

Fill the Nutrient Gap Benin

SAVING LIVES CHANGING LIVES

Report



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Suggested citation:

Permanent Secretariat of the Food and Nutrition Council and World Food Programme. Fill the Nutrient Gap: Benin. Cotonou, Benin, 2023

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Foreword

The Government of Benin prioritizes eradicating hunger and malnutrition in its five-year agenda (Government Action Plan, 2021-2026). Chronic malnutrition, wasting and anaemia rates have stagnated, while overweight has been on the rise over the last ten years. This impacts not only on the health and nutrition status of the population, but also on the country's economic development. In order to ensure adequate nutritional intake for populations in general and vulnerable groups in particular, there is a need to identify policies, strategies and programmes that can support the prioritization of the most appropriate interventions to address nutrient deficiencies through nutritious diets.

The Fill the Nutrient Gap (FNG) analysis aims to strengthen situational analysis and the identification of entry points for improving the nutritional status of populations. It uses a food system approach that focuses on the availability, physical access and affordability of nutritious food, and the existing barriers and opportunities to improve nutrition and it does so across the health, social protection, education and agriculture sectors.

The FNG analysis has been carried out in Benin to contribute to the achievement of Sustainable Development Goal 2.2, "End all forms of malnutrition by 2030", including meeting the internationally agreed targets for stunting and wasting in children under 5 years of age by 2025, and addressing the nutritional needs of adolescents, pregnant and breastfeeding women, and the elderly. The analysis and results presented in this report will help strengthen the National Food and Nutrition Policy 2023-2033 and contribute to the prioritization of interventions in its action plan.

Dr Alfred ACAKPO

Secrétaire Permanent du Conseil de l'Alimentation et de la Nutrition

Executive Summary

Background

In Benin, the nutritional situation of children under five remains worrying, with 32 percent stunted, 17 percent underweight, 5 percent wasted and 2 percent overweight (DHS 2017-2018). Nevertheless, according to a recent report (Cadre Harmonisé 2023), food availability is in general satisfactory because of improved agricultural production. In accordance with the Zero Hunger objective (SDG 2), Benin reaffirmed to eliminate hunger, ensure food security, improve nutrition, and promote sustainable agriculture at the Tokyo 2021 Nutrition For Growth (N4G) Summit. The implementation of the FNG in Benin took place while the national food and nutrition policy was being finalized, and when the bill on school feeding was being drafted. The FNG analysis provides evidence to inform strategic and programmatic choices for improving the nutritional status of vulnerable groups in Benin by assessing the main barriers to accessing nutritious foods and identifying entry points for nutrition-related actions across multiple sectors. The findings and recommendation of the FNG analysis intend to guide and align the strategic implementation of nutrition-specific and nutrition-sensitive activities by relevant stakeholders.

Process and methods

The FNG analysis estimated costs of energy-only and nutrient-adequate (nutritious) diets, as well as the percentages of households that, given current food expenditure, are unable to afford each diet. The costs of energy-only and nutritious diets were estimated using the linear optimization software, Cost of the Diet (CotD) developed by Save the Children UK. Diet costs and non-affordability were estimated in 10 livelihood zones of the country for a five-person household comprising a child between 1 and 2 years of age, a school-age child (6–7 years), an adolescent girl (14–15 years), a breastfeeding woman, and an adult man.

Primary data collection of local food prices was carried out across the 10 livelihood zones in January and February 2023, and the food expenditure data in Global Analysis of Vulnerability and Food, Nutritional and Food Systems Security Benin (AVGSAN-SA, 2022) were used to calculate the affordability of each diet by matching departments to their corresponding livelihood zones. The results of the analysis were validated in May 2023. Revisions with intervention modelling were made and presented in July 2023 at a multi-sector workshop, during which stakeholders drew up recommendations based on the FNG's main findings. The Permanent Secretariat of the Food and Nutrition Council (SP/CAN), with technical support from the WFP, led the FNG process and convened stakeholders to inform, validate and draw recommendations from the FNG analysis.

Main findings

- A high proportion of households in Benin cannot afford the minimum cost to purchase a nutrientadequate diet. A household must spend at least CFA (African Financial Community francs) 1,415 per day to cover its nutritional needs, whereas meeting energy-only requirements costs CFA 568 per day. The cost of a healthy diet per household per day is CFA 2177.
- 2. More than a half of households (60 percent) cannot afford a nutritious diet and one in five (21 percent) cannot afford an energy-only diet. The costs and non-affordability of both energy-only and nutritious diets vary across livelihood zones.
- 3. Given food consumption habits, maize and local flours provide good opportunities for fortification that can improve households' access to affordable nutritious diets. In Benin, fortification of wheat flour, oil and iodized salt has been mandatory, and there is a good opportunity to fortify maize and rice given their high level of consumption and industrial processing. Maize fortified with vitamin A, vitamin B₁₂, iron and zinc reduces the cost of a household's nutritious diet by 4-7 percent if offered at the same price or 20 percent higher than the normal maize. Fortified infant flour is commercially available in Benin; however, the standard of fortification could be improved with more essential micronutrients.
- 4. With over 40 percent of Benin's population below 15 years of age, programmes that focus on human capital development of children and youth can benefit households and the economy in the long term. The current school meal programme in Benin reduces the economic burden on households with school-going children by covering part of the cost of their nutritious diet. It also covers 30 percent of daily macronutrient requirements and more than 50 percent of daily requirements for certain micronutrients for children, yet it lacks in providing other key micronutrients.
- 5. Opportunities exist to improve school meals. Replacement of the current staples with fortified or wholegrain equivalents and additions of locally available foods can improve the nutritional quality of meals. Animal source foods have the greatest impact on closing nutrient gaps of school-age children and adolescents. However, inclusion of these foods in school meals is constrained by weak or non-existent value chains.

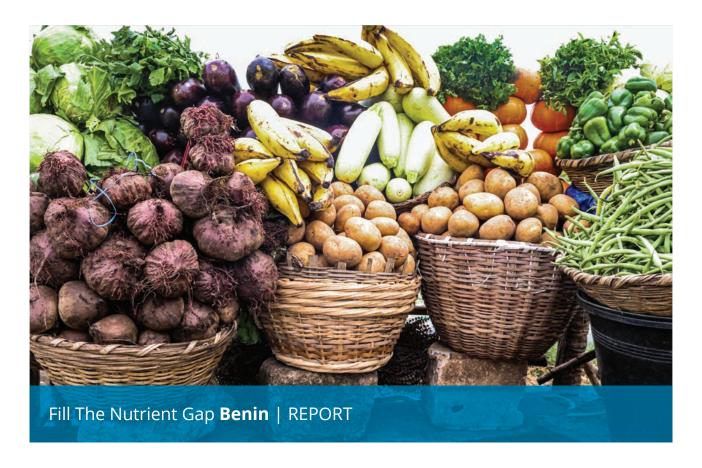
- 6. In Benin, young women who marry before the age of 18 start their reproductive lives early and face challenges realizing their full potential. The combined efforts of different sectors keep girls in school by covering part of their food and education costs. International evidence shows that providing school meals has the greatest impact on improving gender equity in education, while cash transfer programmes are also effective. School meals with a basic ration of fortified maize as well as Cash+Care (targeted cash transfer programme supported by UNICEF) can reduce the affordability gap of the nutritious diet of an adolescent girl by 27 percent.
- Recent violence and displacement in the northern regions of Benin have disrupted livelihoods and therefore food and nutrition security.
 Comprehensive response plans need to include nutrition-sensitive interventions to prevent a deterioration of the nutrition situation of displaced persons and host communities.
- Social protection programmes, interventions improving agricultural practices, and provision of supplementation to targeted individuals can help cover households' nutritional needs. However, a single intervention is not enough to close the affordability gap of a nutritious diet substantially,

hence it also needs a nutrition-sensitive value chain approach. Various interventions help cover the cost of a nutritious diet in different ways and multisectoral coordination is necessary to ensure comprehensive assistance to the most vulnerable households.

Recommendations

- 1. Improve nutritional quality of school meals by increasing the diversity of food groups.
- 2. Develop systems, capacities, and infrastructures for the fortification of staple and processed foods.
- 3. Improve nutritional quality of school meals by replacing maize and white rice with fortified maize, unpolished brown rice or parboiled rice.
- 4. Improve the nutritional status of adolescents by using schools as a platform for health interventions.
- 5. Develop national systems to provide cash transfers to households facing shocks and households living in extreme poverty.
- 6. Develop nutrition-sensitive resilience programmes in shock prone areas and communities with high poverty rates.





Introduction to the Benin Fill the Nutrient Gap (FNG) Analysis

In Benin, the nutrutional situation among children under five remains worrying. According to the results of the latest demographic and health survey (DHS 2017-2018), 32 percent of children under 5 suffer from stunting, 17 percent from underweight, 5 percent from wasting and 2 percent from overweight. The results of the Multiple Indicator Cluster Survey (MICS 2021- 2022) show that 36.5 percent of under-fives are stunted, 21 percent underweight and 8.3 percent wasted.

In accordance with the SDG Zero Hunger objective, Benin committed to eliminate hunger, ensure food security, improve nutrition, and promote sustainable agriculture (2021 Tokyo N4G Summit). The implementation of the FNG in Benin took place while the national food and nutrition policy was being finalized, and a bill on school feeding was being drafted. The FNG assesses the main barriers households face in accessing nutritious food and aims to identify entry points for nutrition-related actions across multiple sectors with the aim of stemming malnutrition. The findings from the FNG analysis serve as evidence to inform strategic, policy and programmatic choices for improving the nutritional status of vulnerable groups. The findings and recommendations of the FNG are intended to guide and align the strategic

implementation of nutrition-specific and nutritionsensitive activities by relevant stakeholders.

Building consensus for improved nutrition

Nutrition is a crucial pillar in the development of a healthy, productive nation. Good nutrition enhances physical and cognitive development, prevents disease, and increases the potential of the workforce and society. Improving diets, especially of children and women, brings immediate and longterm health, education and economic benefits. The two Lancet series (2013 and 2021) on maternal and child undernutrition identified a variety of nutrition interventions that have proven effective. Improving the nutrition situation in a country requires coordinated actions across the food, social protection, health, and education systems. The actions need to be grounded in a good understanding of the local context, its opportunities and bottlenecks, and a synthesis of global and local evidence.

FNG is an analytical process comprised of a secondary literature review in combination with CotD linear optimization to understand local drivers that affect the

availability, cost and affordability of a nutritious diet. Using the CotD software, solutions to improve availability of nutritious foods, lower their cost and/or increase income are then assessed for their potential to improve affordability. In this way, the context-specific potential impact of proven interventions can be quantified. This summary report presents findings from the analysis and a discussion of its process, methodology

and limitations. It highlights recommendations and priorities identified by stakeholders. By identifying and contextualizing new findings, the FNG analysis contributes to building consensus around a vision and a path forward for improved nutrition in a sustainable way that is integrated across the country's food systems.

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

Malnutrition has two direct causes: inadequate dietary intake and disease. The FNG assessment focuses on gaps in dietary intake to inform national policies and actions that can be taken across food, social protection, and health systems to improve nutrition, with a focus on the most vulnerable populations. The FNG considers whether nutritious foods are available, accessible, and affordable in a specific context, and identifies the barriers that lead to gaps in nutrient intake. The analysis focuses on the extent to which vulnerable people have choices in the foods they consume and how those choices are made. The FNG process identifies and models the impacts of context-appropriate interventions to improve diets and nutrient intake across food, health, education, and social protection systems. The results are used to identify entry points across systems, to refine programmes, and to make recommendations to policymakers.

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 (CotD) 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.

Preventing malnutrition, including through improved access to nutritious foods, cannot be achieved 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.

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 together with the analytical team 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, etc.

Between 2016 and early 2022, FNG analyses were completed in 40 countries and, at the time of writing in 2023, were ongoing more in the pipeline.

The FNG methodology has been developed by WFP with technical support from partners including 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.

For 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.

Process and Scope of the Analysis

Process of the FNG Analysis in Benin

In Benin, the FNG analysis was carried out under the leadership of SP/CAN to coordinate the activities of all national and international stakeholders involved in the field of food and nutrition in Benin. The analysis brought together all SP/CAN partners (sectoral ministries, international and local non-governmental organizations, technical and financial partners, and civil society) with technical support from WFP Benin's Nutrition and Monitoring & Evaluation teams, the WFP Dakar Regional Office and the Systems Analysis for Nutrition team at WFP's headquarters in Rome.

The process began in September 2022 with the formation of the FNG technical working group (TWG), led by the SP/CAN. At the planning stage, the TWG defined the direction of the FNG analysis and identified the data sources to be used. Food price data were then collected in January and February 2023. The FNG team subsequently carried out the baseline analysis and validated the findings with stakeholders in May 2023. Revisions to the analysis and intervention modelling were then conducted, and these were presented and validated at a multisectoral workshop in July 2023 where recommendations were formulated based on the main findings of the FNG. The validated results of the FNG analysis and the stakeholder recommendations will be disseminated to the authorities and various institutions involved in the food and nutrition sector in Benin.

Figure 1: The FNG process followed in Benin



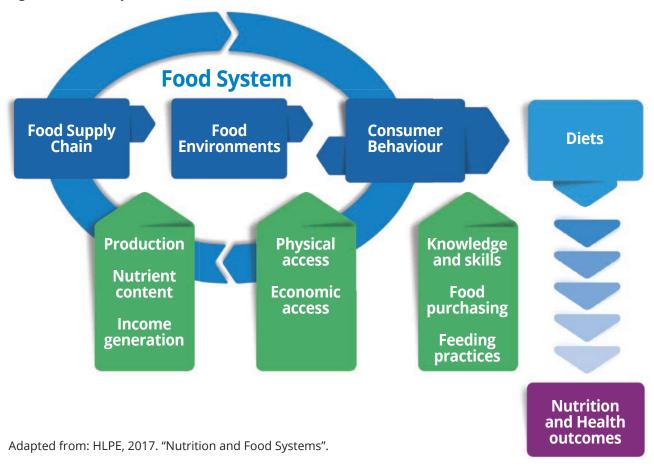
Scope and Focus of the FNG Analysis

The Benin FNG focuses on improving the understanding of the food environment of vulnerable groups, in particular children under 2 years of age, school-age children, adolescent girls and breastfeeding women. The analysis aims to provide evidence on the economic and physical barriers to adequate nutritional intake and to identify entry points for greater impact on improving nutrition using a food systems approach. Long-term solutions to reduce malnutrition require

transformation of the food systems along food value chains, food environments and consumer behaviour patterns (Figure 2).

Findings and recommendations of the FNG analysis help to align communication and awareness raising on nutrition to ensure consistency of messages between the different stakeholders (UN agencies, NGOs, state technical services and civil society) and guide the strategic implementation of nutrition-specific and nutrition-sensitive activities.

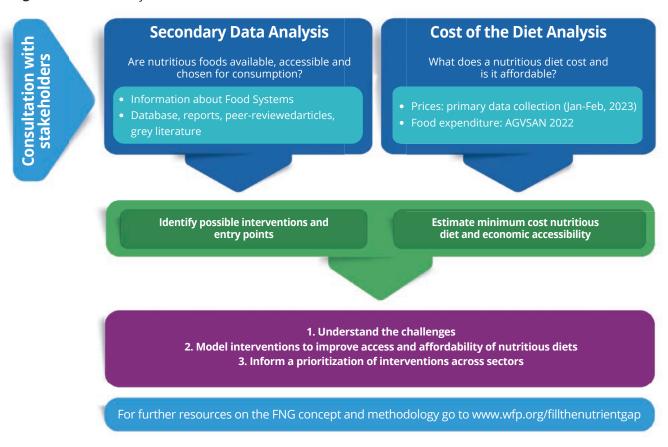
Figure 2: Food systems for diets and nutrition and health outcomes framework,



Methodology

The FNG analysis is composed of a CotD analysis and a secondary data and literature review.

Figure 3: FNG analytical framework



CotD Analysis

The CotD analysis uses local food price data and household food expenditure data. Food price data was primarily collected from 68 markets in 10 livelihood zones throughout January and February 2023. It included the price of 133 foods from 12 food groups and information on fortified foods. Food is abundant during this season, and availability and prices may vary during the year. This should be taken into consideration when interpreting the result.

Using the collected local food price data, the costs of energy-only and nutritious diets were estimated using linear programming through CotD tool developed by Save the Children UK. The cost of a healthy diet was estimated following the dietary recommendation based on Benin's food-based dietary guidelines (2015). These costs were estimated for each of the 10 livelihood zones. The cost of the nutritious diet was adjusted to reflect staple consumption in each zone based on

reports describing food consumption of households (2019) and livelihood zones (2016). Maize was selected as a primary staple food as it accounted for 47 to 85 percent of all staple food consumption in all livelihood zones, and other staple foods (millet, yam, sorghum, rice and casava) were selected according to the dietary pattern of each zone.

The costs of the energy-only, nutritious, and healthy diets are then compared to population level food expenditure data to estimate what proportion of the population is spending less. This estimate is referred to as "non-affordability of nutritious diet" in this report. The analysis used data from AVGSAN 2022, disaggregated at departmental level. To calculate non-affordability in livelihood zones, departments were matched to each of the zones used in the FNG analysis. The expenditure data was adjusted for inflation from January 2021 to January 2023 using the consumer price index (Consumer Price Index Monthly Bulletin, January 2023).

COST OF THE DIET (COTD) ANALYSIS

CotD software uses linear programming to understand the extent to which poverty, food availability and food 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 lowest possible cost of local foods that are required to provide individuals or households with their average needs for energy, and their recommended intake of protein, fat and micronutrients¹. 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' as the lowest cost nutritious diet that includes a typical staple food and excludes foods that are prohibited². This diet is referred to as the 'nutritious diet' throughout this summary. It meets requirements for nutrients, including protein, nine vitamins and four minerals, and does not exceed energy and fat requirements. The nutritious diet is conceptually similar to the 'nutrient-adequate' diet estimated as the second level of diet quality in the State of Food Insecurity (SOFI) report.

Population expenditure data is compared to the cost of the nutritious diet and is used to estimate the proportion of the population that would not be able to afford it. This non-affordability can be estimated and compared across different regions, seasons or countries. The estimate of non-affordability is a conservative estimate of the share of households unable to afford the lowest cost nutritious diet, assuming optimized selection of nutritious foods. The real cost and non-affordability of a nutritious diet is likely to be higher, as reflected by a healthy diet, which includes foods from several food groups and has greater diversity within food groups.

- 1 As defined by the Food and Agricultural Organization (FAO) and the World Health Organization (WHO).
- 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. Foods that are prohibited could be for customary or public health reasons, e.g., snails during pregnancy in certain regions of Benin.

Secondary Data Analysis

FNG secondary data and literature analysis seeks to identify barriers to accessing healthy diets, platforms for reaching nutritionally vulnerable groups in the population, and opportunities for policy and programme interventions to improve access to nutritious foods through multiple sectors, including agriculture, health, social protection and education.

Secondary data review and the discussion with stakeholders serve to identify the interventions for the FNG modelling and points of entry to improve physical and economical accessibility to nutritious diets, and draws the priority interventions and recommendations across all relevant sectors. The secondary data review covers the policy documents, journal articles, grey literature, evaluation reports, etc., in the subjects relevant to the Benin FNG analysis identified by stakeholders. The subject areas include, but are not limited to, school feeding programme, food consumption and habits, food price inflation, fortification, livelihood zones, agriculture programme and policies, agricultural value chain, and social protection programme.

Modelled household and main target groups for the analysis

Based on national average household size, the FNG analysis was carried out for a 5-person household, which included the following individuals:

- 1. Breastfed child aged 12-24 months
- 2. Child aged 6-7 years
- 3. Adolescent girl aged 14-15 years
- 4. Breastfeeding adult woman
- 5. Adult man.

Household composition, validated with stakeholders, reflected the average household size in Benin and considered nutrient needs at different stages of the life cycle and nutritionally vulnerable groups.

Intervention modelling

All interventions modelled in the FNG analysis were defined and approved by stakeholders. The focus of the modelling was defined by the TWG during the planning phase.

To identify concrete recommendations based on analyses, the FNG process concentrated on the modelling areas outlined in Figure 4.

Figure 4 : Entry points and interventions modelled to estimate reduction in cost or improved economic access to a nutritious diet

- Livelihood support and resilience
- Improving agricultural practices for higher yields
- Cash Transfer

Increase household income and food expenditure Target
vulnerable
individuals
with specific
interventions

- Nutritional supplements
- School meals including:
- Diversified foods
 - Fortified foods

Improving economic access

- Fortification of staple foods
- Micronutrient powder

Increase nutrient content of foods access to nutritious foods

Increase availability and lower prices of nutritious foods

- Market-based interventions
- Crop diversification
- Reducing post-harvest losses
- Small farms and subsistence farming



Findings

1.

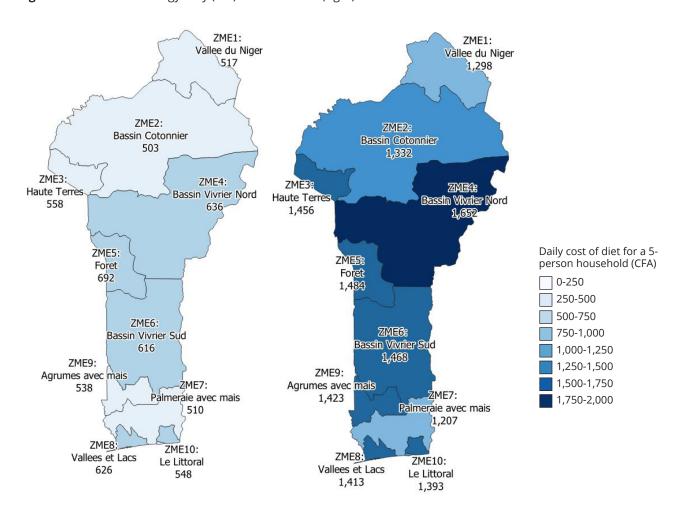
On average, a 5-person modelled household must spend at least CFA 1,415 per day to cover their nutritional needs.

According to the CotD analysis, meeting the nutritional needs of a 5-person household would cost, on average, CFA 1,415 and meeting energy-only needs would cost CFA 568, which means a nutritious diet would cost more than twice as much as an energy-only diet. The cost of a

healthy diet per household per day is CFA 2,177, more than three times that of the energy-only diet.

The cost of a nutritious diet varies widely across the different livelihood zones (Figure 5). A modelled household in the Bassin Vivrier in the north of Benin faces the highest cost (CFA 1,652 per day), and a household in the Palmeraie in the south faces the lowest cost (CFA 1,207) for a nutritious diet. The cost of an energy-only diet for the modelled household is stable throughout the different livelihood zones.

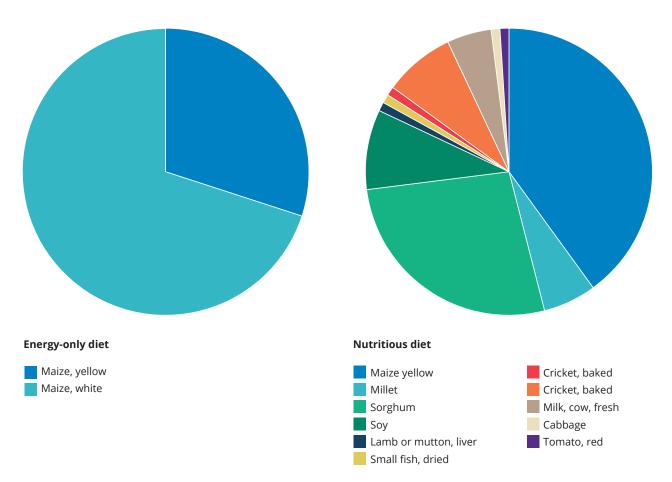
Figure 5: Costs of energy-only (left) and nutritious (right) diets in different livelihood zones



The cost of a nutritious diet is much higher than the cost of an energy-only diet because the foods needed to meet different macro and micronutrient requirements are more expensive than energy-dense foods. While energy needs can be met by only one or two food groups (e.g., cereals, and oils and fats), a nutritious diet requires greater diversity from different

food groups (e.g., cereals, vegetables, animal source foods, fruit, legumes and oils). For example, in Vallee du Niger, the diet consisting of maize, sorghum, small dried fish, lamb or mutton liver, local insects, cabbage, milk and red palm oil can provide the macro and micronutrient needs of household members.

Figure 6: Food composition of each diet (food intake in kcal)



The cost of the healthy diet for the modelled household would be, on average, CFA 2,177 per day, 50 percent higher than that of the nutritious diet, even though the cheapest recommended food items in a food group were selected according to Benin's food-based dietary guidelines (2015). The lowest cost healthy diet would not cover all the daily micronutrient requirements for the reference household member such as pregnant or breastfeeding woman and falls short in vitamin A, vitamin $B_{\rm 6}$, pantothenic acid, iron, calcium and vitamin $B_{\rm 12}$.

2.

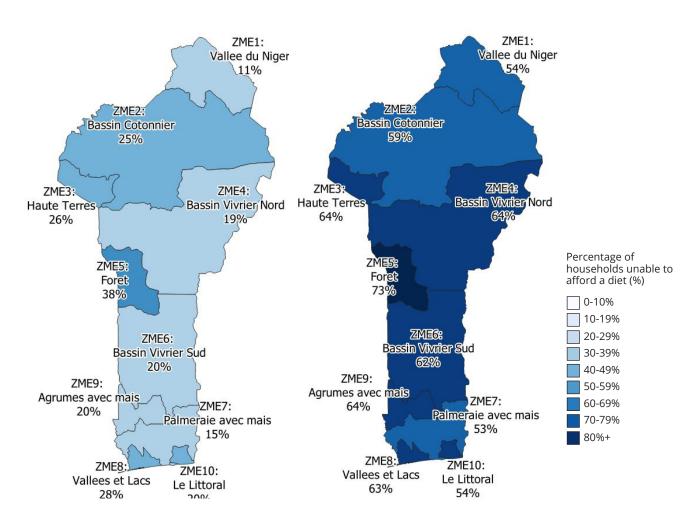
More than a half of households in Benin (60%) are currently unable to afford the lowest-cost diet that meets their nutritional needs, i.e., a nutritious diet.

In Benin, on average, more than a half of households (60 percent) would not be able to afford a nutritious diet, one household in five (21 percent) would not be able to afford an energy-only diet, and four households in five (78 percent) would not be able to afford a healthy diet.

The non-affordability of energy-only and nutritious diets varies across the livelihood zones. For the energy-only diet, non-affordability ranges from 11 percent in Valle du Niger to 38 percent in Foret, where more than a third of households would not be able to meet their energy needs. The non-affordability of a nutritious diet is significantly high in all livelihood zones, ranging from 53 percent (Palmeraie Avec Mais) to 73 percent (Foret) (Figure 7).

Economic capacity and prices of locally available foods in a zone determine the extent of non-affordability of the nutritious diet. For example, the minimum cost of a nutritious diet is slightly lower in Foret (CFA 1,484) than in the Bassin Vivrier Nord (CFA 1,652). However, household food expenditure in Foret is lower than in the Bassin Vivrier Nord, therefore a higher proportion of households in Foret (73 percent) than in Bassin Vivrier (64 percent) would not be able to afford the cost of the nutritious diet.

Figure 7: Non-affordability of energy-only (left) and nutritious (right) diets in different livelihood zones





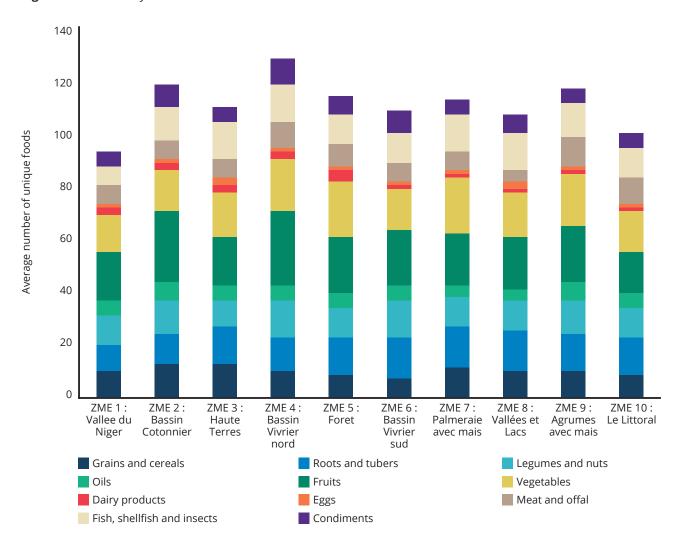
3.

Markets in Benin contain a good diversity of food products, although variety and costs differ between livelihood zones. Interventions that depend on food systems must be tailored to regional context.

Although a substantial diversity of foods is available in Benin's markets, each livelihood zone has different varieties of foods at a range of prices. The average number of foods available in a market ranges from 93 in the Vallee du Niger to 128 in the Bassin Vivrier

Nord, where there is a greater diversity of fruit and vegetables (Figure 8). Maize is a widely available staple food in all regions of Benin, but other essential staples such as yams, sorghum, cassava and rice are available in some regions and not in others; rice and cassava are widely consumed in the south of the country, and sorghum is consumed in the north. In Benin, green leafy vegetables, cereals and soybeans, palm nuts, small fish and offal are identified as cheap and are widely available. These foods help provide the limiting micronutrients (calcium, pantothenic acid and vitamin B_{12}) for members whose requirements were hardest to meet in the modelled household.

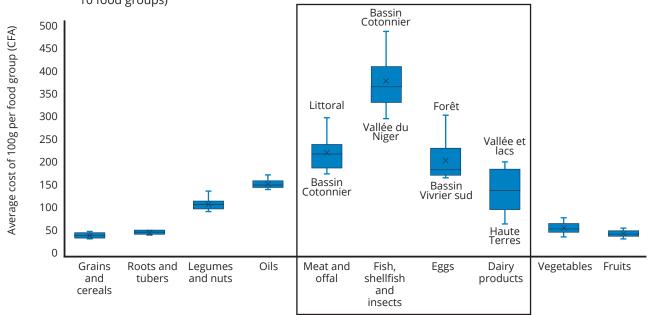
Figure 8: Diversity of foods in different livelihood zones



Animal source foods (fish, meat and offal, eggs, and dairy products) are more expensive compared to other food items and their prices vary substantially across livelihood zones (Figure 9). In Bassin Cotonnier, fish is most expensive, twice as much as in Vallee du Niger, yet the average price of meat and offal is lowest in the

country. Eggs in Foret are much more expensive than in other zones. This regional variation in availability, diversity and prices shows the importance of considering the local context when designing nutrition-sensitive interventions.

Figure 9: Variations in food prices in different livelihood zones (average cost of 100g of food from 10 food groups)

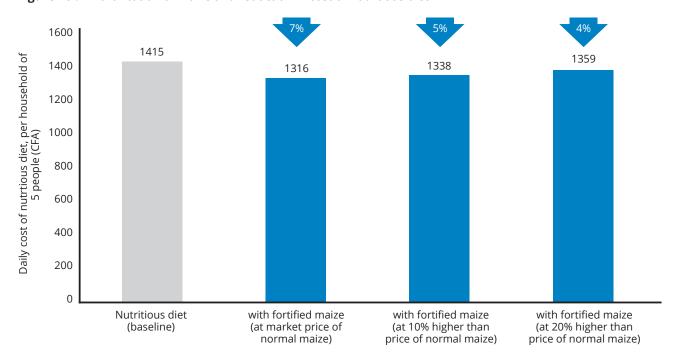


Given food consumption habits, maize and local flours provide good opportunities for fortification. Policy is needed to ensure quality and standards for fortified cereals.

Since 2009 Benin has set standards for the fortification of salt with iodine, vegetable oils with vitamin A and wheat flour with iron, zinc, folic acid and vitamin B. In addition to these foods, there is a good opportunity to fortify maize and rice given the high level of

consumption and industrial processing. Fortification has good potential to improve micronutrient content of locally available and widely consumed foods, reducing the cost of a nutritious diet. In order to assess the impact of fortification, the FNG modelled the fortification of maize with vitamin A, vitamin B₁₂, iron and zinc at varying levels of market price increases. The fortification of maize could reduce the cost of a nutritious diet to the household by 4 percent if offered at 20 percent more than unfortified maize, and by 7 percent if offered at the same price as unfortified maize (Figure 10).

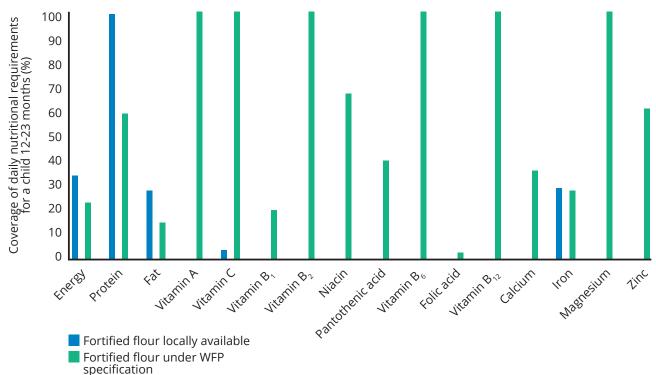
Figure 10: Fortification of maize and reduction in cost of nutritious diet



Specialized infant flours are another good entry point for improving the micronutrient intake of the targeted household members. Fortified infant flour is commercially available in Benin, however, the fortification guideline could be set to provide a wider range of essential micronutrients. Figure 11 shows that currently available infant flours meet daily requirements for macronutrients (energy, protein and lipid) and iron, yet they barely cover other essential

micronutrients for the child under 2. If the child aged 12-23 months were to instead be given fortified infant flour following WFP's standard with a wider range and higher content of micronutrients, it could cover 100 percent of daily requirement of vitamin A, vitamin C, vitamin B_2 , vitamin B_6 , vitamin B_{12} and magnesium, and it would substantially cover other micronutrients (niacin, pantothenic acid, calcium, iron and zinc).

Figure 11: Coverage of daily nutritional requirements for a child aged 12-23 months with locally available fortified infant flour or infant flour fortified to WFP specifications



With over 40 percent of Benin's population below 15 years of age, programmes that target children and young people and focus on their human capital development, such as school meal programmes, can benefit households as a whole and the economy in the long term. Current school meals leave micronutrient gaps and don't meet their potential to develop human capital.

Benin is a young country with over 40 percent of the population under the age of 15. For these children and adolescents to reach their full potential, they require high quality education as well as good health and nutrition. As human capital development is a priority for the government of Benin, more needs to be done to improve certain education indicators, such as primary (87%) and secondary (47%) attendance rates, as well as malnutrition indicators for children under five - 36.5 percent of children under five suffer from stunting, 8.3

percent from acute malnutrition and 21 percent from underweight (MICS Benin 2021-2022).

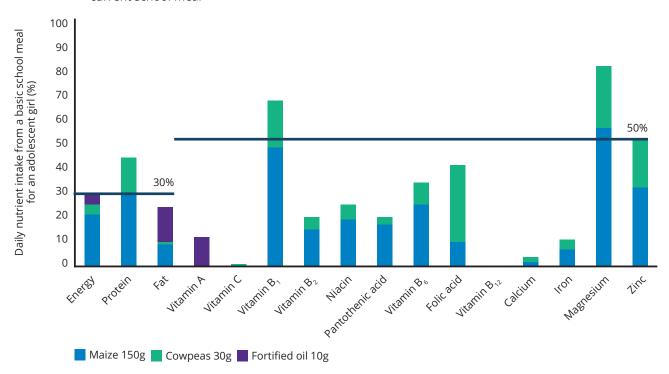
School feeding programmes are recognized as one of the interventions that can help build strong human capital: every dollar invested in Benin's school feeding programme can generate up to USD 5.2 in economic benefits for the country's Gross domestic product (GDP) (School feeding programme in Benin, Costbenefit analysis, 2019). Nutritionally adequate school meals encourage families to support their children to attend school regularly and help children focus on their studies. Evidence shows that school feeding programmes can help to meet education and nutrition objectives. They improved education indicators, such as enrolment, attendance, and retention (West and Central Africa region - RBD), and children's nutritional status, and they reduced micronutrient deficiencies in some contexts. School feeding programmes particularly help increase girls' enrolment and retention in Benin schools, where educating girls is not valued as highly as educating boys. Girls continue to face difficulties accessing education, despite the fact that primary and lower secondary education is free for girls. School

meals can encourage parents to let their daughters continue their studies, instead of falling them into early marriage and adolescent pregnancy.

The president of Benin announced a plan to make school meals available to all, covering between 75 percent and 100 percent of schools academic year 2024-2025. This will not only cover nutritional needs of school-going children but also support the local production of food, vitalizing the economies of communities. The current school meal programme in Benin reduces the economic burden on households with school-going children by covering part of the cost of a nutritious diet.

The current basic school ration includes cereals (maize or rice), legumes (cowpeas or yellow peas), vitamin A and D fortified oil, and iodized salt. It helps lower the cost of a nutritious diet on average, to CFA 157 from CFA 187 a day for a child aged 6 to 7 years, and to CFA 365 from CFA 406 a day for an adolescent girl. For the adolescent girl, the basic school meal covers around 30 percent of daily macronutrient requirements and more than 50 of daily requirements for certain micronutrients (vitamin B₁, magnesium and zinc), but lacks in other important micronutrients such as vitamin A, vitamin C, vitamin B₂, niacin, pantothenic acid, vitamin B₆, folic acid, vitamin B₁₂, calcium, and iron (Figure 12).

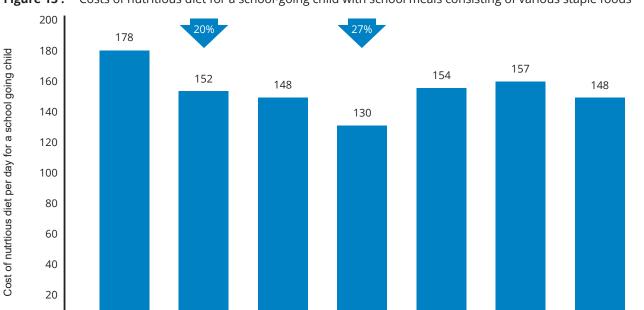
Figure 12: Percentage of the daily macro and micronutrient requirements of the adolescent girl covered by the current school meal



Opportunities exist to improve school meals. Replacement of the current staples with fortified or wholegrain equivalents and the addition of locally available foods can improve the nutritional quality of meals.

Current basic school meals can be improved with fortified or wholegrain staple foods. The FNG analysis

modelled various menus, replacing unfortified maize with fortified maize following WFP's fortification standard, brown rice, yam, cassava, or a combination of maize and sorghum. For a school-age child, the basic school ration (150g of maize, 30g of beans, 10g of fortified oil and 3g of iodized salt) reduces the cost of a nutritious diet to the household by 20 percent (CFA 152). The menu with brown rice is the most effective because it reduces the cost by 27 percent (CFA 130), followed by the fortified maize (CFA 148) and maize and sorghum (CFA 148) options (Figure 13).



Brown rice

Figure 13: Costs of nutritious diet for a school-going child with school meals consisting of various staple foods

Through fortification, school meals can provide a wider range of micronutrients for school-going children in addition to reducing the cost of their nutritious diet. For example, for an adolescent girl, the most effective school meal option of those modelled is the one with fortified maize, reducing the cost by 15 percent (CFA 344), followed by the meal with brown rice (CFA 353). The basic school ration covers 50 percent of the daily requirements

Base ration

Nutritious diet

0

for only three micronutrients (vitamin B_1 , magnesium and zinc) out of thirteen. Replacing maize with fortified maize can provide additional micronutrients, allowing school meals to cover more than 50 percent of the daily requirements of eight micronutrients (vitamin A, vitamin B_1 , niacin, vitamin B_6 , folic acid, vitamin B_{12} , magnesium, and zinc) (Figure 14).

Gari

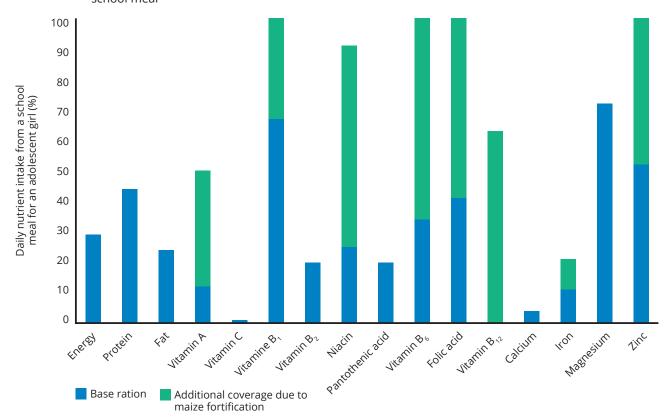
Yam

Red sorghum

and maize

Figure 14: Percentage of the daily macro and micronutrient requirements of the adolescent girl covered by a school meal

Fortified maize





Animal source foods have the greatest impact on closing nutrient gaps of school-age children and adolescents. Inclusion of these foods in school meals is constrained by weak or non-existent value chains. A feasibility study for the introduction of animal protein in school meals is currently underway.

School meals that include animal source foods have the greatest impact on reducing the nutrient gap for school-age children and adolescent girls. To assess the potential reduction in the household's cost of the nutritious diet for the school-going child, the FNG analysis modelled the six menus. These consisted of

the basic ration plus one local food (such as palm nuts, green leafy vegetables, eggs, small fish, chicken and milk) that provides important limiting micronutrients (calcium, pantothenic acid and vitamin B_{12}) (Figure 15).

All the modelled menus reduce the cost of the nutritious diet of the school children, but those with animal source foods are the most effective in reducing the costs. For a school-age child (6-7 years), the school meal with small fry fish in addition to the basic ration can significantly reduce the daily cost of the nutritious diet by 30 percent to CFA 124, and the one with milk reduces it to CFA 126 (Figure 16). For an adolescent girl, the addition of eggs or small fry fish reduces the daily cost to the household from CFA 365 and CFA 345 respectively. (Figure 17).

Figure 15: School meal menus – basic school meal plus a locally available food that provide important limiting micronutrients

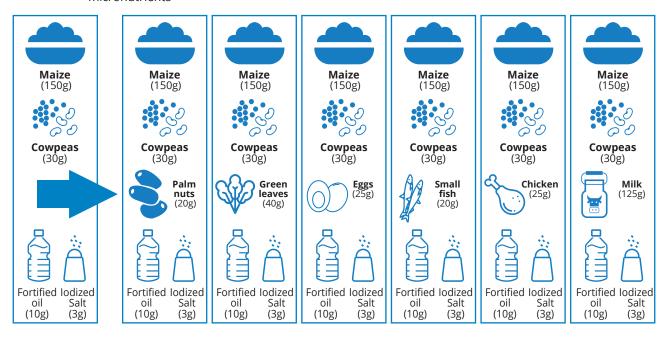
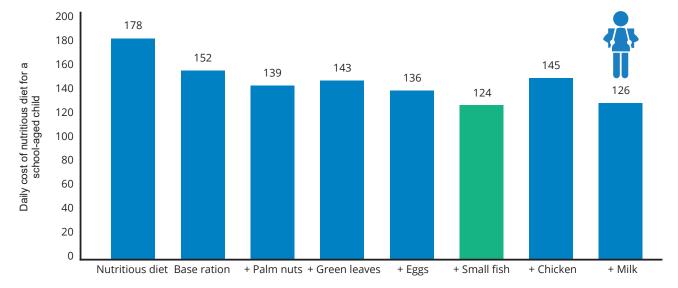


Figure 16: Daily cost of the nutritious diet for a school-age child with and without different school meal options



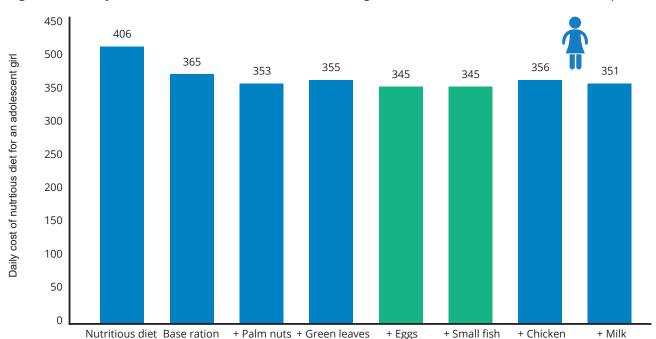


Figure 17: Daily cost of the nutritious diet for the adolescent girl with and without different school meal options

The inclusion of animal source foods in school meals is challenged by weak or non-existent value chains. Fish, poultry and beef are good sources of protein and essential micronutrients. However, value chain policies in Benin are focused on commercial crop agriculture and there is no link to nutritional quality and diversity (German Agency for International Cooperation [GIZ] 2022). According to the Food and Agriculture Organization (FAO) 2015, current domestic production of poultry, meat and eggs is not sufficient to meet national demand. Insufficient infrastructure is a major impediment to reliable access to nutritious food, particularly for animal source foods that require a cold chain. In addition, a poor road network leads to high retail prices for agricultural products in rural or remote areas (National Human Development Report 2015). For example, fish is mainly produced in the southern part of Benin and has to be transported to the rest of the regions (Fisheries Production Department [DPH] 2021). The final delivery of fish products to rural markets is generally made by women on foot. In the case of milk, the production is seasonal with a high concentration in the northern part of Benin. The uneven regional distribution of dairy cows and impassable rural roads to the dairy farms makes it hard to collect and distribute milk to the rest of the country (FAO 2015).

8.

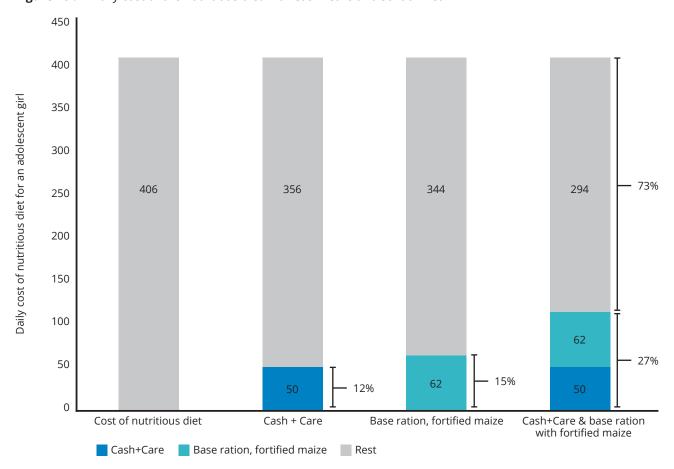
Before the age of 18, one in three young women in Benin marry, and one in five girls begin their reproductive lives while still adolescents, making it challenging for them to reach full potential. Social protection programmes like cash transfers and school meals can create an environment conducive to keeping girls in school and preventing early marriage and pregnancies.

In Benin, one in three young women aged 20 to 24 years were married before the age of 18, and one in ten young women married before age of 15. One in five girls aged 15 to 19 have already started their reproductive lives (DHS 2017-18). There is a strong correlation between poor education and early marriage: more than 60 percent of married girls in developing countries have no formal education. School meals can help create an environment conducive to keeping girls in school and preventing early marriage and pregnancy.

The combined efforts of different sectors can help keep girls in school by covering a part of their food and education costs. International evidence shows that providing school meals has the greatest impact on improving gender equity in education, while cash transfers are another effective programme for improving girls' educational outcomes. The FNG analysis modelled the impact of layered interventions of the cash transfer programme (Cash+Care by UNICEF) and the school meals programme on reducing the affordability gap of the nutritious diet. The Cash+Care programme, providing CFA 3,000 per month to an

adolescent girl, contributes CFA 50 per day for the girl to spend on food and assumes that 52 percent is spent as intended (AVGSAN 2022). This represents 12 percent of the cost of the nutritious diet, leaving an affordability gap of CFA 356 per day. School meals with a ration of fortified maize as well as the cash transfer from the Cash+Care programme reduce the cost of the nutritious diet for the adolescent girl to CFA 294 per day, narrowing the gap by 27 percent (Figure 18).

Figure 18: Daily cost of the nutritious diet with Cash+Care and school meal

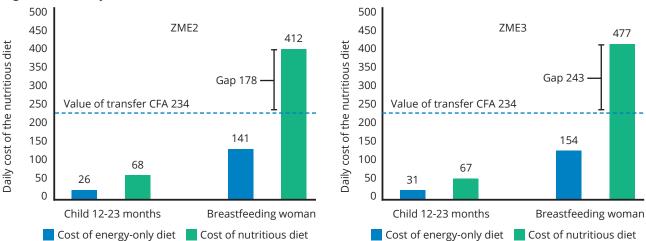


Recent violence and displacement in the northern regions of Benin have disrupted livelihoods, therefore disrupting food and nutrition security. Comprehensive response plans need to include nutritionsensitive interventions to prevent a deterioration of the nutrition situation of displaced persons and host communities.

The crisis in the northern border has led to the displacement of many communities, putting households at risk of food and nutrition insecurity.

In response to the emerging needs, FNG modelling was carried out in zones 2 and 3, which cover the department of Atacora, to guide the design of interventions for targeted individuals and assess the impact of the cash transfer on the cost of the nutritious diet. The modelled cash transfer programme provides CFA 313 to a household and 75 percent of the cash transfer (CFA 234) is spent on food. If the transfer is spent only on food and the child is breastfed, the cash transfer has the potential to cover the full cost of the nutritious diet for the child, plus part of the diet cost for the breastfeeding woman (Figure 19).

Figure 19: Daily cost of the nutritious diet in the livelihood zones of Atacora



The optimal use of cash transfers is essential to successfully ensuring food and nutrition security. Given that only 17 percent of children receive a minimally diverse diet in the department of Atacora (DHS, 2017-2018), social and behaviour change communication is needed to guide the use of the cash transfer. Figure 20 shows different food baskets that the beneficiary household could purchase with the cash transfer (USD 0.5 per person per day), provided that 75 percent of the cash is spent on food. Spending

the cash on a diet that includes a diversity of food groups would have the greatest impact on meeting nutritional needs (Figure 21). The cash transfer could cover up to 64 percent of the cost of a nutritious diet for a child if the household buys maize (250g), soya (55g), small dried fish (35g) and rice (35g). If the household buys maize flour (440g), sorghum (220g) and soya (220g), the same amount of cash covers only 32 percent of the cost of a nutritious diet for a child.

Figure 20: Food baskets that a household can buy with the cash transfer

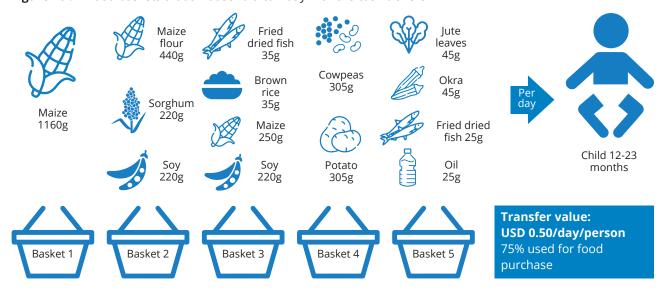
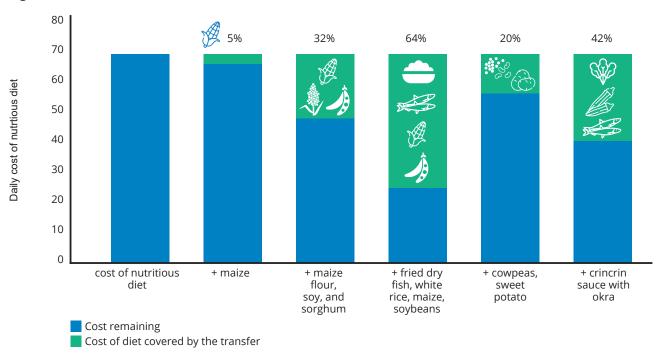


Figure 21: Costs of the nutritious diet of the different food baskets





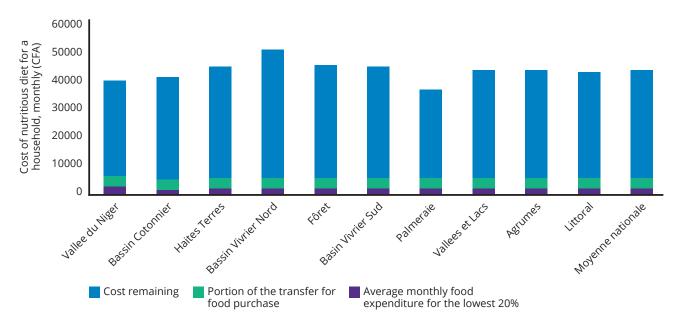
10.

Social protection programmes can have a significant impact on helping cover the nutritional needs of vulnerable individuals. Programmes need to be integrated into a long-term national strategy for poverty reduction.

Nearly 40 percent of Benin's population lives below the national poverty line, and the national poverty rate has not decreased in over two decades (World Bank Databank). The majority of workers (85 percent) are employed in the informal sector where access to social safety nets is limited. Public spending on social assistance programmes accounts for only 0.5 percent of GDP, and there is no universal systematic social safety net scheme to protect the poor against various shocks and reduce extreme poverty (World Bank).

Efforts have been made to expand social services and institutionalize small-scale projects into largescale government-funded programmes. The Appui aux Communes et Communautés pour l'Expansion des Services Sociaux project (ACCESS) is one of the donor-funded social protection programmes that the Government of Benin has implemented to provide the extreme poor households with access to a basic social safety net and to create synergies with other social service programmes. The FNG analysis modelled the impact of the ACCESS cash transfers on reducing the affordability gap of a nutritious diet. With the transfer of CFA 5,000 per month, and assuming 75 percent is spent on food (AVGSAN 2022), a poor household could more than double their food purchases, from CFA 2,414 before transfer to CFA 6,164 after transfer (Figure 22). However, there is still a large gap (86 percent) for the poor household to fully afford the cost of a nutritious diet and it would require multisectoral efforts to close that gap.

Figure 22: Monthly cost of the diet for a household with cash transfer

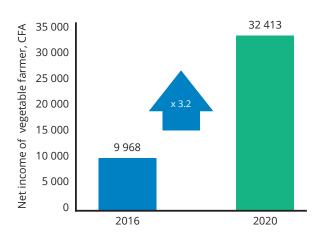


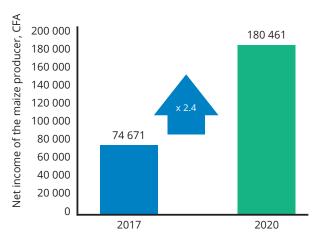
Improved agricultural practices can support households in generating additional income to cover the cost of nutritious diets. Resilience programmes oriented on nutrition-sensitive agriculture build resilience and improve accessibility of nutritious foods.

Agriculture plays an important role in Benin's economy. On average, it contributes 23 percent of GDP, 75 percent of export earnings, 15 percent of government revenue and provides about 70 percent of jobs. According to the International Fund for Agricultural Development (IFAD) in 2023,

about 550,000 smallholder farmers are engaged in subsistence farming of cereals and tubers. Programmes promoting efficient agricultural practices, such as Appui Multisectoriel à la Sécurité Alimentaire et Nutritionnelle dans l'Atacora (AMSANA), are effective in generating additional income for smallholder farmers to cover the cost of a nutritious diet. The AMSANA project (2015-2020) promoted the sustainable production of off-season vegetables and maize, as well as good post-harvest practices and storage structure in Atacora. According to the evaluation report, Rapport Final 2015-2020, Iles de Paix, these interventions increased the incomes of farmers growing off-season vegetables 3.2 times and those of farmers growing maize 2.4 times (Figure 23).

Figure 23: Improvement of income of the farm households that benefited from the AMSANA project (vegetable farmer on the left, maize farmer on the right)

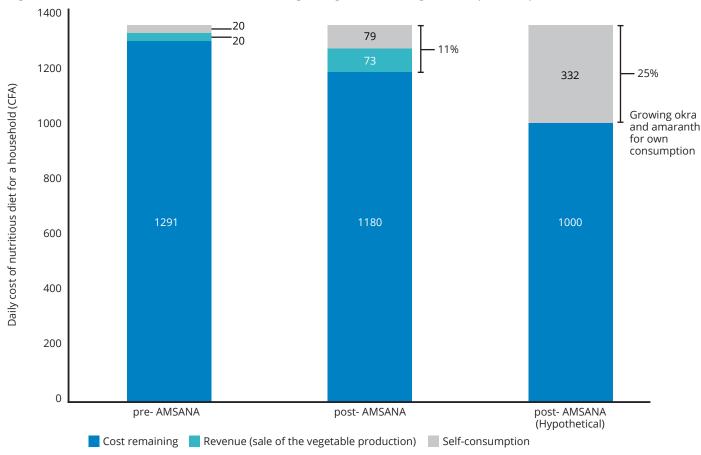




Improved income of farmers growing off-season vegetables in the AMSANA project would cover 11 percent of the household's cost of the nutritious diet through own consumption and sale of the vegetables, shown in the middle bar of Figure 24. The rightmost bar of Figure 24 shows that if farmers focused on cultivating vegetables (e.g., okra and amaranth) rich in vitamin A

and other micronutrients for home consumption, 25 percent of the cost of a nutritious diet could be covered. For maize farmers, good input management and improved post-harvest storage could lead to covering 30 percent of the cost of a nutritious diet; without these the maize production would only cover 12 percent of the cost of a nutritious diet (Figure 25).

Figure 24: Cost of the nutritious diet for farmers growing off-season vegetables – pre- and post-AMSANA



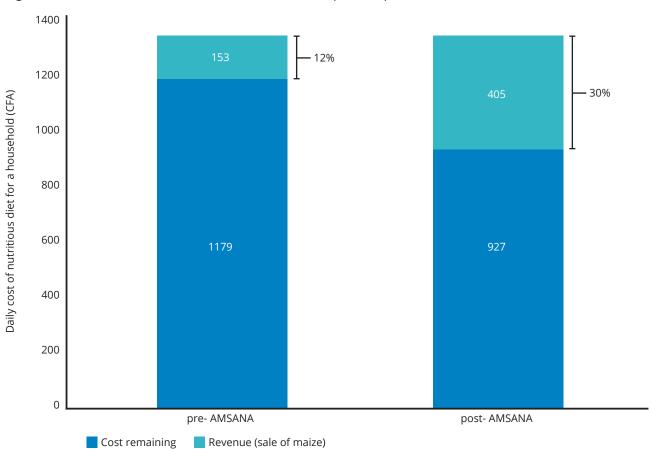


Figure 25: Cost of the nutritious diet for maize farmers: pre- and post-AMSANA

Multiple complementary interventions from different sectors are required to help households cover the cost of nutritious diets. Multisectoral coordination is necessary to ensure

comprehensive assistance to the most vulnerable households.

A single intervention cannot substantially close the affordability gap of a nutritious diet by itself. Multisectoral interventions help cover the cost of a nutritious diet in different ways. The FNG analysis modelled how the combination of interventions in the social protection, health and agriculture sectors could help bridge the affordability gap. In Figure 26, interventions related to improving agricultural practices and fortifying staple foods are superimposed on the ACCESS cash transfer. In Figure 27, targeted nutritionsensitive interventions and agricultural interventions are superimposed. In each figure, each bar represents the daily cost of a nutritious diet. With the exception of the leftmost bar, each bar shows the average food expenditure of the bottom 20th percentile, and the cash transfer and additional interventions.

Enabling access to fortified maize combined with the ACCESS cash transfer can reduce the gap by 16 percent (9 percent reduction through the cash transfer and 7 percent reduction through fortified maize), shown in the third bar of Figure 26. Interventions to improve agricultural practices in maize production together with the ACCESS cash transfer can reduce the affordability gap for smallholder maize farmers by 27 percent (9 percent reduction through the cash transfer and 18 percent through increased income from better agricultural practices), shown in the last bar of Figure 26. Nutrition-sensitive health interventions targeting specific individuals through supplementation in addition to the cash transfer reduce the gap by 16 percent (9 percent reduction through cash transfer and 7 percent reduction through supplementation), shown in the third and fourth bars of Figure 27. If all three interventions (cash transfer, supplementation, and agricultural improvement) were provided to a farming household, these would reduce the affordability gap by 39 percent, shown in the last bar of Figure 27. This shows that the intervention strategies must be tailored to specific contexts, should focus on making nutritious foods accessible and affordable, and need to consider the specific needs of targeted individuals and households.

Figure 26: Improvement in affordability of nutritious diet through interventions related to agriculture, fortification of maize and cash transfer (ACCESS)

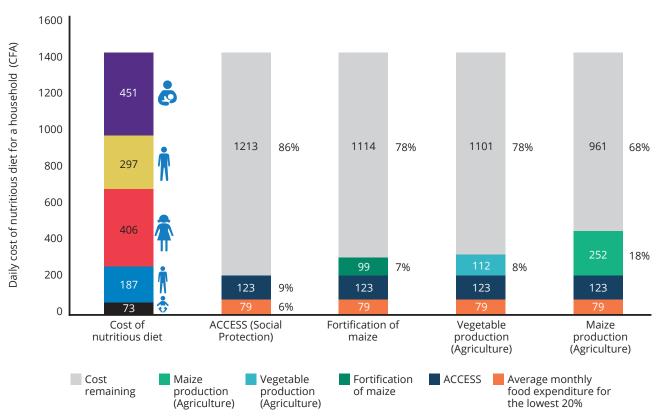
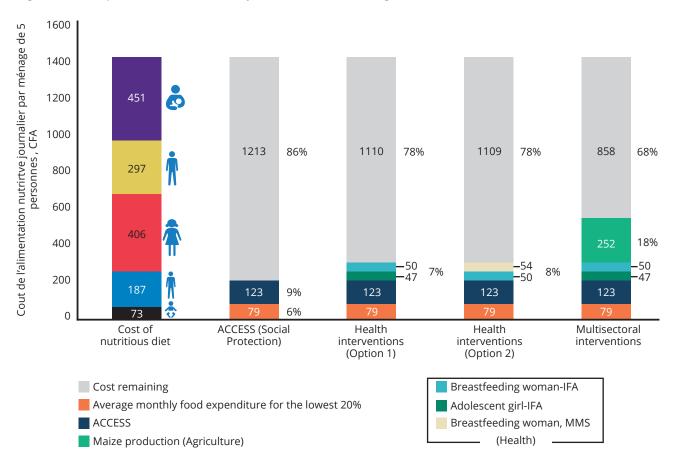
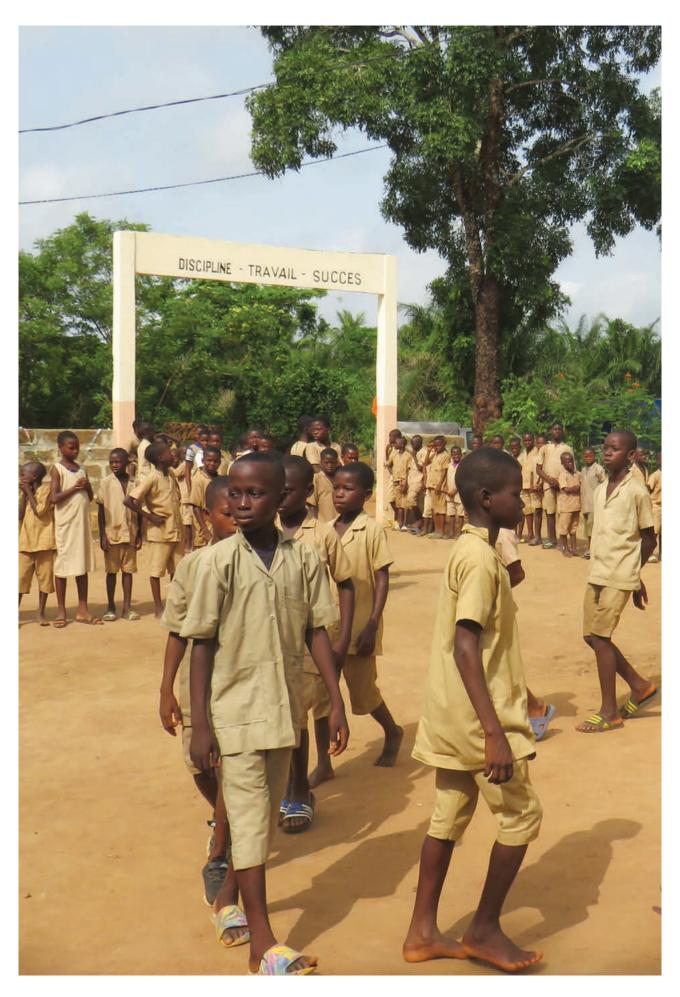


Figure 27: Improvement in affordability of nutritious diet through multisectoral interventions





Recommendations

	Recommendation	Responsible party; Associated party	Indicators	Source of data/ methodology	Timeline		
1.	1. Nutritional quality of school meals by increasing the diversity of food groups						
a.	Use the results of the FNG to identify foods that meet micronutrient requirements at the lowest cost for school-age children and adolescents.	SP/CAN PAM MEMP MESTP	Number of foods meeting micronutrient requirements at the lowest cost identified for school-age children and adolescents	Study Report/ Study	Short term		
b.	Explore the effectiveness of various options for improving the diversity of school meals, such as cash transfers to school meal management committees, strong community contributions, etc.	SP/CAN PAM MEMP	Number of options for improving diversity of school meals tested	Study Report/ Study	Medium term		
C.	Develop guidance documents on food diversification based on local availability and preferences to help communities identify the most nutritious foods and recipes for school meals.	SP/CAN MAEP PAM MEMP	Number of guidance documents on dietary diversification based on local availability and preferences	Study Report/ Study	Medium term		
d.	Develop mechanisms to further encourage community contributions to school meals that include fruit, vegetables and animal source foods in particular.	SP/CAN PAM MEMP MESTP	Number of approaches developed to mobilize community for contribution of fruit, vegetables and animal source foods to school meals	Study Report/ Study	Medium term		
e.	Promote school and community gardens to ensure the availability and accessibility of fruit and vegetables, essential for improving the quality of meals served to pupils.	SP/CAN PAM MAEP FAO	Number of households with community gardens and fruit trees and number of schools with school gardens and fruit trees	Study Report/ Study	Short term		
f.	Explore opportunities in value chains that are currently limited by production but which could make school meals more nutritious, such as market gardening, small fish processing and dairy products, based on local production and preferences.	SP/CAN PAM MEMP MESTP	Number of value chains supported in the school feeding	Study Report/ Study	Medium term		

2.	Development of systems, ca processed foods	apacities, and i	nfrastructures for the fo	ortification of st	taple and
a.	Carry out feasibility studies on fortification and biofortification of maize and rice, and their acceptance by consumers.	SP/CAN MEMP	Number of feasibility studies on maize and rice fortification and their acceptance carried out	Study Report	Medium term
b.	Share standards and specifications set by the UMOA for fortified staple foods (maize, rice and other root- and tuber-based flours) and for fortified processed foods (infant flours).	SP/CAN PAM MAEP MS FAO MCI	Number of reports presenting standards and specifications for fortified staple foods (maize, rice, and other root- and tuber-based flours) and for fortified processed foods (infant flours)	Study Report/ Study	Medium term
c.	Identify capacity and infrastructure gaps that limit fortification of cereals (rice and maize) and salt by local millers.	SP/CAN PAM FAO GAIN SNB MCI	Number of studies diagnosing capacity and infrastructure gaps that limit fortification among local millers	Study Report/ Study	Medium term
d.	Strengthen the capacity of small-scale local millers to fortify maize meal and guarantee quality and safety standards, including those related to premix dosing, safe handling and storage.	SP/CAN PAM FAO GAIN SNB MCI	Number of capacity building workshops for local small-scale millers on quality and safety standards, including those relevant to premix dosing, safe handling and storage	Workshop report/ Training workshops	Short term
e.	Strengthen the capacity of national mills to ensure the production and quality of fortified wholegrain maize meal.	SP/CAN PAM FAO GAIN SNB MCI	Number of national mills that have benefited from capacity building sessions to ensure the production and quality of wholegrain fortified maize flour	Training reports/ Training workshops	Short term
f.	Generate demand for fortified foods by including them in government programmes, such as social protection programmes, to increase supply and reduce the price of fortified products.	SP/CAN PAM FAO GAIN SNB MCI	Number of government programmes requiring fortified foods	Study reports/ Study	Medium term
g.	Develop/encourage fortified processed foods such as fortified flours for women of reproductive age and the elderly (as opposed to infants or children only).	SP/CAN PAM FAO GAIN SNB MCI	Number of fortified flours developed for women	Research	Medium term

3.	Nutritional quality of school meals by replacing maize and white rice with fortified maize, unpolished brown rice or parboiled rice.					
a.	Document dietary habits in each department or zone to identify communities where staple food fortification could be piloted.	SP/CAN PAM FAO MAEP MS	Number of studies carried out to document dietary habits in each region	Study reports/ Study	Medium term	
b.	Use the results of the feasibility study to further explore small-scale food fortification at the level of local millers (with the ongoing support of the SNV) and large-scale maize fortification (with support of the WFP, TechnoServe and Rockefeller Foundation).	SP/CAN PAM FAO GAIN SNB MCI	Number of pilot fortification results documented as part of fortification policy	Study reports/ Study	Short term	
C.	Involve the private sector more in the development of food products with high nutritional value (e.g., fortification).	SP/CAN PAM FAO GAIN SNB MCI	Number of private companies involved in the process of developing food products with high nutritional value	Project reports/ Project	Medium term	
d.	Develop social and behaviour change messages to promote fortified maize and brown rice/parboiled rice to communities, teachers, schoolchildren and parents.	SP/CAN PAM FAO GAIN SNB MCI	Number of social and behaviour change messages developed	Project reports/ Project	Medium term	
e.	Integrate planning for the shift to fortified maize and brown rice or parboiled rice into the fourth generation of Community Development Plans, and strengthen the capacity of mayors, prefects and other local leaders at community level to support actions towards the production and consumption of fortified maize and brown rice.	SP/CAN PAM FAO GAIN SNB MCI	Number of communities that have included the production of fortified maize and brown or parboiled rice in their fourthgeneration Communal Development Plans (PDC). Number of mayors, prefects and other local leaders at community level who have benefited from capacity-building to support the production and consumption of fortified maize and brown rice. Number of capacity-building sessions	Study reports/ Studies	Short term	
			building sessions organized for mayors, prefects and other local leaders			

4.	Improvement of the nutritional status of adolescents by using schools as a platform for health interventions.					
a.	Target areas with high rates of anaemia to provide iron and folic acid (IFA) supplementation to adolescent girls.	SP/CAN MS UNICEF	Number of adolescents receiving supplements	Project reports/ Project	Short term/ Medium term	
b.	Build the capacity of decentralized health staff to implement supplementation programmes at scale.	SP/CAN MS UNICEF	Number of health staff benefiting from capacity-building sessions	Training workshop reports/ Training workshop	Short term/ Medium term	
C.	Ensure that nutrition education is combined with other health-related topics, including reproductive health and supplementation.	SP/CAN MS UNICEF	Number of nutrition education themes associated with health, reproductive health and supplementation interventions	Project reports/ Project	Short term/ Medium term	
5.	Development of national sy and households living in ext			seholds facing	shocks	
a.	Invest in a more comprehensive government beneficiary registration strategy that also considers households at high risk of livelihood shocks.	SP/CAN ANCP	Number of more comprehensive government beneficiary registration strategies developed	Project reports/ Project	Medium term	
b.	Develop a policy around cash transfers for shock-affected people to identify the best mechanism for providing short-term support to maintain the households' food security senstive to nutrition.	SP/CAN ANPC UNICEF PAM CARITAS	Number of cash transfer policies	Study reports/ Study	Medium term	
C.	Develop a targeting mechanism for vulnerable households, specifying the eligibility criteria to reach the target groups in high risk situations.	SP/CAN ANPC UNICEF PAM CARITAS	Number of documents with a mechanism for targeting vulnerable households developed	Study reports/ Study	Medium term	
d.	Coordinate emergency response under the National Civil Protection Agency (ANPC) at decentralized and centralized levels.	SP/CAN ANPC UNICEF PAM CARITAS	Number of communal and departmental consultation frameworks involved in emergency response under the National Civil Protection Agency (ANPC) at decentralized levels	Project reports/ Project	Short term	
e.	Invest in anticipatory action systems to better predict crises and enable a more rapid response.	SP/CAN CT-SAGSA ANPC PAM FAO UNICEF MS	Number of Cadre Harmonisé (CH) analyses organized. Number of community nutrition mutuals (MCN) involved in crisis responses	Project reports/ Project CH MCN	Short term/ Medium term	

f.	Using the results of the FNG and the minimum expenditure basket, ensure that government and nongovernment cash transfer programmes include transfer values high enough to have an impact on households' ability to afford nutritious diets.	SP/CAN ANPC PAM FAO UNICEF CARITAS CRS CROIX ROUGE	Number of advocacy sessions with governmental and non-governmental cash transfer programmes to make them sensitive to the cost of a nutritious diet	Project reports/ Project	Short term/ Medium term	
g.	Using the results of the FNG, coordinate with agencies and organizations involved in cash transfer programmes to develop social behaviour change communication on nutritious local recipes and food selection that effectively cover nutritional needs.	SP/CAN PAM FAO UNICEF CARITAS CRS CROIX ROUGE ANPC	Number of social behaviour change communication sessions on nutritious local recipes and food selection that effectively cover nutritional needs for refugees, displaced persons and asylum seekers	Project reports/ Project	Short term/ Medium term	
h.	Use local community volunteers to disseminate nutrition information.	SP/CAN PAM FAO UNICEF CARITAS CRS CROIX ROUGE ANPC	Number of volunteers involved in the nutrition response	Project reports/ Project	Short term	
i.	Explore opportunities to use cash transfer programmes as platforms for health and food system interventions, including linking specific beneficiaries to fortified food subsidies or health services.	SP/CAN PAM FAO UNICEF CARITAS CRS CROIX ROUGE ANPC	Number of cash transfer programmes tested as an entry point for interventions in health and food systems	Project reports/ Project	Short term	
6.	Development of nutrition-sensitive resilience programmes in shock prone areas and communities with high poverty rates					
a.	Target host communities affected by displacement, providing resilience programmes, particularly for income-generating activities to ensure food and nutrition security	SP/CAN CDC CC CSAN GAIN PAM FAO UNICEF CARITAS CRS CROIX ROUGE	Number of households targeted in areas affected by displacement	Project reports/ Project	Short term/ Medium term	

b.	Support agricultural households with access to inputs for productivity increase.	DDAEP-ATDA CCC SP/CAN Prefectures ANCB FAO PAM	Number of agricultural households with access to inputs	Project reports/ Project	Short term/ Medium term
C.	Provide outreach programmes on sustainable and resilient agricultural innovations and practices for productivity increase.	DDAEP-ATDA CCC SP/CAN Prefectures ANCB FAO PAM	Number of agricultural households reached by the extension programme	Project reports/ Project	Short term/ Medium term
d.	Improve infrastructure to enhance post-harvest practices for storage, preservation and improved transportation of commodities.	DDAEP-ATDA CCC SP/CAN Préfectures ANCB FAO PAM	Number of enhanced infrastructures to improve post-harvest practices	Project reports/ Project	Short term/ Medium term
e.	Develop resilience programmes that generate income for households in exchange for work carried out on infrastructure projects.	Mayors CCC SP/CAN Prefectures ANCB ANPC	Number of resilience programmes developed that generate income	Project reports/ Project	Medium term

Acronyms

ACCESS Appui aux Communes et Communautés pour l'Expansion des Services Sociaux AMSANA Appui Multisectoriel à la Sécurité Alimentaire et Nutritionnelle dans l'Atacora

ANCB National Association of Benin Municipalities

ANPC National Civil Protection Agency

ATDA Territorial Agricultural Development Agencies

AVGSAN-SA Global Analysis of Vulnerability, Food Security, Nutrition and Food Systems

CCC Community Consultation Frameworks

CFA franc African Financial Community

CotD Cost of the Diet CRS Catholic Relief Service

CT-SAGA Technical Unit for Monitoring and Support of Food and Security Management

DDAEP Mono Departmental Directorate of Agriculture, Livestock and Fisheries

DHS Demographic and Health Survey
DPH Fisheries Production Department
FAO Food and Agriculture Organization

FNG Fill the Nutrient Gap

GAIN Global Alliance for Improved Nutrition

GIZ German Agency for International Cooperation
IFAD International Fund for Agricultural Development
IPC Integrated Food Security Phase Classification
MAEP Ministry of Agriculture, Livestock and Fisheries

MCI Ministry of Trade and Industry
MICS Multiple Indicator Cluster Survey

MEMP Ministry of Maternal and Primary Education

MESTP Ministry of Secondary and Technical Education and Vocational Training

MS Ministry of Health N4G Nutrition For Growth

PNASI National Integrated School Feeding Programme

SDG Sustainable Development Goal

SNB Benin Nutrition Society

SP/CAN Permanent Secretariat of the Food and Nutrition Council

TWG Technical Working Group
UMOA West African Monetary Union
UNICEF United Nations Children's Fund

WFP World Food Programme

ZME Livelihood zone

Contributors

This analysis was led by the Permanent Secretariat of the Food and Nutrition Council (SP/CAN) and contributed by the National Institute of Statistics and Demography (INSTAD) and the Technical Unit for Monitoring and Support of Food and Security Management (CT-SAGA). The conclusions and recommendations were made thanks to the support of many technical experts and government partners (Ministry of Agriculture, Livestock, Fisheries, Ministry of Health, Ministry of Social Affairs and Microfinance, Ministry of Nursery and Primary Education, and PNASI Presidential Monitoring Unit). We thank SP/CAN and the following agencies: UNICEF-Nutrition, UNFPA, USAID, GAIN, GIZ -Benin, CARE International Benin/Togo, Plan International, World Vegetable Center, CRS Benin, and the universities (FSA-ENSTA, FSS-END, IRSP, UNA-ESTCTPA). With special thanks to Eunice Nago, Jaurès Lokonon, Yolande Agueh, Christian Ayedoun from the Benin country office; Saidou Magagi, Mahamadou Tanimoune, Karen Ologoudou from the Regional Office Dakar; Matthew Dearborn from the WFP's School-Based Programmes (SBP); the Fill the Nutrient Gap team from the Nutrition Division at WFP headquarters, with special thanks to Zuzanna Turowska, Catherine Shepperdley, Seo Yeon Hong, Sabrina Kuri, Jo Jacobsen, Saskia de Pee, and Jane Badham.

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This Fill the Nutrient Gap is financed by: Rockefeller Foundation, the Government of the Netherlands, and the Government of Denmark.

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