

# Investing in healthy and cost-effective school menus in Ethiopia

## EXECUTIVE SUMMARY

School Feeding Programs (SFPs) are essential for improving the nutritional, health, and educational outcomes of schoolchildren. However, challenges remain in ensuring these programs are both affordable and sustainable. This brief estimates the cost of providing nutritious, locally available, culturally appropriate, and cost-effective meals for Ethiopian children aged 6–18 years, and highlights strategies to enhance program sustainability.

Using the Ethiopia Food-Based Dietary Guidelines (FBDG) and monthly retail prices, we estimate that the national average cost of two meals per child per day is 57.7 ETB, with animal-source foods (ASFs) accounting for the largest share of these costs. Affordability can be improved by using locally available, culturally acceptable, and cost-effective food items. Investing in nutrient-rich foods, ASF production, and the livestock sector can further increase nutrient availability and meal diversity. Initiatives such as school farming and partnerships with local farmers and communities are key to ensuring sustainable and nutritious SFPs.

## THE PROBLEM

Globally, SFPs provide daily meals or snacks to schoolchildren living in poverty or food insecurity<sup>1</sup>. These programs strengthen social safety nets and contribute to education, nutrition, health, and local agriculture<sup>2</sup>. The World Health Organization (WHO) recommends that school meals supply 30–45% of daily nutrient needs for half-day students and 60–75% for full-day students<sup>3</sup>.

In Ethiopia, SFPs build on earlier investments in child health by delivering essential nutrients that support learning and development<sup>4</sup>. However, coverage remains low: in 2022–2023, only about 23%



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of primary and secondary school-aged children received meals<sup>5</sup>. Funding shortages and rising food prices, with meal costs expected to rise from 23 ETB to 32 ETB per child per day in Addis Ababa in 2024–2025, further limit program reach and sustainability. Although costs vary across regions, allocations for two meals per day barely meet the 2022 Ethiopia Food-Based Dietary Guidelines (FBDGs). Menus remain largely cereal-based, lacking fruits, nuts, seeds, and animal-source foods such as dairy and meat, and limited egg provision, only once or twice per week, further constrains dietary diversity. These limitations persist despite efforts to prioritize local ingredients, underscoring challenges in menu design and resource allocation.

## THE OBJECTIVES OF THE BRIEF

- Estimate the average daily cost of providing nutritious school meals (breakfast and lunch) for schoolchildren (6–18 years), disaggregated by region and food group.
- Describe the current limitations of school feeding menus in meeting Ethiopia's dietary diversity standards.
- Provide actionable recommendations for sustainable SFPs.

### Box 1: Methodology

Our analysis used the Ethiopia FBDGs (2022), which categorize foods into six food groups. For this study, animal-sourced foods were divided into two categories: meat, fish, and eggs and milk and dairy products. Similarly, fruits and vegetables were treated as separate groups. This adjustment resulted in a total of eight food groups for quantification : (1) grains, white roots, and tubers; (2) pulses; (3) nuts and seeds; (4) milk and dairy products; (5) meat, fish, and eggs; (6) fruits; (7) vegetables; and (8) fats and oils.

We estimated the minimum cost of providing breakfast and lunch for schoolchildren aged 6-18 years participating in the SFP. Food group recommendations were converted from grams to calories, with a daily energy intake set at 1,518 kcals—covering two-thirds of the total daily requirements for schoolchildren who rely on school meals for breakfast and lunch. Energy contributions from each food group followed the FBDG’s recommendations. The analysis also incorporated monthly retail data from the Ethiopian Statistical Service (ESS), collected from 120 markets across all regions of Ethiopia, between January 2024 to December 2024.

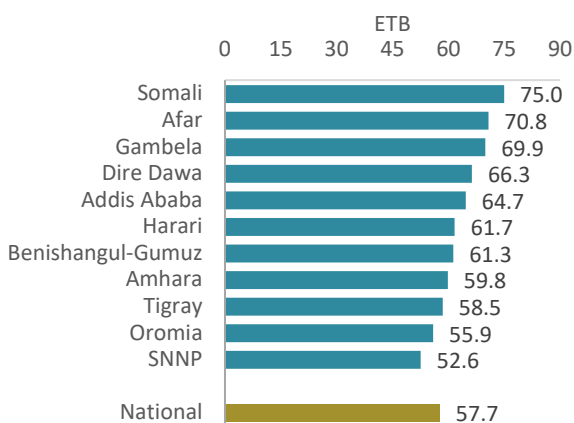
## KEY FINDINGS

### 1. Regional variations in meal costs

**Figure 1** illustrates the daily cost of meeting two-thirds of the daily calorie needs for schoolchildren aged 6–18 years in the SFP, based on retail prices of locally available food items. The national average cost of two meals per child per day is 57.7 ETB.

Costs are lowest in high-rainfall regions such as the Southern Nations, Nationalities, and Peoples’ (SNNP) Region, and highest in arid, pastoral, and agro-pastoral areas such as Afar and Somali, which are highly vulnerable to droughts and climate shocks. These conditions reduce local food production, increase reliance on imports, and drive up prices due to high transport costs and limited supply.

**Figure 1:** Average daily cost of two meals per child per day in ETB



Source: Monthly retail price data (ESS, 2024) and the Ethiopia FBDG (EPHI, 2022)

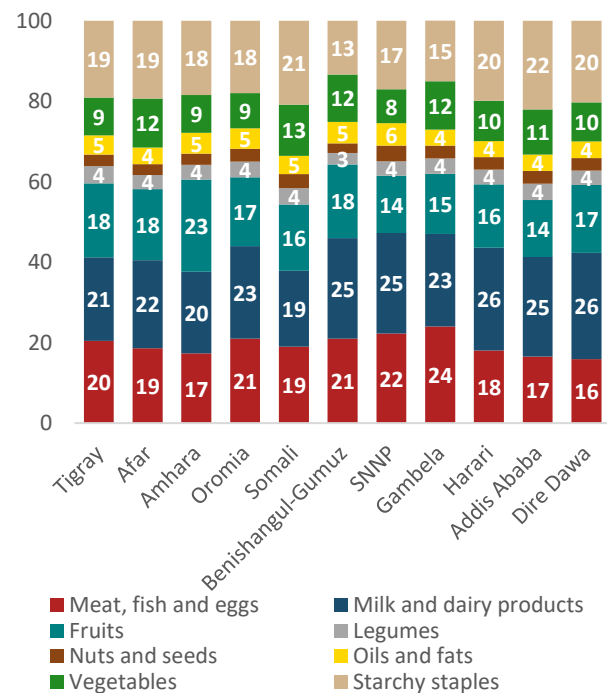
### 2. Cost share of food groups by region

Figure 2 shows the percentage share of the eight FBDG-recommended food groups. Animal-source foods (ASFs)—including meat, fish, eggs, milk, and

dairy products—are the most expensive across all regions, contributing significantly to the overall cost of school meals. Their high prices are driven by limited local production, high costs of animal feed, and supply chain inefficiencies<sup>7</sup>.

Starchy staples consistently account for the largest share of total food costs, with prices in urban areas inflated by transportation expenses from producing zones to high-demand, non-local markets. The cost share for fruits varies by region, being particularly high in Amhara but low in Gambela, reflecting differences in local availability and seasonality.

**Figure 2:** Percentage share of costs by food group and region (%)



Source: Monthly retail price data (ESS, 2024) and the Ethiopian FBDG (EPHI, 2022)

### 3. Limited dietary diversity in school menus

Current school feeding menus in Ethiopia are largely cereal-based, featuring staples such as *injera* made from teff or a teff-maize mixed flour, served with stews primarily made from legumes, and dishes like *kinche* prepared from cracked barley or wheat. This limited variety often excludes key food groups recommended by Ethiopia's FBDG—notably nuts and

seeds, as well as ASFs. Analysis shows that incorporating affordable, locally available foods from all six FBDG food groups is essential to improving nutritional quality and meeting dietary targets. Without ASFs, meals cannot achieve the FBDG recommendation of at least four food groups per meal and six per day.

## KEY ACTIONS TO ENSURE SUSTAINABLE SCHOOL FEEDING PROGRAMS

### 1. Reduce costs through local sourcing and diversified funding

- Utilize locally available and home-grown food items to reduce costs and support local economies.
- Increase regional government contributions to SFP funding to ensure sustainability and ownership.
- Engage the private sector and communities in resource mobilization by fostering partnerships that strengthen supply chains, support food fortification, and invest in infrastructure. These efforts ensure a stable and affordable supply of high-quality foods.

### 2. Increase livestock productivity to lower the costs of animal-source foods (ASFs)

- ASFs are vital for child nutrition but remain costly. Strengthening ASF value chains and investing in livestock production boost productivity, reduce costs, and increase the availability of meat, fish, eggs, and dairy in school meals.

### 3. Promote home-grown school feeding initiatives

- Build partnerships between schools, local smallholder farmers, and communities to improve

food supply chains, reduce costs, and enhance program sustainability. Local sourcing of foods supports farmers' livelihoods and ensures a reliable supply of nutritious foods.

- Promote diverse food production, especially fruit and vegetable cultivation near schools, through school gardens or linkages with local smallholder farmers.

### 4. Prioritize menu planning for nutrition and cost-effectiveness

- Develop comprehensive school meal guidelines that align with dietary requirements, local food availability, and cost constraints.
- Train school meal planners on creating culturally appropriate, nutritionally balanced, and cost-effective menus.

### 5. Strengthen food safety practices and storage infrastructure

- Provide regular food safety and hygiene training for meal preparers.
- Upgrade school infrastructure, including hygiene facilities and food storage spaces, particularly for perishable items like eggs, milk, and fish.

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## ACKNOWLEDGMENTS

The authors of this policy brief gratefully acknowledge Mr. Melaku Bayable (EPHI/NIPN) and Tekle Tesfalidet (EPHI/NIPN) for their review and Cornelia van Zyl (GIZ/NIPN consultant) for her review and content editing of this policy brief.

## FURTHER INFORMATION

This brief is based on a research report which will soon be available on the NIPN website (<http://www.nipn.eph.gov.et/>). Detailed descriptions of methods and findings are included in the research report.

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