The Corona Pandemic’s Impact on the Food and Nutrition Security of Refugees in Northern Uganda

Anne Margrethe Brigham
Paul Isolo Mukwaya
Sarah Khasalamwa-Mwandha
Geofrey Gabiri
Tittel: The Corona Pandemic’s Impact on the Food and Nutrition Security of Refugees in Northern Uganda

Forfatter: Anne Margrethe Brigham, Paul Isolo Mukwaya, Sarah Khasalamwa-Mwandha og Geoffrey Gabiri

Utgiver: Ruralis – institutt for rural- og regionalforskning

Utgiversted: Trondheim

Oppdragsgiver: Ruralis – Institutt for rural og regionalforskning, Strategisk instituttsatsing

Oppdragsgivers ref.: 6411 SIS Utvikling

Short Summary
Uganda is among the top three refugee hosting countries in the world and the leading one in Africa, accommodating an estimated 1.4 million refugees. This report provides an empirical assessment of how the Corona Pandemic has affected food security and nutrition for refugees and host community members in the Adjumani District in Northern Uganda. The findings demonstrate an urgent need for more funding to the World Food Programme in Adjumani, and the necessity of building more resilient refugee food systems in preparation for future crises.

Keywords
Refugees, food security and nutrition (FSN), Corona Pandemic, Northern Uganda, access, availability, utilization, stability, agency, cultivation land

Photos: Dr. Paul Isolo Mukwaya and Dr. Geoffrey Gabiri
Author Affiliations

Dr. Anne Margrethe Brigham and Dr. Sarah Khasalamwa-Mwandha are Senior Researcher and Researcher, respectively, at Ruralis - Institute for Rural and Regional Research, Trondheim, Norway. Dr. Paul Isolo Mukwaya is Senior Lecturer at The Department of Geography, Geo-Informatics and Climatic Sciences, Makerere University, Kampala, Uganda. Dr. Geofrey Gabiri is Lecturer at Kyambogo University, Kampala, Uganda.

Acknowledgements

We wish to thank Ritah Nakanjako, Daniel Ayiga, and Robert Chandiga for diligent work when gathering the data used in this report under difficult circumstances, Alexander Zahl-Thanem for help with the dataset, Pia Otte and Maja Farstad for thorough quality control, and Tamila Thomassen for excellent editing. All remaining mistakes and errors are the sole responsibility of the authors.
**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAO</td>
<td>The Food and Agriculture Organization of the United Nations</td>
</tr>
<tr>
<td>FSN</td>
<td>Food Security and Nutrition</td>
</tr>
<tr>
<td>HLPE</td>
<td>The High Level Panel of Experts on Food Security and Nutrition</td>
</tr>
<tr>
<td>IPC</td>
<td>Integrated Food Security Phase Classification</td>
</tr>
<tr>
<td>LIC</td>
<td>Low Income Country</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>OPM</td>
<td>Office of the Prime Minister</td>
</tr>
<tr>
<td>ReHoPE</td>
<td>Refugee and Host Population Empowerment</td>
</tr>
<tr>
<td>SRS</td>
<td>Self-Reliance Strategy</td>
</tr>
<tr>
<td>UGX</td>
<td>Uganda Shilling</td>
</tr>
<tr>
<td>UNHCR</td>
<td>The United Nations High Commissioner for Refugees</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollar</td>
</tr>
<tr>
<td>WFP</td>
<td>The United Nations World Food Programme</td>
</tr>
</tbody>
</table>
# Table of Contents

Author Affiliations .............................................................................................................. 2
Acknowledgements ............................................................................................................ 2
Table of Contents ............................................................................................................... 4
List of Tables ....................................................................................................................... 5
List of Figures ..................................................................................................................... 6
List of Pictures .................................................................................................................... 6
Summary ............................................................................................................................ 7
Sammendrag ...................................................................................................................... 8
1. Introduction ................................................................................................................. 9
2. Theoretical Approach ................................................................................................ 11
3. Methods .................................................................................................................... 13
4. Findings of the Study ................................................................................................. 19
   4.1 Food Access ........................................................................................................ 20
   4.2 Food Availability ............................................................................................... 22
   4.3 Utilization ........................................................................................................... 26
   4.4 Agency ................................................................................................................ 29
5. Conclusion and Recommendations ........................................................................... 39
Bibliography ..................................................................................................................... 41
Appendix 1: Survey Questionnaire .................................................................................. 43
Appendix 2: Interview Guide for Key Informants ............................................................ 69
List of Tables

Table 1: Gender of Respondents, Percent of Respective Group and of All Respondents .................................................................................................................................................................................. 16

Table 2: Number of Children in the Respondents' Household, Percent of Respective Group................................................................................................................................................................................................................................................................................. 16

Table 3: Age of Respondents, Percent of Respective Group .................................................................................................................................................................................................................................................................................. 16

Table 4: Duration of Stay in Refugee Settlement ..................................................................................................................................................................................................................................................................................................... 17

Table 5: Most Important Sources of Food for Refugees .................................................................................................................................................................................................................................................................................. 23

Table 6: Share of Home-Grown Food Sold on the Market, Percent of Respective Group .................................................................................................................................................................................................................................................................................. 24

Table 7: The Ease or Difficulty of Selling Food on the Market, In Percent of Respective Group .................................................................................................................................................................................................................................................................................. 25

Table 8: Reasons Why it is Difficult to Sell Food During the Pandemic, in Percent of Respective Group .................................................................................................................................................................................................................................................................................. 25

Table 9: Food Rations Distributed to Refugees Before and During the Pandemic. Amount Received for Each Household Member* per Month** .................................................................................................................................................................................................................................................................................. 26

Table 10: Types of Food Consumed Before and During the Corona Pandemic, in Percent of Respective Group .................................................................................................................................................................................................................................................................................. 29

Table 11: Most Common Businesses Refugees Want to Start .................................................................................................................................................................................................................................................................................. 32

Table 12: How Land was Accessed Before the Pandemic, in Percent of Respective Group .................................................................................................................................................................................................................................................................................. 35
List of Figures

Figure 1: Map of Uganda, the Adjumani District, and the Settlements of the Study .....13
Figure 2: Food Access Before the Corona Pandemic ....................................................... 20
Figure 3: Food Access During the Corona Pandemic ....................................................... 21
Figure 4: The Corona Pandemic’s Effect on the Ability to Access Enough Food ............. 22
Figure 5: Occupations for Refugees and Host Community Members ............................. 30
Figure 6: The Corona Pandemic’s Effect on the Ability to Make an Income ................... 31
Figure 7: Access to Cultivation Land Before the Corona Pandemic ............................... 34
Figure 8: Access to Cultivation Land During the Corona Pandemic ............................... 36

List of Pictures

Picture 1: Corona Pandemic Containment Measures ...................................................... 12
Picture 2: Food Rations for Refugees .............................................................................. 12
Picture 3: Research Team Members Getting Ready for Interviews ................................ 15
Picture 4: Refugee Homes (Built and Paid for by Refugees) ........................................... 17
Picture 5: Corona Pandemic Hand Washing Station ....................................................... 18
Picture 6: Food Distribution Center for Refugees ......................................................... 18
Picture 7: Cooking Station in one of the Refugee Settlements ......................................... 28
Picture 8: Goat Rearing in the Adjumani District ............................................................ 28
Picture 9: Stone Quarrying in Agojo Settlement ............................................................ 32
Picture 10: Cassava Crop in Maaji III ................................................................. 35
Picture 11: Kitchen Garden in one of the Refugee Settlements ........................................ 37
Picture 12: Huts and Field in one of the Refugee Settlements ......................................... 38
Picture 13: Intervention to Boost Food Production in Maaji III ...................................... 38
Summary

There are more than 79 million refugees and forcibly displaced people throughout the world and about 80 percent are hosted in countries affected by acute food insecurity and malnutrition. The UNHCR expects the Corona Pandemic to worsen the food security situation for refugees across the globe, as no matter where in the world they find themselves, refugees are often the most vulnerable to crises.

Uganda is among the top three refugee hosting countries in the world and the leading one in Africa, accommodating an estimated 1.4 million refugees. This report provides an empirical assessment of how the Corona Pandemic has affected food security and nutrition (FSN) for refugees and host community members in the Adjumani District in Northern Uganda. We investigate the food security dimensions of food access, food availability, utilization, and agency before and during the pandemic, and analyze the change during the crisis. This change represents the stability dimension of their food security.

The main finding from this study is that the FSN situation for both refugees and their host communities has drastically deteriorated during the pandemic, causing ninety percent of the refugees to go hungry most of the time.

The three most important reasons for this decline in food security are:

- A pandemic related cut in the funding to the WFP’s activities in Adjumani, resulting in a 40 percent reduction in the refugees’ food rations.
- The pandemic has made it much harder for most refugees and host community members to make an income and to sell and/or buy food at the markets.
- Most refugees do not have any land for cultivation outside of a small kitchen garden that is vastly inadequate for providing food security and nutrition for their household. Some of the refugees that did have access to a larger cultivation plot before the pandemic, has lost this.

The findings demonstrate an urgent need for more funding to the WFP in Adjumani, and the necessity of building more resilient refugee food systems in preparation for future crises—whether they come in the form of pandemics, economic recessions, or extreme weather.
Sammendrag

På verdensbasis er det nå mer enn 79 millioner flyktninger og internt fordrevede, og rundt 80 prosent av disse lever i land som er rammet av sult og underernæring. UNHCR forventer at Koronapandemien vil forverre matsikkerheten for flyktninger og internt fordrevne, fordi uansett hvor i verden de befinner seg, er de ofte de mest sårbare overfor kriser.

Uganda er vertskap for omtrent 1.4 millioner flyktninger og er dermed blant de tre landene i verden som mottar flest, og det ledende i Afrika. Denne rapporten viser hvordan Koronapandemien har påvirket matsikkerhet og ernæring for flyktninger og lokalbefolkning i Adjumani-distriktet i Nord-Uganda. Vi setter søkelys på ulike dimensjoner av matsikkerhet, nemlig tilgang på mat, tilgjengelighet av mat, ernæring og handlingsrom, både før og under pandemien, og analyserer endringene under krisen. Til sammen gir disse endringene et bilde på stabilitetsdimensjonen av matsikkerheten deres.

Hovedfunnet i denne studien er at matsikkerheten for både flyktningene og lokalbefolkningen har forverret seg drastisk under pandemien, noe som har ført til at nitti prosent av flyktningene får for lite mat mesteparten av tiden.

De tre viktigste årsakene til denne forverringen av i matsikkerheten er:

- Et pandemirelatert kutt i finansieringen til Verdens matvareorganisasjon sine aktiviteter i Adjumani som har resultert i 40 prosent reduksjon i flyktningenes matrasjoner.
- Pandemien har gjort det mye vanskeligere for de fleste av flyktningene og lokalbefolkningen å ha tilgang på en inntekt og å selge og/eller kjøpe mat på markedene.
- De fleste flyktninger har ikke tilgang til dyrkbar jord foruten en liten kjøkkenhage som er utilstrekkelig for å produsere nok mat til for å demme opp for opp kuttene i matrasjonene. Noen av de flyktningene som hadde tilgang til dyrkbar jord før pandemien, har mistet denne tilgangen.

Funnene viser at det er et presserende behov for økt finansiering til Verdens matvareorganisasjon i Adjumani og at det er viktig å utvikle mer robuste matsystemer for flyktninger slik at de kan være bedre rustet til fremtidige kriser - enten de kommer i form av pandemier, økonomiske nedgangstider eller ekstremvær.
1. Introduction

A range of humanitarian crises created by conflicts, natural disasters and the intensifying effects of climate change have resulted in 79.5 million refugees and forcibly displaced people throughout the world, the highest number since the UN Refugee Agency (UNHCR) was established in 1950 (UNHCR 2021 and 2018). Many of these refugee crises have lasted for years, and some of them for generations, and the international community has long been struggling to provide food and other basic needs for the growing numbers of displaced people (UNHCR 2018). Moreover, over 80 per cent of the world’s displaced people are hosted in countries affected by acute food insecurity and malnutrition (UNHCR 2021).

The UNHCR expects the Corona Pandemic to worsen the food security and nutrition (FSN) situation for refugees across the globe, as no matter where in the world they find themselves, refugees are often the most vulnerable to crises (UNHCR 2021). The High Level Panel of Experts on Food Security and Nutrition (HLPE) argues that there is an urgent need to build more robust and resilient food systems in preparation for future shocks, and to achieve this it is very important to collect data, information, and experiences to learn from the FSN impacts of the Corona Pandemic (HLPE 2020a). The HLPE (2020b: 21) also calls for studies that address the specific needs of rural populations so that appropriate FSN policies in rural contexts can be formulated.

Uganda is among the top three refugee hosting countries in the world and the leading one in Africa, accommodating an estimated 1.43 million refugees mainly from South Sudan, Democratic Republic of Congo, Burundi, Rwanda, and Somalia (UNHCR 2020 and 2019). Adjumani, a predominantly rural district in Northern Uganda, is the second largest refugee hosting district in the country with a total of 214,503 refugees (mostly from South Sudan), and a host community1 of about 235,000 (ibid). Uganda has a unique and progressive refugee policy amongst Low Income Countries (LICs) which allows refugees the right to work, significant freedom of movement, as well as other socio-economic rights (World Bank 2016). The Uganda government considers refugees as “assets”, or in

---

1 A host community refers to the community adjoining to or nearby refugee settlements (UNHCR 2005: 10).
other words economic actors that contributes to the state, rather than as “burdens” (Omata 2020).

Although policy labels have changed over time, Uganda has maintained a practice of promoting refugees’ self-reliance. The 2016 Refugee and Host Population Empowerment (ReHoPE) strategic framework updated the Self-Reliance Strategy (SRS), outlining the need to support resilience and self-reliance for both refugees and host communities by integrating refugees in national development plans (Omata 2020; Government of Uganda et al. 2017). This means that some refugees in rural settlements are allocated arable land and that the integrated social service provision facilitates (economic) interaction with the host communities (ibid). Nevertheless, the country still faces challenges in obtaining the desired FSN and livelihood outcomes for refugees in its care (Betts et al. 2019). According to the Integrated Food Security Phase Classification (IPC 2020), many refugee settlements in the country were classified as living under stressed to crisis situations even before the Corona Pandemic. Studies show that 80 percent of refugees lived below the international poverty line of $1.90/day (FAO and OPM, 2018) and 89 percent of refugee households had experienced food insecurity and do not become self-reliant with time (Development Pathways 2018). It is therefore crucial to understand how the Corona Pandemic and the corresponding containment regulations are impacting food and nutrition security for refugees in Uganda and to identify appropriate measures to quickly improve their situation. A better understanding of the impact of the ongoing Corona Pandemic on the FSN of these refugees and their host communities can also guide future planning to ensure that these communities’ food security is resilient to other crises with similar effects.

This report provides an empirical assessment of the impacts of the Corona Pandemic on the food and nutrition security of refugees and their host community in the Adjumani district of Uganda six months into the pandemic (August and September 2020). We illustrate the food and nutrition situation using statistics before (considered here as the “normal” times) and during the pandemic (the crisis period) and analyze the change. The report has five sections including this introduction. Section 2 describes the theoretical approach and Section 3 the methods. The main findings are presented in Section 4, and Section 5 concludes and gives recommendations.
2. Theoretical Approach

Food security is defined as a situation where “all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (FAO 2001). Six main dimensions of FSN can be derived from this definition: access, availability, utilization, and stability (FAO 2020) as well as agency and sustainability (HLPE 2020a: 9).

The access dimension\textsuperscript{2} represents the entitlement concept in Amartya Sen’s approach to the study of poverty and famines (Sen 1981), where entitlements constitute a person’s ability to access/command food via subsistence production (direct entitlements) and/or via trade using incomes or endowments (indirect/trade entitlements). Food availability addresses the “supply side”, where adequate supply of food at the local, national, or international level is a prerequisite, but does not itself guarantee FSN. It refers to the amount (and type) of food that is present in the area and is determined by the levels of incoming food aid, food production, stock levels and net trade with other areas. Utilization concerns the nutrient content of the food consumed and the body’s ability to utilize them and is a function of type of food a person has access to, the sanitary environment, as well as his/her health condition. Stability reflects the fact that you are not considered food secure even if you have enough nutritious food today—if you cannot be certain that you will have access to an adequate amount in the near or distant future. Stability is often thought of in terms of the seasonality of food, especially for people that depend on rainfed agriculture, but the concept can also cover fluctuations in FSN as a consequence of crises. Resilience, which the World Food Programme (WFP) defines as the “capacity of people, communities and countries to resist and recover from extreme events” (WFP 2013: 1), is in these situations at the core of the stability dimension. Agency is defined as “the capacity of individuals or groups to make their own decisions about what foods they eat, what foods they produce, how that food is produced, processed and distributed within food systems, and their ability to engage in processes that shape food system policies and governance”. Finally, sustainability refers to the regenerative capability of the food system to deliver FSN today without compromising the FSN of future generations.

\textsuperscript{2} This paragraph builds on the definitions of the six dimensions of FSN in (HLPEa: 9) and (FAO 2020).
The main purpose of this study is to investigate the *stability* dimension of the FSN for refugees in Adjumani during the pandemic by investigating how the crisis has influenced access, availability, utilization, and agency.³

*Picture 1: Corona Pandemic Containment Measures*

*Picture 2: Food Rations for Refugees*

³ The sustainability dimension is beyond the scope of this study.
3. Methods

We conducted the study in the refugee settlements Mirieyi, Agojo, Maaji I, and Maaji III and their host communities (see Figure 1). Our main focus is on the situation for refugees, but host community data were collected in the frontline parishes and villages\(^4\) surrounding the settlements in order to assess how the FSN outcomes for refugees compares to the outcomes for Ugandan nationals in the same area. The sample of refugee settlements was chosen to ensure representativeness for all settlements in Adjumani in terms of the age of the settlement and the degree of rurality. Due to COVID-19 safety precautions the final selection (considering these two criteria) was made based on the advice from the Refugee Desk Officer in Pakelle, Adjumani District.

*Figure 1: Map of Uganda, the Adjumani District, and the Settlements of the Study*

We obtained permission to enter the refugee settlements from the Commissioner for Refugees at the Office of the Prime Minister (OPM) in Kampala. This permission referred us to the Refugee Desk Officer in Adjumani who then, in writing, linked us to the chairpersons of the Refugee Welfare Committees in the selected refugee settlements of Mirieyi, Agojo, Maaji I, and Maaji III. These were, at the time, free of registered Covid-19 cases and had the desired variation in age and rurality.

---

\(^4\) Villages are the lowest administrative divisions in Uganda. The hierarchy of administration starts with villages at the lowest level, through parishes, sub-counties, counties and then districts.
We used a mixed methods approach to the study. First, we conducted a survey of 639 households in the refugee settlements and their immediate host communities, using the survey software KOBO Toolbox. The survey questions are listed in Appendix A. Data were collected on the household level from heads of households. A household was defined as “a person or group of people who normally cook, eat, and live together (for at least 6 of the 12 months preceding the interview) irrespective of whether they are related or unrelated” (Uganda Bureau of Statistics 2018). The head of a households was defined as “the person who manages the income earned and the expense incurred by the household and is considered by other members of the household as the head” (ibid).

The chairpersons of the Refugee Welfare Committees and/or their representatives requested their block/cluster leaders and selected translators to lead the research team into their blocks. Within these communities/blocks heads of households were randomly selected. In addition, we conducted fifteen key informant interviews among chairpersons, settlement block leaders, representatives from the Office of the Prime Minister, Refugee Welfare Committees leaders, and a few service providers in the same communities. Anonymity was granted all respondents. The interview guides for key informants are found in Appendix B. The purpose of the survey was mainly to get an overview of the food security situation, while the key informant interviews were used to get a deeper understanding and explanation of the main findings from the survey.

There is no pre-Corona Pandemic baseline data on any of the common indicators of FSN such as spending on food, dietary diversity and food frequency, experience of food insecurity, and household caloric availability, and the WFP’s Food Consumption Score (Upton et al. 2016). We therefore focus on indicators for experienced FSN. This approach makes it possible to get information dating back in time by asking questions for which it is relatively easy for a respondent to recall the situation before the onset of the pandemic and contrast this with their experience during the pandemic. For this reason, both the survey respondents and the key informants were, for most issues relating to their food security and livelihoods, first asked to recall their situation before the onset of Corona Pandemic, and thereafter to describe the current state and/or how it is being affected by the pandemic.

There are two main challenges with this approach. The first is that memories of the time before the crisis can be unreliable even if the respondent tries very hard to recall the situation accurately. It would therefore have been better to collect the baseline data right before the pandemic started, but this was not possible due to the unanticipated nature of the crisis. The second challenge is that the respondents might have an interest in portraying the current situation as bleaker than it really is to try to attract more help from the outside. Our strategy to minimize these respective risks was to give the
respondents ample time to respond and ask several questions that illuminates the same dimension of food security from different angles.

Tables 1 through 4 show background data on gender, number of children, age, and the duration of stay in the settlement for the 639 survey respondents of which 420 were refugees and 219 were host community members.

Of all refugees in Adjumani, females constitute 54 percent, the group “women and children” 87 percent, and there are only about 13 percent men (UNHCR 2019). According to key informants, the reason there is so few men is that they often stay back when women and children flee or move to other places in Uganda or back to their country of origin to find work. Since women more consistently stay in the settlement, about 70 percent of registered heads of refugee households are women (Alupo 2017; Namayengo 2018). In the Adjumani host community 39 percent of households are headed by women (Uganda Bureau of Statistics 2017: 20). Table 1 shows that in our survey sample, women constituted 75 percent of the heads of the refugee households interviewed and 71 percent of the heads of households in the host community. This means that women are overrepresented in the host community sample, but the share of women in the refugee sample is very close to the share in the total population of refugees in Adjumani.

*Picture 3: Research Team Members Getting Ready for Interviews*
The food needs of households are to some degree determined by the number of children. From Table 2 we see that most households have two to five children (57 percent of the refugee households in the study and 59 of the host community households), followed by six to eight children (with 18 percent and 15 percent, respectively). Most households consequently have high food demands.

Table 3 shows that most respondents in both the refugee and host community sample were in the age groups 26 to 35 and 36 to 50 years old (each with around 30 percent), followed by the age groups 18 to 25 years and 51 to 64 years. Only around 2 percent were between 15 and 17 years, while 9 percent of the interviewed refugees and 6 of the host community members were 65 years or older.
From Table 4 we can see that most refugees have lived in their settlement for four to six years. About 13 percent have been there for more than ten years, 10 percent for seven to ten years, and almost eight percent between one and three years. Since we were going to ask the refugees to recall their situation before the onset of the Corona Pandemic, the new arrivals during the past eight months could not be part of the sample, and only 0.7 percent had been in their settlement for less than a year.

*Table 4: Duration of Stay in Refugee Settlement*

<table>
<thead>
<tr>
<th>Duration in Years</th>
<th>Percent of Refugees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one</td>
<td>0.7</td>
</tr>
<tr>
<td>One to three</td>
<td>8</td>
</tr>
<tr>
<td>Four to six</td>
<td>70</td>
</tr>
<tr>
<td>Seven to ten</td>
<td>10</td>
</tr>
<tr>
<td>More than 10</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Notes: N= 412; Question 10 in Appendix 1.

A comparison of these background statistics on number of children, age of heads of households, and duration of stay in the settlement in our survey sample with data from the population of refugees in Adjumani (found in Development Pathways 2018: 40) shows that the sample is representative in terms of these variables.

*Picture 4: Refugee Homes (Built and Paid for by Refugees)*
Picture 5: Corona Pandemic Hand Washing Station

Picture 6: Food Distribution Center for Refugees
4. Findings of the Study

In this section, we show how the Corona Pandemic has affected food access, food availability, nutrition, and agency, before and during the pandemic, for both refugees and host community members in the Adjumani district. In sum, this will give us a picture of the stability and resilience of refugee FSN during the pandemic. However, before we dive into the food security consequences of the pandemic, we will take a quick look at the number of confirmed cases and hospitalizations due to COVID-19 in Adjumani.

Regional data on the spread of the virus is difficult to find for Uganda, as all the reported numbers are aggregated to the national level. At the time of the study (August-September 2020), there had not been very many confirmed cases of COVID-19 in Uganda as a whole. On September 1st, the cumulative national numbers were 2972 confirmed cases (and 32 deaths from the virus) (WHO 2021). The best available statistics for number of cases for the Adjumani district are from June 15th, when they hit the cumulative mark of 50 confirmed cases (West Nile Music 2020). We also know that one year into the pandemic, altogether 57 people had been admitted to the Adjumani General Hospital with COVID-19 and that all of them were discharged (MOH 2021). This means that the effects of the Corona Pandemic on food security for most people in Adjumani stems not from a disease burden, but from the measures that were put in place to protect people from getting sick. According to the survey respondents (question 23 in Appendix 1) and the key informants, the most important pandemic containment measures in Adjumani during the five to six months leading up to the study were:

- Mandatory use of face masks
- Improved access to hand washing
- Stay home order
- Curfew between 9:00pm and 6:30am
- Social distancing
- Closing of all businesses except for food and drug stores
- Ban on vehicle movement in the border districts
- Limited hours of operation and number of passengers for taxis and boda-bodas (motorcycle transport for hire)
- Limit on gatherings of less than five people
- Closure of schools and churches
- No political meetings
These are the measures that the population of Adjumani were aware of and that may have impacted their FSN during the pandemic. The remainder of this section is an empirical study of if and how these measures were impacting the FSN of refugees and host community members in Adjumani.

4.1 Food Access

Access to food reflects how much food a household or a person has to its disposal. This is in many ways the ultimate measure of FSN, as it does not, for instance, matter how much of what kind food is available in your area if you do not have the right to consume enough of it.

The respondents were asked whether they had access to enough food both before and during the pandemic. Figure 2 shows that before the onset of the pandemic, 15 percent of the refugees reported that they always had enough food and 40 percent that they most often had enough food. About 10 percent of the refugees had enough food half the time, 34 percent reported that they most often did not have enough food, and 0.7 percent that they never had enough.

Figure 2: Food Access Before the Corona Pandemic

![Figure 2: Food Access Before the Corona Pandemic](chart)

Notes: N= 314 refugees and 214 host community members; Question 36 in Appendix 1.

A key informant from the refugee community sums up the situation like this:

“The food received is not sufficient. In order to supplement on the food rations, refugees go to the host communities to dig and then they receive mostly in-kind payments of food such as cassava, maize, sweet potatoes, money, and ground nuts” (refugee cluster leader).
Food access was a challenge also for the host community members, but they were better off than the refugees. About 35 percent and 42 percent reported that they always, and most often, had enough food, respectively. Further, 16 percent of the host community had enough food half the time, while five percent most often did not have enough food, and 0.5 percent never had enough.

**Figure 3: Food Access During the Corona Pandemic**

During the pandemic, the situation deteriorated for refugees and the host community alike, but the outcome is most serious for the refugees. From Figure 3, we can see that almost no one reported that they always have enough food, and as many as 90 percent of refugees and 70 percent of host community members do not have enough food most of the time. The impact of the pandemic can also be seen in Figure 4, which shows that 73 percent of the host community members and 83 percent and refugees reported that the Corona Pandemic had made it much more difficult to access enough food. This implies that the pandemic is having a relatively stronger negative effect on the refugees’ access to food than on the host community’s.
Responses to follow up questions in the survey as well as key informant interviews revealed that the restrictions on movement were a main obstacle for refugees wanting to buy food. First, given the night-time curfew, there were not enough hours in the day to travel the long distances to some of the places where the refugees usually went to get food supplies (such as neighboring settlements where they have relatives). Second, because Adjumani is considered a border district, refugees were not allowed to travel to distant districts (for example the Kiryandongo District) to get food from their family members and relatives. In addition, movement was restricted because roads to some of the refugee settlements become impassable during the rainy season. Third, when the ban on vehicle movement in border districts was lifted in mid-August 2020, the cost of transportation skyrocketed. Public transport and boda bodas became too expensive for most refugees to afford. For instance, it costs UGX10,000 (2.70 USD) for one-way travel on a motorbike from Agojo Refugee Settlement to Adjumani town. Although Obongi Town/market is only about 3.5 kilometers from Maaji III, most refugees used to prefer to source supplies from Adjumani town. With the increased transportation cost, refugees from Maaji I and III could no longer afford to travel the 33 kilometers to Adjumani.

### 4.2 Food Availability

Refugees are not merely passive recipients of food aid that live in a vacuum. They are part of food systems that share many characteristics with other food systems, but that also differ from these in many ways. The most obvious difference is the influx of in-kind food aid, organized and funded by a web of the host country, bilateral and multinational donors/organizations, as well as local, national, and international NGOs.
Table 5 shows that most of the refugees rely on a mix of sources of food including, but not limited to, rations from WFP, buying food on the market, and growing their own food. The table also reveals that the sources they rely on have not changed much after the onset of the pandemic.

Table 5: Most Important Sources of Food for Refugees

<table>
<thead>
<tr>
<th>Source</th>
<th>Before Corona Pandemic</th>
<th>During Corona Pandemic</th>
</tr>
</thead>
<tbody>
<tr>
<td>WFP Rations</td>
<td>94</td>
<td>93</td>
</tr>
<tr>
<td>Buy on market/from traders</td>
<td>75</td>
<td>74</td>
</tr>
<tr>
<td>Grow food themselves</td>
<td>70</td>
<td>69</td>
</tr>
<tr>
<td>Work for food (cash) programs</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Borrow</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

Notes: N=418; Questions 26 and 31 in Appendix 1.

Most refugees pointed to the fact that the food rations had been reduced substantially, and that refugees receiving cash instead of food rations had experienced a reduction in their cash transfers from 12 USD to 8.40 USD. This was substantiated by the OPM that informed us that a 30 percent reduction in the rations (cooking oil being the exception) took place at the beginning of May of 2020 due to a pandemic related drop in funding to the WFP. This drop in funding was a result of (donor) governments, the private sector, NGOs, and individuals diverting funds to fight against the Corona Pandemic in other ways, leading to a shortfall of more than 50 percent in fund allocations to the WFP’s activities in Adjumani in 2020. The effect of this is expressed by a refugee key informant in Mirieyi:

“Yes, if we have land, we can grow our own food, but we do not have land. That is why we are crying to WFP to add more food because the 8 kgs cannot last one month”.

Further funding shortfalls forced the WFP to cut food assistance to 1.27 million refugees by another 10 percent in February 2021, adding up to a 40 percent cut in the basic survival ration (WFP 2021). According to the WFP, and an additional 77 million USD in funding is needed to provide the refugees with full basic survival rations through August 2021 (ibid).

5 This information was provided by a key informant at the OPM in Adjumani.
The food supply in Adjumani also relies on how much local farmers sell on the local markets. Table 6 shows the share of home-grown food sold on the market by both refugees and the host community, before and during the pandemic. We can see that fewer people among both refugees and the host community sell a large share of their produce during the Corona Pandemic than they did before. The share of the host community that sells between $\frac{1}{2}$ and $\frac{3}{4}$ of what they produce has, however, increased, but a likely explanation for this is that the ones that sold more than $\frac{3}{4}$ before the pandemic, now sell between $\frac{1}{2}$ and $\frac{3}{4}$ or less.

<table>
<thead>
<tr>
<th></th>
<th>Refugees</th>
<th></th>
<th></th>
<th>Host Community</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>During</td>
<td>Change</td>
<td>Before</td>
<td>During</td>
<td>Change</td>
</tr>
<tr>
<td>No</td>
<td>73</td>
<td>85</td>
<td>12</td>
<td>36</td>
<td>50</td>
<td>14</td>
</tr>
<tr>
<td>Less than 1/4</td>
<td>6</td>
<td>9</td>
<td>3</td>
<td>30</td>
<td>28</td>
<td>-2</td>
</tr>
<tr>
<td>Between 1/4 and 1/2</td>
<td>14</td>
<td>4</td>
<td>-10</td>
<td>21</td>
<td>12</td>
<td>-9</td>
</tr>
<tr>
<td>Between 1/2 and 3/4</td>
<td>4</td>
<td>2</td>
<td>-2</td>
<td>4</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>More than 3/4</td>
<td>3</td>
<td>0,5</td>
<td>-2,5</td>
<td>9</td>
<td>0,0</td>
<td>-9</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100,0</td>
<td></td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Notes: N= 416 refugees and 214 host community members; Questions 68 and 72 in Appendix 1.

Some refugees usually sell part of their food rations on the market to pay for other types of food and/or basic needs. About 25 percent of the refugees in the survey told us that they used to sell some of their food rations before the pandemic. During the pandemic, this had dropped to 15 percent, and additionally, those who did sell some during the pandemic sold a smaller share of their rations than before. The real numbers of refugees that sold/sell some of their rations are probably higher, because only 260 out of the 420 refugees in the study answered this question. We believe that many refugees did not want to answer the question because they were afraid that rations could be cut if WFP knew they sold some of them.

Follow up questions in the survey as well as key informant interviews confirm that the food supply on the local markets have fallen, and that the prices on the market of food items such as onions, tomatoes, and fish have consequently increased substantially.

Table 7 shows the ease or difficulty of selling food on the market for refugees and host community members, both before and during the pandemic. We can see that by far most of the refugees and host community members that sold food on the market, found it much more difficult to do so after the onset of the Corona Pandemic. While 69 percent of refugees and 67 percent of host community members found it very easy before the pandemic, only 6 and 12 percent of the respective groups found it very easy during. If we look at the share that found it very difficult to sell food on the market, only 4 percent
of refugees and 9 percent of host community members that sold food on the market found this very difficult before the pandemic, but during the pandemic these numbers rose to as much as 80 percent for refugees and 63 percent for host community members.

Table 7: The Ease or Difficulty of Selling Food on the Market, In Percent of Respective Group

<table>
<thead>
<tr>
<th>Reason given</th>
<th>Refugees Before</th>
<th>Refugees During</th>
<th>Refugees Change</th>
<th>Host Community Before</th>
<th>Host Community During</th>
<th>Host Community Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very easy</td>
<td>69</td>
<td>6</td>
<td>-63</td>
<td>67</td>
<td>12</td>
<td>-55.</td>
</tr>
<tr>
<td>Somewhat easy</td>
<td>26</td>
<td>6</td>
<td>-20</td>
<td>5</td>
<td>3</td>
<td>-2</td>
</tr>
<tr>
<td>Neither easy nor difficult</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>-5</td>
</tr>
<tr>
<td>Somewhat difficult</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>14</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td>Very difficult</td>
<td>4</td>
<td>80</td>
<td>76</td>
<td>9</td>
<td>63</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Notes: N= 97 refugees and 111 host community members; Questions 69 and 73 in Appendix 1.

Table 8 shows the most important reasons why the refugees and host community members found it somewhat, or very, difficult to sell food (rations and/or home grown) during the pandemic. In the refugee communities, the most common reason was no food surplus to sell (71 percent), while the host community reported lack of transportation as the most common (79 percent) reason why they could not sell more food on the market. Lack of markets, Corona Pandemic regulations such as travel restrictions, limits on gatherings, and stay home/curfew regulations were also reasons given for why it is difficult sell food on the market.

Table 8: Reasons Why it is Difficult to Sell Food During the Pandemic, in Percent of Respective Group

<table>
<thead>
<tr>
<th>Reason given</th>
<th>Refugees</th>
<th>Host Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>No surplus to sell</td>
<td>71</td>
<td>33</td>
</tr>
<tr>
<td>Lack of markets</td>
<td>50</td>
<td>57</td>
</tr>
<tr>
<td>Lack of transportation</td>
<td>42</td>
<td>79</td>
</tr>
<tr>
<td>Corona Pandemic regulations limiting gatherings</td>
<td>34</td>
<td>32</td>
</tr>
<tr>
<td>Corona Pandemic stay home/curfew regulations</td>
<td>22</td>
<td>30</td>
</tr>
</tbody>
</table>

Notes: N= 97 refugees and 111 host community members; Questions 74 and 75 in Appendix 1.

The overall picture we get from the data in this section is that food availability has been reduced during the pandemic, as rations were reduced significantly, less of the rations were sold on the market, and most refugees and host community members sell a smaller share of their home-grown food during the pandemic than they did before.
4.3 Utilization

In this section we focus on the nutrition part of utilization, and not on the health and sanitation aspects that can also have an impact on FSN. Food security and hunger policies in LIC settings have traditionally had a narrow focus on ensuring that people would get enough calories. In recent years, more attention has been given to the nutritional value of the food, as nutrient deficiencies can lead to reduced growth and development as well as a range of non-communicable diseases—even if a person gets enough calories. A key feature of a healthy diet is dietary diversity, which entails consuming a variety of foods across and within food groups to ensure intake of essential nutrients (Nugent 2011). In broad terms, these food groups are fruit and vegetables, starchy food, dairy, protein, and fat. This section looks at the dietary diversity of the refugees before and during the Corona Pandemic.

As we can see from Table 9, the rations received are not diversified enough to secure a healthy (nutritious) diet.

Table 9: Food Rations Distributed to Refugees Before and During the Pandemic. Amount Received for Each Household Member* per Month**

<table>
<thead>
<tr>
<th>Items</th>
<th>Before</th>
<th>During</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maize kernels</td>
<td>12 kilograms</td>
<td>6 kilograms***</td>
</tr>
<tr>
<td>Cooking oil</td>
<td>1 liter</td>
<td>1 liter</td>
</tr>
<tr>
<td>Beans or cowpeas</td>
<td>4 kilograms</td>
<td>2 kilograms</td>
</tr>
<tr>
<td>Soap</td>
<td>1 bar of soap (4 pieces)</td>
<td>½ bar of soap (2 pieces)</td>
</tr>
<tr>
<td>Cash instead of rations****</td>
<td>UGX45,000 ($12.2)</td>
<td>UGX31,000 ($8.4)</td>
</tr>
</tbody>
</table>

Notes:
*Because of delays in registration, one could find households that had more persons than those on their ration cards.
** Source: Refugee Desk Officer, OPM Office in Adjumani
***¼ of the maize kernels are subsequently exchanged for grinding at the maize mill.
**** WFP established the current transfer value in 2017 which at the time was equivalent to the average market prices of the commodities that make up the in-kind food basket in different settlements across the country, including cereals, beans, oil, and salt.

Some refugees diversify their diets by selling parts of their rations to pay for the purchase of other types of food:

“Tomatoes and onions, we usually get from the market after selling our ration. We sell part of the ration to change the diet. For example, when we get 16 kgs we sell 4kgs and keep the rest for home consumption. Some will be for grinding the maize and another one is for buying fish or meat to change the diet. We usually buy
the Nile perch and the silver fish. Some of the refugees go to Obongi market to buy the fish then they sell it” (refugee key informant in Maaji III).

Even though many refugees sell some of their rations at the market to diversify their diet, very few among both refugees and host community members consume any animal-based proteins (from fish, meat, dairy, and eggs). As we can see from Table 10 below, the number of refugees and host community members that consumed some cereals, pulses, as well as vegetables and leaves was very high (more than 88 percent) both before and during the pandemic, and there was not much difference between the community groups. The number that consumed some tubers were quite a bit lower (around 60 percent), but also quite similar for both groups. A larger share of refugees consumed coffee, tea, spices, and salt as well as sweets than the share among host community members. At the low end of the prevalence scale, very few of both refugees and host community members consumed some dairy products or eggs, with a slightly higher share of refugees consuming dairy and a higher share of the host community consuming eggs. We find the largest differences among the groups when we look at the consumption of oil, fish, and meat. Oil is interesting, as while around 70 percent of refugees consumed oil both before and during the pandemic, only 47 percent of host community members consumed oil before the pandemic and 42 percent during. The explanation for this is that oil is part of the rations that refugees get and was the only item that had not been reduced because of the pandemic. Very few refugees consumed any fish (8 percent before and 4 percent during) while 20 percent of the host community consumed some fish before the pandemic, and 15 percent during. This pattern is repeated for meat, where only 5 and 2 percent of refugees consumed meat before and during the pandemic, respectively, and the number for the host community are 16 and 6 percent.
Picture 7: Cooking Station in one of the Refugee Settlements

Picture 8: Goat Rearing in the Adjumani District
This sub-section shows that very few refugees consume any animal proteins even after they try to diversify their diets by engaging with the food market. This indicates that their diets are not diversified enough fulfill their needs for micronutrients. A larger share of the host community members consumes some animal proteins, but most have a diet that does not include any meat, dairy, eggs, or fish.

### 4.4 Agency

Agency represents the ability of people to take both political and economic actions to help improve their FSN (HLPE 2020a: 7). This section studies some of the economic channels that refugees can use to improve their food security. The political avenues are beyond the scope of this study. In Uganda, refugees are (in contrast to in many other countries in Sub-Saharan Africa) allowed to leave their settlement, find work, set up businesses, and access land for cultivation and grazing (World Bank 2016). These rights can give refugees economic agency to secure enough food for their households. In this section we look at how this potential agency is translated into practice by studying the refugees’ income earning opportunities and access to land for cultivation before and during the pandemic.

---

6 Notwithstanding this, we make not of the fact that political meetings were banned in Adjumani during the five to six months leading up to this study, to contain the spread of the COVID-19 virus.
4.4.1. Incomes

Many refugees and host community members rely on more than one occupation for their livelihood and income. Crop farming is, however, by far the most common occupation among both refugees and host community members of this study, followed by brewing, stone quarrying, and casual wage labor. There is however, as we will see in the section on land for cultivation below, substantial disparity in the amount of land the two groups have access to.

Figure 5 below, shows that as many as 86 percent of the host community and 50 percent of refugees give crop farming as an occupation. We can also see from the figure that while about 10 percent of the refugees report that they have no occupation, none of the host community members have given this answer.

Figure 5: Occupations for Refugees and Host Community Members

The respondents were asked to indicate whether the Corona Pandemic has made it harder for them to make income and the results obtained are summarized in Figure 6. We can see that 80 percent of the host community members and 69 percent of the refugees think it is much harder to make an income during the pandemic then it was before. Hardly anyone thinks it is a little easier, none thinks it is much easier (not shown in the figure), while 28 percent of refugees and 8 percent of host community members do not think the pandemic has had any effect on their ability to make an income.
Figure 6: The Corona Pandemic’s Effect on the Ability to Make an Income

Notes: N= 411 Refugees and 210 Host Community Member, Question number 25 in Appendix 1.

Conversations with block/cluster leaders also revealed that in Adjumani alone, between 2,000 and 5,000 people make the change from food rations to cash transfers each month, as they believe this gives more flexibility greater decision-making power over what they can use their cash for. Numerous survey respondents and key informants noted that with the ban on public transport, refugees could not sell quarried stones like they used to in order to get incomes with which to supplement the food rations they receive from the WFP.

Some refugees have found new, creative, ways to make an income, such as hair braiding and selling goods at the market. However, several key informants reported that since the onset of the pandemic, there has been a marked increase in early and forced marriage among refugee girls because many households have more difficulties getting enough food and income to cover their basic needs. Such negative coping strategies can have serious consequences for the future food security of these girls, as early marriage often makes them drop out of school, increases their care responsibilities, and reduces their ability to make an income (Development Pathways 2018: 53). Before the pandemic, the rate of teenage marriage among refugees in Adjumani was about three percent, much lower than the Ugandan national figure of almost 40 percent (Development Pathways 2018: 52), and it is worrisome that the pandemic is seemingly forcing more young female refugees to resort to these coping strategies.

There is considerable wish for more economic agency among the refugees. When asked if they would like to start a business, as many as 79 percent of the refugees answered affirmative. Table 11 shows the most common types of businesses the refugees would
like to start. The most popular business is growing and selling fruit, vegetables, and tubers (65 percent), with starting a grocery store as a runner up (27 percent), followed by animal husbandry (14 percent) and tailoring (10 percent).

**Table 11: Most Common Businesses Refugees Want to Start**

<table>
<thead>
<tr>
<th>Type of Business</th>
<th>Percent of Refugees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growing and selling fruit, vegetables, and tubers</td>
<td>65</td>
</tr>
<tr>
<td>Grocery store</td>
<td>27</td>
</tr>
<tr>
<td>Animal husbandry</td>
<td>14</td>
</tr>
<tr>
<td>Tailoring</td>
<td>10</td>
</tr>
<tr>
<td>Restaurant/ café</td>
<td>9</td>
</tr>
<tr>
<td>Selling soap</td>
<td>7</td>
</tr>
<tr>
<td>Hair/ beauty salon</td>
<td>6</td>
</tr>
<tr>
<td>New and used clothing store</td>
<td>6</td>
</tr>
<tr>
<td>Baking</td>
<td>5</td>
</tr>
<tr>
<td>Produce and sell charcoal and firewood</td>
<td>4</td>
</tr>
<tr>
<td>Food trader</td>
<td>4</td>
</tr>
</tbody>
</table>

Notes: N= 315; Questions number 76-80 in Appendix 1.

To manage setting up a business, most refugees reported (Questions 85 and 86 in Appendix 1) that they will need a startup grant (a few said a loan), business skills training, and land (for food production businesses).

*Picture 9: Stone Quarrying in Agojo Settlement*
4.4.2 Land for Cultivation

Food production can be a source of food for their own consumption, and it can be a source through income if they sell (some of) the food they produce and use the money to buy (other kinds of) food. Interviews with key informants revealed that upon arrival, the refugees are allocated what is called a “shelter plot” of land that is about 30x30 meters in size. These plots of land are large enough to build a hut, latrine and sometimes establish a kitchen-garden to cultivate some vegetables.

The land is relatively fertile given that the settlements lie within what is referred to as the Zoka corridor, which is a fertile crescent in West Nile and surrounding districts. That said, Maaji I and III appeared to have more opportunities to produce food compared to Mirieyi and Agojo refugee settlements. In fact, refugees in the Agojo and Mirieyi settlements are prohibited from roasting the maize that they harvest from rented land in the host communities. What is harvested must be reserved for conversion into maize flour, as this feeds more people from the same amount of corn. This is different from the Maaji I and III settlements, where refugees have the “luxury” to roast part of the maize harvest. This is partly because the land is more fertile there, but also because there are initiatives such as the Northern Uganda Resilience Initiative (NURI) that provide seeds to refugees in Maaji I and III. The proper growing of beans and vegetables (including, but not limited to, onions, Sukuma wiki, African Eggplant, Egg Plant, Cabbage, paw paws, etc.) is first demonstrated on the many demonstration sites across Maaji III and is in turn rolled out to groups of refugees that are interested in farming. The implementing partners normally request cluster leaders to constitute two kinds of groups, one for women only, and the other for both men and women. The distribution of seeds is done every planting season to ensure people have seeds as planting commences.

Many of the people living in the settlements consider the size of the shelter plots and the rations provided to be too small to cover daily household needs for food. As mentioned before, Uganda is one of few countries in Sub-Saharan Africa that allows refugees to access land for cultivation (in addition to the shelter plots), and that some

7 The refugees are also issued a tent, two saucepans and two jerry cans (but not material to build a hut).

8 There is a similar exercise carried out in the refugee settlements of Mungula, which we could not study due to Corona Pandemic restrictions.
refugees even get such land from the government\textsuperscript{9} (World Bank 2016). These plots are often referred to as “cultivation plots”.

**Figure 7: Access to Cultivation Land Before the Corona Pandemic**

Figure 7 shows that before the onset of the Corona Pandemic 63 percent of the refugees did not have access to cultivation plot, 28 percent had less than two acres, 9 percent had between two and five acres, and only 1 percent had five to seven acres. None among the respondents had more than seven acres. The results also reveal that there is a higher share of the host community members that have from two to five, five to seven and more than seven acres than for the refugees, and that a lower share of the host community have less than two acres or no cultivation plot.

From Table 12, we can see that out of the 37 percent of the refugees that have access to cultivation land, only 14 percent reported that this was granted from the government, while more than 31 percent were renting the land. Among the more than 91 percent of the host community members that have access to land, more than 73 percent had inherited this, and only 8 percent were renting or had received the land as gifts from friends or family, respectively.

---

\textsuperscript{9} The refugees do not get ownership rights to this land that is granted from the government, and the amount of land can be subject to change (reductions) if, for instance, more refugees arrive and there is not enough land to go around.
Table 12: How Land was Accessed Before the Pandemic, in Percent of Respective Group

<table>
<thead>
<tr>
<th>Land access</th>
<th>Refugees</th>
<th>Host Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rented</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>Granted by Government</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Borrowed</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Inherited</td>
<td>0,5</td>
<td>73</td>
</tr>
<tr>
<td>Granted by friends or family</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Bought</td>
<td>0,2</td>
<td>2</td>
</tr>
</tbody>
</table>

Notes: N= 154 refugees and 199 host community members; Question number 50 in Appendix 1.

As observed from Figures 7 and 8, approximately five months after the onset of the pandemic, the share of refugees that do not have access to any land for cultivation increased from 63 to 66 percent, and the share that had access to the most land (five to seven acres) went down from 1 to 0.2 percent. Furthermore, the share with access to between two and five acres increased marginally, most likely because refugees that used to have more than this, has lost access to some of their land.

Picture 10: Cassava Crop in Maaji III
For the host communities, the number of people with access to five to seven acres fell from 23 to 20 percent during the pandemic, and access to more than seven acres went down by one percent. Access to less than two acres, however, increased by 6 percent, and it is interesting to note that during the pandemic, the number of host community members that did not have access to any cultivation land was reduced—while it went up for the refugees. This could be attributed to the Corona Pandemic regulations which were put in place such as curfew and stay home orders forced people to resort to cultivation (near their home). It is also worth noticing that both the refugee and host communities experienced a reduction in the number of people that has access to the most land (five to seven acres and more).

The survey data shows that some refugees have lost access to cultivation land since the onset of the pandemic, but these data indicate that it is not a prevalent problem. The key informant interviews, however, suggest that problem of refugees losing access to cultivation land during the pandemic can be much more widespread than the survey data reveal. One reason for this is that restrictions on movement has made it too difficult for refugees to get to their land. Another important reason is that some host community landowners terminated the lease (because they needed the land to provide food for their own households). Both key informant interviews and follow up survey questions revealed that some landlords who reclaimed their land also took the food that was growing on it.

“We are suffering. Many mature men and youths struggle to survive due to lack of work and are therefore unable to provide for their families. While in South Sudan, we had a lot of land that we could cultivate. Here, you enter into an informal
agreement with the landowner, and you invest time and family labor in clearing the land for maize cultivation. But the landowners come and either occupy the land and use it for their crop growing or they just deliberately harvest our crops. This is what you call real suffering. We are treated as foreigners. You can’t do much except to leave the place and find an alternative place from a friendlier landowner. Many men have returned to South Sudan because of limited opportunities available and a sense of hopelessness in Agojo” (Refugee key informant in the Agojo Settlement).

It is perhaps not surprising that some key informants reported that this land issue is becoming a source of conflict between refugee and host communities.

When asked whether they would like to produce more food, 95 percent of refugees and 99 percent of the host community answered affirmative, and they gave lack of land and capital as the most important reasons why they were not producing more already. Furthermore, over 80 percent of the refugees in the survey would like more land for cultivation (or some land if they did not already have any).

*Picture 11: Kitchen Garden in one of the Refugee Settlements*

This sub-section shows that the Corona Pandemic has had negative impact on the refugees’ economic agency regarding food security, mainly because it has become much harder to make an income with which to buy food, but also because some refugees have
lost access to cultivation land. Equally important is that most refugees want to produce more food on more land to improve their household’s food security. The sub-section has furthermore made it clear that an overwhelming majority of refugees would like more economic agency to secure their FSN.

*Picture 12: Huts and Field in one of the Refugee Settlements*

*Picture 13: Intervention to Boost Food Production in Maaji III*
5. Conclusion and Recommendations

This report has studied how the Corona Pandemic has affected food security for refugees and host community members in the Adjumani district in Northern Uganda. We have investigated the food security dimensions of food access, food availability, utilization, and agency—both before and during the pandemic, and described the change. This change represents the stability dimension of their FSN situation.

Before we go into the changes induced by the pandemic, it is important to note that the food security situation for the refugees in this study was challenging even before its onset. This is exemplified by the fact that more than 34 percent of the refugees reported that they most often did not have access to enough food for their household before the pandemic. In comparison, this number was 7 percent among the host community members of the study—a number that is much lower than for the refugees, but still too high.

During the pandemic, the food security situation has deteriorated for both groups, but most severely for the refugees. The experience of about 83 percent of refugees, and 73 percent of the host community members, is that it has become much harder to access enough food during the pandemic. Food availability has dropped due to financing shortfalls to the WFP, and because it is more difficult to get food to the markets due to the Corona Pandemic containment measures that restricts travel. Diets have also become less diverse. The pandemic has made it much harder for most refugees and host community members to make an income and food prices have risen significantly. Most refugees do not have any land for cultivation outside of a kitchen garden which is usually too small to provide enough extra food for the generally large households. Home-grown food production has therefore not been able to replace ration cuts and/or food previously purchased on the market. Some of the refugees that did have access to a cultivation plot before the pandemic, has lost this access. Furthermore, more than 80 percent of the refugees in the survey would like more land for cultivation so they can produce more food. Last, but not least, there are indications that the intensified hardships of making an income and accessing enough food for the households has led to an increase in early and forced marriage among refugee girls.

In conclusion, this study has shown that:

- The food security of the refugees and host community members in Adjumani has been far from stable during the crisis induced by the pandemic, and that the refugees were hit worse than the host community.
• It is paramount and urgent to secure more funding to the WFP so they can at least support the refugees with basic minimum food rations.

• There is a need to build more resilient refugee food systems to prepare for future crises whether they come in the form of pandemics, economic recessions, or extreme weather.

This study has also revealed that there is need for more research into at least three crucial issues of importance for refugee food security:

• The access to land for cultivation and the dynamics around land tenure (security). Improving the refugees’ access to land will benefit their food security as well as their self-reliance, agency, and dignity. Increased agricultural production can also lead to ripple effects of economic growth in the area. In the face of intensifying climate change, it is pertinent that land is accompanied by climate-smart agricultural extension.

• The nature of food systems in refugee settings. A deeper understanding of the interactions between the external food aid and local elements and activities that relate to the production, processing, distribution, preparation, and consumption of food, is critical for creating resilient food systems.

• The emergent strategies used by the refugees to cope with the drastic reductions in food rations and FSN. This will provide more insight on what kind of agency the refugees behold, and how they use it.
Bibliography


WFP (2021). “WFP, UNHCR appeal for funding for over 3 million refugees suffering from rations cuts in eastern Africa”, WFP Media Centre March 2. 2021, WFP, UNHCR appeal for funding for over 3 million refugees suffering from rations cuts in eastern Africa | World Food Programme


Appendix 1: Survey Questionnaire
1 Country of survey
This is a mandatory question. To be filled in by the researcher before the interview starts.

- Uganda
- Ethiopia
- Jordan

2 Group identification
This is a mandatory question. To be filled in by the researcher before the interview starts.

- Refugee
- Host community member

3 Place of residence
Mandatory question. To be filled in by the researcher before interview starts. Numbers go together so that host community 1 is right next to refugee settlement 1

- Refugee settlement 1
- Host community 1
- Refugee settlement 2
- Host community 2
- Refugee settlement 3
- Host community 3

4 Gender

- Male
- Female
- Prefer not to answer

5 How old are you?

- 15-17
- 18-25
- 26-35
- 36-50
- 51-64
- 65 or older
- prefer_not_to_answer
- Don't know
6 What is your civil status?

- Single
- Married
- Separated
- Divorced
- Widow/widower
- Cohabitant
- Prefer not to answer

7 Does your spouse live with you?

*This is a follow up question to the answers “married and Cohabitant” above.*

- Yes
- No
- Prefer not to answer

8 What is your highest level of education?

- None
- Started primary school but did not finish
- Primary school
- Lower secondary school
- Upper secondary school
- Vocational training with certificate/diploma
- Bachelor’s Degree
- Masters Degree
- PhD
- Other
- Don’t know
- Prefer not to answer

9 What “other” education do you have?

*This is a follow up question to Other category in education question above*
10 How long have you been living in this settlement/ (host) community?
- less than one year
- 1-3 years
- 4-6 years
- 7 to 10 years
- More than 10 years
- Don't know
- Prefer not to answer

11 How many people live in your household?
- 1
- 2 to 5
- 6 to 8
- 9 to 11
- more than 11
- Don't know
- Prefer not to answer

12 How many children below the age of 18 years are there in your household?
- None
- 1
- 2 to 5
- 6 to 8
- 9 to 11
- more than 11
- Don't know
- Prefer not to answer

13 How old are the children in your household
   This is a follow up question to people with children in the household in the question above.
- 0-2 years
- 3-5 years
- 6-9 years
- 10-14 years
- 15-17 years
- Don't know
- Prefer not to answer
14 Do any of the children in the household go to school?

Follow up question to people with children

- All of them
- Some of them
- No
- Prefer not to answer

15 What levels of school are the children attending?

Follow up question to people with children

- Nursery/Kindergarten
- Primary
- Secondary
- Vocational training institutions
- University
- Don't know
- Prefer not to answer

16 Are there any disabled persons in your household?

- Yes
- No
- Don't know
- Prefer not to answer

17 Are there any elderly people in your household? (Over 65 years old)

- Yes
- No
- Don't know
- Prefer not to answer

18 How many persons in your household makes an income?

- None
- 1
- 2 to 5
- 6 to 8
- 9 to 11
- More than 11
- Don't know
- Prefer not to answer
19 What is your occupation?

☐ Crop farmer
☐ Livestock farmer
☐ Fisher
☐ Food and cash crop processing (Grain milling, leather processing, +++)
☐ Restaurant
☐ Hotel
☐ Tailor/Seamstress/ embroidery
☐ Home keeping and childcare
☐ Teacher
☐ Lay reader
☐ Civil servant
☐ Driver (taxi, trucks, etc.)
☐ Boda boda rider
☐ Shop owner/keeper
☐ Market vendor
☐ Hair Saloon/beautician/barber, etc.
☐ Security services
☐ Medical practitioner
☐ Brewing
☐ Charcoal trade
☐ Brick making
☐ Masonry, carpentry, metal works, welding, etc.
☐ Mechanical repairs
☐ Other
☐ Don't know
☐ Prefer not to answer

20 What kind of food and/or cash crop processing?

This is a follow up question to those who answer “Food and cash crop processing” in the question about occupation above. Please keep answer short.

21 What is the "other" occupation you have?

This is a follow up question to those who answer "other" in the question about occupation above. Please keep answer short.
22 What is your employment status?
- Formal employment
- Self employed
- Unemployed
- Don't know
- Prefer not to answer

23 What kind of measures have been implemented to stop the spread of the corona virus in your community?
- No movement of any form between 9:00pm and 6:30am
- Stay home order
- Closing of businesses except for food and drug stores
- Closing of businesses including food and drug stores
- Limited hours of operation for taxis and boda bodas
- Limited number of occupants in taxis
- Schools closed
- Limiting gatherings to less than 5 people
- Limiting parties
- Closure of bars, churches and political meetings
- Mandatory face masks
- Improved access to hand washing
- Other
- Don't know
- Prefer not to answer

24 If other measures, what?
*This is a follow up question to those who answer “other” in the question above. Keep answer short.*

25 Has the corona pandemic and/or the measures to stop the spread of it affected your ability to make an income?
- It's much easier to make an income
- It's a little easier to make an income
- No effect
- It's a little harder to make an income
- It's much harder to make an income
- Don't know
- Prefer not to answer
26 Where did you get/buy your food from before the corona pandemic?
By barter we mean trade one type of food, or something else, for (another type of) food with no (or little) cash involved

- Government rations
- WFP rations
- Buy on the market
- Grow yourself
- Borrow
- Barter
- NGOs
- Community groups
- Neighbors and friends
- Buy from refugees
- Other
- Don't know
- Prefer not to answer

27 If other, where did you get your food from before?
This is a follow up question to the answer "other" to the question above. Please keep answer short.

28 Did you sell any of your food rations before the onset of the corona pandemic?
This is a follow up question to the answer "Government rations or WFP rations" to the question above.

- No
- Yes, one quarter or less
- Yes, between one quarter and half
- Yes, between half and three quarters
- Yes, more than three quarters
- Don't know
- Prefer not to answer
29 Why did you sell some of your household's rations before the onset of the corona pandemic?
This is a follow up question to the answer "yes" to the question about selling rations above.

- [ ] Buy other types of food
- [ ] Rations are too large
- [ ] Pay for education
- [ ] Pay for health care
- [ ] Save the money
- [ ] Send money to home country
- [ ] Other
- [ ] Don't know
- [ ] Prefer not to answer

30 For what "other" reasons did you sell rations before the onset of the corona pandemic?
This is a follow up question to the answer "other" to the question above. Please keep answer short.

31 Where do you get/buy your food from now, during the corona pandemic?
By barter we mean trade one type of food, or something else, for (another type of) food with no (or little) cash involved

- [ ] Government rations
- [ ] WFP rations
- [ ] Buy on the market
- [ ] Grow yourself
- [ ] Borrow
- [ ] Barter
- [ ] NGOs
- [ ] Community groups
- [ ] Neighbors and friends
- [ ] Buy from refugees
- [ ] Other
- [ ] Don't know
- [ ] Prefer not to answer

32 If "other", where do you get your food from now?
This is a follow up question for the answer "other" to the question above. Please keep answer short.
33 Do you sell any of your food rations now, during the pandemic?
This is a follow up question to the answer “Government rations or WFP rations” to the question above.

- No
- Yes, one quarter or less
- Yes, between one quarter and half
- Yes, between half and three quarters
- Yes, more than three quarters
- Don’t know
- Prefer not to answer

34 Why do you sell some or all of your household’s rations now, during the pandemic?
This is a follow up question to the answer “yes” to the question about selling rations now, above.

- Buy other types of food
- Rations are too large
- Pay for education
- Pay for health care
- Save the money
- Send money to home country
- Other
- Don’t know
- Prefer not to answer

35 For what “other” reason do you sell rations now, during the pandemic?
This is a follow up question to the answer “other” to the question above. Please keep answer short.

36 Did your household have enough food before the onset of the corona pandemic?

- Yes, always
- Most often enough food
- Enough food about half the time
- Most often not enough food
- No, never
- Don’t know
- Prefer not to answer
37 Does your household have enough food now, during the corona pandemic?

- Yes, always
- Most often enough food
- Enough food about half the time
- Most often not enough food
- No, never
- Don't know
- Prefer not to answer

38 Has the corona pandemic had an effect on your ability to get enough food for your household?

- It is much easier to get enough food for the household
- It is a little easier to get enough food for the household
- No effect
- It is a little more difficult to get enough food for the household
- It is much more difficult to get enough food for the household
- Don't know
- Prefer not to answer

39 Why has the corona pandemic made it more difficult for your household to get enough food?

*This is a follow up question to the answer "a little and much more difficult" to the question above. Please keep answer short.*

40 Why has the corona pandemic made it easier for your household to get enough food?

*This is a follow up question to the answer "a little and much easier" to the question above. Please keep answer short.*

41 Are there seasonal variations in your ability to get enough food?

*This question should be asked everyone (even though the print is light grey)*

- Yes
- No
- Don't know
- Prefer not to answer

42 At what time of year is it easiest to get enough food?

*Follow up question to the answer "yes" to seasonal variations in ability to get enough food*

- March - May (Wet Season)
- December - February (Dry season)
- June - August (Dry Season)
- September - November (Wet Season)
- Don't know
- Prefer not to answer
43 At what time of year is it most difficult to get enough food?
Follow up question to the answer "yes" to seasonal variations in ability to get enough food

- March - May (Wet Season)
- December - February (Dry season)
- June - August (Dry Season)
- September - November (Wet Season)
- Don't know
- Prefer not to answer

44 What types of food did you consume most often before the onset of the corona pandemic?

- Cereals (Rice, maize, sorghum, millet, wheat)
- Pulses (Beans, Peas, nuts, soya and seeds)
- Vegetables and leaves
- Dairy products (Milk, yoghurt)
- Meat (Chicken, goat,)
- Eggs
- Fish
- Sweets (Sugar, honey)
- Oil
- Condiments (coffee, tea, spices, salt)
- Other
- Don't know
- Prefer not to answer

45 What "other" types of food did you consume before the pandemic?
This is a follow up question to the answer "Other" above. Please keep answer short.
46 What types of food do you consume most often now (during the corona pandemic)?

☐ Cereals (Rice, maize, sorghum, millet, wheat)
☐ Pulses (Beans, Peas, nuts, soya and seeds)
☐ Vegetables and leaves
☐ Dairy products (Milk, yoghurt)
☐ Meat (Chicken, goat,)
☐ Eggs
☐ Fish
☐ Sweets (Sugar, honey)
☐ Oil
☐ Condiments (coffee, tea, spices, salt)
☐ Other
☐ Don't know
☐ Prefer not to answer

47 What "other" type of food do you consume now, during the pandemic?

This is a follow up question to the answer "other" above. Please keep answer short.

48 Did you have access to land to grow food/cash crops or raise livestock on before the onset of the corona pandemic?

☐ Yes
☐ No
☐ Don't know
☐ Prefer not to answer

49 How much land did you have access to before the corona pandemic?

Follow up question to the answers "yes" to the question on access to land above.

☐ Less than a quarter of an acre (Shelter plot)
☐ Between a quarter and two acres
☐ Between two and five acres
☐ Between five and ten
☐ More than ten acres
☐ Don't know
☐ Prefer not to answer
50 How did you acquire access to this land to grow food/cash crops or raise livestock on before the corona pandemic?  
Follow up question to the answers "yes" to the question on access to land above.

☐ Bought  
☐ Rented  
☐ Borrowed  
☐ Inherited  
☐ Granted by the government  
☐ Granted by family or friends  
☐ It is commons  
☐ Don't know  
☐ Prefer not to answer

51 Do you have access to land to grow food/cash crops or raise livestock on now, during the corona pandemic?  

☐ Yes  
☐ No  
☐ Don't know  
☐ Prefer not to answer

52 How much land do you have access to now, during the corona pandemic?  
Follow up question to the answers "yes" to the question on access to land above.

☐ Less than a quarter of an acre (Shelter plot)  
☐ Between a quarter and two acres  
☐ Between two and five acres  
☐ Between five and ten acres  
☐ More than ten acres  
☐ Don't know  
☐ Prefer not to answer

53 Do you or someone in your household own this land?  

☐ Yes, all of it  
☐ Yes, some of it  
☐ No  
☐ Don't know  
☐ Prefer not to answer
54 How did you acquire access to this land that you can grow food/cash crops or raise livestock on now, during the corona pandemic?
Follow up question to the answers "yes" to the question on access to land above.

- Bought
- Rented
- Borrowed
- Inherited
- Granted by the government
- Granted by family or friends
- It is commons
- Don't know
- Prefer not to answer

55 Would you like to have some/more land to grow food/cash crops on?
Follow up question to the answers "No" to the question on access to land above.

- Yes
- No
- Don't know
- Prefer not to answer

56 Would you like to have some/more land to raise livestock on?
Follow up question to the answers "No" to the question on access to land above.

- Yes
- No
- Don't know
- Prefer not to answer

57 Has the corona pandemic influenced how much land you have?

- I have much more land now
- I have a little more land now
- No effect
- I have a little less land now
- I have much less land now
- Don't know
- Prefer not to answer
58 Has the corona pandemic influenced how easy or hard it is to get to your land?

- It is much easier to get to my land now
- It is a little easier to get to my land now
- No effect
- It is harder to get to my land now
- I cannot get to my land now
- Don't know
- Prefer not to answer

59 What kind of crops or livestock did you produce before the onset of the corona pandemic?

- None
- Okra
- Cassava
- Sweet potatoes
- Sorghum
- Simsim (Sesame)
- Soya beans
- Maize
- Groundnuts
- Beans
- Millet
- Mangoes
- Avocado
- Matooke (bananas)
- Rice
- Coffee
- Tobacco
- Cotton
- Cattle
- Goats and sheep
- Pigs
- Rabbits
- Poultry (chicken, ducks)
- Other
- Don't know
- Prefer not to answer
60 What kind of "other" food/cash crops or livestock did you produce before the onset of the corona pandemic?
This is a follow up question to those who answer "other" in the question above. Keep answer short.

61 What kind of food/cash crops or livestock do you produce now, during the corona pandemic?
This is a follow up question to the answer "yes" to the question on if they have access to land now during the corona pandemic, above.

- None
- Okra
- Cassava
- Sweet potatoes
- Sorghum
- Simsim (Sesame)
- Soya beans
- Maize
- Groundnuts
- Beans
- Millet
- Mangoes
- Avocado
- Matooke (bananas)
- Rice
- Coffee
- Tobacco
- Cotton
- Cattle
- Goats and sheep
- Pigs
- Rabbits
- Poultry (chicken, ducks)
- Other
- Don't know
- Prefer not to answer

62 What kind of "other" food crops or livestock do you produce now, during the corona pandemic?
This is a follow up question to those who answer "other" in the question above. Keep answer short.
63 Has the corona pandemic influenced what type, quantity and/or quality of the food/cash crops or livestock you produce?

☐ Yes

☐ No

☐ Don't know

☐ Prefer not to answer

64 In what ways has the corona pandemic influenced the type of food/cash crops or livestock you produce?

*This is a follow up question to the answer “yes” above. Please keep answer short.*

65 Would you like to produce more food/cash crops on your land?

*This is a follow question to the answer “yes” to if they have land now, during the corona pandemic, above.*

☐ Yes

☐ No

☐ Don't know

☐ Prefer not to answer

66 What is the most important obstacles hindering you in producing more food/cash crops on your land?

*This is a follow up question to the answer “yes” to the question “Would you like to produce more food on your land”, above.*

☐ Not enough land

☐ Poor quality of land

☐ Not enough water

☐ Access to other inputs such as seeds, fertilizer, pesticides, etc.

☐ Limited knowledge on how to farm

☐ Limited or inadequate farm labour

☐ Adverse weather conditions

☐ The corona pandemic stay home/curfew rules

☐ Corona pandemic limits on transportation rules

☐ Corona pandemic limits on gatherings rules

☐ Corona pandemic school closures

☐ Other

☐ Don't know

☐ Prefer not to answer

67 What “other” obstacles?

*This is a follow up question for those who answered “other” to the question about obstacles above. Please keep answer short.*
68 Did you sell any of the food/cash crops you produced before the onset of the corona pandemic?

This is a question for those who produced crops or livestock before the corona pandemic

- [ ] No
- [ ] Yes, one quarter or less
- [ ] Yes, between one quarter and half
- [ ] Yes, between half and three quarters
- [ ] Yes, more than three quarters
- [ ] Don't know
- [ ] Prefer not to answer

69 Was it easy or difficult for you to sell the food/cash crops you produced before the corona pandemic?

This is a follow up question for those who did sell some of their produce before the corona pandemic, in the question above.

- [ ] Very easy
- [ ] Somewhat easy
- [ ] Neither easy nor difficult
- [ ] Somewhat difficult
- [ ] Very difficult
- [ ] Don't know
- [ ] Prefer not to answer

70 What made it difficult to sell the food/cash crops you produced before the corona pandemic?

This is a follow up question for those who found it difficult sell some of their produce before the corona pandemic, in the question above.

- [ ] Lack of transportation
- [ ] Didn't have enough time
- [ ] Didn't have childcare
- [ ] I needed to care for elderly/ disabled
- [ ] Too much competition from other farmers
- [ ] Lack of markets
- [ ] No surplus to sell
- [ ] Government restrictions on food sale/trade
- [ ] It was socially unacceptable for me
- [ ] The corona pandemic stay home/curfew rules
- [ ] Corona pandemic limits on transportation rules
- [ ] Corona pandemic limits on gatherings rules
- [ ] Corona pandemic school closures
- [ ] Other
- [ ] Don't know
- [ ] Prefer not to answer
71 What "other" reason made it hard for you to sell the food/cash crops you produced before the corona pandemic?
This is a follow up question for those who answered "other" to the reasons it was difficult sell some of their produce before the corona pandemic. Please keep answer short.

72 Do you sell any of the food /cash crops you produce now, during the corona pandemic?
This is a question for those who produce crops or livestock during the corona pandemic

- No
- Yes, one quarter or less
- Yes, between one quarter and half
- Yes, between half and three quarters
- Yes, more than three quarters
- Don't know
- Prefer not to answer

73 Is it easy or difficult for you to sell the food/cash crops you produce now, during the corona pandemic?

- Very easy
- Somewhat easy
- Neither easy nor difficult
- Somewhat difficult
- Very difficult
- Don't know
- Prefer not to answer
74 What makes it difficult to sell the food/cash crops you produce now, during the corona pandemic?
This is a follow up question for those who find it difficult sell some of their produce now, during the corona pandemic, in the question above.

- Lack of transportation
- Didn't have enough time
- Didn't have childcare
- I needed to care for elderly/ disabled
- Too much competition from other farmers
- Lack of markets
- No surplus to sell
- Government restrictions on food sale/trade
- It was socially unacceptable for me
- The corona pandemic stay home/curfew rules
- Corona pandemic limits on transportation rules
- Corona pandemic limits on gatherings rules
- Corona pandemic school closures
- Other
- Don't know
- Prefer not to tanswer

75 What "other" reason makes it hard for you to sell the food/cash crops you produce now, during the corona pandemic?
This is a follow up question for those who answered "other" to the reasons it is difficult sell some of their produce now, during the corona pandemic. Please keep answer short.

76 Would you like to start a business in the food and agriculture sector?

- Yes
- Maybe
- No
- Don't know
- Prefer not to answer
77 What kind of business would you like to start in the food and agriculture sector?
This is a follow up question to the answers "yes and maybe" above.

- Produce business
- Grocery store
- Agro-vet store
- Large scale farming
- Agricultural produce middleman
- Milling
- Food processing (other than milling)
- Food transport
- Restaurant, café or catering
- Other
- Don't know
- Prefer not to answer

78 What "other" kind of business in the food and agriculture sector?
This is a follow up question to the answers "other" above.

79 Would you like to start a business outside of the food and agriculture sector??

- Yes
- Maybe
- No
- Don't know
- Prefer not to answer

80 What kind of business outside of the food and agriculture sector would you like to start?
This is a follow up question to the answers "yes and maybe" above.
81 What kept you from starting a business before the corona pandemic?

This is a follow up question to the answers "yes and maybe" to starting any kind of business in the two questions above. Refers to business both in or outside the food or agriculture sector.

- [ ] Didn't have enough money
- [ ] Didn't have enough land
- [ ] Didn't have enough time
- [ ] Didn't have the right technical skills (e.g. how to process a certain food)
- [ ] Didn't have business skills (e.g. how to run a business)
- [ ] Didn't know if there is a market for it
- [ ] Too many competitors
- [ ] Don't know where to get inputs
- [ ] Inputs were unavailable
- [ ] Limited farm labour
- [ ] It was socially unacceptable for me
- [ ] Scared of losing money
- [ ] I had to take care of children, disabled and/or elderly persons in my household
- [ ] Restoring family links
- [ ] Fear of theft
- [ ] Desire to relocate to home country
- [ ] Other
- [ ] Don't know
- [ ] Prefer not to answer

82 What other reasons kept you from starting such a business before the corona pandemic?

This is a follow up question to the answers "other" above. Please keep answer short.
83 What is keeping you from starting a business now, during the corona pandemic?

This is a follow up question to the answers "yes and maybe" to starting any kind of business in the two questions above. Refers to business both in or outside the food or agriculture sector.

- [ ] Didn't have enough money
- [ ] Didn't have enough land
- [ ] Didn't have enough time
- [ ] Didn't have the right technical skills (e.g. how to process a certain food)
- [ ] Didn't have business skills (e.g. how to run a business)
- [ ] Didn't know if there is a market for it
- [ ] Too many competitors
- [ ] Don't know where to get inputs
- [ ] Inputs were unavailable
- [ ] Limited farm labour
- [ ] It was socially unacceptable for me
- [ ] Scared of losing money
- [ ] I had to take care of children, disabled and/or elderly persons in my household
- [ ] Restoring family links
- [ ] Fear of theft
- [ ] Desire to relocate to home country
- [ ] Other
- [ ] Don't know
- [ ] Prefer not to answer

84 What other reasons are keeping you from starting such a business now, during the corona pandemic?

This is a follow up question to the answers "other" above. Please keep answer short.
85 What kind of support would you need to start such a business?
This is a follow up question to the answers "yes and maybe" to starting any kind of business in the two questions above

- None
- Start up money, grant
- Start up money, loan
- Access to credit
- Agricultural land
- Skills training
- Child care
- Care for elderly and/or disabled person in my household
- Other
- Don't know
- Prefer not to answer

86 What kind of "other" support would you need?
This is a follow up question to the answers "other" above. Please keep answer short.

87 How would you describe your relation to the host community before the corona pandemic?
Question for refugees only. We're interested in knowing whether/to what degree the host community is hostile of friendly towards the refugees and vice versa

- Very good
- Good
- Neutral
- Bad
- Very bad
- Don't know
- Prefer not to answer

88 How would you describe your relation to the refugees before the corona pandemic?
Question for host community only. We're interested in knowing whether/to what degree the host community is hostile of friendly towards the refugees and vice versa

- Very good
- Good
- Neutral
- Bad
- Very bad
- Don't know
- Prefer not to answer
89 How would you describe your relation to the host community now, during the corona pandemic?

*Question for refugees only. We're interested in knowing whether/to what degree the host community is hostile of friendly towards the refugees and vice versa*

- [ ] Very good
- [ ] Good
- [ ] Neutral
- [ ] Bad
- [ ] Very bad
- [ ] Don't know
- [ ] Prefer not to answer

90 How would you describe your relation to the refugees now, during the corona pandemic?

*Question for host community only. We're interested in knowing whether/to what degree the host community is hostile of friendly towards the refugees and vice versa*

- [ ] Very good
- [ ] Good
- [ ] Neutral
- [ ] Bad
- [ ] Very bad
- [ ] Don't know
- [ ] Prefer not to answer
Appendix 2: Interview Guide for Key Informants

Appendix 2A: Interview Guide for Refugee Key Informants
These questions are meant as an aid to start discussions around issues of food security, livelihoods, self-reliance, the relationship between refugees and host community, and the effects of the Corona Pandemic on these issues. You can adjust the questions, add some or skip some according to the flow of the interview.

The questions are mostly phrased to be about the specific person you are interviewing, as this makes it easier for them to tap into the subjects. But we are also interested in what they think about the general situation in their community. If the question is relevant for the respondent, they may know more about their own situation, other times they can only talk about experiences in their community. It will be up to the interviewer to ask more, or less, about the general situation when you get a feel for what the respondent knows.

1) Mandatory background questions:
   a) Settlement
   b) What community group/organization your respondent is a representative of

2) Food and nutrition security
   a. Does your household generally have enough food?
   b. What kind of food do you generally eat? Does this vary, if so: how and why?
   c. Would you prefer to eat different kinds of food? Why?
   d. Where do you get your food from? Do you buy from the local market, grow yourselves, fish and hunt, rations from the government, WFP or NGO’s, rely on neighbors, friends and community groups, etc.?
   e. Do you receive food rations from the government/WFP?
      i. What types of food are provided?
      ii. How many people are registered on your ration card? What quantities of food items do you receive?
      iii. When was the last time you received the food rations? Do you know where the food rations come from (Adjumani, Northern Uganda, greater Uganda, or other countries?)
   f. What do you think about food rations and food aid?
   g. Would you prefer to receive food rations or cash to buy food? Why?
   h. Do you buy food from the local market?
i. What types of food do you buy? Do you know whether these foods are locally grown or imported?

What effects does the Corona Pandemic and the measures to contain its spread have on your ability to get enough food? Is it more difficult, easier, why?

3) Crop production and livestock rearing

a. Do you grow food and/or rear livestock?
   i. What types of crops and livestock do you grow/rear?
   ii. What crops did you grow in the last cropping season?
   iii. How many livestock do you have (numbers of chicken, goats…)?
   iv. What type of livestock products (eggs, milk, meat, honey, ghee…) do you consume?
   v. Which type of livestock products do you sell?

b. What are the major challenges to crop production that you face?

c. What are the major challenges to livestock production?

d. Is it easy or hard for you/refugees to get access to land to grow food or raise livestock?

e. Do you have access to land for cultivation or grazing? Do you own or have user rights to any agricultural land including woodlots, forest land, fishing, and grazing areas? How did you acquire this land (buy, rent, use commons, receive from the government)?

f. Do you have disputes on the land that you are using now? Please describe the kind of dispute

g. How much land do you have? How much is cultivated or available for cultivation?

h. Describe the quality of the land you currently have. Is your land fertile?

i. How much food did you harvest from your land during the last cropping season?

j. How much of the produce was sold? What was the value of the produce (price per kilo or sack…?)

k. How much of the produce was kept or further processed (drying, grinding/milling…)?

l. Do you have enough water to grow crops and/or raise livestock? Are you able to buy or do you receive organic and inorganic fertilizers, pesticides, seeds, farm implements etc. if you need them?
m. Are there any programs that offer information/classes on improved farming techniques/methods? Do you want to take/have you taken any such classes/received such information? Was it useful?

n. Do you struggle to produce enough food for your own household?
   i. Do you sometimes/often have a surplus of food that you sell?
   ii. Are you able to save enough food so it lasts until the next harvest?

o. What effects does the Corona Pandemic and the measures to contain its spread have on your ability to produce crops or rear livestock?

4) Food sales
   a. If you/others have a surplus, where do you sell the food?
      i. Are you able to access markets beyond the settlement? Can mention the specific markets if possible.
   b. Is it challenging for you to sell food?
      i. What are the challenges?
      ii. How can these challenges be overcome?
   c. Do the local/host community purchase food from you/your community?
   d. What effects does the Corona Pandemic and the measures to contain its spread have on how easy or hard it is for you/your community to sell your food surplus?

5) Livelihoods, jobs, and business
   a. What would be the best way for you to improve your livelihood within food and agriculture (food production, processing, storage, sales, restaurants/cafés, etc.)?
      i. What kind of jobs/businesses could you have in this area? Do you want to increase your agricultural production?
      ii. Would it be best for you to have job or a business, or produce what you need yourself (subsistence production)? Why?
      iii. In what ways would you be able to boost your production? Are you able to hire extra labour during the cropping season?
      iv. What post-harvest handling strategies is/would be important for your community? E.g. milling, drying, canning, …?
      v. What kind of support would you need if you wanted to start a business within food and agriculture?
   b. Would it be better for you to make a living in another sector than food and agriculture? What kind of job or business would you like? Why?
i. What kind of support would you need if you wanted to start a business in this sector? Or get a job?

c. Would you like to invest time and effort (and money if you have any) in farming, creating a business, or learn job skills so you can be independent from the UNHR and WFP, etc.? Why/Why not?

d. What effects does the Corona Pandemic and the measures to contain its spread have on your livelihood/your ability to make a living, have/get a job, or run/start a business:
   i. within food and agriculture (production, processing, storage, and sales, restaurants, etc.)?
   ii. In other occupations/sectors?

e. Do you receive any assistance (financial/in-kind) from your relatives or friends?
   i. where are these friends or relatives located (Uganda, country of origin, diaspora)
   ii. How often do you receive this assistance?

6) Relationship to the host community
   a. Do you have friends or relatives in the host community?
   b. Have you received or offered any support to the host community?
   c. Do you participate together with the host community in socio-cultural events such marriages, funerals, and other festivities?
   d. Do you have joint activities such as sports, savings with the host community?
   e. Do you have access to farmland, pastures, and water and/or fishing and hunting rights in the host community? If so, do you own, rent, borrow, etc.?
   f. How would you describe the interactions between you/settlement and the host community?
   g. What effects does the Corona Pandemic and the measures to contain its spread have on the relationship between you and the host community?

Thank you very much for your time! We hope our common efforts will help make the food and livelihood situation better for you and your community.
Appendix 2B: Interview Guide for Key Informants in the Host Communities

These questions are meant as an aid to start discussions around issues of food security, livelihoods, self-reliance, the relationship between refugees and host community, and the effects of the Corona Pandemic on these issues. You can adjust the questions, add some or skip some according to the flow of the interview.

The questions are mostly phrased to be about the specific person you are interviewing, as this makes it easier for them to tap into the subjects. But we are also interested in what they think about the general situation in their community. If the question is relevant for the respondent, they may know more about their own situation, other times they can only talk about experiences in their community. It will be up to the interviewer to ask more, or less, about the general situation when you get a feel for what the respondent knows.

1) Mandatory background questions:
   c) Village/town
   d) What community group/organization your respondent is a representative of

2) Food and nutrition security
   a. Does your household generally have enough food?
   b. What kind of food do you generally eat? Does this vary, if so: how and why?
   c. Would you prefer to eat different kinds of food? Why?
   d. Where do you get your food from? Do you buy from the local market, grow yourselves, fish and hunt, rations from the government, WFP or NGO’s, rely on neighbors, friends and community groups, etc.?
   e. Do you buy food rations from refugees? Why?
   f. Is all the food you eat produced in this area? Or is some if it brought in from other areas in Uganda, or from abroad? If imported, from which countries?
   g. What do you think about food rations and food aid?
   h. What effects does the Corona Pandemic and the measures to contain its spread have on your ability to get enough food? Is it more difficult, easier, why?

3) Crop production and livestock rearing
   a. Do you grow food and/or rear livestock?
      i. What types of crops and livestock do you grow/rear?
   b. What are the major challenges to crop and livestock production that you face?
c. Is it easy or hard to get access to land to grow food or raise livestock?

d. How did you get access to this land for cultivation or grazing (buy, rent, use commons, receive from the government)?

e. How much land do you have? How much is cultivated or available for cultivation?

f. Is your land fertile?

g. Do you have enough water to grow crops and/or raise livestock?

h. Do you have access to fertilizers, pesticides, etc. if you need it?

i. Are there any programs that offer information/classes on improved farming techniques? Do you want to take/have you taken any such classes/received such information? Was it useful?

j. Do you struggle to produce enough food for your own household?

  i. Do you sometimes/often have a surplus of food that you sell?

  ii. Are you able to save enough food so it lasts until the next harvest?

k. What effects does the Corona Pandemic and the measures to contain its spread have on your ability to produce crops or rear livestock?

4) Food sales

a. If you/others have a surplus, where do you sell the food?

b. Would you like to sell on larger markets that are farther away?

c. Are there challenges in selling food?

  i. What are they and why?

  ii. How can these challenges be overcome?

d. Do refugees purchase food from you/your community?

e. Do refugees sell their rations in your community? If so, does this make it harder for you/your community to sell the food you produce?

f. What effects does the Corona Pandemic and the measures to contain its spread have on how easy or hard it is for you/your community to sell your food surplus?

5) Livelihoods, jobs, and business

a. What would be the best way for you to improve your livelihood within food and agriculture (food production, processing, storage, sales, restaurants/cafés, etc.)?

  i. What kind of jobs/businesses could you have in this area?

  ii. Would it be best for you to have a job or a business, or produce what you need yourself (subsistence production)?

  iii. What post-harvest handling strategies is/would be important for your community? E.g. milling, drying, canning, …?
iv. What kind of support would you need if you wanted to start a business within food and agriculture? Or get a job in this area?
b. Would it be better for you to make a living in another area than food and agriculture? If so, what area? What kind of job or business would you like? Why?
   i. What kind of support would you need if you wanted to start a business in this area? Or get a job?
c. What effects does the Corona Pandemic and the measures to contain its spread have on your livelihood/your ability to make a subsistence living, have/get a job, or run/start a business:
   i. within food and agriculture (production, processing, storage, and sales, restaurants, etc.)?
   ii. In other occupations/sectors?

6) Relationship to the refugees
   a. Do you have friends or relatives within the refugee settlements?
   b. Have you received or offered any support to the refugees?
   c. Do you have joint activities such as sports with the refugees?
   d. Do refugees have access to farmland, pastures, and water and/or fishing and hunting rights in your area? If so, do they own, rent, borrow, etc. this land/right?
   e. Are any refugees currently using your land? What kind of user arrangements are practiced? (renting, borrowing, bought…)
   f. Do you think your community benefits from hosting the refugees? How/Why not?
   g. What effects does the Corona Pandemic and the measures to contain its spread have on the relationship between you and the refugees?

Thank you very much for your time! We hope our common efforts will help make the food and livelihood situation better for you and your community.
FORMÅL

RURALIS - Institutt for rural- og regionalforskning skal gjennom fremragende samfunnsvitenskapelig forskning og forskningsbasert utviklingsarbeid gi kunnskap og idéer for allmenheten, privat næringsliv, offentlig virksomhet og FoU-sektoren, og gjennom det bidra til å skape sosiokulturell, økonomisk og økologisk bærekraftig utvikling i og mellom bygd og by.

RURALIS skal være et nasjonalt senter for å utvikle og ta vare på en teoretisk og metodisk grunnleggende forskningskompetanse i flerfaglige bygdestudier, og fungere som et godt synlig knutepunkt for internasjonal ruralsosiologi.