



World Food Programme

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Mind the Gap Country Case Study ETHIOPIA

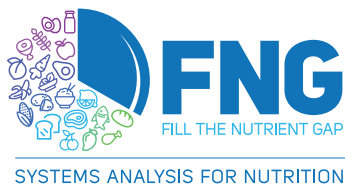
October 2024

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.....	11
V. Using the FNG to inform social protection programmes	12
Contribution of social protection to reducing the affordability gap.....	12
VI. Bridging research with policy and action	14
VII. Bibliography	15



I. Overview of the malnutrition burden and poverty situation

Over one fourth of the Ethiopian population lives under the international poverty line (USD 2.15 per day). Around 24 percent of the population live below the national poverty line, with a higher prevalence among the rural population (26 percent) than the urban population (15 percent) (1; 2). While Ethiopia managed to reduce poverty between 2010 and 2016, particularly in urban areas, the COVID-19 pandemic may have reversed some of this progress, with poverty incidence expected to range between 19.7 percent and 23.2 percent (3). Recent crises, including COVID-19 and climate-related shocks (4), threaten economic progress.

Undernutrition during childhood has implications for health outcomes, cognitive development and productivity throughout an individual's life (5). In Ethiopia, modelled estimates show that the economic effects of stunting amount to around USD 4.7 billion annually, or 16.5 percent of GDP (5).

Ethiopia has made progress towards improving the nutritional status of children under 5, with stunting prevalence falling from 58 to 39 percent between 2000 and 2022 (6). However, progress in addressing wasting has slowed in recent years, with stagnating rates of 12 to 11 percent between 2000 and 2022 (6). There are significant geographic disparities in undernutrition, with stunting rates ranging from 42 (6) to 16 percent in Addis Ababa and wasting prevalence as high as 26 percent in Afar (6). Only 8 percent of children aged 6–23 months nationally have a diet of adequate diversity and frequency (6).

Ethiopia made significant progress in its efforts to achieve its World Health Assembly 2025 target of reducing anaemia prevalence in women by 50 percent, reducing the rate from 24 to 13 percent between 2016 and 2022 (6). Yet anaemia is still a public health concern as it impacts women and their children, as maternal anaemia is associated with infants of low birthweight and with decreased iron stores for the baby, leading to impaired development (7).



II. Country priorities on nutrition and social protection

NUTRITION POLICY FRAMEWORK

Ethiopia recognizes nutrition as a critical factor for human and economic development. The Food and Nutrition Policy 2018 states that food and nutrition security is a constitutional and human right (8). Under the policy, a National Food and Nutrition Council was established and includes representatives from various sectors including social protection. The implementation plan of the policy advocates for the strengthening of social protection programmes to ensure equitable distribution of nutritious foods, money, and services to promote greater food and nutrition security.

SOCIAL PROTECTION POLICIES AND PROGRAMMES

Social protection spending in Ethiopia accounted for 3.4 percent of the GDP in 2016, with expressed government intention to expand further (9). Nutrition and social protection are important elements of the National Growth and Transformation Plan 2015–2020 (GTP II). The National Social Protection Strategy approved in 2016 integrates nutrition into social protection, demonstrating how social assistance programmes can be made more nutrition sensitive (10).

The Productive Safety Net Programme (PSNP) is Ethiopia's flagship social assistance programme. It provides cash or in-kind food assistance to chronically food-insecure households in targeted areas in exchange for public works, six months of the year.

The rural PSNP is one of Africa's largest safety nets, with more than 8 million clients in its fourth phase, covering 57 percent of Ethiopia's rural woredas; the urban PSNP reached 600,000 people in 2019 (11). The public work conditionality is waived for households without the capacity to work, including those with disabilities, chronic illness, or orphans. It is also temporarily waived for pregnant and breastfeeding women who instead receive Temporary Direct Support for a one-off six month period. Most PSNP payments are cash with in-kind payments used in areas of poor market accessibility. Transfer size is based on the cost of purchases – 3 kg of cereals and 0.8 kg of pulses for each day worked.

A study conducted during the early months of the COVID-19 pandemic found that PSNP households were better able to protect themselves against shocks to food security, compared to non-PSNP households. This was particularly true for poorer households and those living in remote areas (12). However, no impact was found on maternal and child dietary diversity, which may be due to limited access to markets and disruptions in food supply chains during the lockdowns. Another study found that the PSNP improved meal frequency of children aged 6–23 months but found no impact on the overall household food security, child dietary diversity or child anthropometry (13).

The lack of impact on undernutrition may be due to differences between PSNP households and non-PSNP households at the start of the programme. Targeting is based on chronic food insecurity, which means children in targeted households have a higher likelihood of undernourishment at baseline, driven by factors such as mother's education and access to public health facilities. Programmatic factors including transfer size, actual value received and transfer duration (six months per year) may also explain the limited impact on diets and nutrition (13).

The results of these studies suggest that use of the PSNP to improve diets and nutrition would require programme refinements to make it more nutrition sensitive, such as merging with other programmes and improving adequacy of transfers and duration.



III. WFP's approach

To understand and address factors determining access to nutritious diets in Ethiopia, the Ethiopian Public Health Institute (EPHI) of the Ministry of Health, with technical assistance from the World Food Programme (WFP), conducted a Fill the Nutrient Gap (FNG) analysis in 2020 (14). Prior to the FNG study, WFP had conducted a cost of the diet analysis in Amhara, informing the updates to the design and transfer value of a Fresh Food Voucher programme delivered to PSNP beneficiaries who were pregnant or breastfeeding or had a child between 6 and 23 months of age.

The objective of the FNG in Ethiopia was to highlight dietary inadequacies, identify barriers to adequate nutrient intake and strengthen consensus on priority interventions and policy options to improve the nutrition of population groups across the life cycle through various programmes and sectors including health, social assistance, education and agriculture.

Cost of the diet analysis in the FNG Ethiopia

The cost of the diet analysis was conducted using monthly average food prices between November 2018 and October 2019, collected by the Central Statistical Agency to construct the consumer price index and expenditure data from the Ethiopia Socioeconomic Survey 2015–2016. 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 (19). The analysis was carried out for 65 zones of Ethiopia and aggregated to 11 regions, with costs estimated for a modelled household consisting of five individuals: breastfed child (12–23 months), school-age child (6–7 years), adolescent girl (14–15 years), breastfeeding woman and adult man.

The costs of the diets were then compared with existing expenditure on food to determine the proportion of households unable to afford the diet (called 'non-affordability'). The gap between the lowest cost of nutritious diet and the food expenditure of a household is referred to as the affordability gap.

Intervention modelling was conducted in specific zones or regions, depending on the intervention and its scope.

IV. Findings of the FNG

COST AND AFFORDABILITY OF THE NUTRITIOUS DIET

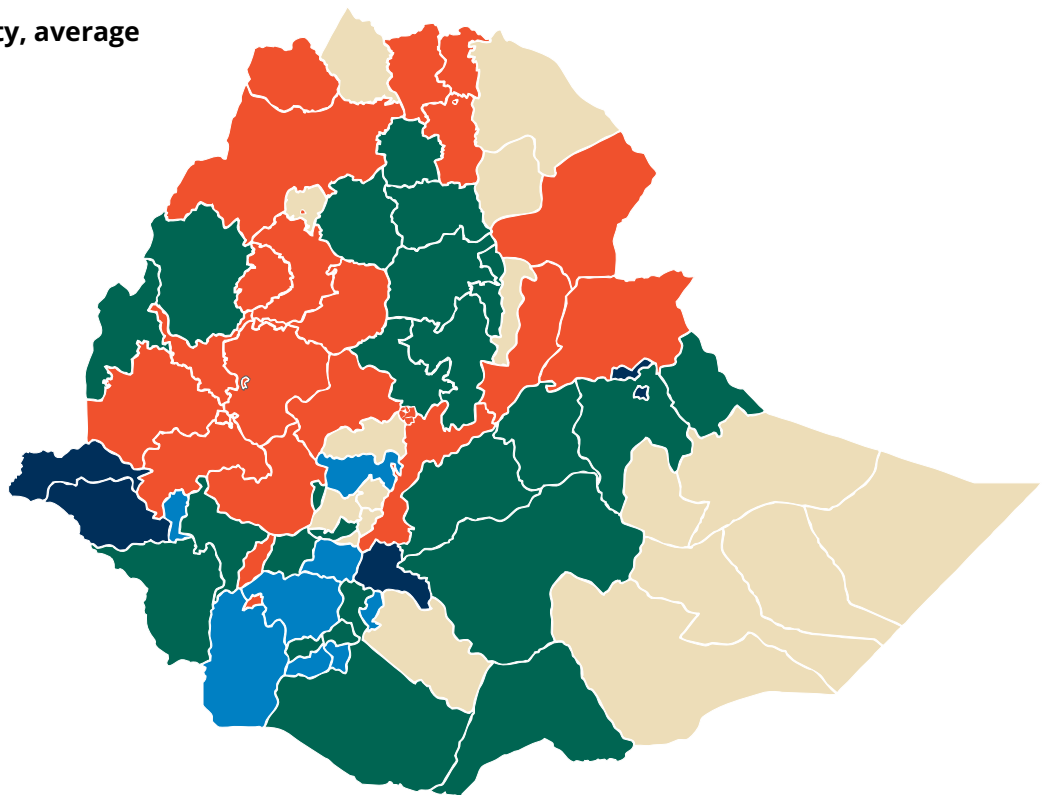
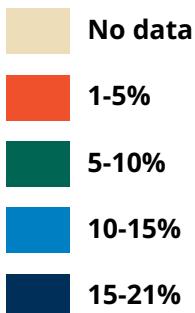
The FNG found that an energy-only diet¹ for a household of five people would cost between Ethiopian Birr (ETB) 609 and 1,093 per month (USD 15.85–28.40). In contrast, the nutritious diet² would cost four times as much or between ETB 2,400 and 4,384 (USD 62.45–114) per month. Nutritious diets were found to be most expensive in the pastoralist regions of Somali and Afar and least expensive in Amhara and SNNP.

Comparing the cost of the nutritious diet to food expenditure at the time of the study, the FNG found that, on average, 93 percent of households would be able to afford the energy-only diet but only one in four households (26 percent) would be able to afford the lowest cost nutritious diet. Affordability of nutritious diets varied greatly by geographic zone, with a larger proportion of households able to afford a nutritious diet in the central zones (Figure 1).

Figure 1: Percentage of households in each assessment zone that would be unable to afford the energy-only (a) and nutritious (b) diets (FNG Ethiopia study 2021 based on data from 2018–2019)

a)

Non-affordability, average

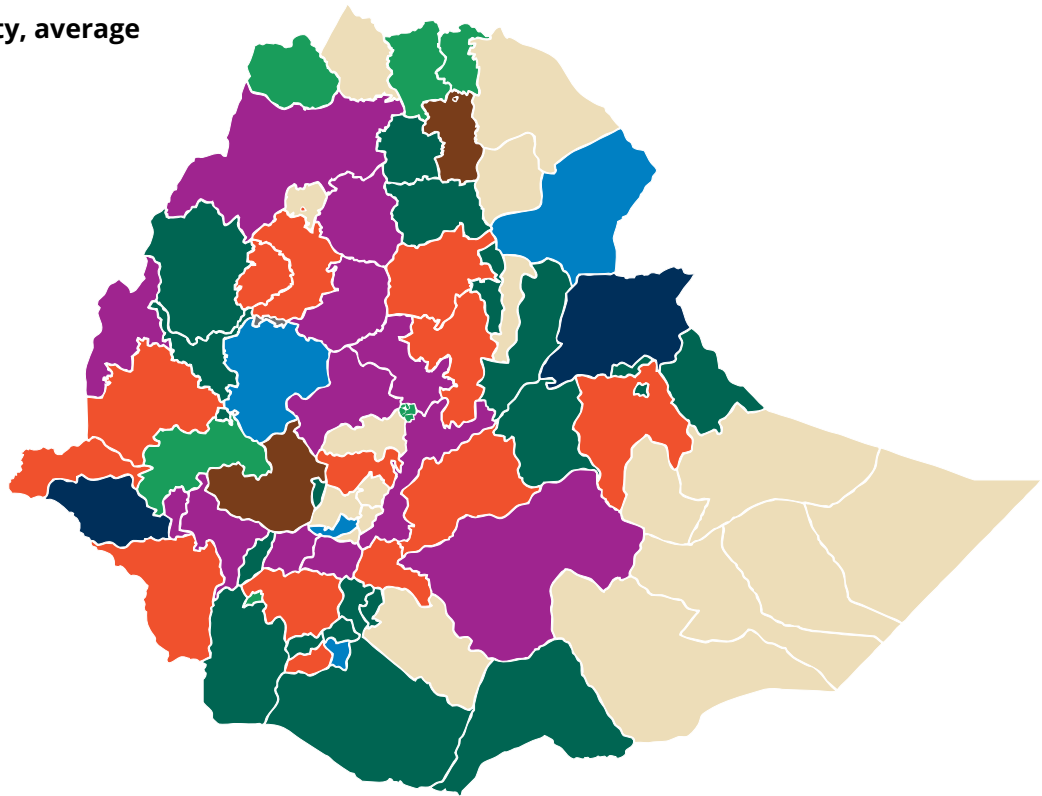
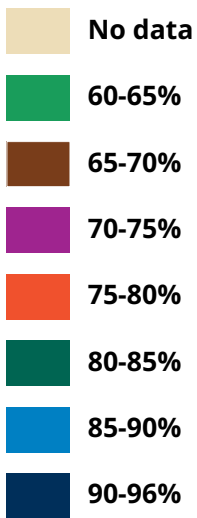


1 An energy-only diet usually consists of a non-diverse combination of staple foods, such as rice, wheat or maize, and oil (18).

2 The nutritious diet was calculated using the cost of the diet linear optimization software, and represents the combination of foods that, for the lowest possible cost, meets energy, protein, fat and micronutrient requirements based on locally available foods. The foods included depend on market availability and cost, but come from a range of food groups, typically including animal source foods, fruits and vegetables (18).

b)

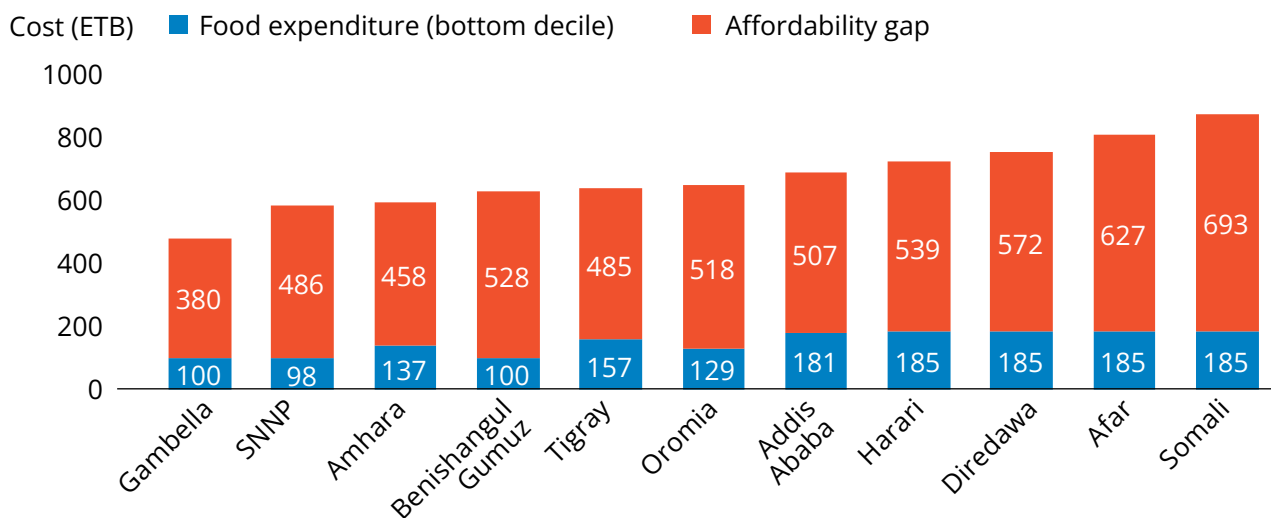
Non-affordability, average



The study found a substantial affordability gap for households with the lowest expenditure (Figure 2). A nutritious diet could cost between 3.8 and 6.3 times as much as the amount that households in the lowest expenditure decile were spending on food, resulting in an average affordability gap per capita of ETB 527 (USD 13.71) per month. These findings suggest that interventions to address the gap should be put in place because the larger the affordability gap, the poorer the quality of the diet is likely to be, increasing the risks of malnutrition. Improving availability of, and access to, nutritious foods, along with social behaviour change interventions, can make a nutritious diet more reachable and improve dietary and nutrition outcomes.



Figure 2: Affordability gap of households in the bottom decile of food expenditure (FNG 2021 based on data from 2018–2019)



Monitoring the cost and affordability of nutritious diets

As part of the FNG process, WFP trained researchers from EPHI on calculating the cost of the nutritious diet. One of the recommendations of the FNG was to regularly update the cost and affordability of nutritious diets for up-to-date availability of evidence to inform programming. Following the FNG, EPHI and WFP further updated the cost and affordability of nutritious diets in four regions, namely Afar, Amhara, Oromia and Somali. Monthly data on retail prices of food from the Ethiopia Socioeconomic Survey for the period August 2022 and June 2023, and expenditure data collected by WFP, were used to conduct these updates.

The cost of the nutritious diet during this period was as follows: ETB 9,096 (USD 168.28) in Amhara; ETB 11,798 (USD 218.28) in Afar; ETB 9,824 (USD 181.94) in Oromia; and ETB 12,520 (USD 231.62) in Somali. The cost of a nutritious diet has increased by around 66 percent compared to the cost calculated by the FNG in 2018–2019.

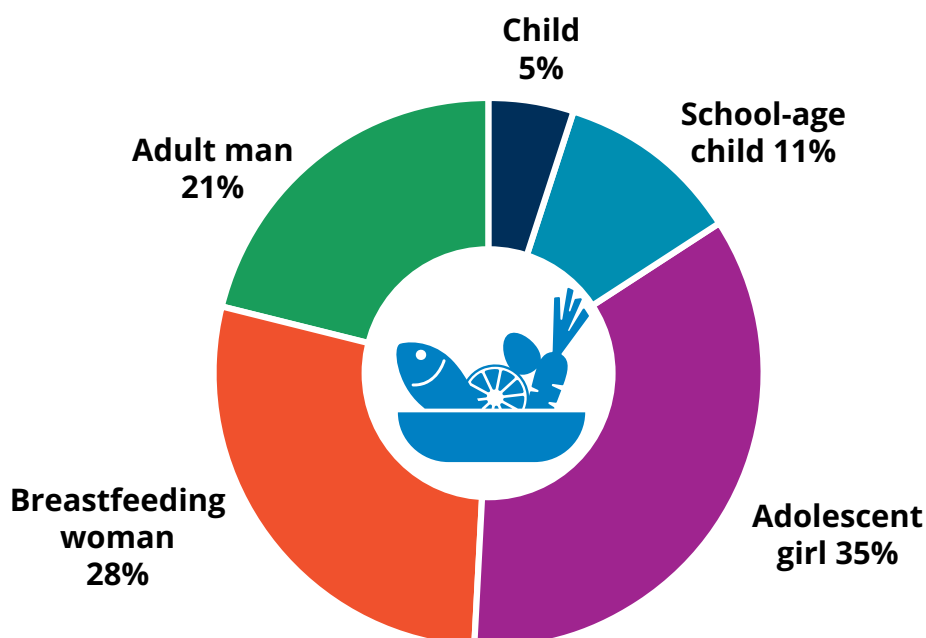


VULNERABLE GROUPS

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 63 percent of the household's cost of a nutritious diet (Figure 3). Actual intra-household food allocation may not consider these differential nutrient needs and the corresponding greater need for diversity in the diet, which comes at a higher cost, and therefore targeted interventions such as supplementation are often needed to help cover the nutrient requirements of nutritionally vulnerable individuals.

Children aged 12–23 months have a lower cost of the nutritious diet compared to other members of the modelled 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 (15).

Figure 3: Distribution of the daily cost of a nutritious diet for the modelled household across individual household members (FNG 2021 using data from 2018–2019)



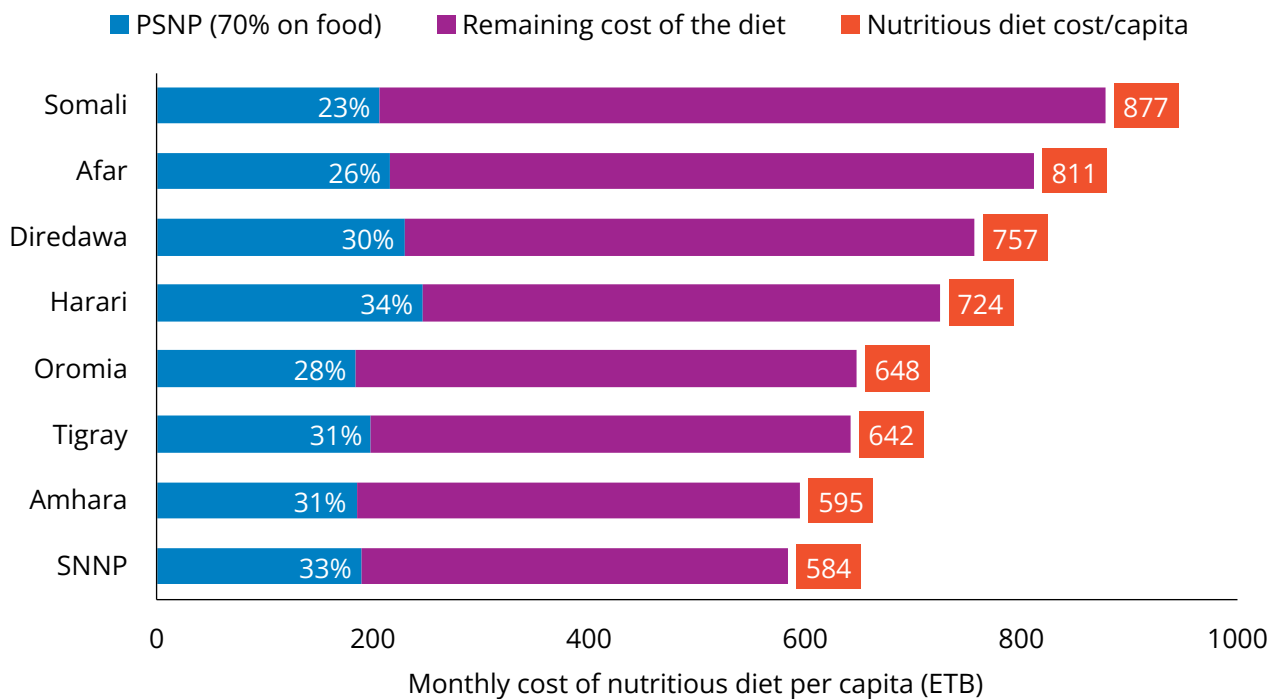
V. Using the FNG to inform social protection programmes

CONTRIBUTION OF SOCIAL PROTECTION TO REDUCING THE AFFORDABILITY GAP

At the time the FNG was conducted, a PSNP household with one eligible member enrolled in the programme and fulfilling the public work conditionality would receive ETB 49–ETB 70 (USD 1.27–1.82) per day worked for a maximum of

five days per month, depending on location (16). Assuming the household used 70 percent of this cash for food, the transfer would have covered between 23 and 34 percent of the average per capita cost of a nutritious diet, depending on the region (Figure 4). This suggests that the PSNP cash transfer alone would not have been enough to ensure economic access to a nutritious diet, particularly for vulnerable households.

Figure 4: Adequacy of the Rural PSNP cash transfer using wage rates from the end of financial year (EFY) 2013 (FNG 2021)



A Fresh Food Voucher (FFV) programme was piloted in 2018 by the Government of Ethiopia, in partnership with WFP, in selected woredas in the Amhara region (17). The programme provides a top-up to the PSNP transfer and has the dual aim of improving dietary diversity of pregnant and

breastfeeding women and children (6–23 months) and to stimulate local markets. Households enrolled in the programme were provided with an e-voucher that could be redeemed at approved retailers to purchase fruits, vegetables and animal source foods.

The FNG modelled the potential impact of the PSNP and the top-up FFV on non-affordability, as shown in Figure 5. Based on a household's current food expenditure, the baseline affordability gap before the PSNP transfer for poorest households (i.e. those in the bottom decile of food expenditure) would be 77 percent. The affordability gap would reduce after the transfer as it would cover 31 percent of the nutritious diet cost. As the food expenditure used in these models includes households already receiving the PSNP, the baseline affordability gap if a household was not receiving the PSNP is likely to be higher.

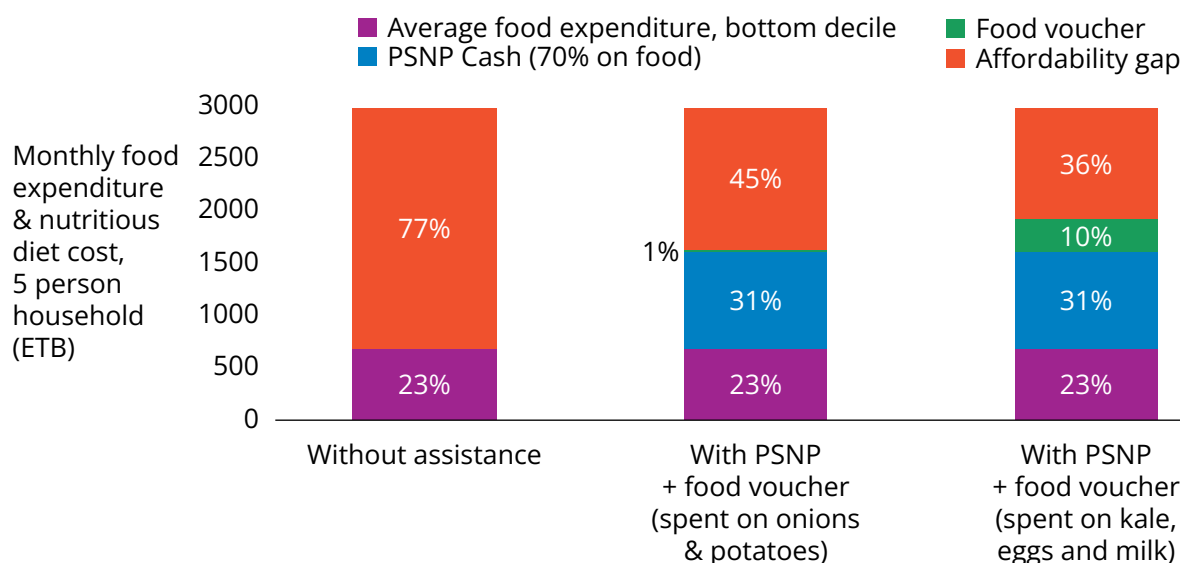
To show the maximum potential impact of the FFV on access to nutritious diets, the FNG analysis showed the additional contribution of the voucher to the PSNP cash transfer, assuming households also had some other resources to spend on food (i.e. as per the middle bar in Figure 5). While the FFV is targeted towards pregnant and breastfeeding women and children under 2, the model shows the impacts at the household level if the food purchased by the voucher were distributed among the household members. Two scenarios have been modelled, as shown in Figure 5.

In the first scenario (middle bar), the model uses a voucher of USD 14/month not restricted to specific fresh foods. The model assumes the household is using the food voucher to buy onions and potatoes, based on a programme evaluation which found these to be the most common food purchased with the voucher (17).

The second scenario (third bar) shows the impact of a food voucher of the same value but restricted to purchase fruits and vegetables (kale) and animal source foods (eggs and milk). In both scenarios, no changes were made to staple adjustment – the model continued to assume the household obtained half of its energy needs through staples. In the first scenario, the voucher covers only 1 percent of the nutritious diet cost, while in the second scenario, it contributes 10 percent.

This is because the nutritious foods included in this model contribute substantially more nutrients, such as vitamin B12, iron and calcium, reflecting the extent to which the transfer contributes to meeting nutrient needs of individuals within the household.

Figure 5: Contribution of PSNP cash transfer and fresh food voucher in Amhara (based on FNG 2021 using data from 2018–2019)



The difference in impact between the two scenarios (less and more restricted voucher) shows the difference between the voucher's monetary value and the nutritional value it adds to a diet. This indicates that both the transfer amount, and the nutritional value of the foods purchased with the voucher matter. While cash and voucher assistance can effectively improve access to food, certain conditions must be in place to ensure that the transfer is contributing optimally to reduce the nutrient intake gap. Households, and in particular individuals within them who are responsible for making decisions

about food consumption, should understand what foods are nutritious and be motivated to purchase and consume these foods. Restricted food vouchers can act as a nudge for households and social behaviour change strategies further encourage positive outcomes. As part of the pilot design for the FFV in Ethiopia, formative research was conducted to inform a social behaviour change strategy to complement the voucher programme. On the supply side, the availability of nutritious food in local markets and at affordable prices is needed to meet the increased demand from assistance programmes.

VI. Bridging research with policy and action

The FNG results were presented to stakeholders at the national level and through a series of regional workshops. These provided stakeholders with an opportunity to convene and develop action plans and collaborate on the way forward. The following recommendations related to social assistance programmes have been informed by these stakeholder discussions:

- Transfer values for social assistance programmes should take into consideration cost and affordability of nutritious diets.
- PSNP households should be targeted with social behaviour change to ensure that the transfer is maximized as much as possible for acquiring foods and services that improve nutrition outcomes.
 - Formative research studies designed to understand behaviours and preferences can help inform social behaviour change. If such studies have already been conducted, they should be utilized, and, where such research has not been conducted previously, a study should be commissioned.
- The use of FFVs, where feasible, is one action through which the PSNP can become more nutrition sensitive and contribute to improving dietary quality of beneficiary households. FFVs can also stimulate demand for nutritious foods, and to maximize their effectiveness, the FFV programme should be complemented with supply side interventions to strengthen value chains. This can ensure adequate availability of these foods in the markets where the voucher programme is implemented. Together, these actions can also benefit non-recipient households through increased availability of diverse nutritious foods in markets, which may in some cases also lower their prices.
- The coverage of PSNP should expand to include those who are likely to have a large affordability gap, which includes the poorest households, orphans and elderly people. To prevent stunting complementary interventions to the PSNP should be prioritized for households that have pregnant women and children under the age of 2.

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