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Fill the Nutrient Gap Rwanda

REFUGEE SUMMARY REPORT



March 2019



Fill the Nutrient Gap Rwanda | REFUGEE SUMMARY REPORT

Refugee Settlements in Rwanda: Introduction

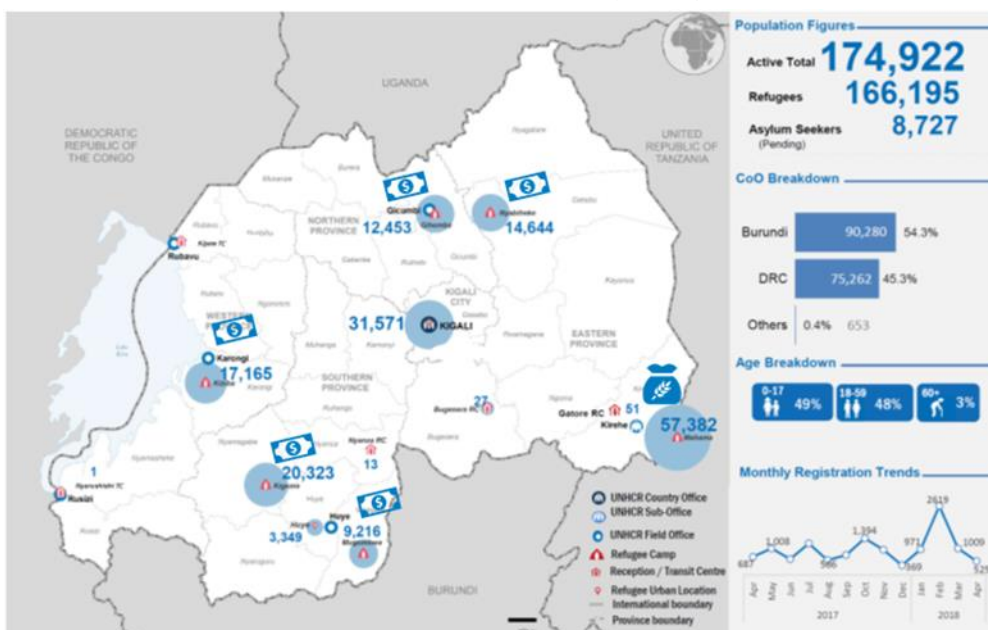
Political and ethnic conflicts in the Great Lakes Region¹, coupled with a favourable refugee policy, have given rise to the refugee crisis in Rwanda. By the end of 2017 Rwanda hosted almost 175,000 refugees, 79 percent of whom now reside in six camps provided by the government of Rwanda, while the remainder reside in Kigali and are classified as urban refugees.

Congolese refugees have been fleeing to Rwanda since 1996 and constitute 78,750 people or 45 percent of the refugee population, residing in the original five camps in the northern and western areas of the country (Gihembe, Nyabiheke, Kiziba, Kigeme and Mugombwa). These camps receive monthly cash-based transfers from the WFP (World Food Programme).

The refugee population in Rwanda increased significantly from 2015 following election-related conflicts in Burundi. This influx necessitated opening a sixth camp, Mahama in Kirehe district. Mahama is now Rwanda's largest refugee camp, currently home to over 57,382 Burundian refugees or 34 percent of the refugee population in Rwanda. The WFP provides monthly food rations to this camp but aims to change to cash-based transfers following an upcoming feasibility study. Refugees from Burundi continue to flow into Rwanda at a rate of 40–80 people per month and this flow is not expected to slow down in the near future.

Forty nine percent of the refugees in Rwanda are under the age of 18 while 15 percent are under the age of 5. The location and size of the refugee camps as well as the WFP assistance modalities used is shown in Figure 1.

Figure 1: Location, size and WFP assistance modalities used in the Rwandan refugee camps (UNHCR, 2018).



¹ This region comprises the following countries that surround the African Great Lakes: Burundi, the Democratic Republic of the Congo, Kenya, Rwanda, Tanzania and Uganda.

Rwanda's favourable policy allows refugees to work, move freely within the country, establish companies, pay taxes and create jobs. Despite this, refugees face significant challenges in accessing livelihoods and income-generating opportunities, resulting in an excessive reliance on WFP and UNHCR (United Nations High Commissioner for Refugees) assistance to meet food and non-food needs. Chronic malnutrition is widespread across the camps and improvements in stunting and anaemia have been inconsistent over the past six years.

Addressing malnutrition in refugee camps in a sustainable manner requires taking a gender-sensitive lifecycle approach that engages both men and women, with a special focus on the most nutritionally vulnerable: children under 2 years of age, adolescent girls, and pregnant and lactating women (PLW). It must include a range of context-specific, targeted interventions that engage stakeholders across multiple sectors.

Fill the Nutrient Gap (FNG) in Rwanda: Purpose

The overarching objective of the FNG was to bring stakeholders together to identify and prioritize context-specific policies and programmes, across food, health and social protection systems with the aim of improving nutrient intakes of target groups. The results from the FNG at national level are to be used to inform and complement the new National Nutrition Policy, among other evidence-based strategic documents. The FNG team in the WFP country office identified the need for an additional FNG analysis that would be used to inform WFP, UNHCR and stakeholder programmes in refugee camps.

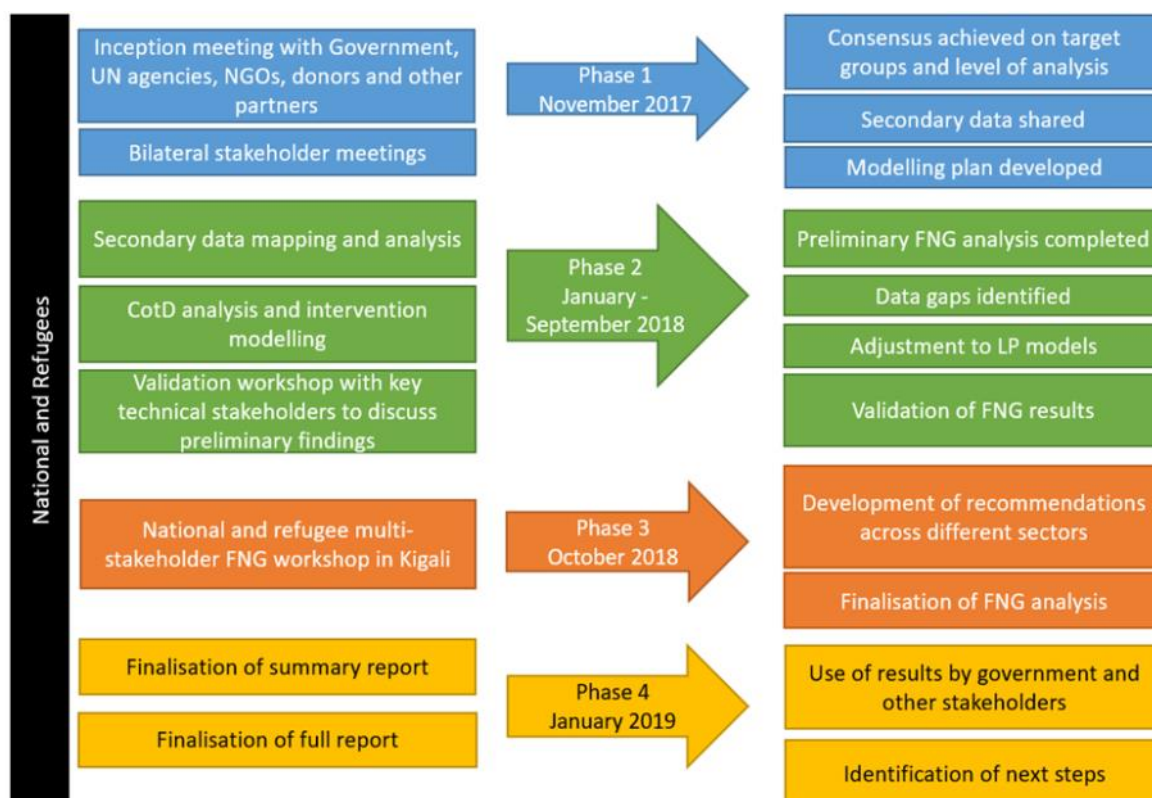
The FNG analysis has identified the current knowledge gaps regarding refugees so that assessments can be undertaken to address these and strengthen evidence-based programming. The FNG process has brought stakeholders together to share their programming experiences within the camps and identify priority nutrition-specific and nutrition-sensitive interventions.

FNG in the Refugee Camps: Process

The FNG process for the refugee camps ran from November 2017 to October 2018. The analysis comprised a comprehensive literature review of available secondary data sources in combination with linear programming (LP) using the Cost of the Diet (CotD) software. The aim was to understand context-specific barriers to adequate nutrient intake and to model potential interventions to improve access to nutrients, particularly from nutritious foods.

At the start of the process, the Rwanda FNG team met with Non-Government Organisations (NGOs) and UNHCR working in the camps to: introduce the FNG process; collate secondary data sources, and; identify possible interventions, entry points and transfer modalities to test in the CotD modelling. Over 40 data sources were identified and reviewed and the CotD analysis intervention modelling was carried out. Full findings were presented, first within the WFP country office internally to all units working in the refugee camps and then to UNHCR and the wider stakeholder group as part of a recommendations formulation workshop. The detailed FNG process in Rwanda is illustrated in Figure 2.

Figure 2: The FNG process followed in Rwanda.



FILL THE NUTRIENT GAP: SITUATION ASSESSMENT FOR MULTI-SECTORAL DECISION MAKING ON THE PREVENTION OF MALNUTRITION²

Malnutrition has two direct causes: inadequate nutrient intake and disease. As its name specifies, the Fill the Nutrient Gap (FNG) assessment focuses on gaps in nutrient intake to inform a country's national policies and actions that can be taken to improve nutrition among their population, with a focus on the most vulnerable.

The FNG assesses the extent to which people have choices. It considers the availability, physical access and affordability of nutritious foods required for adequate nutrient intake. It seeks to understand why households make the food choices they do. Finally, it identifies context-appropriate interventions that can be implemented by different sectors to enable people to choose more nutritious foods, and hence fill nutrient gaps.

The assessment comprises two components:

1. A country-specific review of secondary data and information on factors that reflect or affect dietary intake. This includes malnutrition trends over time, characteristics of the food system and food environment, and population behaviour related to food and feeding.
2. An assessment of the extent to which economic barriers prevent adequate nutrient intake. This uses the Cost of the Diet linear programming software developed by Save the Children (UK),

and includes modelling of the economic impact of possible interventions to increase nutrient intake and fill nutrient gaps.

Malnutrition cannot be addressed by one sector alone. FNG is designed to inform multisectoral decision-making and therefore engages stakeholders from all sectors including food, health, agriculture, education, and social protection systems throughout the assessment.

It is the stakeholders who define the scope and focus of the assessment. They contribute data and sources of information for identification of context-specific barriers and entry points, and develop a shared understanding of the issues and possible solutions. They then identify appropriate nutrition-specific and nutrition-sensitive interventions that can be implemented by different sectors using their existing delivery platforms. These could be social safety nets, food processing and markets, antenatal care, school feeding programmes and others.

The FNG assessment has been developed by the WFP with technical support from: The University of California Davis; the International Food Policy Research Institute (IFPRI, Washington DC); Epicentre (Paris); Harvard University (Boston); Mahidol University (Bangkok); Save the Children (UK); and UNICEF.

At the end of 2018, the FNG had been conducted in 17 countries and started in another 8.

²For more information on the concept and the method of the analysis, see Bose I, Baldi G, Kiess L, de Pee S. The 'Fill the Nutrient Gap' Analysis: An approach to strengthen nutrition situation analysis and decision-making toward multisectoral policies and systems change. *Matern Child Nutr* 2019; DOI: 10.1111/mcn.12793

COST OF THE DIET ANALYSIS

The CotD software uses LP to understand the extent to which poverty, food availability and prices may affect the ability of people to meet their nutrient needs.

Using price data collected from markets or from secondary sources, the software calculates the amount, combination and cost of local foods that are needed to provide individuals or households with their average needs for energy and their recommended intakes of protein, fat and micronutrients³. These diets are calculated within defined constraints to prevent the inclusion of unrealistic types or amounts of food and the provision of excessive amounts of nutrients.

The FNG approach defines the Staple Adjusted Nutritious Diet: the lowest cost nutritious diet that includes the typical staple foods and excludes foods that are considered taboo⁴. This diet is referred to as the 'nutritious' diet throughout this summary. Population expenditure data is compared to the cost of this nutritious diet and is used to estimate the proportion of the population that would not be able to afford a nutritious diet. This non-affordability can be estimated and compared across different regions, seasons or countries.

Primary market survey data was collected during the November round of the Post Distribution Monitoring (PDM) to determine the price per 100 g of food in each market within the camp⁵. Using this information, a nutritious diet was estimated for a model household of five members which included a breastfed child of 12–23 months, a school-aged child of 6–7 years, an adolescent girl of 14–15 years, a lactating woman and an adult man. Two portions of the staple foods (rice or maize, and beans) were included for all household members per day, with the exception of the child aged 12–23 months, who received one portion per day⁶.

The CotD software is also used to model interventions with the objective of improving the affordability of a nutritious diet for individuals and/or households. The selection of potential interventions for modelling was informed by the secondary data review and stakeholder consultations. It included:

- Increased availability of local nutritious (unfortified) foods and biofortified foods.
- Different types of complementary foods or specialised nutritious foods made available through the market and/or social safety nets.
- Micronutrient supplementation.
- Fortification of staple foods.
- Cash transfer values or in-kind food assistance for refugee households targeted through WFP assistance programmes.

The modelled interventions are theoretical and would need to be accompanied by complementary behaviour change interventions.

³ As defined by the Food and Agriculture Organization (FAO) and the World Health Organization (WHO). Needs for 9 vitamins and 4 minerals are included.

⁴ This diet is not intended to reflect what individuals or households are currently eating, nor should it be used to develop food-based recommendations or dietary guidelines.

⁵ Refugees also purchase foods from markets outside the camps, but these were not considered for this analysis.

⁶ Rice and beans in the Congolese camps and maize and beans in the Burundian camp.



FNG in Rwanda: Findings⁷

1.

PROGRESS IN REDUCING UNDERNUTRITION IN CHILDREN UNDER 5 YEARS HAS BEEN INCONSISTENT. GLOBAL ACUTE MALNUTRITION (GAM) RATES ARE ACCEPTABLE BUT STUNTING AND ANAEMIA ARE THE MAIN BURDEN AND RATES REMAIN MODERATE TO HIGH. GLOBAL ACUTE MALNUTRITION AND ANAEMIA PREVALENCE ARE SIMILAR BETWEEN THE HOST POPULATION AND REFUGEES WHILE STUNTING IS MUCH LOWER IN REFUGEE CAMPS. MAHAMA AND KIGEME HAVE THE WORST NUTRITION SITUATION.

Since 2015 the rates of GAM in refugee camps have reduced to an acceptable level of 3 percent. Stunting and anaemia are of moderate to high public health significance and their rates have fluctuated between 2015 and 2018. For example: anaemia prevalence decreased from 34 percent to 31 percent between 2015 and 2017 but rose again to 37 percent in 2018. Overall stunting has fallen 10 percent from 33 percent in 2015 to 23 percent in 2018, with most of the decline happening between 2017 and 2018.

Figures 3–5 show the prevalence of stunting (2018), GAM (2018) and anaemia (2015)⁸ for children under 5 years of age in the camps and the host population in the refugee hosting areas. These figures show that Kigeme has the highest prevalence of stunting and GAM at 30 percent and 4 percent respectively, while Mahama has the highest burden of anaemia at 45 percent and stunting rates of 30 percent. The difference between GAM in the refugee and the host populations is minimal. In all camps except Mahama, anaemia was lower than in the host population, but when aggregated this difference is minimal (33 percent in the camps vs. 37 percent in the host population). However, average stunting prevalence in refugee camps is 14 percent lower than the national prevalence of stunting in Rwanda (23 percent vs. 37 percent). This could be because the refugee camps are a controlled setting that allow for 1) high coverage of nutrition specific and sensitive interventions, 2) implementing partners with higher staffing levels and, 3) increased complementarity across sectors. Much could be learnt from the refugee settings and applied at scale to the host communities to decrease the rates of stunting.

Figure 3: The prevalence of stunting for children under 5 years of age in the refugee camps and host population in 2018. Triangle and blue script outline indicates refugee camps (WFP, 2018; UNHCR and WFP, 2018).

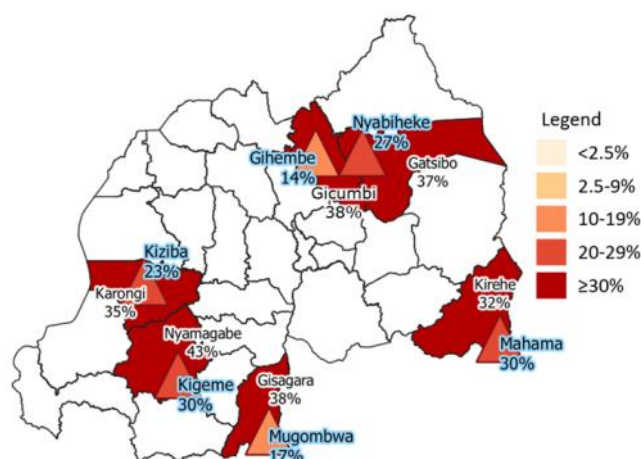


Figure 4: The prevalence of GAM for children under 5 years of age in the refugee camps and host population in 2018 (WFP, 2018; UNHCR and WFP, 2018).

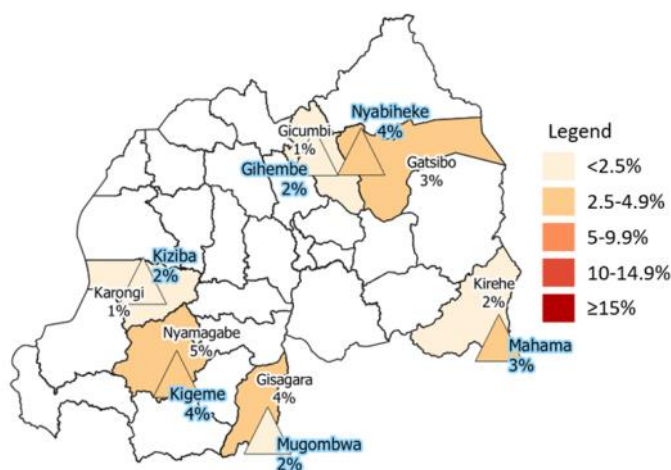
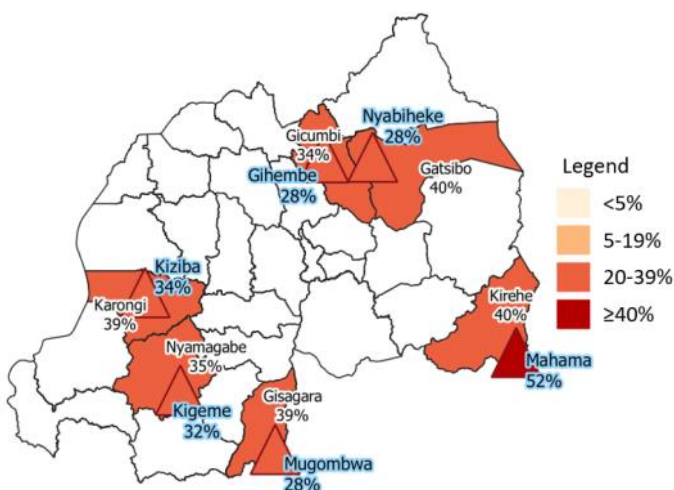


Figure 5: The prevalence of anaemia for children under 5 years of age in the refugee camps and host population in 2015 (comparisons for 2018 were not possible because anaemia data in the host population was not available) (NISR, 2015; UNHCR and WFP, 2015).



⁷ Complete details of the findings, a full list of data sources used, and references can be found in the full report.

⁸ Comparisons for 2018 were not possible because anaemia data in the host population is not available.

2.

REFUGEES ARE ALMOST SOLELY RELIANT ON WFP FOR FOOD ASSISTANCE. DUE TO A SCARCITY OF LIVELIHOOD OPPORTUNITIES FOOD AND CASH ASSISTANCE IS BEING COMPROMISED TO COVER NON-FOOD NEEDS, NEGATIVELY IMPACTING NUTRITION AND FOOD SECURITY.

Refugees rely on WFP for 90 percent of their food source. This is slightly higher in the Congolese camps receiving cash (92 percent of food sources) than in Mahama camp which receives food (87 percent of food sources). The remaining 8-13 percent is met by hunting, fishing, own production, gifts and borrowing. The level of household dependence on WFP is influenced by their opportunities for income generation, which includes having access to land with good quality soil to grow food to sell or having employable skills for the labour market. The proximity of the camps to food markets and the age and physical capacity of the refugees are also important factors in the level of household dependence on WFP. The most recent Joint Assessment Mission (JAM) survey found no correlation between length of stay in the camps and a refugee's capacity for self-sufficiency.

Limited livelihood opportunities, coupled with a misunderstanding of their right to work in Rwanda, make it difficult for refugees to engage in formal employment and earn money to support themselves and their families. These issues extend to youth who finish school and face very limited job prospects. In 2016, 38-48 percent of the refugee population in all six camps earned no income. Consequently, the cash assistance or sale of food assistance is one of the primary earning opportunities for refugees (reported by 21 percent of households). In the Congolese camps approximately 75-83 percent of the cash is used to buy food whilst the remaining money is used to repay food loans and buy essential non-food items. In Mahama, 70 percent of the food assistance is consumed by the household. Maize and oil are the main food assistance commodities sold, in terms of quantity, amounting to approximately 25 percent and 35 percent respectively of what is provided by WFP. The money earned from these sales is used to diversify the food basket, repay food loans and buy essential non-food items.

The UNHCR Economic Inclusion of Refugees Strategy offers the potential for refugees to develop employable skills and access credit for start-up businesses. It is essential that youths are able to access these services once they finish school to break the cycle of dependence.



3.

HOUSEHOLD FOOD CONSUMPTION IS MOSTLY ACCEPTABLE BUT DIETARY DIVERSITY IS POOR. A NUTRITIOUS DIET COSTS ALMOST TWICE AS MUCH AS A DIET THAT ONLY MEETS ENERGY NEEDS. GENERAL FOOD ASSISTANCE (CASH AND FOOD) SHOULD BE COMPLEMENTED WITH OTHER LIVELIHOOD AND INCOME EARNING OPPORTUNITIES TO ENABLE DIETARY DIVERSIFICATION AND TO COVER ESSENTIAL NON-FOOD NEEDS.

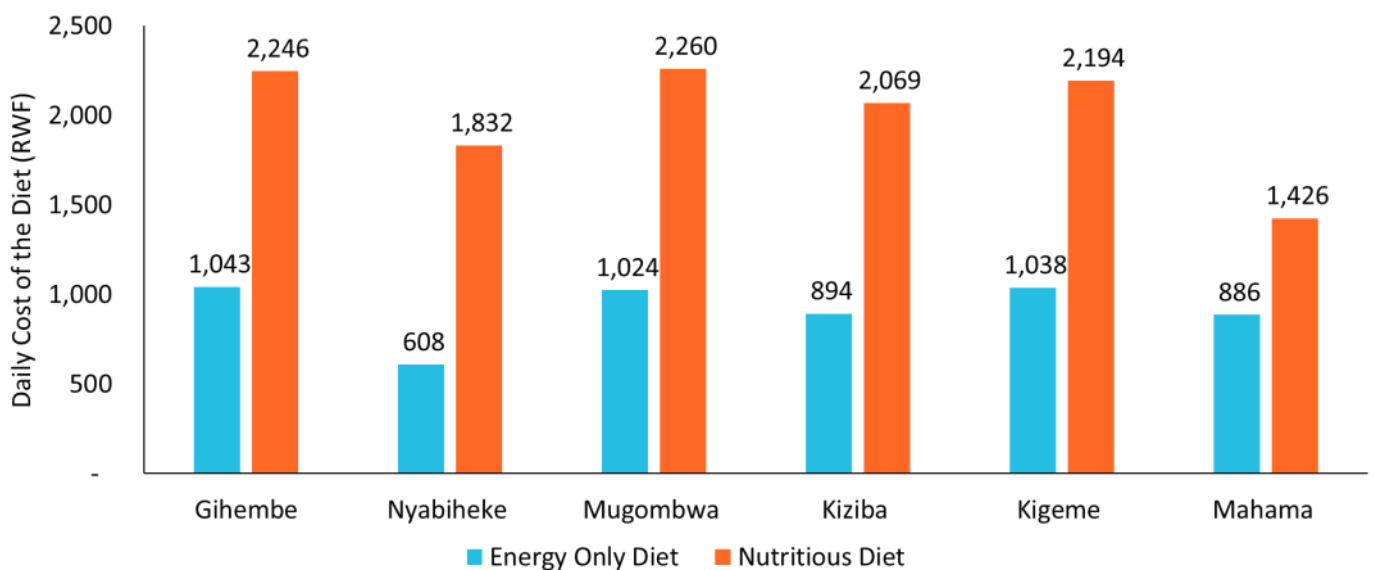
In 2018, the majority of refugee households (80 percent) had an acceptable food consumption score (FCS)⁹. More households in Mahama camp had borderline and poor FCS compared to the Congolese cash camps (22 percent vs. 16 percent for borderline and 5 percent vs. 3 percent for poor). Despite most households having an acceptable FCS, household’s dietary diversity and the consumption of fresh, micronutrient-rich foods are poor. The diets of refugees comprise mostly cereals, pulses, oil and vegetables. Although households (81–96 percent) consumed vitamin A rich foods daily or sometimes (mostly dodo leaves), only 2-4 percent of household consumed heme-iron¹⁰ rich foods daily. The CotD market survey found that meat was only available in the markets in Kiziba

and Mahama.

The CotD analysis displayed in Figure 6 found that it cost almost twice as much for a household of five to purchase a nutritious diet from markets inside the camps than a diet that only met their energy needs (608 – 1 043 Rwandan Francs (RWF) per day vs. 1 408 – 1 713 RWF a day). Both diets cost the most in Gihembe camp and least in Nyabiheke camp.

The CotD analysis also found that the general food distribution given in Mahama provided the majority of macronutrient requirements for a household but was low in essential micronutrients. For example, the ration provided all energy and protein requirements but only 25 percent of calcium and 47–48 percent of vitamin B12 and iron requirements. The outstanding micronutrients would need to come from mainly from animal source foods such as eggs, milk, dried fish and meat purchased on the market. Figure 7 shows that the general food distribution covers 60 percent of the cost of a nutritious diet but that households would need to add approximately 560 RWF per day to meet their remaining vitamin and mineral needs from foods such as dried fish, dodo leaves, avocados, eggs and milk. In comparison, the average daily income for Mahama in 2016 was 457 RWF¹¹.

Figure 6: The cost of a nutritious diet for a five-person household in the six refugee camps in RWF per day.

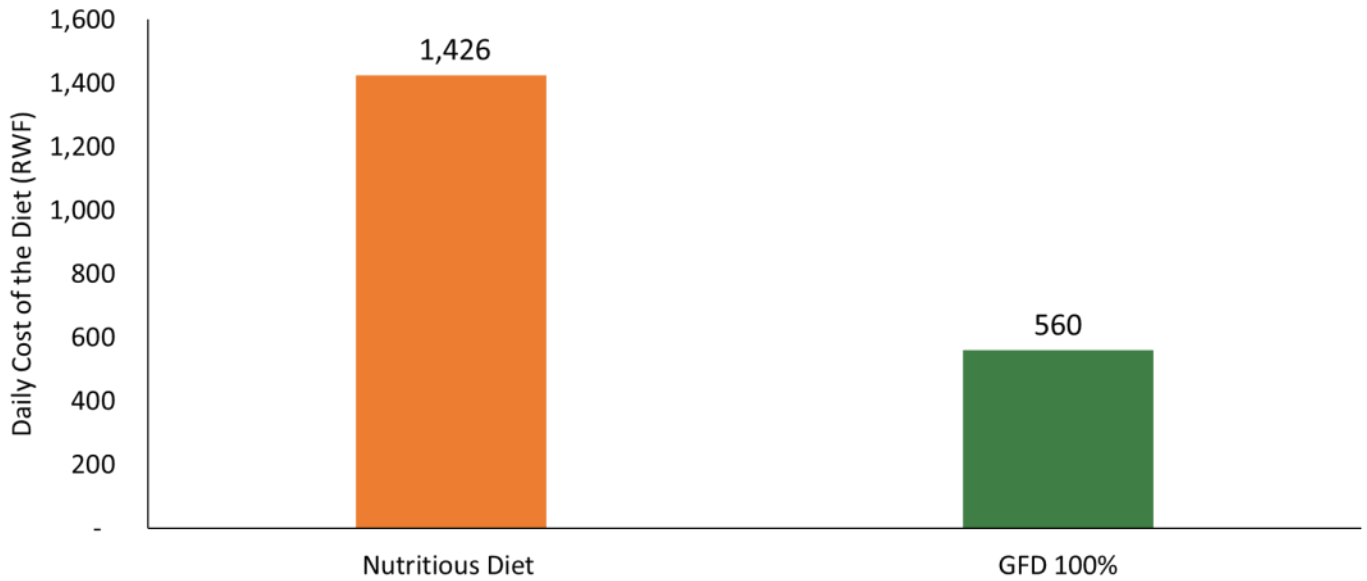


⁹ FCS is calculated by grouping together food items for which consumption was assessed over a seven day recall period. For each food group the frequency represents the number of days an item from the food group was consumed. A weight is assigned to each food group, representing its nutritional importance. The FCS is the sum across food groups of the product of the frequency by the weight. Two thresholds are used to distinguish consumption level: a FCS of 21 and a FCS of 35. The thresholds define three groups: poor consumption (≤21), borderline consumption (>21 and ≤35), and acceptable consumption (>35).

¹⁰ Derived from animal source foods.

¹¹ Income was earned through construction projects. More recent data was not available.

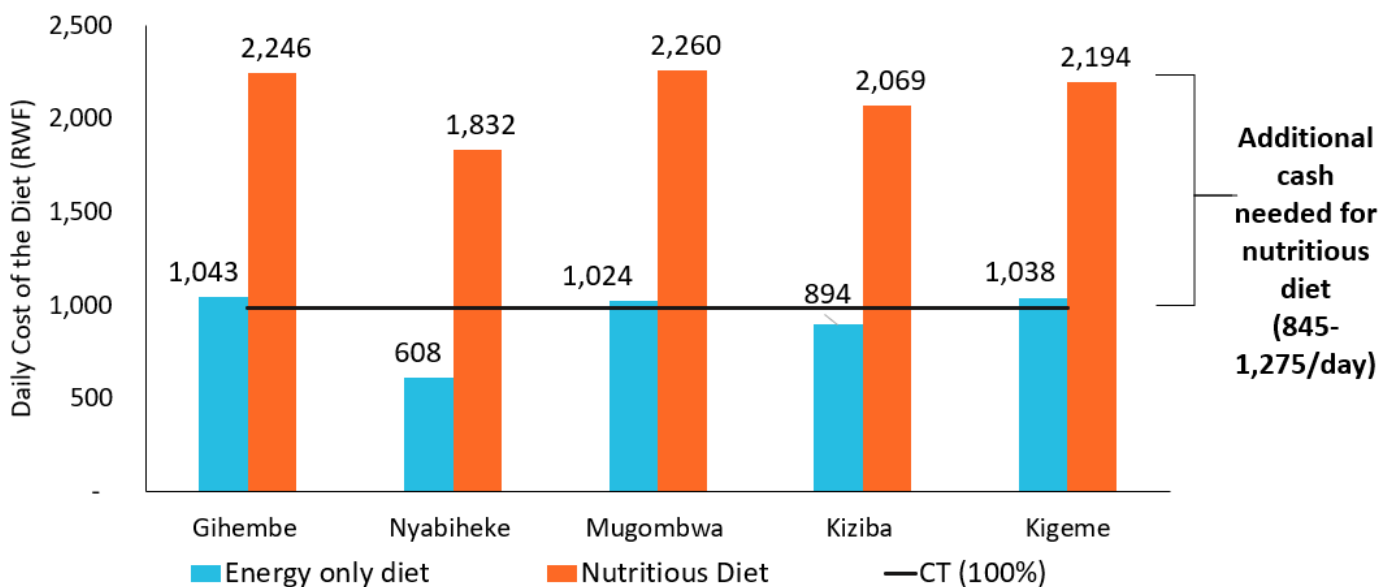
Figure 7: The daily cost of a nutritious diet for a household of five people in Mahama camp and the cost of this diet with the full food assistance ration, which meets 100 percent of energy needs.



With regard to the Congolese cash camps, Figure 8 shows that when food expenditure¹² is accounted for, the current cash transfer value is only enough for households to purchase a diet that meets energy requirements but would need to be doubled to be able to purchase a nutritious diet. The cash transfer value covers 47 percent of the cost of a nutritious diet, but households would require between 845 and 1,275 RWF per day more to purchase foods to meet their remaining needs. In comparison, the total daily income in the cash camps in 2016 was 1,429 RWF. The low cash value was the main issue with cash redemption as reported by refugee households.

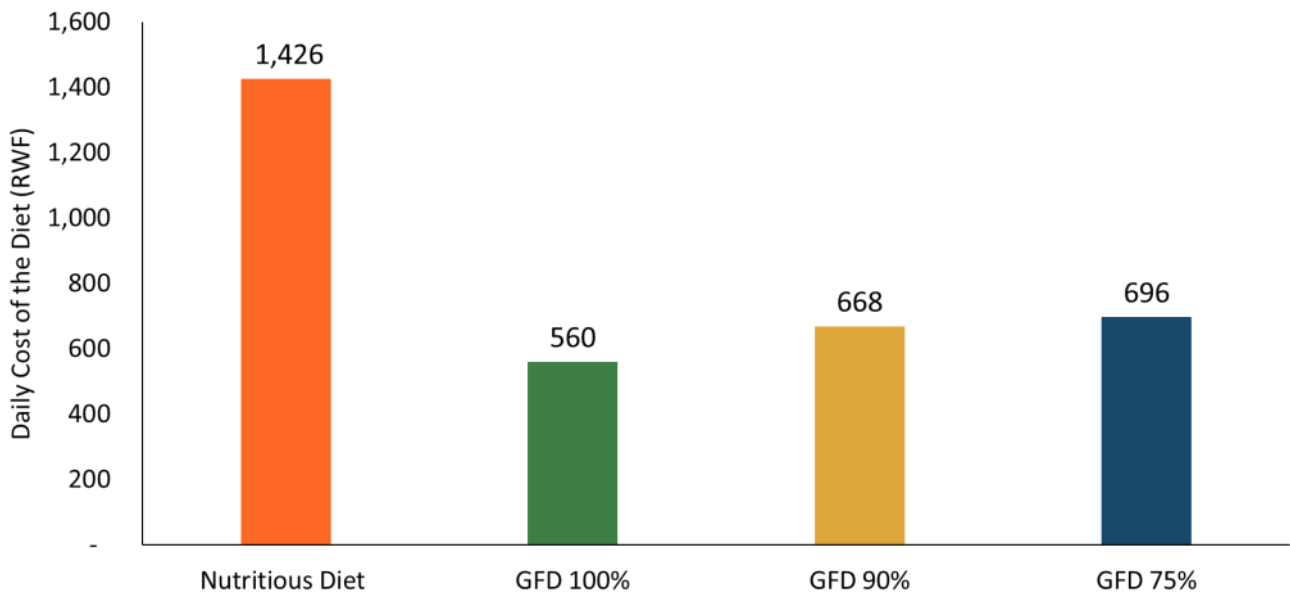
Poor dietary diversity in refugee households was attributed to inadequate cash value and in-kind food assistance in the 2018 JAM survey. The CotD results also identify this. The findings from the 2017 PDM survey found that the diets of households currently do not differ substantially by assistance modality. Marginally more households in the Congolese cash camps consumed meat products (6 percent vs. 3 percent) and heme-iron foods (4 percent vs. 2 percent) 5 to 7 days in a week. These results show that provision of cash can only result in a more diverse diet if: 1) the transfer is large enough to purchase nutritious food, 2) nutritious fresh food is available and, 3) social behaviour change communication is undertaken to inform purchasing choices.

Figure 8: The daily cost of an energy only and nutritious diet in the Congolese cash camps. Black line signifies the value of the cash-based transfer which was estimated at 987 RWF per day.



¹² Assumed at 79 percent based upon 2017 PDM findings. This equated to a transfer of 987 RWF a day.

Figure 9: The daily cost of a nutritious diet for a household of five people in Mahama camp with different in-kind food ration sizes in RWF .



4.

RECENT RATION CUTS MEAN HOUSEHOLDS ARE EMPLOYING COPING STRATEGIES WHICH HAVE NEGATIVELY IMPACTED FOOD SECURITY INDICATORS, PARTICULARLY HOUSEHOLD DIETARY DIVERSITY. THE COTD RESULTS EMPHASIZE DIFFICULTIES HOUSEHOLDS HAVE IN MEETING THEIR NUTRIENT NEEDS WITH A REDUCED RATION.

In November and December 2017, the general food assistance (both cash and food) were reduced by 10 percent due to funding constraints. In January 2018, this reduction was increased to 25 percent. Findings from a WFP survey in 2018 found that as a result of these ration

cuts the percentage of households with poor and borderline food consumption doubled and dietary diversity halved within the camps. The percentage of households employing consumption-based coping strategies more than doubled with 52 percent of households stating that adults restricted their food consumption for children to eat.

Figures 9 and 10 show the potential impact that the ration cuts have on households' ability to purchase a nutritious diet. Figure 9 shows that households in Mahama would require 668-696 RWF a day to be able to purchase a nutritious diet, whilst Figure 10 shows that for the Congolese cash camps, a 25 percent reduction in cash results in households in four of the five camps not being able to purchase enough food to meet their energy needs.

Figure 10: The daily cost of the energy-only and nutritious diet and the amount provided by different cash transfer values in the Congolese camps. It was assumed that 79 percent of the cash transfer value would be spent on food, based upon 2017 PDM findings.

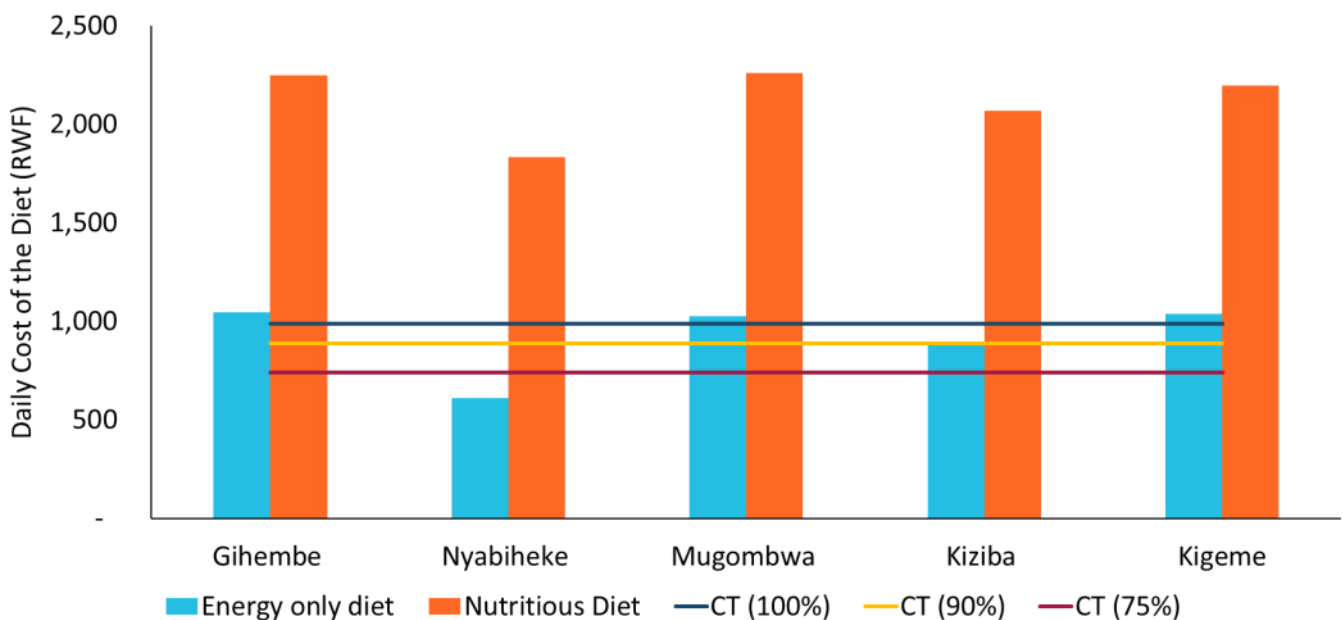
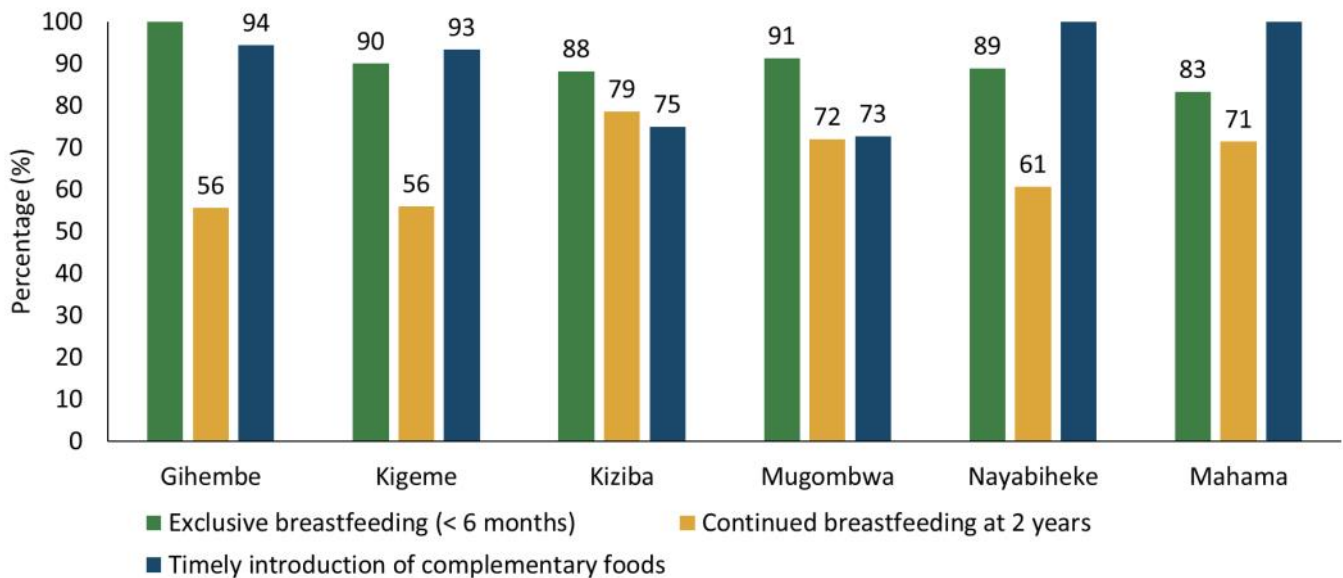


Figure 11: Infant and Young Child (IYCF) Indicators by camp (UNHCR and WFP, 2017).



5.

BREASTFEEDING IS WIDELY PRACTICED BUT TIMELY INTRODUCTION OF COMPLEMENTARY FEEDING IS SUBOPTIMAL PRECLUDING ADEQUATE NUTRIENT INTAKE IN CHILDREN AGED 6-23 MONTHS. RATION CUTS HAVE NEGATIVELY IMPACTED ON THE ACHIEVEMENT OF THE CHILD'S MINIMUM FOOD FREQUENCY AND MINIMUM ACCEPTABLE DIET.

Figure 11 shows that 83–100 percent of mothers in the refugee camps reported exclusively breastfeeding their children. This figure also shows that improvements in continued breastfeeding to 2 years need to be made in Gihembe, Kigeme, Nayabiheke and Mahama. The timely introduction of complementary foods also needs improvement in Kiziba and Mugombwa.

Trends in stunting by age show a peak at 8–20 months which indicates that complementary feeding does not provide the required variety and amount of nutrients. In 2018, 41 percent of children in the refugee camps achieved Minimum Acceptable Diet (MAD), a reduction from 58 percent in 2017. Refugee children rely on supplements, fortified food and/or home fortificants¹³ as major sources of micronutrients. Eighty eight percent of mothers reported that their children consumed iron-rich foods (or iron-fortified foods where there were few sources of iron-rich food), for 70 percent SuperCereal Plus and for 29 percent Multiple Micronutrient Powders (MNP) was the source of iron. A mere 1 percent consumed iron-rich fresh food such as meat.

The main barriers to adequate complementary feeding, i.e. the inclusion of animal source foods, are their limited

availability in camp markets and their unaffordability due to poor earning opportunities. This means that households need to rely on WFP assistance which is insufficient to provide access to a nutritious diet. Mothers reported having to leave young children with their siblings when they needed to leave the camps to find work. SuperCereal Plus and MNPs are good micronutrient gap fillers for children whose diets are low in diversity, as indicated by low stunting and anaemia rates compared to the host population.

6.

THE LITTLE DATA THAT DOES EXIST ON THE DIETS OF WOMEN AND ADOLESCENT GIRLS IN REFUGEE CAMPS SUGGESTS THAT THEIR DIETS ARE POOR AND THAT THIS IS CONTRIBUTING TO MALNUTRITION IN THEIR CHILDREN.

In 2018, anaemia prevalence among non-pregnant women of reproductive age was on average 11 percent, which is classified according to WHO as an issue of mild public health concern. This is 8 percent lower than the national average in the host population, which was 19 percent in 2015 (2018 not available). Despite this, health-seeking behaviour during pregnancy could be improved. Sixty eight percent of pregnant women received iron and folic acid tablets whilst 73 percent received SuperCereal, both of which are good sources of iron (and other micronutrients in the case of SuperCereal) and can contribute to prevention of anaemia during pregnancy. Coverage was lowest in Mugombwa (52 percent received iron and folic acid tablets and 57 percent received SuperCereal, oil and sugar).

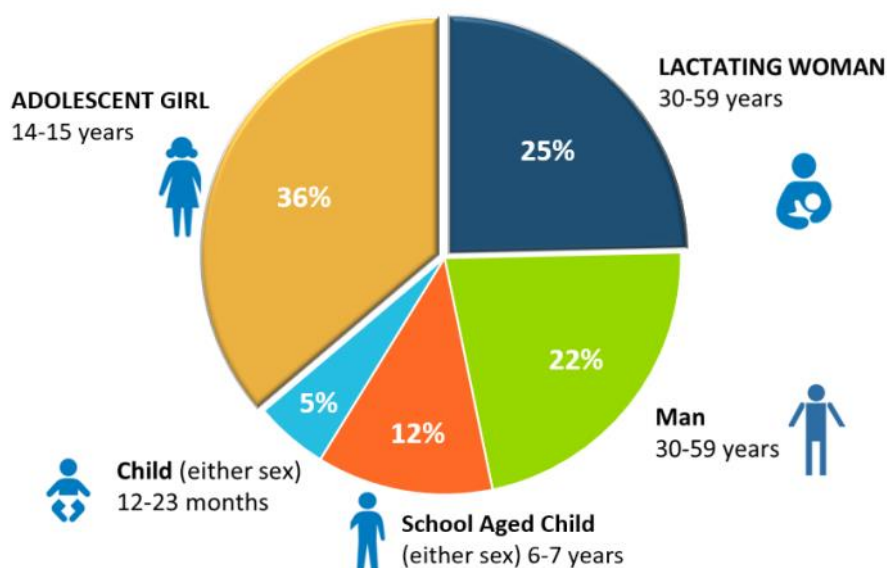
¹³ Such as Multiple Micronutrient Powder (MNP).



The CotD results shown in Figure 12 emphasise the high nutrient needs of adolescent girls and PLW and illustrates that 61 percent of the household cost of a nutritious diet should be allocated to meeting their requirements. Data on women’s diets is limited but, according to the 2018 SENS survey, only 6 percent of women achieved Minimum Dietary Diversity¹⁴ (MDD-W). The high prevalence of anaemia in children at 6 months (70 percent) implies that mothers are not laying down adequate iron stores for their children during the first six months of life.

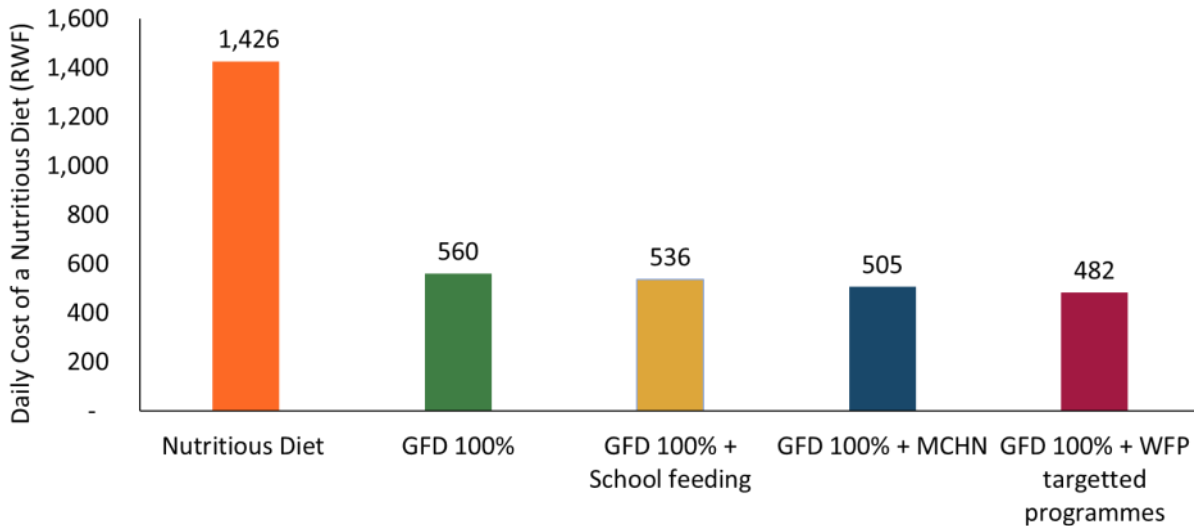
The data gaps identified for these nutritionally vulnerable groups include: women’s body mass index by age; consumption of vitamin A and iron rich-food by women; coverage of deworming; age at first birth; what foods adolescent girls are eating and; if and how diets of women change when they are pregnant or breastfeeding.

Figure 12: The percentage cost of a nutritious diet that should be attributed to different household members in Rwanda, according to Cost of the Diet analysis.



¹⁴ MDD-W is a dichotomous indicator of whether or not women 15–49 years of age consumed at least five out of ten defined food groups the previous day or night. The proportion of women 15–49 years of age who reach this minimum in a population can be used as a proxy indicator for higher micronutrient adequacy, one important dimension of diet quality.

Figure 13: Daily cost of a nutritious diet with and without targeted nutrition interventions for a household of five people in the Mahama camp in RWF. School feeding refers to the Early Child Development programme.



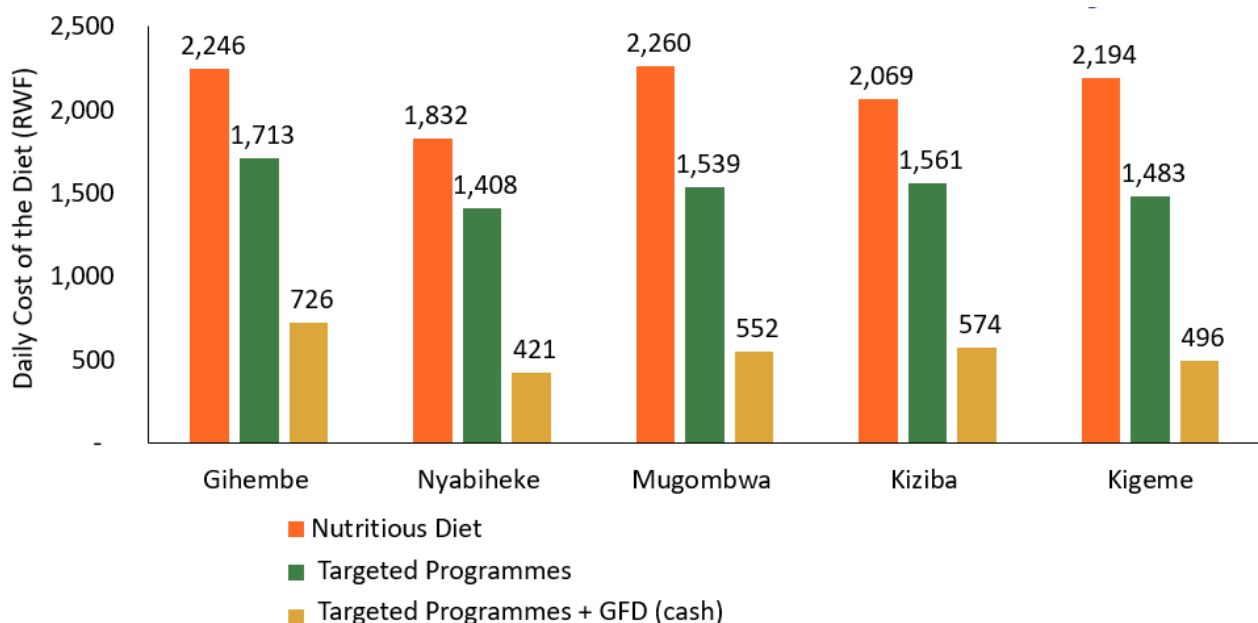
7.

CURRENT TARGETED NUTRITION PROGRAMMES, IN COMBINATION WITH GENERAL FOOD ASSISTANCE (FOOD OR CASH), CAN REDUCE THE COST OF A NUTRITIOUS DIET FOR REFUGEE HOUSEHOLDS. HOWEVER, COMBINED PROGRAMMES ARE NOT ENOUGH TO MEET ALL OF THE HOUSEHOLD'S NUTRIENT NEEDS, EMPHASIZING THE NEED TO INCREASE INCOME THROUGH ACCESS TO SKILL-BUILDING AND LIVELIHOODS.

Current targeted programmes include the Maternal and Child Health and Nutrition (MCHN) programme where children aged 6-23 months receive Supercereal Plus and

PLW receive Supercereal, oil and sugar, and the Early Child Development programme where enrolled children aged 3-5 years receive Supercereal and oil. Figures 13 and 14 show the potential impact that these interventions, separately and combined, could have on reducing the cost of a nutritious diet for households in the camps: by 74 percent in the Congolese cash camps and by 66 percent in Mahama camp when combined with the food assistance. The targeted interventions for nutritionally vulnerable groups provide a large share of both macro and micronutrients, particularly for a child under two years. However, the figures show that to meet their remaining nutrient requirements, households would still require 482 RWF a day in Mahama and between 421 and 726 RWF in the cash camps. These results emphasise the need to improve access to skill-building and livelihood opportunities for refugee households.

Figure 14: Daily cost of a nutritious diet with and without targeted nutrition interventions for a household of five people in the Congolese cash camps in RWF.



8.

CONTEXT-SPECIFIC INTEGRATED PACKAGES OF INTERVENTIONS HAVE THE GREATEST POTENTIAL TO REDUCE THE COST OF A NUTRITIOUS DIET FOR THE HOUSEHOLD AND NUTRITIONALLY VULNERABLE GROUPS, AND THUS IMPROVE NUTRIENT INTAKE AND ULTIMATELY NUTRITIONAL STATUS AND HEALTH.

A range of interventions were modelled using the CotD for individual target groups and the household, as guided by the secondary data analysis, interventions that are currently ongoing, and stakeholder consultation (shown in Table 1).

- For children aged 6–23 months, fresh and fortified foods reduced the cost to the household of providing a nutritious diet. The MCHN programme has the greatest impact in reducing these costs of meeting nutrient needs.

- A school meal with a combination of Supercereal, sugar, milk, dried fish, fruit and vegetables was the most effective at reducing the cost to the household of providing a nutritious diet for a school aged child.
- An MMT was the most effective at reducing the cost of a nutritious diet for an adolescent girl.
- The MCHN programme and an MMT had a similar impact and were the most effective at reducing the cost of meeting nutrient needs for a PLW.
- For the household, fortified rice available in the markets in the Congolese camps had the greatest impact on reducing the cost of a nutritious diet in the cash camps. In Mahama camp fresh food vouchers had the greatest impact.

Table 1: The targeted and household interventions modelled to improve nutrient intake.

Intervention	Target Group	Transfer Modality	Entry Point(s)
Multiple Micronutrient Powder	Child 6–23 months	In-kind Voucher	Health Social Protection
Maternal and Child Health and Nutrition Programme ¹⁵			
Nutrition Sensitive School Meals ¹⁶	School Aged Child	In-kind	Education
Iron and Folic Acid Supplement	Adolescent girl PLW	In-kind Voucher	Health Social Protection
Multiple Micronutrient Tablet (MMT)			
Maternal and Child Health and Nutrition Programme ¹⁷			
Nutrition-Sensitive Kitchen Gardens ¹⁸	Household	Own Production	Agriculture Markets
Smallholder Poultry Intervention ¹⁹			
Smallholder Rabbit Intervention ²⁰			
Fortified Rice (Congolese Cash Camps only)		Market	Markets
Fresh Food Vouchers ²¹		In-kind Voucher	Health Agriculture Markets Social Protection

¹⁵ Provision of Supercereal Plus.

¹⁶ Supercereal and sugar with milk, fruits and vegetables (carrots, cabbage, banana and avocado) and dried fish modelled separately and in combination.

¹⁷ Provision of Supercereal, oil and sugar.

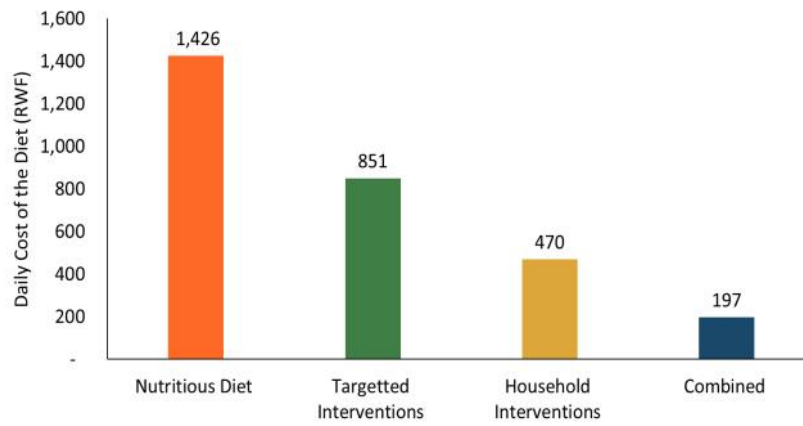
¹⁸ Assumed a yield of 3.3kg per month (total) of biofortified beans, dodo leaves, pumpkin, pumpkin leaves and swiss chard.

¹⁹ Provision of four chickens that lay three eggs a day.

²⁰ Assumed households would consume 2 rabbits a month.

²¹ Provision of 12 eggs and 1kg dodo leaves per week for households with a child under 2 years, adolescent girl or a PLW.

Figure 15: The potential impact that a package of targeted household level interventions could have on reducing the cost of a nutritious diet in Mahama camp.



9.

A PACKAGE OF INTERVENTIONS IMPLEMENTED ACROSS MULTIPLE SECTOR(S) ENTRY POINTS COULD GREATLY IMPROVE HOUSEHOLD’S ECONOMIC CAPACITY TO PURCHASE A NUTRITIOUS DIET.

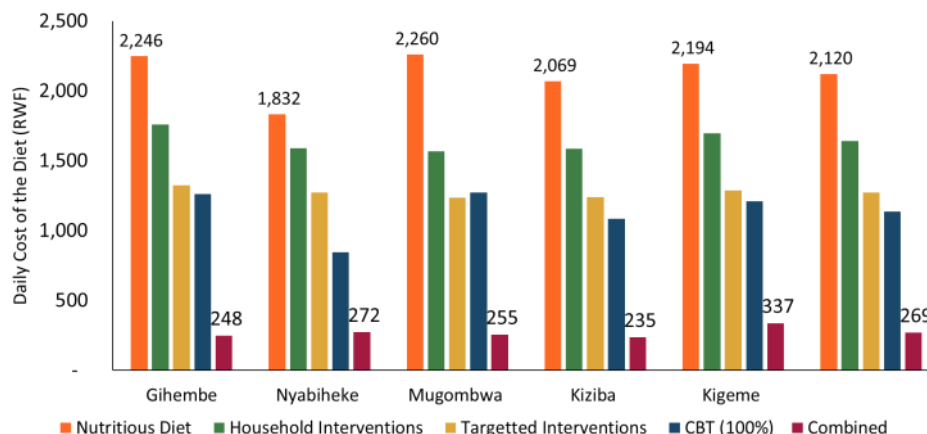
The most effective interventions for reducing the cost of meeting nutrient intakes for individual target groups were combined into packages, with the most effective household interventions as shown in Table 2.

Currently, households in the camps receive general food assistance in the form of food or cash and the targeted programmes described in finding 7. Figures 15 and 16 summarize the impact these interventions - combined with others into a package - could have on reducing the cost of a nutritious diet. In Mahama camp, this cost could be reduced by as much as 86 percent and in the Congolese cash camps by between 59 and 89 percent. These results demonstrate the possible benefits that could be gained by increasing refugee’s nutrient access via a package of interventions across multiple entry points and sectors. The underlying assumption for such an intervention is that adequate demand creation strategies are in place to ensure that any cash transfers or vouchers provided would be spent on nutritious food.

Table 2: The targeted household interventions most effective at reducing the cost of a nutritious diet.

Camp	Target Group	Intervention
Mahama camp	Child 6–23 months	MCHN (WFP targeted programme shown in Fig. 13)
	School Aged Child	Nutrition-Sensitive School Meal
	Adolescent Girl and PLW	MMT
	Household	Fresh food vouchers General Food Assistance (WFP programme shown in Fig.13)
Congolese camps	Child 6–23 months	MCHN (WFP targeted programme shown in Fig.14)
	School Aged Child	Nutrition-Sensitive School Meal
	Adolescent Girl and PLW	MMT
	Household	Fortified rice Fresh food vouchers WFP Cash Transfer (WFP programme shown in Fig.14)

Figure 16: The potential impact that a package of targeted household level interventions could have on reducing the cost of a nutritious diet in the Congolese cash camps. Current expenditure on food was assumed for the cash transfer value.



FNG in Rwanda: Recommendations

During the dissemination workshop hosted by UNHCR and attended by the wider stakeholder group working within the refugee context, the main findings of the FNG analysis were shared and discussed with the participants to formulate recommendations. Participants then formed five work groups, each focused on a different target – children under 2 years; children 2-9 years; adolescent girls; pregnant and lactating women, and households.

Each group was asked to identify and then prioritize the issues for their target as identified by the FNG analysis. They were then asked to brainstorm ideas for interventions that would address the issues they had prioritized. During this section of the group work they had to list existing interventions, improvements to existing interventions, and new interventions from different sectors including agriculture, health/nutrition, WASH, education, social protection, gender, private sector and livelihoods.

After this exercise, participants were asked to select a package from these interventions that would address the issues they prioritized for their target group. They were required to discuss the linkages that could exist between their chosen interventions and ensure that their package included interventions from at least three sectors. Finally, they were asked to identify the enabling environment required for their package to be successful. They had to consider the following - policy and strategy frameworks; coordination and synergies across sectors; resources; advocacy; and data gaps.

The following sections outline the priority issues as identified by stakeholders, and the recommendations for interventions and the enabling environment.

PRIORITY ISSUES

Nutritionally vulnerable target groups:

1. Children under 5 years - high prevalence of stunting and anaemia;
2. Children aged 6-23 months - low attainment of timely introduction of complementary foods and MAD;
3. Adolescent girls - high rates of pregnancy²² and lack of targeted nutrition interventions;
4. Pregnant women - low attendance at antenatal care and low enrolment in the MCHN programme, especially in Mugombwa²³.

Household:

1. Limited livelihood and income earning opportunities.
2. Unmet non-food needs.
3. Misuse of resources (food assistance) provided.
4. Limited access to, and low consumption of, high iron (animal source) foods.
5. Limited access to nutrition counselling sessions or a resistance to nutrition messages due to cultural practices and beliefs.



²² The information was not found through secondary data but was mentioned anecdotally by stakeholders. Specific numbers are not available.

²³ In 2017 between 66 percent (Gihembe) to 90 percent (Mahama) of pregnant women aged 15-49 years were enrolled in antenatal care. Between 49 percent (Gihembe) to 90 percent (Mahama) of pregnant women aged 15-49 years were enrolled in the MCHN programme.



SCHOOL BASED INTERVENTIONS

- Develop a nutrition curriculum to be delivered to all age groups in schools.
- Run after/out-of-school clubs for adolescent boys and girls which engage them on topics such as nutrition, child care, gender, food safety, hygiene and sanitation, and sexual and reproductive health.
- Use school meals as a platform to create demand for nutritious foods. Suggestions included:
 - Including MNPs in school meals in the short term to improve micronutrient density;
 - Scaling up the One Cup of Milk per Child programme to schools in refugee communities, linking to host population families who are enrolled in the GIRINKA²⁴ programme;
 - Working with the private sector to provide a fortified food that could be included in school meals;
 - Linking with smallholder animal and vegetable producers in the host community to supply schools with fresh, nutritious foods (especially milk, eggs, dodo leaves, iron rich biofortified beans and orange flesh sweet potatoes);
 - Including a strong component of WASH in schools to ensure meals are prepared safely and providing hand washing facilities to prevent illness.
- Use schools as a platform to collect nutrition and health data on adolescents.
- Use schools as a platform to deliver MMTs or iron and folic acid tablets to adolescent girls.

AGRICULTURE AND OTHER LIVELIHOOD ACTIVITIES

- Scale up an integrated package of improved smallholder livestock and kitchen garden interventions with a focus on eggs, milk and high iron vegetables combined with a strong component of nutrition and WASH education. Suggestions included:
 - Use innovative methods to maximise space (e.g. vertical gardening), and prioritize iron- and vitamin A-rich crops such as dodo leaves and biofortified high-iron beans.
 - Invest in, and improve access to, water and irrigation to make kitchen gardens a viable programme during the dry season.
- Implement programmes that optimize agricultural land and livestock by integrating the resources of refugee and host communities and ensuring products are equally shared.
- Link livelihood activities to child friendly spaces or Early Child Development centres and ensure that nutritious foods are given to children enrolled in these programmes.
- Conduct research on gaps in the employment market and invest in vocational training curricula for refugees to fill these gaps. Provide cash grants after training to enable refugee men and women to set up businesses or invest in their livelihood activities. Vocational training should also be offered to adolescent girls and boys who drop out of school.

²⁴ One cow per household programme.

NUTRITION EDUCATION

- Adapt nutrition messages (currently, only included in health sector activities) to other target groups and integrate them into agriculture, social protection and WASH activities.
- Expand mother-to-mother support group programmes to include groups specifically for adolescent girls (i.e. girl-to-girl group programme).
- Engage local leaders or religious figures to encourage men to attend nutrition education sessions and to engage in messages, particularly those related to men taking an active role in domestic work (including small livestock and kitchen gardens) and child care.
- Find male champions who support their wives in domestic chores and child care, who believe in making decisions equally, and who can act as male change agents in the community.

ENABLING ENVIRONMENT

Policy and Strategy Frameworks

- Develop a long-term strategy that graduates refugees from assistance dependence to self-reliance, and renew government commitment to the Comprehensive Refugee Response Framework.
- Continue investment and implementation of UNHCR's Economic Inclusion of Refugees Strategy.

Coordination and Synergies across Agencies and Sectors

- Improve the coordination between health, education, WASH, gender and social protection sectors.
- Ensure nutrition messages are tailored to different target groups and integrated into other sector programmes.





Resources

- Ensure health centres have continuous stock of iron and folic acid tablets.
- Build capacity of health staff, teachers, agriculture extension workers and WASH sector staff in nutrition.

Advocacy

- Use the FNG results on ration cuts to advocate to donors for consistency in funding for general food assistance.
- Sensitise the host community about refugees right to work in Rwanda.

Data Gaps

- The drivers of high anaemia in camps.
- Better disaggregation of livelihoods earning opportunities for refugees included remittances. Current PDM has an 'other' category for sources of income that the majority of responses fall into, so understanding what 'other' means is important for ongoing analysis.
- What nutritious, fresh foods are available in the markets where refugees buy food and whether supply could respond to an increase in demand (e.g. through school meals or uptake of behaviour change

messaging).

- The reasons for low attainment of timely introduction of complementary feeding in camps.
- The reasons for fluctuations in the attainment of MAD in camps between 2016 and 2018.
- Women's BMI by age.
- Age at first birth.
- Whether and how the diets of women change when they are pregnant or breastfeeding.
- An understanding of whether income figures for refugees include money that is earned by selling food assistance.
- Gaps in the employment market (beyond agriculture) in refugee and host communities, which could be filled by trained refugees.



CONTRIBUTORS

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LIST OF ACRONYMS

CotD	Cost of the Diet
FAO	Food and Agriculture Organization
FNG	Fill the Nutrient Gap
GAM	Global Acute Malnutrition
IFA	Iron Folic Acid
IYCF	Infant and Young Child Feeding
JAM	Joint Assessment Mission
LP	Linear Programming
MAD	Minimum Acceptable Diet
MCHN	Maternal and Child Health and Nutrition
MMT	Multiple Micronutrient Tablet
MNP	Multiple Micronutrient Powders
NGO	Non-Government Organisation
NISR	National Institute of Statistics Rwanda
PDM	Post-Distribution Monitoring
PLW	Pregnant and Lactating Women
RWF	Rwandan Francs
SENS	Standardised Expanded Nutrition Survey
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WHO	World Health Organization
WFP	World Food Programme

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Nutrition Division (OSN)

World Food Programme

Via Cesare Giulio Viola 68/70

00148 Rome, Italy

T +39 06 65131 wfp.org

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