

Cost and affordability of nutritious diets in Ethiopia

Issue 1



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Key messages



Nutrients cost more than calories. In Ethiopia, a diet providing essential macro- and micro-nutrients would cost almost four times more than a diet meeting calorie needs only¹.



A diet meeting nutrient needs is most expensive for adolescent girls and pregnant and lactating women. These groups are therefore most at risk of inadequate nutrient intake.



Special analysis for Addis Ababa reveals that the cost of a nutritious diet has been increasing since the beginning of 2020. In May 2020, a nutritious diet was estimated to cost 880 Ethiopian birr (ETB), up from 790 ETB in February, an increase of 11%.



In Addis Ababa, cash transfers provided through the urban Productive Safety Net Programme (PSNP) could cover 57% of the gap between what the poorest households spend on food and the cost of a nutritious diet for all members.

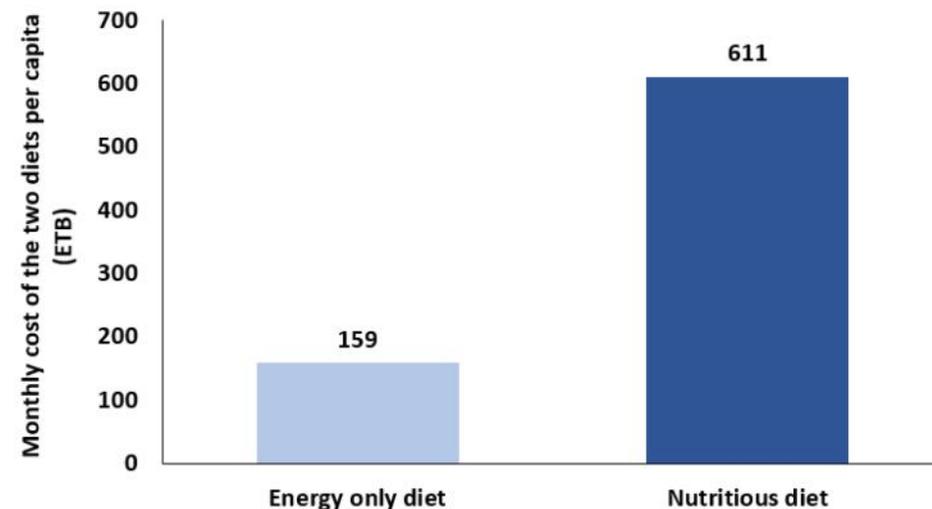


Fig 1: Monthly costs of modelled diets per capita. A nutritious diet costs 3.8 times more than a diet sufficient in energy only (Ethiopia national average).



Fig 2: Proportion of households able to afford the two diets (national average)

Most Ethiopian households would not be able to afford a nutritious diet

A diet providing essential macro- and micronutrients would cost an average of 3.8 times more (and up to 5 times more in some regions) than a diet meeting energy (calorie) needs only.

Affordability of a diet depends on its cost and on the income a household has as its disposal. Modelling using Cost of the Diet (CotD) software and household food consumption data estimated that while 93% of households would be able to afford an energy-sufficient diet, only a quarter (26%) would be able to afford the foods required to provide a nutritious diet for all household members².

Fig 2 (left) shows how out of 10 Ethiopian households, 9 would be able to afford an energy-sufficient diet, while only 3 would be able to afford a nutritious diet (Ethiopia national average).

¹ EPHI/WFP own calculations. Calculated using CotD linear programming tool, based on national CPI prices 2018-19 from the Central Statistical Agency (CSA), calculates the lowest cost diet, based on locally available foods, that would meet needs of energy, protein and 13 micronutrients when adjusted to incorporate locally consumed staple foods. This is an optimised diet and does not reflect actual consumption.

² Affordability analysis estimate based on CotD results and household food expenditure data from the Household Consumption and Economic Survey 2015-16. Expenditure was adjusted using CPI to be comparable to food prices in the same time period.



Who is at risk?

Since different household members have different nutrient needs depending on their age, sex and life-cycle stage, diets meeting nutrient needs carry different price tags depending on who they are for.

For the modelled household³, the cost of a nutritious diet for an adolescent girl would be the most expensive, followed by the pregnant or lactating woman (PLW), as seen in Figure 3.

Figure 4 shows the difference in daily cost of an energy-sufficient versus nutritious diet for males and females across the lifecycle, using data from Addis Ababa. The graph shows not only that a nutritious diet for the adolescent girl is the most expensive diet in the household, but also that female household members have the largest difference in cost between the diets, with a diet meeting their nutrient needs costing 3 to 5 times more than one just meeting their energy needs, compared to 1.5 times more for males.

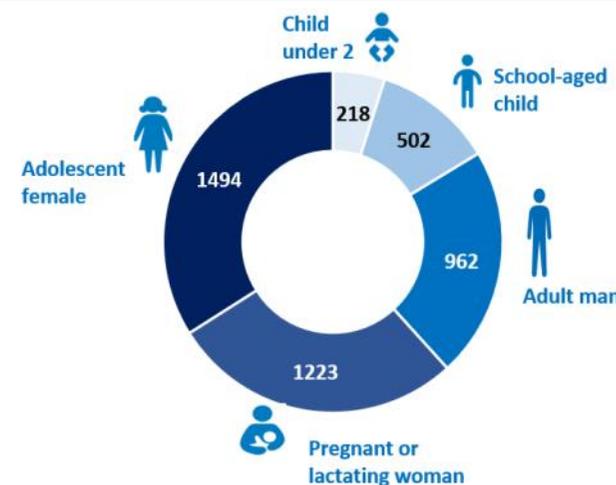


Fig 3: The monthly cost of a nutritious diet (ETB) for each household member, shown as a proportion of household food expenditure

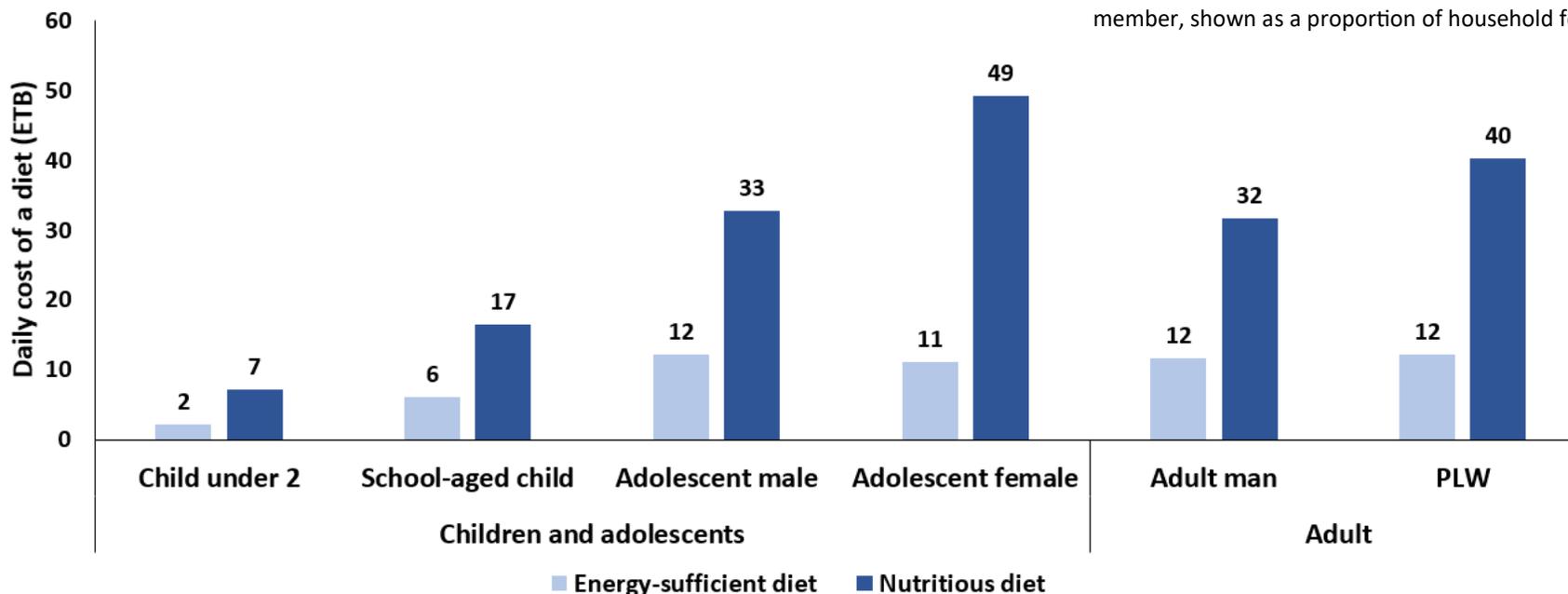


Fig 4: Difference in cost between a nutritious and energy-sufficient diet throughout the life cycle (Addis Ababa)

³ The model household used for CotD was based on an average household size in Ethiopia and included a 12-23-month-old child, a 6-7 year old child, an adolescent girl 14-15, a lactating adult woman and an adult man. 2



Regional variation

The regions of Somali, Gambella and Afar⁴ were found to have the highest cost of a nutritious diet. These three regions were also found to have the highest prevalence of households that would be unable to afford a nutritious diet (>80% of households).

Figure 5 shows how the cost of a nutritious diet varies across zones. Price data are currently not available for all zones in Ethiopia, mostly in the regions of Afar and Somali (missing data zones shown in grey).

Source: Based on national Consumer Price Index (CPI) prices 2018-19 from the Central Statistical Agency (CSA).

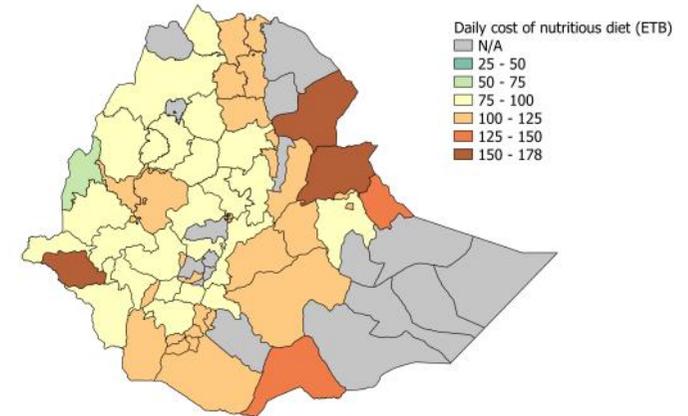


Fig 5: Daily cost of a nutritious diet by zone for the modelled household.



The cost of a nutritious diet has risen in the first half of 2020: Spotlight on Addis Ababa

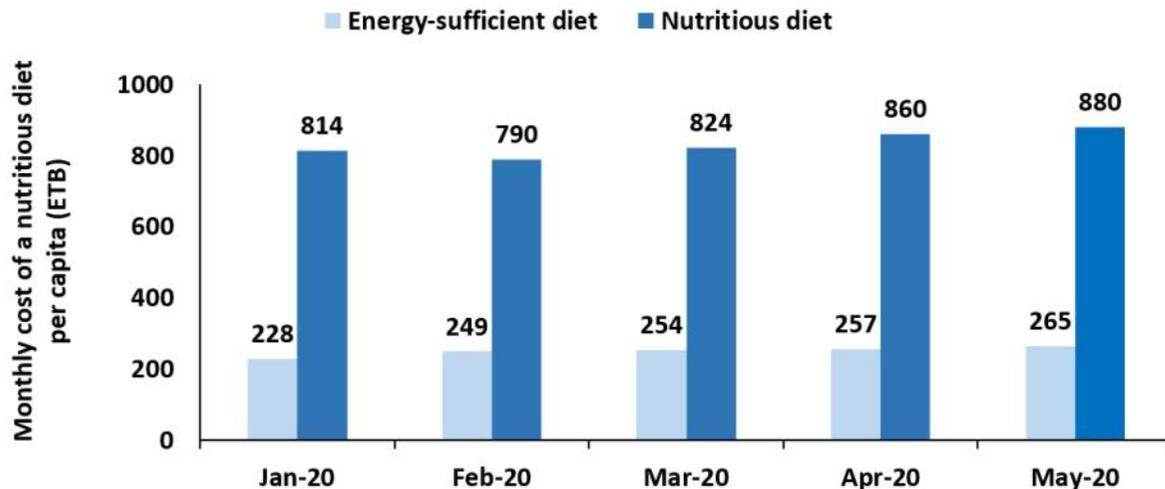


Fig 6: The monthly per capita cost of a nutritious versus energy-sufficient diet in Addis Ababa.

Source: EPHI/WFP own calculations

The cost of nutritious diets has been rising. The monthly cost of a nutritious diet for a household of five in Addis Ababa has risen from 790 ETB in February 2020 to 880 ETB in May, an increase of 11%.

In May 2020, 62% of households in Addis Ababa were expected to be unable to afford a nutritious diet⁵.

A general rise in food prices is expected with seasonal variation. However, rising prices could be even more problematic than in previous years due to the drop in income documented from April to June due to COVID-19⁶.

While this is the situation in Addis Ababa, it may be worse in other regions where the baseline percentage of households unable to afford a nutritious diet was higher.

4 CPI data coverage for Somali and Afar regions

5 Based on CotD calculations using CPI food price data collected in Addis Ababa, from January to May 2020, and HCES 2015-16 adjusted using CPI.

6 Source: IFPRI 2020 'Food and nutrition security in Addis Ababa, Ethiopia during COVID-19 pandemic June 2020 report'



Potential impact of programmatic interventions

Ethiopia’s social protection programme is one of multiple entry points that could be used to improve households’ access to nutritious diets, by effectively reducing the gap between what a household could afford to spend on food and the cost of a nutritious diet for all its members. The current cash transfer value provided through Ethiopia’s urban Productive Safety Net Programme (PSNP) could cover up to 57% of this gap.

Figure 7 illustrates the potential effect of the PNSP transfer on a household’s ability to afford nutritious diets. While the first column shows the full cost of a nutritious diet for a household, the second column represents the proportion of this cost that is expected to be covered by current food expenditure in a poor household (those in the bottom decile of the population). The third column shows how the urban PNSP transfer could cover some of the remaining cost⁷.

Future issues of this bulletin will explore the potential impact of interventions across different sectors, such as health, social protection, education and agriculture, to improve household access to nutritious diets.

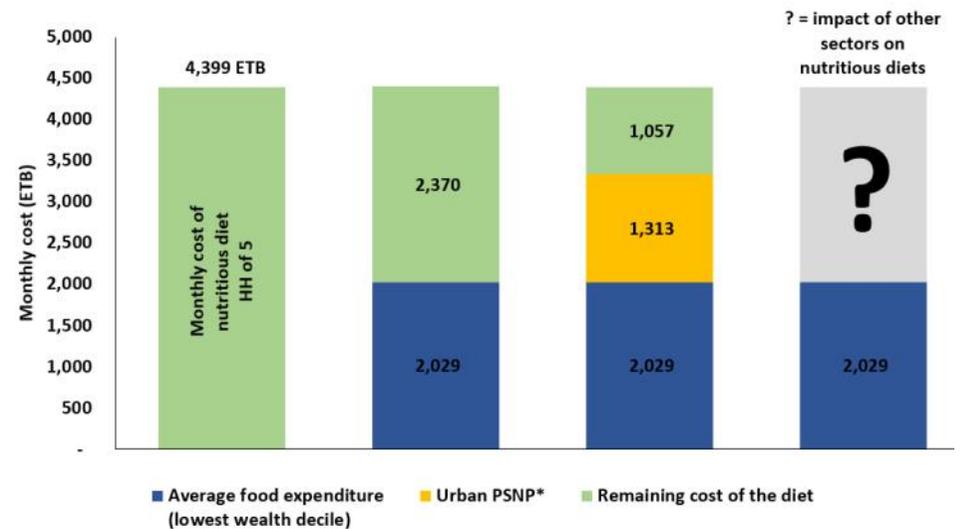


Fig 7: Monthly cost of a nutritious diet for a household and the proportion that could be covered by different interventions (Addis Ababa).

About this bulletin

This bulletin is produced by EPHI with the support of WFP and reports on the affordability of nutritious diets in Ethiopia based on results from WFP’s Fill the Nutrient Gap analysis. It aims to provide relevant, up-to-date data and insights to inform multisectoral interventions such as supplementation, fortification, nutrient-dense food baskets and nutrition-sensitive programming.

About Fill the Nutrient Gap and Cost of the Diet

Fill the Nutrient Gap (FNG) is a nutrition situation analysis and multi-sectoral decision-making tool created by WFP and partners. FNG combines secondary data review with a Cost of the Diet (CotD) analysis to identify context-specific entry-points for food, health and social protection systems to improve nutrition through increasing availability, access, affordability and choice of nutritious foods.

The CotD tool was developed by Save the Children UK and uses linear optimization to estimate the lowest cost of a diet that meets energy, protein, fat and micronutrient requirements. Affordability is estimated using percentiles of total food expenditure and measured against the cost of the energy only and the nutritious diet cost at zonal level and regional levels.

For more information on this bulletin, please contact xxxx

⁷ Based on the assumption that 70% of the total transfer sum is spent on food. Source: Cost of the Diet analysis based on CPI price data (May 2020).