sectoral humanitarian programming, particularly as actors begin shifting toward medium-term planning that focuses not only on the mitigation of potential negative externalities that the recent influx may be causing in host communities, but also on the overall development and wellbeing of these communities over the long term. While this J-MSNA contributes to a stronger knowledge base of cross-sectoral needs and conditions, further research is necessary in order to better understand some of the gaps in coverage detailed above and in the body of this report, as well as household characteristics which may aggravate household vulnerabilities in key indicators related to well-being.

CONTENTS

SUMMARY	2
CONTENTS	6
List of Acronyms	7
Geographical Classifications	7
List of Figures, Tables and Maps	7
INTRODUCTION	10
COORDINATION AND METHODOLOGY	12
Coordination	12
Analytical Framework	12
Indicators and tool design	12
Sampling strategy and household selection	13
Data collection	14
Data cleaning and checking	14
Data analysis	15
Caveats and limitations	15
KEY MESSAGES	17
FINDINGS: VARIATIONS IN HOUSEHOLD OUTCOMES BASED ON HOUSEHOLD DIVERSITY CHARACTERISTICS	21
Overview	21
Description of household characteristics	21
Gender of head of household	21
Highest education levels in the household	22
Household dependency ratio	22
Households reporting at least one member (aged 5 and above) as requiring assistance to complete dail	y
activities	23
Households reporting no males aged 18 – 59	24
Household characteristics compared to outcomes on key indicators	24
CONCLUSION	35
ANNEXES	37
Annex 1: Household Surveys Completed Per Union	37
Annex 2: Rohingya Response Analytical Framework	38
Annex 3: Relationships Tested for Correlation	39
Annex 4: Scatterplot of households' calculated Food Consumption Score against households' distance to	
camp boundaries	41
Annex 5: Mapped Indicator-Level Findings	42
Communication with communities	42
Education	49
Health	52
Livelihoods and markets	54
Protection	58
Shelter & NFI	59
WASH	61

List of Acronyms

BDT	Bangladeshi Taka
CwC	Communications with Communities
ECHO	Directorate-General for European Civil Protection and Humanitarian Aid Operations
FCS	Food Consumption Score
GCCG	Global Cluster Coordinators Group
НоН	Head of household
IMAWG	Information Management and Assessment Working Group
ISCG	Inter Sector Coordination Group
IOM NPM	International Organization for Migration Needs and Population Monitoring
JIAF	Joint Intersectoral Analysis Framework
JIAG	Joint Intersectoral Analysis Group
J-MSNA	Joint Multi-Sector Needs Assessment
JRP	Joint Response Plan
LPG	Liquid Petroleum Gas
NFI	Non-Food Items
NGO	Non-Governmental Organisation
OCHA	Office for the Coordination of Humanitarian Affairs
REVA	Refugee Influx Emergency Vulnerability Assessment
SGBV	Sexual and gender-based violence
TWB	Translators Without Border
TWG	Technical Working Group
UNHCR	United Nations High Commissioner for Refugees
UNO	Upazila Nirbahi Officer
WASH	Water, Sanitation and Hygiene
WFP VAM	World Food Programme Vulnerability Analysis and Mapping

Geographical Classifications

District	Third tier of administration in Bangladesh, forming sub-units of divisions
Upazila	Fourth tier of administration in Bangladesh, forming sub-units of districts
Union	The fifth and smallest tier of administration in Bangladesh, forming sub-units of Upazilas

List of Figures, Tables and Maps

Figure 1: % of households with a female head of household	21
Figure 2: % of households by highest level of education completed by anyone in the household	22
Figure 3: Presence of individuals (aged 5 and above) reported as requiring assistance to complete daily	activities 23
Figure 4: % of households that reported at least one adult member (aged 18 and above) that worked to e	earn an
income in the 30 days prior to data collection, by gender of head of household (HoH)	
Figure 5: % of households that reported at least one child member (aged 17 and below) that worked to e	arn an
income in the 30 days prior to data collection, by highest level of education obtained in the household	
Figure 6: % of households that reported at least one child member (aged 17 and below) that worked to e	arn an
income in the 30 days prior to data collection, by household dependency ratio (high or low)	27
Figure 7: % of households that reported at least one adult member (aged 18 and above) that worked to e	earn an
income in the 30 days prior to data collection, by whether or not the household had at least one male age	ed 18-59

Figure 8: % of households reporting owning any livelihood assets (livestock, agricultural land or fishing gear), by gender of head of household (HoH) 28 Figure 9: % of households reporting borrowing money and / or purchasing items on credit (i.e. incurring debts) in 28 the 30 days prior to data collection, by gender of head of household (HoH) 37 Figure 10: % of households reporting borrowing money and / or purchasing items on credit (i.e. incurring debts) in 36 in the 30 days prior to data collection, by whether or not the household had at least one male aged 18-59 37 Figure 11: % of households reporting any health or medical expenses in the 30 days prior to data collection, by 33 Figure 12: % of household (HoH) 33 Figure 12: % of households reporting any health or medical expenses in the 30 days prior to data collection, by 33 compared with whether or not households reported any members (aged 5 and above) as requiring assistance to 33 complete daily activities 33
Table 1: % of households reporting spending money on medical expenses, health care and / or medicine in the 30 days prior to data collection, by expenditure amount (Bangladeshi Taka, BDT)
Map 1: Assessed unions in Teknaf and Ukhiya Upazilas, Cox's Bazar
43 Map 4: % of households reporting access to income-generating activities as a top 3 priority need for which they require additional support, unranked
require additional support, unranked
47 Map 8: % of households reporting that they have not received humanitarian aid in the 6 months prior to data collection
Map 9. % of children and youth aged 5-11 reported as not attending any formal learning opportunities during the Map 10: % of children and youth aged 12-17 reported as not attending any formal learning opportunities during the current academic year
Map 11: % of individuals aged 18-24 reported as not attending any formal learning opportunities during the current academic year
prior to data collection who sought treatment, % who sought treatment at a government clinic
basic needs in the 30 days prior to data collection
Map 16: Of households reporting that they borrowed money or purchased items on credit (i.e. incurred debt) in the 30 days prior to data collection, % reporting a reason of buying food

Map 18: % of households reporting that they have witnessed tensions between Rohingya and host communitie	es
n the 30 days prior to data collection	. 58
Map 19: % of households reporting not being connected to the electricity grid	. 59
Map 20: % of households reporting using self-collected firewood as a fuel source for cooking in the 4 weeks pr	rior
o data collection	. 60
Map 21: % of households reporting accessing surface water for drinking and cooking purposes a couple times	or
almost every day during the last dry season	.61
Map 22: % of households reporting not having enough water to meet all needs (drinking, cooking, personal	
nygiene, and domestic purposes) at the time of data collection	. 62
Map 23: % of households reporting visible waste in the vicinity of their accommodation (30 metres or less) in the	he
30 days prior to data collection	. 63

INTRODUCTION

The district of Cox's Bazar, located in southeastern Bangladesh, faces some of poorest living conditions in the country in part due to underdeveloped critical infrastructure.¹⁷ The net intake rate of boys and girls in the first grade of primary school is far below the national average, and the district is one of the lowest performing in reading and math attainment.¹⁸ There is also a significant prevalence of stunting and underweight among children in the area.¹⁹ Both Ukhiya and Teknaf face high levels of natural hazard risks in the form of storm surges, cyclones, and flash floods with limited and underdeveloped infrastructure to mitigate the risks.²⁰ Income opportunities are also precarious, with both Teknaf and Ukhiya found to have low female labour force participation rates.²¹

The above issues have been compounded by the most recent influx of refugees; for decades, Rohingya refugees have been fleeing to Bangladesh from Rakhine State, Myanmar due to periodic outbreaks in violence. An estimated 855,000 Rohingya refugees are now residing in 34 camps in Ukhiya and Teknaf Upazilas in Cox's Bazar District, Bangladesh, roughly two years after the recent influx.²² It is in these two Upazilas where refugee populations represent the majority of the population, estimated to outnumber the host community by three-to-one,²³ and where host communities are assumed to have been most affected by the crisis. The influx of refugees has led to concerns over falling wages, increased prices, and environmental degradation which may exacerbate vulnerabilities to worse-off outcomes. Rohingya refugees are reportedly more willing to work for lower pay and are driving down local wages by roughly 20%.²⁴ Many refugees have also reportedly sold food and non-food items provided as humanitarian assistance at lower-than-market rates with which host community households are unable to compete.²⁵ Among other challenges, the mass influx of refugees has also had far-reaching impacts on transport systems, infrastructure and public services. Many teachers who were before employed with local schools have left to work for higher wages in camps, which has put additional strains on the local education system.²⁶ Finally, the influx of large displaced populations has led to heightened concerns about environmental degradation in the area, with numerous issues ranging from rapid deforestation, destruction of agricultural lands, depletion and contamination of groundwater sources, and depletion of fishing and other resources.²⁷ Many host community households perceive a considerable decrease in the quality of living and feel that the humanitarian response has focused disproportionality on the needs of refugees without doing enough to mitigate negative externalities for local populations.

At the same time, certain host community households may have benefited from increased demand for goods and services arising from Rohingya communities themselves, as well as new livelihoods arising out of the presence of the humanitarian actors. While the Rohingya crisis has undoubtedly had an effect on surrounding host communities and has already been shown to have multi-faceted effects on how host communities access livelihoods, income and other key resources, not all host community households have been impacted in the same way and outcomes are likely not unidirectional.

As the crisis moves beyond the initial emergency phase, and as the conditions for safe and voluntary return to Myanmar appear increasingly unlikely in the near term²⁸, comprehensive information on the needs and vulnerabilities of affected populations is needed in order to inform the design and implementation of effective intersectoral programming that focuses not only on managing externalities, but also on enhancing the overall wellbeing,

¹⁷ UNDP, Impacts of the Rohingya Refugee Influx on Host Communities (Cox's Bazar, 2018). Available here (accessed 19 November 2019).

¹⁸ Centre for Global Development (CGD) and International Rescue Committee (IRC), Moving Beyond the Emergency: A Whole of Society Approach to the Refugee Response in Bangladesh (Cox's Bazar, 2019). Available <u>here</u> (accessed 20 November 2019).

¹⁹ UNDP, Impacts of the Rohingya Refugee Influx on Host Communities (Cox's Bazar, 2018). Available here (accessed 19 November 2019).

²⁰ Ibid.

²¹ WFP, *Refugee Influx Emergency Vulnerability Assessment (REVA II)* 2018, *Cox's Bazar, Bangladesh* (Cox's Bazar, 2019). Available <u>here</u> (accessed 19 November 2019).

²² Figures for the total population are derived from the Rohingya refugees/Forcibly Displaced Myanmar Nationals (FDMN) registered under the joint Government-UNHCR registration exercise as of 31 December 2019.

²³ Centre for Global Development (CGD) and International Rescue Committee (IRC), Moving Beyond the Emergency: A Whole of Society Approach to the Refugee Response in Bangladesh (Cox's Bazar, 2019). Available <u>here</u> (accessed 20 November 2019).

²⁴ UNDP, 2018. ²⁵ Ibid

²⁶ ISCG, 2018 Multi-Sector Needs Assessment, Teknaf and Ukhiya Upazilas (2019, Cox's Bazar). Available here (accessed 10 December 2019).,

²⁷ UNDP, 2018; CGD and IRC, 2019.

²⁸ Ibid.

dignity, and self-reliance of host communities. At the same time, to ensure that no one is left behind, effective intersectoral programming will depend on having adequate knowledge of who is in particular need, and what these needs are, while recognizing that each household is affected differently by the present crisis. However, very little research currently exists on the specific drivers of vulnerability within host community populations, whether these drivers of vulnerability are directly affected by dynamics of the Rohingya refugee crisis, as well as the specific social and demographic characteristics of particular households that may aggravate overall vulnerability.

To this aim, a Joint Multi-Sector Needs Assessment (J-MSNA) was conducted in host communities, in consultation with Upazila Nirbahi Officers (UNO)²⁹, to support humanitarian planning and enhance the ability of operational partners, donors and coordinating bodies to meet the needs of affected populations. The J-MSNA was conducted to inform the Inter Sector Coordination Group (ISCG)'s 2020 Joint Response Plan (JRP), with the specific objectives of: (1) providing a comprehensive evidence base of household-level multi-sectoral needs for the humanitarian 2020 JRP; and (2) providing the basis for joint-multi-stakeholder analysis. The J-MSNA operates upon an analytical framework for multi-sector analysis based on the work undertaken by the Joint Inter-sector Analysis Group (JIAG)³⁰, tailored by ACAPS and other participants of ISCG's MSNA Technical Working Group (TWG) of the Information Management and Assessment Working Group (IMAWG) in order to meet the specific needs of the Rohingya Humanitarian Crisis. The J-MSNA serves to measure current humanitarian conditions, perceptions and preferences, and safety and security in affected communities.³¹

This J-MSNA report aims to fill existing information gaps by exploring how variation in household social and demographic characteristics may lead to significantly different outcomes on a number of sectoral and crosssectoral key indicators related to household wellbeing, measured during the present assessment.³² The following section of the report includes an in-depth discussion of the specific coordination mechanisms and methodologies employed in the J-MSNA, covering information on J-MSNA governance structures, research design processes, sampling strategy and household selection, processes of data cleaning and analysis, as well as challenges and limitations of the current assessment. The third section of this report on key messages presents a narrative overview of J-MSNA findings on the current context, living conditions in host communities, potential gaps in coverage, as well as community perceptions, priorities and preferences, derived from key indicator-level findings. The final section will present key findings related to variation in indicator-level outcomes based on household social and demographic characteristics, focusing on: (1) the gender of head-of-household; (2) the highest level of education obtained in the household; (3) household dependency ratio³³; (4) households reporting at least one member as requiring assistance to complete daily activities; and (5) households with no male adults of productive age (defined as 18 to 59).³⁴

²⁹ The Upazila Nirbahi Officer (UNO) is the chief executive of an Upazila (sub-district) and a mid-level officer of the Bangladesh Civil Service.

³⁰ JIAG is developing an analytical framework for inter-sectoral analysis, assisting with the identification of inter-linkages between various drivers, underlying and contributing factors, sectors and humanitarian conditions.

³¹ The J-MSNA is not intended to capture information on natural or man-made hazards, legal or rights-based issues, logistics or humanitarian access. It is also not intended to inform long-term development programming.

³² The present study does not present a multi-dimensional or multiple-regression analysis of household deprivations and is not intended to be used to make conclusions on which households are worse or better-off. While five household social and demographic variables are under analysis in this present study, there are a range of other individual, intra-household and household-level characteristics that can contribute to varied levels of vulnerability. Findings are not intended to inform service provision nor are they intended to assess current access to services.

³³ The dependency ratio is equal to the number of individuals not of productive age (0 – 14 or 65 and above) in the household divided by the number of individuals of productive age (15 – 64), expressed as a percentage.

³⁴ The rationale behind the selection of these characteristics is explained in detail in the section "Coordination and Methodology".

COORDINATION AND METHODOLOGY

Coordination

All components of the J-MSNA were coordinated through the MSNA TWG of the <u>IMAWG</u>, under the leadership of the ISCG who led coordination with all sectors, including: Health; Nutrition; Water, Sanitation & Hygiene (WASH); Shelter & Non-Food Items (NFI); Education; Protection (including the Child Protection and Gender Based Violence sub-sectors); Food Security; Site Management and Site Development; and the Communication with Communities (CwC) Working Group. The Transfers Working Group and Gender in Humanitarian Action Working Group were also consulted for feedback. Sectors were engaged throughout the process in reviewing and validating the overall assessment approach, participating in joint analysis activities, validating assessment findings and providing feedback on J-MSNA outputs.

The MSNA TWG was responsible for designing and implementing the assessment as well as for the analysis of the findings, in consultation with sector and other technical experts. Membership of the TWG consisted of the United Nations High Commissioner for Refugees (UNHCR), ACAPS, International Organization for Migration Needs and Population Monitoring (IOM NPM), Translators without Borders (TWB), World Food Programme Vulnerability Analysis and Mapping Unit (WFP VAM), and REACH. Each member of the TWG served as a primary liaison for one or more sectors during research design and validation, as well as during dissemination of findings. REACH led implementation of the assessment, including the sampling approach, management of field teams, data processing, and initial analysis and inter-sectoral analysis of raw data.

Analytical Framework³⁵

This assessment operates off of the Joint-Intersector Analysis Framework (JIAF)³⁶ currently under development by the Joint-Intersector Analysis Group (JIAG). Led by OCHA and the Global Cluster Coordinators Group (GCCG), the JIAF aims to assist with identification of inter-linkages between various drivers, underlying and contributing factors, sectors and humanitarian conditions. The JIAF seeks to enable humanitarian actors to arrive at a common understanding of who, and how many people face humanitarian needs, and which needs are most critical.

This JIAF under development was tailored by ACAPS and other participants of the J-MSNA TWG to meet the specific needs of the Rohingya Humanitarian Crisis. It consists of the following three pillars (and a range of subpillars) that provide the framework for analysis, including: (1) **context**, which explores the socio-cultural and security context underpinning the current crisis, including aspects of social norms and beliefs which have the potential to influence access to services and enjoyment of rights; (2) **humanitarian conditions**, which explores the current living conditions of affected communities and potential shortages in service provision; and (3) **community perceptions, priorities and preferences**, which explores the opinions of host community households, preferences regarding modalities of service provision, as well as the appropriateness of the response to date in meeting the needs of host community populations (see Annex 1 for an in-depth visualisation of the analytical framework).

The aforementioned framework does not capture information on natural or man-made hazards, legal or rightsbased issues, logistics or humanitarian access. It is also not intended to inform long-term development programming.

Indicators and tool design

Indicator identification and tool development were built off of an initial review of secondary data derived from the Assessment Registry³⁷ and Needs Assessment Indicator³⁸ list. The second phase of the design process involved close consultations with all sectors, information management staff, as well as various working groups and experts

³⁵ The information in this sub-section builds off of the analytical framework as originally defined in the Terms of Reference of the J-MSNA. ISCG,

Assessment Concept Note, Rohingya Crisis Bangladesh, În-Depth MSNA, July 2019 (Cox's Bazar, 2019). Available here (accessed 19 November 2019). ³⁶ Joint Intersectoral Analysis Group (JIAG), *Joint Intersectoral Needs Analysis for Efficient and Effective Joint Response Planning* (Geneva, 2017). Available here (accessed 11 December 2019).

³⁷ ISCG, Assessment Registry Dashboard (as of July 2019) (Cox's Bazar, 2019). Available here (accessed 12 December 2019).

³⁸ ISCG, Assessment Indicator List, Rohingya refugee crisis Cox's Bazar, Bangladesh (Cox's Bazar, n.d). Available here (Accessed 12 December 2019).

present in the response. The preliminary tool and list of indicators derived from these consultations were then refined and finalised by the MSNA TWG. The research tool was translated into Bangla with support from TWB. The final tool incorporated a standard set of questions and translations on household and individual characteristics that would enable analysis across assessments.

Prior to questionnaire finalisation, REACH conducted a series of consultations with Bangladeshi host community members with male and female adults, separately. The purpose of these consultations was to ensure that there were no outstanding information gaps that were not already covered by the sector-driven component of tool design, while verifying the understanding and interpretation of key terms and language nuances in Bangla.

Sampling strategy and household selection³⁹

The household – defined as "the group of people who regularly eat from the same pot and share the same shelter" is the main unit of measurement in this assessment. To ensure that each household had an equal chance of being selected for an interview, the assessment employed a stratified, simple random sampling approach of shelter footprints in each union. Target sample sizes for each union were based on corrected population figures from 2011 census data, with the objective of producing data generalisable at a 95% confidence level and 10% margin of error for each of the 11 assessed unions (see Map 1 below).⁴⁰ This means that if the assessment were to be replicated multiple times, the findings for each union would be within +/- 10% of the true value, 19 times out of 20. The sampling strategy provides findings aggregated to the population of Ukhiya and Teknaf (excluding unassessed areas) with a 95% confidence level and 3% margin of error. For a complete list of assessed unions, and household surveys completed per union, please refer to Annex B.

Samples were derived from a combination of multiple datasets, but relied primarily on OpenStreetMap (OSM) building footprints of structures visible from satellite imagery. OSM shelter footprints were triangulated with other population datasets whenever appropriate, including the Worldpop raster dataset from 2015 estimates of population density in the assessment areas. To ensure that refugee populations living in camps were not included in the sample, IOM NPM *Majhi*⁴¹ block boundaries were removed from the sample frame.

A non-response buffer was included in order to account for: (1) non-eligible geopoints, such as those falling on non-residential structures including latrines, mosques, schools, etc.; (2) non-eligible households, including Rohingya households residing in mixed communities; (3) non-consenting households, such as those where respondents declined to participate or finish a full survey; and (4) households without an admissible respondent, including those without a consenting adult aged 18 and above. During data collection, enumerators were provided maps with the GPS points corresponding to households to interview. In the event that no eligible respondents were identified at any GPS points given, enumerators were instructed to make a note of non-response and continue on to the next target household.

In order to ensure that the experiences and perspectives of both males and females were equally represented in the assessment, enumerator teams were composed equally (50:50) of men and women. Each enumerator interviewed an adult respondent (aged 18 and above) of their own gender, who was most knowledgeable about the affairs of the household (as defined by the household). Overall, 55% of respondents in this assessment were female and 45% were male.

³⁹ Please reference Annex 1 for a list of assessed camps by estimated household population and number of household surveys completed in each union ⁴⁰ St. Martin's Island in Teknaf Upazila was not included in the target population. Shahporir Dwip in Sabrang union was inaccessible during data collection and thus not assessed.

⁴¹ *Majhis* are selected by the Government of Bangladesh to support camp management authorities and act as the focal point for an unofficial "block" of households. *Majhis* were appointed without a formalised process. The system was introduced in registered camps after the 1991-92 influx and revived after the onset of the recent crisis [ACAPS NPM Analysis Hub, *Rohingya Crisis: Governance and community participation, thematic report, June 2018* (Cox's Bazar, 2018). Available here (Accessed 1 December 2019)].



Map 1: Assessed unions in Teknaf and Ukhiya Upazilas, Cox's Bazar

Data collection

Data collection was jointly conducted by REACH and NPM from 7 August through 9 September 2019. A total of 1,321 households consisting of 7,382 individuals were surveyed across the 11 unions. Data collection was conducted by a total of six teams (three from REACH and three from NPM) consisting of eight enumerators each (48 enumerators in total). Prior to data collection, enumerators underwent a three-day training and a two-day pilot in order to familiarise themselves with the tool, field protocols, as well as the code of conduct and basic protection principles. In-country technical experts from each sector facilitated training sessions for the enumerators about components of the questionnaire related to their respective sectors, including explanations on the reasons and intentions for the inclusion of certain questions and nuances of vocabulary and wording.

Prior to conducting a survey, informed consent was sought, received and documented at the start of each interview. During interviews, data were entered directly using KoboCollect. At the end of each day, forms were uploaded to a secure central server where raw data were accessible to only one individual within REACH.

Data cleaning and checking

Data checking occurred on a daily basis, with checks including identification of outliers, correct categorisation of "other" responses, and the removal and / or replacement of incomplete or inaccurate records. All changes to the dataset were documented in a data cleaning log. Based on observations during the pilot, 25 minutes was established as the minimum length of interview required to ensure an acceptable level of data quality. Any interviews falling below this threshold were excluded from the final dataset. In total, 63 interviews (of 1,384) were deleted from the final dataset due to quality issues related to timing, the survey being conducted too far from the

allotted GPS point, or data discrepancies that could not be corrected. The <u>clean dataset</u> for this assessment is available on the <u>REACH Resource Centre</u>.

Data analysis

A basic data analysis plan (DAP) was drafted, providing a roadmap outlining stratification, weightings, statistical functions required, intermediate composite indicators to be made, and more. The DAP included the identification of household demographic characteristics that may be associated with varying responses or outcomes against selected key indicators. The relationships to be tested were guided by the overarching analytical J-MSNA analysis framework and based on formative qualitative research currently being conducted by ACAPS on key vulnerability characteristics of affected populations (including how the community defines "vulnerability" and what characteristics were associated with more severe needs), as well as existing secondary literature and past needs assessments in the response. Upon completion of data collection, preliminary analysis of raw data was performed using the software R.

ISCG held a Joint Analysis Workshop on 26 September 2019 attended by all Sector and Sub-sector coordinators, Sector Information Management Officers (IMOs) and a range of other Working Group heads and technical colleagues involved in the 2020 JRP process. Using the data analysis tables, attendees conducted an initial interpretation, analysis and validation of findings, while identifying areas for further exploration or explanation.

Relationships between household demographic/social characteristics and indicators of interest were analysed based on a chi-square independence test, which compares two categorical variables to determine whether they are related for the same population. Relationships were determined to be statistically significant if the *p*-value⁴² was low (typically ≤ 0.05).

Caveats and limitations

- J-MSNA as a multi-sector snapshot: The J-MSNA is intended to inform crisis-wide humanitarian planning, providing comparable data across all relevant sectors. However it is not intended to be an in-depth assessment of one particular sector or thematic concern. In-depth sectoral assessments should be consulted in order to complement the findings from this survey.
- **Coverage:** Shahporir Dwip (Wards 7, 8, 9 in Sabrang union) was inaccessible during data collection and not surveyed. St. Martin's Island in Teknaf Upazila was not included in the target population and thus not assessed.
- Data by proxy: individual-level data collected during the assessment (such as data related to education attendance, illness, age, gender, etc.) are collected by proxy form the respondent and not directly from household members themselves.
- Potential for respondent bias: certain indicators may be under-reported or over-reported due to the
 subjectivity and perceptions of respondents (in particular, "social desirability bias" the tendency of people to
 provide what they perceive to be the "right" answers to certain questions). Certain findings related to sensitive
 subjects including safety and security concerns, income sources, community dynamics and / or prohibited
 activities, are likely under-reported.
- Interpreting findings from subset indicators: findings that refer to a subset of the overall population may have a wider margin of error. For example, questions asked only to households with school-aged children, or to households with at least one individual reported as having an illness serious enough to require medical treatment, will yield results with lower precision. Any findings that refer to a subset are clearly communicated in this report.
- Limitations of household surveys: while household-level quantitative surveys seek to provide quantifiable
 information that can be generalised to the populations of interest, the methodology is not suited to provide indepth explanations of complex issues. Thus, questions on "how" or "why" (such as reasons for feeling unsafe,
 reasons for incurring debt, or gender dynamics) are best suited to be explored through an accompanying
 qualitative component. Given that the unit of measurement is the household, this assessment does not focus

⁴² The p-value reflects the probability that any correlation between two variables could be due to random chance.

on intra-household dynamics, including those related to intra-household gender norms, roles and dynamics, or related to intra-household variation in outcomes or perspectives based on disability, age, level of education, or other demographic characteristics. Users are reminded to supplement and triangulate findings from this survey with other data sources.

- Caveats related to period of data collection: when interpreting findings, users are informed that data
 collection occurred during the monsoon season, and that results for certain indicators may be linked to
 variations in living standards attributable to seasonal variation (particularly in regard to WASH or shelter). Data
 collection also occurred during the Eid al-Adha holiday, which may explain findings related to debts and
 expenditures on certain items.
- Parameters of the analysis presented in this report: The present study does not present a multidimensional or multiple-regression analysis of household deprivations and is not intended to be used to make conclusions on which households are worse or better-off. While five household social and demographic variables are under analysis in this report, there are a range of other individual, intra-household and household-level characteristics that can contribute to varied levels of vulnerability. Findings are not intended to inform service provision nor are they intended to assess current access to services.

KEY MESSAGES

This section presents key messages and indicator-level findings from the J-MSNA, summarising current living conditions, potential gaps in coverage that may be linked to service provision or structural constraints, notable geographic variation in findings, as well as the potential social dynamics underpinning findings on certain indicators. This section also summarizes any unsustainable or risky behaviours that host community households reported employing in order to meet their basic needs.

- J-MSNA findings are not indicative of widespread extreme gaps in basic household-level living standards in host communities. Rather, the proportion of households found to face minimal needs was similar to the proportion facing extreme gaps. The majority of households fell in between the two extremes, suggesting that households may struggle to meet certain isolated needs but do not face extensive gaps across all sectors. This reflects the socio-economic environment that should underpin considerations of host communities' needs:
 - Nearly three-quarters (72%) of households are calculated to have an "acceptable" Food Consumption Score (FCS)⁴³ (reflecting diets of adequate quantity and quality).⁴⁴ The proportion of households with a "poor" FCS was not found to exceed 4% of households in any union.
 - Almost all households (97%) reported accessing improved water sources⁴⁵ (mainly tube wells and piped water / tap stands) as their main source of water for drinking and cooking purposes at the time of data collection. Most households (94%) reported having enough water for drinking purposes at the time of data collection.
 - The vast majority of households (86%) reported at least one adult member (aged 18 and above) who worked to earn an income in the 30 days prior to data collection. The three most frequently reported sources of employment or labour were: small business (28%); agricultural / casual labour (e.g. construction, drainage) (18%); and non-agricultural casual labour, such as a *tom tom* (auto rickshaw) driver (17%).⁴⁶
 - Agricultural asset ownership was relatively widespread in host community households. Half of all households reported owning livestock, while one-fourth of households reported owning agricultural land and 13% reported owning fishing gear (nets, etc.).
 - Most households (85%) reported owning or co-owning the plot of land where their shelter is located. Ninety-five per cent (95%) of households reported that they owned or co-owned their shelter. Four in five host community households reported being connected to the electricity grid.
- 2. However, there are certain gaps in access to basic goods and services, with many of these concerns appearing to affect host communities in Teknaf and Ukhiya Upazilas as a whole, regardless of who or where they are located:
 - While findings suggest that households have managed to avoid "poor" food consumption outcomes, estimates of household dietary diversity based on the reported quantity of food groups consumed during the seven days prior to data collection also suggest that the majority of host community households face difficulties accessing a varied diet. Roughly three-quarters of households are estimated to consume

⁴³ The Food Consumption Score based on: (1) dietary diversity; (2) food frequency; and (3) relative nutritional importance of nine weighted food groups. The FCS is recorded from a seven-day recall period. In Bangladesh, thresholds for FCS classifications set by WFP are as follows: \geq 42 Acceptable; 28 - 41 Borderline; \leq 27 Poor. For additional information on the FCS, what it shows and how it is calculated, please reference: World Food Programme (WFP), *Food Consumption Analysis: Technical Guidance Sheet* (Rome, 2008). Available <u>here</u> (accessed 20 December 2019).

⁴⁴ WFP, *Refugee Influx Émergency Vulnerability Assessment (REVA II) 2018, Cox's Bazar, Bangladesh* (Cox's Bazar, 2019). Available <u>here</u> (accessed 19 November 2019).

⁴⁵ "Improved drinking water sources are those that have the potential to deliver safe water by nature of their design and construction" World Health Organization / UNICEF Joint Monitoring Programme (JMP). Available <u>here</u> (accessed 30 November 2019).

⁴⁶ This question was only asked of households indicating "labour" or "employment" as an income source (n = 1,100). Respondents could choose more than one employment source.

three food groups or fewer in any given day, while 32% of households are estimated to consume just two food groups or fewer in any given day.⁴⁷

- Thirty-seven per cent (37%) of households reported not making improvements to their shelter in the six months prior to data collection, despite reporting the need to do so. Of households that reported not making improvements to their shelter in the six months prior to data collection, 60% reported "lack of enough money" as a reason for not making improvements.⁴⁸
- Despite most host community households reporting owning or co-owning their house / shelter, one in ten reported feeling at risk of eviction or being forced to leave their house / shelter within the few months following data collection.
- Only 63% of households reported having enough water to meet all basic needs at the time of data collection (including drinking, cooking, personal hygiene and other domestic purposes).⁴⁹
- One in three households reported visible waste in the vicinity (30 metres or less) of their accommodation in the 30 days prior to data collection, which echoes ongoing concerns about environmental sanitation and solid waste management in the district.⁵⁰
- Seventy-seven per cent (77%) of households that reported at least one member with an illness in the 30 days prior to data collection reported engaging in coping mechanisms in order to manage health-related issues.⁵¹ Of the households that reported engaging in any health-related coping mechanisms, 53% reported that they went into debt to pay for health expenditures. Fifteen per cent (15%) reported seeking lower-quality care or medication due to a lack of money, while 11% reported engaging in home treatment due to a lack of money.⁵² Only 10% of households reported being visited by a community health worker in the four weeks prior to data collection.
- Thirty-seven per cent (37%) of male respondents reported at least one area in their neighbourhood where male members feel unsafe⁵³ (top three areas: markets, 14%; on the way to and from key facilities, 13%; firewood collection sites, 10%); 43% of female respondents reported at least one area in their neighbourhood where female members feel unsafe (top three areas: markets, 24%; latrines⁵⁴, 21%; on the way to or from key facilities, 12%).
- Only one-fifth of households reported that they have received any humanitarian aid in the six months prior to data collection. Sixteen per cent (16%) of households reported that members have been consulted or asked about concerns or priority needs in the six months prior to data collection.
- 3. Findings did not show significantly worse-off conditions or needs in any given area in the assessed host communities. However, certain issues in access to water and education attendance may be exacerbated in Teknaf Upazila (see Annex 5, as well as the <u>J-MSNA Dashboard</u> for union-level findings for which notable geographic variation was observed):
 - Eighteen per cent (18%) of households reported accessing surface water for drinking or cooking purposes a couple of times or almost every day during the last dry season.⁵⁵ Most households reporting the need to do so were concentrated in four unions in Teknaf Upazila, ranging from 25% in Teknaf Sadar union to as high as 35% in Whykong union.

⁵² Respondents could choose multiple options for this question.

⁴⁷ The standard module to calculate a Household Dietary Diversity Score (24-hour recall period) was not included in this questionnaire. These findings represent the proportion of households who reported consuming numbers of food groups at least six or seven times in the week prior to data collection.

⁴⁸ This question was only asked of households that reported not making improvements to their shelter in the 6 months prior to data collection (n = 797). ⁴⁹ "Personal hygiene" includes activities such as washing and bathing; "other domestic purposes" includes activities such as cleaning house, floor, etc.

⁵⁰ United Nations Development Programme (UNDP), *Solid waste management essential to save Cox's Bazar*, 18 October (Cox's Bazar, 2018). Available here (accessed 19 December 2019).

⁵¹ The denominator for this indicator is all households that reported at least one member with an illness serious enough to require medical treatment in the 30 days prior to data collection (n = 1,059).

⁵³ Respondents were asked to respond on behalf of household members of their respective gender only (male, n = 587; female, n = 723). Respondents could choose more than one option.

⁵⁴ Respondents were not asked to specify whether they felt unsafe at personal / household latrines or communal latrines

⁵⁵ Respondents were asked to recall frequencies from the previous dry season, as data collection occurred during the rainy season. The calendar period corresponding to "dry season" was not specifically defined but is commonly understood to include the months immediately preceding monsoon season (Roughly April – May 2019).

- The proportion of children and youth (aged 4 24) reported to attend a formal learning programme during the current academic year varied significantly based on union, with lower overall attendance rates reported in unions located in Teknaf Upazila when compared with Ukhiya Upazila, for all age ranges. Thirty-six per cent (36%) of boys and girls aged 5 11 in Teknaf were reported as *not* attending a formal learning programme compared with 23% in Ukhiya; 44% of youth aged 12 17 were reported as *not* attending any formal learning programme in Teknaf compared with 27% in Ukhiya; and 80% of individuals aged 18-24 were reported as not attending in Teknaf compared with 68% of individuals in the same age range in Ukhiya.⁵⁶
- 4. In other cases, findings seem to highlight issues of particular concern related to gender norms, roles, and dynamics, and their potential effect on access to services in host communities:
 - Of children aged 0 to 11 months at the time of data collection, 56% were reported to be born at home.⁵⁷ When households were asked who in the household was the primary decision-maker on the location of delivery, 44% reported that the decision was that of the husband of the pregnant woman and 14% reported that the decision was made by another relative of the pregnant woman. Only 15% of respondents reported that the decision was made by the pregnant woman herself, while 22% reported that it was a joint decision between the pregnant woman and someone else.⁵⁸
 - Reported labour market participation varied significantly based on gender, with 47% of males aged five and above reported to be working to earn an income in the 30 days prior to data collection compared with just 4% of females aged five and above.⁵⁹
 - Eighteen per cent (18%) of households reported that *married* women (aged 18 and above) are not allowed to go to the local market to buy things, either alone or accompanied by someone else. Twenty-three per cent (23%) of households reported that *unmarried* women (aged 18 and above) are not allowed to go to the local market to buy things, either alone or accompanied by someone else.⁶⁰
- 5. Households in the assessed host communities reported accessing a diverse range of service providers to meet a variety of needs (such as health, education, or non-food items). These items or services are often associated with incurred costs. Spending on items and services is underpinned by access to livelihoods and participation in income-generating activities, as well as asset ownership. However, J-MSNA findings show that socioeconomic conditions in host communities are still precarious:
 - Seventy-two per cent (72%) of households reported engaging in coping mechanisms due to a lack of money to meet basic needs in the 30 days prior to data collection.
 - Nearly three-fifths (56%) of households reported borrowing money or purchasing items on credit (i.e. incurring debt) in the 30 days prior to data collection. Forty-five per cent (45%) of all households reported incurring debt in order to cover health expenses while 41% reported needing to buy food as a reason for incurring debt. Seven per cent (7%) reported incurring debt in order to pay school or education costs in the 30 days prior to data collection.⁶¹
 - There are indications that the rate at which debt is being incurred outpaces the rate at which households are repaying debts or paying off credit, with only 27% of households reporting spending any money (> 0 Bangladeshi Taka) on debt repayment in the 30 days prior to data collection.

⁵⁶ These indicators are a proportion out of all individuals in the defined gender and age range (boys 5-11, n = 654; girls 5-11, n = 662; boys 12 – 17 n = 536; girls 12 – 17 n = 617; boys 18-24, n = 584; girls 18-14, n = 546).

⁵⁷ This indicator is a proportion of all individuals 11 months of age or younger at the time of data collection (n = 520).

⁵⁸ The reported primary decision-maker within the household varied slightly between male and female respondents. Notably, 51% of male respondents and 39% of female respondents cited the husband of the pregnant woman as the primary decision-maker, while 9% of male respondents and 20% of female respondents cited the pregnant woman herself. Similar proportions of male and female respondents reported the mother-in-law as the primary decision-maker (10-12%), and similar proportions reported joint decision-making (21-22%).

⁵⁹ These indicators are a proportion out of all individuals of either gender five years of age and older (male, n = 3,267; female, n = 3,243).

⁶⁰ This question was only asked of households with at least one female individual over the age of 12 (n = 1,310). A higher proportion of female respondents indicated the ability for both married and unmarried women to go to the market alone as compared to male respondents.

⁶¹ Respondents could choose multiple options for this question.

- Households also reported the need to engage in "crisis" or emergency" coping mechanisms in order to meet basic needs. These are coping mechanisms which may have long-term (potentially irreversible) negative impacts on individual safety and/or wellbeing. Four per cent (4%) reported that they sold labour in advance; 4% reported that they reduced essential non-food expenditures (e.g. on education / health / clothes); 3% reported that they withdrew children from school; 2% reported depending on community support as their only food or income source in the 30 days prior to data collection; 1% of households reported that adults (aged 18 and above) worked long hours (more than 43 hours) or in hazardous conditions, while 1% reported having sold their house or land.⁶²
- 6. Certain household diversity characteristics had a significant relationship with varied outcomes on indicators related to well-being, particularly in regard to participation in labour markets, practices related to debt incurrence and health expenditures. However, there were numerous wellbeing-related indicators for which no correlation was found with the household social and demographic characteristics under examination in this analysis. Additional targeted research and exploration would be required, including of other diversity characteristics that may be linked to variation in outcomes, before serving as the basis for informing programmatic and strategic decisions.
 - Whether or not households reported at least one adult member (aged 18 and above) as working to earn
 an income in the 30 days prior to data collection was strongly associated with household social and
 demographic characteristics linked to gender composition and structure. Higher proportions of maleheaded households reported at least one adult (aged 18 and above) that worked to earn an income in the
 30 days prior to data collection when compared with female-headed households. Households with at least
 one male member of productive age (18-59) were approximately twice as likely than households with no
 males aged 18-59 to report at least one adult member (aged 18 and above) that worked to earn an income
 in the 30 days prior to data collection
 - Households reporting that at least one member had completed secondary education or above (the highest category of education obtainment) were less likely to report that at least one child member (aged 17 and below) had worked to earn an income in the 30 days prior to data collection. Households with a "high" calculated dependency ratio were more likely than households with a "low" calculated dependency ratio to report that at least one child member (aged 17 and below) had worked to earn an income in the 30 days prior to data collection.
 - Male-headed households and households with at least one male aged 18-59 were more likely to report having incurred new debts in the 30 days prior to data collection compared with female-headed households, or households with no males aged 18-59.
 - Outcomes on food consumption were not found to be correlated with whether or not households demonstrated any of the five household diversity characteristics under present study.
 - Outcomes on whether or not households reported not making improvements to their shelter in the six months prior to data collection despite reporting the need to do so, as well as whether households reported any safety concerns as a barrier to accessing key facilities (markets, health or education) were not strongly correlated with any of the five household diversity characteristics under examination.

⁶² Respondents could choose multiple options for this question.

FINDINGS: VARIATIONS IN HOUSEHOLD OUTCOMES BASED ON HOUSEHOLD DIVERSITY CHARACTERISTICS

Overview

This section presents findings related to additional analysis of J-MSNA data, to assess how household social and demographic characteristics may lead to significantly different outcomes on a number of sectoral and cross-sectoral key indicators related to household wellbeing. In total, five key household social and demographic characteristics were selected and tested for correlation against a mix of 11 total indicators. These indicators were tied to a range of dimensions of wellbeing, including access to food, income generation, education, market access, health care, and general safety and security. For a complete list of which relationship tests were conducted for which indicators and household characteristics, please refer to Annex C.

The present analysis, which relies on chi-square tests for independence, serves to test binary associations between variables. This is a descriptive test that is meant to establish correlation between categorical variables, but it is not a model of the determinants of said relationship, nor does it provide answers on the likelihood of an outcome occurring. As a result, this study does not intend to establish causation between relationships. The findings in this section are not intended to inform service provision or assess current access to services. Instead, they serve to provide a more nuanced understanding of the diversity of needs between different households, as well as the household profiles which may be more vulnerable to facing deprivations in key indicators and may thus be worth researching in more depth.

Description of household characteristics

This sub-section outlines the five household demographic and social characteristics selected for study in the present analysis, background on the diversity of household needs for each of these characteristics and the rationale for further study. It should be mentioned that these and other household diversity characteristics have been largely under-studied in host communities to this point when compared with Rohingya refugee populations. As such, exploration of these five household social and demographic characteristics is explorative and inductive in nature with no assumption of correlation. Those studies that have explored these diversity characteristics in host communities are cited in this sub-section but are limited in number.

Gender of head of household

Figure 1: % of households with a female head of household



During the present assessment, 19% of households were determined to be female-headed. This proportion is consistent with the 2018 *REVA II* survey (which found 18% of households to be female-headed) but is significantly higher than the 2018 UNDP household survey (9.2%). Notably, a slightly higher proportion of households in Teknaf Upazila were found to be female-headed (21%) compared with Ukhiya Upazila (16%). The definition of "head of household" that was provided to respondents in this J-MSNA was "the individual who makes decisions on behalf of the entire household".

Female-headed households are characterized as having increased levels of vulnerability within host communities when compared with male-headed households, as reflected in both *REVA II* and in the ACAPS Host Community Review. The latter survey found that 45% of female-headed households in host communities were either vulnerable

or very vulnerable, compared with 35% of male-headed households.⁶³ *REVA II* findings showed that female-headed households in host communities were at particular risk of food insecurity.⁶⁴ A 2018 UNDP household survey found that female-headed households earn an average of 25% less than male-headed households.⁶⁵

In acknowledging that households with female heads may be more vulnerable to facing deprivations in a number of dimensions, the present analysis compares households in this demographic to male-headed households, under the broad hypothesis that the gender of the head of household may be correlated with varying outcomes on key J-MSNA indicators.

Highest education levels in the household

Figure 2: % of households by highest level of education completed by anyone in the household



Findings regarding highest education levels completed in the household show that nearly half (49%) of households had at least one member that had completed some secondary education (including Middle Standard 6 through High Standard 10) while nearly one in five households had at least one member that completed secondary education or above (including tertiary education). One third of households reported that the highest education level completed by anyone in the household was primary or less (including Kindergarten through Elementary Standard 5, as well as 2% of households that reported "no education" and 2% that reported "madrassa only").

Given that education levels can have important implications in household coping strategies, income levels and employment, J-MSNA data were analysed based on the three aforementioned education categories (completed primary or less, some secondary, completed secondary or above) under the hypothesis that household education levels would have a correlation to different outcomes on key wellbeing-related indicators.

Household dependency ratio

The dependency ratio of a household was calculated as the ratio of individuals aged 0 - 14 or 65+ to individuals aged 15 - 64, assumed to be of productive working age. *REVA II* findings from 2018 indicate that household dependency ratio was one of the core characteristics tied to household vulnerability in host communities.⁶⁶

For the purposes of the present analysis, households were separated into two categories – those having low calculated dependency ratios (<1.5) (77% of households overall) versus those having high calculated dependency ratios (\geq 1.5) (23% of households overall). The broad hypothesis informing exploration of this demographic characteristic in the present analysis, in line with *REVA II*, was that households with high dependency ratios could have a correlation with less favourable outcomes in key well-being related indicators.

⁶³ Action Against Hunger, Save the Children, and Oxfam, Rohingya Refugee Response Gender Analysis: Recognizing and responding to gender inequalities, August 2018 (Cox's Bazar, 2018). Available here (accessed 20 December 2019).

 ⁶⁴ UNDP, Impacts of the Rohingya Refugee Influx on Host Communities (Cox's Bazar, 2018). Available here (accessed 19 November 2019).
 ⁶⁵ Ibid.

⁶⁶ WFP, Refugee Influx Emergency Vulnerability Assessment (REVA II) 2018, Cox's Bazar, Bangladesh (Cox's Bazar, 2019). Available <u>here</u> (accessed 19 November 2019).

Households reporting at least one member (aged 5 and above) as requiring assistance to complete daily activities

Figure 3: Presence of individuals (aged 5 and above) reported as requiring assistance to complete daily activities⁶⁷



J-MSNA findings show that slightly less than one-fifth of host community households reported at least one member (aged 5 and above) as requiring assistance to complete daily activities (such as eating, dressing, bathing or going to the toilet). This indicator serves as a loose proxy for disability but is not a comprehensive analysis given that questions on household disability prevalence were not asked according to Washington Group Short Set of Questions on Disability.

Most individuals reported to require daily assistance were elderly, illustrated by the 25% of individuals aged 60 and above who were reported as requiring assistance to complete daily activities, compared with roughly 3% of individuals aged 5-59.⁶⁸ Of those individuals (aged 5 and above) reported as requiring assistance to complete daily activities, 51% were reported to require daily assistance due to long-term pain, 27% were reported as having a physical disability, and 8% were reported to have a mental health concern.⁶⁹

People with disabilities living in Teknaf and Ukhiya Upazilas may face barriers in accessing essential facilities such as latrines, health centres, education facilities and shelters, often due to lack of adapted facilities to meet their needs.⁷⁰ Roads and walkways are often not adequate enough to enable safe passage by people with physical disabilities in these localities, who struggle to move about in rain-soaked and hilly terrain.⁷¹ Given that individuals with disabilities lack the same degrees of autonomy and may be restricted in movement outside of the home and / or stigmatized for their condition, they may face exclusion from important community decision-making processes or may not be adequately consulted for feedback in service provision and planning.⁷²

The present analysis compared outcomes on a number of well-being indicators for households that reported at least one member (aged 5 and above) as requiring assistance to complete daily activities (17% of households overall), compared to the 83% of households who did not report any members as requiring assistance.

⁶⁷ The indicator "% of individuals (aged 5 and above) reported as requiring assistance to complete daily activities" is a proportion out of all individuals (male and female) aged 5 and above (n = 6,511). The indicator "% of individuals (aged 60 and above) reported as requiring assistance to complete daily activities" is a proportion out of all individuals aged 60 and above (n = 468).

⁶⁸ Data on individual disability were collected by proxies (from respondents on behalf of all household members), and not directly from household members themselves. Respondents were asked to report on each individual in their household who required another person to help him / her complete daily activities. These indicators present proportions out of the individuals in each of the specified age groups (5 – 17, n = 2,469; 18-59, n = 3,574; 60 and above, n = 468).

⁶⁹ These reasons for requiring daily assistance are not based on an actual medical diagnosis but are instead reported by the survey respondent on behalf of these individuals. This question was only asked for all individuals (aged 5 and above) reported as requiring assistance to complete daily activities (n = 237). Respondents could choose more than one option.

 ⁷⁰ ACAPS and NPM Analysis HUB, Rohingya Influx Overview – April 2019 (Cox's Bazar, 2019). Available here (accessed 12 December 2019).
 ⁷¹ Human Rights Watch, Bangladesh: Rohingya Refugees with Disabilities, 24 September 2018 (Cox's Bazar, 2018). Available here (Accessed 12 December 2019).

⁷² Aktion Deutschland Hilft, Centre for Disability in Development and Arbeiter-Samariter-Bund, *Rohingya Refugee Crisis in Bangladesh: Age and Disability Inclusion, Rapid Assessment Report, December* 2017. Available <u>here</u> (accessed 17 December 2019); ISCG, *Gender in Humanitarian Action Brief No.* 4 (Cox's Bazar, 2018). Available <u>here</u> (accessed 17 December 2019).

Households reporting no males aged 18 - 59

This analysis looks at households who had no adult males aged 18-59, encompassing households that were composed of only women as well as households that only had boys aged 0 - 17 or elderly men aged 60 and above. Overall, 9% of households were determined to have no males within the defined age range.

Gender composition of households may have important implications for access to essential services, linked to risks and fears that women and girls have regarding movement outside of their homes (with reports that these fears have been exacerbated since the most recent influx of refugees)⁷³, as well as cultural restrictions linked to *purdah*.⁷⁴ Women and girls are also at a heightened risk of forced and child marriage, as well as sexual and gender-based violence (SGBV).⁷⁵

Livelihood opportunities for women are still minimal in host communities. A low proportion of women were reported to have worked for an income in the 30 days prior to data collection during the present J-MSNA – only 4% of all females aged 5 and above – compared with 47% of all males aged 5 and above.⁷⁶ The absence of male adults of productive age may have implications for household economic vulnerability, given that even small injections of cash into households can have a large effect in pulling them out of vulnerability.⁷⁷ In most parts of Bangladesh, even when women are engaged in the labour market, the wages they command are typically far less than males. An average daily wage for male agricultural workers (one of the principle employment sources in Teknaf and Ukhiya Upazilas) in Bangladesh was found to be 435 Bangladeshi Taka (BDT) compared with 350 BDT earned by female agricultural workers.⁷⁸

Household characteristics compared to outcomes on key indicators

This sub-section presents key messages and notable findings from the statistical relationship testing of the household demographic and social characteristics outlined in the previous sub-section, compared against outcomes on key indicators related to household wellbeing. Relationships were determined to be statistically significant and are reported on as such if the *p*-value⁷⁹ was low (typically ≤ 0.05). Error bars on all graphs reflect the 95% confidence interval.

1. LIVELIHOODS: Exploration of household diversity characteristics against outcomes regarding whether or not households reported at least one adult (aged 18 and above) as working to earn an income in the 30 days prior to data collection show that household gender composition and structure is strongly associated with participation in labour markets. Far smaller proportions of female-headed households and households with no males aged 18-59 reported at least one adult member (aged 18 and above) that worked to earn an income in the 30 days prior to data collection. Female-headed households were also less likely to report owning any livelihood assets. Households with higher overall education levels were less likely to report at least one child member (aged 17 and below) that worked to earn an income in the 30 days prior to data collection when compared with households with lower overall education obtainment.

⁷³ Action Against Hunger, Save the Children and Oxfam, Rohingya Refugee Response Gender Analysis: Recognizing and responding to gender inequalities, August 2018 (Cox's Bazar, 2018). Available here (accessed 20 December 2019).

⁷⁴ Purdah is a practice by which there is a separation of sexes and seclusion of women from public observation.

⁷⁵ Action Against Hunger, Save the Children and Oxfam, 2019.

⁷⁶ This indicator is a proportion out of all individuals of either gender aged 5 and above (females, n = 3,243; males, n = 3,267).

⁷⁷ WFP, *Refugee Influx Emergency Vulnerability Assessment (REVA II) 2018, Cox's Bazar, Bangladesh* (Cox's Bazar, 2019). Available here (accessed 19 November 2019).

⁷⁸ UNDP, Impacts of the Rohingya Refugee Influx on Host Communities (Cox's Bazar, 2018). Available here (accessed 19 November 2019).

⁷⁹ The *p*-value reflects the probability that any correlation between two variables could be due to random chance.

• Indicators: Households reporting at least one member (adult aged 18 and over and / or child aged 17 and below) who worked to earn an income in the 30 days prior to data collection

For host community households, access to income is generally considered the most important determinant of wealth and the most important driver determining access to essential needs.⁸⁰ In Teknaf and Ukhiya Upazilas, large proportions of the population depend on agriculture (mainly rice and salt cultivation) and fishing as a main source of income and employment, with very few opportunities in the realm of industrial employment (e.g. manufacturing) available in these areas when compared with the rest of the country.^{81,82} A 2018 UNDP assessment found that nearly half (46.5%) of households had at least one member either employed in, or associated with agricultural work.⁸³ Wages in Cox's Bazar are typically in line with the national average, although the same survey found that monthly per capita income in Teknaf and Ukhiya Upazilas together was on average 13.3% lower than the rest of Cox's Bazar district.

J-MSNA findings show that most host community households (86%) reported that at least one adult member (aged 18 and above) had worked to earn an income in the 30 days prior to data collection. Eight per cent (8%) reported that at least one child member (aged 17 and below) had worked to earn an income in the 30 days prior to data collection. Of households reporting "labour" or "employment" as a main source of income at the time of data collection, the most frequently reported sources of employment were: small business (28%); agricultural / casual labour (e.g. construction or drainage) (18%); non-agricultural casual labour (17%); unskilled wage labour (other construction) (17%); skilled wage labour (e.g. carpentry) (11%); fishing (11%); and professional (e.g teacher, nurse, banking, NGO, government).⁸⁴ While most host community households in this assessment reported accessing sources of income and employment. Findings from *REVA II* indicate that employment in host community households, though widespread, is fragile and sporadic. Many families with economically active individuals are only accessing labour opportunities a couple of days per month, contributing to low overall income levels.⁸⁵

There are also reported concerns about the ways in which the recent refugee influx may be impacting host communities' access to income-generating activities, given reports of refugees entering local labour markets, compounded by the potential willingness of refugees to work for lower wages.⁸⁶ Certain estimates show a decrease in the daily wage for casual labour from roughly 500-600 BDT to just 200 BDT per day.⁸⁷ Competition for jobs between refugee and host communities may be exacerbated given that many Bangladeshi families in Teknaf Upazila in particular have been facing security-related limitations since August 2017 in accessing key water sources for fishing, leading them to seek additional work elsewhere as wage labourers.⁸⁸

The present analysis found that there was generally a significant association between whether households reported at least one adult member (aged 18 and above) that worked to earn an income in the 30 days prior to data collection and the gender of head of household and households with no males aged 18-59. On the other hand, no significant correlation was observed between household dependency ratio or the highest level of education obtained in the household and whether or not the household reported at least one adult member (aged 18 and above) that worked to earn an income in the 30 days prior to data collection, suggesting that gender dynamics are one of the core driving factors behind households' access to labour-based income.

When analysing outcomes on whether or not the household reported at least one child member (aged 17 and below) that worked to earn an income in the 30 days prior to data collection against the same aforementioned

⁸⁷ Ibid. ⁸⁸ Ibid.

⁸⁰ WFP, *Refugee Influx Emergency Vulnerability Assessment (REVA II)* 2018, *Cox's Bazar, Bangladesh* (Cox's Bazar, 2019). Available <u>here</u> (accessed 19 November 2019).

⁸¹ WFP, 2019.

⁸² UNDP, 2018 ⁸³ Ibid

⁸³ Ibid

⁸⁴ This question was only asked of households indicating "labour" or "employment" as an income source (n = 1,100). Respondents could choose multiple options.

⁸⁵ WFP, *Refugee Influx Emergency Vulnerability Assessment (REVA II) 2018, Cox's Bazar, Bangladesh* (Cox's Bazar, 2019). Available <u>here</u> (accessed 19 November 2019).

⁸⁶ UNDP, Impacts of the Rohingya Refugee Influx on Host Communities (Cox's Bazar, 2018). Available here (accessed 19 November 2019).

household diversity characteristics, the opposite correlations appeared to be true. There was a significant association between whether households reported at least one child member (aged 17 and below) that worked to earn an income in the 30 days prior to data collection and household dependency ratio and the highest level of education obtained in the household. However, no significant correlation was observed between this indicator and the gender of head of household, nor with households with no males aged 18-59.

a. Gender of head of household

Overall, 90% of male-headed households reported at least one adult member (aged 18 and above) who worked to earn an income in the 30 days prior to data collection, compared with 72% of female-headed households (see Figure 4 below). There was no association between the gender of the head of household and whether or not the household reported child members that worked to earn an income in the 30 days prior to data collection.

Figure 4: % of households that reported at least one adult member (aged 18 and above) that worked to earn an income in the 30 days prior to data collection, by gender of head of household (HoH)⁸⁹



b. Highest level of education obtained in the household

The highest level of education obtained in the household was not correlated with whether or not an adult member (aged 18 and above) in the household was reported to have worked for an income in the 30 days prior to data collection. However, there appeared to be an inverse relationship between education levels and whether or not the household reported at least on child member (aged 17 and below) that worked to earn an income. As household education levels increased by category (from "primary or less" to "some secondary education" and "secondary education and above"), the proportion of households reporting at least one child member (aged 17 and below) that worked to earn an income in the 30 days prior to data collection decreased – however, the difference between categories was minimal.

Figure 5: % of households that reported at least one child member (aged 17 and below) that worked to earn an income in the 30 days prior to data collection, by highest level of education obtained in the household⁹⁰



⁸⁹ *p*-value <0.001 ⁹⁰ *p*-value <0.014

c. Household dependency ratio

Findings from this analysis suggest that there may be a slight relationship (*p*-value 0.072) between household dependency ratio and whether or not the household reported at least one adult member (18 and above) that worked to earn an income in the 30 days prior to data collection, although the variation in outcomes between households with low versus high calculated dependency ratios was minimal. On the other hand, there was a strong association between household dependency ratio (high or low) and whether or not the household reported at least one child member (aged 17 and below) that worked to earn an income in the 30 days prior to data collection. However, in contrast to what was initially hypothesized, households with a low calculated dependency ratio were slightly more likely to report that any child members (aged 17 and below) had worked to earn an income in the 30 days prior to data collection. The reasons for this are unclear and would require additional research and testing, primarily to understand whether high dependency ratios are driven by a larger proportion of elderly individuals or children.

Figure 6: % of households that reported at least one child member (aged 17 and below) that worked to earn an income in the 30 days prior to data collection, by household dependency ratio (high or low)⁹¹



d. Households with no males aged 18-59

The variation in outcomes regarding whether a household reported at least on adult member (aged 18 and above) that worked to earn an income in the 30 days prior to data collection was substantial when looking at gender and age composition of household members. In households with at least one male aged 18-59, 90% reported that at least one adult member (aged 18 and above) worked to earn an income in the 30 days prior to data collection. This is compared with 47% of households with no males aged 18-59 that reported at least one adult member (aged 18 and above) worked to earn an income in the 30 days prior to data collection. This is compared with 47% of households with no males aged 18-59 that reported at least one adult member (aged 18 and above) that worked to earn an income in the 30 days prior to data collection (see Figure 7). That is, households with at least one male member of productive age were approximately twice as likely as households with no males aged 18-59 to report at least one adult member (aged 18 and above) that worked to earn an income in the 30 days prior to data collection. This household diversity characteristic was not correlated with whether or not a child (aged 17 and below) in the household was reported to have worked for an income in the 30 days prior to data collection.

⁹¹ *p*-value =0.001

Figure 7: % of households that reported at least one adult member (aged 18 and above) that worked to earn an income in the 30 days prior to data collection, by whether or not the household had at least one male aged 18-59⁹²



• Indicators: Households reporting owning no livelihood assets (livestock, agricultural land or fishing gear)

Household in this assessment were asked to report on whether or not they owned any of the following three livelihood assets: livestock, agricultural land and / or fishing gear (nets, etc.). Half of host community households reported owning livestock. Approximately one-quarter (24%) reported owning agricultural land, while 13% reported owning fishing gear. Asset ownership is studied as an important contributor amongst many to overall household economic security. Ownership of assets may also enable households to generate more income.

In the present analysis asset ownership was tested against the gender of head of household, for which the results showed a significant correlation. Male-headed households were significantly more likely to report owning any livelihood assets when compared with female-headed households (see Figure 8 below).

Figure 8: % of households reporting owning any livelihood assets (livestock, agricultural land or fishing gear), by gender of head of household (HoH)⁹³



⁹² *p*-value <0.001 ⁹³ *p*-value =0.003

2. FOOD CONSUMPTION: The present analysis yielded no strong association between any of the five household diversity characteristics under present study and outcomes on food consumption. Additionally, exploratory analysis to determine whether household food consumption varied based on households' distance to official camp boundaries resulted in no discernible pattern (see Annex). These findings likely reflect the socioeconomic conditions in host communities, particularly in regard to access to livelihoods, participation in income-generating activities, as well as asset ownership. These results do not signify that host community households face no challenges related to food consumption, but rather that outcomes did not vary significantly based on whether households demonstrated any of the characteristics under present study.

• Indicator: Household food consumption score (FCS)⁹⁴

J-MSNA findings show that the majority of host community households – 72% – have a calculated FCS of "acceptable". One-quarter of households have a calculated FCS of "borderline". Four per cent (4%) have a calculated FCS of "poor". When asked about their main sources of food consumed in the seven days prior to data collection, almost all households (98%) reported that they purchased food with cash. Sixteen per cent (16%) reported purchasing food on credit; 14% reported borrowing food; 12% reported sourcing food from own production / vegetable garden; 6% from hunting and fishing; 5% from support from friends and relatives; and 2% through barter and exchange.⁹⁵

Results from this analysis yielded no strong association between the five household diversity characteristics under present study and outcomes on food consumption. This would suggest that female-headed households are as likely as male-headed households to have diets of adequate quantity and quality. This would also imply that households with no males aged 18-59 did not face worse-off outcomes on food consumption when compared with households with at least one male aged 18-59, just as households with high calculated dependency ratios did not fare any worse than households with low calculated dependency ratios. These outcomes should not imply that host community households do not face any issues maintaining adequate food consumption but rather that outcomes (whether positive or negative) do not vary significantly based on whether households demonstrate any of these aforementioned characteristics.

Even when "borderline" and "poor" food consumption outcomes have largely been avoided, households are often engaging in negative coping mechanisms in order to do so. J-MSNA findings show that approximately two-fifths (41%) of households reported incurring debt (either borrowing money or purchasing items on credit) in order to pay for food in the 30 days prior to data collection. In addition, *REVA II* found that host community households devote nearly two-thirds of their monthly budget to meeting food needs, leaving a very small portion of money left over to cover other essential expenditures (such as health and education).⁹⁶ Observations on outcomes on food consumption compared with these household diversity characteristics require additional targeted research and exploration. For example, a number of characteristics that *REVA II* found to be associated with vulnerability in food security and other outcomes in host community households – such as households with three children or more aged 5-14, three or more children under five years of age, or small households (1-3 members)⁹⁷ – were not explored in the present analysis.

⁹⁴ The Food Consumption Score is a composite score based on: (1) dietary diversity; (2) food frequency; and (3) relative nutritional importance of nine weighted food groups. The FCS is recorded from a seven-day recall period. In Bangladesh, thresholds for FCS classifications set by WFP are as follows: ≥ 42 Acceptable; 28 - 41 Borderline; ≤ 27 Poor. For additional information on the FCS, what it shows and how it is calculated, please reference: World Food Programme (WFP), *Food Consumption Analysis: Technical Guidance Sheet* (Rome, 2008). Available <u>here</u> (accessed 20 December 2019). ⁹⁵ Respondents could choose multiple options for this question.

⁹⁶ WFP, *Refugee Influx Emergency Vulnerability Assessment (REVA II) 2018, Cox's Bazar, Bangladesh* (Cox's Bazar, 2019). Available <u>here</u> (accessed 19 November 2019).

3. COPING MECHANISMS: Household gender composition and structure appeared to have a strong association with whether or not households reported borrowing money or purchasing items on credit (i.e. incurring debt) in the 30 days prior to data collection. Male-headed households, as well as households with at least one male aged 18-59, were more likely to report having incurred new debts in the 30 days prior to data collection than female-headed households, or households with no males aged 18-59. Whether or not the household reported at least one member (aged 5 and above) as requiring assistance to complete daily activities had a significant association with a higher likelihood of having paid for health or medical expenses in the 30 days prior to data collection.

• Indicator: Households reporting borrowing money and / or purchasing items on credit (i.e. incurring debts) in the 30 days prior to data collection

J-MSNA findings show that 56% of households either borrowed money or purchased items on credit (i.e. incurred new debts) in the 30 days prior to data collection. Most households reporting that they incurred debt in the 30 days prior to data collection reported doing so in order to meet immediate food and health needs, as well as education-related costs. There are also indications that the rate at which debt is being incurred outpaces the rate at which households are repaying debts or paying off credit, with only 27% of households reporting spending any money (> 0 Bangladeshi Taka) on debt repayment in the 30 days prior to data collection. These findings are in line with *REVA II*, which found that most host community households who had incurred new debts had yet to repay them. While the J-MSNA did not measure actual debt burden, *REVA II* found the average value of loans incurred by host community households to be rather substantial – 16,000 BDT.⁹⁸ Although J-MSNA findings do not provide insights regarding the source of such debts and loans, it should be noted that social programmes with the aim of poverty alleviation have contributed to a relatively robust micro-credit and micro-financing system for Bangladeshi citizens.⁹⁹

The results of the current analysis showed that household dependency ratio, as well as households reporting at least one member (aged 5 and above) as requiring assistance to complete daily activities had no significant associations with whether or not a household reported incurring debts in the 30 days prior to data collection, whereas the investigation did show significant correlation between new debts incurred and the gender of head of household, as well as households with no males aged 18-59.

a. Gender of head of household

Findings show that slightly higher proportions of male-headed households reported incurring new debts in the 30 days prior to data collection compared with female-headed households (see Figure 9). This finding should not necessarily be interpreted as female-headed households facing fewer economic deprivations or as not being in need of additional cash injections. Instead, variations in debt incurrence may speak either to gendered social and cultural behaviours (e.g. the possibility that men are more likely to incur debts than women) as well as questions of access, as male-headed households, in addition to having greater access to income-generating activities, may have greater access to lenders. The findings from this analysis would benefit from a more in-depth assessment of money lending and borrowing practices in host communities and the specific gendered structures that produce variation in outcomes.

⁹⁸ Ibid.

⁹⁹ Mia, Md Aslam. "An overview of the microfinance sector in Bangladesh." The East Asian Journal of Business Management (EAJBM) 7, no. 2 (2017): 31-38.

Figure 9: % of households reporting borrowing money and / or purchasing items on credit (i.e. incurring debts) in the 30 days prior to data collection, by gender of head of household (HoH)¹⁰⁰



b. Households with no males aged 18-59

Mirroring findings regarding the relationship between gender of head of household and incurrence of new debts, households with no males aged 18-59 were slightly less likely to report having incurred new debts (either borrowed money or purchased items on credit) in the 30 days prior to data collection compared with households with at least one male in the defined age range. The proportion of households with at least one male aged 18-59 that reported incurring new debts in the 30 days prior to data collection was 10 percentage points higher than the proportion of households with no males 18-59 that reported having done so (see Figure 10 below).

Figure 10: % of households reporting borrowing money and / or purchasing items on credit (i.e. incurring debts) in the 30 days prior to data collection, by whether or not the household had at least one male aged 18-59¹⁰¹



• Indicator: Households reporting any health or medical expenses in the 30 days prior to data collection

J-MSNA findings show that nearly all individuals (98%) who were reported to have an illness serious enough to require medical treatment in the 30 days prior to data collection were reported to have sought treatment for their illness.¹⁰² Host community households reported accessing a diverse range of health service providers for treatment, although findings also suggest less frequent use of public health facilities. Individuals were nearly twice as likely to have been reported to have sought treatment at private health facilities (either a private clinic or pharmacy / drug shop) than a government clinic in order to treat their illness.¹⁰³

Many of these private health services are associated with incurred costs. Of the households that reported at least one individual as having an illness serious enough to require medical treatment in the 30 days prior to data

¹⁰⁰ *p*-value =0.005

¹⁰¹ *p*-value =0.028

¹⁰² This indicator is a proportion out of all individuals reported to have an illness serious enough to require medical treatment in the 30 days prior to data collection (n = 2,280).

¹⁰³ This question was only asked of households reporting at least one individuals has having an illness serious enough to require medical treatment in the 30 days prior to data collection, who sought treatment (n = 2,236).

collection in this assessment, 53% reported paying for care as a coping mechanism for addressing health-related issues.¹⁰⁴ In a separate question, households were asked to estimate the amount of money spent on medical expenses, health care and / or medicine in the 30 days prior to data collection. The below Table 1 shows a breakdown of these expenditure ranges (in Bangladeshi Taka).

Table 1: % of households reporting spending money on medical expenses, health care and / or medicine in the 30 days prior to data collection, by expenditure amount (Bangladeshi Taka, BDT)

0 BDT	6%
1 – 500 BDT	9%
501 – 1,000 BDT	15%
1,001 – 2,000 BDT	24%
2,001 – 5,000 BDT	22%
>5000 BDT	23%

Overall, 94% of households reported spending money on health-related items and services in the 30 days prior to data collection. A considerable proportion (approximately one-fourth) of households reported spending greater than 5,000 BDT on health-related items and services in the 30 days prior to data collection. A composite indicator for whether households either: (1) reported spending money on medical treatment as a coping mechanism for addressing health-related issues in the 30 days prior to data collection; OR (2) reported spending greater than 0 Bangladeshi Taka on medical expenses, health care and / or medicine in the 30 days prior to data collection was created and tested against household social and demographic characteristics, to see whether certain characteristics were correlated with a lower or higher likelihood that the household reported incurring any health or medical expenses.

The importance of looking into this indicator is multi-faceted for host communities. Firstly, the influx of refugees into these two Upazilas has contributed to a perceived shift in the focus of health centres to attending to the needs of refugees, while some host community households may not be receiving the same levels of care. There are also perceptions that host community members are having to wait longer for services, and potential tensions surrounding the fact that refugees receive medication free of charge while Bangladeshis in the area most often are required to pay.¹⁰⁵ For low-income earning Bangladeshi households, unexpected or large health expenses may have important implications on household wellbeing, and may explain high levels of debt incurred by host community households in order to manage health expenses.

Results from the analysis of this indicator against the gender of head of household, as well as households reporting at least one member (aged 5 and above) as requiring assistance to complete daily activities showed a strong correlation with both household social and demographic characteristics.

a. Gender of head of household

An analysis of gender of head of household showed that male-headed households were more likely to report having spent money on health and medical expenses in the 30 days prior to data collection, by a difference of eight percentage points (see Figure 11 below). The reasons for this variation in outcomes are likely multi-faceted but should not necessarily be interpreted to mean that female-headed households faced fewer health-related issues or had fewer health and medical-related needs. Rather, the lack of expenditures on this category might also be tied to the lack of enough money to pay in the first place. This finding would benefit from additional research and a more in-depth assessment exploring gendered health-seeking behaviours as well as gendered dynamics in access to health services in host communities.

¹⁰⁴ This question was only asked of households reporting at least one individual as having an illness serious enough to require medical treatment in the 30 days prior to data collection (n = 2,280).

¹⁰⁵ UNDP, Impacts of the Rohingya Refugee Influx on Host Communities (Cox's Bazar, 2018). Available here (accessed 19 November 2019).

Figure 11: % of households reporting any health or medical expenses in the 30 days prior to data collection, by gender of head of household (HoH)¹⁰⁶



b. Households reporting at least one member (aged 5 and above) as requiring assistance to complete daily activities

Households reporting at least one member (aged 5 and above) as requiring assistance to complete daily activities were slightly more likely to report health or medical expenses in the 30 days prior to data collection when compared with households reporting no members as requiring assistance to complete daily activities, by a difference of 5 percentage points. This would suggest that households are often incurring additional expenses in order to manage the care for these individuals.

Figure 12: % of households reporting any health or medical expenses in the 30 days prior to data collection, compared with whether or not households reported any members (aged 5 and above) as requiring assistance to complete daily activities¹⁰⁷



4. HOUSE / SHELTER STRUCTURE AND MAINTENANCE and SECURITY OF HOUSE / STRUCTURE TENURE: Indicators related to shelter improvement showed no strong association with any of the five household demographic and social characteristics examined in the present study. While there was a correlation between gender of head of household and perceptions of security of tenure in the household's accommodation, the difference in outcomes between male and female-headed households was minimal.

¹⁰⁶ *p*-value <0.001

¹⁰⁷ *p*-value =0.015

• Indicator: households reporting not making improvements to their shelter in the six months prior to data collection, despite reporting the need to do so

J-MSNA findings show that 37% of households reported not making any improvements to their shelter in the six months prior to data collection, despite reporting the need to do so. Of households reporting not making improvements to their shelter in the six months prior to data collection, 65% reported lack of enough money as a reason for not making improvements.¹⁰⁸ Although this indicator was tested against four separate household demographic and social characteristics for variation on outcomes, no strong association was found for any of the examined characteristics, including the gender of head of household, household dependency ratio, households reporting at least one member (aged 5 and above) as requiring assistance to complete daily activities and households with no males aged 18-59. These outcomes should not imply that host community households that reported not making improvements to their shelter in the six months prior to data collection, despite reporting the need to do so) but rather that outcomes (whether positive or negative) do not vary significantly based on whether households demonstrate any of these aforementioned characteristics.

• Indicator: households reporting feeling at risk of eviction or being forced to leave their house / shelter within the few months following data collection

One in ten host community households reported feeling at risk of eviction or being forced to leave their house / shelter within the few months following data collection. This indicator was found to have a correlation with the gender of head of household, albeit the variation in outcomes was minimal. Roughly 10% of male-headed households reported feeling at risk of eviction or being forced to leave their house / shelter within the few months following data collection or being forced to leave their house / shelter within the few months following data collection compared with 13% of female-headed households.¹⁰⁹ This question is based on the perception of the respondent and does not reflect a legal reality. The slight variation in outcomes could be linked to gendered dynamics in response to this question (e.g. female-headed households feeling less secure in house / shelter tenure when compared with male-headed households).

- 5. BARRIERS TO ACCESSING KEY FACILITIES: The diversity characteristics under present study were not strongly correlated to whether or not households reported safety concerns as a barrier to accessing key facilities
- Indicator: Households reporting safety concerns as a barrier to accessing markets, health, or education facilities¹¹⁰

A composite indicator was created to represent any households that reported safety concerns as a barrier to accessing three key facilities – health centres, markets, or education centres – during the present assessment, derived from responses to a number of questions asked throughout the survey. Overall, 21% of households reported safety concerns as a barrier to accessing any of these three key facilities during the interview.

In the present analysis this indicator was tested against two household demographic characteristics – the gender of the head of household and households with no males aged 18-59 – but no strong association was observed for either characteristic.

¹⁰⁸ This question was only asked of households that did not make improvements to their shelter in the six months prior to data collection (n = 797). ¹⁰⁹ *p*-value =0.013

¹¹⁰ This indicator does not reflect a question asked directly of the respondent but instead represents a composite indicator for whether households cited safety concerns as a reason for not being able to access any of these three types of facilities in three separate questions during the survey.

CONCLUSION

This assessment aimed to inform the humanitarian community of the multi-sectoral needs and vulnerabilities of host communities residing in 11 unions in Cox's Bazar, Bangladesh. It has measured key indicators related to Protection, Education, WASH, Health, Food Security, Shelter & NFI, Site Management and Communication with Communities, identified community perceptions and preferences and potential gaps, and explored a number of underlying factors contributing to variation in outcomes on household wellbeing-related indicators. This J-MSNA may serve as a valuable tool in informing future evidence-based programming in host communities potentially affected by the influx of Rohingya refugees. This becomes particularly necessary as the current crisis moves beyond the initial emergency phase, and as actors in the response begin to transition their sights to more medium-term planning. Part of this future planning should entail the design and implementation of a more holistic approach to host community programming which not only focuses on mitigating potential negative externalities caused by the recent influx of refugees, but also on building resilience and prosperity in these communities which have faced long-term socio-economic development shortcomings.

J-MSNA findings show a number of areas where the basic needs of host communities are being met. The majority of households have a calculated FCS of "acceptable", while the proportion of households with a "poor" FCS was not found to exceed 4% of households in any union. Almost all households (97%) reported accessing improved water sources as their main source of water for drinking and cooking purposes at the time of data collection. Of individuals that were reported to have an illness serious enough to require medical treatment in the 30 days prior to data collection, 98% were reported to have sought treatment. Most households (86%) reported at least one adult member (aged 18 and above) who worked to earn an income in the 30 days prior to data collection.

At the same time, there remain outstanding gaps in access and coverage of basic goods and services. Approximately one-third of households are estimated to consume two food groups or fewer in any given day. Thirtyseven per cent (37%) of households reported not making improvements to their shelter in the six months prior to data collection despite reporting the need to do so. Thirty-seven per cent (37%) of male respondents reported at least one area in their neighbourhood where male members feel unsafe while 43% of female respondents reported at least one area in their neighbourhood where female members feel unsafe. Only one-fifth of households reported that they have received any humanitarian aid in the six months prior to data collection.

J-MSNA findings show that many households reported engaging in unsustainable or risky behaviours in order to meet their basic needs. Nearly three-fifths of households reported borrowing money or purchasing items on credit (i.e. incurring debt) in the 30 days prior to data collection. Most households that reported incurring debt reported doing so in order to cover basic health and food expenses.

Finally, the statistical analysis presented in this report suggests that household diversity characteristics related to the gender of head of household, the highest level of education obtained in the household, calculated household dependency ratio, household reporting at least one member (aged 5 and above) as requiring assistance to complete daily activities, and household with no males aged 18-59, can have significant associations with variation in outcomes on a number of key indicators related to household wellbeing, particularly in the realm of livelihoods, debt incurrence and health expenditures. Additional research would be required to assess how and whether any variations in outcomes on these and other indicators is related to the influx of refugees or is instead indicative of long-term socio-economic dynamics in these localities.

The presence of roughly 855,000 Rohingya refugees in just two Upazilas in Bangladesh has undoubtedly had an effect on surrounding host communities and has already been shown to have multi-faceted effects on how host communities access livelihoods, income and other key resources. However, not all host communities have been impacted in the same way and outcomes are likely not unidirectional (that is, outcomes may be both positive and negative). Further exploration is needed, given that the amount of current evidence available is not enough to arrive at a comprehensive understanding of household vulnerability characteristics and the specific dynamics which might aggravate the vulnerabilities that host community households face. Further exploration is also required in order to contextualise some of the indicator-level information presented in this report and in other J-MSNA resources. The following actions are recommended for the next round of assessment:

- Arrive to a common understanding regarding a methodology to measure severity of household needs and the underlying factors that contribute to households having more or less severe needs.
- Inclusion of a qualitative component to complement the household quantitative survey, used to better understand the "how" and "why" behind certain findings and contextualise them accurately in order to inform appropriate programming responses. This component may also serve to explore intra-household dynamics and contribute to continued gender mainstreaming efforts in the response.
- A more in-depth study of livelihoods and practices related to debt incurrence (e.g. from whom debt is being incurred, when, how much and for what reasons) and the possible risks that permeate these systems.
- Incorporation of certain findings from this report regarding household social and demographic characteristics that may contribute to varied outcomes on key wellbeing-related indicators into the design of future assessments, in order to arrive at a better understanding of vulnerability and the diversity of needs between different household profiles.

It is intended that the J-MSNA become a regular feature of joint humanitarian response planning for the Rohingya crisis. This exercise is likely to be repeated in the coming year in order to monitor progress on the 2020 JRP, assess trends over time and inform further medium-term planning and programming for the Government of Bangladesh and aid organizations.

ANNEXES

Annex 1: Household Surveys Completed Per Union

Table 2: List of assessed unions and household surveys completed in 11 unions in Teknaf and Ukhiya Upazilas, Cox's Bazar

Upazila	Union	Estimated # of households	# of interviewed households
Teknaf	Baharchhara	4,832	116
Teknaf	Nhilla	8,271	116
Teknaf	Sabrang	9,970	125
Teknaf	Teknaf Paurashava	4,752	127
Teknaf	Teknaf Sadar	8,467	114
Teknaf	Whykong	8,867	116
Ukhiya	Haldia Palong	9,006	123
Ukhiya	Jalia Palong	8,511	131
Ukhiya	Palong Khali	5,589	102
Ukhiya	Raja Palong	10,596	117
Ukhiya	Ratna Palong	4,238	124
Assess	ment total	83,099	1,311

Annex 2: Rohingya Response Analytical Framework

The three shaded sections in yellow in the below figure are the three principal pillars covered in this J-MSNA that served as the framework for analysis

CONTEXT PRE-AUGUST 2017		
SOCIO-CULTURAL	ECONOMY	HUMANITARIAN
VULNERABILITIES	DISPLACEMENT	CONDITIONS
CURRENT CONTEXT		
SOCIO-CULTURAL	ECONOMY	LEGAL FRAMEWORK
POLITICS	NATURAL HAZARDS	MAN MADE HAZARDS
ENVIRONMENT	SAFETY/SECURITY	LOGISTICS AND COM

OF REFUGEES AND IN HOST COMMUNITY AFFECTED by sex, age and other relevant characteristics of diversity



by sex, age and other relevant characteristics of diversity

TREND/RISK ANALYSIS

CURRENT AND POSSIBLE FUTURE NEEDS AND CONCERNS

Annex 3: Relationships Tested for Correlation

Table 3: List of household demographic and social characteristics and indicators related to well-being compared against each characteristic

Household characteristic	Indicator of interest
	% of households that reported borrowing money or purchasing
	incurring new debts)
	% of households by Food Consumption Score (FCS)
	% of households reporting not making improvements to their
	shelter in the 6 months prior to data collection, despite
	reporting the need to do so
	% of households reporting any health or medical expenses in
	the 30 days prior to data collection
	in the 30 days prior to data collection
Gender of head of household	% of households reporting at least one adult member (18 and
	above) that worked to earn an income in the 30 days prior to
(male and female-headed	data collection
households)	% of households reporting at least on child (17 and under) that
	worked to earn an income in the 30 days prior to data collection
	% of households reporting safety concerns as a barrier to
	accessing health facilities, education facilities OR markets ¹¹²
	% of households able to name at least one of four key GBV
	support resources (nealth facilities, psychosocial service
	providers, police and security OR legal aid service providers)
	% of nousenoids reporting owning no livelinood assets
	(ivestock, agricultural land, or listing gear)
	forced to leave their bouse / shelter within the few months
	following data collection
Highest level of education obtained	% of households reporting at least one adult member (18 and
in the household	above) that worked to earn an income in the 30 days prior to
	data collection
(no formal education, some primary	% of households reporting at least on child (17 and under) that
education, primary or above)	worked to earn an income in the 30 days prior to data collection
	% of households that reported borrowing money or purchasing
	items on credit in the 30 days prior to data collection (i.e.
	incurring new debts)
	% of households reporting at least one adult member (18 and
Household dependency ratio	above) that worked to earn an income in the 30 days prior to
nousenou dependency ratio	data collection
(high or low)	% of households reporting at least on child (17 and under) that
	Worked to earn an income in the 30 days prior to data collection
	% of households reporting not making improvements to their sholter in the 6 months prior to data collection, despite
	reporting the need to do so
	% of households by Food Consumption Score (ECS)
	% of households that reported barrowing manoy or purchasing
Households reporting at least one	items on credit in the 30 days prior to data collection (i.e.
member (aged 5 and above) as	incurring new debts)
Gender of head of household (male and female-headed households) Highest level of education obtained in the household (no formal education, some primary education, primary or above) Household dependency ratio (high or low) Households reporting at least one member (aged 5 and above) as	% of households reporting not making improvements to their shelter in the 6 months prior to data collection, despite reporting the need to do so % of households reporting any health or medical expenses in the 30 days prior to data collection ¹¹¹ % of households reporting facing problems accessing markets in the 30 days prior to data collection % of households reporting at least one adult member (18 and above) that worked to earn an income in the 30 days prior to data collection % of households reporting at least on child (17 and under) that worked to earn an income in the 30 days prior to data collection % of households reporting safety concerns as a barrier to accessing health facilities, education facilities OR markets ¹¹² % of households able to name at least one of four key GBV support resources (health facilities, psychosocial service providers, police and security OR legal aid service providers) ¹¹³ % of households reporting feeling at risk of eviction or being forced to leave their house / shelter within the few months following data collection % of households reporting at least one adult member (18 and above) that worked to earn an income in the 30 days prior to data collection % of households reporting at least on child (17 and under) that worked to earn an income in the 30 days prior to data collection % of households reporting at least on child (17 and under) that worked to earn an income in the 30 days prior to data collection % of households reporting at least on child (17 and under) that worked to earn an income in the 30 days prior to data collection % of households reporting at least on child (17 and under) that worked to earn an income in the 30 days prior to data collection % of households reporting at least on child (17 and under) that worked to earn an income in the 30 days prior to data collection % of households reporting not making improvements to their shelter in the 6 months prior to data collection, despite reporting the need to do so % of households that reported borrowing money or

¹¹¹ This is a composite indicator based on whether or not the household reported spending any money (>0 Bangladeshi Taka) on medical expenses, health care or medicine in the 30 days prior to data collection, OR indicating paying for care as a coping mechanism for health-related issues when a member of the household had an illness serious enough to require medical treatment in the 30 days prior to data collection.

¹¹² This indicator does not reflect a question asked directly of the respondent but instead represents a composite indicator for whether households cited safety concerns as a reason for not being able to access any of these three types of facilities in three separate questions during the survey.
¹¹³ Each respondent was asked (based on a hypothetical situation) where they would refer a friend who was sexually assaulted to find care and support. This indicator reflects households that reported any of these resources as a point-of-contact.

requiring assistance to complete daily activities	% of households reporting not making improvements to their shelter in the 6 months prior to data collection, despite reporting the need to do so
(yes or no)	% of households by Food Consumption Score (FCS)
	% of households reporting any health or medical expenses in the 30 days prior to data collection
	% of households that reported borrowing money or purchasing items on credit in the 30 days prior to data collection (i.e. incurring new debts)
	% of households by Food Consumption Score (FCS)
Households with no males aged 18	% of households reporting not making improvements to their shelter in the 6 months prior to data collection, despite reporting the need to do so
- 59	% of households reporting facing problems accessing markets in the 30 days prior to data collection
(yes or no)	% of households reporting at least one adult member (18 and above) that worked to earn an income in the 30 days prior to data collection
	% of households reporting at least on child (17 and under) that worked to earn an income in the 30 days prior to data collection
	% of households reporting safety concerns as a barrier to accessing health facilities, education facilities OR markets





Annex 5: Mapped Indicator-Level Findings

This annex presents maps of key J-MSNA indicators, by sector, for which notable geographic variation in outcomes was observed. Users may also access the <u>J-MSNA Dashboard</u> for additional visualization of these indicators.

Communication with communities

Map 2: % of households reporting <u>access to clean drinking water</u> as a top 3 priority need for which they require additional support, unranked¹¹⁴



¹¹⁴ Respondents were asked to report the top three priority needs for which their family required additional support, and then rank the three identified needs in order of importance. The unranked findings present the proportion of households who named each option as a top-three priority need, regardless of rank.



Map 3: % of households reporting access to <u>food</u> as a top 3 priority need for which they require additional support, unranked¹¹⁵

¹¹⁵ Respondents were asked to report the top three priority needs for which their family required additional support, and then rank the three identified needs in order of importance. The unranked findings present the proportion of households who named each option as a top-three priority need, regardless of rank.



Map 4: % of households reporting <u>access to income-generating activities</u> as a top 3 priority need for which they require additional support, unranked¹¹⁶

¹¹⁶ Respondents were asked to report the top three priority needs for which their family required additional support, and then rank the three identified needs in order of importance. The unranked findings present the proportion of households who named each option as a top-three priority need, regardless of rank.



Map 5: % of households reporting <u>access to safe and functional latrines</u> as a top 3 priority need for which they require additional support, unranked¹¹⁷

¹¹⁷ Respondents were asked to report the top three priority needs for which their family required additional support, and then rank the three identified needs in order of importance. The unranked findings present the proportion of households who named each option as a top-three priority need, regardless of rank.



Map 6: % of households reporting <u>access to safe and functional latrines</u> as a top 3 priority need for which they require additional support, unranked¹¹⁸

¹¹⁸ Respondents were asked to report the top three priority needs for which their family required additional support, and then rank the three identified needs in order of importance. The unranked findings present the proportion of households who named each option as a top-three priority need, regardless of rank.



Map 7: % of households reporting <u>shelter materials</u> as a top 3 priority need for which they require additional support, unranked¹¹⁹

¹¹⁹ Respondents were asked to report the top three priority needs for which their family required additional support, and then rank the three identified needs in order of importance. The unranked findings present the proportion of households who named each option as a top-three priority need, regardless of rank.



Map 8: % of households reporting that they have <u>not</u> received humanitarian aid in the 6 months prior to data collection¹²⁰

¹²⁰ Respondents were asked to report the top three priority needs for which their family required additional support, and then rank the three identified needs in order of importance. The unranked findings present the proportion of households who named each option as a top-three priority need, regardless of rank.

Education

Map 9: % of <u>children and youth aged 5-11 reported as not attending</u> any formal learning opportunities during the current academic year¹²¹



¹²¹ The denominator for this indicator is all individuals in this age group (n = 1,316). Formal learning opportunities include government school, Alia madrassa, private school, University, technical college, college (public or private), and Ministry of Youth and Sport Development Programmes.

Map 10: % of <u>children and youth aged 12-17 reported as not attending</u> any formal learning opportunities during the current academic year¹²²



¹²² The denominator for this indicator is all individuals in this age group (n = 1,153). Formal learning opportunities include government school, Alia madrassa, private school, University, technical college, college (public or private), and Ministry of Youth and Sport Development Programmes.



Map 11: % of <u>individuals aged 18-24 reported as not attending</u> any formal learning opportunities during the current academic year¹²³

¹²³ The denominator for this indicator is all individuals in this age group (n = 1,130). Formal learning opportunities include government school, Alia madrassa, private school, University, technical college, college (public or private), and Ministry of Youth and Sport Development Programmes.

Health

Map 12: Of individuals reported as having an illness serious enough to require medical treatment in the 30 days prior to data collection who sought treatment, % who sought treatment at a <u>government clinic¹²⁴</u>



¹²⁴ The denominator for this indicator is individuals who were reported to have had an illness serious enough to require medical treatment in the 30 days prior to data collection, who sought treatment (n= 2,236).



Map 13: Of individuals reported as having an illness serious enough to require medical treatment in the 30 days prior to data collection who sought treatment, % who sought treatment at a private clinic¹²⁵

¹²⁵ The denominator for this indicator is individuals who were reported to have had an illness serious enough to require medical treatment in the 30 days prior to data collection, who sought treatment (n= 2,236).

Livelihoods and markets

Map 14: % of households reporting borrowing money as a coping mechanism due to a lack of money to meet basic needs in the 30 days prior to data collection





Map 15: % of households reporting that it takes more than 30 minutes to travel to the closest market by foot at the time of data collection



Map 16: Of households reporting that they borrowed money or purchased items on credit (i.e. incurred debt) in the 30 days prior to data collection, % reporting a reason of <u>buying food</u>¹²⁶

¹²⁶ This question was only asked to households who had indicated borrowing money and/or purchasing items on credit (i.e. incurring debt) (n = 656). However, findings are presented as a proportion of all households. Respondents could choose multiple reasons for incurring debts or credit.



Map 17: Of households reporting that they borrowed money or purchased items on credit (i.e. incurred debt) in the 30 days prior to data collection, % reporting a reason of covering <u>health expenses¹²⁷</u>

¹²⁷ This question was only asked to households who had indicated borrowing money and/or purchasing items on credit (i.e. incurring debt) (n = 656). However, findings are presented as a proportion of all households. Respondents could choose multiple reasons for incurring debts or credit.

Protection

Map 18: % of households reporting that they have witnessed tensions between Rohingya and host communities in the 30 days prior to data collection



Shelter & NFI



Map 19: % of households reporting not being connected to the electricity grid



Map 20: % of households reporting using self-collected firewood as a fuel source for cooking in the 4 weeks prior to data collection¹²⁸

¹²⁸ This indicator does not reflect the proportion of households reporting exclusively using this fuel source for cooking in the past 4 weeks. Households could report multiple fuel sources.

WASH

Map 21: % of households reporting accessing surface water for drinking and cooking purposes a couple times or almost every day during the last dry season¹²⁹



¹²⁹ Respondents were asked to recall frequencies from the previous dry season, as data collection occurred during the rainy season. The calendar period corresponding to "dry season" was not specifically defined but is commonly understood to include the months immediately preceding monsoon season (roughly April - May 2019).



Map 22: % of households reporting <u>not</u> having enough water to meet all needs (drinking, cooking, personal hygiene, and domestic purposes) at the time of data collection¹³⁰

¹³⁰ This indicator reflects all households noting that they did not have enough water to meet needs for drinking; cooking; personal hygiene; and domestic purposes. The denominator for this indicator is all households.



Map 23: % of households reporting visible waste in the vicinity of their accommodation (30 metres or less) in the 30 days prior to data collection