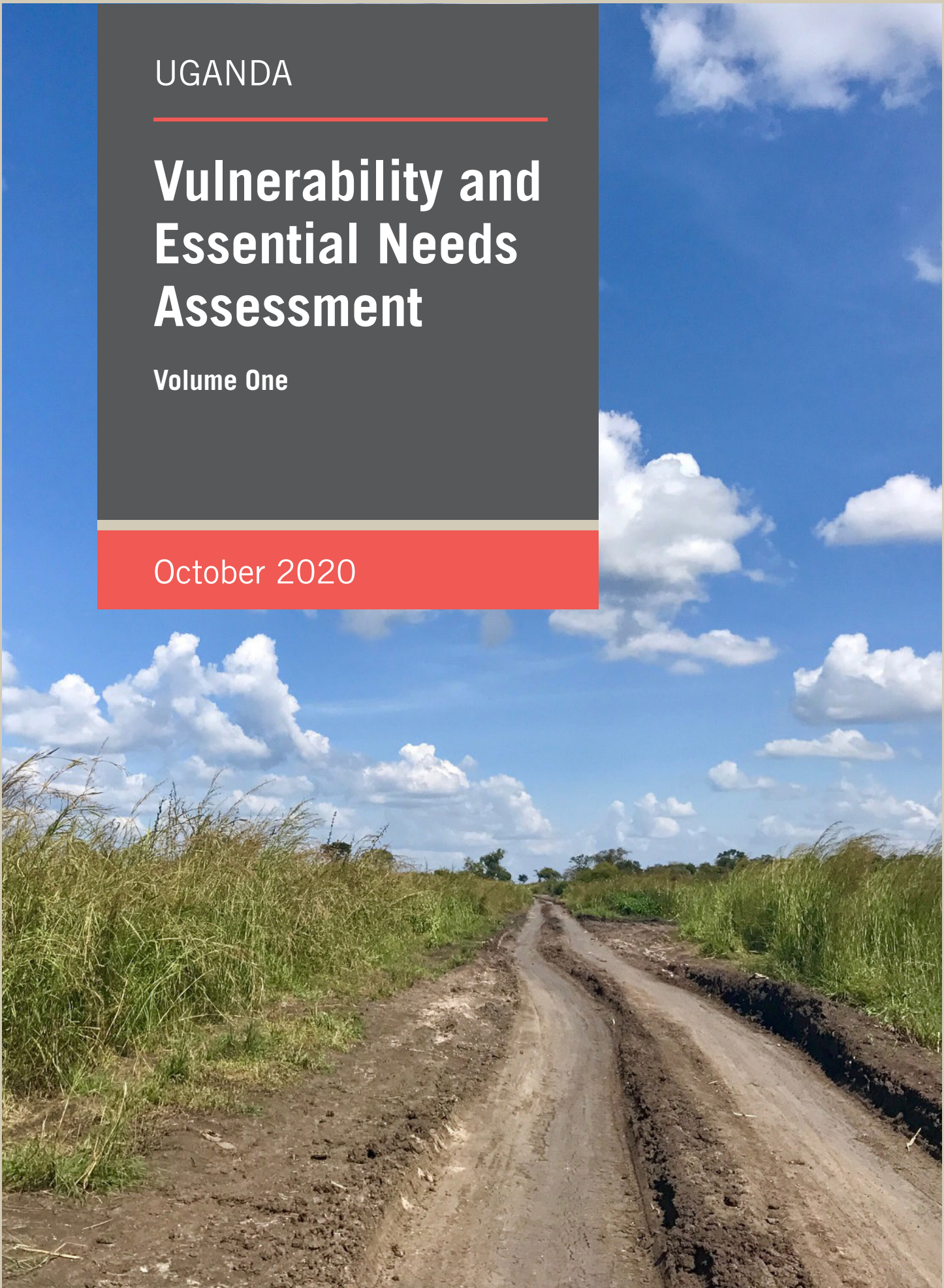
UGANDA

Vulnerability and Essential Needs Assessment

Volume One

October 2020



WFP World Food Programme

UNHCR The UN Refugee Agency

REACH Informing more effective humanitarian action

Cover photo: Palorinya refugee settlement. © IMPACT/2017

About REACH

REACH facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development contexts. The methodologies used by REACH include primary data collection and in-depth analysis, and all activities are conducted through inter-agency aid coordination mechanisms. REACH is a joint initiative of IMPACT Initiatives, ACTED and the United Nations Institute for Training and Research - Operational Satellite Applications Programme (UNITAR-UNOSAT). For more information please visit our website: www.reach-initiative.org. You can contact us directly at: geneva@reach-initiative.org and follow us on Twitter @REACH_info.

About World Food Programme

The United Nations World Food Programme is the world's largest humanitarian organization, saving lives and changing lives, delivering food assistance in emergencies to build a pathway to peace, stability and prosperity for people recovering from conflict, disasters and the impact of climate change. In Uganda, WFP provides cash and food assistance to meet the food and nutrition needs of over 1.2 million refugees, as well as Ugandans affected by climate shocks. In addition to crisis response, WFP's work focuses on resilience building, providing school meals, nutrition services, support to smallholder farmers, capacity strengthening, and supply chain support. For more information, visit https://www.wfp.org/countries/uganda.

About United Nations High Commissioner for Refugees

UNHCR, the UN Refugee Agency, is a global organization dedicated to saving lives, protecting rights and building a better future for refugees, forcibly displaced communities and stateless people. In Uganda, UNHCR provides assistance to almost 1.4 million refugees from countries including South Sudan, the Democratic Republic of Congo, Burundi, Somalia, Rwanda, Eritrea, Sudan, Ethiopia, and other countries. For more information, visit https://www.unhcr.org/uganda.html.

Summary

Introduction

Uganda is one of the top refugee-hosting countries in the world, with a protracted refugee situation and ongoing influxes of refugees from neighbouring countries. As of January 2020, the country hosted nearly 1.4 million refugees, mostly from South Sudan, the Democratic Republic of Congo, and Burundi, with smaller populations from elsewhere in the east Africa region.[1] The majority of refugees currently in Uganda fled to the country in the past four years, but the country has hosted refugee populations for decades, with an open-door approach and progressive refugee laws. Despite the range of origins, the varying lengths of displacement, the different exposure to protection risks and the different levels of income of refugees, past assessments (see page 12 for a list of key assessments and findings) have shown that the needs among the refugee population are consistently high across the country. While several studies of refugees in Uganda explored factors related to vulnerability, there was a lack of consensus within the response on the definition of vulnerability, which factors affect levels of vulnerability across the population, and how information on those factors could be used to direct humanitarian assistance in a more effective manner.

To support the basic needs approach (see page 14 for a description of the basic needs approach), the Uganda Assessment Technical Working Group (ATWG) determined there was a need to address the lack of understanding related to vulnerability affecting refugees' capacity to meet essential needs among the population and establish an evidence-base to inform adaptive response modalities based on the specific type of vulnerability.

Methodology

Through the ATWG and Cash Working Group (CWG), the World Food Programme (WFP), the United Nations High Commissioner for Refugees (UNHCR), and REACH Initiative (REACH) established the core analysis team and designed the Vulnerability and Essential Needs Assessment (VENA), comprised of two components: the essential needs component and the market component.

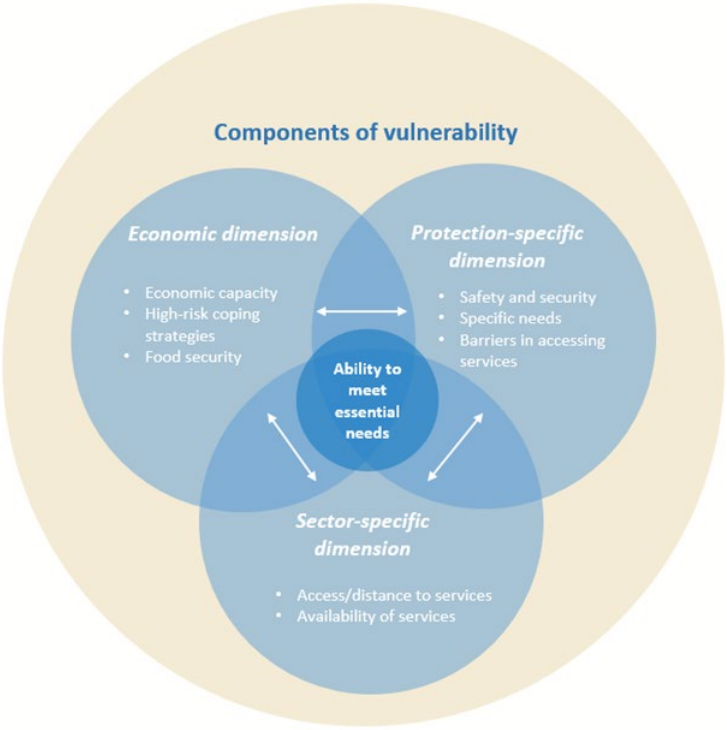
The core objectives of the VENA essential needs component included: understand common protection and economic vulnerability factors that impact a household's ability to meet their basic needs; identify key indicators that affect household vulnerability; develop household profiles based on variables that are correlated to vulnerability; support response actors in the development of future operational targeting mechanisms for how humanitarian assistance can be provided to address unmet needs; and explore various assistance modalities based on sectoral needs, protection concerns, and market functionality.

The core objectives of the VENA market component included: identify barriers faced by refugees in accessing essential items in the markets; understand availability of essential items across different seasons of the year; understand the capacity of markets to supply essential items that are in demand by refugees in settlement areas; identify constraints and enabling factors in the market system in or near refugee settlements; inform strategic level decision-making on the most appropriate response options and transfer mechanisms; and potential regional or country level comparison of results between settlements.

The VENA research design process began in early 2019 and took a comprehensive approach to ensure that important stakeholders such as the refugee response leadership (Office of the Prime Minister, UNHCR), the Uganda Bureau of Statistics (UBOS), sector working groups leadership, UN agencies, donors, and non-governmental organization partners at both capital and field-office levels were consulted. Developing the analysis framework to define components of vulnerability was a core objective and effort of the VENA. The figure below illustrates the three core components of

[1] UNHCR and the Office of the Prime Minister, "Uganda – Refugee Statistics January 2020," https://data2.unhcr.org/en/documents/download/73914

vulnerability: economic, protection-specific, and sector specific. For a more detailed description, see the analysis framework section starting on page 18.



Primary data collection for the essential needs component, using quantitative and qualitative methods, was carried out from 9 August through 7 October 2019 in 13 refugee settlement locations, interviewing a total of 6,030 refugee households (see page 17 for the detailed sampling frame). The data produced representative household-level findings with 95% level of confidence and 5% margin of error at the settlement level (13 strata[2]). Two additional strata covering Persons with Specific Needs (PSN) groups at the national level were purposively sampled to ensure that information on these groups was captured.[3] Sample sizes were determined based on the 31 May 2019 UNHCR/OPM population statistics.[4]

It is relevant to note that data collection and analysis was conducted prior to the outbreak of the COVID-19 pandemic. Based on secondary data sources, including the UBOS and World Bank High Frequency Phone Survey on COVID-19, it can be assumed that COVID-19 and the resulting government restrictions had a negative effect on both refugee and Ugandan households. From the first round of UBOS's study, the Ugandan households with the lowest access to buy soap, food items, and medicine was observed in rural areas, where the majority of refugees in Uganda live, and major losses of income were reported throughout the population.[5] While this study focused on Ugandan households rather than refugee households, it can be assumed that COVID-19 has had a similar or even more severe impact on vulnerable refugee households. In relation to food security, WFP mobile Vulnerability Analysis Mapping (mVAM) monitoring of food security levels among settlement-based refugees show a spike in a larger proportion of refugees experiencing poor or

[2] The term "strata" is used to denote "study domain" (not subpopulations of minimal heterogeneity used in stratified sampling to reduce variance).
[3] The PSN groups that were considered to be a minority and therefore important to capture through an additional strata include: people with severe physical disability and unaccompanied or separated child.
[4] UNHCR and the Office of the Prime Minister, "Uganda – Refugee Statistics May 2019," https://data2.unhcr.org/en/documents/download/73914
[5] Uganda Buearu of Statistics and World Bank, "Uganda High-Frequency Phone Survey on COVID-19: Results from round 1," August 2020. https://blogs.worldbank.org/opendata/uganda-high-frequency-phone-survey-covid-19-results-round-1

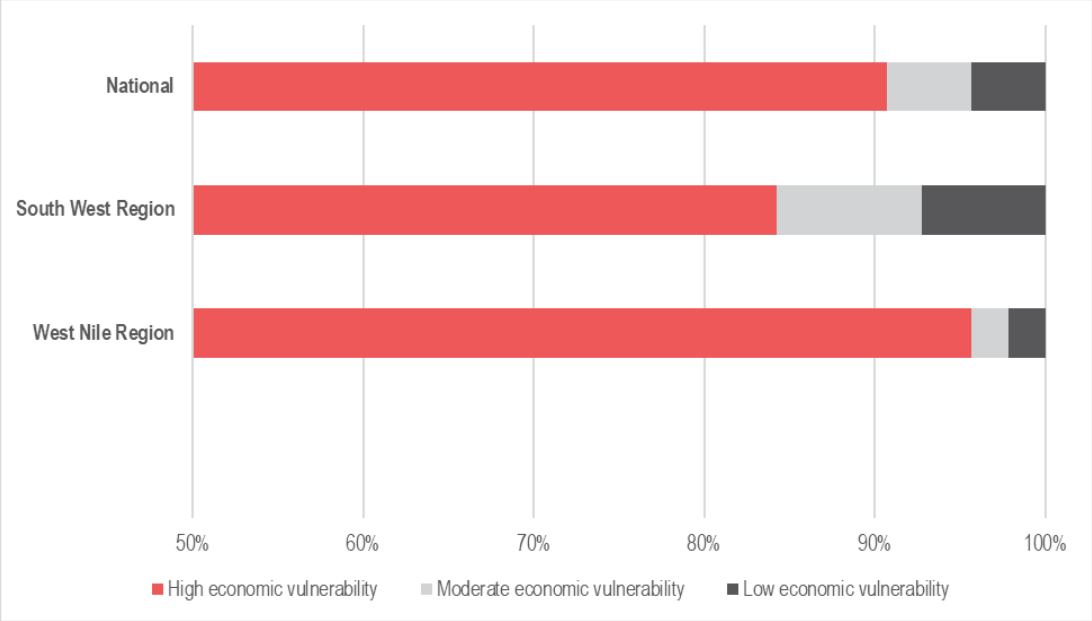
borderline food consumption around June 2020, which began to improve around July and August.[6] When interpreting the VENA findings and conclusions, the further impact of COVID-19 should be considered.

Findings

Economic vulnerability

Economic vulnerability was determined by three indicators: economic capacity, use of specific negative coping mechanisms that may inflate economic capacity, and food security status. At the national level, 91% of refugee households were categorized as being highly economically vulnerable, with 5% in the moderate and 4% in the low categories. Additional analysis on the highly vulnerable households would be required in order to break this category down further. At the regional level, a higher percentage of households in West Nile were found to be highly economically vulnerable (96%) as compared to those in the Southwest (84%).

Percentage of refugee households per economic vulnerability categorization at the regional and national level:



Several factors were found to have an impact on a household's likelihood of being categorized as highly economically vulnerable. Female-headed households, larger households, such as those with seven or more members, households with school-aged children between 6-18 years old, households with three or more children aged 2-5 years old, those with four or more female members, and those with a higher dependency ratio were all found more likely to be highly economically vulnerable. Households with members categorized as certain types of PSNs were also found more likely to be highly economically vulnerable. See the economic vulnerability section starting on page 28 for a comprehensive description of the findings.

Protection-specific vulnerability

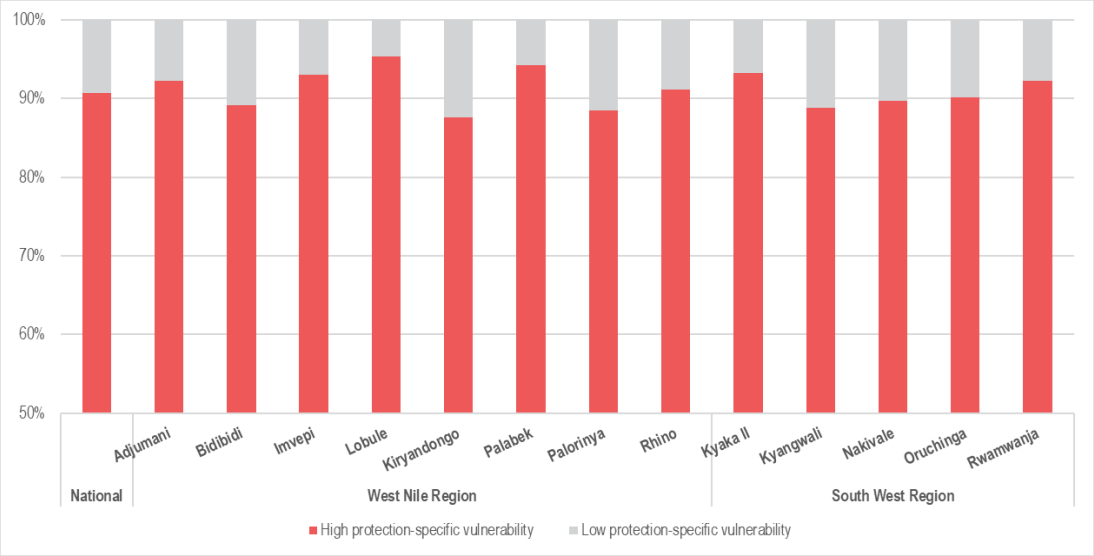
Protection sector experts identified the following risks and barriers which vulnerable persons may face as a result of their specific circumstances / individual characteristics, and thereby act as an indicator of persons with a higher level of protection vulnerability: refugees who face barriers in accessing services; safety and security issues; economic

[6] WFP, "mVAM Bulletin: Food Security Monitoring: Urban Areas, Refugee Hosting Areas and Karamoja," August 2020.

vulnerability; and specific needs and other individual characteristics and availability of support networks. Based on results from VENA data and qualitative data sources, a number of groups were found likely to meet one or more of the above components of protection vulnerability as illustrated in the detailed below. It was not possible to statistically demonstrate that a number of these groups meet indicators of protection vulnerability solely through reliance on the VENA dataset due to (I) limitations of the dataset, such as the fact that data on some protection issues (e.g. risks of sexual and gender-based violence (SGBV), domestic violence, child marriage in the household) may not be reliable as these questions were posed at the household level to the head of household only, coupled with the fact that the nature of the exercise was not necessarily conducive to gathering such sensitive data; (ii) small sample sizes in respect of certain groups (for example, in relation to certain categories of PSNs, which include very small percentages of the overall refugee population, and are difficult to capture through random sampling methodology)[7]; and (iii) gaps in the data collected during VENA and from the ProGres v4 registration database (for example, data on the ethnicity of respondents was not collected which prevents an analysis of the responses of individuals from ethnic minorities). Therefore, the protection vulnerability analysis took an inclusive approach, defining the framework using a combination of data-driven and expert-driven approaches, to mitigate some of the exclusion risks which could result if these groups were not included in a protection vulnerability framework; therefore, a wider list of groups considered to be likely to be vulnerable from a protection standpoint was established. For a more detailed description of protection-specific vulnerability and limitations of the analysis, see the analysis framework section starting on page 18.

At the national level, 91% of the refugee population were categorized as having high protection-specific vulnerability. While the difference is minimal, Lobule settlement (95%), hosting Congolese refugees in West Nile, was found to have the largest proportion of the population with protection-specific vulnerability, while Kiryandongo was found to have the smallest proportion (88%).

Percentage of refugee households with high and low protection-specific vulnerability at the settlement and national level



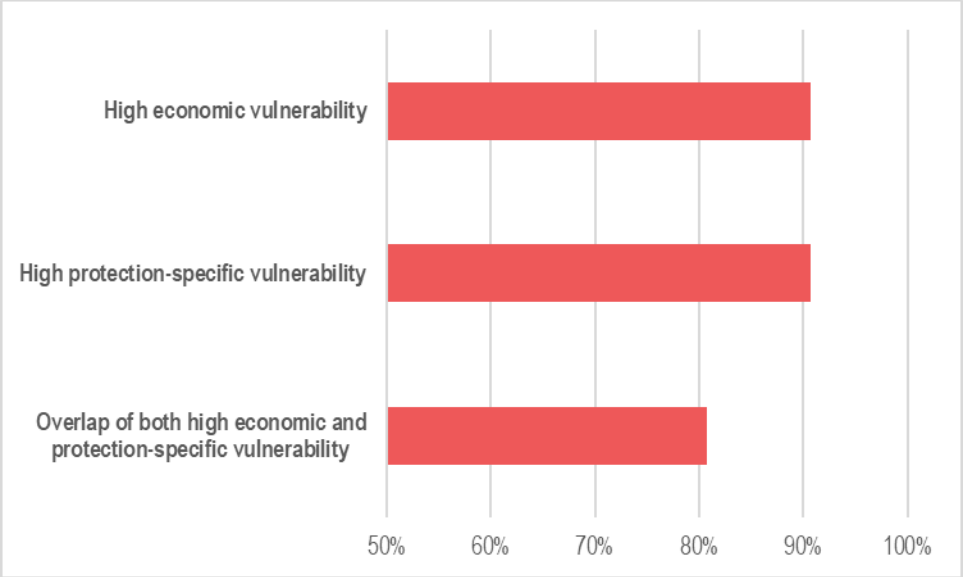
Overlap of high economic and protection-specific vulnerability and correlation analysis

While both economic and protection-specific vulnerability frameworks produced high proportions of the refugee population categorized as vulnerable, and it was determined that economic vulnerability was a core component of

[7] Representative samples were not collected for all individual PSN categories (i.e. when comparing a household with a member who is classified as a survivor of sexual and gender-based violence to a household that has a member of another PSN category), but the findings are representative when aggregated at the national level and when comparing a household with a PSN member to a household without a PSN member.

protection-specific vulnerability and therefore could not be completely separate, the VENA sought to identify the percentage of households that were identified in the overlap between the economic and protection-specific vulnerability frameworks (i.e. being categorized as having high vulnerability in both). Eighty-one percent (81%) of the refugee population was found to be categorized in both high economic and protection-specific vulnerability categories.

Percentage of refugee households categorized by type of vulnerability at the national level



Based on these 81% of households, correlation analysis was conducted to determine the key variables correlating with household status of being categorized with both high economic and protection-specific vulnerability. It is important to note that identifying clear correlations between variables is difficult when the proportion of the population identified as vulnerable is so large, and when the protection-specific vulnerability analysis framework relies on a combination of a data-driven and expert-driven approach. Therefore, the variables identified as being correlated to the overlap of economic and protection-specific vulnerabilities should be refined in case of any changes to the analytical framework defining dimensions of vulnerability.

That said, certain indicators were found to be significantly correlated with higher likelihood of a household being categorized as both highly economically vulnerable and having high protection-specific vulnerability. Factors found to make households more likely to have high economic and protection-specific vulnerability include a larger number of school-aged children in the household, a higher dependency ratio, a higher amount of time children spent working in the household, households living in settlements in Uganda for less than two years, households that have multiple livelihoods sources (as compared to one single livelihoods source), households that have shelter roofs not made from iron sheets, and shelter walls not made from mud poles or unburnt bricks, households that did not spend money on substances items, and households living in specific settlements (Adjumani, Bidibidi, Imvepi, Kyaka II, Palabek, and Rhino Camp[8]). Additionally, households headed by someone with a disability (based on UNHCR PSN codes) and households with a member that has some difficulty seeing or some or a lot of difficulty concentrating (as identified in the Washington Group set of questions on disability) was also found to be positively correlated to high economic and protection-specific vulnerability. For more details, see page 43.

[8] Note that all settlements listed are in West Nile region, except Kyaka II, which is in the Southwest

Sector-specific vulnerability

Based on consultations with six other sectors, covering topics of water, sanitation, and hygiene (WASH), health, livelihoods, shelter, non-food items (NFI), education, and energy/environment, sector specific vulnerability analysis frameworks were defined to classify households as having high, moderate (some sectors only) or low sector vulnerability. For a detailed description of the frameworks, see the analysis framework section starting on page 18, and graphics for each sector framework in annex 1.

- **WASH**
  - *Water supply***:** One fifth (20%) of refugee households at the national level were found to have high water supply vulnerability.
  - *Sanitation:* One fourth (25%) of refugee households at the national level were found to have high sanitation vulnerability.
- **Health:** At the national level, around 39% of refugee households were found to have high health vulnerability.
- **Livelihoods**: Nearly one fourth of refugee households (24%) at the national level are considered as having high livelihoods vulnerability, with 14% having multiple livelihoods sources, 8% having a single, non-agricultural related livelihoods source, and 2% having a single, agricultural related livelihoods source.
- **Shelter**: The majority of refugee households (62%) at the national level were categorized as having high shelter vulnerability
- **NFI:** At the national level, 5% of refugee households were categorized as having high NFI vulnerability.
- **Education:** At the national level, more than one fourth (27%) of refugee households were categorized as having high vulnerability related to education.
- **Energy:** The majority of refugee households (70%) at the national level were categorized as having high energy vulnerability.

For a full description of the findings, see the sector-specific vulnerability findings section starting on page 45.

Conclusions

The VENA process was extensive and consultative, ensuring that all sector experts and relevant actors contributed to the research design and development of the analysis framework. Defining the essential needs of refugees and what it means to be vulnerable in the Uganda context was a conceptually complex exercise, but driven from a basic needs and rights-based approach, rather than from a resourcing or prioritization perspective.

The main findings from the VENA illustrate that from a basic needs and rights-based approach, the refugee population as a whole is highly vulnerable. The VENA found around 91% of refugee households in Uganda to be economically or protection-specific vulnerable. Considering the 91% of refugee households found to be categorized separately as highly economically and protection-specific vulnerable, 81% of refugee households were categorized as both highly economically and protection-specific vulnerable, only slightly narrowing down the population that could be considered most vulnerable. While the highly vulnerable group is very large, differences in the severity of needs exist within the population as a whole and also within the highly vulnerable group. This is particularly true from an essential needs and food security perspective, where specific circumstances and characteristics at the household, individual, and location levels, result in heterogeneity also within the large highly vulnerable group: the worst-performing segment of the highly vulnerable group is far more deprived of essential needs compared to the best-performing segment of the same highly vulnerable group. See the recommendation below about revisiting the analytical framework for important implications on the response analysis.

The large size of the highly vulnerable group makes it difficult for the VENA to achieve one of its main objectives: to provide guidance for the targeting and prioritization of assistance in the refugee response. The VENA's identification of circumstances and characteristics of individuals, households, and geographical areas that can be used for beneficiary

selection and other program design aspects rely mainly on statistical analysis of quantitative data, specifically on correlation analysis between level of vulnerability on the one hand and said circumstances and characteristics on the other. The challenge is that identifying correlations useful for the purposes of targeting is difficult when the proportion of the population identified as highly vulnerable is so large to approach nearly the entire population, and when the protection-specific vulnerability analysis framework relies on a combination of a data-driven and expert-driven approach. That said, certain indicators were found to be significantly correlated with higher likelihood of a household being categorized as both highly economically vulnerable and having high protection-specific vulnerability. See the correlation analysis section starting on page 43 for a comprehensive description of the findings.

As indicated above, one important research objective of the VENA was to support the development of operational targeting mechanisms for how humanitarian assistance can be better aligned to the different needs of different households and thereby better address unmet needs. While the definition of vulnerability and the analysis framework achieved consensus through the Assessment Technical Working Group, the VENA results did not produce findings that are able to support targeting at this stage given that 81% of refugee households were identified to be both highly economically and protection-specific vulnerable.

Given these limitations, while also recognizing the need to publish the vulnerability analysis without delay, the VENA will be published in two volumes: the first volume of the VENA report, this report, is based on an analysis of needs, resulting in the identification of a large group of highly vulnerable refugee households as done throughout this report. The second volume of the VENA report will focus on delivering results usable for prioritization by identifying a smaller group of most vulnerable refugees. This guidance is essential as no refugee response partner have the resources necessary to provide assistance to the entire refugee population at sufficient levels (and providing such assistance equally without regard for varying degree of unmet need would be inappropriate regardless) and it is urgent as the current resource constraints faced by refugee response partners in Uganda, already now requiring prioritization of needs, will only worsen. To achieve this, the second volume of VENA would revisit the definition of economic and protection-specific vulnerability from a resource and prioritization perspective, rather than a needs and rights-based approach.

While the VENA results could not be used to independently recommend targeted interventions on a household level, several next steps have been identified to support reaching this objective: improve primary ProGres v4 dataset, revisit the VENA analysis framework from a resource and prioritization perspective, update the Minimum Expenditure Basket (MEB), and develop an understanding and generate evidence related to vulnerability in the urban refugee context. For more details on each of these next steps, see the full conclusions section starting on page 58. The ATWG and core stakeholders will seek to make progress on these next steps through the second volume of the VENA report and other related work streams.

Content

List of Acronyms

ATWG	Assessment Technical Working Group
CWG	Cash Working Group
FAO	Food and Agriculture Organization
FCS	Food Consumption Score
FGD	Focus group discussion
FSNA	Food Security and Nutrition Assessment
GPS	Global Positioning System
HH	Household
JMSNA	Joint Mutli-Sector Needs Assessment
LGBTI	Lesbian, gay, bisexual, transgender, and intersex
MEB	Minimum Expenditure Basket
NFI	Non-food items
ODK	Open Data Kit
OPM	Office of the Prime Minister
PSN	Person with Specific Needs
REACH	REACH Initiative
RIMA	Resilience Index Measurement Analysis
SACCO	Savings and credit cooperative society
SGBV	Sexual and gender-based violence
UGX	Ugandan Shilling
UNHCR	United Nations High Commissioner for Refugees
VENA	Vulnerability and Essential Needs Assessment
VSLA	Village savings and loans associations
WASH	Water, sanitation, and hygiene
WFP	World Food Programme

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Introduction

Background on the humanitarian situation and response

Uganda is one of the top refugee-hosting countries in the world, with a protracted refugee situation and ongoing influxes of refugees from neighbouring countries. As of January 2020, the country hosted nearly 1.4 million refugees, mostly from South Sudan, the Democratic Republic of Congo, and Burundi, but with smaller populations from elsewhere in the east Africa region.[9] The majority of refugees currently in Uganda fled to the country in the past four years, but the country has hosted refugee populations for decades, with an open-door approach and progressive refugee laws. With 94% of the refugee population living in established refugee settlements, managed by the Ugandan government in the northwest and southwest parts of the country, only 6% of refugees are registered as living in urban areas (Kampala).

Despite the range of origins, the varying lengths of displacement, the different exposure to protection risks and the different levels of income of refugees, past assessments have shown that the needs among the refugee population are consistently high across the country. The majority of humanitarian assistance is tailored based on expert-based approaches, in additional to qualitative data and targeted field assessments, but there is not a universal, evidence-driven analysis framework. While certain types of assistance, such as protection services, are targeted to specifics individuals (i.e. Persons with Special Needs [PSNs], children, survivors of sexual and gender-based violence), general food assistance, as well as shelter and non-food item support to newly arrived households, is provided to all refugees.

In the past few years, there have been several studies exploring vulnerability and needs among the refugee population in Uganda (see Table 1 below). While several studies of refugees in Uganda explored factors related to vulnerability, there was a lack of consensus within the response on the definition of vulnerability, which factors affect levels of vulnerability across the population, and how information on those factors could be used to direct humanitarian assistance in a more effective manner.

Table 1: Key findings from recent refugee needs assessments and vulnerability studies

Study	Key Findings
Analysis of Refugee Vulnerability in Uganda, conducted in 2018[10]	Most refugees in Uganda were found to be living in extreme poverty, with wellbeing measured by per capita expenditure. The majority of the refugee population experience food insecurity and poverty, even though they receive food assistance. Refugees that have been living in Uganda for substantial period of time were found to be food insecure and vulnerable. Disability was found to be a particular challenge faced by refugees of all ages, and around 6% of the population were found to have severe disability. The report noted that households with disabled members typically incurred additional costs related to disability, which is not taken into account for receiving assistance, and this increased their overall economic and protection vulnerability. Quantitative data was collected across 10 districts, with qualitative research conducted in six settlements.
2018 Joint Multi-Sector Needs Assessment (JMSNA)[11]	The JMSNA found that, at the national level, the highest proportions of refugee households were in need in the following sectors: environment and energy (89%), protection (67%), shelter, site planning, and non-food items (NFIs) (58%), health and nutrition and livelihoods (both 51%). Host community households were also found to be

[9] UNHCR and the Office of the Prime Minister, "Uganda – Refugee Statistics January 2020," https://data2.unhcr.org/en/documents/download/73914

[10] Office of the Prime Minister, WFP, UNHCR, Development Pathways, "Analysis of Refugee Vulnerability in Uganda, Working Paper," January 2020. https://data2.unhcr.org/en/documents/details/72299

[11] REACH and UNHCR, "Joint Multi-Sector Needs Assessment: Identifying humanitarian needs among refugee and host community populations in Uganda." August 2018. https://www.impact-repository.org/document/reach/c79c49ac/reach_uga_msna_report_aug2018.pdf

	in need similarly in the following sectors: environment and energy (93%), protection (66%), WASH (39%), and education (37%). The study did not include an in-depth analysis of vulnerability factors, and rather focused on humanitarian needs. The findings were generalizable to refugee populations at the settlement level and at the district level for host populations with a 95% level of confidence and a 10% margin of error. The survey covered refugee households across all refugee settlements in Uganda and host community households in the 11 refugee hosting districts.
2018 Food security, reliance and well-being analysis of refugees and host community populations in Uganda, 2019 Food security and resilience of refugees and host communities in south-west Uganda (RIMA)[12]	In comparison to host community members, refugees in the West Nile and Southwest regions were found to have lower resilience. In West Nile, refugee households were found to have lower education levels, poor diversification of income sources, a limited number of crops cultivated, and a low level of productive assets such as land and livestock. In the Southwest, refugee households were found to have limited access to physical productive assets and produced a smaller range of crops. This contributed to higher levels of food insecurity, adoption of negative coping strategies to deal with food shortages, and a high dependency on humanitarian assistance. The study found that substantial transfers, in-kind and in cash, did not compensate for the lack of inputs and limited production. The West Nile and Southwest RIMA studies assessed both refugee and host community populations and were conducted separately. Cluster sampling methodology was used to select certain refugee settlements in each region.
2017 Food Security and Nutrition Assessment in Refugee Settlements (FSNA)[13]	The FSNA report provided a general assessment on nutrition and food security, infant and young child feeding, health and anaemia status of refugees. The assessed population in West Nile settlements were found to have the highest rate of acute malnutrition, while anaemia was common across settlements. Rates of malnutrition among refugees in Kampala tended to be slightly higher when compared to most settlements. Additionally, the findings indicated that refugee children under age 5 and pregnant women were the groups most vulnerable to illness and death from malaria infection in the settlements. In the settlements, cross-sectional surveys were conducted in each designated settlement employing systematic random sampling.
2018 Informing the Refugee Policy Response in Uganda: Results from the Uganda Refugee and Host Communities 2018 Household Survey[14]	This report analysed the living conditions, wellbeing, and socio-economic profile of refugees and host communities in Uganda focusing on monetary poverty, food security, housing conditions, and vulnerability to shocks. The study examined their access to basic services including education, health, and water and sanitation, as well as access to financial services. The demographic characteristics of refugee households caused higher vulnerability, including a high percentage of female-headed households, high dependency ratio, and a generally younger population (56% below the age of 15) as compared to host community members. A two-stage sampling methodology was used to survey households across 13 districts of Uganda to report findings for three strata (Kampala, West Nile, and Southwest)

[12] Office of the Prime Minister and FAO, "Food security, reliance and well-being analysis of refugees and host communities in northern Uganda," July 2018. http://www.fao.org/resilience/resources/resources-detail/en/c/1143820/ and Office of the Prime Minister and FAO, "Food security and resilience of refugees and host communities in south-west Uganda," September 2019. http://www.fao.org/resilience/resources/resources-detail/en/c/1234011/

[13] Government of Uganda, UNHCR, UNICEF, and WFP, "Food Security and Nutrition Assessment in Refugee Settlements – 2017 Uganda," May 2018. https://data2.unhcr.org/en/documents/details/64423

[14] World Bank Group, "Informing the Refugee Policy in Uganda: Results from the Uganda Refugee and Host Communities 2018 Household Survey," October 2019. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/571081569598919068/informing-the-refugee-policy-response-in-uganda-results-from-the-uganda-refugee-and-host-communities-2018-household-survey

Rationale for the Vulnerability and Essential Needs Assessment

Through the adoption of a basic needs approach[15], refugees should be enabled to meet their basic needs and achieve longer-term well-being through assistance. To support the approach, the Assessment Technical Working Group (ATWG) determined there was a need in Uganda to understand refugees' needs and vulnerability based on specific monetary and non-monetary needs. One of the objectives of the Vulnerability and Essential Needs Assessment (VENA) exercise was to understand the correlations between economic and protection vulnerabilities. This understanding was determined to be critical to enable partners to design programming that supports individuals and households in meeting their basic needs. Through adaptive response modalities, such as multi-purpose cash grants and/or sector-specific support, households should be able to bridge the gap between their essential needs and capacity to cover them. The basic needs approach places vulnerable groups at the core and focuses on refugees' perspectives to define unmet needs, prioritizing expenditures, and identifying preferences related to how assistance is received.

Background on the Assessment Technical Working Group (ATWG) and the Cash Working Group (CWG)

In May 2019, the ATWG was established, co-chaired by the World Food Programme (WFP), the United Nations High Commissioner for Refugees (UNHCR), and REACH Initiative (REACH) and as a sub-group of the Inter-Sector Working Group, to facilitate jointly conducted assessments, harmonize and streamline data being collected by partners, and provide technical support to actors working in the Uganda refugee response to ensure appropriate and efficient assessments are carried out. Due to the multiplicity of actors and the various ongoing and planned assessments, there was a need for improved coordination to identify and resolve information needs. The VENA became the first joint assessment conducted under the guidance of the ATWG. Throughout the process, ATWG members were consulted on drafting the study terms of reference, developing the research design and analysis framework, identifying the limitations, and analysis of the preliminary findings.

In addition to guidance from the ATWG, the VENA research design for the market component was developed in consultation with the CWG. The CWG coordinates the implementation of cash transfer programmes in Uganda, as well as shares plans, findings, and best practices of assessments relating to cash programming and markets.

Objectives and research questions

In order to address the lack of understanding related to vulnerability affecting refugees' capacity to meet essential needs among the population and an evidence-base to inform adaptive response modalities based on the specific type of vulnerability, the ATWG and CWG designed the Vulnerability and Essential Needs Assessment (VENA), comprised of two components: the essential needs component and the market component.

The core objectives of the **essential needs component** of the VENA included:

1. Understand common protection and economic vulnerability factors that impact a household's ability to meet their basic needs
2. Identify key indicators that affect household vulnerability
3. Develop household profiles based on variables that are correlated to vulnerability.

[15] UNHCR defines the basic needs approach as "a way to enable refugees to meet their basic needs and achieve longer-term well-being through means to survive and services based on their socio-economic vulnerabilities and capacities." The results framework defines basic needs in terms of "access to basic services and assistance in health, nutrition, WASH, food, shelter, energy, education, as well as domestic items and specialized services for people with specific needs." UNHCR, "Basic Needs Approach in the Refugee Response."

4. Support response actors in the development of future operational targeting mechanisms for how humanitarian assistance can be provided to address unmet needs.
5. Explore various assistance modalities based on sectoral needs, protection concerns, and market functionality.

To meet these objectives, the following research questions for the **essential needs component** of the VENA were defined:

1. What are monetary and non-monetary essential needs of the refugee population in Uganda?
2. Which essential needs are unmet?
3. What are the profiles of refugees completely or partially unable to meet their essential needs?
4. How does the current targeting mechanism predict/identify the most socio-economically and protection-specific vulnerable people? How many are left out due to exclusion error of the current targeting criteria?
5. What are practical procedures and gender-responsive operational targeting criteria for how humanitarian assistance can address unmet needs?
6. Which assistance modalities (in-kind, cash, voucher, etc.) are appropriate based on the types of the vulnerabilities identified?
7. How can certain types of people, households, or community systems support themselves and be assisted to meet their essential needs?

The core objectives of the **market component** of the VENA included:

1. To identify barriers faced by refugees in accessing essential items in the markets
2. To understand availability of essential items across different seasons of the year
3. To understand the capacity of markets to supply essential items that are in demand by refugees in settlement areas
4. To identify constraints and enabling factors in the market system in or near refugee settlements
5. To inform strategic level decision-making on the most appropriate response options and transfer mechanisms
6. Potential regional or country level comparison of results between settlements

To meet these objectives, the following research questions for the **market component** of the VENA were defined:

1. What are the barriers (financial, social, physical) refugees face to access essential items in the markets in a timely manner?
2. What is the availability (type, time, quantity and quality) of essential items across different seasons of the year and across markets?
3. What is the capacity of markets (existing and emerging new markets/traders) to supply essential items in a timely manner that meet current and increased demand of refugees in each settlement areas?
4. What are the constraints in the market system that inhibit functionality?
5. What are the enabling environmental factors and actors in the market system that support functionality?
6. Based on an understanding of the market system, what are the most appropriate response options and transfer mechanisms available to support refugees' ability to meet their essential needs?
7. What are the differences and similarities of individual market systems between settlements and/or regions?

Methodology

Research design

The VENA research design was developed by the ATWG and CWG, facilitated by a core analysis team with members from WFP, UNHCR, and REACH. The terms of reference guiding the study was drafted jointly and circulated to important stakeholders such as the refugee response leadership (Office of the Prime Minister, UNHCR), the Uganda Bureau of Statistics, sector working groups leadership, UN agencies, donors, and non-governmental organization partners at both capital and field-office levels.

The core analysis team conducted a secondary data review of all available research related to refugees in Uganda and identified the gaps in existing data to meet the VENA objectives. Simultaneously, REACH and WFP data collection teams conducted focus group discussions in June 2019 in Kyaka and Adjumani settlements to gather refugee perspectives on defining their essential needs, through a monetary and non-monetary lens. The qualitative data and secondary data on essential needs were used to develop a basis for the first research question of the VENA: What are monetary and non-monetary essential needs of the refugee population in Uganda?

In addition to consulting refugees on defining essential needs, the team conducted focus group discussions in July 2019 in Kiryandongo, Adjumani, and Nakivale settlements on two other aspects, contextualized livelihoods coping strategies and community perceptions of vulnerability, in order to inform the research design of the VENA. These preliminary qualitative findings fed into the development of the analysis plan and tools to ensure that refugee perspectives were incorporated into the research design and that the tools used were tailored to the context.

The core analysis team drafted initial versions of the data analysis plan and tools for both components of the VENA. The indicators and tools were reviewed extensively and input was shared by ATWG and CWG members, as well as sector leads. One tool was developed for the essential needs component: a quantitative, household-level survey. Two tools were developed for the market component: one quantitative, individual-level survey for market traders, and one qualitative, key-informant interview tool for individuals with knowledge of local markets. The tools were tested and adapted, based on a pilot in Kiryandongo settlement in July 2019.

During the research design phase from February to June 2019, the core analysis team presented the VENA terms of reference, data analysis plan, and tools on more than twenty occasions to other coordination forums (outside of the ATWG and CWG) within the response, including the Inter-Agency Coordination Group, Inter-Sector Working Group, Protection Advisory Group, Data Management Working Group, and International Non-Governmental Organization Refugee Response Forum, as well as bilaterally to seven sector leads.

Sampling

The essential needs component was conducted in 13 refugee settlements (considering Adjumani as one location) in 12 refugee settlement hosting districts.[16] The data produced representative household-level findings with 95% level of confidence and 5% margin of error at the settlement level (13 strata[17]). Two additional strata covering PSN groups at

[16] 13 refugee settlements in 12 refugee settlement hosting districts include: Adjumani district (Adjumani, 19 smaller settlements considered as one location), Arua district (Imvepi, Rhino Camp), Madi Okollo district (Rhino Camp), Isingiro district (Nakivale, Oruchinga) Kamwenge district (Rwamwanja), Kiryandongo district (Kiryandongo), Koboko district (Lobule), Kyegegwa district (Kyaka II), Kikubbe district (Kyangwali), Lamwo district (Palabek), Obongi district (Palorinya), Yumbe district (Bidibidi).

[17] The term "strata" is used to denote "study domain" (not subpopulations of minimal heterogeneity used in stratified sampling to reduce variance).

the national level were purposively sampled to ensure that information on these groups was captured.[18] Sample sizes were determined based on the 31 May 2019 UNHCR/OPM population statistics.[19]

Single-stage, stratified random sampling was applied, with refugee households as the sampling unit and refugee settlements as the strata. Adjumani, considered as one stratum for the assessment, includes 19 smaller settlements. The sample size for the Adjumani stratum was distributed across the 19 smaller settlements, proportional to population size in each. For the PSN stratum, the sample was based on 95% level of confidence and 10% margin of error at the national level. The sample size was calculated assuming each PSN was from a separate household.

Table 2: Sampling frame for geographic strata

District	Total refugee population (HH)	Precision (+/-%)	Statistical confidence level (%)	Required sample HH	Buffer (%)	Actual HH sample collected
Adjumani	34,811	5	95	384	15	483
Bidibidi	43,404	5	95	382	15	459
Imvepi	16,569	5	95	377	15	456
Kiryandongo	9,870	5	95	370	15	428
Kyaka II	32,063	5	95	380	15	468
Kyangwali	35,492	5	95	382	15	469
Lobule	886	5	95	270	15	343
Nakivale	33,125	5	95	380	15	391
Oruchinga	1,856	5	95	319	15	392
Palabek	14,367	5	95	376	15	485
Palorinya	30,634	5	95	380	15	463
Rhino	29,559	5	95	380	15	451
Rwamwanja	18,442	5	95	377	15	449
Total				**4,757**		**5,737**

Table 3: Sampling frame for Persons with Specific Needs strata (not included in the geographic strata)

Household with specific PSN member	Precision (+/-%)	Statistical confidence level (%)	Design effect	Required sample HH	Buffer (%)	Actual HH sample
Physical Disability	10	95	1.5	144	15	172
Unaccompanied or separated child[20]	10	95	1.5	144	15	121

When analysed at the national level, weighting was applied to compensate for the unequal probabilities of a household being included in the sample. Since the sample was stratified and representative at the settlement level, no weighting

[18] The PSN groups that were considered to be a minority and therefore important to capture through an additional strata include: people with severe physical disability and unaccompanied or separated child.
[19] UNHCR and the Office of the Prime Minister, "Uganda – Refugee Statistics May 2019," https://data2.unhcr.org/en/documents/download/73914
[20] The typical minimum age for a survey respondent is set at 18 years or older. However, to capture this specific target group, minors under the age of 18 were interviewed, if the head of the household was noted as an unaccompanied or separated child through the UNHCR ProGres v4 database.

was applied for analysis at the settlement level. For national level findings, the normalized weights are based on the proportion of total refugees in each settlement divided by the sample allocation for each settlement, which was calculated using this formula:

$$W_s = \frac{N_s / N}{n_s / n} = \frac{N_s/n_s}{N/n} = \frac{N_s}{n_s} \cdot \frac{n}{N}$$

W_s: Normalized weight for sampling stratum s
N_s: Number of households in sampling stratum s
N: Total number of households in the entire sampling universe
n_s: Sample size of sampling stratum s
n: Total sample size of all sampling stratums
N_s/N: Proportion of all households living in sampling stratum s
n_s/n: Proportion of sampled households coming from sampling stratum s
N_s/n_s: The design weight in stratum s
n/N: The sampling fraction of the survey

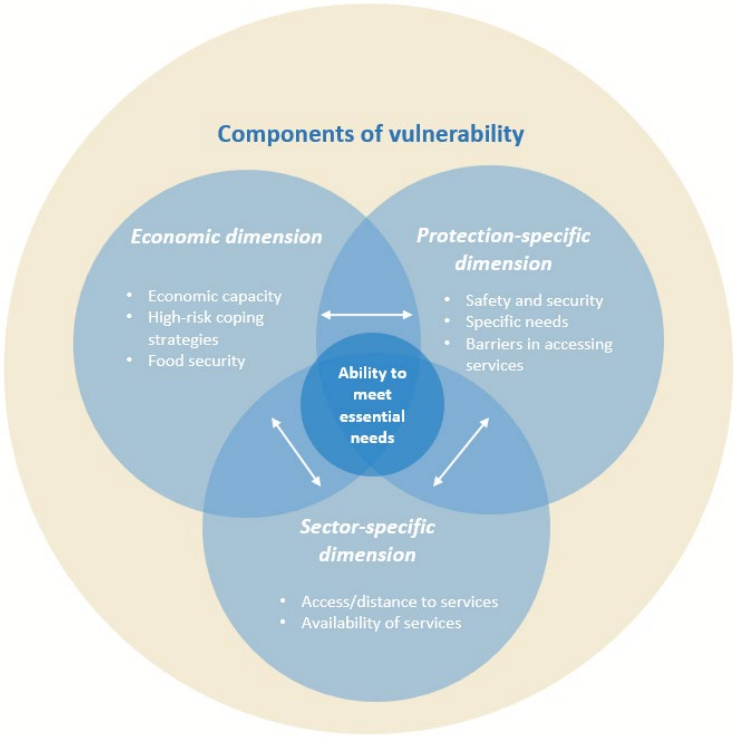
Analysis framework

In order to comprehensively assess the vulnerability of a given household, the VENA established common vulnerability classifications by defining thresholds of each core vulnerability indicator and grouping the households according to their vulnerability level.

Developing holistic essential needs vulnerability profiling is intrinsic for enabling refugees to meet their essential needs and achieve longer-term well-being through assistance based on their socio-economic and protection vulnerabilities and capacities. In order to do so, the VENA explored various elements of essential needs including refugees' capacity to cover a minimum level of expenditure required to cover food, water and sanitation, healthcare, adequate shelter, education, household items, and other basic necessities; refugees' protection-specific needs and risks related to age, gender, status, ability, among other factors; and sector-specific needs and access to basic services.

The analysis framework formulated three dimensions to assess economic vulnerability, protection-specific vulnerability, and sector-specific vulnerability. While these three dimensions were defined for the ease of analysis and conceptualization of different types of vulnerability, there are linkages between the dimensions and across households' monetary and non-monetary needs that cannot be fully separated. For example, aspects of economic vulnerability are inter-linked to protection-specific vulnerability, and access to basic services covered by sector-specific vulnerability can also be related to protection-specific vulnerability.

Figure 1: VENA analysis framework



Economic vulnerability analysis

Economic vulnerability was defined using three indicators:

- *Economic Capacity* - Economic capacity was measured to understand the household's monetary capacity to meet their essential needs. This is estimated through the household total expenditure (as proxy for income), savings, value of consumption from own agricultural production, and cash assistance received. This economic capacity was measured against the 2019 Minimum Expenditure Basket (MEB) value,[21] in three categories: highly vulnerable (below 75% of the MEB value), moderately vulnerable (between 75% and 100% of the MEB value), and least vulnerable (above 100% of the MEB value).[22]

Economic capacity	=	Total expenditure (self reported)	+	Savings	+	Consumption from own agricultural production	-	Assistance (cash food aid for cash recipients or food sale for in-kind food recipients)

[21] The 2019 MEB Harmonisation Guidance established a reference MEB to represent a national average, comprised of 11 sectoral components and based on an average household size of 5. The 2019 MEB value was 359,273 Uganda Shillings (UGX), which gives a value of 71,855 UGX per person per month and approximately 2,395 UGX per person per day.

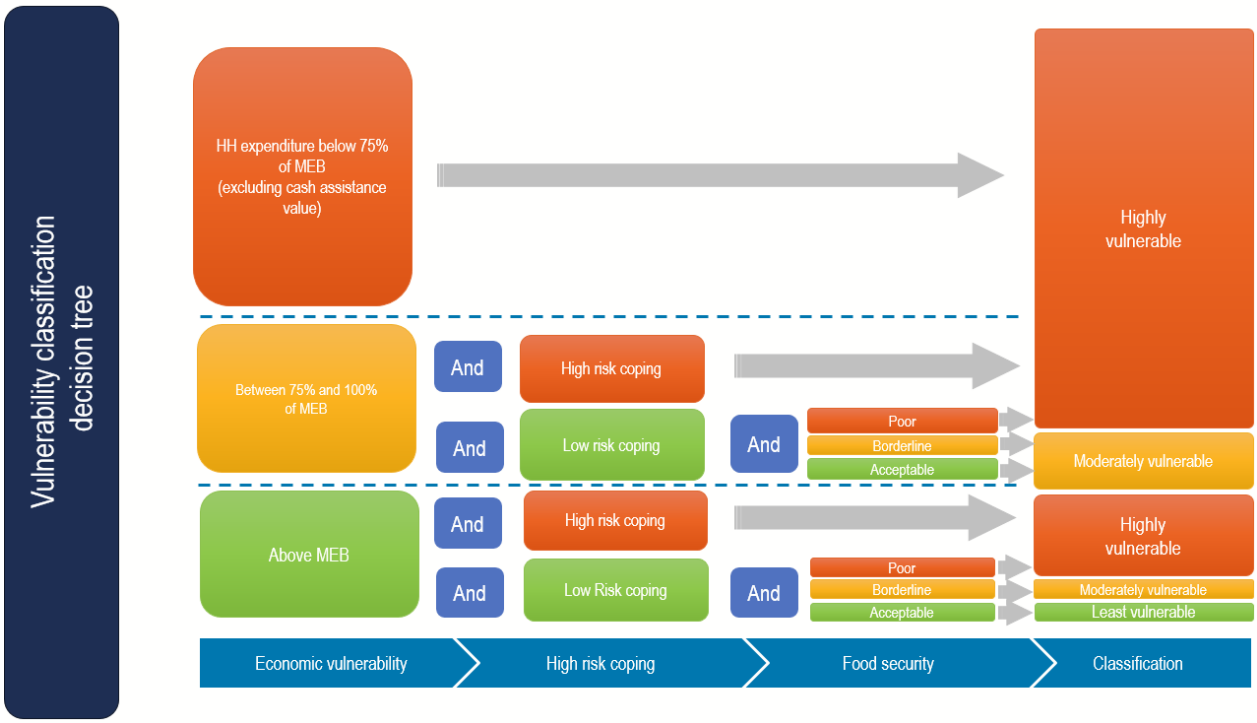
[22] Because the food MEB comprises 67% of the full MEB, 75% was considered to be a logical proportion to estimate a Survival MEB (SMEB), since there was no SMEB developed in Uganda. However, it is recommended that the Cash Working Group define a SMEB in 2020 to support the classification of households into different vulnerability categories.

- *High risk coping strategies* – Certain high risk coping strategies are used to temporarily boost the economic capacity to overcome the shock and expose the household to severe protection risks. Use of certain strategies would inflate the economic capacity of the household but ultimately make the household more vulnerable than if those strategies were not used. High risk coping strategies which were correlated with economic vulnerability were selected to identify households which were currently employing or had already exhausted one of selected high risk coping strategies. Four strategies were selected as high risk coping strategies to be considered as part of the economic vulnerability definition: begging, engaging in illegal/high risk activities, selling the last female animal, and forced/early marriage.

- *Food security* – Food security is used as a proxy for understanding the household economic capacity. Given that food assistance is provided uniformly to all the refugee households to cover their food needs, food insecurity status is a representation of the unmet essential needs. Food security was measured through a household's food consumption patterns based on a seven-day recall period, calculated using the Food Consumption Score (FCS) methodology.

Based on the three indicators households are grouped into three levels of vulnerability using the decision tree (see below figure). First, household economic capacity is categorized into three groups (good capacity, medium capacity, and low capacity), then use of high risk coping strategies further filters households into 2 groups (use of high risk coping strategies or not), and lastly, food security level classifies households into 3 groups (poor FCS, borderline FCS, and acceptable FCS).

Figure 2: VENA economic vulnerability analysis framework



Protection-specific vulnerability analysis

Based on consultation with the protection sector, protection-specific vulnerability was defined and the analysis explored protection risks resulting from identified vulnerabilities. Vulnerability through a protection lens refers to individuals who face a heightened risk of rights violations by virtue of their specific circumstances or individual characteristics and who require responses/assistance from protection and other services in order to mitigate those risks. Circumstances and characteristics which may add to vulnerability can include age, sex, sexual orientation and/or gender identity, legal status, disability, health status, ethnic or linguistic background, level of education and/or skills and level of family/community support. Specific circumstances and individual characteristics (or a combination thereof) influence the potential protection vulnerability of an individual.

The following issues may be considered as risks and barriers which vulnerable persons face as a result of their specific circumstances/individual characteristics, and thereby act as an indicator of persons with a higher level of protection vulnerability:

- *Refugees who face barriers in accessing services:* Refugees who face barriers in accessing services by virtue of their specific circumstances or individual characteristics are at heightened risk of being excluded from meeting their essential needs and denied key rights as a result.

- *Safety and security issues:* Refugees facing safety and security issues, by virtue of their specific circumstances or individual characteristics, may be considered having a higher level of protection vulnerability due to their heightened risk of rights violations. Some examples of this include refugees at risk of sexual and gender-based violence (SGBV), including domestic violence, forced/child marriage, etc., and minority groups at risk from the wider community/authorities due to their individual characteristics.

- *Economic vulnerability:* As one of the original research questions of the VENA, it is important to understand the links between protection-specific and economic vulnerability. Economic vulnerability may be the root cause of many protection risks, due to limited ability to meet basic needs. Meeting the basic needs of refugees has important protection outcomes, including decreased risks of resorting to negative coping mechanisms such as child labour, survival sex, hazardous activities, etc. It is assumed that many refugee households are currently underspending on what are in fact essential needs (for example, sanitary materials, health care and transportation costs – particularly for elderly persons / persons with disabilities who often have higher needs in these areas) due to their very low incomes, absence of cash and the lack of opportunities to purchase the items they require, which in turn may expose them to protection risks. Likewise, protection risks can contribute to socio-economic vulnerability; for example, the ability of individuals facing security threats or discrimination to access markets, labour and education can negatively impact their present and future economic and social engagement. Understanding the interlinkage between protection and economic vulnerability is therefore key in establishing the capacity of different groups within the refugee population to meet their basic needs and in establishing a framework for how refugees can be best assisted to ensure that they can meet all of these needs.

- *Specific needs and other individual characteristics and availability of support networks:* Some individuals face heightened protection risks because they have specific needs. These include girls and boys at risk, including unaccompanied and separated children, persons with serious health conditions, persons with special legal or physical protection needs (including those marginalized from society such as ethnic/religious minorities and persons with a diverse sexual orientation or gender identity), single women, women-headed households, older persons, and persons with disabilities. They may also face barriers to access services due to their specific needs. Vulnerability from a protection standpoint goes beyond the identification of someone as a person with specific needs (PSN) and is an evolving and dynamic concept; whilst the identification of a PSN is relevant in assessing protection vulnerabilities, not all individuals identified as PSN will be considered to be 'vulnerable'

due to their existing support networks and coping mechanisms within their family and community. In addition, classifications of an individual as a PSN are not static and can change over time (for example, in the case of women identified as having a difficult pregnancy or as lactating) or with a change in individual circumstances.

Based on results from VENA data and other sources of protection information, a number of groups were found likely to meet one or more of the above components of protection vulnerability as illustrated in the detailed below. It was not possible to statistically demonstrate that a number of these groups meet indicators of protection vulnerability solely through reliance on the VENA dataset due to (i) limitations of the dataset, such as the fact that data on some protection issues (e.g. risks of SGBV, domestic violence, child marriage in the household) may not be reliable as these questions were posed at the household level but to the head of household only, coupled with the fact that the nature of the exercise was not necessarily conducive to gathering such sensitive data; (ii) small sample sizes in respect of certain groups (for example, in relation to certain categories of persons which specific needs, which include very small percentages of the overall refugee population, and are difficult to capture through random sampling methodology)[23]; and (iii) gaps in the data collected during VENA and from the ProGres v4 registration database (for example, data on the ethnicity of respondents was not collected which prevents an analysis of the responses of individuals from ethnic minorities). Therefore, the protection vulnerability analysis took an inclusive approach, defining the framework using a combination of data-driven and expert-driven approaches, to mitigate some of the exclusion risks which could result if these groups were not included in a protection vulnerability framework and a wider list of groups considered to be likely to be vulnerable from a protection standpoint was established.

Groups found to be at heightened protection risk based on household composition

- Female headed households (without any adult male within the household)
- Households with one or more individuals with a disability as defined by the Washington Group questions asked during the VENA exercise
- Households with a high dependency ratio that accounts for individual age, individual disability status according to the Washington Group guidance, and status of a household member that may require a full-time caregiver (member with serious medical condition, young children)
- Household headed by an older person aged 60 years or older without any adult aged 18-59 within the household
- Household headed by a person under the age of 18 with no adult within the household

Groups found to be at heightened protection risk based on presence of individuals with specific needs codes in ProGres v4 database

- Household with one or more unaccompanied and separated children
- Household with one or more children at risk
- Household with a single parent or caregiver
- Household with one or more individuals with a serious medical condition
- Household with one or more older person at risk
- Household with one or more person with specific legal/physical protection needs (unmet basic need, no access to services, violence, abuse, or neglect, marginalized from society)
- Household with one or more individuals with psychological or physical impairment due to torture

[23] Representative samples were not collected for all individual PSN categories (i.e. when comparing a household with a member who is classified as a survivor of sexual and gender-based violence to a household that has a member of another PSN category), but the findings are representative when aggregated at the national level and when comparing a household with a PSN member to a household without a PSN member.

Groups found to be at heightened protection risk based on other attributes

- Household with one or more school-aged children not attending school
- Household with one or more children engaged in harsh labour conditions
- Household with one or more unregistered members
- Household with women/girls who could not access sanitary materials in the past 3 months as they could not afford them
- Household engaging in the following negative coping mechanisms: withdrew children from school, begged, illegal/high risk activities, forced and child marriage
- Households with no or worst conditions of shelter
- Households with diverse sexual orientation/gender identity
- Households from ethno-linguistic minorities
- Individuals at risk of SGBV, domestic violence, and child marriage defined by specific needs codes in ProGres v4 database

Sector specific analysis

Based on consultations with each sector, the sector specific vulnerability analysis frameworks were defined to classify households as having high, moderate (some sectors only) or low sector vulnerability.

The table below lists specific indicators included in the sector-specific vulnerability frameworks. For a detailed description of the frameworks, see graphics for each sector in annex 1.

Table 4: Sector specific vulnerability frameworks

Sector	Indicator	High sector vulnerability distinction
Water	Primary water source	If water source is unimproved (surface water, unprotected well, unprotected spring, unprotected water tank)
	Estimated volume of water per person per day	If average volume of water per person per day is below 10 litres (10-15 is moderate vulnerability)
Sanitation	Type of toilet facility	If household has no facility or uncovered latrine with/without slab
Health	Received treatment for sickness	If household had sick member in the 30 days prior to data collection and did not receive treatment
	Estimated travel time to nearest health centre	If estimated travel time is above 5 km distance (self-reported walking time)
Livelihoods	Diversification of livelihoods	See decision tree in annex 1 for full description
	Income earned from selling crops	
	Ability to save	
	Use of negative coping mechanisms	

Shelter	Crowding index	If not meeting SPHERE standard of minimum 3.5 square metres of living space per person[24]
	Condition of shelter	If "no shelter," "worst" (high sector vulnerability); "poor" (moderate sector vulnerability)
Non-food items	No possession of: sleeping mat or mattress, blanket, jerry can, mosquito net	If reported no possession of 3-4 out of 4 selected items
Education	School-aged children not attending school	If 6-12 year old not attending school, if 13-18 year old never completed primary and is not attending school
	Estimated travel time to school	If estimated travel time is more than 30 minutes self-reported walking time
Energy/ Environment	Reported barriers collecting firewood	If household reported barriers
	Primary light source	If household had no light source, grass, cow dung, tadooba (tin container with kerosene and wick), or candles
	Estimated travel time to collect/gather cooking fuel	If estimated travel time is more than 60 minutes walking distance

Primary data collection

Five field teams, led by staff from REACH and WFP, oversaw data collection in the 13 settlement locations. Prior to data collection, hired enumerators, refugee and host community members living in or nearby each of the assessed areas, were trained on the essential needs component during three regional trainings held in Arua, Gulu, and Mbarara. For the market component, staff from partner organizations and hired enumerators were trained before the start of data collection in each specific location.[25] Data collection, using an Open Data Kit (ODK) form was carried out from 9 August through 7 October 2019 and stored on the UNHCR Kobo server to ensure data protection.

In each refugee settlement, randomized Global Positioning System (GPS) points were generated across zones in the settlement, using zonal population data from UNHCR/OPM. Enumerators were assigned a series of GPS points on a daily basis, which they located using the mobile application Maps.me. From the GPS point, the enumerator located the nearest household to the point. If there were several households that were equidistant from the assigned GPS point or none visible from the point, the enumerator applied the pen method, spinning a pen to randomly select the household for interview or choose a direction to walk. If a household was unavailable or ineligible to be surveyed (such as a host community household), the enumerator used the pen method from the first household (needing replacement) to locate another household.

To ensure enumerator adherence to assigned GPS points, daily spatial verification was conducted. Interviews that were duplicates of the same assigned GPS point or that were collected too far from the assigned point (above 150 metres) were removed. The proposed geographic sample included a buffer of 15% to account for incorrectly drawn GPS points and observations removed during data cleaning.

[24] Sphere, "The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response," 2018. https://spherestandards.org/wp-content/uploads/Sphere-Handbook-2018-EN.pdf

[25] Five partner organizations contributed staff and resources to support the VENA market component data collection. The VENA team recognizes and appreciates World Vision International, Cesvi, AVSI, Windle International Uganda, and Andre Foods International for participating in the assessment.

Data processing and analysis

The data was checked on a daily basis, errors were logged, compiled and exported into a single database before the full dataset was cleaned using an R cleaning script. Data processing and cleaning involved quality checks, reshaping individual and household-level data, editing computer-identified errors, and adding variable labels in SPSS. As the sample was not self-weighting, household weighting factors were added to the data file for aggregations at the regional or national levels.

Limitations

Capturing protection-specific data: Due to the sample size and the fact that responses were collected at the household level but from the head of household only, there is risk that responses may not have captured the experiences of all age, gender and diversity groups. For example, questions on prevalence of SGBV, domestic violence and child marriage were asked to the head of household, which may lead to an underreporting of these issues in circumstances where the head of the household is the perpetrator of or implicit in gender-based violence within the home. The VENA dataset, nor the ProGres v4 database, did not capture the ethnicity of respondents, which prevented an analysis of the experiences of ethnic minorities regarding economic, protection, and sector-specific vulnerability. Due to the nature of the exercise, it was not possible to capture data on other minorities (for example, sexual orientation and/or gender identity).

Using the Washington Group set of questions to identify the prevalence of disabilities: The Washington Group set of questions were answered by one respondent on behalf of each individual, without physically verifying the disability, which may have affected the reported percentage of households with members with disabilities in some of the settlements

Calculating economic capacity: There were other elements of the VENA questionnaire that presented limitations when calculating economic capacity as part of the economic vulnerability framework. The questionnaire included a shortened expenditure module to use as a proxy for the household's economic capacity, as obtaining accurate information on a household's income was a challenge in past assessments. Specific values of other components, such as the value of food consumed from own production, were also estimations. There were certain values, such as income earned from high risk, emergency coping mechanisms, that were not collected, so this and other forms of income were not able to be removed from the economic capacity calculation. These limitations were considered closely during the development of the economic vulnerability framework.

Analysis against the MEB: The MEB value, established/endorsed by the CWG in Uganda and used for analysis purposes in the VENA, does not take into account the higher costs associated with individuals having certain specific needs, such as disability or serious medical conditions. As per the Analysis of Refugee Vulnerability in Uganda study conducted in 2018 by Development Pathways, households with disabled members typically incurred additional costs related to disability, which are not taken into account for receiving assistance, and this increased their overall economic and protection vulnerability.[26] Therefore, it should be noted that these additional costs and burdens were not factored into assessments of economic vulnerability and may lead to an incorrect assessment of a household's economic capacity.

Inaccurate household composition designation in the ProGres v4 registration database: The VENA exercise identified that approximately 36% of households surveyed had a different household composition from what was officially recorded in the ProGres v4 database. In these cases, either the total number of household members was different from

[26] Office of the Prime Minister, WFP, UNHCR, Development Pathways, "Analysis of Refugee Vulnerability in Uganda, Working Paper," January 2020. https://data2.unhcr.org/en/documents/details/72299

the household's registration, or the specific individuals, and their ages, genders, etc. were different. Therefore, this will have significant implications for accurately identifying the households, with certain composition characteristics, that are more or less likely to be able to meet their basic needs in the ProGres v4 database, as there will be a significant risk of exclusion and inclusion errors.

Limited data on persons with specific needs (PSNs) available in the ProGres v4 database: Data on PSNs available in the ProGres v4 database was not complete for all settlements at the time of data collection; therefore, persons who have specific needs but who have not been updated as such in the database were not identified within the sample. Additionally, some individuals previously identified as PSNs may have an outdated status or inclusion on the list, depending on the status of settlement-specific PSN verifications conducted by UNHCR. The percentage of the refugee population falling into certain PSN categories in ProGres v4 is very small; therefore, some comparisons across groups (i.e. different types of PSN categories) may have lower confidence levels and wider margins of error than stated in the methodology section, and this is noted in a footnote throughout the findings section where applicable.

Understanding individual-level access to services: As data was collected at the household level but from the head of the household only, it is not possible to determine whether individual members of the household have equal access to services or whether assistance collected benefits all members of the household equally.

Data collected pre-COVID-19: It is relevant to note that data collection and analysis was conducted prior to the outbreak of the COVID-19 pandemic. Based on secondary data sources, including the UBOS and World Bank High Frequency Phone Survey on COVID-19, it can be assumed that COVID-19 and the resulting government restrictions had a negative effect on both refugee and Ugandan households. From the first round of UBOS's study, the Ugandan households with the lowest access to buy soap, food items, and medicine was observed in rural areas, where the majority of refugees in Uganda live, and major losses of income were reported throughout the population.27 While this study focused on Ugandan households rather than refugee households, it can be assumed that COVID-19 has had a similar or even more severe impact on vulnerable refugee households. In relation to food security, WFP mobile Vulnerability Analysis Mapping (mVAM) monitoring of food security levels among settlement-based refugees show a spike in a larger proportion of refugees experiencing poor or borderline food consumption around June 2020, which began to improve around July and August.[28] When interpreting the VENA findings and conclusions, the further impact of COVID-19 should be considered.

[27] Uganda Buearu of Statistics and World Bank, "Uganda High-Frequency Phone Survey on COVID-19: Results from round 1," August 2020. https://blogs.worldbank.org/opendata/uganda-high-frequency-phone-survey-covid-19-results-round-1

[28] WFP, "mVAM Bulletin: Food Security Monitoring: Urban Areas, Refugee Hosting Areas and Karamoja," August 2020.

Findings

Characteristics of refugee households

The majority of refugee households in Uganda are headed by women[29], headed by an adult aged 31 to 45, headed by a person that is married, and have 4 to 6 members. While these findings are observed at the national level, there is variation among refugee households at the settlement level. In Adjumani (87%) and Kiryandongo (80%), a higher proportion of households are female-headed, and in Oruchinga (44%) and Rwamwanja (35%) the smallest proportions of female-headed households were found. The relative majority of households at the national level were headed by an adult aged 31 to 45 (45%), 27% of households were headed by a person aged 18-30. The largest proportion of households headed by someone 17 years old or younger was found in Bidibidi settlement (3%), followed by Palabek settlement (2%). In terms of marital status of the head of household, the majority of household heads reported being married (69%), while 15% were widowed. The proportion of widowed household heads was notably higher in Lobule (25%) and Adjumani (23%) settlements. While only 10% of household heads reported being single[30], the percentage of single headed households are likely higher in reality; many heads of households may have self-reported being legally or customarily married, but their partners may be living separately in their country of origin and only part of the household living together in a refugee settlement.

Across Uganda, the majority of refugee households were found to have 4 to 6 members, but three settlements in particular had a majority of households with a notably higher number of members. In Adjumani, 39% of households reported 7 to 9 members, and 27% of households with 10 or more members. In Kiryandongo, 29% of households had 7 to 9 members, and 32% had 10 or more members. In Lobule, 35% of households had 7 to 9 members, and 30% of households had 10 or more members.

Around 80% of refugee households had all members that were registered as refugees, while 20% of households had one or more members that were unregistered. The most common reasons why households had members that were unregistered included being new arrivals in the settlement and awaiting registration, missing the 2018 verification exercise, and having newborn babies that were not yet registered.

According to the PSNs registered in the ProGres v4 database, 24% of assessed households had one or more members that were registered PSNs. When comparing to the percentage of households that were identified having a member with a physical disability through the Washington Group set of questions, it is important to note that the ProGres PSN categories are broader than physical disability (Washington Group set of questions mostly covers physical disabilities), and one individual may have more than one specific needs code assigned to him or her, meaning they could be categorized into multiple groups[31] When household respondents were asked about each individual member's ability using the Washington Group set of questions, 5% of the total individuals in households reported having a possible disability in the functional areas of seeing, hearing, walking, communicating/understanding, or self-care, in 12% of households.[32] This difference is likely related to the fact that the Washington Group set of questions is mostly targeted to identify physical disabilities (although questions on communication and difficulty understanding is included), and the

[29] When enumerators approached a household, the head of the household or someone who could speak on behalf of the head was selected for the interview. To identify or confirm the head of the household, respondents were asked to list all household members and designate one member that was considered by all as the head. In some cases, other adult males may have been present in a household where a female head was designated, or in others there may have been one single adult female with no other adult male members.
[30] Marital status (married, single, divorced, windowed, no answer) of the head of household was self-reported. The survey tool did not ask a follow up question to determine if the spouse was present or not in Uganda if the respondent answered that the head of household was married.
[31] For a full description of UNHCR PSN codes, please consult "Guidance on the Use of Standardized Specific Needs Codes"
[32] It is important to note that the recommended methodology for the Washington Group short set of questions is to interview each individual directly. Due to the constraints of the exercise and the design of the VENA to be a household-level survey, the respondent was asked to answer the Washington Group questions on behalf of each individual household member.

range of specific needs included in the UNHCR PSN code manual is broader than physical disability (i.e. includes women at risk, children at risk, etc.).

The majority of refugee heads of households reported having no formal education (46%). However, 30% reported some primary-level education without completion and 10% reported some secondary-level education without completion. Only 12% of heads of households reported completing some degree, either primary (6%), secondary (4%), university, or professional degree (both less than 1%). In terms of informal education, around 11% of refugee heads of households completed some form including accelerated education programmes and vocational training.

Nearly half (42%) of refugee households reported having no members generating an income at the national level. However, the percentage was considerably lower in certain settlements including Oruchinga (9%), Lobule (12%), and Nakivale (18%). Around 31% of households at the national level reported having one member generating an income, and around 17% reported having two members.

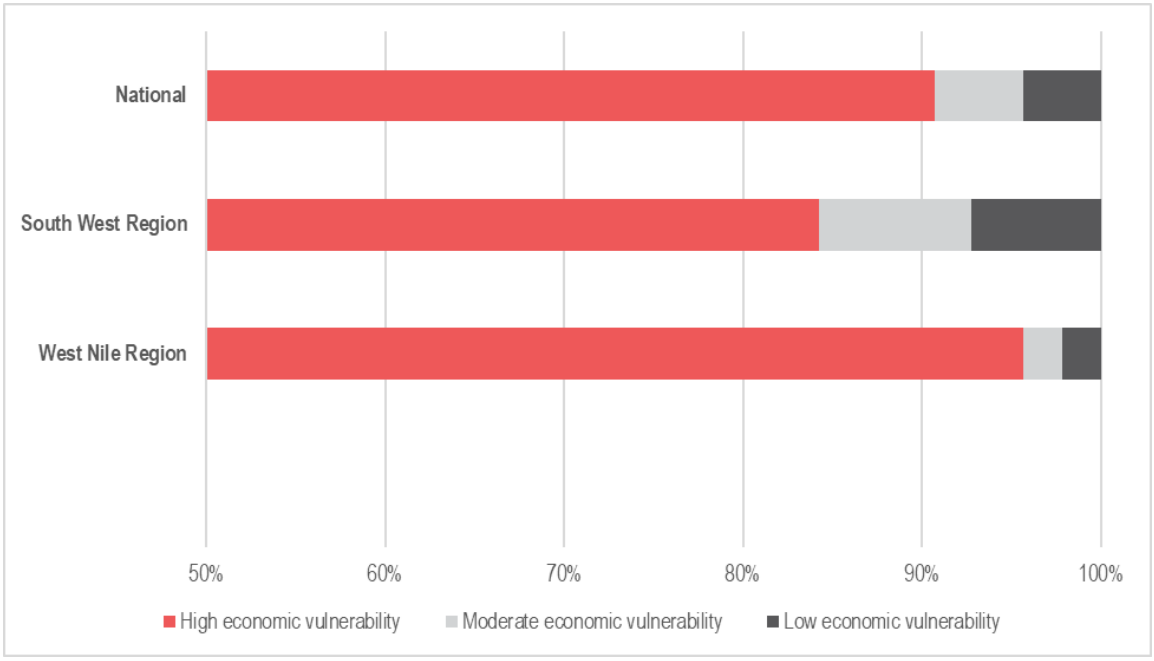
Economic vulnerability

Overall economic vulnerability

As detailed in the analysis framework section above, economic vulnerability was determined by three indicators: economic capacity, use of specific negative coping mechanisms that may inflate economic capacity, and food security status.

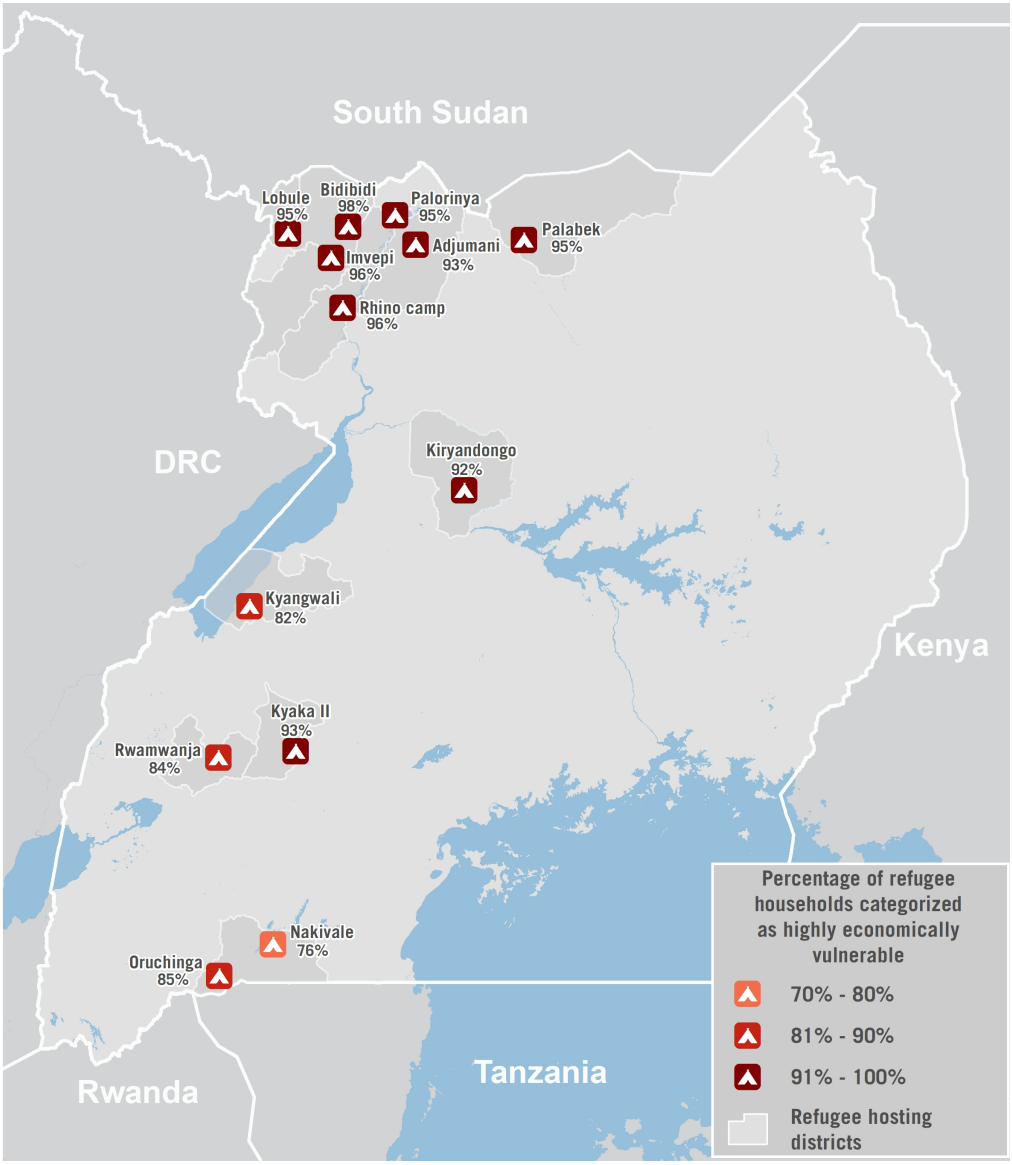
At the national level, 91% of refugee households were categorized as being highly economically vulnerable, with 5% in the moderate and 4% in the low categories. Additional analysis on the highly vulnerable households would be required in order to break this category down further. At the regional level, a higher percentage of households in West Nile were found to be highly economically vulnerable (96%) as compared to those in the Southwest (84%).

Figure 3: Percentage of refugee households per economic vulnerability categorization at the regional and national level



Certain settlements, particularly in the Southwest, were found to have smaller percentages of households categorized as highly economically vulnerable: the smallest percentages of highly economically vulnerable households were found in Nakivale (76%), Kyangwali (82%), Rwamwanja (84%), and Oruchinga (85%). These locations can be compared to certain settlements in West Nile where nearly all households were found to be in the highly economically vulnerable category: 98% of households in Bidibidi, 96% of households in Imvepi, 96% of households in Rhino, and 95% of households in Lobule, Palabek, and Palorinya. Out of settlements in the Southwest, Kyaka II (93%) stands out as having a particularly large percentage of households in the high economic vulnerability category as compared to the other settlements in the region.

Map 1: Percentage of refugee households with high economic vulnerability at the settlement level



There were several other factors found to have an impact on a household's likelihood of being categorized as highly economically vulnerable. In terms of household size, a smaller proportion of small households of one to three members (76%) were categorized as highly economically vulnerable as compared to larger households of seven to nine members

(92%) and households with ten members or more (97%). Conversely, a larger proportion of small households of one to three members (16%) were in the low economic vulnerability category as compared to larger households.

The highest proportions of households in the high economic vulnerability category reported sale of food assistance (97%) and food assistance received in cash (93%) as their primary sources of income.[33] The smallest proportions of households that were categorized as being highly economically vulnerable reported non-agricultural wage labour (76%) and fishing (75%) as primary sources of income. The largest proportion of households in the low economic vulnerability category reported that their main sources of income were fishing (16%), food crop production and sales (11%), and salary and wages (10%).

Ninety-one percent (91%) of households with school-aged children between 6-18 years old were found to be highly economically vulnerable, as compared to 78% of households without school-aged children. Additionally, households with three or more children aged 2-5 (99%) or with four or more female members (94%) were more likely to be highly economically vulnerable. It is likely that larger households also have younger and more school-aged children due to the demographic nature of the population. Female-headed households (91%) were also more likely to be highly economically vulnerable as compared to male-headed households (83%). Households that had a high dependency ratio were also found more likely to be highly economically vulnerable.

In March 2020, the economic vulnerability analysis framework and specific indicators were presented to refugees through focus group discussions for feedback. There was general agreement in the relevant indicators that were presented, but alternative opinions were shared in terms of the profiles of the most vulnerable households in their communities. In several FGDs, refugees raised that the employment status of the head of household was more telling of the vulnerability status rather than the gender of the head of household. For example, if a woman head of household was employed and generating income, rather than only relying on humanitarian assistance, that household might be better off as compared to one headed by man who was not working. Other characteristics contributing to household economic vulnerability were highlighted, included households that were not registered as refugees and therefore ineligible to receive assistance, and households that were headed by children, had child mothers, and orphans. Some refugees that participated in the FGDs also noted that while the correct categories of households were identified as more vulnerable, they did not always receive the assistance they needed due to lack of household assessments to register those with particular needs (PSN verification, for example).

Economic capacity

Economic capacity was measured to understand the household's monetary capacity to meet their essential needs, and was the main indicator (out of economic capacity, use of certain high risk coping mechanisms, and food security status) driving the economic vulnerability classification. Economic capacity was estimated through the household total expenditure (as proxy for income), savings, value of consumption from own agricultural production, cash assistance received, and the value of money earned from selling in-kind food assistance. This economic capacity is measured against the Minimum Expenditure Basket (MEB) value, in three categories: high economic capacity (above 100% of the MEB), moderate economic capacity (between 75% to 100% of the MEB), and low economic capacity (below 75% of the MEB).[34]

Eighty-eight percent (88%) of refugee households in Uganda were found to have low economic capacity based on the definition developed through the VENA process. At the national level, around 6% of refugee households were found to have high economic capacity, and 6% were found to have moderate economic capacity. The difference in level of economic capacity was significant when comparing findings at the regional level. In West Nile, 94% of refugee households were categorized as having low economic capacity compared to 80% of refugee households in the

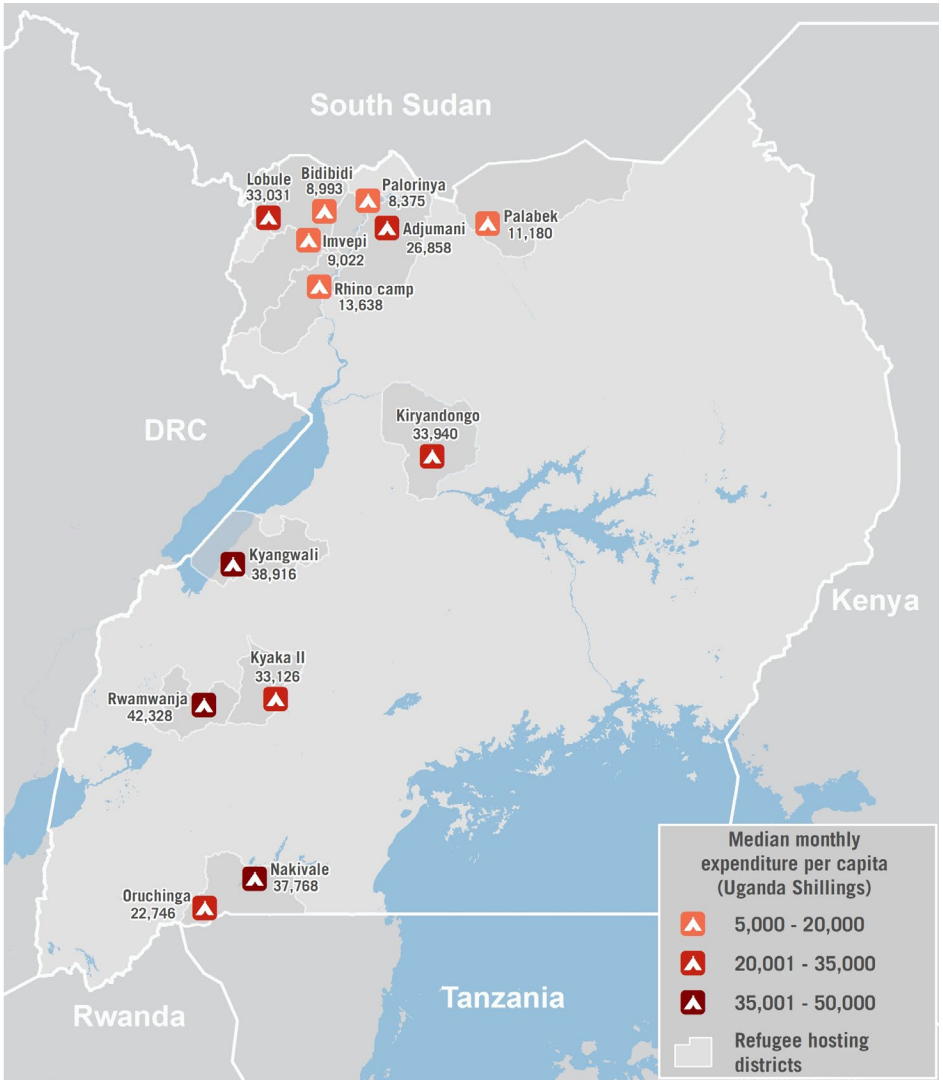
[33] Respondents could select multiple answer options for this question.

[34] The 2019 MEB Harmonisation Guidance established a reference MEB to represent a national average, comprised of 11 sectoral components and based on an average household size of 5. The 2019 MEB value was 359,273 Uganda Shillings (UGX), which gives a value of 71,855 UGX per person per month and approximately 2,395 UGX per person per day.

Southwest. A few settlements in particular had higher percentages of households in the high economic capacity category: Nakivale (16%), Kyangwali (12%), Rwamwanja (10%), and Oruchinga (9%). Refugee households in Nakivale, Kyangwali, and Rwamwanja reported the highest monthly expenditures as compared to other settlements (see Map 2 below). As value of consumption from own agricultural production is one of the components of determining economic capacity, it is important to note that Kyangwali (40%) and Oruchinga (37%) were also the settlements where the highest proportion of households reported that own production was their primary source of food, as compared to other settlements where more than 90% of households reported relying on food assistance (Bidibidi, Imvepi, Palabek, Palorinya, Rhino Camp).

Refugee households in settlements in West Nile reported a notably lower monthly expenditure, which was then calculated into median monthly expenditure per capita. Economic capacity was heavily influenced by monthly expenditure. The map below illustrates monthly expenditure across settlements, which aligns with level of economic capacity. Households in Nakivale, Kyangwali, and Rwamwanja had the highest median monthly expenditure per capita, compared to specific West Nile settlements including Bidibidi, Palorinya, Imvepi, Palabek, and Rhino Camp.

Map 2: Median monthly expenditure per capita for refugees in Uganda Shillings at the settlement level[35]



[35] During the data collection period around October 2019, 1 U.S. dollar was equivalent to 3,657 UGX according to Oanda Currency Convertor.

Negative coping mechanisms

As part of the economic vulnerability framework, four negative coping strategies were incorporated into the decision tree due to the potential effect of inflating the monthly income and therefore expenditures and due to the high protection risk associated with the activity. The four coping mechanisms include begging, selling the last female animal, engaging in illegal or high risk activities, and engaging in forced or child marriage.

Of these specific coping strategies, households most commonly reported begging, with 14% of households at the national level using this strategy in the one-month prior to data collection. Selling the last female animal was the next most commonly used strategy, reported by 7% of households at the national level. Engaging in forced or child marriage (1%) and illegal or high risk activities (less than 1%) were found to be much less common, but it is likely that these figures are underreported due to the nature of the activity and the survey methodology. Across all settlements, households in Lobule had the high proportions of households engaging in begging (24%) and selling the last female animal (19%) in the one month prior to the data collection period.

Table 5: Percentage of refugee households engaging in various livelihoods coping strategies during the 30 days prior to data collection at the settlement and national level

Households engaging in livelihoods coping strategies during the previous 30 days to cover basic needs:	National	West Nile Region								South West Region				
		Adjumani	Bidibidi	Imvepi	Lobule	Kiryandongo	Palabek	Palorinya	Rhino Camp	Kyaka II	Kyangwali	Nakivale	Oruchinga	Rwamwanja
Begged	14%	22%	19%	16%	24%	14%	17%	6%	19%	15%	16%	6%	8%	4%
Engaged in illegal/high risk	1%	1%	1%	0%	1%	0%	1%	0%	1%	0%	0%	2%	1%	0%
Sold last female animals	7%	8%	6%	16%	19%	4%	5%	4%	11%	2%	4%	12%	11%	7%
Forced and early marriage	1%	0%	1%	1%	1%	0%	1%	0%	1%	0%	2%	4%	2%	1%

While the VENA household survey tool assessed about 15 livelihoods coping mechanisms most commonly used and the economic vulnerability framework incorporated the four specific strategies above, focus group discussions with refugee households in settlements across Uganda shed light on how other households coped with their situations. Other strategies not included in the survey tool, but warrant mention include: producing more children in order to increase the household size and receive a larger quantity of humanitarian assistance, engaging in survival sex specifically in urban centres, seeking adoption for separated and unaccompanied children for households that cannot care for them, and renting land allocated to households by OPM.

Food Security

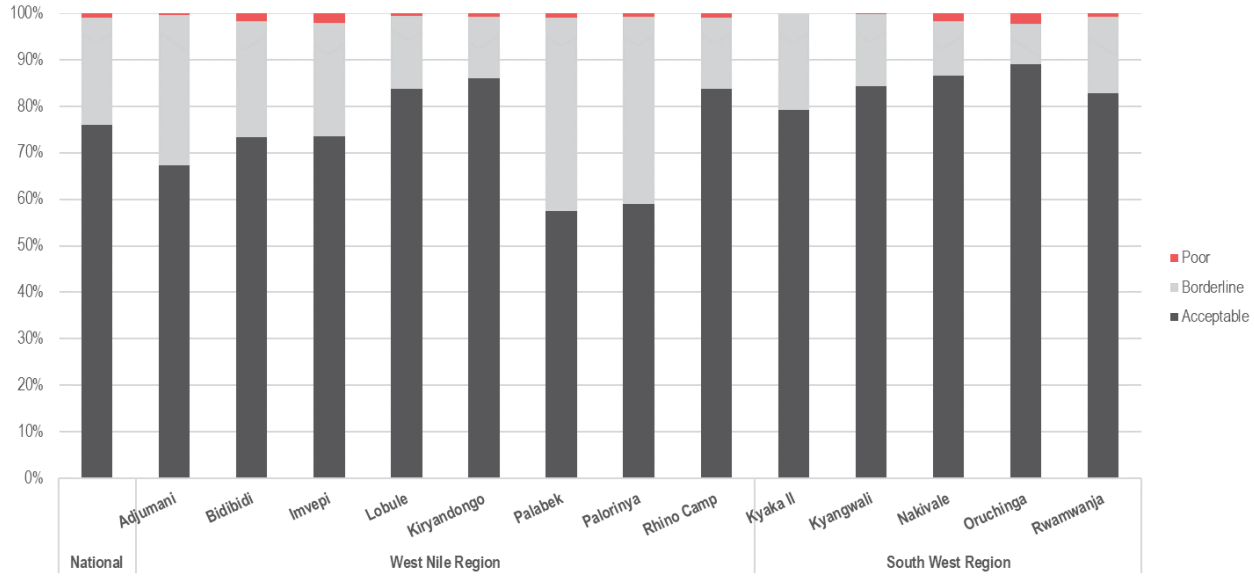
In addition to economic capacity and use of specific negative coping mechanisms, food security measured by the Food Consumption Score (FCS) was a component of the economic vulnerability analysis framework. The majority of refugee households (76%) across the country were found to have an acceptable FCS, with around one fourth of the households categorized as borderline. At the national level, less than 1% of refugee households were found to have a poor FCS. However, the proportion of households categorized as having borderline food consumption varied at the settlement level. In particular, Palabek (42%), Palorinya (40%), and Adjumani (32%) had significant proportions of refugee households in the borderline category compared to other settlements.

There were a few particular groups that were found to have notably worse FCS and therefore food security status than others. Child-headed households[36] were more likely to have worse food security, as well as households that had a

[36] A representative sample of child-headed households was not captured, and therefore the confidence level may be lower and the margin of error wider. Findings related to this group should be considered as indicative only.

member with a chronic illness or a member that was identified as a child at risk by UNHCR PSN code.[37] Additionally, households with a member who had a disability according to the Washing Group set of questions were also found to have slightly worse food security statuses.

Figure 4: Percentage of refugee households by FCS at the settlement and national level



Other relevant indicators

While the economic vulnerability analysis framework included the indicators described above, other indicators were measured that provide context to levels of economic vulnerability found among refugee households. The findings below were not part of the economic vulnerability determination, but provide further insight.

Main livelihoods source and diversification of livelihoods

At the national level, the most commonly reported main source of livelihood for refugee households was food assistance received in the form of cash (31%). Food crop production and sales was found to be the second most common source of livelihoods, reported by nearly one-fifth of refugee households (17%). Other main livelihoods reported included pension and allowance (9%), agricultural wage labour (8%), small business/self-employed (8%), salary and wages (8%), and remittances/gifts (8%).

Certain settlements were found to have higher proportions of households reporting food crop production and sales as the main source of livelihoods, including Oruchinga (38%), Kyangwali (32%), and Nakivale (32%). As noted above, these settlements also had higher proportions of the population that had high economic capacity and relied on own production as the main source of food.

In terms of number of household members working, 42% of households at the national level reported that no household member was generating income. In 31% of refugee households, it was reported that only one member was generating income. However, households in a few settlements in particular reported lower percentages of no one earning income.

[37] A representative sample of households that had a member with a chronic illness or a member that was identified as a child at risk by UNHCR PSN codes was not captured, and therefore the confidence level may be lower and the margin of error wider. Findings related to these groups should be considered as indicative only.

In Lobule (12%), Oruchinga (9%), and Nakivale (18%), less than 20% of households reported no one working, as compared to 42% at the national level. While only 3% of households at the national level reported having 5 or more household members generating an income, this was the case for 22% of households in Lobule.

Table 6: Percentage of refugee households by number of income-generating members at the settlement and national level

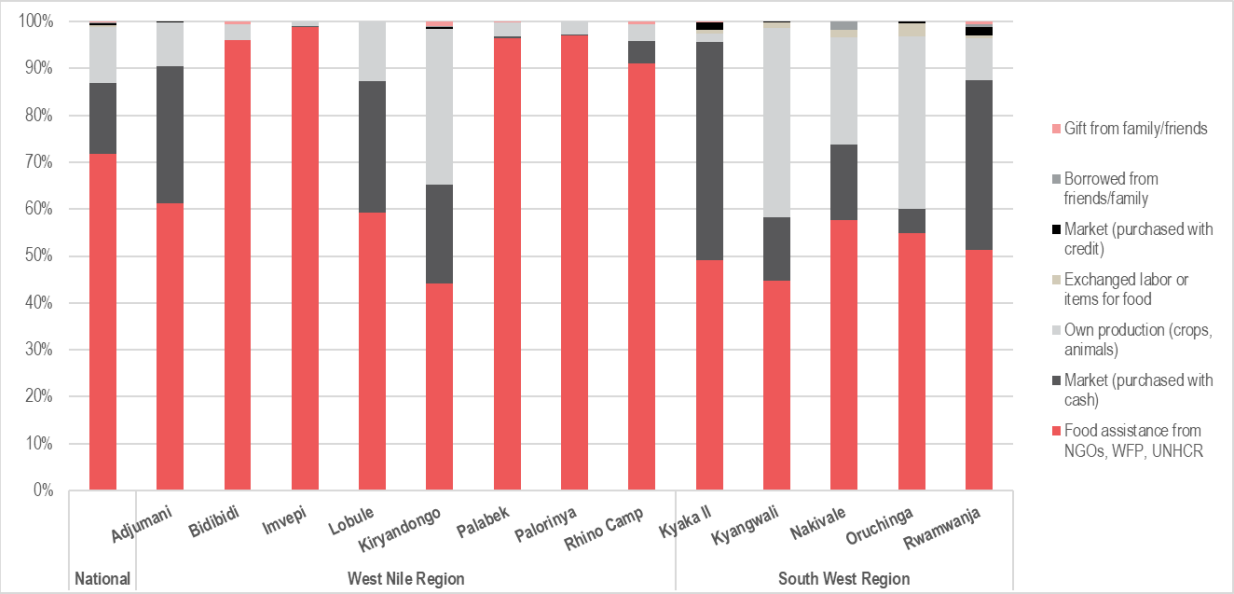
Households with income-generating members	National	West Nile Region								South West Region				
		Adjumani	Bidibidi	Imvepi	Lobule	Kiryandongo	Palabek	Palorinya	Rhino Camp	Kyaka II	Kyangwali	Nakivale	Oruchinga	Rwamwanja
No one employed	42%	57%	55%	46%	12%	56%	27%	26%	41%	59%	45%	18%	9%	31%
1 member employed	31%	28%	30%	37%	22%	26%	32%	38%	39%	26%	26%	33%	33%	25%
2 members employed	17%	10%	9%	13%	22%	11%	19%	20%	14%	11%	21%	28%	41%	30%
3 members employed	5%	2%	4%	2%	13%	4%	9%	7%	3%	3%	4%	9%	9%	8%
4 members employed	2%	1%	1%	1%	9%	2%	7%	4%	1%	1%	2%	6%	5%	3%
More than 5 members employed	3%	2%	1%	0%	22%	2%	6%	5%	2%	1%	2%	6%	3%	2%

In terms of diversification of livelihoods, a higher proportion of households with only one livelihoods source (94%) were categorized as having low economic capacity at the national level. Households that reported three livelihoods sources were found less likely to have low economic capacity (82%). For refugee households in the Southwest region, nearly 20% that reported three sources of livelihoods were categorized as having high economic capacity, as compared to only 7% of households with one reported livelihoods source.

Main source of food

Food assistance provided by WFP was the most commonly reported main source of food across the refugee population. Seventy-two percent (72%) of refugee households noted food assistance as their household's main source of food, with purchasing with cash from the market (15%) and own production (12%) as the next most commonly reported sources. In some refugee settlements that receive in-kind food assistance, more than 90% of households relied on the food assistance as their main source of food (Imvepi, 99%; Palabek and Palorinya, 97%; Bidibidi, 96%; Rhino Camp, 91%). The main sources are more diverse among settlements where the food assistance modality is cash or includes both cash and in-kind, in settlements such as Adjumani, Kiryandongo, Kyaka, Kyangwali, Nakivale, Oruchinga, and Rwamwanja. Despite the reported diversity of food sources, it can be assumed that the majority of households rely on humanitarian assistance, as it was also noted as the main livelihoods source above.

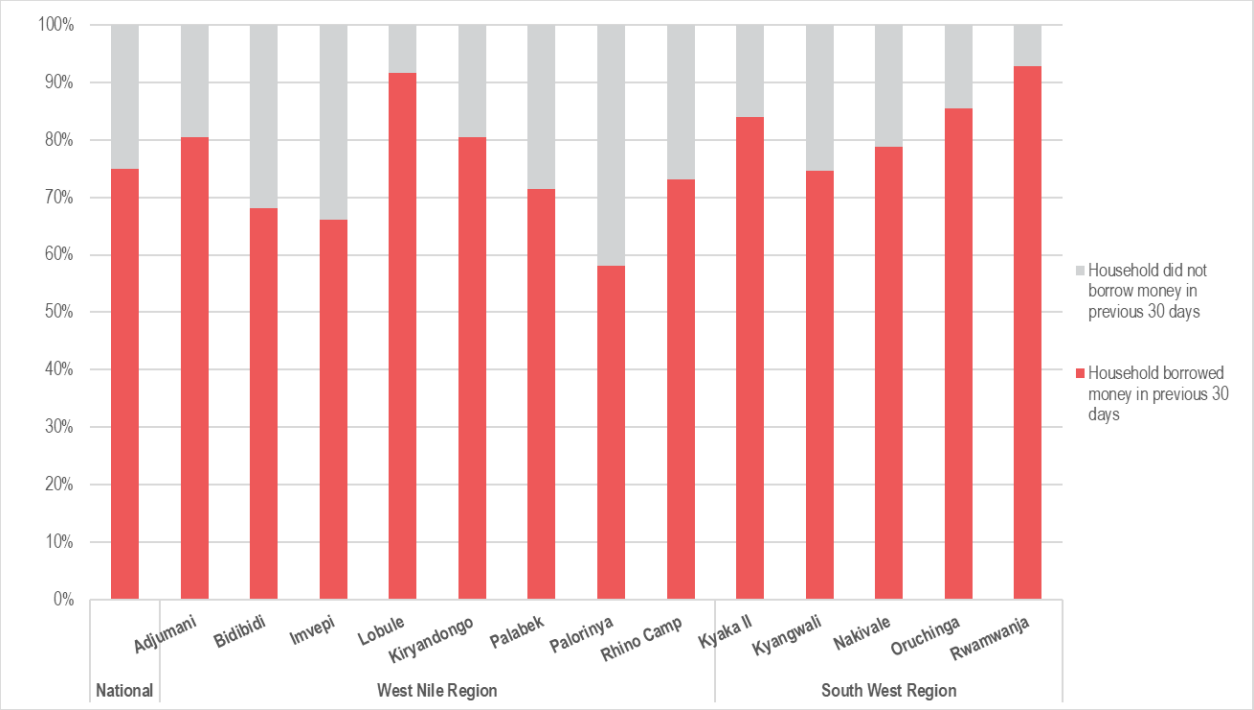
Figure 5: Percentage of refugee households reporting main source of food at the settlement and national level



Borrowing money

While the amount of money borrowed was not included as part of the economic capacity calculation, it is important to note that three-fourths (75%) of refugee households across the country reported borrowing money in the one month prior to the assessment. The amount of money borrowed could artificially inflate households' monthly expenditure, and cause them to appear less economically vulnerable if the borrowed amount is not deducted. The proportion of households that borrowed money was particularly high in Rwanwanja (93%) and Lobule (92%). A qualitative follow up was conducted in settlements where the proportion of households that borrowed money was more than 80% to further understand the context. In several locations, such as Oruchinga and Nakivale, it was reported that many refugees belong to Village Savings and Loans Associations (VSLAs), where refugees borrowed money to cover expenses such as agricultural inputs, school fees, and medical expenses. In other locations, such as Adjumani, Kiryandongo, and Kyangwali, borrowing from VSLAs was not noted, but similar reasons for needing to borrow money was cited: food, school fees and materials, buying productive inputs, and covering medical expenses.

Figure 6: Percentage of refugee households reporting borrowing money in the 30 days prior to data collection at the settlement and national level



Smaller proportions of households that reported borrowing money in the 30 days prior to the assessment were found in Palorinya (58%), Imvepi (66%), and Bidibidi (68%). Refugees in these three settlements receive in-kind food assistance rather than cash, so households may have less cash to lend, which could contribute to the lower levels of borrowing. Nationally, more than half of refugee households (56%) reported borrowing food or relying on help from friends or relatives in the 30 days prior to data collection. In Bidibidi, the largest proportion of households reported borrowing food or relying on help from friends or relatives (71%) as compared to other settlement locations, so these households may still be borrowing, but in the form of food rather than money. Nearly 50% of all refugee households that reported borrowing money in the one month prior to the assessment perceived that the consequences were severe or very severe if they were unable to pay back the debt.

Protection-specific vulnerability

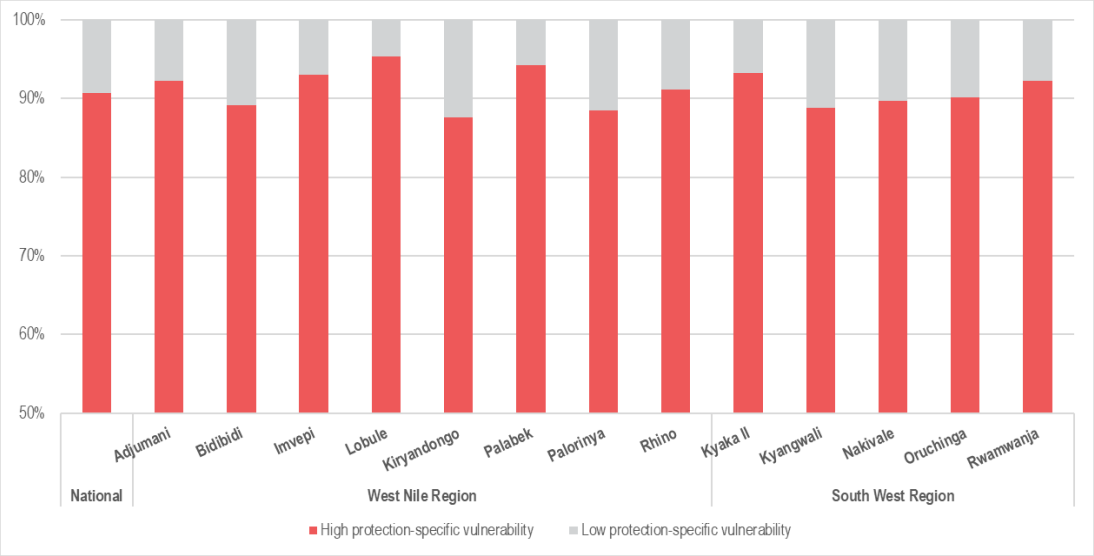
As detailed in the analysis framework section above, protection sector experts identified the following risks and barriers which vulnerable persons may face as a result of their specific circumstances / individual characteristics, and thereby act as an indicator of persons with a higher level of protection vulnerability:

- Refugees who face barriers in accessing services
- Safety and security issues
- Economic vulnerability
- Specific needs and other individual characteristics and availability of support networks

Overall protection-specific vulnerability

At the national level, 91% of the refugee population were categorized as having high protection-specific vulnerability. While the difference is minimal, Lobule settlement (95%), hosting Congolese refugees in West Nile, was found to have the largest proportion of the population with protection-specific vulnerability, while Kiryandongo was found to have the smallest proportion (88%).

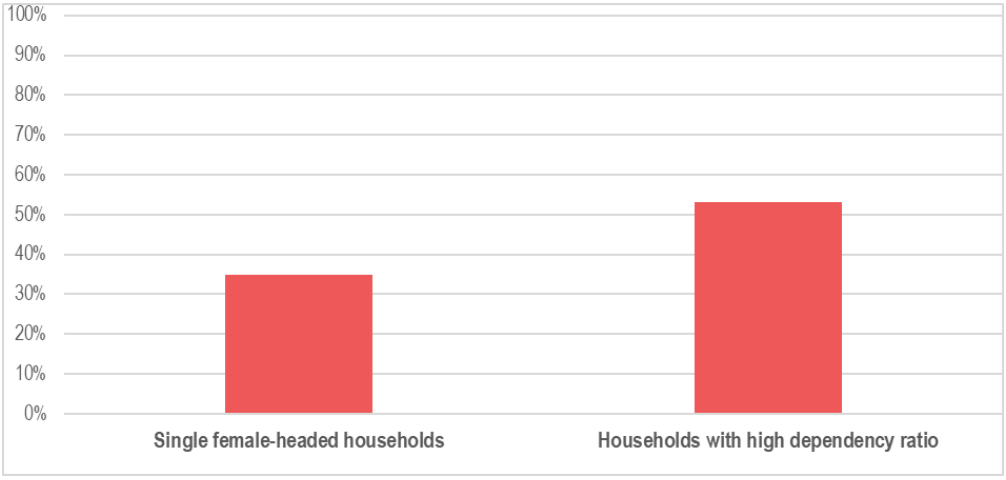
Figure 7: Percentage of refugee households with high and low protection-specific vulnerability at the settlement and national level



There were a few indicators that captured large percentages of the refugee population, and therefore contributed to the overall high proportion of refugees that were found to have high protection-specific vulnerability. Dependency ratio, that is calculated to account for individual age, individual disability status according to the Washington Group guidance, and presence of a household member that may require a full-time caregiver, captures 53% of refugee households.[38] Additionally, 35% of refugee households were headed by a woman and had no other adult male household member. These two indicators account for the largest percentages of households being classified as having high protection-specific vulnerability.

[38] A threshold of 1.25 was set based on calculating how many income earners were required per household to meet 75% of MEB using household expenditure as a proxy. As the median income capacity of income earner was determined to be 2.25 times of 75% MEB, it was established that one income earner was able to support 1.25 household members.

Figure 8: Percentage of refugee single female-headed households and households with high dependency ratio at the national level



Following these two indicators, households that had unregistered members (20%), at least one school-aged child not attending school (17%) and households that used specific negative coping mechanisms (begging, illegal/high risk activities, and forced/child marriage) in the 30 days prior to the assessment (17%) made up the next largest drivers of the high protection-specific vulnerability category. In terms of disability, 12% of households had one or more member with a disability according to the Washington Group set of questions, which was another driver of high protection-specific vulnerability. As for households with PSN members, 12% of households had one or more member that was an older person at risk, 6% of households had one or more member that was an unaccompanied or separated child, and 4% of households were headed by a person older than 60 years old and had no other adult household members. The rest of the indicators (i.e. other PSN types, not being able to afford sanitary items, harsh labour conditions for children, and poor shelter conditions) contributing to the high protection-specific vulnerability categorization captured smaller percentages of the population.

Barriers in accessing services

There were several specific groups that were found to have issues accessing services such as health, education, sanitation facilities among others, measured through various indicators. Child-headed households[39] (18 years old or younger) were found more likely to have members that were not registered as refugees (33% of households headed by a child compared to 20% of households headed by someone older than 18), which is a clear barrier to accessing basic humanitarian assistance. In terms of accessing education, households headed by children[40] were significantly more likely to have school-aged members not attending school (43% of child-headed households compared to an average 16% of households headed by someone older than 18), as well as households with a member having a moderate (25% of households with a member with moderate physical disability compared to 16% of those without) or severe physical (28% of households with a member with severe physical disability compared to 16% of those without) disability identified by UNHCR PSN codes.

At the national level, around 14% of households reported having members that faced barriers in accessing humanitarian assistance. Out of households that reported facing barriers, 62% reported that adult women were the age and gender category most affected. This could be related to the fact that the majority of households are headed by adult women, so they are typically the ones accessing humanitarian assistance on behalf of their households. Palabek settlement in

[39] A representative sample of child-headed households was not captured, and therefore the confidence level may be lower and the margin of error wider. Findings related to this group should be considered as indicative only.
[40] A representative sample of child-headed households was not captured, and therefore the confidence level may be lower and the margin of error higher. Findings related to this group should be considered as indicative only.

northern Uganda was the clear outlier, with 38% of households reporting having members that faced barriers accessing assistance. In particular, households headed by children (20% of child-headed households[41] reported barriers compared to an average 14% of households headed by someone older than 18) and those with a disability as identified by UNHCR's PSN codes (25% of households with a disability identified by UNHCR reported barriers accessing assistance compared to 14% of households without a disabled member identified by UNHCR) were found to be more likely to report barriers facing humanitarian assistance than other groups.

In addition, data collected from VENA indicates that women and girls face generally higher levels of barriers in accessing services (humanitarian assistance, markets, firewood, water) than men and boys (the exception was access to latrines, where a majority of households reported that girls and boys faced barriers in access primarily because they are too young to use them). Long distances to distribution points, markets, water points, and areas to collect firewood, as well as physical and verbal attacks from the host community, were commonly cited barriers. This likely reflects the gendered nature of the types of services considered, the fact that women and girls often take on multiple roles and responsibilities in displacement (including collection of assistance), and indicates the higher level of vulnerability of women and girls related to accessing services in the Ugandan context.[42]

It should be noted that other age, gender, and diversity groups (ethnic or religious minorities, members of the LGBTI community, others) may also be at risk of facing barriers in accessing services, or risk of being denied access to services by virtue of their individual characteristics, although these characteristics were not captured by the VENA. Also, as data was collected at the household level but from the head of household only, it is not possible to determine whether individual members of the household have equal access to services or whether assistance collected benefits all members of the household equally.

Safety and security issues

Some data on safety and security issues was collected during VENA, particularly questions relating to whether women and girls, men and boys felt safe in their homes or not and the reasons why, if not. The responses to these questions highlighted relatively small groups of refugees who feel unsafe in their homes primarily due to theft, physical and verbal attacks, SGBV, domestic violence and other risks. The majority of refugee households at the national level report that women and girls (97%) and men and boys (98%) feel safe in their homes. However, due to the various limitations describe above, it should be noted that the assessment not have adequately captured the experience of all household members and therefore may exclude certain safety and security concerns such as risks of SGBV, domestic violence, and child marriage within the household. From other protection-specific assessments, SGBV including domestic violence and other types of violence and safety concerns in refugee communities has been documented,[43] so it is highly likely that this indicator was underreported due to the nature of the assessment. However, it is important to note that in response to both questions asking about women and girls and men and boys, the highest percentage households living in Palabek settlement (9% for women and girls feeling unsafe, 6% for men and boys feeling unsafe) responded negatively to feeling safe and secure in their homes. Further analysis, and potential qualitative data collection, would be needed to examine the households which reported that women/girls and/or men/boys feel unsafe in the home to determine whether there are particular characteristics which make the households more vulnerable to theft and physical and verbal attacks by others.

[41] A representative sample of child-headed households was not captured, and therefore the confidence level may be lower and the margin of error wider. Findings related to this group should be considered as indicative only.

[42] Various assessments in Uganda have established the gendered nature of accessing humanitarian services and roles played by women and girls in displacement settings. For more information, see: Saferworld, Gender and Displacement Northern Uganda 2020 (research conducted in Adjumani): p.30; CARE International, Rapid Gender Analysis, May 2020, p.8 (the report covers Ugandan and refugee contexts); ACTED, Kyaka II Rapid Gender Analysis, September 2019, p. 2-3; CARE International, Rapid Gender Assessment of the DRC Refugee Influx, March 2018

[43] For example, see *Interagency Assessment of Measures, Services and Safeguards for the Protection of Women and Children against Sexual and Gender Based Violence among Refugees in Uganda*, https://data2.unhcr.org/en/documents/details/69840; *Uganda Refugee Operation - Participatory Assessment 2019 – National Report* (forthcoming). In the 2018 Joint Multi-Sectoral Needs Assessment conducted by REACH and UNHCR, 12% of respondents responded safety and security of their households as poor or very poor.

Economic vulnerability

Frameworks for analysis of economic and protection vulnerability cannot be completely divorced from one another. Economic vulnerability may be the root cause of many protection risks, due to limited ability to meet basic needs. Meeting the basic needs of refugees has important protection outcomes, including decreased risks of resorting to negative coping mechanisms such as child labour, survival sex, hazardous activities, etc. It is assumed that many refugee households are currently underspending on what are in fact essential needs (for example, sanitary materials, health care, education, and transportation costs – particularly for elderly persons or persons with disabilities who often have higher needs in these areas) due to their very low incomes, absence of cash, and the lack of opportunities to purchase the items they require, which in turn may expose them to protection risks. Likewise, protection risks can contribute to socio-economic vulnerability; for example, the ability of individuals facing security threats or discrimination to access markets, labour and education can negatively impact their present and future economic and social engagement. To better understand economic vulnerability that may directly contribute to protection risks, several indicators can be explored.

As noted in the economic vulnerability section above, four negative coping strategies were incorporated into the economic vulnerability analysis – begging, selling the last female animal, engaging in illegal or high-risk activities, and engaging in forced or child marriage. The protection sector has additionally considered withdrawing children from school due to the potentially severe protection consequences of this negative coping strategy, whilst noting that data on forced or child marriages may be under-reported due to the limitations outlined above and the possibility that respondents may also have under-reported their engagement in illegal activities.

At the national level, around one fourth of the refugee population engaged in coping mechanisms categorized as crisis-level during the 30 days prior to the assessment, while around 17% engaged in emergency-level coping strategies, both of which were identified to have potentially severe protection consequences for refugee households.[44] For crisis-level coping mechanisms, households in Nakivale (37%) and Imvepi (31%) were more likely to practice these strategies. Households in Lobule (27%) and Adjumani (25%) were found most likely to be engaging in emergency-level coping mechanisms. Child-headed households[45] were more likely to engage in emergency coping strategies (32% of child-headed households compared to an average of 17% of households headed by someone 18 or older). Those households were also found to more commonly engage in begging as a specific coping mechanism (25% of child-headed households) compared to an average of 15% of households headed by someone 18 or older. Around 7% of refugee households at the national level reported withdrawing children from school during the 30 days prior to the assessment. Households with specific PSNs, such as those with a member who had a mental illness specific needs codes were more likely to report that they had withdrawn children from school, whilst households headed by a person under the age of 18 were more likely to report that they had engaged in begging than households headed by an adult.[46] Whereas a higher dependency ratio has been found to be correlated with higher economic vulnerability, a higher percentage of households with a high dependency ratio were found to be headed by a woman, as compared to those headed by a man.

A larger proportion of households with certain types of PSN members were also found to be highly economically vulnerable; this includes: households with one or more older person at risk (92%), households with a single parent (94%), households with one or more separated child (97%), households with one or more unaccompanied or separated

[44] Crisis or emergency coping strategies to buy food or meet other basic needs measures households employing severe livelihood coping strategies impacting their future productivity, which are more difficult to reverse. Crisis coping strategies include selling productive assets or means of transport, reducing non-food expenses on health, consuming seed stocks, and selling last female animal. Emergency coping strategies include begging, engaging in illegal/ risky income activities, and migrating entire household.

[45] A representative sample of child-headed households was not captured, and therefore the confidence level may be lower and the margin of error wider. Findings related to this group should be considered as indicative only.

[46] A representative sample of child-headed households and households with a member who had a mental illness was not captured, and therefore the confidence level may be lower and the margin of error wider. Findings related to this group should be considered as indicative only.

child (96%), households with one or more serious medical condition (94%), households with one or more woman at risk (90%), households with one or more child at risk (98%), households with one or more disability (95%), households with one or more other medical condition (92%), households with one or more member with visual impairment (92%), households with one or more unaccompanied child (99%), households with one or more member with moderate mental disability (90%), households with one or more with family unity cases (100%), households with one or more member having a critical medical condition (95%), households with one or more single woman at risk (93%), households with one or more members with severe moderate mental disability (89%), households with one or more member who has experienced torture (70%), households with one or more member with severe physical disability (100%), households with one or more child in foster care (100%), households with one or more member with hearing impairment (100%), households with one or more member with malnutrition (100%), households with one or more member with mental illness (100%). However, it should be noted that specific need code data was not complete for all settlements at the time that data collection for VENA was conducted, and that the proportion of the overall refugee population falling into some of the specific needs codes is small and some conclusions may have a lower level of confidence and a wider margin of error.

As noted above, it is likely that respondents under-reported the use of certain negative coping mechanisms (particularly child and forced marriage or illegal activities) due to the fact that responses were gathered at the household level, but only from the head of household, and the nature of the data collection exercise which may not have been able to be conducted in a confidential space. Notwithstanding, previous assessments conducted within refugee populations in Uganda have linked child and forced marriage to poverty and limited economic capacity.[47] These dynamics unfortunately cannot be captured through VENA data as the MEB used within the exercise do not account for differential costs and earning capacities of households based on the presence of individuals with specific needs. However, based on prior assessments conducted within refugee households in Uganda, such as the Analysis of Refugee Vulnerability in Uganda study conducted by Development Pathways in 2018, it can be assumed that households with a member with a disability are more vulnerable, both from a protection and economic standpoint.[48]

Therefore, it can be concluded that there are significant links and overlap between economic and protection vulnerability: economic vulnerability may be the root cause of many protection risks, due to limited ability to meet basic needs, whilst protection risks can contribute to socio-economic vulnerability (for example, the ability of individuals facing security threats or discrimination to access markets, labour and education can negatively impact their present and future economic and social engagement).

Specific needs and other individual characteristics

As noted previously, vulnerability from a protection standpoint goes beyond the identification of someone as a PSN and is an evolving and dynamic concept; whilst the identification of a PSN is relevant in assessing protection vulnerabilities, not all individuals identified as PSN will be considered to be 'vulnerable' due to their existing support networks and coping mechanisms within their family and community. In addition, classifications of an individual as a PSN are not static and can change over time (for example, in the case of women identified as having a difficult pregnancy or as lactating) or with a change in individual circumstances. In addition, PSN data was not complete in all settlements at the time of VENA data collection. Therefore, caution should be exercised when extrapolating results from VENA data regarding households with a specific need code due to the small sample size and an overreliance should not be placed on households with PSN codes to the exclusion of other wider groups which may face protection vulnerabilities and risks.

[47] See for example: N.Gottschalk, 'Uganda: early marriage as a form of sexual violence', Forced Migration Review 27 (https://reliefweb.int/sites/reliefweb.int/files/resources/D975781857ED748B4925726F001FF1C3-Full_Report.pdf); J.Schecit et al, 'Early relationships and marriage in conflict and post-conflict settings: vulnerability of youth in Uganda', Reproductive Health Matters (https://www.tandfonline.com/doi/pdf/10.1016/S0968-8080%2813%2941710-X)

[48] Office of the Prime Minister, WFP, UNHCR, Development Pathways, "Analysis of Refugee Vulnerability in Uganda, Working Paper," January 2020. https://data2.unhcr.org/en/documents/details/72299

Groups found to be at heightened protection risk

Based on results from VENA data and other sources of protection information, a number of groups were found likely to meet one or more of the above indicators of protection vulnerability as set out below. It has not been possible to statistically demonstrate that a number of these groups meet indicators of protection vulnerability solely through reliance on the VENA dataset due to (i) limitations to the data set, including the fact that data on some protection issues (e.g. risks of SGBV, domestic violence, child marriage in the household) may not be reliable as these questions were posed at household level but to the head of household only and the nature of the exercise was not conducive to gathering such sensitive data, and (ii) small sample sizes in respect of certain groups. Therefore, the protection vulnerability analysis has taken an inclusive approach to mitigate some of the exclusion risks which could result if these groups were not included in a protection vulnerability framework.

Groups based on household composition

- Female headed households (without any adult male within the household)
- Households with one or more individuals with a disability as defined by the Washington Group questions asked during the VENA exercise
- Households with a high dependency ratio that accounts for individual age, individual disability status according to the Washington Group guidance, and status of a household member that may require a full-time caregiver (member with serious medical condition, young children)
- Household headed by an older person aged 60 years or older without any adult aged 18-59 within the household
- Household headed by a person under the age of 18 with no adult within the household

Groups based on presence of individuals with specific needs codes in ProGres v4 database

- Household with one or more unaccompanied and separated children
- Household with one or more children at risk
- Household with a single parent or caregiver
- Household with one or more individuals with a serious medical condition
- Household with one or more older person at risk
- Household with one or more person with specific legal/physical protection needs (unmet basic need, no access to services, violence, abuse, or neglect, marginalized from society)
- Household with one or more individuals with psychological or physical impairment due to torture

Groups based on other attributes

- Household with one or more school-aged children not attending school
- Household with one or more children engaged in harsh labour conditions
- Household with one or more unregistered members
- Household with women/girls who could not access sanitary materials in the past 3 months as they could not afford them
- Household engaging in the following negative coping mechanisms: withdrew children from school, begged, illegal/high risk activities, forced and child marriage
- Households with no or worst conditions of shelter
- Households with diverse sexual orientation/gender identity
- Households from ethno-linguistic minorities
- Individuals at risk of SGBV, domestic violence, and child marriage (identified through ProGres v4 PSN codes or other verification methods)

Overlap of high economic and protection-specific vulnerability and correlation analysis

While both economic and protection-specific vulnerability frameworks produced high proportions of the refugee population categorized as vulnerable, and it was determined that economic vulnerability was a core component of protection-specific vulnerability and therefore could not be completely separate, the VENA sought to identify the percentage of households that were identified in the overlap between the economic and protection-specific vulnerability frameworks (i.e. being categorized as having high vulnerability in both). Eighty-one percent (81%) of the refugee population was found to be categorized in both high economic and protection-specific vulnerability categories.

Table 7: Percentage of refugee households categorized by economic and protection-specific vulnerability categories at the national level

Protection-specific vulnerability	Economic vulnerability: Low	Economic vulnerability: Moderate	Economic vulnerability: High
Low	1%	1%	10%
High	3%	4%	81%

Based on these 81% of households, correlation analysis was conducted to determine the key variables correlating with household status of being categorized with both high economic and protection-specific vulnerability. The correlation analysis was based on binominal logistic regression analysis for the continuous variables and multi-nominal logistic regression analysis for the categorical variables. Continuous variables include those that are quantitative in nature and can be measured based on a number, such as the number of household members. Categorical variables include those that are discrete and have categories that are not based on an order or numerical scale, such as the type of roof material of a shelter. Variables meeting a significance level of 5% were determined to be statistically significant, and are included in the list below and tables in annex 2.

It is important to note that identifying clear correlations between variables is difficult when the proportion of the population identified as vulnerable is so large, and when the protection-specific vulnerability analysis framework relies on a combination of a data-driven and expert-driven approach. Therefore, the variables identified as being correlated to the overlap of economic and protection-specific vulnerabilities should be refined in case of any changes to the analytical framework defining dimensions of vulnerability.

Continuous variables identified as being positively correlated to high economic and protection-specific vulnerability[49]

- Number of school-aged children in the household: A larger number of school-aged children as part of the household was found to be positively correlated to an increased likelihood of being highly economic and protection-specific vulnerable.

[49] See Annex 2 for correlation analysis tables for the continuous variables

- Dependency ratio (that accounts for individual age, individual disability status according to the Washington Group guidance, and presence of a household member that may require a full-time caregiver) – A higher dependency ratio was found to be positively correlated to an increased likelihood of being highly economic and protection-specific vulnerable.
- Amount of time spent working by children in the household – A higher amount of time spent working by children in the household was found to be positively correlated to an increased likelihood of being highly economic and protection-specific vulnerable.

Categorical variables identified as being positively correlated to high economic and protection-specific vulnerability, meaning that the presence of the variable makes high vulnerability more likely[50]

- Households displaced for 0-2 years (time spent living in settlement)
- Head of household that has some difficulty seeing (identified in the Washington Group set of questions on disability)
- Head of household that has some or a lot of difficulty concentrating (identified in the Washington Group set of questions on disability)
- Households that have multiple livelihoods sources (as compared to one single livelihoods source)
- Households that have shelter roofs not made from iron sheets
- Households that have shelter walls not made from mud poles or unburnt bricks
- Households that did not spend money on substances such as alcohol, tobacco, and others in the 30 days prior to data collection
- Households headed by someone categorized as a PSN with a disability based on UNHCR codes
- Households living in the following refugee settlements: Adjumani, Bidibidi, Imvepi, Kyaka II, Palabek, and Rhino Camp. Note that all settlements listed here are in West Nile region, except Kyaka II, which is in the Southwest.

Categorical variables identified as being negatively correlated to high economic and protection-specific vulnerability, meaning that the presence of the variable makes high vulnerability less likely[51]

- Households that have 2-5 people sleeping per shelter
- Households that reported not selling in-kind humanitarian assistance during the 30 days prior to data collection
- Households with no members that had difficulty seeing, hearing, or taking care of oneself (identified in the Washington Group set of questions on disability)
- Households that reported agriculture as their main livelihood
- Households that had shelter walls not made from tarpaulin
- Households that had shelter floors not made from earth or rammed earth
- Households that had shelter rooves not made from tarpaulin or grass thatch
- Households living in Nakivale refugee settlement

[50] See annex 2 for correlation analysis tables for the categorical variables
[51] See annex 2 for correlation analysis tables for the categorical variables

Sector-specific vulnerability

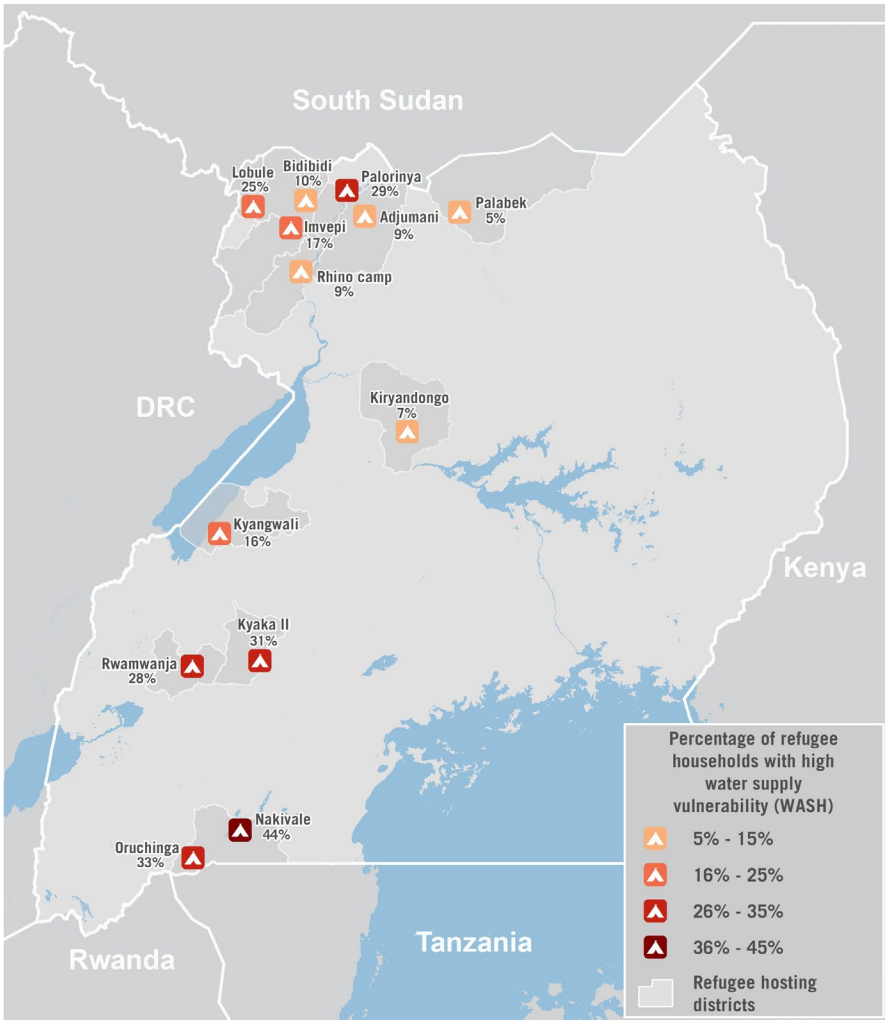
WASH

Vulnerability related to the WASH sector was conceived in two ways: vulnerability and needs relating to water supply and separately to sanitation.

Water supply

Two indicators were selected as indicating vulnerability related to water supply: percentage of households using unimproved water sources as opposed to improved water sources, and percentage of households with an average volume of water below 10 litres of water per person per day based on the household size. One-fifth (20%) of refugee households at the national were found to have high water supply vulnerability. The assessment found the highest percentage of households with high water supply vulnerability in Nakivale settlement (44%), due to relatively high percentages of households with members reportedly accessing less than 10 litres of water per person per day (30%) and using unprotected water sources (20%). At the national level, 16% of households were found to have an average volume of water per person per day less than 10 litres and 6% were found to be using unprotected water sources.

Map 3: Percentage of refugee households categorized as having high water supply vulnerability at the settlement level

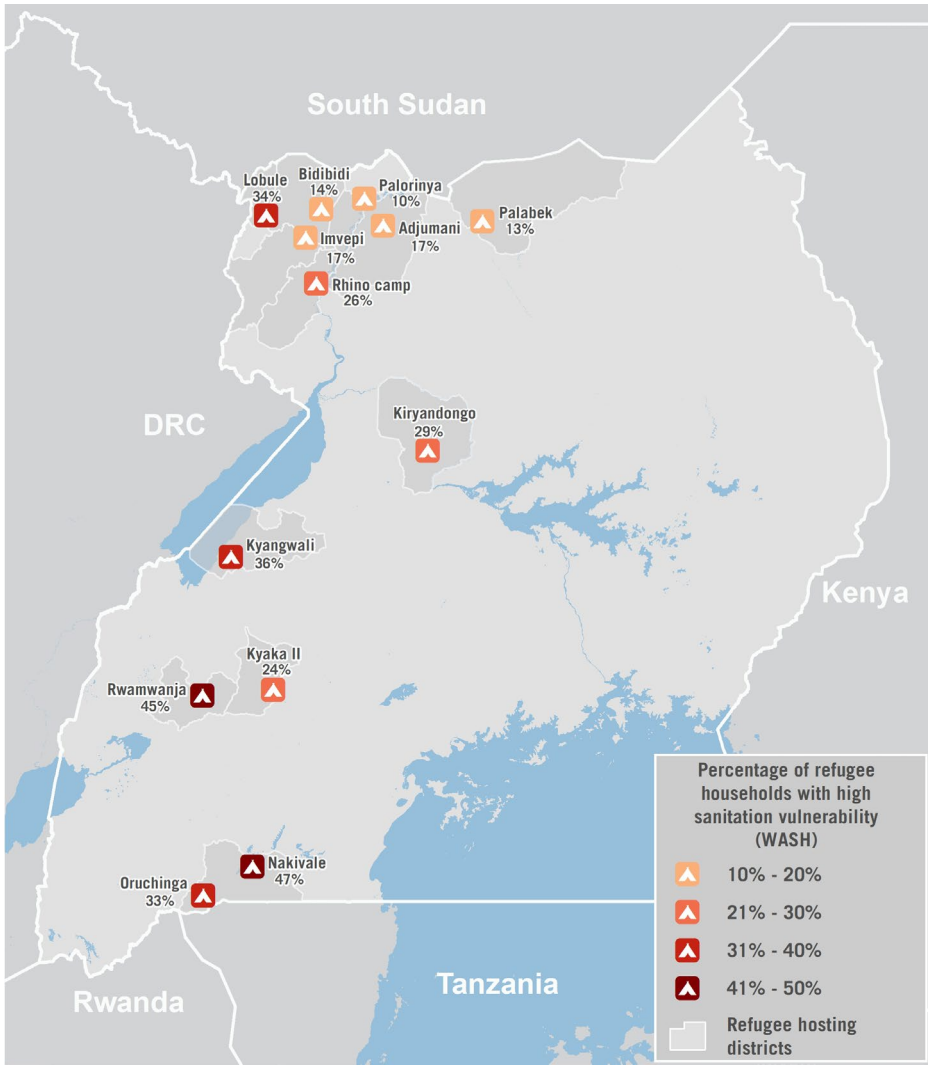


Sanitation

For vulnerability relating to sanitation, the type of toilet facility household members access was selected as the key indicator, with households reporting having no toilet facility, or using an uncovered latrine with or without a concrete slab being categorized as having high sanitation vulnerability. One fourth of refugee households at the national level were found to have high sanitation vulnerability, directly related to the lack of a toilet facility or only having access to a sub-standard or unsafe facility. The highest percentages of households with high sanitation vulnerability were found in Nakivale, with nearly half of refugee households (47%) there having a sub-standard toilet facility. Other locations with high percentages included Rwamwanja (45%), Kyangwali (36%), Lobule (34%), and Oruchinga (33%).

It is important to note that the type of toilet facility does not necessarily capture usage or whether it is adapted to all household members. When households were asked who had regular access to a toilet facility, 82% of households noted that all members had access, while around 16% noted that only some members had access. Of the 21% of households that noted only some member or no members had access, more than 50% households noted that children (62% of households noted boys, and 59% of households noted girls) were the ones that did not have regular access. This is not unusual given the context, as it is unsafe for small children to use pit latrines. Elderly men or elderly women were not cited any more than the other age and gender categories as specific groups not having regular access to a toilet facility.

Map 4: Percentage of refugee households categorized as having high sanitation vulnerability at the settlement level



Health

There were two indicators selected to determine a household's vulnerability in the health sector. The first was whether a household who had a member needing medical treatment in the previous 30 days was able to access treatment, and the second was estimated distance from the nearest health facility, calculated by self-reported travel time. At the national level, around 39% of refugee households were found to have high health vulnerability. The highest percentages of households meeting the definition of this categorization were found in Imvepi (65%) and Palabek (64%).

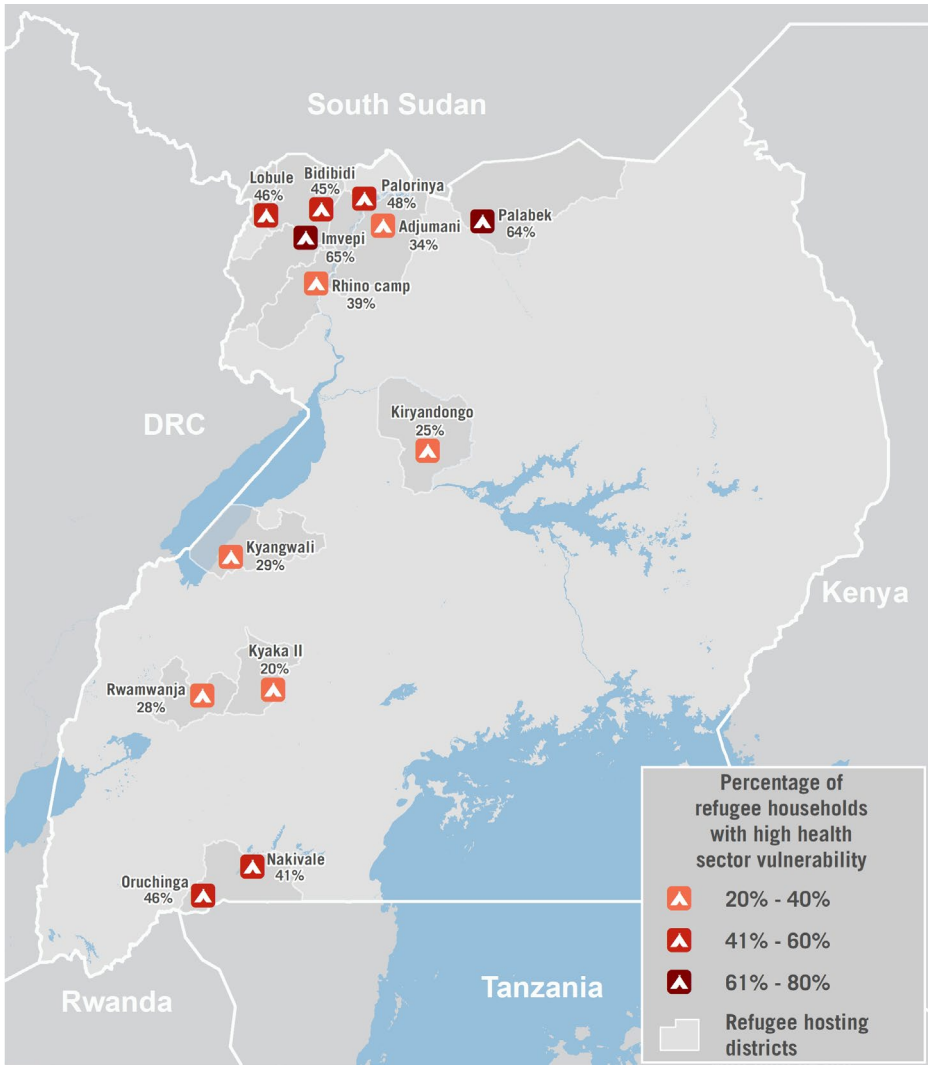
At national level, 5% of households that reported having a sick member in the 30 days prior to data collection were not able to access treatment. Eighty-three percent (83%) of households had sick members and accessed treatment, while 12% of households reported that they did not have sick members and therefore did not seek treatment. The highest percentages of households reporting that they could not access medical treatment for a sick household member were found in Nakivale (15%) and Rwamwanja (13%).

Through mapping household distance to the nearest health facility, it was found that almost all refugee households living in settlements have access to a health centre within a 5 kilometre distance, except some refugee households living in Miryei in Adjumani and potentially Siripi zone of Rhino Camp in Arua. However, mapping physical distance may not accurately represent or capture challenges that certain individuals or households face in accessing health facilities. Rather than calculating this indicator based on pure distance, the estimated travel time self-reported by households was used.[52] At the national level, 35% of households reported the estimated distance to the nearest health facility, calculated by travel time, was more than the 5 kilometre standard. The percentage of households further than a 5 kilometre distance to the nearest health facility was found to be highest in Imvepi (63%) and Palabek (61%).

It is important to note that these indicators selected to determine household vulnerability in the health sector may not fully capture the situation. Asking if a household with sick members in the previous 30 days accessed treatment is somewhat vague, as a member may have accessed treatment but it might not have fully treated the illness. The recall period is also short, considering that many people could suffer from chronic illnesses and require various types of treatment over different periods of time.

[52] Based on the consultation with the health sector, households or individuals are categorized as vulnerable if they reported spending more than 60 minutes accessing health facilities.

Map 5: Percentage of refugee households categorized as having high health vulnerability at the settlement level

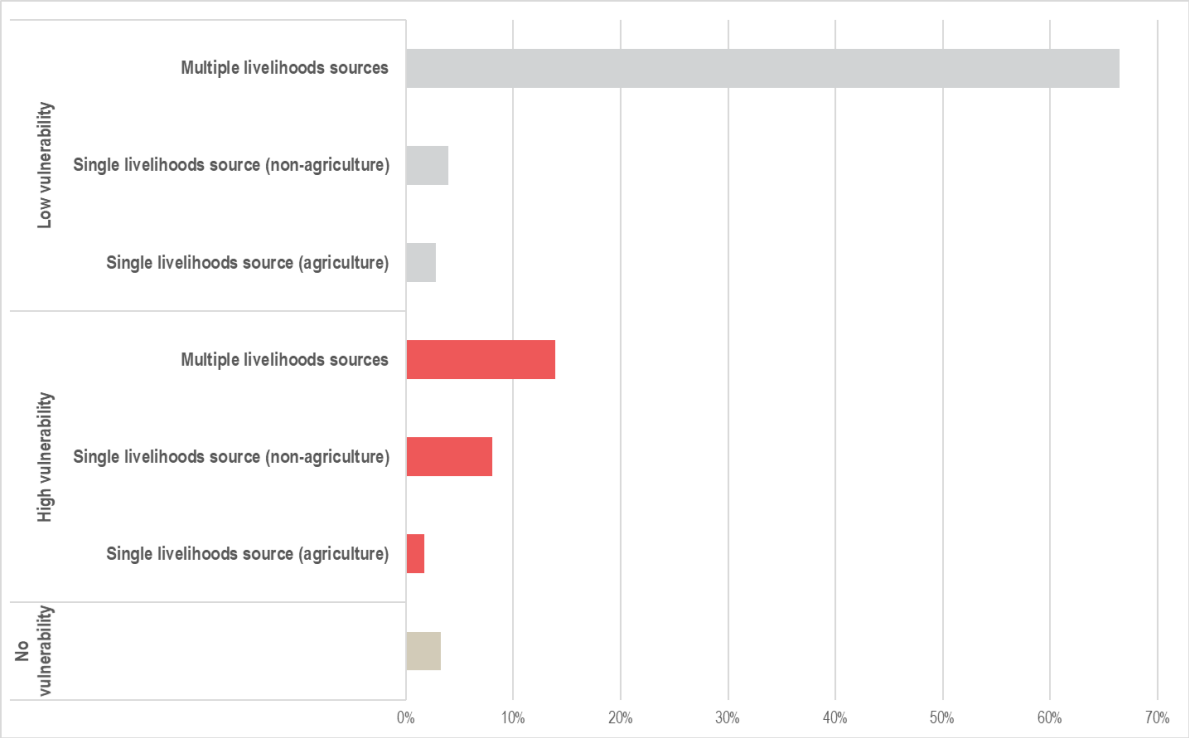


Livelihoods

Factors determining household vulnerability in the livelihoods sector were split into several categories: households that had only one single livelihoods source and those that reported multiple livelihoods source. To further separate these groups and vulnerability criteria, of those with one single livelihoods source, households were further grouped by those that primarily rely on agriculture as their main source of livelihoods and households that rely on non-agricultural sources as their main livelihoods. If a household relies on agriculture as a single livelihoods source, indicators such as selling a portion of their crops, using emergency negative coping mechanisms, and savings were considered. If a household relies on a non-agriculture source as a single livelihoods source, whether they were saving or not was considered. For households with multiple livelihoods sources, the use of emergency negative coping mechanisms was considered.

Nearly one fourth of refugee households (24%) at the national level are considered as having high livelihoods vulnerability, with 14% having multiple livelihoods sources, 8% having a single, non-agricultural related livelihoods source, and 2% having a single, agricultural related livelihoods source.

Figure 9: Percentage of refugee households categorized by livelihoods vulnerability type at the national level



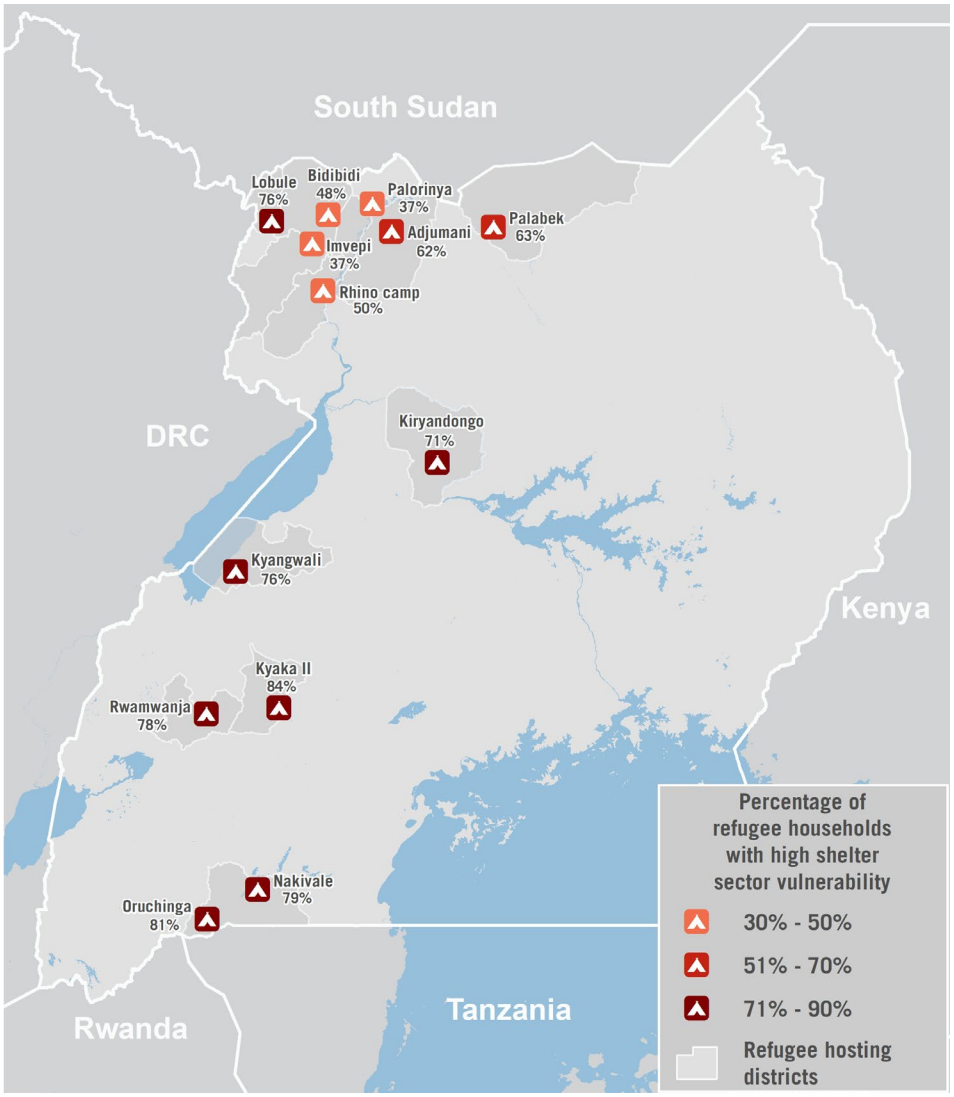
At the national level, the majority of refugee households (73%) reported having a non-agriculture livelihood source as their main source, but for those that did (27%), nearly half of them reported that they sold a portion of the crops grown to earn income (i.e. non-subsistence farming). Nearly 20% of refugee households reported engaging in emergency coping strategies during the 30 days prior to the assessment, and less than half (44%) of households reported that they were able to save some of their monthly earnings.

Shelter

Two indicators were selected to determine household shelter vulnerability: whether household living conditions meet the crowding index sphere standard, and the condition of the shelter. The majority of refugee households (62%) at the national level were categorized as having high shelter vulnerability, primarily due to not meeting the crowding index sphere standard. At the national level, 61% of refugee households have less than 3.5 square metres per person, calculated based on the average size of a tukul-style shelter. In Kyaka (84%) and Oruchinga (81%), the highest percentage of households across all settlements were categorized as having high shelter vulnerability, and these locations were also found to have the highest percentages of households not meeting the crowding index sphere standard. In addition, several other locations including Rwamwanja (77%), Nakivale (77%), Kyangwali (75%), and Lobule (74%) were found to have high percentages of refugee households living in the same conditions.

In terms of shelter condition, which was rated from no shelter, worst, poor, to fair, and good, a low percentage of households (4%) at the national level were found to have shelters in the worst condition or no shelter. However, 31% of households had shelters in the poor condition, as compared to around 65% of households in fair or good condition. Households in Rhino Camp (6%), Kyangwali (6%), and Kiryandongo (6%) were slightly more likely to have shelters in the worst condition.

Map 6: Percentage of refugee households categorized as having high shelter vulnerability at the settlement level



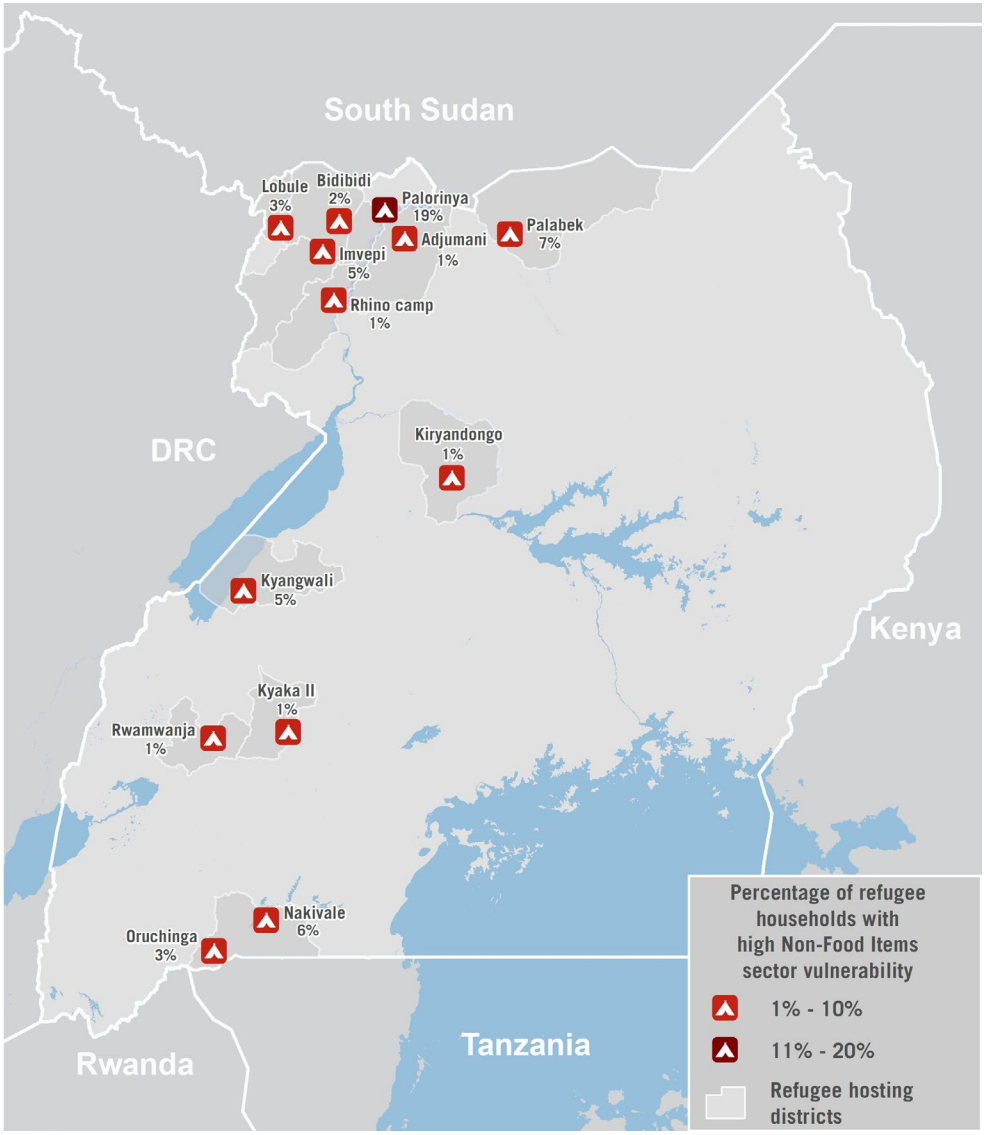
Non-Food Items (NFIs)

To assess vulnerability in access to NFIs, the reported number of owned key core relief items was considered. If a household reported not having three to four of out of the four selected core relief items, the household was considered to have high NFI vulnerability. The four items included a sleeping mat or mattress, blanket, jerry can, and mosquito net.

At the national level, only 5% of refugee households were categorized as having high NFI vulnerability. The percentage of households in Palorinya categorized as having high NFI vulnerability was significantly higher at 19%.

It is important to note that the threshold for having the item was either none or any number, and it was not adjusted based on the household size. Therefore, the vulnerability determination may not fully capture vulnerability in access to NFIs for items which may depend on number of household members, including those 4 included in this indicator.

Map 7: Percentage of refugee households categorized as having high NFI vulnerability at the settlement level



Education

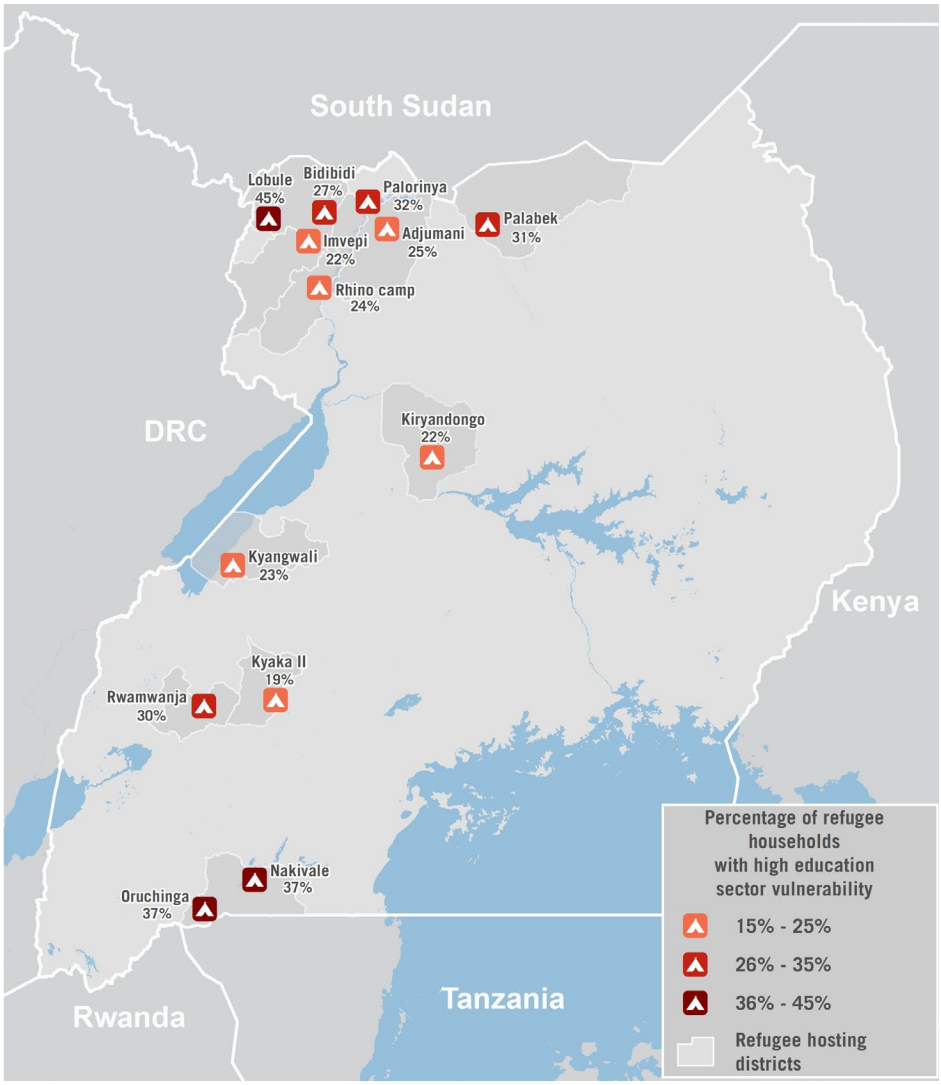
To determine household vulnerability related to education, two indicators were considered: primary school-aged children (ages 6-12 years old) not attending school or secondary school-aged children (ages 13-18 years old) not attending school that did not complete primary education, and estimated travel time above 30 minutes for children to reach school facilities. At the national level, more than one fourth (27%) of refugee households were categorized as having high vulnerability related to education, with the highest percentages of households found in Lobule (45%), Nakivale (37%), and Oruchinga (37%).

The highest percentage of households with primary school-aged children that were not attending school was found in Kyaka (31%), Rwamwanja (29%), and Nakivale (27%), compared to 17% at the national level. Generally, the same locations were also found to have the highest percentage of households with secondary school-aged children that were not attending school and that had not complete primary education: One fourth of households in Nakivale and Oruchinga, 23% in Rwamwanja, and 20% in Kyaka were found to have secondary school-aged children that were not attending

school and that had not completed primary education. For all households in West Nile, 10% of households or less had primary school-aged children that were not attending school, except for Adjumani (15%).

In terms of distance and estimated travel time, 60% of refugee households with school-aged children at the national level reported that children travel longer than 30 minutes walking distance to get to school. The highest percentages of households were found in Imvepi (76%) and Lobule (72%).

Map 8: Percentage of refugee households categorized as having high education vulnerability at the settlement level



Energy

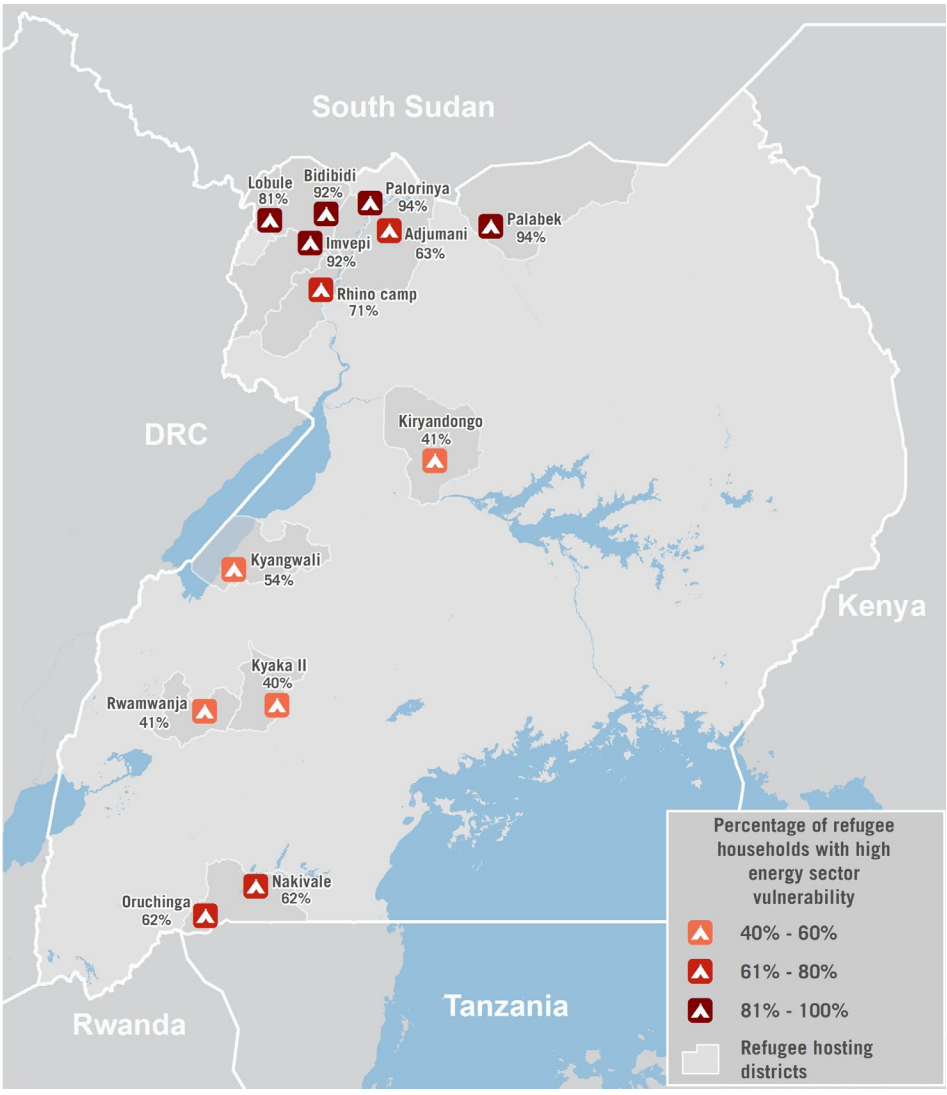
Several indicators were selected to determine vulnerability related to energy, including reported barriers to accessing firewood, usage of an unsafe, unhealthy, or insufficient primary light source, and estimated travel time to access cooking fuel. The majority of refugee households (70%) at the national level were categorized as having high energy vulnerability, with more than 90% in several settlements in West Nile (Palorinya, 94%; Palabek, 94%, Imvepi, 92%; Bidibidi, 92%). Generally, these were the same settlements where the highest percentages of households reported an estimated travel time higher than 60 minutes to access cooking fuel. More than 80% of households in Palorinya,

Palabek, Imvepi, and Bidibidi reported an estimated travel time of more than 60 minutes to access cooking fuel, as compared to 54% of households at the national level.

In terms of primary light sources, use of paraffin tadooba (tin container with kerosene and wick), candles, cow dung, grass reeds, or having no light source at all, were considered as unsafe, unhealthy, or insufficient. At the national level, 8% of refugee households were found to rely on one of these methods for their primary source of light. The highest percentage of households using one of these sources was found in Nakivale, with 22% of households using any of these sources, but the majority (15%) using candles and Oruchinga, with 19% of households using any of these sources, but the majority using paraffin tadoobas (10%) or candles (9%). The highest percentage of households that reported no primary light source was found in Nakivale (10%).

Nearly 50% of refugee households at the national level reported facing some form of barriers collecting firewood. Of the 46% of households that reported barriers, the primary types of barriers were related to physical attacks by host community members (62%), long distances to collection areas (54%), and verbal harassment by host community members (27%). The highest percentages of households reporting barriers were found in Palabek (71%), Imvepi (70%), and Bidibidi (68%).

Map 9: Percentage of households categorized as having high energy vulnerability at the settlement level



Market analysis findings[53]

Alongside the VENA essential needs household component, REACH, WFP, and UNHCR conducted a joint market assessment with the aim to overcome gaps in information on the market systems within and nearby refugee settlements. The assessment explored market functionality and capacity, and specifically looked at factors related to access, availability, capacity, seasonality, and safety and security in marketplaces. The VENA can provide a foundational evidence-base for establishing a framework for how refugees can be best assisted by linking the key findings of the market analysis, household information on market access, access to cash and credit, and modality preference, with the general outlook of refugee vulnerability as discussed above.

Market functionality: market characteristics, operations, ability to scale up, and seasonality

Overall, traders in assessed marketplaces tended to operate on small scales and with low profit margins. Eighty-two percent (82%) of interviewed traders reported serving fewer than 100 customers per week, including 39% fewer than 50 per week. Markets inside and outside of settlements were reported to differ in a number of ways, including the size and permanence of the markets. Markets outside of settlements were often found to have improved physical structures that were usually more permanent compared to markets within settlements, where the structures were more often temporary or semi-permanent. Markets in and near settlements also differed in the size of their operations with markets outside of settlements often having a larger number of traders operating. Markets outside of settlements were often reported to have more established rules and regulations along with the regulated price setting mechanisms usually controlled by government bodies. These differences highlighted could contribute to an overall higher functionality of markets located outside of settlements.

Only 18% of traders interviewed in assessed market places reported having hired any other employees. Across Uganda, 82% of traders interviewed reported having no employees at all. Of those who had employees, the median was 2 employees across all settlements for markets both within and outside of the settlements. This suggests that the majority of traders, work on their own and run small-scale operations. It may also highlight a lack of capacity and capital to hire further staff to support their operations.

Despite operating on small scales and with low profit margins, nearly all interviewed traders reported that they would be able to double their stock in response to doubled customer demand, for example due to the rollout of cash and voucher assistance in their settlement. However, examining other indicators revealed a more complex picture, with many traders reporting a lack of access to the credit and storage space that they would need to rapidly scale up; furthermore, wholesalers were more likely than retailers to foresee problems doubling their stock, an issue that, if experienced, would inevitably trickle down to the retailers themselves. In terms of access to credit, only 22% of interviewed traders reported having accessed any form of credit to scale up their businesses, most often from Village Savings and Loan Associations (VSLAs) rather than more formal banking institutions.

Another essential aspect influencing traders' capacity is their access to adequate storage. A lack of storage capacity can hinder traders' ability to expand their businesses, as storage space is needed to house an increase in stock. Across all settlements, 59% of interviewed traders reported relying on their own storage space, whether at their businesses or in their houses. However, the majority of interviewed traders in Lobule (48%), retailers in particular, reported they were renting their storage space. Palabek (44%), Nakivale (40%), and Imvepi and Palorinya (39%) had the highest percentages of interviewed traders who reported that they did not have storage facilities at all, which could significantly affect traders' ability to operate and maintain the supply and quality of their items.

[53] To access other VENA products related to the market analysis, see the VENA Market Analysis Terms of Reference, VENA Market Overview in Refugee-Hosting Areas of Uganda (March 2020), and settlement level factsheets (November 2019).

Seasonality was reportedly the primary factor affecting supply, demand, and prices for many market commodities: not only food items, which were predictably dependent on the timing and quality of the rainy and harvest seasons, but also several types of NFIs for which consumption tended to be seasonal, in particular education and shelter items.

This snapshot of market functionality indicates that markets offer critical goods needed by refugee households, with supply, demand, and prices most impacted by seasonality. While market traders indicate capacity to scale up, aspects such as access to credit, storage space, and potentially proximity to town centres and trade networks must be examined more closely to determine the potential challenges to market functionality on a localized basis.

Access to markets and credit

Nearly all refugee households reported being able to physically access marketplaces, but getting there could be difficult, with 91% most commonly traveling to their nearest market on foot. Some of these households reported travel times of up to three hours, a prohibitive distance for household members with mobility issues. Out of the 8% of households that reported facing barriers when accessing markets, adult women (55%) in particular were reported to face the greatest challenges in accessing markets, followed by female youth (37%), likely due to the gendered nature of household roles such as shopping for the household. Imvepi settlement had the highest percentage of households that reported facing challenges when traveling to and from markets (17%). Rwamwanja, Kiryandongo, and Oruchinga had the lowest percentages of households that reported facing issues accessing markets with 3%, 2%, and 1% respectively. These relatively low percentages highlight that across all settlements, households do not face major challenges in accessing and reaching the marketplaces.

Out of the 8% of households that reported facing challenges in accessing markets, 84%, including a majority in all settlements but Oruchinga, reported that their most common barrier was the long distance to their nearest market. In 8 of the 13 assessed settlements, physical disability was the second most commonly reported barrier to market access, particularly in Kiryandongo (88%).[54] The high percentages of households that reported walking to marketplaces is likely related to a lack of funds to pay for transport. As distance and disability were reported as common barriers to accessing markets, being able to afford and use other forms of transport could potentially increase market access for vulnerable refugee households. Other reported barriers to accessing markets faced by refugee households were perceived physical attacks by host community members (10%) and/or refugees (9%), which highlights tensions between the refugee and host community members. Ten percent (10%) of households that reported facing barriers to access markets in Rhino Camp cited the main challenge to be sexual and gender based violence (SGBV), which stood out compared to other settlements.

Though 90% of refugee households reported having access to some form of credit, this was almost invariably informal or semi-formal in nature. With regards to financial access, 10% of households across the settlements reported not having any form of access to credit, either informal or formal.[55] In Lobule, this percentage was less than 2%, followed by Rwamwanja and Kyangwali (3%). The most commonly cited reason for households not able to access any form of credit was insufficient collateral (52%); this was particularly the case in Adjumani (82%). Refugee households most commonly reported being able to borrow money through friends or family members (58%), followed by VSLAs and shopkeepers. This suggests that the majority of households do not have access to formal credit services, such as banks. Despite the fact that refugee households typically face significant financial challenges to meet their daily needs, the percentage of households unable to access any form of credit at all is relatively low. Indeed, 75% of households overall reported having borrowed money in the six months prior to data collection.

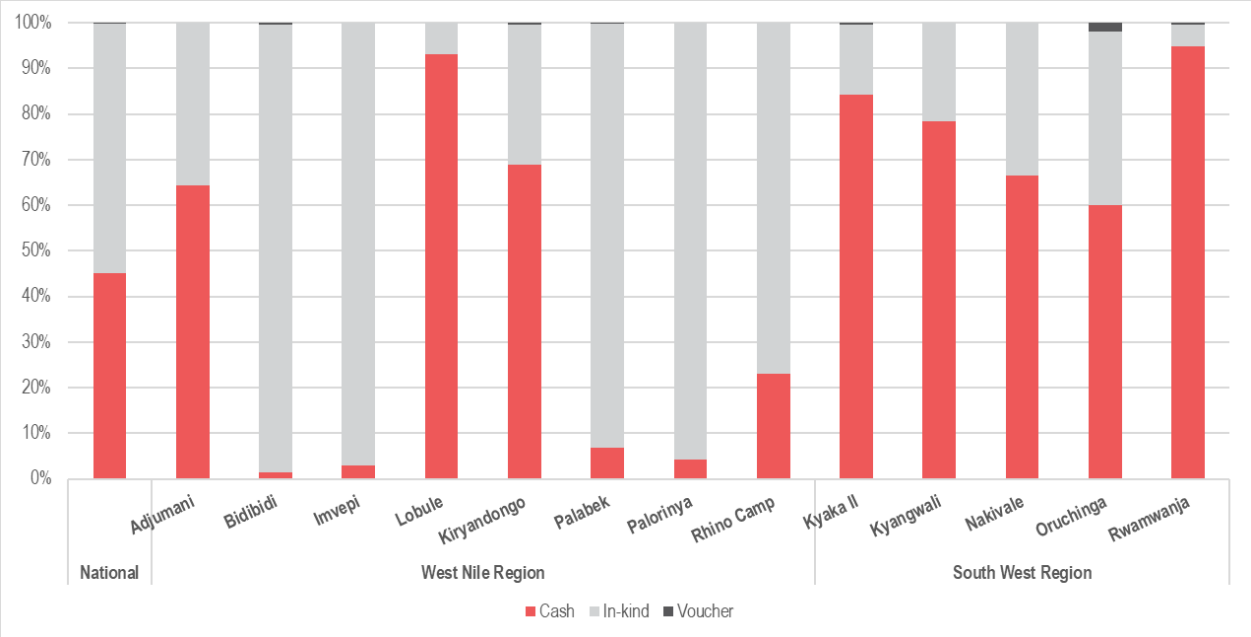
[54] Respondents could select more than one option when responding to this question.
[55] Selectable options included when asking households' access to credit were: VSLAs, SACCOs, formal money lenders, informal money lenders, shopkeepers, banks, microfinance institutions, friend or family members and no access at all

Preference of humanitarian assistance modality

As part of the essential needs household component, respondents were asked which modality they preferred to receive assistance per sector, for sectors including food security, education, shelter, NFIs, WASH, and energy. At the national level, the majority of households reported that they preferred receiving humanitarian assistance for the education (75%), shelter (64%), NFIs (69%), WASH (76%), and energy (70%) sectors via in-kind assistance as compared to via cash or voucher. Across the sectors, while in-kind assistance was preferred by households at the national level, there were higher proportions (from around 30-40%) of households that reported preferring cash, particularly in Rwamwanja, Nakivale, and Oruchinga. Food security was the only sector where proportions of refugee households at the national level preferring cash to in-kind was more equal: 55% of households reported preferring in-kind food assistance as compared to 45% reported preferring cash.

It should be noted that households typically reported their preference based on experience and familiarity with the modality that they were currently receiving. This is particularly evident with the food assistance modality. At the time of data collection, a larger proportion of refugee households living in settlements in the South West region were receiving cash for food assistance, as compared to households in West Nile region that were receiving in-kind food assistance, and this is reflected in the responses around preferred assistance modality. As the majority of refugee households do not receive cash assistance for any other sector aside from food assistance, households may not be familiar with other modality types for different services and goods, and therefore potentially less comfortable to indicate this as a preference.

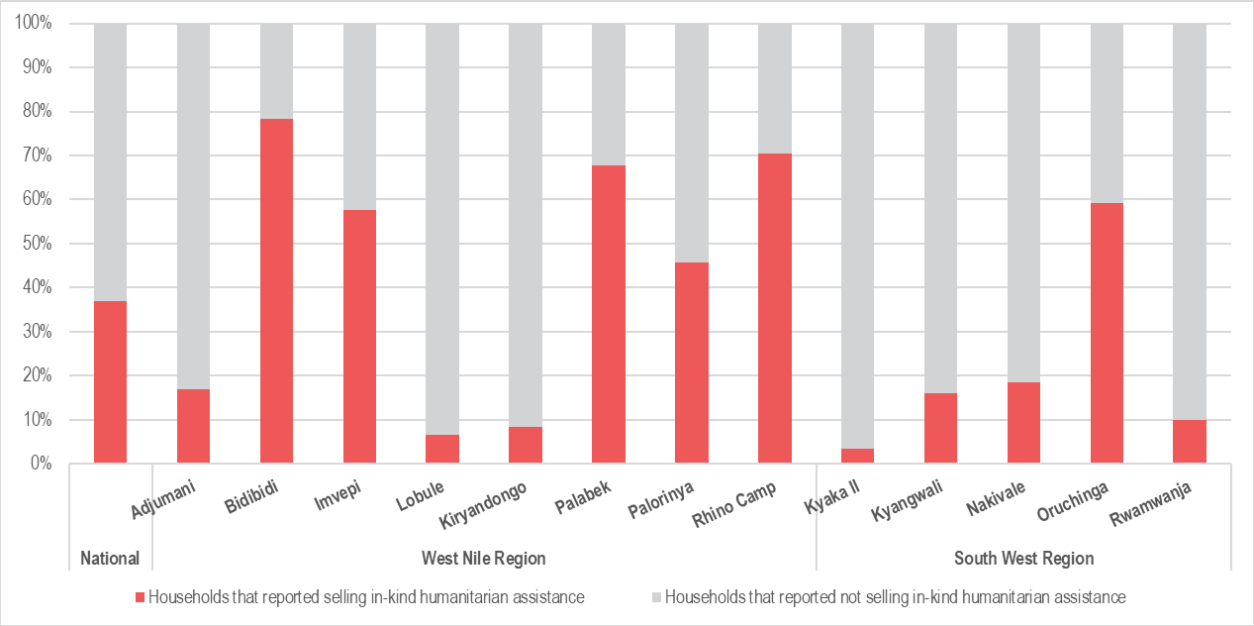
Figure 10: Percentage of refugee households reporting food assistance modality preference at the settlement and national level



However, while humanitarian assistance modality preference was largely skewed to in-kind as opposed to cash at the national level, it is important to compare this to locations where larger proportions of households reported selling in-kind humanitarian assistance to have access to cash. In the same settlements in West Nile where households reported a strong preference for receiving in-kind food assistance shown above (Bidibidi, Imvepi, Palabek, Palorinya, and Rhino Camp), the largest proportions of households also reported selling in-kind humanitarian assistance during the 30 days prior to data collection in order to earn cash. This implies that while households may have reported a preference for in-

kind food assistance, they chose to sell some of the assistance receive (any type of in-kind assistance, not necessarily food) so they could have cash to afford meeting other basic needs.

Figure 11: Percentage of refugee households reporting that they sold in-kind humanitarian assistance during the 30 days prior to data collection at the settlement and national level



Linkage to economic and protection-specific vulnerability

Based on the discussion of economic vulnerability and protection-specific vulnerability in the sections above, a main finding of the VENA essential needs component is that the majority of refugee households in Uganda have weak economic capacity, and this can directly contribute to protection-specific vulnerability and risks. The majority of households cannot meet the value of the MEB, defined by minimum goods and expenses required to support a household on a monthly basis. Furthermore, the fact that even with a portion of humanitarian assistance provided to cover a household's food needs, a significant proportion of households are using various coping mechanisms, selling in-kind humanitarian assistance, and borrowing money on a regular basis points to the clear indication that households do not have sufficient economic capacity. This context, illustrated by the VENA findings as well as previous assessments, should be noted in relation to the assessment of markets and consideration of assistance modality types.

Conclusion

The VENA process was extensive and consultative, ensuring that all sector experts and relevant actors contributed to the research design and development of the analysis framework. Defining the essential needs of refugees and what it means to be vulnerable in the Uganda context was a conceptually complex exercise, but driven from a basic needs and rights-based approach, rather than from a resourcing or prioritization perspective.

The main findings from the VENA illustrate that from a basic needs and rights-based approach, the refugee population as a whole is highly vulnerable. The VENA found around 91% of refugee households in Uganda to be economically or protection-specific vulnerable. Considering the 91% of refugee households found to be categorized separately as highly economically and protection-specific vulnerable, 81% of refugee households were categorized as both highly economically and protection-specific vulnerable, only slightly narrowing down the population that could be considered most vulnerable. While the highly vulnerable group is very large, differences in the severity of needs exist within the population as a whole and also within the highly vulnerable group. This is particularly true from an essential needs and food security perspective, where specific circumstances and characteristics at the household, individual, and location levels, result in heterogeneity also within the large highly vulnerable group: the worst-performing segment of the highly vulnerable group is far more deprived of essential needs compared to the best-performing segment of the same highly vulnerable group. See the section below about revisiting the analytical framework for important implications on the response analysis.

The percentage of vulnerable refugee households in Uganda is high due to several factors, such as low income, limited agricultural production and resulting economic capacity, the high dependency ratio across refugee households in Uganda, the high proportion of female headed households, as well as the high number of children in the refugee population (children comprise more than 60% of the overall refugee population, and women and children together comprise 81%).[56] The high proportion of children in the overall population is double the global average (38%) and one of the highest among large refugee operations in East and Horn of Africa, and other regions.[57] In addition, the ratio of unaccompanied and separated children is also high. In addition, the ratio of unaccompanied and separated children is also high.[58]

The large size of the highly vulnerable group makes it difficult for the VENA to achieve one of its main objectives: to provide guidance for the targeting and prioritization of assistance in the refugee response. The VENA's identification of circumstances and characteristics of individuals, households, and geographical areas that can be used for beneficiary selection and other program design aspects rely mainly on statistical analysis of quantitative data, specifically on correlation analysis between level of vulnerability on the one hand and said circumstances and characteristics on the other. The challenge is that identifying correlations useful for the purposes of targeting is difficult when the proportion of the population identified as highly vulnerable is so large to approach nearly the entire population, and when the protection-specific vulnerability analysis framework relies on a combination of a data-driven and expert-driven approach.

That said, certain indicators were found to be significantly correlated with higher likelihood of a household being categorized as both highly economically vulnerable and having high protection-specific vulnerability. Factors found to make households more likely to have high economic and protection-specific vulnerability include a larger number of school-aged children in the household, a higher dependency ratio, a higher amount of time children spent working in the household, households living in settlements in Uganda for less than two years, households that have multiple

[56] UNHCR and OPM, "Uganda Refugees Statistics Dashboard – August, 2020", available at https://data2.unhcr.org/en/documents/details/78794
[57] As of the end of 2019, the percentages of children among the refugee and asylum-seeking population were: 49% in Sudan, 55% in Kenya, 49% in Rwanda, 57% in Tanzania, 62% in Ethiopia, 46% in Pakistan, 30% in Egypt, 47% in Jordan, 56% in Lebanon according to the UNHCR Global Report 2019 and UNHCR Annual Statistical Reports 2019.
[58] The percentage of unaccompanied and separated children against the overall refugee and asylum-seeker population in Uganda was at 2.9% as of end 2019, which was the second highest figure in the East and Horn of Africa region following Ethiopia.

livelihoods sources (as compared to one single livelihoods source), households that have shelter roofs not made from iron sheets, and shelter walls not made from mud poles or unburnt bricks, households that did not spend money on substances items, and households living in specific settlements (Adjumani, Bidibidi, Imvepi, Kyaka II, Palabek, and Rhino Camp[59]). Additionally, households headed by someone with a disability (based on UNHCR PSN codes) and households with a member that has some difficulty seeing or some or a lot of difficulty concentrating (as identified in the Washington Group set of questions on disability) was also found to be positively correlated to high economic and protection-specific vulnerability. For more details, see page 43.

As indicated above, one important research objective of the VENA was to support the development of operational targeting mechanisms for how humanitarian assistance can be better aligned to the different needs of different households and thereby better address unmet needs. While the definition of vulnerability and the analysis framework achieved consensus through the Assessment Technical Working Group, the VENA results did not produce findings that are able to support targeting at this stage given that 81% of refugee households were identified to be both highly economically and protection-specific vulnerable.

Furthermore, the VENA data collection exercise found that 36% of assessed households were living in different household compositions than official registrations in the ProGres v4 database. While supporting the development of a future operational targeting mechanism is separate from implementing the targeting mechanism, this mismatch of household composition between how refugee households are registered in the database and how they are living in reality means that for any targeting mechanism will suffer from a wide margin of error if implemented through ProGres v4.

Given these limitations, while also recognizing the need to publish the vulnerability analysis without delay, the VENA will be published in two volumes: the first volume of the VENA report, this report, is based on an analysis of needs, resulting in the identification of a large group of highly vulnerable refugee households as done throughout this report. The second volume of the VENA report will focus on delivering results usable for prioritization by identifying a smaller group of most vulnerable refugees. This guidance is essential as no refugee response partner have the resources necessary to provide assistance to the entire refugee population at sufficient levels (and providing such assistance equally without regard for varying degree of unmet need would be inappropriate regardless) and it is urgent as the current resource constraints faced by refugee response partners in Uganda, already now requiring prioritization of needs, will only worsen. To achieve this, the second volume of VENA would revisit the definition of economic and protection-specific vulnerability from a resource and prioritization perspective, rather than a needs and rights-based approach. To overcome its limitations and challenges, several next steps have been identified to support the VENA to reach its objectives:

Improve primary ProGres v4 dataset

The ProGres v4 database can be improved in several areas in order to become a viable mechanism for the eventual targeting of humanitarian interventions beyond case management as it is currently used for.

The household composition impacts many factors affecting economic and protection-specific vulnerability, such as dependency ratio, head of household demographics, presence of members with specific needs and individual characteristics, and others. Because the VENA found that 36% of the sampled households had a different household composition, such as a different total number of household members or different individuals (with different ages, genders, etc.) comprising the household from the data recorded in the ProGres v4 database, any targeting mechanism relying on the ProGres v4 dataset will have a wide margin of error. This requires regular updating of the registration database to minimize the percentage of households living differently than according to their registration, and will result in a reduction of the margin of error if used to implement a targeting mechanism.

[59] Note that all settlements listed are in West Nile region, except Kyaka II, which is in the Southwest

In addition to adjusting refugee household composition in the dataset, ProGres v4 data fields should be expanded to capture the indicators found to have a strong correlation with vulnerability on the household and individual (where relevant) level to enable the usage of the framework to target interventions. The current ProGres v4 database has limited data fields for all households, as it is mostly limited to demographic factors, and would benefit from enriching the types of indicators included and the frequency of updating the information.

The current UNHCR specific needs data in the primary dataset does not capture certain specific groups. Enhancing data collection methodologies, including incorporating the Washington Group questions for disability related data, is required to enhance the quality of the specific needs/protection data.

Revisit the VENA analysis framework from a resource and prioritization perspective

As mentioned above, the analytical framework developed to apply a basic needs and rights-based approach resulted in a large group of highly vulnerable refugees, which did not support the development of operational targeting mechanisms. Technical and sector experts should review the economic and protection-specific analytical frameworks, so that the large portion of the highly vulnerable population can be broken down into smaller categories for operational prioritization purposes.

In the context of reduced humanitarian funding globally and in this response, coupled with the impact of COVID-19 on global economies and needs in Uganda, different scenarios should be devised using the available data including an understanding of the inclusion/exclusion error margins.

Update the Minimum Expenditure Basket (MEB)

The current Minimum Expenditure Basket, last updated in May 2020,[60] does not take into account the higher costs associated with individuals having certain specific needs, such as a disability or serious medical conditions. These additional costs should be factored into the calculation of the next MEB using the extensive expenditure data available in the VENA dataset.

Develop an understanding and generate evidence related to vulnerability in the urban refugee context

The urban refugee population, primarily in Kampala, was excluded as a target population in the VENA. The majority of humanitarian assistance and funding is delivered to refugee households living in settlements, so developing a full comprehensive understanding and definition of vulnerability in the urban context was considered as a second priority. The living situation of refugees in Kampala, access to livelihoods, level of humanitarian assistance received, and the cost of basic needs is considerably different when compared to the settlement context. With the recent development of an urban refugee MEB[61] and potential for increased assistance to urban refugees to address the economic impacts of COVID-19, it is important to establish a baseline understanding of vulnerability in the urban refugee context and compare this to the vulnerabilities and needs of settlement-based refugee households for inform future priorities and programming decisions.

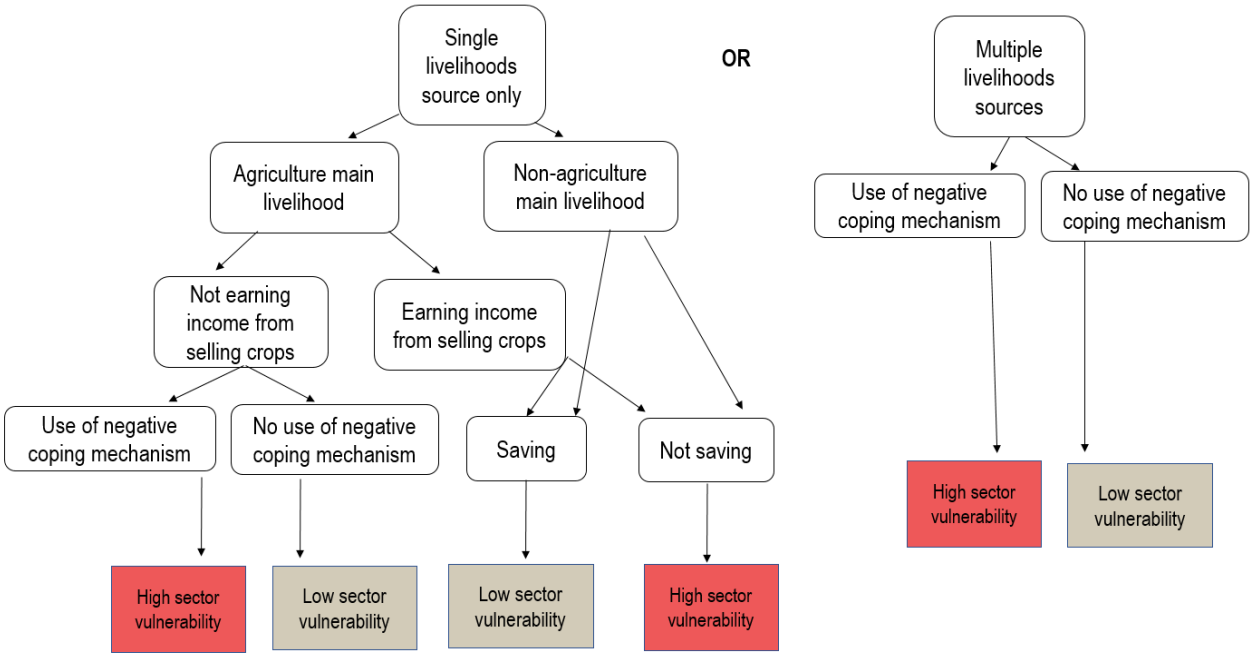
While the VENA results could not be used to independently recommend targeted interventions on a household level, the next steps describe above have been identified to support reaching this objective. The ATWG and core stakeholders will seek to make progress on these next steps through the second volume of the VENA report and other related work streams.

[60] Uganda Cash Working Group, "Minimum Expenditure Baskets for Cash-Based Programming in Uganda," last updated: 12 May 2020, available at https://data2.unhcr.org/en/documents/download/76328
[61] Ibid.

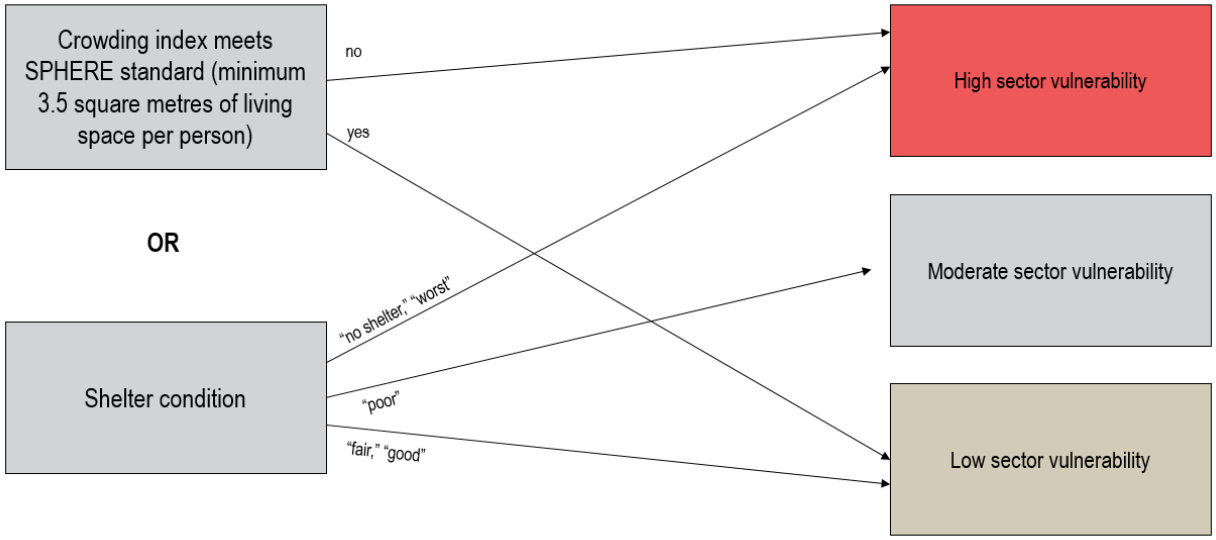
Annexes

Annex 1: Sector-specific vulnerability analysis frameworks

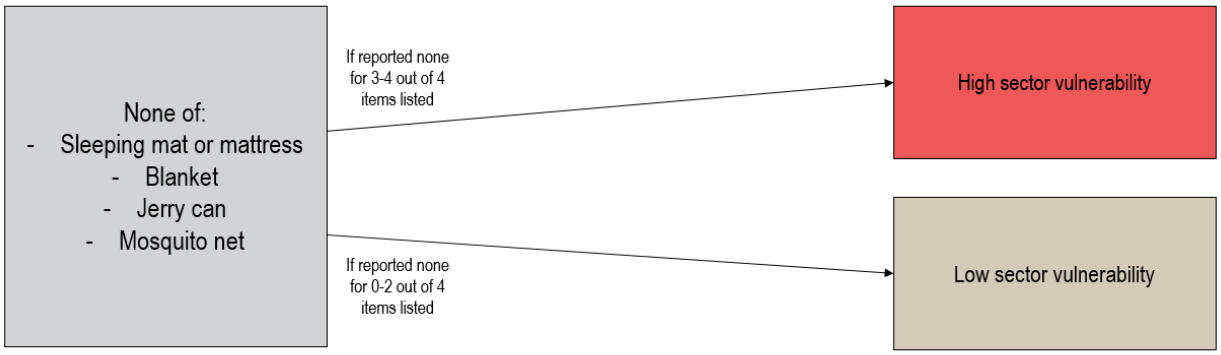
Livelihoods sector-specific vulnerability analysis framework



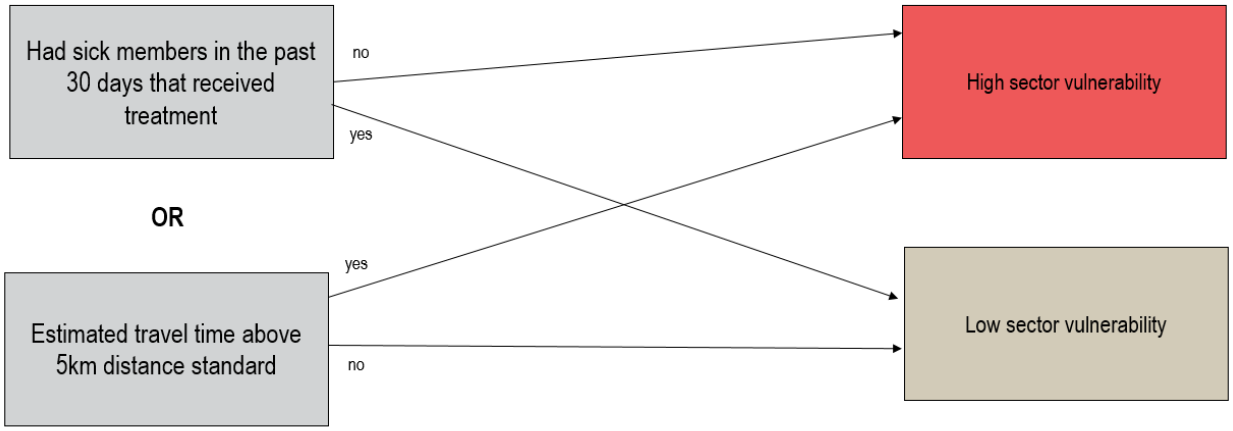
Shelter sector-specific vulnerability analysis framework



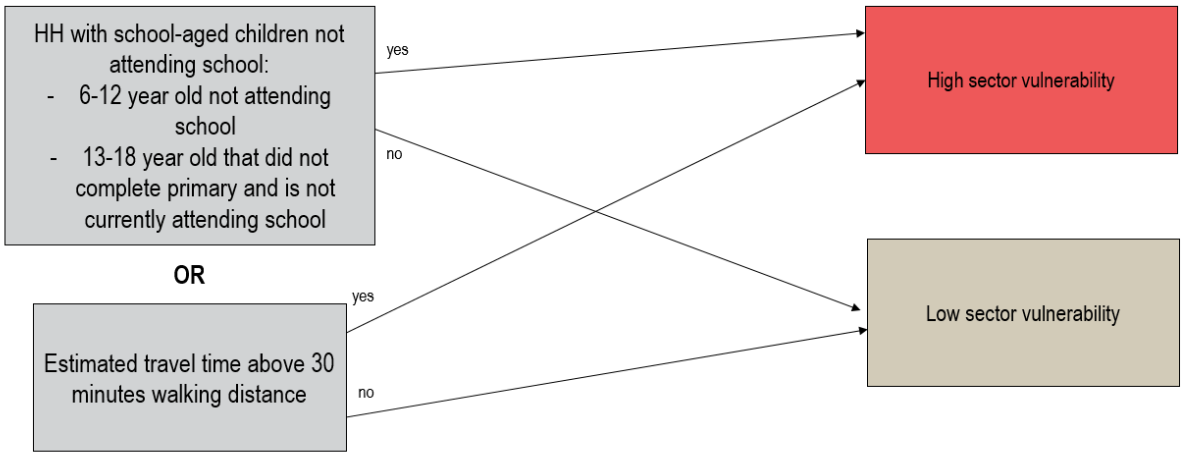
Non-food items sector-specific vulnerability analysis framework



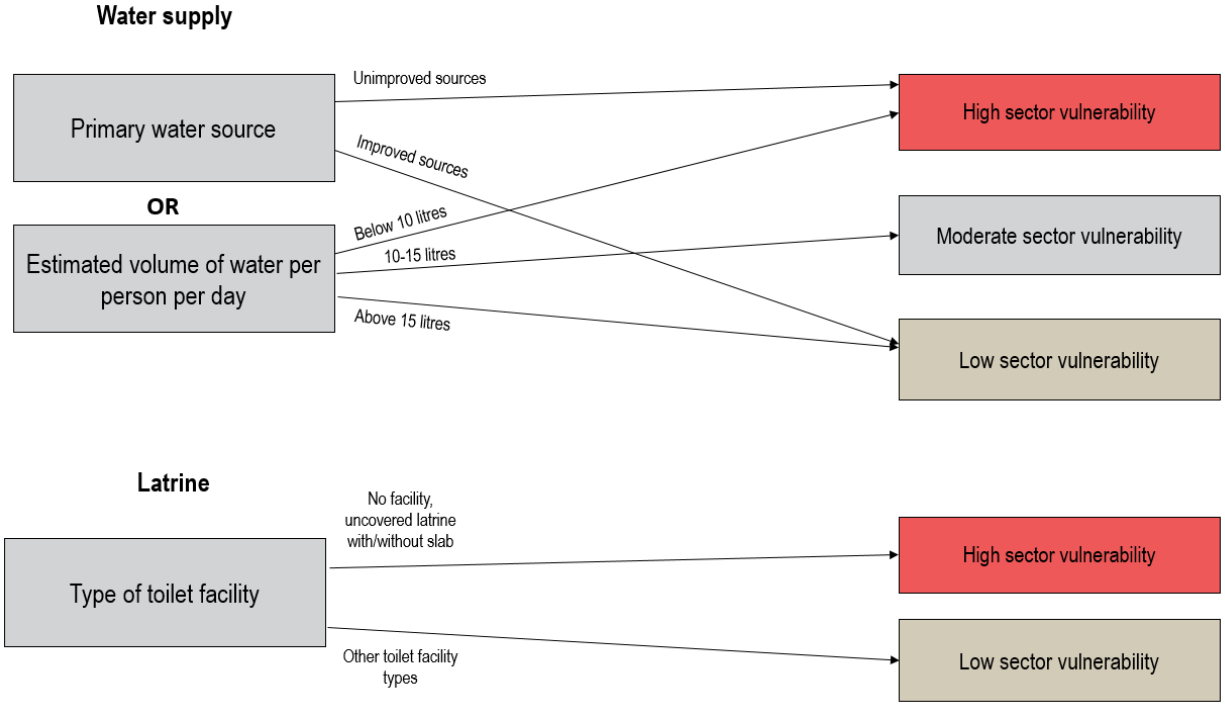
Health sector-specific vulnerability analysis framework



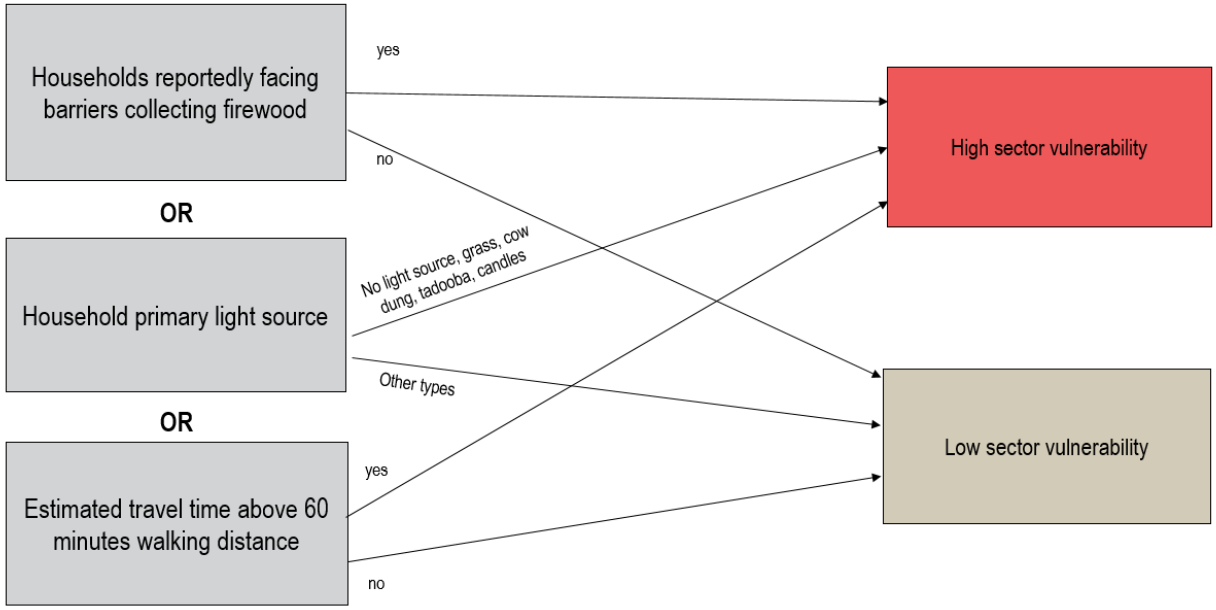
Education sector-specific vulnerability analysis framework



WASH sector-specific vulnerability analysis framework



Energy sector-specific vulnerability analysis framework



Annex 2: Correlation analysis tables

Continuous variables identified as being positively correlated to high economic and protection-specific vulnerability

Variable	Sig.	Exp(B)
Number of school aged children in the household	0.001	9.870
Dependency ratio (that accounts for individual age, individual disability status according to the Washington Group guidance, and presence of a household member that may require a full-time caregiver)	0.001	2.120
Amount of time children spent working	0.016	12574961.392
Note		
Variables with significance less than .05 have a statistically significant correlation.		
If the Odds Ratio [Exp(B)] is greater than 1, then A and B are associated (correlated) in the sense that, compared to the absence of B, the presence of B raises the odds of A, and symmetrically the presence of A raises the odds of B. Conversely, if the Odds Ratio is less than 1, then A and B are negatively correlated, and the presence of one event reduces the odds of the other event.		

Categorical variables identified as being positively correlated to high economic and protection-specific vulnerability, meaning that the presence of the variable makes high vulnerability more likely

Variable	Sig.	Exp(B)
Time household spent living in settlement (0-2 years)	0.025	1.318
Head of household that has some difficulty seeing (identified in the Washington Group set of questions on disability)	0.048	18.342
Head of household that has some difficulty concentrating (identified in the Washington Group set of questions on disability)	0.046	7.631
Head of household that has a lot of difficulty concentrating (identified in the Washington Group set of questions on disability)	0.014	12.271
Households that have multiple livelihoods sources (as compared to one single livelihoods source)	0.000	1.527
Households that have shelter roofs not made from iron sheets	0.002	1.302
Households that have shelter walls not made from mud poles	0.024	1.379
Households that have shelter walls not made from unburnt bricks	0.007	1.475
Households that did not spend money on substances such as alcohol, tobacco, and others in the 30 days prior to data collection	0.001	1.578
Households headed by someone categorized as a PSN with a disability based on UNHCR codes	0.022	1.412
Households living in Adjumani settlement	0.001	1.797

Households living in Bidibidi settlement	0.000	1.787
Households living in Imvepi settlement	0.000	2.265
Households living in Kyaka settlement	0.008	1.583
Households living in Palabek settlement	0.000	2.456
Households living in Rhino Camp settlement	0.001	1.826
Note		
Variables with significance less than .05 have a statistically significant correlation.		
If the Odds Ratio [Exp(B)] is greater than 1, then A and B are associated (correlated) in the sense that, compared to the absence of B, the presence of B raises the odds of A, and symmetrically the presence of A raises the odds of B. Conversely, if the Odds Ratio is less than 1, then A and B are negatively correlated, and the presence of one event reduces the odds of the other event.		

Categorical variables identified as being negatively correlated to high economic and protection-specific vulnerability, meaning that the presence of the variable makes high vulnerability less likely

Variable	Sig.	Exp(B)
Households that have 2-3 people sleeping per shelter	0.005	0.732
Households that have 4-5 people sleeping per shelter	0.040	0.774
Households that reported not selling in-kind humanitarian assistance during the 30 days prior to data collection	0.008	0.822
Households with no members that had difficulty seeing (identified in the Washington Group set of questions on disability)	0.003	0.388
Households with no members that had difficulty hearing (identified in the Washington Group set of questions on disability)	0.005	0.299
Households with no members that had difficulty taking care of oneself (identified in the Washington Group set of questions on disability)	0.003	0.366
Households that reported agriculture as their main livelihood	0.001	0.778
Households that had shelter walls not made from tarpaulin	0.020	0.547
Households that had shelter floors not made from earth	0.039	0.703
Households that had shelter floors not made from rammed earth	0.000	0.511
Households that had shelter rooves not made from tarpaulin	0.036	0.814
Households that had shelter rooves not made from grass thatch	0.000	0.683
Households living in Nakivale settlement	0.003	0.627
Note		
Variables with significance less than .05 have a statistically significant correlation.		
If the Odds Ratio [Exp(B)] is greater than 1, then A and B are associated (correlated) in the sense that, compared to the absence of B, the presence of B raises the odds of A, and symmetrically the presence of A raises the odds of B. Conversely, if the Odds Ratio is less than 1, then A and B are negatively correlated, and the presence of one event reduces the odds of the other event.		