



# UGANDA (REFUGEES)

## OVERVIEW OF THE IPC ACUTE MALNUTRITION ANALYSIS OF THE REFUGEE SETTLEMENTS IN UGANDA

## IPC ACUTE MALNUTRITION ANALYSIS

NOVEMBER 2020 - SEPTEMBER 2021

Issued July 2021

KEY FIGURES		NOVEMBER 2020 - SEPTEMBER 2021	
<p><b>24,581</b></p> <p>cases of children aged 6-59 months acutely malnourished</p> <p>IN NEED OF TREATMENT</p>	Severe Acute Malnutrition (SAM)	<b>5,641</b>	
	Moderate Acute Malnutrition (MAM)	<b>18,940</b>	
	<p><b>2,961</b></p> <p>cases of pregnant or lactating women acutely malnourished</p> <p>IN NEED OF TREATMENT</p>		

### Overview

**How Severe, How Many and When:** Of the 14 refugee settlements included in this analysis, six settlements had Alert levels of acute malnutrition (IPC Phase 2) and eight settlements had Acceptable levels of acute malnutrition (IPC Phase 1), according to the Integrated Food Security Phase Classification (IPC) Acute Malnutrition analysis during the low acute malnutrition season of 2020/2021, November 2020 – April 2021. It is anticipated that three settlements will have Serious levels of acute malnutrition (IPC Phase 3), five settlements will have Alert levels of acute malnutrition (IPC Phase 2), and six settlements will have Acceptable levels of acute malnutrition (IPC Phase 1) during the high acute malnutrition season of 2021, May – September 2021. About 24,581 children in the 14 settlements included in the analysis are likely affected by acute malnutrition and in need of treatment. 18,940 children are likely experiencing moderate acute malnutrition while 5,641 children are likely experiencing severe acute malnutrition. Additionally, 2,961 pregnant or lactating women are likely affected by acute malnutrition, also in need of treatment.

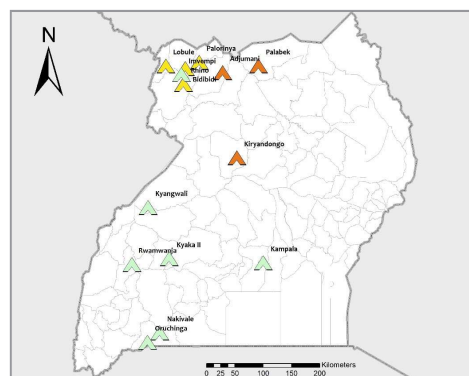
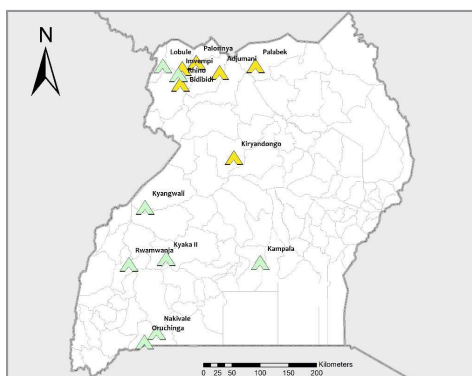
**Where:** Adjumani, Bidibidi, Palabek, Palorinya, Rhino Camp and Kiryandongo refugee settlements were classified in IPC Phase 2 (Alert) with Global Acute Malnutrition (GAM) prevalences of 8.3%, 6.7%, 8.2%, 5.3%, 6.9% and 8.7% respectively during the period of November 2020 to April 2021. On the other hand, Imvepi (4.3%), Lobule (3.5%), Kampala (3.7%), Kyaka II (1.2%), Kyangwali (1.1%), Nakivale (2.2%), Oruchinga (2.1%) and Rwamwanja (2.2%) were all classified in IPC Phase 1 (Acceptable). In the projection period of May – September 2021, it is anticipated that Adjumani, Palabek and Kiryandongo refugee settlements will be classified in IPC AMN Phase 3 (Serious), Bidibidi, Imvepi, Lobule, Palorinya, and Rhino Camp will be classified in IPC Phase 2 (Alert), while the other settlements will remain classified in IPC Phase 1 (Acceptable).

**Why:** The major factors contributing to acute malnutrition in the refugee settlements are: 1) inadequate food consumption, both in terms of quality and quantity due to 40% of refugees food rations cut, with only 22% of the children able to attain a Minimum Dietary Diversity, 36% of the rural refugee population being food insecure according to the CARI indicator, and only 29% of the women able to attain a Minimum Dietary Diversity; 2) declining health seeking behavior as a result of the COVID-19 disruptions, stigma and fear; 3) high disease burden, especially malaria, diarrhea and acute respiratory infections; 4) inadequate IYCF and MIYCAN practices, with only about 62% of infants exclusively breastfed and complementary feeding for children 6-8 months at 70%; 5) low CMAM coverage in most settlements and low Vitamin A supplementation (70%). Furthermore, anaemia among refugee children aged 6-59 months and non-pregnant women aged 15-49 years is of public health concern in most settlements (Severe 2%, Moderate 28%, Mild 24%). Consumption of iron rich foods is still low at 24%.

It is projected that in the period of May – September 2021, disease burden will increase (especially malaria and diarrhea), food consumption will deteriorate further, yet there may be an influx of more refugees in some settlements, as border restrictions are eased, coupled with instability in DRC and South Sudan. These and other factors will most likely lead to increased acute malnutrition among under fives and PLWs (Pregnant or Lactated Women).

### Current situation Nov 2020 - April 2021

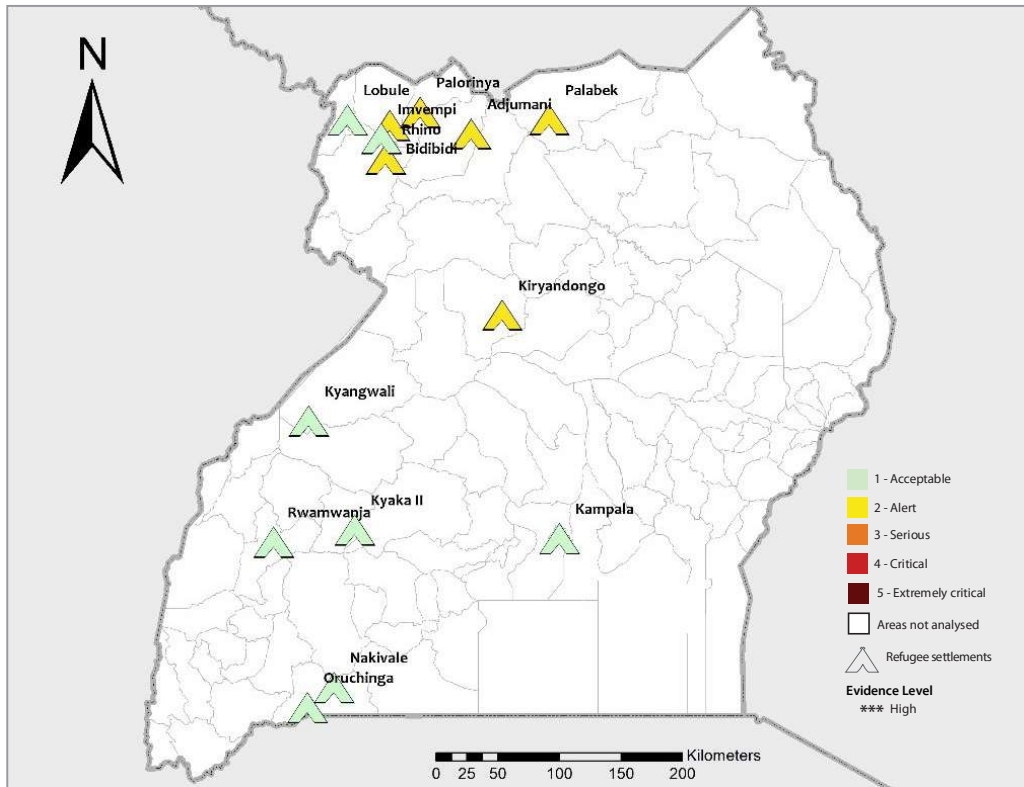
### Projected Situation May - Sept 2021



### Key for the Map IPC Acute Malnutrition Phase Classification

- 1 - Acceptable
  - 2 - Alert
  - 3 - Serious
  - 4 - Critical
  - 5 - Extremely critical
  - Areas not analysed
  - △ Refugee settlements
- Evidence Level**  
\*\*\* High

## CURRENT SITUATION MAP AND OVERVIEW (NOVEMBER 2020 – APRIL 2021)



### Current Situation Overview

Uganda hosts over 1.4 million refugees and asylum seekers, of whom 1.38 million are in 13 rural-based refugee settlements while the other 90,000 are in Kampala. The rural based refugee settlements are Bidibidi, Adjumani, Palorinya, Nakivale, Kyaka II, Rhino Camp, Lobule, Oruchinga, Palabek, Kyangwali, Kiryandongo, Rwamwanja and Imvepi. Of all these settlements, Bidibidi is the largest, hosting about 236,700 refugees, followed by Adjumani with about 219,600 refugees, while Lobule is the smallest, hosting about 5,700 refugees. The unending civil conflicts in South Sudan, DRC, Burundi, Somalia and Rwanda have been the main reason for citizens from those countries seeking asylum and to be hosted as refugees in Uganda. The refugee policy in Uganda grants refugees the right to work, free access to primary health care, free access to education, among other privileges.

General Food Assistance (GFA), both cash and in-kind, remains the main source of food and other livelihoods for refugees in rural settlements, while urban refugees are in most cases deemed to be self-reliant, and not considered for regular programmed assistance. Refugees in rural settlements also grow their own food, although this is affected by limited access to agricultural land, while some are engaged in provision of labour as a source of income to buy food and other essential non-food items. In April 2020, the food rations to refugees were reduced from 100% to 70% of the recommended daily food basket (2100 kcal), and further reduced to 60% in February 2021.

The GFA, in form of cash and in-kind, is contributed by both the United Nations World Food Programme (WFP) and the United Nations High Commissioner for Refugees (UNHCR). Cash is only for food and not other non-food contributions extended within the refugee response. Currently, the GFA contribution modality is 52% cash and 48% in-kind, with Palabek (0.2%), Bidibidi (3%), Palorinya (3%) and Imvepi (4%) receiving the lowest cash assistance, whereas Kyaka II (0.2%), Kyangwali (0.2%), Rwamwanja (2%) and Oruchinga (3%) receive the lowest in-kind GFA. No location within the Uganda refugee response implemented the Blanket Supplementary Feeding Programme (BSFP) in 2018, 2019, and 2020; though this was triggered in Nyakabande Transit Center in 2019.

According to the Food Security and Nutrition Assessment (FSNA) conducted during the low acute malnutrition season of 2020/21 (November 2020), from the 14 refugee settlements, eight of the settlements had less than 5% of children aged 6 - 59 months affected by acute malnutrition, while the other six settlements had over 5% of children affected. No settlement was found to have over 10% of the children affected by acute malnutrition, as per the survey data. According to the IPC AMN scale, six settlements (Adjumani, Bidibidi, Palabek, Palorinya, Rhino Camp and Kiryandongo) were classified in IPC Phase 2 (Alert). All the other settlements of Imvepi, Lobule, Kampala, Kyaka II, Kyangwali, Nakivale, Oruchinga and Rwamwanja were classified in IPC Phase 1 (Acceptable). Of the six settlements classified in IPC Phase 2, Adjumani (8.3%), Palabek (8.2%) and Kiryandongo (8.7%) had a higher GAM prevalence and were at a higher risk of deteriorating into IPC Phase 3 (Serious).



Overall, 1.1% of the children aged 6 - 59 months in the 14 refugee settlements are experiencing severe acute malnutrition and another 4% moderate acute malnutrition, based on the weight-for-height Z-score (WHZ). With the combined GAM, the numbers slightly go up, with 1.6% in severe acute malnutrition and 5.5% in moderate acute malnutrition. Additionally, 4.6% of the pregnant or lactating women in all the settlements are acutely malnourished, with those most affected found in Nakivale settlement (11.5%).

### Contributing Factors

The major contributing factors to acute malnutrition in the refugee settlements include very poor food consumption (both quantity and quality), high prevalence of malaria, acute respiratory infections (ARIs), diarrhea and general decline in health seeking behaviour. Lack of access to a diversified diet and poor meal frequency generally result from low food availability and access. Anaemia is also of significant public health concern in all settlements, except in Kampala where it is about 25%.

Generally, and even with the GFA provided monthly, there is food scarcity, as most households do not have enough food from own production and the usually high prices in the local markets (especially in West Nile) limit the ability to meet the Minimum Expenditure Basket (MEB). Because of reliance on the same foods that are consumed, the Minimum Dietary Diversity (MDD) and Minimum Acceptable Diet (MAD) are very low in the majority of the refugee settlements. From the recent FSNA, only about 22% of the children attain a minimum diet, with those in Palorinya (8%), Kyangwali (11%), Nakivale (16%) and Kyaka II (17%) most affected. In the same way, only 29% of the women are able to attain a Minimum Dietary Diversity (MDD), with Palorinya (11%), Palabek (15%), Adjumani (16%) and Kiryandongo (17%) being the most affected. The diet generally comprises of starchy foods (maize flour, cassava, millet flour) and legumes (beans and groundnuts), with some households feeding on green leafy vegetables (either from market purchase or own production). The consumption of meat (both organ and flesh), eggs, milk, fish and fruits, which are vital in providing iron, vitamins and zinc, is still very low across the refugee population. According to the CARI indicator, about 36% of the refugee population in the rural locations are food insecure, with the most food insecure population found in Palorinya (58%), Rhino camp (49%), Kyangwali (43%) and Bidibidi (41%).

Although most of the COVID-19 preventive measures and lockdown had been relaxed by November 2020, livelihoods had already been disrupted, with the gradual recovery being slow. This livelihood disruption that included loss of casual employment significantly reduced income opportunities for the refugee population (both rural and urban), which affected access to food, health services and other essential items / facilities. Child care practices have been affected and diets greatly compromised, as the only source of finances for market purchase is the cash GFA provided once in two months. The fear to contract the Coronavirus at the health facilities negatively affected the health seeking behaviour among the refugee population, which was exacerbated by infections in some refugee settlements like Nakivale, where 590 refugees and 71 health workers tested positive.

Malaria, Acute Respiratory Infections (ARIs) and diarrhoea cases are high in some refugee settlements, which places a strenuous disease burden on the children, eventually leading to malnutrition. In the refugee settlements classified in IPC Phase 2 (Alert), prevalence of diarrhoea averages 13% and ARIs about 15%, with Rhino Camp registering an ARI rate as high as 19%. Malaria prevalence is a health concern, averaging 34% in the settlements classified in IPC Phase 2 (Adjumani 31%, Bidibidi 41%, Kiryandongo 14%, Palabek 49% and Rhino camp 34%). Of the refugee settlements classified in IPC Phase 1 (Acceptable), Rwamwanja has the highest malaria prevalence at 48%, while Nakivale has the highest ARI prevalence of 33%.

There is inadequacy in breastfeeding practices, other Infant and Young Child Feeding (IYCF) practices and Maternal, Infant, Young child and Adolescent Nutrition (MIYCAN) practices / interventions in most of the refugee settlements. Exclusive breastfeeding is low at 62% across all settlements and poorest in Kiryandongo (36%), Adjumani (42%), Rhino Camp (42%), Palorinya (44%), Lobule (46%) and Kampala (49%). Much as in Kampala it is possible, the low exclusive breastfeeding is a result of mothers being involved in day-to-day wage employment, the increasing urge for introduction of semi-solid and solid foods at a very young age most likely explains the low exclusive breastfeeding among the rural based settlements. Bottle feeding, though on the rise, is not yet a worrying practice, averaging 8% and only highest in Kampala at 37%. Timely / early initiation of breastfeeding within an hour after birth is still low at 74%, though way above the national average. Proper breastfeeding practices help the child to get the nutrients necessary for protection against diarrhoea and other common illnesses such as ARIs, with other longer-term health benefits. It has also been established that colostrum is rich in child protective factors. On the contrary, inadequate breastfeeding deprives the child of essential nutrients, leading to reduced immunity that then exposes the child to infections. From the recent assessment, about 70% of the children aged 6-8 months are exposed to complementary feeding, with Palorinya and Lobule (both at 50%) registering the lowest rate, while Palabek at 94% having the highest number of children being exposed to complementary feeding at 6 months. In most of the settlements, continued breastfeeding up to 1 year and up to 2 years remains below the UNHCR post emergency thresholds of 90% and 60% respectively. The early exposure to mixed feeding coupled with limited breastfeeding exposes children to reduced immunity as they miss out on the needed nutrients.

Poor Vitamin A supplementation (70%), inadequate access to a sufficient quantity of water and sub-optimal hygiene practices in some settlements expose the children to diarrhea and skin infections resulting in malnutrition. The CMAM coverage is sub-optimal, implying that active case finding and referral for Integrated Management of Acute Malnutrition (IMAM) services is not reaching all children in need of care.



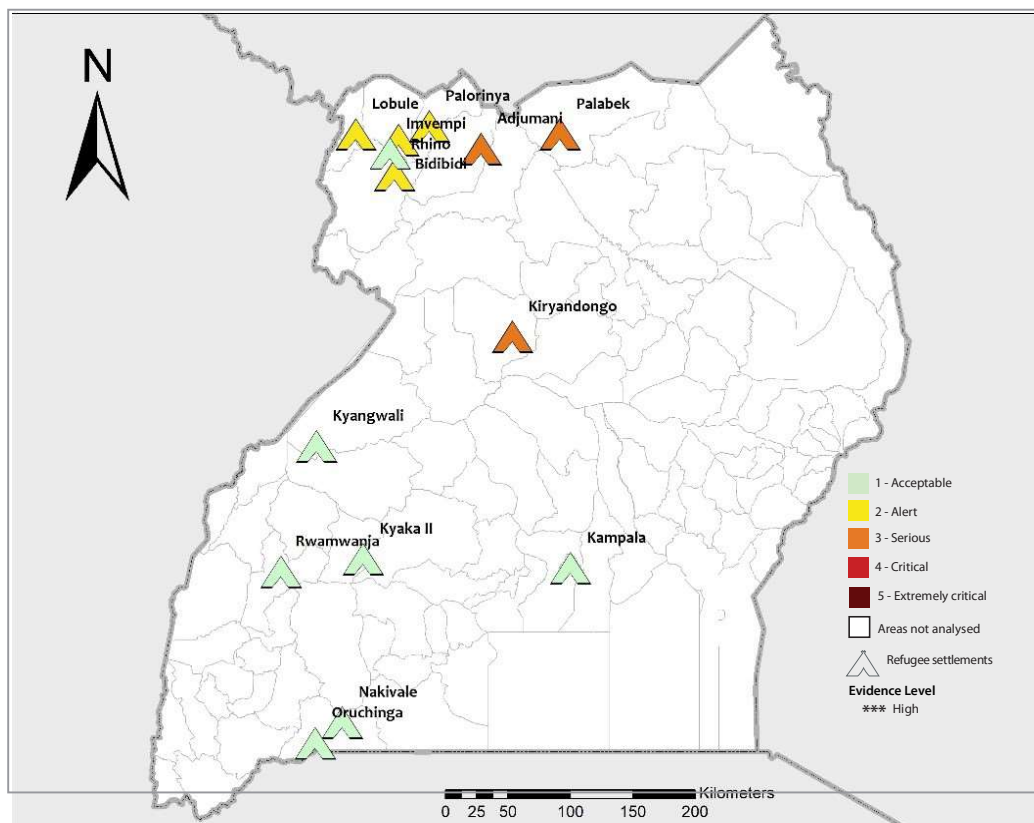
High levels of anaemia (among refugee children as well as among women) are of major public health concern that calls for urgent attention in all settlements. Anaemia among children 6-59 months contributes to reduced immunity, loss of appetite, body weakness, etc., which affects intake and absorption of nutrients, growth and development leading to acute malnutrition, and among women, the same side effects can affect the intake of food, leading to intra-uterine growth retardation and eventually low birth weights. Overall, 53% of the children 6-59 months are anaemic, with the highest number of children suffering from anaemia being in Lobule (79%), Bidibidi (74%) and Palabek (63%), yet the lowest number is found in Kampala (25%). Iron deficiency anaemia resulting from poor quality of food and malarial anaemia are highly probable contributing factors for acute malnutrition among the refugee population. The consumption of iron rich foods is still low at 24% across all settlements, with Bidibidi registering the highest consumption rate at 35% and Palorinya the lowest at 8%. The consumption of organ meat (1%), flesh meat (4%) and milk (9%) is still very low, yet these are good sources of iron for the children under five years of age.

### Trend analysis

Historical data on both acute malnutrition as well as contributing factors that are comparable are available for all refugee settlements both from the FSNA and Mass Screening exercises. Available data show improvement in the nutrition status of under 5 children in some settlements, yet there has been deterioration in others. The acute malnutrition prevalence during the low acute malnutrition periods of 2015, 2017 and 2020 were 6.9%, 7.8% and 5.1% respectively for all refugee settlements put together. Adjumai, Rhino Camp and Kiryandongo had the highest levels of acute malnutrition in 2015 of 11%, 10.5% and 9.7% respectively, whereas Palabek, Bidibidi and Adjumani settlements had the highest levels of acute malnutrition in 2017 of 12.3%, 11.8% and 11.8% respectively. In 2020, Kiryandongo, Adjumani and Palabek settlements had the highest GAM prevalence of 8.7%, 8.3% and 8.2% respectively. Even though there was no anthropometric study done in 2018 and 2019 in the refugee settlements, available mass screening data indicates worsening SAM and MAM admissions for some settlements, with the same data indicating an improvement in others, compared to the past years.

The food security situation, water use and sanitation and toilet facility coverage had improved during the last five years, owing to the livelihood improvement programmes in the refugee settlements. However, the food security situation started deteriorating in 2020 due to the COVID-19 crisis and massive cuts in food rations from 100% of the daily calorie requirement to 60%.

## PROJECTED SITUATION OVERVIEW AND MAP (MAY – SEPTEMBER 2021)





## Projected Situation Overview

During the projection period (May – September, 2021), three refugee settlements are anticipated to be in IPC Phase 3 (Serious), five settlements are expected to be in IPC Phase 2 (Alert) and six settlements are projected to be in IPC Phase 1 (Acceptable). While Adjumani, Kiryandongo and Palabek settlements, that are currently in IPC Phase 2, will likely deteriorate to IPC Phase 3, Imvepi and Lobule settlements, that are currently in IPC Phase 1, will likely deteriorate to IPC Phase 2. On the other hand, Bidibidi, Palorinya and Rhino Camp refugee settlements, that are currently in IPC Phase 2, and Kampala, Kyaka II, Kyangwali, Nakivale, Oruchinga and Rwamwanja settlements, currently in IPC Phase 1, will most likely remain in the same Phase through the projection period of May – September 2021, although the acute malnutrition situation is expected to slightly deteriorate. The magnitude of the acute malnutrition and its contributing will vary from settlement to settlement. Generally, the major contributing factors to acute malnutrition driving higher Phases will most likely be inadequacy in food consumption and increased disease burden.

During the projection period, 24,581 children will be in need of treatment for acute malnutrition, of whom 18,940 are in moderate acute malnutrition and 5,641 are in severe acute malnutrition. Bidibidi refugee settlement has the highest absolute number of children in severe acute malnutrition (1,046), whereas Adjumani settlement has the highest number of children in moderate acute malnutrition (4,551). Across the refugee settlements, about 2,961 pregnant or lactating women are acutely malnourished, based on the MUAC index, and are in need of treatment. Bidibidi refugee settlement has the highest number of PLWs in need of treatment (462), while Adjumani, Kampala and Lobule settlements do not have any acutely malnourished pregnant or lactating women.

Most COVID-19 restrictions that directly affect household food availability and access, including market access, have been relaxed. The economy is now deemed to be functioning normally, except for the restrictions on wearing masks and curfew time observation which limits working time. The refugee population is now able to participate in local trade and access health services which will most likely lead to improvement in the nutrition status. The ongoing general vaccination against the Coronavirus will eventually lead to a decline in new infections, thus reducing the fear, stigma and COVID-19 related disruptions among the refugee population.

Dependence on GFA, particularly cash assistance from WFP and UNHCR, both from routine distribution and the one-off safety net program, will continue throughout the projection period, with food rations anticipated to remain at 60% of the daily calorie requirement. The double ration cash distribution may, however, lead to increased extravagance, as most refugee households have no exposure to financial literacy, which may cause some food security shocks. Some refugee households have a tendency to divert the cash to access other needs rather than purchase enough food in advance of the two-month period.

The Child Sensitive Emergency Cash Based Transfer (CSECBT) program, implemented by WFP, that provides financial assistance to pregnant or lactating women and girls (48,000UGX per child or pregnant/lactating woman), coupled with financial literacy to improve livelihood capabilities, will most likely continue through the projection period. This will continue to improve food security among beneficiaries, especially those in Rhino Camp.

The current switch from Specialised Nutritious Feed (SNF) to Fresh Food Vouchers by WFP and Save the Children International, which will also continue in the projection period, may gradually improve food consumption and diversity among the refugee population. The switch is intended to create self-resilience among beneficiaries and also improve access to fresh foods.

Food availability and access will first likely improve in June and July, as first season harvests by refugee population and host community start. However, as the new agricultural season starts in August, which is the main season for most settlements, especially those in Western and South Western Uganda, food availability will gradually decrease, as households resort to planting the little stock they will have gathered from the first season. For the settlements in West Nile, they will most likely suffer further food shortages, as they have had a bad first season due to erratic weather and other factors that greatly affected food production in this season. It is also likely, that due to low production within the host community in West Nile there will be scarcity in the markets, further leading to increases in market prices. The mix of increasing food prices and low incomes will further constrain poor refugee households from accessing food. Overall, the food security situation is not expected to improve in most settlements during the projection period, which will lead to further deterioration in the nutrition status of children and mothers.

With the expected food shortages in some settlements and since the 60% food ration is not enough for the refugees to meet the MEB, it is anticipated that dietary diversity will further deteriorate in these settlements, leading to more acute malnutrition cases.

IYCF practices are expected to deteriorate, as care takers will spend most of the time in their gardens. The practice of bottle feeding will most likely increase, followed by a decline in breastfeeding, as parents leave children under the care of young siblings.

Prevalence and /or incidences of malaria, diarrhoea and acute respiratory infections will likely increase in the projection period, because of the highly expected rains and also in line with historical seasonal changes. Heavy rains increase occurrence of stagnant water and bush cover which encourage mosquito breeding. On the other hand, during the rainy season, refugee household members are tempted to use the freely flowing water that contains fecal matter from open and destroyed sanitary facilities, which in turn increases incidences of diarrhea. It is a common case in many settlements that waste management systems deteriorate during the rainy season, increasing malaria, diarrhea and ARI infections. Due to its location and proximity to the DRC, there is most likely to be spontaneous outbreak of Ebola, Cholera, and Crimean–Congo Hemorrhagic Fever (CCHF) in Kyangwali refugee settlement.



Hand washing practices will likely still be observed during the projection period because of COVID-19 prevention measures and other WASH practices may also improve in some settlements, given the fact that the majority of the refugee population have access to protected water sources and improved sanitation facilities. However, in settlements with non-improved sanitation facilities like Imvepi and Palorinya, there may be deterioration in WASH practices, due to the expected rains in the projection period, leading to water-borne diseases/infections.

CMAM coverage will gradually improve, as the recent FSNA results may trigger response from Non-Governmental Organisations, Ministry of Health and other partners. Additionally, the change in management protocol of MAM from Super Cereal Plus (CSB++) to Ready to Use Supplementary Food (RUSF) for Children aged 6-59 months, in settlements like Kyangwali, will most likely improve the management of acute malnutrition.

The expected stopping of the preventive ration currently implemented in settlements like Kyaka II will lead to reduction in utilization of Antenatal Care (ANC), Prenatal Care (PNC) and Young Child Clinic (YCC) services by mothers and children.

With the expected opening of borders as COVID-19 restrictions are relaxed further, and also with the already many porous entry points, there is an expected influx of refugees, which will lead to further strain on the little resources, including cash and food, and may eventually lead to further malnutrition in some settlements.

The rainy season usually leads to a breakdown in the road network, coupled with seasonal rivers flooding, which will affect coverage due to difficulty in accessing health services, VHT/Health workers access to clients and skilled birth attendance, may also be affected in settlements with an already poor road network.

Anaemia is expected to remain high throughout the projection period as there are currently no planned activities intended to reverse the trend. The production and consumption of iron rich foods that may have naturally reversed the anaemia trend is expected to remain low or even deteriorate in the projection period.

## SUMMARY POPULATION TABLE (NOVEMBER 2020 – SEPTEMBER 2021)

Settlement	No. of Children (6-59 Months) in Need of Treatment			Total No. of Cases of Pregnant and Lactating Women in Need of Treatment
	GAM Treatment	MAM Treatment	SAM Treatment	
Adjumani	5,474	4,551	923	0
Bidibidi	4,744	3,698	1,046	462
Imvepi	1,111	878	233	162
Kampala	663	478	184	0
Kiryandongo	2,627	1,993	634	118
Kyaka II	584	487	97	355
Kyangwali	691	502	188	310
Lobule	79	79	0	0
Nakivale	1,258	572	686	796
Oruchinga	80	65	15	18
Palabek	1,676	1,206	470	175
Palorinya	2,017	1,865	152	161
Rhino Camp	2,665	2,234	431	259
Rwamwanja	913	332	581	145
All Settlements	<b>24,581</b>	<b>18,940</b>	<b>5,641</b>	<b>2,961</b>



## RECOMMENDATIONS FOR ACTION

### Response Priorities

In the short term:

- Scale up screening and treatment for SAM and MAM cases identified in the projection period, particularly in settlements with low coverage. Early case identification needs to be scaled up for both children and pregnant and lactating women.
- Strengthen the integrated multisectoral approaches to addressing the major causes of acute malnutrition i.e., livelihood, WASH, distribution of ITNs, rehabilitation of infrastructure like roads, markets, hospitals, etc.
- Strengthen shock responsive social protection to improve resilience of households to shocks and vulnerabilities.
- Promote improved farming (more so Climate Smart Agriculture) and storage techniques, especially for the refugee population with limited access to agricultural land. Engage more stakeholders in establishing food storage facilities at settlement level to improve food security.
- Promote nutrition sensitive agriculture, especially by promoting the growing of nutrient dense foods like orange-fleshed sweet potato, iron and zinc rich beans, and protein enriched maize.
- Strengthen prevention, testing and treatment of malaria and acute respiratory infections at health facilities that are in close proximity to the settlements.
- Scale up iron supplementation programmes and other anaemia prevention strategies. There is a need to invest in multisectoral efforts to reduce anaemia among all vulnerable groups and also promote the production and consumption of iron rich foods.
- Improve micronutrient intake i.e., multiple micronutrient supplementation e.g. MNP + fortification.
- Scale up and intensify community sensitization on good IYCF and MIYCAN practices among the rural refugee population.
- Increase coverage of CMAM services and also strengthen MIYCAN related interventions among the urban refugees.
- Strengthen community structures and partnerships for prevention and management of acute malnutrition. There may be the need to scale up community awareness campaigns on good nutrition for children, pregnant and lactating mothers.
- Improve access to skilled health care and nutrition services, and similarly increase integrated outreach emphasizing vaccination, vitamin A supplementation and deworming.
- Strengthen counselling of caregivers on improved and recommended Maternal, Infant and Young Child Feeding (MIYCF) and MIYCAN practices.
- Scale up Social Behaviour Change Communication (SBCC) on health and WASH.

In the medium to long term:

- Invest more in post-harvest handling practices to reduce food losses that contribute to food insecurity.
- Empower beneficiaries with life and vocational skills for improved livelihoods, including financial literacy.
- Empower the refugee community to understand rainfall patterns and early warning systems to reduce climate related shocks to agricultural production.
- Enable refugee households to diversify their livelihoods by engaging in other income-generating activities.
- Improve market systems to increase food and other products supply in the refugee settlements.
- Review contingency plans for emergency needs in case of an abrupt refugee influx when the borders are opened to refugees and asylum seekers.
- Venture further into multi-partner integration and linkages across nutrition thematic interventions.
- Consider the possibility of conducting nutrition assessments during the high acute malnutrition season.
- Investigate the reasons for the low coverage of CMAM programme, ideally by conducting coverage surveys.

### Situation monitoring and update

- While appropriate programmes are put in place to address the poor quality and quantity of food consumption, it is important to monitor their progress.
- It is important to monitor response to the high malaria prevalence among the refugee population.
- Further monitor secondary economic impacts of the COVID-19 pandemic, including loss of employment opportunities, reduced access to markets, etc.
- Where possible, a Comprehensive Food Security and Vulnerability Assessment (CFSVA) should be conducted across the refugee settlements. In the meantime, it may be necessary to carry out an IPC Acute Food Insecurity analysis to review the food security situation in the refugee settlements.



### Risk factors to monitor

- Admission trends of acute malnutrition
- Coverage of CMAM programs, immunisation and vitamin A coverage
- Deterioration of IYCF practices due to limited time of the mothers and care takers to look after children
- Utilization of ANC, PNC and YCC services at health facilities
- Health seeking behaviours as most mothers will be engaged in agricultural activities; monitor response to vaccination exercises and uptake and use of ITNs
- Increased disease burden, especially malaria and acute watery diarrhoea
- Further reduction in the food rations by WFP / UNHCR
- COVID-19 pandemic and its related effects that might impact on food availability and accessibility
- Market and household food stocks and market prices
- Post-harvest behaviours and practices, including the massive sale of food immediately after harvest
- Livestock and crop pests / vectors and diseases as these may affect production
- Anticipated refugee influx, which may also be linked with some disease epidemics making the hosting refugees more vulnerable.

### PROCESS AND METHODOLOGY

A team of Nutrition, Health, Food security, WASH and Statistics experts, working at central as well as refugee settlement level in Uganda, carried out the analysis using the standard IPC Acute Malnutrition Version 3.0 protocols. Prior to the analysis, all analysts underwent a training on IPC Acute Malnutrition. This training was based on the IPC Technical Manual Version 3.0, and all participants who took part in the training were involved in the analysis.

The training and analysis were conducted between 19th-27th April, 2021.

This hybrid analysis was technically supported by the IPC Global Support Unit and carried out under the overall co-ordination and leadership of the IPC Technical Working Group in Uganda. Financial support was provided by the United Nations World Food Programme, Uganda Office.

### Sources

The data used in this analysis mainly came from the Food Security and Nutrition Assessment (FSNA) conducted in December 2020 for the 14 refugee settlements of Uganda, by UNHCR and WFP. Data from mass screening exercises conducted on behalf of UNHCR by Action Against Hunger (ACF), Medical Teams International (MTI), International Rescue Committee (IRC), Food For The Hungry, Save the Children, and general health facility data from the Health Information System (HIS) was also used. Historical FSNA were used to compare the current situation with the past and conduct trend analysis.

### Limitations

- Lack of some specific data pertaining to some settlements, like disease outbreak.
- Most of the analysts were new to the IPC, which took them time to adapt vis-à-vis understanding the IPC tool and how it is used.

### What is the IPC and IPC Acute Malnutrition?

The IPC is a set of tools and procedures to classify the severity and characteristics of acute food insecurity and acute malnutrition crises as well as chronic food insecurity based on international standards. The IPC consists of four mutually reinforcing functions, each with a set of specific protocols (tools and procedures).

The core IPC parameters include consensus building, convergence of evidence, accountability, transparency and comparability. The IPC analysis aims at informing emergency response as well as medium and long-term food security policy and programming.

The IPC Acute Malnutrition Classification provides information on the severity of acute malnutrition, highlights the major contributing factors to acute malnutrition, and provides actionable knowledge by consolidating wide-ranging evidence on acute malnutrition and contributing factors.

### Contact for further Information

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IPC Global Support Unit  
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### IPC Analysis Partners:







## FACTORS CONTRIBUTING TO ACUTE MALNUTRITION

CONTRIBUTING FACTORS		Adjumani	Bidibidi	Imvepi	Kampala	Kiryandongo	Kyaka II	Kyangwali	Lobule	Nakivale	Oruchinga	Palabek	Palorinya	Rhino Camp	Rwamwanja	
	Food consumption	Minimum Dietary Diversity (MDD)	Major	Minor	Major	Major	Major	Major	Major	Major	Major	Major	Major	Major	Major	
		Minimum Meal Frequency (MMF)	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		Minimum Acceptable Diet (MAD)	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		Minimum Dietary Diversity – Women (MDD-W)	Major	Minor	Minor	Major	Major	Major	Minor	Minor	Major	Major	Major	Major	Major	Minor
	Health status	Diarrhoea	Minor	Minor	Major	Minor	Minor	Major	Major	Minor	Minor	Major	Minor	Major	Major	
		Dysentery	No	No	No	No	No	No	No	No	No	No	No	No	No	No
		Malaria	Major	Major	Major	No	Minor	Major	Major	No	Major	Major	Major	Major	Major	Major
		HIV/AIDS prevalence	Minor	Minor	No	No	No	No	No	No	No	No	No	No	No	No
		Acute Respiratory Infection	Minor	Major	Major	No	Minor	Major	Minor	No	Major	Major	Minor	No	Major	Major
		Disease outbreak	No	No	No	No	No	No	No	No	No	No	No	No	No	No
	Food security	Outcome of the IPC for Acute Food Insecurity analysis	Major	Minor	Major	Major	Minor	Major	Major	Major	Minor	Major	Major	Major	Major	
	Caring and feeding practices	Exclusive breastfeeding under 6 months	Major	Major	Minor	Major	Major	No	Major	Minor	Minor	Major	Major	Major	Major	
		Continued breastfeeding at 1 year	Major	Minor	No	Major	Minor	No	No	Minor	Minor	Minor	Minor	Minor	Minor	
		Continued breastfeeding at 2 years	Major	Minor	No	Major	Minor	Minor	No	Minor	Minor	Minor	Minor	Minor	Minor	
		Introduction of solid, semi-solid or soft foods	Major	Major	Minor	Minor	Minor	Minor	No	Major	Minor	Minor	Minor	Minor	Minor	
		Timely initiation of breast feeding	Major	Minor	No	No	Minor	Major	No	No	Minor	Minor	Major	Minor	No	No
	Health services & environmental health	Measles vaccination	Minor	No	No	Major	No	No	No	No	No	Major	Minor	No	No	
		Polio vaccination	Minor	No	No	No	Minor	No	No	No	No	No	No	No	No	
		Vitamin A supplementation	Minor	No	No	No	No	Minor	Minor	No	No	Major	Minor	No	Major	
		Skilled birth attendance	Minor	Minor	Minor	No	No	No	No	No	No	Minor	Minor	No	Minor	
<b>Legend</b>		<b>Major Contributing Factor</b>	<b>Minor Contributing Factor</b>			<b>No Contributing Factor</b>				<b>No data</b>						



## TOTAL NUMBER OF CASES OF CHILDREN 6-59 MONTHS AND PREGNANT OR LACTATING WOMEN AFFECTED BY ACUTE MALNUTRITION AND IN NEED OF TREATMENT

The expected number of cases of acute malnutrition among children under five was calculated using the following formula:  $npk$ , where  $n$  is the number of children under the age of five years,  $p$  is the prevalence of acute malnutrition (based on combined GAM), and  $k$  is the incident correction factor of 2.6.

The expected number of cases of acute malnutrition among pregnant and lactating women was calculated using the formula  $np$ ; where  $n$  is the number of PLWs and  $p$  is prevalence of acute malnutrition (based on MUAC, estimated at <23cm).

Settlements	Children under 5							Pregnant and Lactating women		
	Total #	Combined GAM %	Combined MAM %	Combined SAM %	Estimated number of GAM cases	Estimated number of MAM cases	Estimated number of SAM cases	Total #	AMN %	# of cases AMN
Adjumani	25,366	8.3%	6.9%	1.4%	5,474	4,551	923	10,982	0.0%	0
Bidibidi	26,833	6.8%	5.3%	1.5%	4,744	3,698	1,046	11,836	3.9%	462
Imvepi	9,936	4.3%	3.4%	0.9%	1,111	878	233	3,440	4.7%	162
Kampala	7,078	3.6%	2.6%	1.0%	663	478	184	4,561	0.0%	0
Kiryandongo	11,613	8.7%	6.6%	2.1%	2,627	1,993	634	3,578	3.3%	118
Kyaka II	18,718	1.2%	1.0%	0.2%	584	487	97	6,236	5.7%	355
Kyangwali	24,152	1.1%	0.8%	0.3%	691	502	188	6,323	4.9%	310
Lobule	871	3.5%	3.5%	0.0%	79	79	0	285	0.0%	0
Nakivale	21,999	2.2%	1.0%	1.2%	1,258	572	686	6,923	11.5%	796
Oruchinga	1,397	2.2%	1.8%	0.4%	80	65	15	412	4.3%	18
Palabek	7,859	8.2%	5.9%	2.3%	1,676	1,206	470	2,779	6.3%	175
Palorinya	14,640	5.3%	4.9%	0.4%	2,017	1,865	152	6,205	2.6%	161
Rhino Camp	15,073	6.8%	5.7%	1.1%	2,665	2,234	431	6,169	4.2%	259
Rwamwanja	15,958	2.2%	0.8%	1.4%	913	332	581	3,815	3.8%	145
<b>Grand Total</b>	<b>201,493</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>24,581</b>	<b>18,940</b>	<b>5,641</b>	<b>73,543</b>	<b>N/A</b>	<b>2,961</b>

The expected number of cases of acute malnutrition among children under five was calculated using the following formula:  $npk$ , where  $n$  is the number of children under the age of five years,  $p$  is the prevalence of acute malnutrition (based on combined GAM), and  $k$  is the incident correction factor of 2.6.

Settlements	Children under 5						
	Total #	Combined GAM %	Combined MAM %	Combined SAM %	Estimated number of GAM cases	Estimated number of MAM cases	Estimated number of SAM cases
Adjumani	25,366	11.7%	9.6%	2.1%	7,716	6,331	1,385
Bidibidi	26,833	7.6%	5.6%	2.0%	5,302	3,907	1,395
Imvepi	9,936	4.9%	4.0%	0.9%	1,266	1,033	233
Kampala	7,078	4.6%	3.1%	1.5%	847	570	276
Kiryandongo	11,613	12.4%	9.8%	2.6%	3,744	2,959	785
Kyaka II	18,718	3.6%	2.5%	1.1%	1,752	1,217	535
Kyangwali	24,152	4.2%	3.4%	0.8%	2,637	2,135	502
Lobule	871	5.1%	4.0%	1.1%	115	91	25
Nakivale	21,999	3.5%	2.1%	1.4%	2,002	1,201	801
Oruchinga	1,397	3.0%	2.0%	1.0%	109	73	36
Palabek	7,859	9.7%	6.4%	3.3%	1,982	1,308	674
Palorinya	14,640	7.4%	6.7%	0.7%	2,817	2,550	266
Rhino Camp	15,073	9.2%	7.3%	1.9%	3,605	2,861	745
Rwamwanja	15,958	4.4%	2.5%	1.9%	1,826	1,037	788
<b>Grand Total</b>	<b>201,493</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>35,721</b>	<b>27,273</b>	<b>8,447</b>