



World Food Programme

SAVING
LIVES
CHANGING
LIVES

Mind the Gap Country Case Study **BURUNDI**

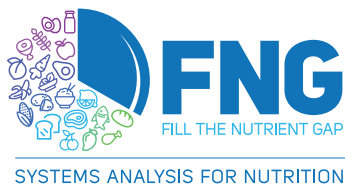
October 2024

About the Mind the Gap Report

Achieving Sustainable Development Goal 2 (Zero Hunger) by 2030 is increasingly at risk due to the combined impacts of climate change, conflict, COVID-19, and rising living costs, which have reversed progress in reducing global hunger. Social protection systems, while essential for supporting vulnerable populations, often fail to account for nutritional needs—a key element in breaking the cycle of poverty, vulnerability, and malnutrition. This oversight represents a missed opportunity to advance the objectives of SDG 2, especially in a context where hunger has been rising since 2015.

Amid these challenges, the Mind the Gap report explores the role of social protection systems in addressing affordability gaps of nutritious diets. It is structured around the **Fill the Nutrient Gap (FNG)** analytical approach, which aims to understand the drivers affecting the availability, cost, and affordability of nutritious diets in specific contexts. The policy objective is to identify and implement interventions to improve diets, especially of nutritionally vulnerable people, including through the integration of nutrition into social protection systems. Through case studies from 12 diverse national contexts, the report presents actionable social protection pathways for reducing the affordability gap of nutritious diets and improving food security and nutrition outcomes.

Further information and evidence on the FNG can be accessed at: wfp.org/fillthenutrientgap



Contents

I. Overview of the malnutrition burden and poverty situation	4
II. Country priorities on nutrition and social protection	5
Nutrition policy framework.....	5
Social protection policies and programmes.....	5
III. WFP’s approach	7
IV. Findings of the FNG	8
Cost and affordability of the nutritious diet	8
Vulnerable groups.....	9
V. Using the FNG to inform social protection programmes	11
Contribution of social protection to reducing the affordability gap.....	11
VI. Bridging research with policy and action	14
VII. Bibliography	15



I. Overview of the malnutrition burden and poverty situation

Over the years, Burundi has made significant investments in poverty reduction and its quality of and access to education (1). The African Development Bank also predicts growth in Burundi's GDP in 2023 and 2024 (2), despite facing the compounding challenges of the COVID-19 pandemic and subsequent economic shocks.

However, poverty remains a significant challenge, and Burundi is among the poorest countries in the world, ranking 187 out of 191 on the 2022 Human Development Index (3). The percentage of people living below the international poverty line (USD 2.15 per day) was estimated to be 83 percent in 2022, an increase from 65.1 percent in 2013 (4). Female-headed households and those with livelihoods dependent on agriculture are more heavily affected by monetary poverty (5). Burundi also experiences high rates of gender inequality, ranking 127 out of 170 countries in 2021 (3).

There is a high dependence on agriculture, with 84 percent of women and 66 percent of men working in the sector and 80 percent of production used for personal consumption (6).

Burundi has one of the highest rates of stunting globally, with little progress made over the last 30 years (6). Stunting remains much higher than the World Health Organization's emergency threshold of 30 percent, with 55.8 percent of children under five years affected by stunting in 2021 (7). Additionally, 4.8 percent of children were wasted in 2022 (5).

In addition to undernutrition, other forms of malnutrition are also present in Burundi, such as micronutrient deficiencies, with vitamin A, iron and iodine deficiencies among the most common. According to the 2016–2017 Demographic and Health Survey, 61 percent of children under five years and 39.3 percent of women of reproductive age were anaemic (6). These multiple forms of malnutrition represent an important barrier to children's and adult's well-being, to education, to productivity and to the overall economic development of the country.

Poor diets can lead to suboptimal nutrition and health outcomes. In Burundi, dietary diversity remains low with 17.5 percent of children aged 6–23 months meeting acceptable dietary diversity and 12.3 percent of women meeting minimum dietary diversity in 2019 (8). For the overall population of Burundi, consumption of fruits, vegetables, legumes, nuts and whole grains is well below recommended intake (37, 62, 41, 26, 26 percent, respectively). Dairy consumption is also below recommended intake, at only 12 percent. Red meat consumption currently meets 84 percent of recommended intake (9).

It is estimated that malnutrition costs the Government USD 9.50 per capita, creating a significant burden of USD 3.5 billion on the economy (10).

II. Country priorities on nutrition and social protection

NUTRITION POLICY FRAMEWORK

Despite slow improvements, the Government of Burundi has shown commitment to addressing malnutrition. Reducing the burden of malnutrition is emphasized in key overarching development plans, including the Burundi National Development Plan (Plan National de Développement du Burundi) (2018–2027) (11) and Vision Burundi 2025, formulated in 2011 to target the eradication of malnutrition by 2025 (12). In 2013, Burundi joined the Scaling Up Nutrition (SUN) movement and published its first Multisectoral Plan for Food and Nutrition Security (Plan Stratégique Multisectoriel de Sécurité Alimentaire et Nutritionne, or PSMSAN) (2014–2017) (13).

In 2019, the Burundi Government, with the support of UNICEF and WFP, drafted the second plan, PSMSAN II (2019–2023), which aims to improve the nutritional status of the population through multisectoral actions. It includes a strategic pillar on nutrition-sensitive social protection as a key element to improving food and nutritional security. Specific sectoral policies such as the Nutrition Strategic Plan of the Ministry of Health (2019–2023) and the National Social Protection Strategy underpin the multidimensional approach to achieving sustainable nutrition outcomes.

In 2015, the Government of Burundi also made fortification of staple foods, including wheat, cassava, maize flour, edible oil and salt, mandatory through the signature of a presidential decree (14).

SOCIAL PROTECTION POLICIES AND PROGRAMMES

The Government of Burundi established an institutional framework for social protection in 2011 with the Strategic Framework to Fight Poverty (Cadre Stratégique de Lutte contre la Pauvreté) and a National Social Protection Strategy (Stratégie Nationale de la Protection Sociale, or SNPS). The SNPS identifies four priorities for social protection including the reduction of chronic malnutrition in children (15). In 2020, the Burundi Government also adopted a National Social Protection Code and established a Social Registry Steering Committee (16).

In practice, however, the social protection landscape remains poorly funded, and coverage and adequacy of the social security system remain insufficient (17). Considering Burundi's history of repeated crises, safety nets have been largely designed to respond to short-term humanitarian and post-conflict needs and are often largely externally funded. According to a recent analysis, the Government of Burundi invests only USD 2 per person in non-contributory social protection and only a fifth of Burundians have health insurance (18). Few social assistance programmes exist today in Burundi. However, in the fiscal year 2021/22, Burundi allocated 12.2 percent of its budget to social protection expenditure, doubling what it spent in 2016 (19).

The School Feeding Programme, supported by WFP, is the largest social protection scheme in the country and covers more than 20 percent (approximately 800) of schools in areas with high food insecurity and low enrolment rates (20). The Merankabandi programme, supported by the World Bank, provides cash transfers to the extreme poor and vulnerable households with children under the age of five, and spans refugees as well as host communities. The programme is implemented in four provinces, with a planned national scale-up to all provinces

by 2024. Activities to improve human capital are implemented alongside the cash transfer, including information, communication and education measures to encourage the adoption of positive nutrition, health and early childhood development behaviours, school attendance and job creation (21). WFP is supporting the implementation of the refugee component of this project within the five refugee camps in the country, which is expected to benefit 8,000 refugee households.



III. WFP's approach

The Fill the Nutrient Gap (FNG) analysis in Burundi was implemented as a collaboration between WFP and the Secrétariat Exécutif Permanent de la Plateforme Multisectorielle de Sécurité Alimentaire et de Nutrition (SEP/PMSAN) (ex-Secrétariat Scaling Up Nutrition (SUN)), with the technical support of UNICEF Burundi and funding from the Swiss Cooperation and the Dutch Embassy (14).

The FNG took place between November 2018 and October 2019 and took on a multisectoral and inclusive approach to identify bottlenecks that drive malnutrition across the food system, with an emphasis on availability, cost and affordability of a nutritious diet.

Cost of the diet analysis in the FNG Burundi

The cost of the diet analysis covered seven livelihood zones (ZME) and used the Government's Consumer Price Index (CPI) data across three seasons in 2018 and 2019: harvest (February–May), post-harvest (June–September) and lean season (October–January). This was then averaged out to provide one national estimate. The lowest costs of a diet that meets energy requirements (energy-only diet) and a diet that meets requirements for macro- and micronutrients (nutritious diet) were estimated using the FNG methodology (25) for a modelled household consisting of five individuals: a breastfed child (12–23 months), a school-aged child (6–7 years), an adolescent girl (14–15 years), a breastfeeding woman, and an adult man.

The cost of diet was then compared to household food expenditure to determine the proportion of households unable to afford the costs (called 'non-affordability'), using WFP's FSMS food expenditure data for the months of March, August and December 2018 to match the three seasons above. The gap between the lowest-cost nutritious diet and the food expenditure of a household is referred to as the affordability gap.

ZMEs were then divided into four 'types' based on their characteristics (non-affordability rate and increased vulnerability during lean season) and nutritional challenges (forms and extent of malnutrition) for modelling purposes. These typologies were used for modelling different intervention packages.

Throughout the FNG process, consultations were held with a variety of stakeholders, including representatives of government ministries, nongovernmental organizations and UN agencies across the health, agriculture, social development, education and private sectors. Through these engagements, representatives from different ministries and sectors were appointed to form a technical expert group. This group defined the data sources and modelling

parameters and identified entry points to improve nutrient intake and affordability of nutritious diets for key target groups. As part of this process, the contribution of existing social protection programmes in Burundi towards improving access to nutritious foods was reviewed. The FNG analysis identified overlaps and potential alignment of the social protection programme across sectors to strengthen the nutrition response.

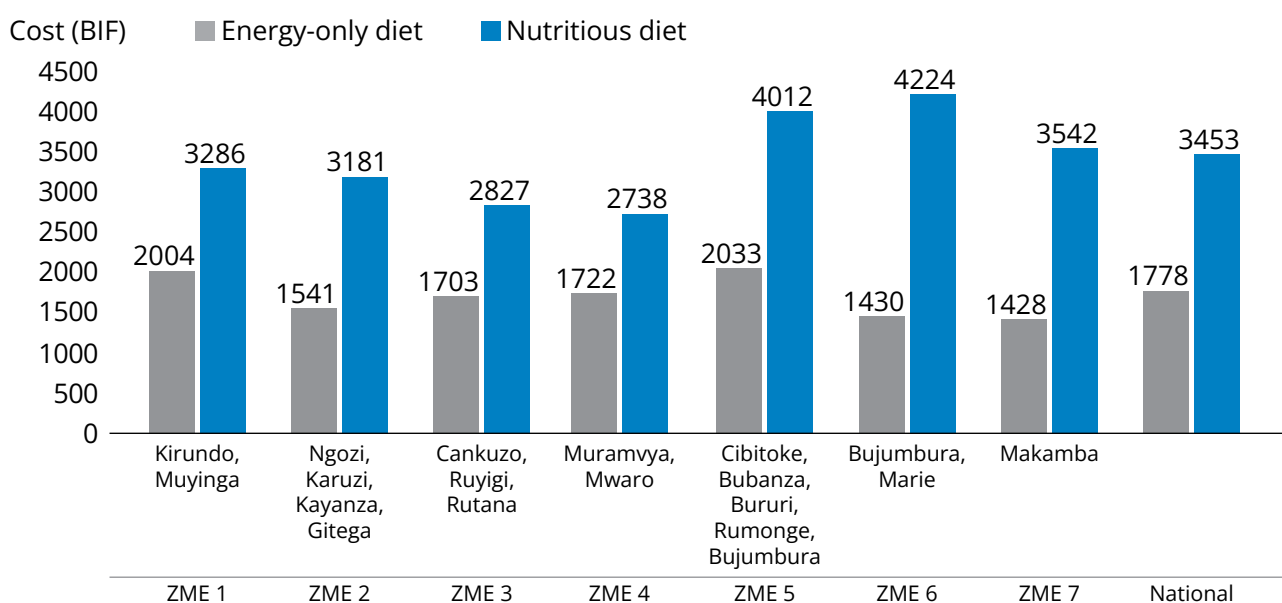
IV. Findings of the FNG

COST AND AFFORDABILITY OF THE NUTRITIOUS DIET

A nutritious diet for a five-person modelled household was found to cost almost double that of the energy-only diet at BIF 3,453 (USD

1.94) as compared to BIF 1,778 (USD 1)¹ per day. These costs vary across zones, with the highest cost for a nutritious diet in Bujumbura city and surrounding areas (zones five and six) and lowest in the centre (zone four) and eastern parts (zone three) of the country (Figure 1).

Figure 1: Daily cost of energy-only and nutritious diets in Burundi across livelihood zones and overall, for a five-person household in 2018–2019 (average across the three seasons)



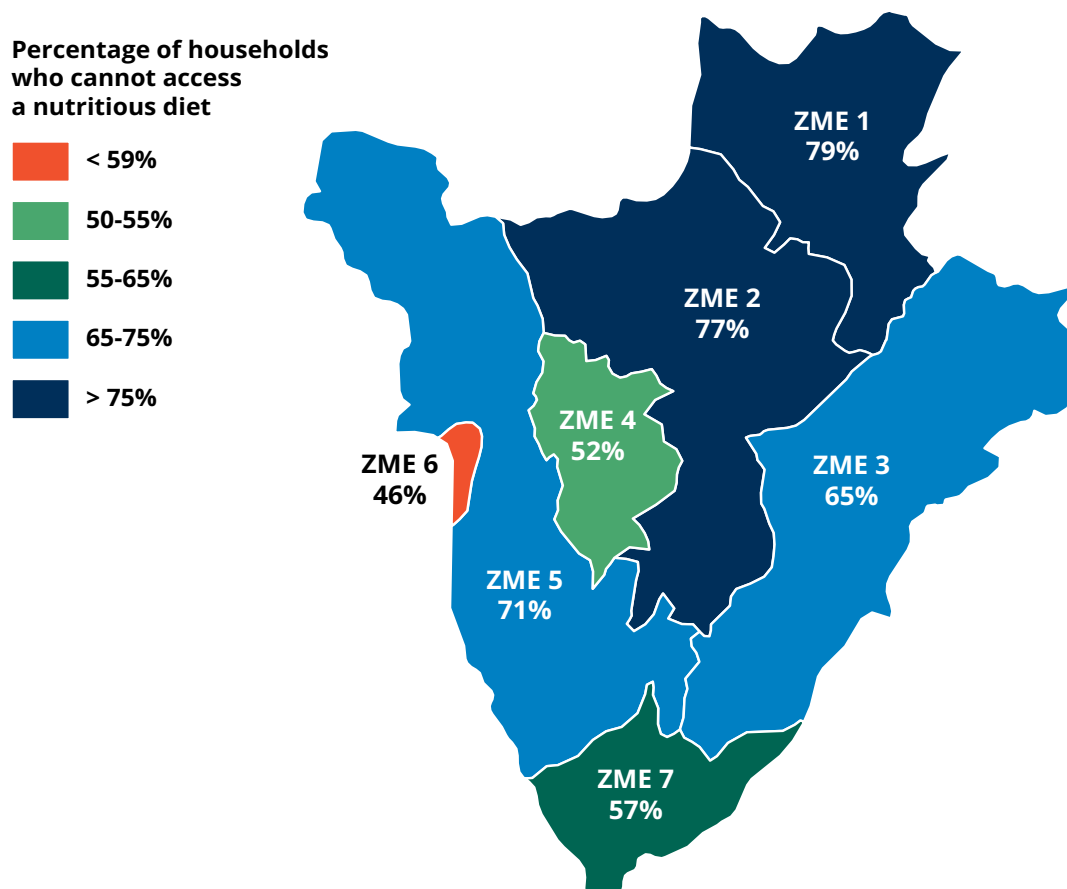
On average, 30 percent of households could not even afford an energy-only diet, while 70 percent could not afford a nutritious diet. This aligns broadly with poverty figures mentioned previously, which unlike the nutritious diet affordability line take into consideration food as well as non-food items. Therefore, it is likely that some households above the monetary poverty line are unable to afford a nutritious diet.

This is of concern as poor affordability of nutritious foods limits access to these foods, which can lead to poor dietary intake and dietary quality.

A sub-national analysis shows that non-affordability of nutritious diets was lower in the centre (ZME 4) and highest in the northern zones (ZME 1 and 2) (Figure 2).

¹ Using average exchange rate of 1 January 2018 and 31 December 2019 (cost of the diet analysis) USD 1 = BIF 1781.12

Figure 2: Non-affordability of nutritious diet by ZME in 2018–2019 (average across the three seasons)



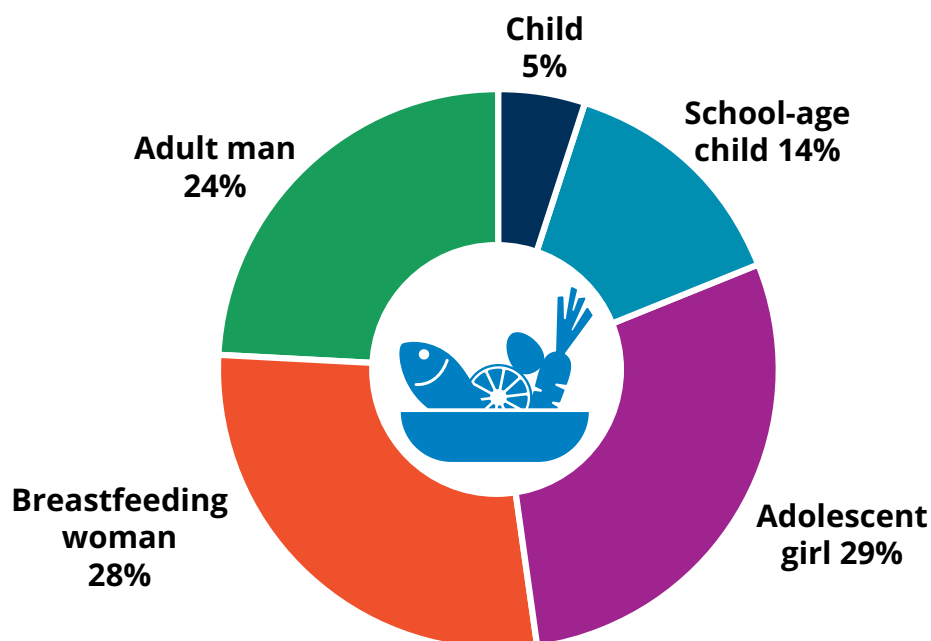
The cost of the diet has also likely increased dramatically since the time of these analyses, given the economic pressures of the COVID-19 pandemic and the Global Food Crisis which has contributed to high inflation in Burundi since 2022.

VULNERABLE GROUPS

Adolescent girls and pregnant and breastfeeding women have relatively higher requirements of specific nutrients such as iron, folic acid and vitamin B12. In the modelled household, this is reflected by the adolescent girl and breastfeeding woman together having the highest cost of nutritious diets within the

household, representing 57 percent of the household’s cost of a nutritious diet (Figure 3). Actual intra-household food allocation may not take these differential nutrient needs and the corresponding greater need for diversity in the diet, which comes at a higher cost, into consideration. Therefore, targeted interventions such as supplementation are often needed to help cover the nutrient requirements of nutritionally vulnerable individuals. In 2017, among households within the lowest economic quintile in Burundi, about a third of women of reproductive age (15–49 years) were considered undernourished (14).

Figure 3: Distribution of the daily cost of a nutritious diet for the modelled household across individual household members (FNG 2019)



Children aged 12–23 months have a lower cost of nutritious diet compared to other members of the household as they consume less food, and the modelled diet assumes optimal breastfeeding, which covers a large proportion of their nutrient needs. This age group, however, is nutritionally vulnerable as their smaller stomachs mean that meals must be provided at higher frequency and need to include nutrient-dense foods to cover nutrient requirements (22).

The FNG analyses highlighted the vulnerability of children, evidenced by extremely high rates of stunting in the country. A 2017 UNICEF report estimates that 78 percent of children in Burundi live under the national poverty line, which is higher than the average national poverty line of 65 percent (23). Targeted interventions for children need to be prioritized to break the cycle of poverty and malnutrition in Burundi and unlock human capital development and economic growth.



V. Using the FNG to inform social protection programmes

CONTRIBUTION OF SOCIAL PROTECTION TO REDUCING THE AFFORDABILITY GAP

The WFP-supported School Feeding Programme is one of Burundi's largest social protection programmes – more than 20 percent of schools are currently covered by the programme (704,000 beneficiaries in eight provinces) with plans to expand further (14). According to the Burundi National School Feeding Policy (2018–2032), the Government's plan is to reach universal coverage by scaling-up local decentralized Home-Grown School Feeding (HGSF). HGSF provides an important platform to improve nutritional and educational outcomes of children and small-holder farmers' incomes through a stable institutional market.

The FNG analysis modelled different school meals that could be implemented to leverage the programme to further increase nutritional intake for school-aged children. As the energy and nutrient requirements of school-age children increase significantly by the time the child reaches 10–11 years, and these needs often remain unmet

when households are unable to afford nutritious diets, the importance of the School Feeding Programme becomes apparent. Thus, the FNG modelled the impact of different scenarios on the nutritional content and cost of a nutritious diet for a 10–11-year-old child including²:

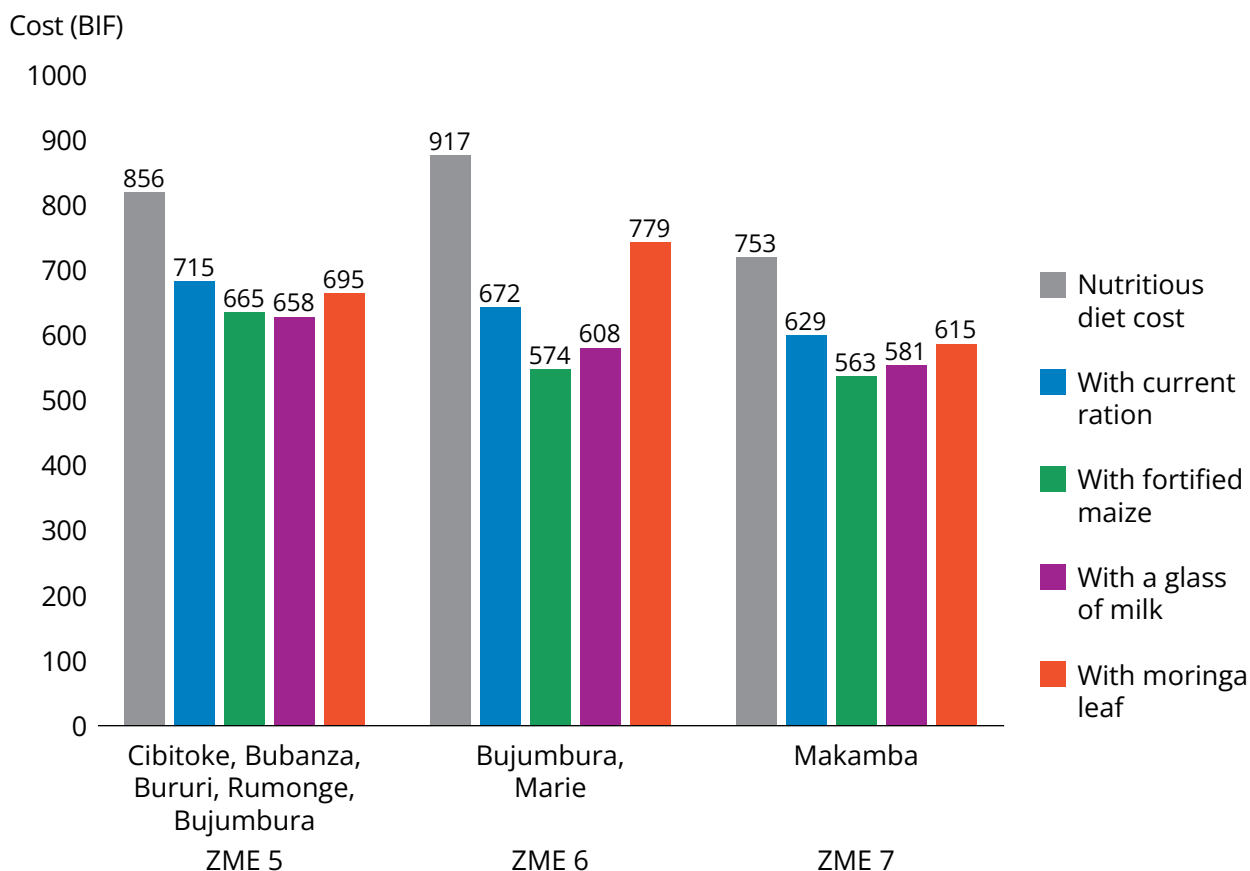
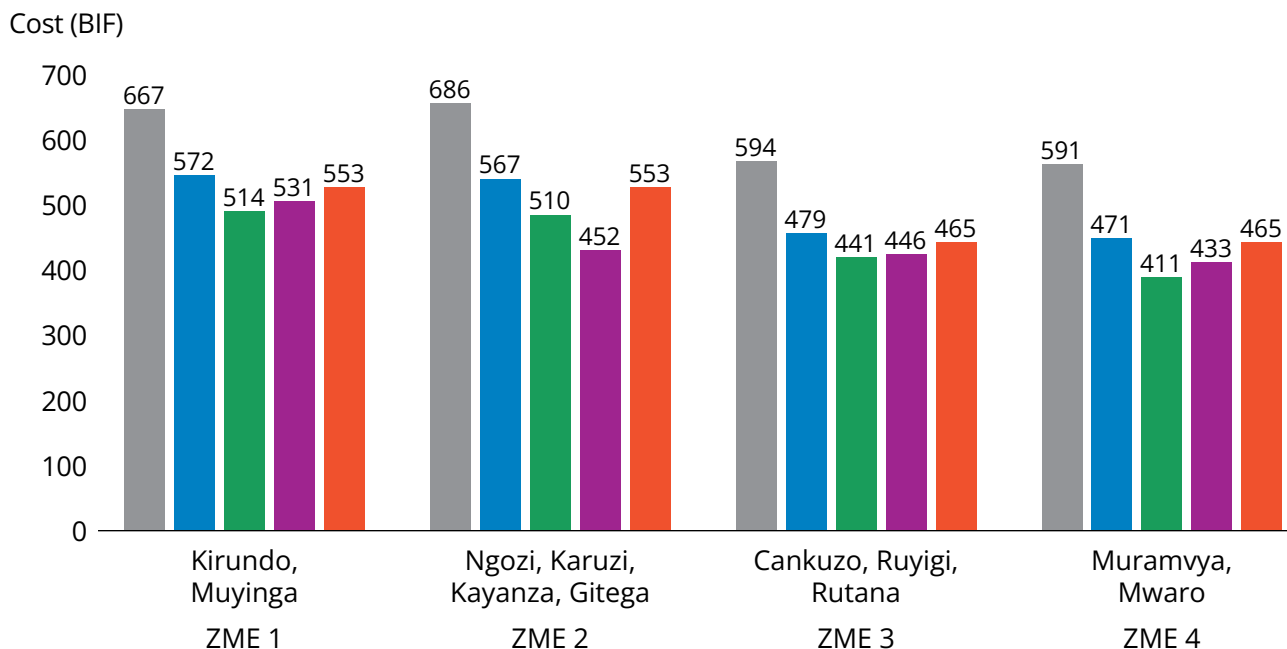
1. The current ration (cereals, legumes, oil and salt);
2. The current ration with fortified maize flour replacing unfortified cereals;
3. The current ration with an additional glass of milk; and
4. The current ration with an additional portion of vegetables (60g of moringa leaf).

Figure 4 shows the decrease in the cost of the nutritious diet for the child with the School Feeding Programme and inclusion of the above foods. Modelling indicates that fortifying maize flour would yield the highest impact on the reduction in cost of the nutritious diet for school-age children in most regions, except for ZME 2 and ZME 5, where adding a glass of milk would achieve the highest reduction in the cost of the nutritious diet.



² This is a selection of the modelling done in the FNG analysis. For a more complete overview, see the FNG report.

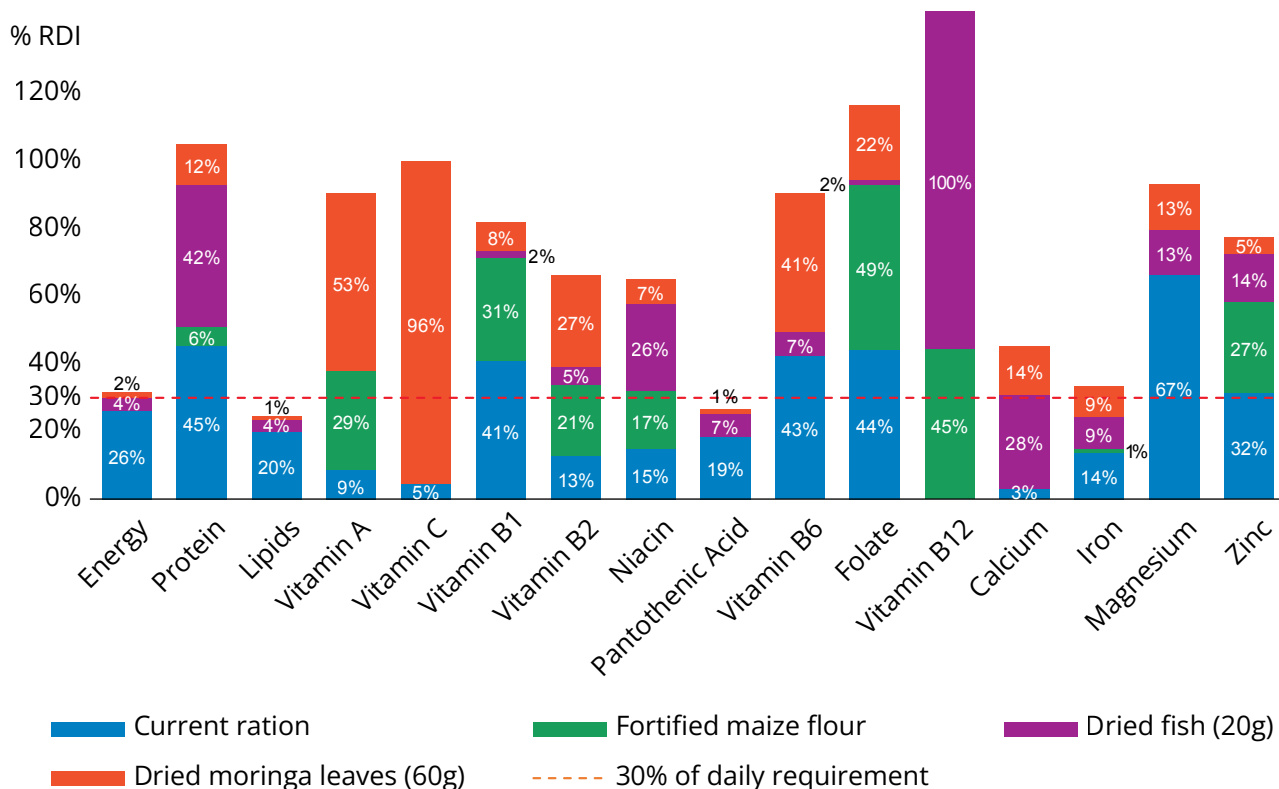
Figure 4: Comparison of the cost of a nutritious diet for a child 10–11 years of age with the current School Feeding Programme ration and additions to the current ration (FNG 2019)



If children eat three meals a day, the school meal should cover at least 30 percent of a child's nutritional requirement. The current ration falls short of meeting the requirement in lipids, vitamins A, C, B2, niacin, pantothenic acid, B12, calcium and iron (Figure 5), and fails to include any vitamin B12. Fortified maize flour would

significantly increase the nutritional intake of children for all nutrients, except calcium, magnesium and vitamins B6 and C. A glass of milk would contribute to meeting key nutrient intakes of vitamin B12, pantothenic acid, vitamin B1 and calcium. Moringa leaf would help in meeting vitamin A and C and iron requirements.

Figure 5: Percentage of Reference Nutrient Intakes met by the school meal provided through the School Feeding Programme - Nutritional coverage for the child 10-11 years



The FNG also modelled the combination of moringa leaf, fortified maize, and dried fish, a good source of animal protein and calcium. This combination would meet 30 percent of daily requirements of a 10–11-year-old child. Overall, a combination of foods from different food groups supplemented by fortification of staple food

would make the greatest contribution to closing the nutrient gap. The FNG analysis showed the extent to which these modelled rations contribute to the school-going child's nutrient intake and therefore reduction in their cost of the nutritious diet, reflecting the extent to which nutrient needs are being met.

VI. Bridging research with policy and action

WFP continues to support the institutionalization and expansion of the School Feeding Programme in Burundi with the objective of reaching more children. The FNG findings have been leveraged to inform the next phase of the programme expansion with the aim of improving the nutritional intake of children at all ages. In particular, the latest proposal for the McGovern–Dole grant included recommendations that mirrored findings from the FNG:

- 1. Inclusion of fortified foods** (e.g. rice, maize meal, vegetable oil) **in the school meals to improve the nutrient content.**
- 2. Inclusion of milk as source of calcium and B12**, two micronutrients that are generally poor in Burundian diets and hardest to meet in terms of cost.

Based on the FNG findings, and a pilot programme conducted in neighbouring Rwanda in partnership with the Rockefeller Foundation, WFP is supporting the implementation of fortified wholegrain (FWG) maize flour in Burundi. The programme launched in July 2023 has resulted in over 65,00 school children benefiting from FWG maize flour in their school meals. Under the same project, fresh milk feasibility and biofortification studies are ongoing to examine whether these commodities could be included in school meals. Additionally, fresh vegetables grown using hydroponics have been incorporated into nine School Feeding Programmes, with around 8,000 school children benefiting, and ultra-high temperature (UHT) milk and mushrooms have also been introduced.

The Government of Burundi, with WFP's technical support and assistance, is willing to scale-up the nutrition-sensitive HGFSF initiatives. Domestic financing contributing to HGFSF doubled from USD 2.5 to 4.4 million as of July 2023. While the School Feeding Programme cannot meet the needs of all vulnerable individuals within a household, it can provide an important platform to support the nutritional and life outcomes of children, at key cognitive and physical development periods within their life cycle. This provides an important example of how to provide comprehensive social protection packages to support nutrition outcomes by leveraging existing systems and programmes.

In addition, supporting supply chains and industries, including small and medium-sized enterprises, within the country to promote the inclusion of these more targeted nutritious foods can yield significant benefits for children, households, and the country as a whole (24). Agricultural, trade and industry policies and programmes, including those of livelihood support, aimed at encouraging the culture and creation of markets for nutritious foods, can yield a triple benefit of improving livelihoods of agricultural households, developing local economy and improving dietary quality and nutrition of children and other household members.

Plans are under way for updating the FNG analysis to reflect the evolving nutrition and economic situation in Burundi.

VII. Bibliography

1. World Bank. The World Bank in Burundi. 2023. <https://www.worldbank.org/en/country/burundi/overview>.
2. African Economic Outlook (AEO). Burundi Economic Outlook. African Development Bank Group. 2023. <https://www.afdb.org/en/countries/east-africa/burundi/burundi-economic-outlook>.
3. United Nations Development Programme. The 2021/2022 Human Development Report. New York, NY: s.n. 2022.
4. World Bank. Macro Poverty Outlook – Burundi. 2023.
5. UNICEF. Country Office Annual Report – Burundi. 2022.
6. Institute of Statistics and Economic Studies of Burundi (ISTEEBU). Demographic and Health Survey in Burundi (EDSB-III). 2016–2017.
7. WFP. Burundi - Annual Country Report – Country Strategic Plan (2022–2024). 2022.
8. Government of Burundi. Enquete Nationale sur la Situation Nutritionnelle et de Mortalite au Burundi (ENSNSAB). 2019.
9. Tufts University. Global Dietary Database. 2019. [cited: 6 September 2021]. <https://www.globaldietarydatabase.org/data-download>.
10. Odjidja, E., et al. 2030 Countdown to combating malnutrition in Burundi: comparison of proactive approaches for case detection and enrolment into treatment. *International Health*, 4, s.l.: vol. 14, 2020.
11. Republique du Burundi. Plan National de Développement 2018–2027 (PND Burundi 2018–2027). 2018. <https://www.presidence.gov.bi/strategies-nationales/plan-national-de-developpement-du-burundi-pnd-burundi-2018-2027/>.
12. Ministère du Plan et du Développement Communal/ Cellule Prospective & Programme des Nations Unies pour le Développement au Burundi. Vision Burundi 2025. 2011. http://www.presidence.gov.bi/archives/IMG/pdf/Vision_Burundi_2025_complete_FR.pdf.
13. Republique du Burundi. Multi-sectorial strategic plan for food security and nutrition. April 2014. <http://extwprlegs1.fao.org/docs/pdf/bur158662.pdf>.
14. WFP. Fill the Nutrient Gap. Bujumbura, Burundi: s.n., 2019.
15. Stratégie de la Protection sociale au Burundi. ILO. January 2015. http://www.ministereftss.gov.bi/sites/default/files/strategie_de_la_protection_sociale_au_Burundi.pdf.
16. The International Policy Centre for Inclusive Growth jointly supported by the UNDP and the Government of Brazil. Setting up a Unified Social Registry in Burundi: Moving towards better coordination with social protection. Research Brief. 2022. https://ipc-undp.org/sites/default/files/pub/en/PRB93_Setting_up_a_Unified_Social_Registry_in_Burundi.pdf.
17. Watson, C., and Devereux, S.. WFP Burundi: Social Protection Strategy Development. April 2021. https://docs.wfp.org/api/documents/WFP-0000132361/download/?_ga=2.79348563.610974567.1660250783-176473284.1633967650.
18. UNDAF. Système des Nations Unies (SNU) Plan Cadre des Nations Unies pour l'Aide au Développement du Burundi – UNDAF 2019–2023. 2019.
19. UNICEF. Social Protection – Budget Brief Burundi. 2021–2022.
20. WFP. Burundi Social Protection Strategy Development 2021. 5 October 2021. <https://www.wfp.org/publications/wfp-burundi-social-protection-strategy-development-2021>.
21. Bigayimpunzi, L. A Gender Analysis of the Merankabandi Cash Transfer Project. HEART (High-Quality Technical Assistance for Results). 13 January 2021. https://www.heart-resources.org/wp-content/uploads/2021/09/Rapport-provisoire-revue-rapide-genre-Eng-version-FINAL.docxedt_REV-2.pdf.
22. UNICEF. Fed to Fail? The Crisis of Children's Diets in Early Life. *Child Nutrition Report*. 2021. <https://data.unicef.org/resources/fed-to-fail-2021-child-nutrition-report/>.
23. UNICEF. La Pauvreté des enfants au Burundi. 2017.
24. Collins, C., Magnani, R., & Ngomirakiza, E. USAID Office of Food For Peace Food Security Country Framework for Burundi (FY 2014–FY 2019). Washington, D.C.: s.n., 2013. FHI 360/FANTA.
25. Bose, I., et al. The 'Fill the Nutrient Gap' analysis: An approach to strengthen nutrition situation analysis and decision making towards multisectoral policies and systems change. *Maternal and Child Nutrition*, vol. 15, 3, s.l.: John Wiley & Sons, Ltd. 2019.

Photo credits: WFP/Arete/Fredrik Lerneryd

World Food Programme

Via Cesare Giulio Viola 68/70,
00148 Rome, Italy - T +39 06 65131

wfp.org

wfp.org/fillthenutrientgap

wfp.org/social-protection