



World Food Programme

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**TIMOR-LESTE:**

**COST OF THE**

**DIET ANALYSIS**

**2023 UPDATE**

Photo: WFP/Natsuki Tsuda

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ZERO

TARE

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g

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CAPACITY:  
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**TIMOR-LESTE:  
COST OF THE  
DIET ANALYSIS  
2023 UPDATE**







## FORWARD

The consumption of a nutritious diet plays a critical role in promoting the health and development of our citizens, particularly in a country like Timor-Leste, where malnutrition remains a significant challenge. This bulletin serves as a valuable resource for policymakers, researchers, and stakeholders to gain insights into the affordability and accessibility of nutritious diets within our nation.

The Cost of the Diet analysis delivers data that is vital to our understanding of the nutritional status and well-being of our population. It also provides us with an evidence-based approach to address the complex issues surrounding food security and nutrition. By quantifying the cost of a healthy diet, this analysis facilitates targeted interventions and policy formulation to ensure sustainable food systems and improved dietary outcomes for all.

I would like to share my utmost gratitude to all those who contributed to this bulletin, especially to WFP for the role it plays in addressing food security challenges and promoting sustainable development in our nation. Your unwavering commitment to eradicating hunger and improving nutrition has had a profound impact on the lives of countless individuals and communities across the country.

Let us continue to work together to ensure a future where every Timorese has access to affordable, diverse, and nutritious diets, ultimately improving the health and well-being of our nation.

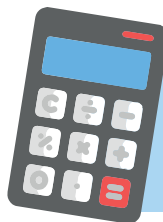
Together we save lives and change lives.



**Eng. César José Da Cruz**

General Director for Cooperation and Institutional Development  
Ministry of Agriculture, Livestock, Fisheries & Forestry

## WHAT DOES IT MEAN TO ANALYSE THE COST OF THE DIET?



It means to calculate how much a household has to spend to consume the lowest cost nutrient-adequate basket or energy-adequate basket.



### ENERGY-ONLY DIET

An energy adequate basket meets **energy** needs only



### NUTRITIOUS DIET

A nutrient adequate basket meets needs for **energy, protein** and **13 micronutrients**

In March 2023, prices were collected for **65 food items**, which can be categorized in food groups including the following :



**CARBOHYDRATES** (rice, maize, etc.)



**VEGETABLES** (mustard, tomatoes, etc.)



**ROOTS AND TUBERS** (cassava, potatoes, etc.)



**MEAT** (chicken, buffalo, etc.)



**PULSES** (soybean, Mung beans, etc.)



**FISH** (freshwater fish, saltwater fish)



## TIMOR-LESTE: COST OF THE DIET

Timor-Leste is facing high acute food insecurity due to inflated food prices, reduced purchasing power, and the persistent impacts of the COVID-19 pandemic as well as the 2021 and 2022 floods.

Amid these challenges, everyday households are finding it increasingly harder to afford nutritious food.

The cost of a nutrient-adequate diet (that meets energy, protein, fat and micronutrient requirements) is now **over US\$ 4 (78%)** higher than in 2019. This is a notable threat to nutrition across the country.

Based on the food found available on the market during the month of March 2023, it was not possible to estimate the cost of the nutrient-adequate basket in three municipalities (Atauro, Oecusse-Ambeno, and Liquiçá) due to the lack of certain nutritious foods, especially the iron-rich ones.

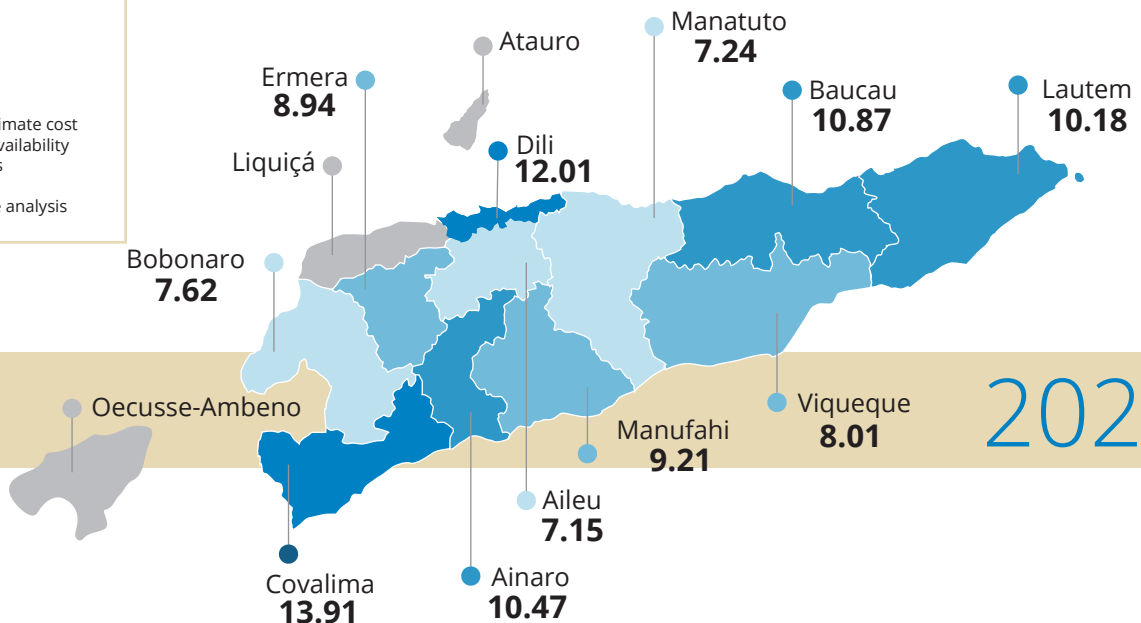
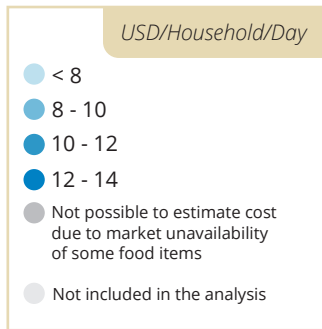
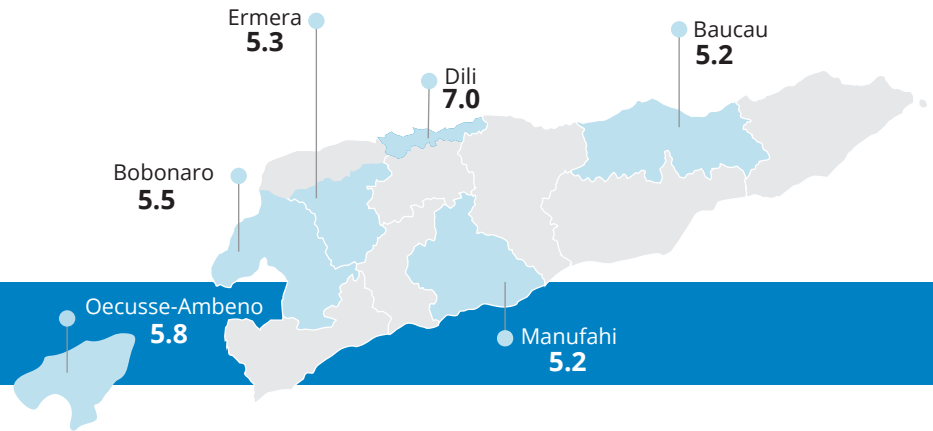
### INCREASE OF DAILY COST OF NUTRITIOUS DIET FOR A FIVE-MEMBER HOUSEHOLD (USD\$)



The national average cost of a nutrient-adequate diet is US\$10.09 per household of five members per day. The cost of a nutrient-adequate diet is highest in Covalima (US\$13.91) per day, while it is lowest in Aileu (US\$7.15). In Covalima, low market availability is estimated to be the main driver of the high food prices, when compared to Dili (US\$12.02) or neighbouring Bobonaro (US\$7.62).

This means that a household of five members has to spend on average a little over US\$ 300 each month to cover their nutrient needs. The monthly cost of the nutrient-adequate basket for each household ranges from US\$ 217 to US\$ 423.

2019

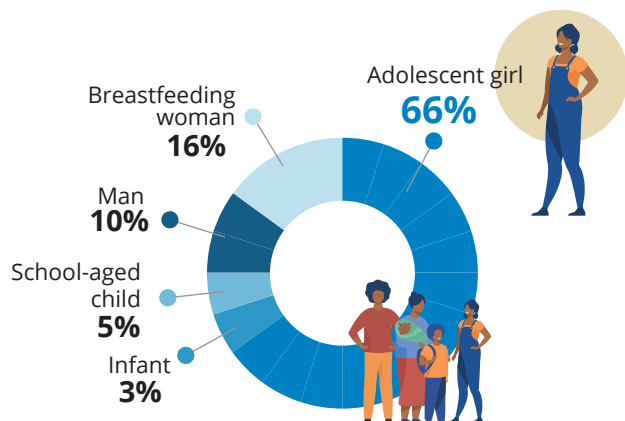


2023



The cost to cover the adolescent girl's needs contributes to two-thirds of the household's cost, as a result for the need for iron-rich foods. This highlights her nutritional vulnerabilities and the economic barriers to covering her nutrient needs. The cost of the nutrient-adequate diet of an adolescent girl ranges from US\$ 4.1 to US\$ 11.6 per day.

## THE ADOLESCENT GIRL CONTRIBUTES TO OVER TWO THIRDS OF THE COST OF THE HOUSEHOLD\*



Furthermore, this also reflects the fragility of the food system and the lack of nutrient-dense foods. When available, nutritious items were found to be expensive. However, it was found that food availability and assortment were so limited in some markets (Atauro, Oecusse and Liquiçá), especially for iron-rich items, that it was not possible to estimate the cost of the nutrient-adequate basket. Low food availability was also found in Covalima.

\*The analysis is based on the assumption of a five-member family, composed of child (12-23 months), school-going child (7 years), adolescent girl (14 years), breastfeeding woman, adult man.





The higher the household cost of the nutrient-adequate basket, the higher the cost allocation for the adolescent girl. This ranges from 58 percent in Aileu to 83 percent in Covalima.

The analysis is based on food items available in the markets at the time of data collection (March 2023).

However, the following factors should be taken into account:

- Certain items may have been unavailable due to seasonality (especially fruits and vegetables).
- There are limitations in defining food availability in the municipalities. The unavailability of some products in the markets does not necessarily translate into a lack of consumption.
- Some commodities are not sold in markets, since most households either produce them or purchase them outside of markets. For example, fish may be sold along the road, near the coast or at other water sources; beef, pork, goat meat and sheep meat are usually purchased from neighbours who plan to slaughter one of their animals; imported meat may be sold frozen in grocery stores, which may have not been visited during the data collection.

## COST OF THE DIET METHODOLOGY

The cost of the diet 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 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 micronutrients<sup>1</sup>. 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<sup>2</sup>.

The Fill the Nutrient Gap approach defines the 'nutrient-adequate basket' as the lowest cost food basket that includes the locally preferred staple food and excludes foods that are prohibited<sup>3</sup>. This basket is referred to as the 'nutrient-adequate basket' throughout this bulletin. It meets the requirements for nutrients, including protein, nine vitamins and four minerals, and does not exceed energy and fat requirements. The nutrient adequate basket is conceptually similar to the 'nutrient-adequate' diet estimated as the second level of diet quality in the 2020 State of Food Insecurity (SOFI) report<sup>4</sup>.

Population expenditure data\*\* are compared to the cost of the nutrient-adequate diet and are 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 nutrient-adequate diet, assuming optimized selection of nutritious foods. The real cost and non-affordability of a nutrient-adequate 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.

\*Data for the 2023 CotD analysis were collected in March 2023, in 51 markets in 14 municipalities (when available, three samples for each item were weighed and their prices averaged per kilo, in each market)

\*\*There was no recent population expenditure data available at the time of the analysis, therefore the affordability analysis is still pending the release of more recent surveys.

<sup>1</sup> As defined by the Food and Agricultural Organization (FAO) and the World Health Organization (WHO).

<sup>2</sup> 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.

<sup>3</sup> Foods that are prohibited could be for customary or public health reasons, e.g., raw meat during pregnancy in some parts of the world.

<sup>4</sup> FAO, IFAD, UNICEF, WFP, WHO. The State of Food Security and Nutrition in the World 2020 [Internet]. 2020. Available at: <http://www.fao.org/3/ca9692en/online/ca9692en.html>



## ACKNOWLEDGMENTS

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