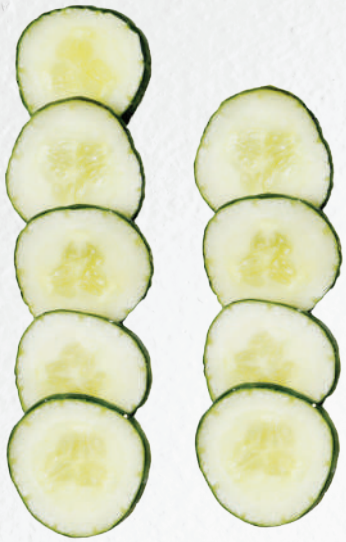
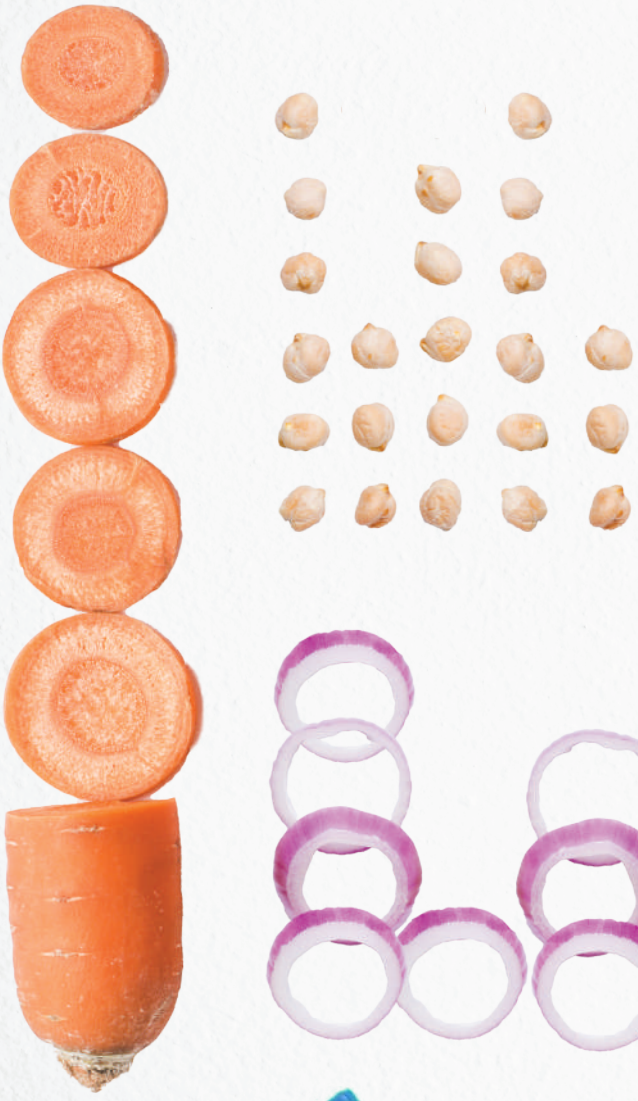
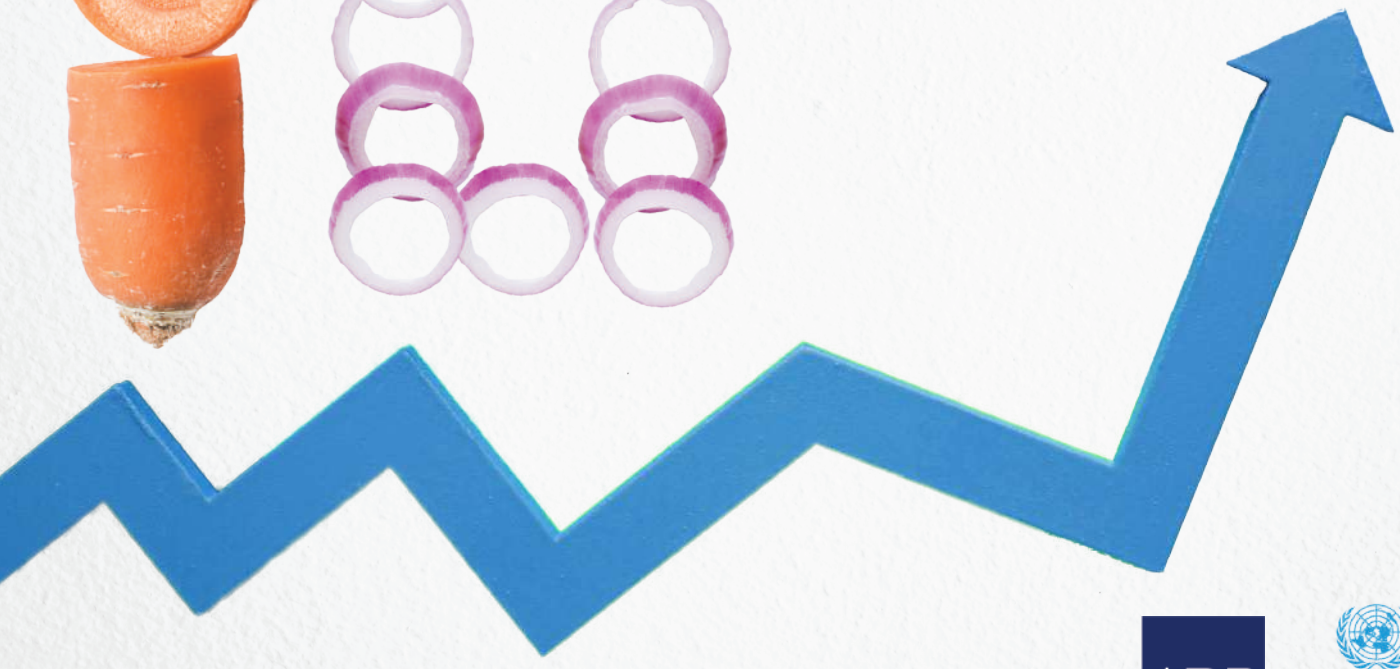




FOOD SECURITY ASSESSMENT

TIMOR-LESTE 2023



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Contents

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Data collection was carried out in September and October 2023, by WFP, with data quality checks conducted by the Ministry of Agriculture, Fisheries and Forestry, and the National Statistics Institute (INETL), in collaboration with Empowering with Tebedai solution LDA.

This report was prepared by WFP Timor-Leste (Aaron Wise, Elena Conte, Lino Antonio Borges, Francisco Soares) and reviewed by WFP Timor-Leste (Cecilia Garzon, Ali Ahmad Khan, Hallie Sohyun Jeon), WFP Regional Bureau of Bangkok (Aysenur Ozcan, Susana Moreno). The design/layout of this report was prepared by WFP Timor-Leste (Mariano Redondo).

Executive Summary

Timor-Leste is grappling with escalating food security challenges. The steep increase in rice prices, a main staple in the local diet, is placing increased financial strain on households, and the advent of El Niño is poised to disrupt agricultural output, worsening food supply problems.

The country is already facing drought-like conditions, likely to persist until mid-2024, reminiscent of the 2015/16 El Niño that led to widespread food shortages. Compounding these difficulties, a hike in rice prices has been spurred in 2023 by high international rice quotations, compounded by export restrictions from the major supplier India. In response, the World Food Programme, alongside Timor-Leste's Ministry of Agriculture, Livestock, Fisheries and Forestry (MALFF) and the National Institute of Statistics (INETL.IP), initiated a comprehensive food security assessment in September 2023, aiming to evaluate food insecurity levels, investigate contributing factors, and supply outcome data for the 2023/24 Acute IPC analysis to guide response strategies and preposition for impacts of El Niño and La Niña in 2024.

Findings from the September 2023 food security assessment indicate a deteriorating situation in Timor-Leste compared to the previous year, with 42% of households (about 569,000 people) currently facing different levels of food insecurity[1]. The highest levels of food insecurity are recorded in the municipalities of Covalima and Ermera.

Nearly half of Timor-Leste's households have inadequate diets, with smaller and poorer households particularly affected. Wealthier households have better nutrition, with stark disparities in protein consumption linked to economic status and household size.

Over 56% of households employ food-based coping strategies, with those having disabled members or experiencing multiple shocks being more reliant on these measures. Livelihood-based coping strategies are used by 74% of households, with drastic measures like cutting health and education expenses indicating the sacrifices made to manage food insecurity. Lower education levels correlate with greater use of such strategies.

Approximately 40% of households have seen a drop in income compared to a year earlier, exacerbating food access and availability issues from rising rice prices and El Niño, respectively. This has led to increased debt, especially in rural areas and among the less educated and poorer households, underlining the need for continuous economic and food access monitoring.

About 1 in 7 households (13%) have recently faced shocks, especially in Ainaro and Ermera, contributing to food insecurity. The 2015/16 El Niño had profound impacts, including reduced crops and water access. Currently, 10 percent of households receive assistance from different sources (Government and humanitarian stakeholders), with higher aid in communities experiencing multiple recent shocks.

[1]This estimate is based on the remote Consolidated Approach for Reporting Indicators of Food Security (rCARI), a modified version of WFP's standard corporate definition using the Consolidated Approach for Reporting Indicators of Food Security (CARI) methodology. The rCARI classification assesses the adequacy of households' current food consumption, as well as their capacity to maintain food consumption as measured through the use of coping strategies, type of income sources, and changes in income. The rCARI scale of food insecurity classifies the population into four categories (food secure, marginally food secure, moderately food insecure and severely food insecure). According to rCARI food insecurity is measured by combining moderately and severely food insecure populations. This classification is different from IPC where the population is classified into five phases using a different scale. More information on the CARI methodology can be found at: WFP CARI, and information on the difference between CARI and IPC methodologies can be found at CARI & IPC Factsheet: Technical Annex.

1. Introduction

In the two decades since regaining independence, Timor-Leste has made considerable progress towards building a society anchored in reconciliation and human rights, as well as fostering democratic values. However, as it navigates a critical phase marked by dwindling oil and gas revenues due to depletion of reserves, the urgency for Timor-Leste to sustain its socioeconomic growth has never been more pressing. However, as a small island nation with a population of just 1.3 million, the country faces formidable obstacles in creating a sustainable and diverse economic landscape.

Multidimensional poverty afflicts nearly half of its population, affecting women, the disabled, and those in isolated rural communities the hardest[2]. Climate change and disaster risks threaten the nascent non-oil sectors, predominantly agriculture, that form the backbone of the economy. The COVID-19 pandemic delivered a heavy blow, contracting GDP by 8.6% in 2020—its most significant decline since independence—worsening the pre-existing economic vulnerabilities.

One result of these myriad challenges is that an elevated level of food insecurity persists within Timor-Leste. By November 2022, 22 percent of the population was estimated to be facing acute food insecurity according to the IPC (Integrated Phase Classification) analysis conducted in 2022[3], and only 15-37 percent of the population was estimated to be able to afford a nutritious diet[4]. The prevalence of malnutrition in children aged 0-59 months is among the highest in the region; 47 percent of children under five are stunted (considered 'very high' as per WHO's classifications), and 8.6 percent are suffering from acute malnutrition (8.9 percent of males and 6.3 percent of females).[5]

In 2024, Timor-Leste confronts additional challenges to its food security situation. The surging cost of rice, a fundamental part of the Timorese diet, is exerting more financial pressure on households. Concurrently, the onset of the El Niño phenomenon threatens to disrupt agricultural production, potentially worsening existing food supply issues.

Timor-Leste is currently experiencing widespread drought-like conditions as indicated by the Combined Drought Index, largely due to the strengthening El Niño Southern Oscillation, which is expected to continue into mid-2024. This environmental event is predicted to cause extended periods of dry weather, adversely affecting 2024 agricultural production across the country. Reflecting on the last El Niño in 2015/16, it's noted that such events can have severe consequences, with that episode affecting 78% of households and moreover leading to over 40% of households suffering acute food shortages.[6]

Additionally, during 2023, international rice prices soared, leading to a significant increase in rice prices within Timor-Leste, with retail imported rice prices jumping over 30 percent between end 2022 and end 2023, reaching USD 0.77 per kilogram in December 2023. The Timorese, who largely rely on Indian rice imports, faced even greater challenges as India imposed a 20 percent export duty on certain rice varieties and set minimum export prices to control its own market. These actions are likely to worsen the situation in Timor-Leste, making rice less affordable for the poor and potentially causing supply issues in other rice-dependent countries, amid volatile prices.

Food security has deteriorated in Timor-Leste since last year

It was within this context that the World Food Programme (WFP) in coordination with the Ministry of Agriculture, Livestock, Fisheries, and Forestry (MALFF), the National Institute of Statistics (INETL) and the Food and Agriculture Organization (FAO) agreed to conduct a second Acute IPC analysis in November 2023.

To generate fresh information for the IPC analysis, WFP, MALFF and INETL collaboratively undertook a national household food security assessment spanning all Timor-Leste municipalities to assess current food security conditions.

The primary goals of the food security assessment included:

1. Evaluate the present levels of food insecurity in Timor-Leste;
2. Explore the principal factors contributing to food insecurity;
3. Supply essential data for the 2023/24 Acute IPC analysis, thereby supporting decision-making and resource allocation for addressing current food insecurity and preparations for potential impacts of El Niño.

[2]Multidimensional Poverty Index 2023 - UNDP https://hdr.undp.org/sites/default/files/Country-Profiles/MPI/TLS.pdf

[3]Acute Integrated Food Security Phase Classification (IPC) Results, November 2022, Timor-Leste

[4]The Fill the Nutrient Gap (FNG) Study Timor-Leste, Food and Agriculture Organization of the United Nations (FAO), and National Council on Food Security, Sovereignty and Nutrition on Timor-Leste (KONSSANTIL). 2019

[5]Timor-Leste Food and Nutrition Survey (TLFNS), Ministry of Health, 2020

[6]Rapid Drought Impact Assessment – El Nino, Ministry of Agriculture, Livestock, Fisheries and Forestry: https://www.fao.org/fileadmin/templates/rap/files/meetings/2017/Final_MAF_El_Nino_Report.pdf

2. Methodology

The 2023 Food Security Assessment in Timor-Leste was a comprehensive survey that spanned the nation's entire geographic scope and delivered representative results at the national and municipality levels, encompassing all 12 municipalities and 2 special regions and their respective Administrative Posts. This extensive effort was undertaken to gain a granular understanding of the food security status across the country, allowing for tailored interventions where needed. Data was collected from 9,488 randomly selected households (using face-to-face interviews). With such sample size, the assessment constitutes the largest food security focused survey to date in Timor-Leste.

The questionnaires covered a variety of relevant themes including:
- Food consumption
- Food- and livelihood-based coping strategies
- Livelihoods, income sources, and debt
- Shocks and assistance
- Demographic and household characteristics

The full questionnaire can be found in Annex 5.

2.1 Sample Size

The November 2023 food security assessment sample was designed to provide representative data at each of the 12 municipalities and 2 special regions within Timor-Leste. To calculate a sample size for estimating the prevalence with 95% confidence interval considering cluster sampling, the following formula was used:

$$N = DEFF \cdot \frac{\left((P) \cdot (1 - P) \cdot 1.96^2\right)}{d^2}$$

N = sample size

DEFF = Design effect

1.96 = Z value for p = 0.05 or 95% confidence intervals

P = Estimated prevalence

d = Desired precision (0.05 for ± 5%)

The final desired sample size was calculated at 9,042 households across the country and 646 households in each municipality.

2.2 Sample Design

The survey methodology employed a two-stage cluster sampling approach, which facilitated a structured and efficient collection of data. In the first stage, 30 clusters, identified in the sukus (Admin 3), per municipality (Admin 1) were selected using probability proportional to size (PPS). Each of these clusters then formed the basis for the second stage, where households were chosen through systematic random sampling (on average 21.5 households per cluster).[7] The number of households interviewed in each municipality exceeded the required amount (646) and in total 9,488 households were surveyed in the country (see Annex 1).

Data collection was supported by 35 supervisors and 198 enumerators, grouped in 14 dedicated teams, each comprising between 6 to 20 trained members. These teams visited between 44 to 110 households daily, with the duration of data gathering in each municipality ranging from 6 to 15 days depending on size and accessibility. Data collection was conducted in multiple but not all municipalities simultaneously, with the first questionnaire filled in on 20 September and the last on 10 October. The teams used Android tablets for data collection, a method that not only streamlined the process but also enhanced the accuracy of the data recorded and shortened the time necessary for the survey, averaging about 40 minutes per household. Prior to the survey, all enumerators underwent thorough training to ensure consistency and reliability in the data collection process.

The quality of data collection was overseen through daily supervision, with the fieldwork supervisors and the WFP team in Dili performing regular quality checks. This oversight was critical in maintaining the standards set for the assessment. To ensure the representativeness of the findings, the results were weighted. This adjustment accounted for any discrepancies between the survey's sample distribution and the actual population distribution within each Municipality and Administrative Post, as recorded in the 2022 population census. This weighting process was a crucial step in validating the survey's results, ensuring they accurately reflected the food security situation across Timor-Leste.

[7]Systematic random sampling is a method where a sample is chosen from a population at regular intervals, starting from a randomly selected point. In Ainaro, Atauro, Liquica, Manufahi and Oecusse, municipalities composed of fewer than 30 sukus, large sukus were segmented geographically to facilitate the cluster sampling method.

3.Household Food Security

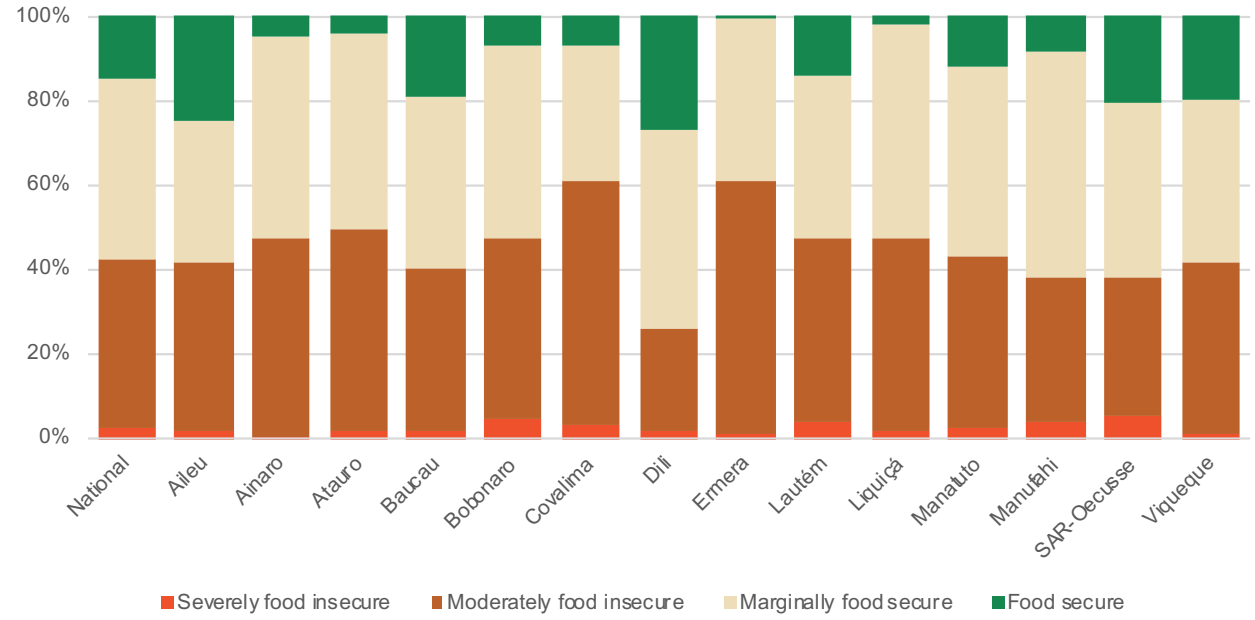
3.1 Food Insecurity

The September 2023 assessment was conducted to understand the current household food security situation in Timor-Leste and identify any existing vulnerabilities which may be worsened by rising food prices or a significant El Niño event. Top-level findings suggest that the food security situation has deteriorated compared to 2022. Many households are potentially compromising their future resilience and productivity by using coping strategies because they do not have enough food or money to buy food. Given the acute food insecurity situation and considering that economic and climatic conditions are likely to deteriorate before improving, continuous monitoring of the situation is essential. This will ensure that any significant deterioration is quickly identified, enabling the implementation of appropriate policy and programmatic responses.

Based on the September 2023 assessment, the food security situation in Timor-Leste is quite concerning, with about 42% of households (569,000 people in the country) experiencing acute food insecurity (moderate and severe), of which 2.6 percent experiencing severe food insecurity (about 35,000 people) (Figure 1 and Map 1).[8] The highest levels of acute food insecurity were found in Covalima and Ermera (at 61.2 percent and 60.7 percent, respectively). About 5 percent of households in Bobonaro and SAR-Oecusse were severely food insecure according to the survey results (5.0 percent and 5.6 percent, respectively).

42% of households [currently] experience acute food insecurity

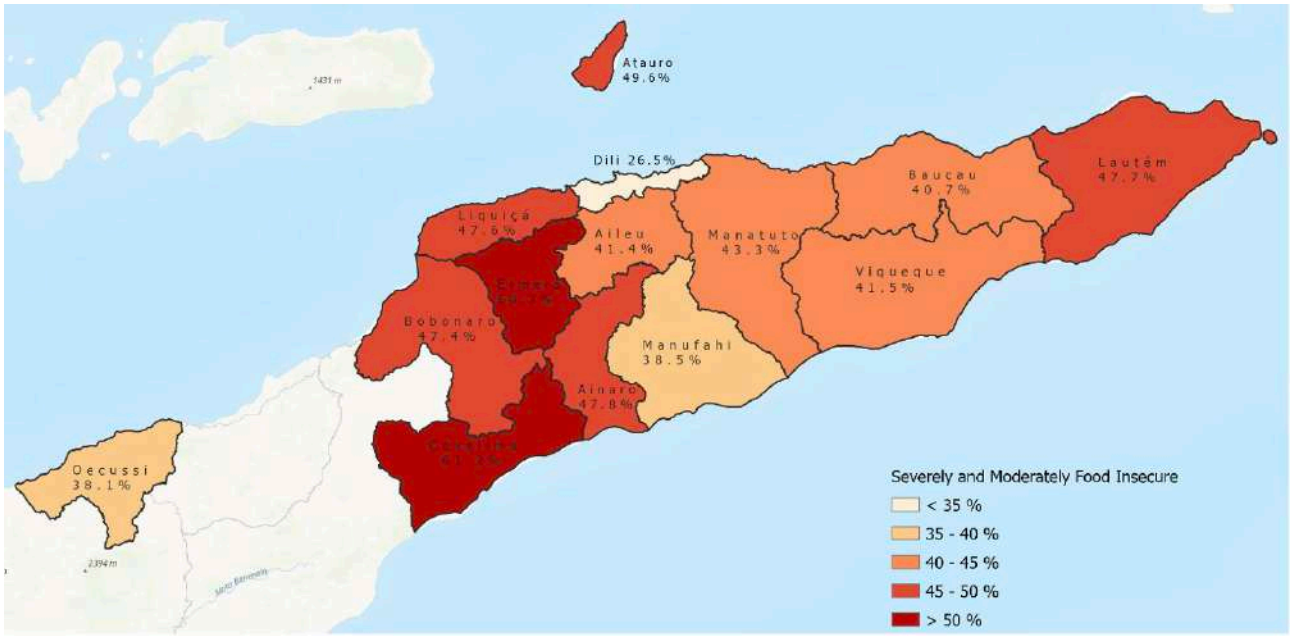
Figure 1. Food Security by municipality



[8]This estimate is based on the remote Consolidated Approach for Reporting Indicators of Food Security (rCARI), a modified version of WFP's standard corporate definition using the Consolidated Approach for Reporting Indicators of Food Security (CARI) methodology. The rCARI classification assesses the adequacy of households' current food consumption, as well as their capacity to maintain food consumption as measured through the use of coping strategies, type of income sources, and changes in income. The rCARI scale of food insecurity classifies the population into four categories (food secure, marginally food secure, moderately food insecure and severely food insecure). According to rCARI food insecurity is measured by combining moderately and severely food insecure populations. This classification is different from IPC where the population is classified into five phases using a different scale. More information on the CARI methodology can be found at: WFP CARI, and information on the difference between CARI and IPC methodologies can be found at CARI & IPC Factsheet: Technical Annex.

Small households (1-2 members), poor households, those with decreased income over the previous 12 months, and households that experienced two or more shocks in the past six months are identified as the groups most likely to be facing food insecurity.

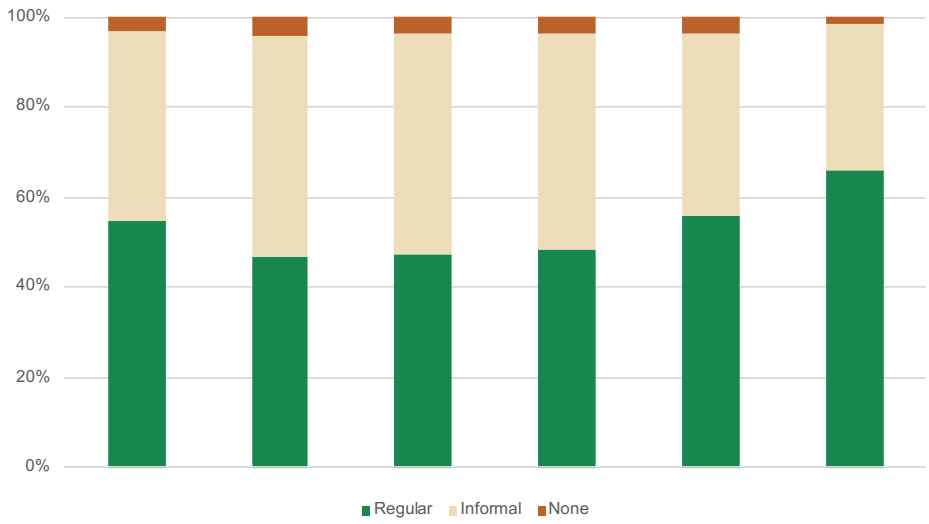
Map 1. Food Security by municipality



Household size was an important determinant of food security: households with just 1-2 members were notably more likely to be food insecure compared to households with 11+ members (52 percent vs. 38 percent, respectively). One explanation for this disparity supported by the survey data is that smaller households have fewer members able to earn an income (i.e. members aged 18-60) and thus are less resilient when challenging times arise.

Food insecurity rates also varied significantly by wealth groups. Households in the poorest wealth group (Quintile 1) were more than twice as likely to be food insecure compared to households in the richest wealth group (59 percent vs. 23 percent, respectively). One explanation for this disparity is borne out in other survey findings: the richest households were also the most likely to have regular sources of income whilst the poorest households were most likely to have informal sources of income (Figure 2). Regular sources of income help households better manage their resources and smooth out their consumption patterns (in part, by being more likely to have savings or other fungible assets which can easily be converted into money or food).

Figure 2. Income source by wealth quintile

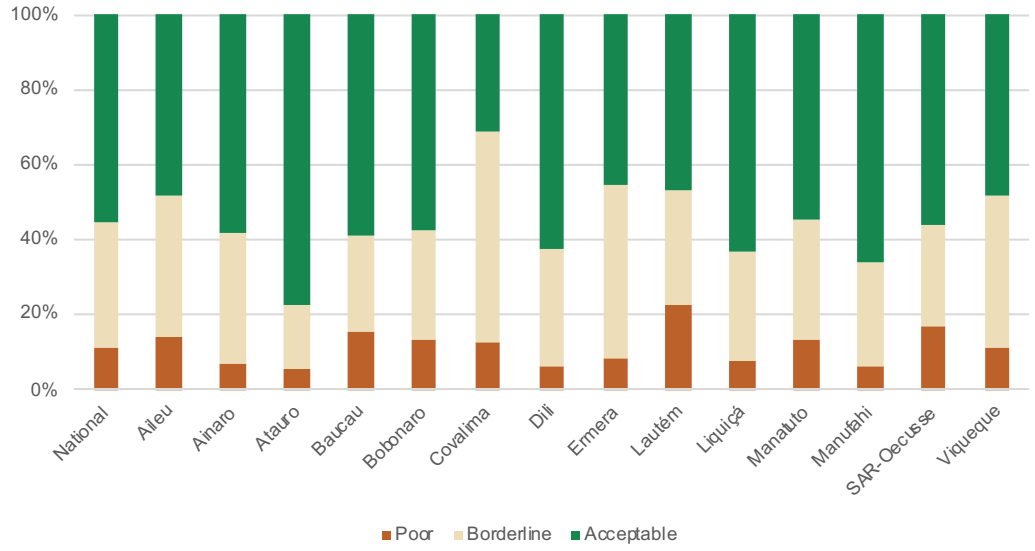


Related to the previous finding, households reporting that their total monthly income had decreased compared to the same time a year ago were also twice as likely to be food insecure compared to households reporting an increase (60 percent vs. 27 percent). The reasons for this are many but one explanation can be found in shocks: households reporting two or more shocks were much more likely to be food insecure than those reporting no shocks (51 percent vs. 41 percent, respectively). The interrelated impacts of decreasing income and shocks is quite apparent in Ermera, a municipality with one of the highest rates of food insecurity as well as proportions of households reporting shocks and income decreases. This correlation with shocks is particularly salient given the current El Niño phenomenon which households in Timor-Leste are currently experiencing (see more on potential El Niño impacts in section 4.2 below).

3.2 Food Consumption

The food security assessment revealed that nearly half of all households (45 percent) were not consuming an adequate diet (Figure 3).[9] More than 1 in 10 households (11 percent) had poor food consumption which equates to a diet primarily consisting of just cereals, vegetables, and oil with little to no protein intake. There were notable differences in food adequacy at the municipality level, with Covalima reporting the highest percentage of households with inadequate diets at 69 percent, followed by Ermera at 54 percent. Lautem is the municipality with the highest percentage of population with poor food consumption (22.4 percent).

Figure 3. Food consumption by municipality



Small households (1-2 members), poor households, those with decreased income over the previous 12 months, and households that experienced two or more shocks in the past six months are identified as the groups most likely to be facing food insecurity.

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[9]This estimate is based on the Food Consumption Score (FCS) indicator which measures dietary diversity and food frequency. A household food consumption score is calculated according to the types of foods consumed during the previous seven days, the frequencies with which they are consumed, and the relative nutritional weight of the different food groups. The higher the FCS, the better the food consumption status of the household. FCS is calculated based on the past 7-day recall period and classifies households into three categories: poor consumption (FCS=1.0 to 28); borderline (FCS=28.1 to 42); and acceptable consumption (FCS=>42.0). More information on the FCS methodology can be found at: WFP FCS.

Food insecurity rates also varied significantly by wealth groups. Households in the poorest wealth group (Quintile 1) were more than twice as likely to be food insecure compared to households in the richest wealth group (59 percent vs. 23 percent, respectively). One explanation for this disparity is borne out in other survey findings: the richest households were also the most likely to have regular sources of income whilst the poorest households were most likely to have informal sources of income (Figure 2). Regular sources of income help households better manage their resources and smooth out their consumption patterns (in part, by being more likely to have savings or other fungible assets which can easily be converted into money or food).

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Box 1: 2023 Cost of the Diet update

In Timor-Leste, the cost of food has increased considerably in recent years. This is shown by the results of the 2023 update of the Cost of the Diet analysis, which calculates how much a household must spend to consume the lowest cost nutrient-adequate diet*. The analysis finds that:

1. The average cost of a nutrient diet for a family of five is USD 10.09 per day in 2023. This marks a 78 percent increase since 2019, when the average daily cost amounted to USD 5.68. It means that a household of five members would have to spend on average USD 4.41 more each day to meet nutrient needs of household members, compared to four years earlier.

2. On a monthly basis, households would need to spend over USD 300 per month to cover their basic nutrient needs in 2023, which is more than double the national minimum wage of USD 115, presenting a notable threat to household nutrition across the country. In 2019, the average monthly cost was just above USD 170.

3. There are considerable variations across different municipalities in the daily cost of a nutrient-adequate diet (highest in Covalima at USD 13.91/ day, and lowest in Alieu at USD 7.15/day), as well as in the availability of nutrient-dense foods.

4. The market availability of food in some municipalities (Atauro, Liquica and Oecusse) was found to be so limited that it was not possible to calculate the minimum cost of a nutritious diet.

5. Adolescent girls are particularly at risk of not meeting the minimum dietary needs, as iron-rich foods (necessary to support healthy growth at a formative time in their physical development) are more expensive than others in a country already suffering from food unaffordability.

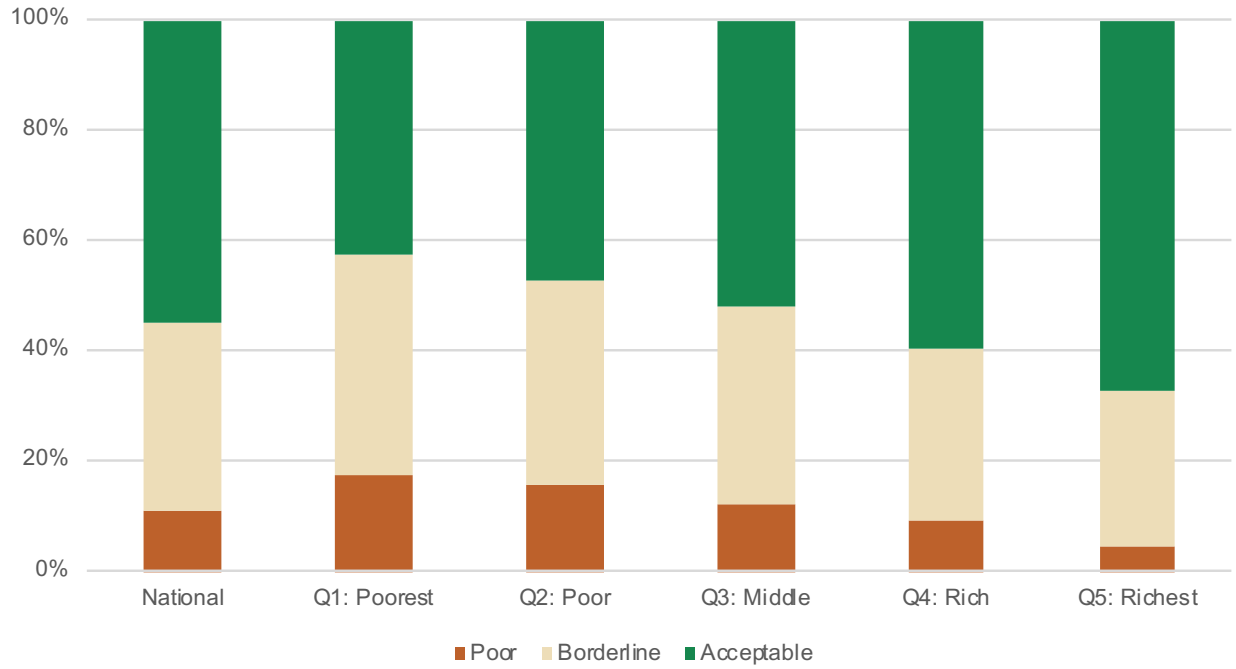
6. The food products with the highest concentration of iron, among those for which price data were collected, are soybeans, kidney beans, fish, meat and eggs. On average, in Timor-Leste, these iron-rich foods cost over two and half times more than the other food items.

*A nutrient-adequate basket meets needs for energy, protein, and 13 micronutrients, which include a diversity of items such as fruits, vegetables, dairy, and starchy staples.

The survey highlights that in Timor-Leste there is a direct correlation between wealth and food consumption within households. The findings reveal a distinct divide: nearly 1 in 6 of the poorest households (17 percent) are consuming a poor diet, in stark contrast to just 4 percent of the richest households (see Figure 4). This disparity underscores the impact of financial status on access to sufficient nutrition. These results are linked to and supported by the findings of the 2023 Cost of the Diet analysis[10], showing that the cost of a nutritious diet has increased considerably since 2019, and protein rich foods are particularly expensive, compared to other commodities, making it difficult to meet the dietary needs, particularly among the poorest households. Notably, Covalima reports the highest percentage of households with inadequate food consumption and also the highest cost of a nutrient-adequate diet (see Box 1).

[10]The Cost of the Diet update 2023 was based on market price data collected in March 2023 by WFP and the Ministry of Agriculture.

Figure 4. Food consumption by wealth quintile



Additionally, the survey found that household size in Timor-Leste plays a significant role in dietary habits. Smaller households, consisting of 1-2 persons, are more likely to struggle with inadequate diets, with 56% falling into this category, compared to about 40% of larger households. These insights demonstrate the crucial interplay of economic resources and household demographics in determining food security.

Across Timor-Leste, the daily diet in most households predominantly includes staples, vegetables, and oil, consumed on average 6.3, 6.2, and 6.1 days per week, respectively. However, protein intake remains notably low across all municipalities, signaling a gap in nutritional balance.

Remarkably, the municipality of Atauro stands out with significantly higher protein consumption and lower vegetable consumption compared to other municipalities, indicating a unique dietary pattern. As explained in Box 2 in more detail, it appears that at the time of the survey most communities reported a high fish consumption linked to a particularly good fishing season and lack of refrigeration facilities. In addition, given Atauro's remoteness, the population mostly consumes locally produced food, which includes very little variety and quantities of vegetables. This evidence is particularly interesting when reading the results in light of the 2023 Cost of Diet analysis, showing very little availability of food in the markets of Atauro at the time of the analysis (see Box 1).

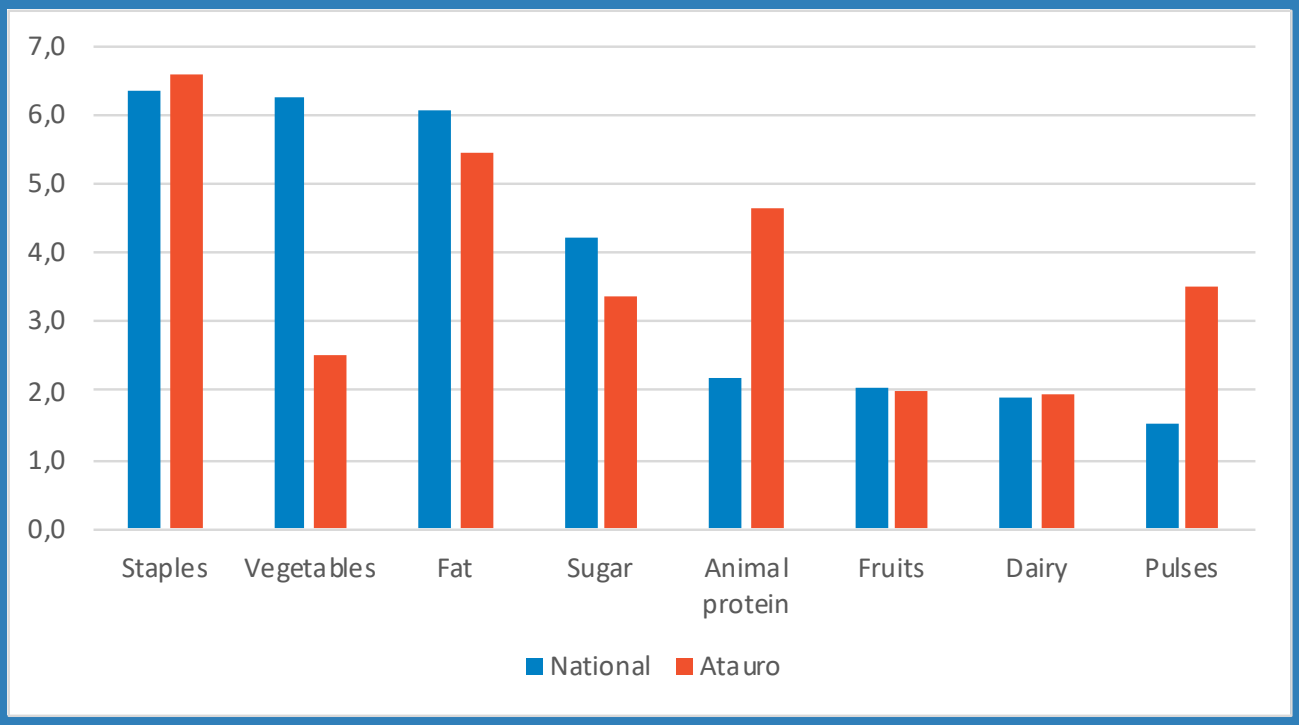
The two analyses' results seen together indicate that Atauro's population does not rely on markets as much as other municipalities and the population mostly consumes food produced at the household and immediate community level.

Unaffordability caused by lower income results in almost **50%** of Timorese households consuming inadequate diets

Box 2: Atauro food consumption

Atauro daily food consumption results show that, on average, the population on this island consumes staples, fat, sugar, fruit, and dairy with a frequency similar to the national average. By contrast, vegetables, animal proteins and pulses consumption appear to be very different than the country's average level (Figure 5).

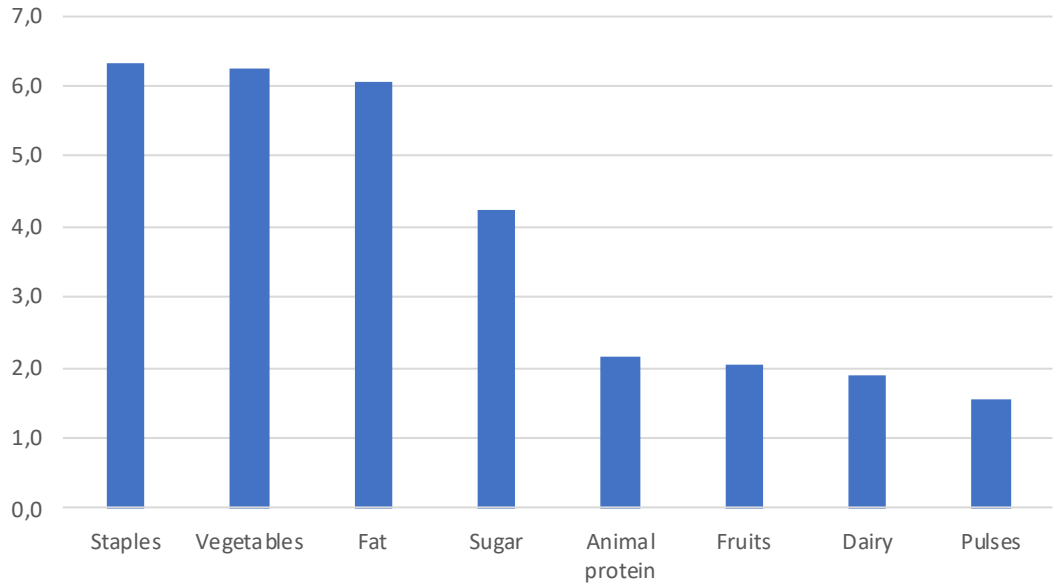
Figure 5. Atauro and national average daily food group consumption



Between 21 and 25 November 2023, detailed qualitative research delved into the daily food habits of Atauro residents. Guided conversations with communities and Focus Groups Discussions were organized in three aldeias in each of the three sukus where pulses and animal protein consumption results appeared to be considerably above the national average: Beloi (Usubemassu, Arlo, Maquer-Raiketa), Biqueli (Uaru-Ana, Pala, Ilicnamo) and Vila Maumeta (Ileticaraquia, Eclae, Ilimanu). These discussions unveiled that the primary livelihood of these coastal communities is fishing, leading to heightened consumption of animal protein, particularly derived from fish-based diets. Furthermore, these sukus, situated on the southeast side of the island, experienced a prime fishing season between September and October in 2023, surpassing previous years in productivity. Given the abundance of fish and the absence of refrigeration facilities, the survey period (20 September to 10 October 2023) likely saw escalated consumption, notably among fishing households and their broader community. Thus, while the study highlights a peak in animal protein (fish) intake during this period, it is crucial not to generalize this level of consumption to the entire Atauro population throughout the year.

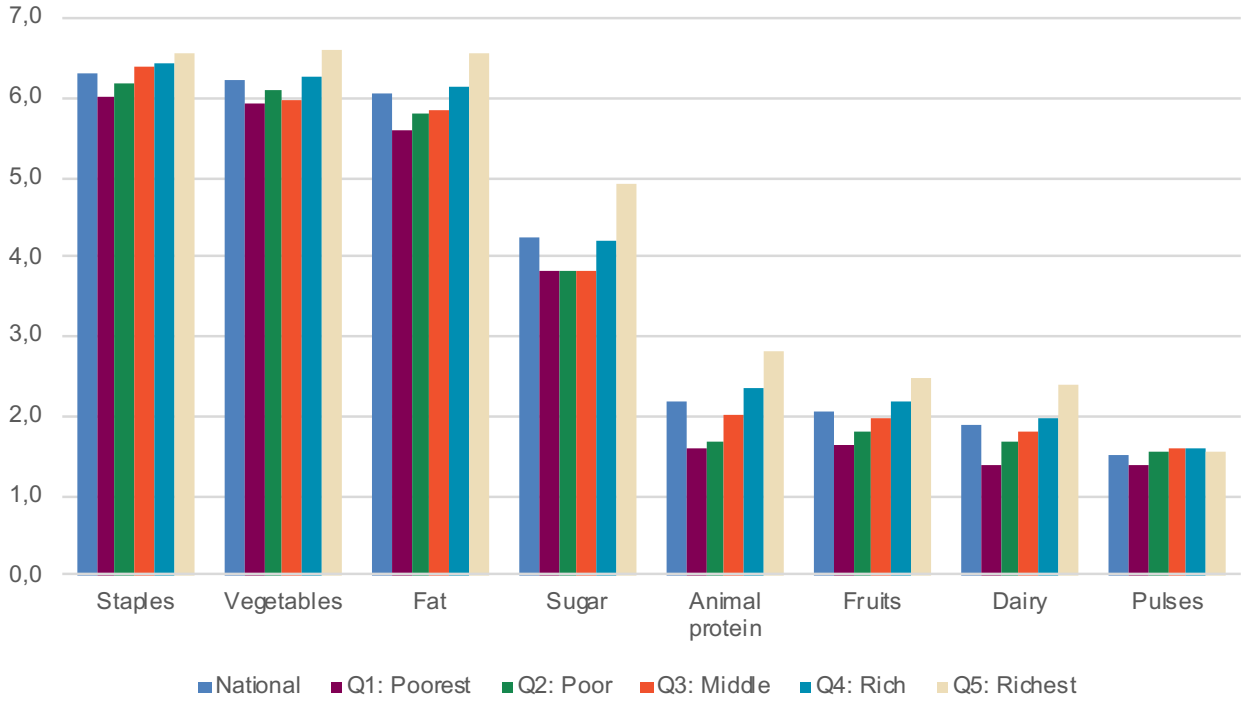
Insights from discussions with the communities unveiled the restricted variety of vegetables and pulses in Atauro, primarily reliant on locally cultivated produce. Traditional diets comprise essential staples like rice, maize, cassava, specific types of pulses and a moderate portion of vegetables. The most commonly consumed vegetables are tomatoes, papaya leaves, papaya flower, murunga, and the most common pulses are white, brown and black long beans, and green peas. Other types of vegetables and pulses, such as red beans, kidney beans and lentils, are consumed in smaller quantities as they are mostly transported from Dili and thus more expensive.

Figure 6. Average Weekly Consumption of Food Groups



There was a marked difference in food consumption patterns according to wealth such that the wealthiest households were consuming more protein and dairy compared to the poorest households (Figure 7) underscoring the persistent economic barriers to accessing a well-rounded diet.

Figure 7. Food group consumption by wealth quintile



Elderly-headed households were also much more likely to consume a poor diet compared to households headed by someone aged 18-59 (15 percent vs. 10 percent, respectively). Elderly-headed households tend both to be smaller and less likely to have a regular source of income, each of which are predictive factors for poor diets and food insecurity.

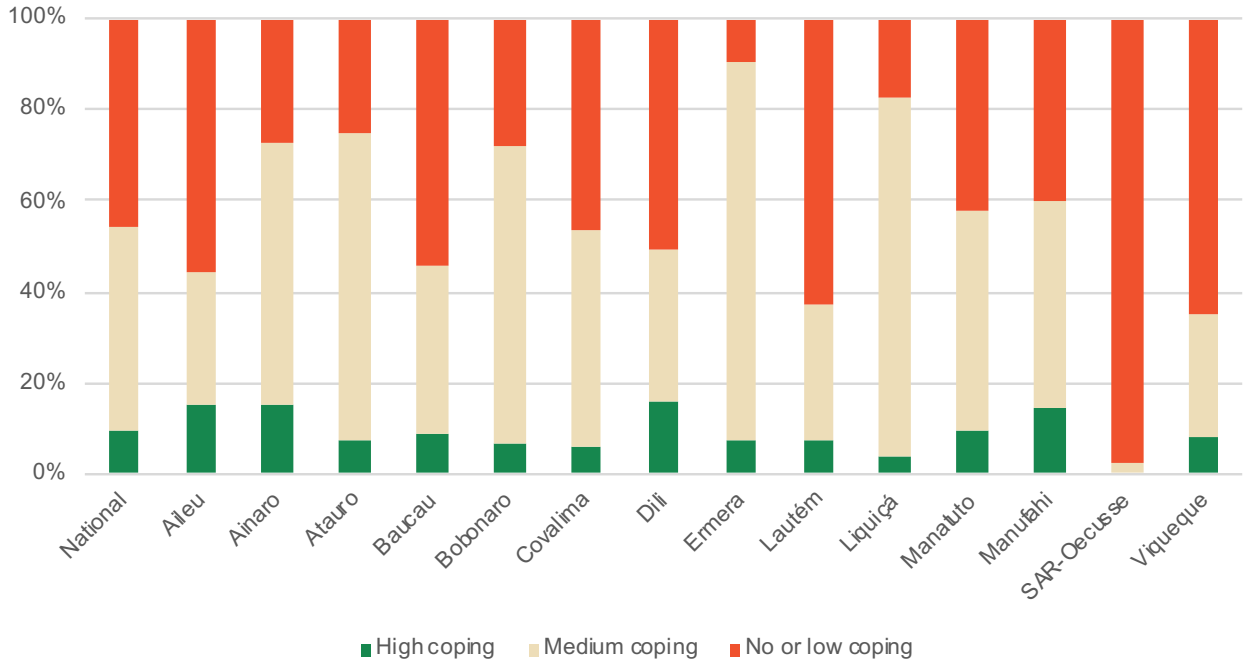
3.3 Coping Strategies

Assessing household coping strategies is important for understanding how households react to food insecurity and various shocks. They help to elaborate the ways in which households make changes to their diet or livelihood behaviors in the face of limited food or money to buy food.

The survey delved into these coping mechanisms over different recall periods - specifically, the 7 days prior to the survey for food-based coping strategies (rCSI) and the 30 days prior for livelihood-based coping strategies.[11,12] This approach was designed to gather more precise information about the food and livelihood challenges households faced during the current situation.

In Timor-Leste, more than half of the households (56 percent) reported using medium or high food-based coping strategies due to insufficient food or financial resources to buy food (Figure 8)[13]

Figure 8. Food-based coping by municipality



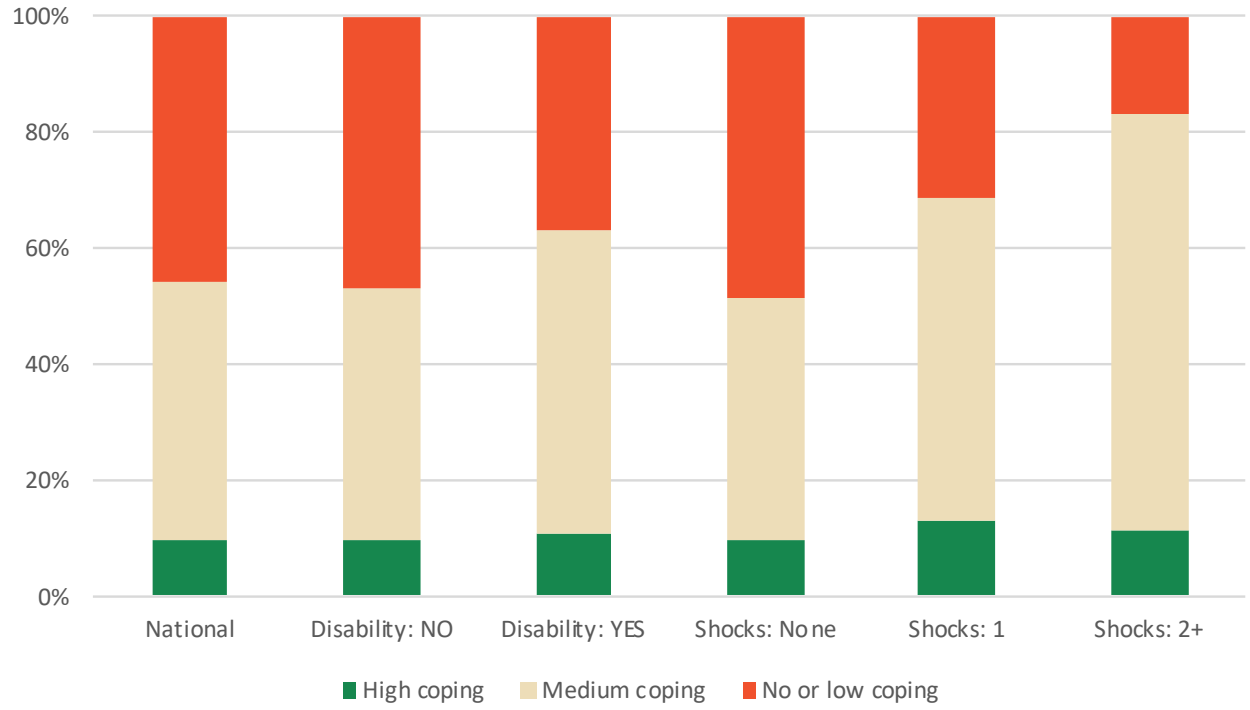
Households with at least one member with a disability are more likely to resort to food-based coping strategies, with 63 percent of such households employing these measures compared to 53 percent of households without disabled members (Figure 9). Additionally, households that have experienced at least two shocks in the past six months show a higher tendency to rely on these coping strategies, with 83% often using them. This highlights the heightened vulnerability and challenges faced by households dealing with disabilities and multiple crises.

[11]The World Food Programme (WFP) employs a standardized set of questionnaires to determine food-based coping strategies. These strategies are evaluated based on their severity and frequency, allowing households to be categorized into groups that adopt high, medium, or low coping strategies. More information on the rCSI can be found at: WFP rCSI.

[12]The livelihood-based coping strategies indicator is formulated from a series of questions focusing on households' experiences with livelihood stress and asset depletion as a response to food shortages. Based on the severity of the measures taken, households are classified into three categories: those adopting stress, crisis, or emergency coping strategies. More information on livelihood coping (LCSI) can be found at: WFP LCSI.

[13]Households with "medium" levels of food-based coping are using such strategies occasionally to address gaps in food consumption; households with "high" levels of food-based coping are using these strategies regularly/daily to meet food gaps.

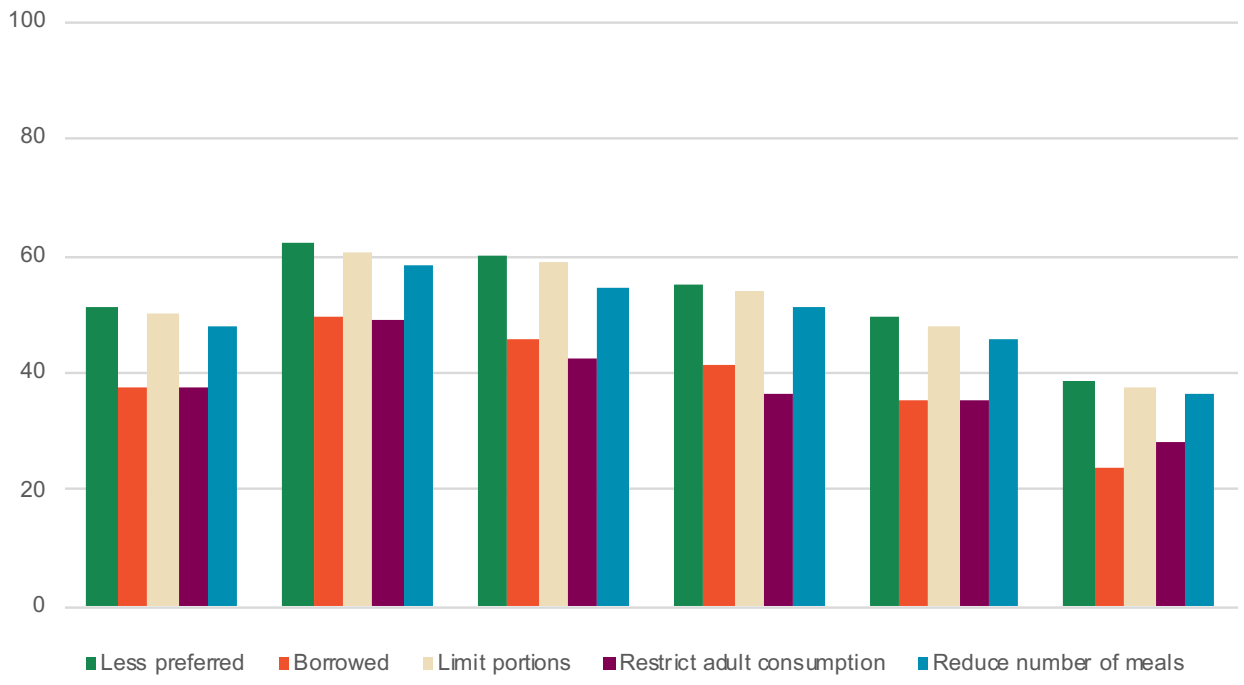
Figure 9. Food-based coping by disability and shocks



Diving deeper, the most prevalent food-based coping strategy across all households is eating less preferred foods: more than half of all households nationally (51 percent) reported using this strategy in the 7 days before the survey (Figure 10). Wealthier households, however, are significantly less likely to resort to such coping strategies. The relationship between wealth and the reliance on food-based coping is approximately linear, indicating that as household wealth increases, the likelihood of employing these strategies decreases proportionally. Notwithstanding this relationship, it is worth noting that households on the higher end of the wealth spectrum were still reporting that they were making some food-based coping decisions suggesting that food security concerns are not limited to the poor in Timor-Leste.

To cope with food insecurity, households are making difficult livelihood choices

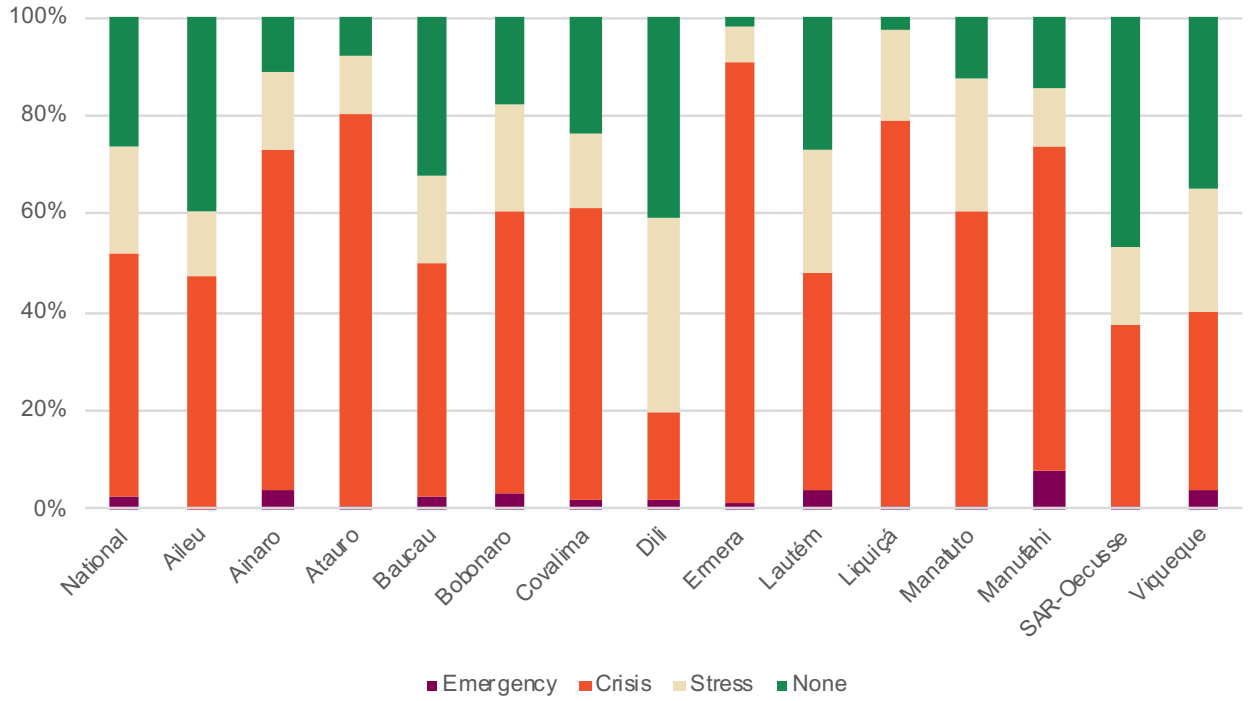
Figure 10. Individual food-based coping strategies by wealth quintile[14]



Apart from adjusting their food consumption patterns, households were also employing various livelihood-based coping strategies. Nearly 3 in 4 households across the country (74 percent) reported using at least one such strategy in the past month because there was not enough food or money to buy food (Figure 11). About 51.7 percent of households are resorting to emergency or crisis livelihood coping strategies (2.4 percent to emergency LCS and 49.3 to crisis LCS), which are expected to severely affect their medium to long-term ability to generate income and ensure food security.

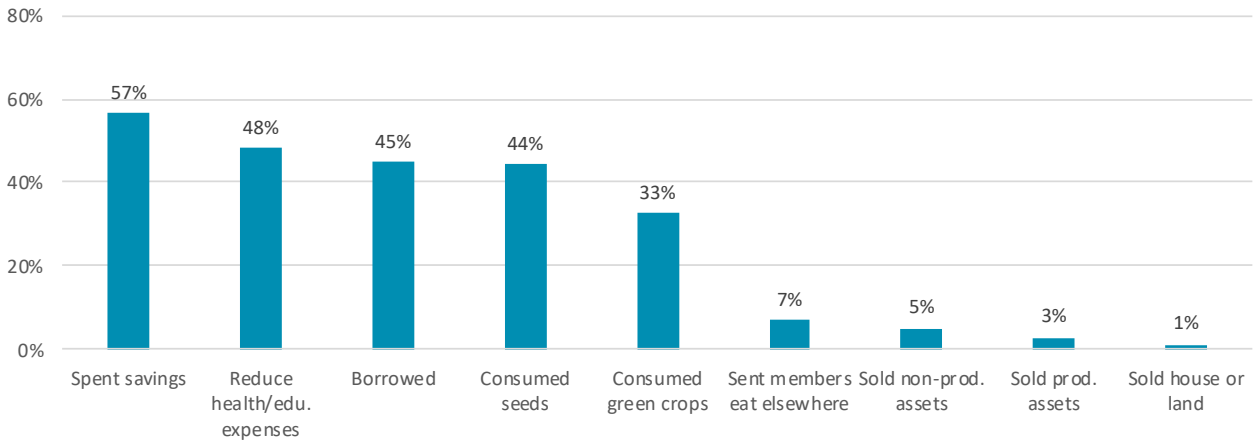
[14]See Annex 5 for the list of Food-Based Coping Strategies (rCSI indicator).

Figure 11. Livelihood-based coping by municipality



The most common livelihood-based strategies, as shown in Figure 12, include spending savings, borrowing food/money from friends and family, and reducing essential health and education expenses. Notably, almost half of households (48 percent) have cut back on health and education spending (a Stress Livelihood Coping Strategy), potentially affecting their well-being and prospects. The use of such strategies suggests that the relative stability in food security over the past year has come at the cost of increased debt, loss of savings, and foregone medical and education spending, highlighting the current hardships faced by households in Timor-Leste in securing food.

Figure 12. Individual livelihood-coping strategies



The subpopulations most likely to be using emergency and crisis strategies are households with no source of income, those headed by someone who is separated or divorced, and those with four or more elderly members. These groups face the greatest risk of long-term economic and food security instability due to their reliance on such drastic coping mechanisms.

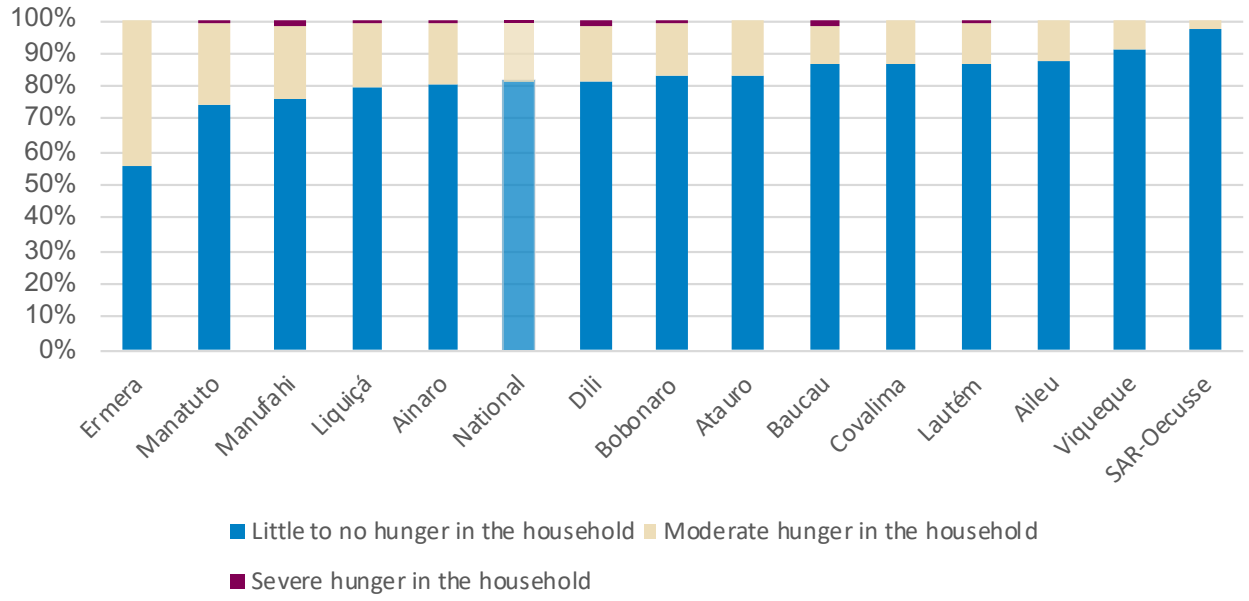
There is also a negative correlation between education level and the adoption of livelihood-based coping strategies, with better-educated household heads less likely to adopt such strategies.

3.4 Household Hunger

The Household Hunger Scale (HHS) is a tool designed to measure household hunger in food-insecure areas.[15] It is a simple and cross-culturally validated indicator that produces reliable and comparable results across different cultures and settings. The HHS is intended to be used as a small module within a larger, more comprehensive food security and nutrition questionnaire administered to a representative population-based sample of households.

Households in SAR-Oecusse had the lowest levels of reported hunger (Figure 13). In contrast, households in Ermera display the most concerning rates of moderate household hunger, highlighting the existing regional disparities in hunger levels and underlining the need for geographically targeted interventions to address food insecurity.

Figure 13. Household hunger scale by municipality



The survey findings further indicate a strong correlation between socio-economic factors and household hunger. Households in the poorest wealth quintile, those with larger sizes, and those headed by individuals with lower education levels, females, or the elderly are more prone to experience moderate to severe hunger. Furthermore, households that rely on informal income sources, have experienced economic shocks, or have seen a recent decrease in income report higher levels of hunger.

[15]More information on the Household Hunger Scale can be found at: HHS.

4. Livelihoods and Income

The rise in rice prices, coupled with the challenges posed by extreme climatic events such as floods and the 2023/24 El Niño phenomenon, present severe difficulties for poor and vulnerable households, particularly those whose incomes cannot keep up with inflation, leading to diminished purchasing power and earnings. Therefore, it is vital to continuously monitor and deepen stakeholders' understanding of the connections between households' access to food and their financial status, considering these compounding challenges.

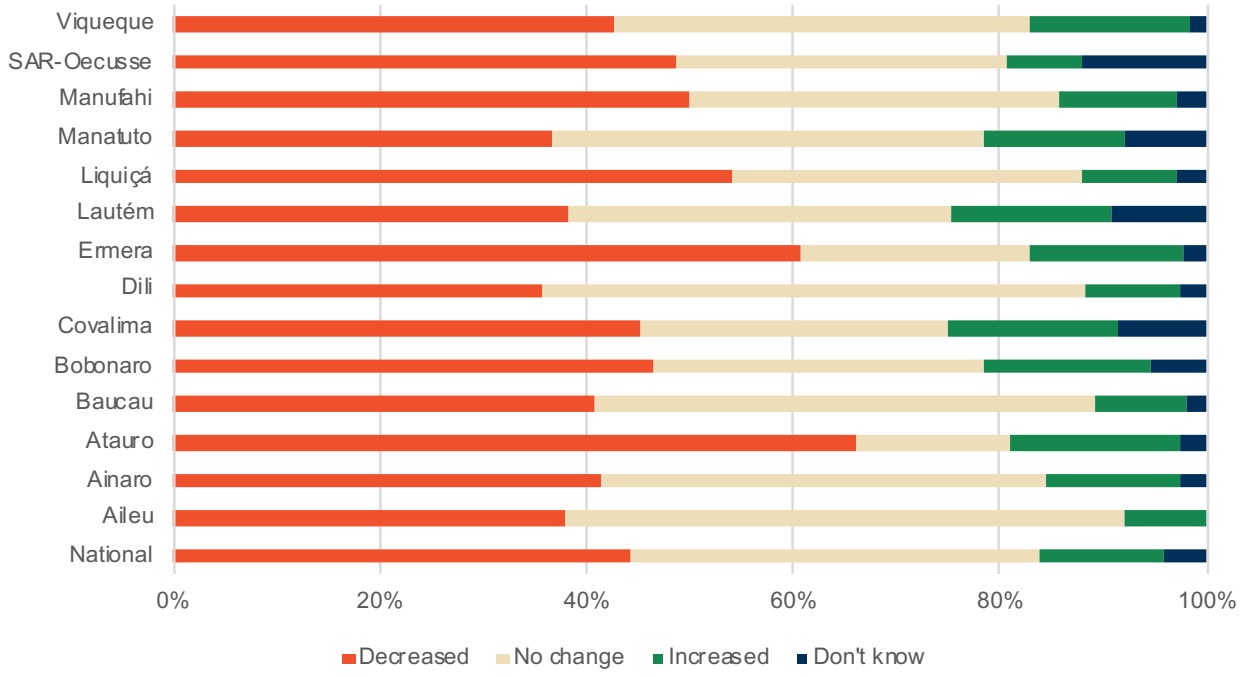
4.1 Changes in income

When evaluating households' food access and resilience to future shocks in Timor-Leste, it's crucial to understand the impact of the current global food prices crisis and other shocks on livelihoods and income sources.

The September 2023 assessment found that over two in five households in Timor-Leste reported a decrease in their total income compared to the same period a year earlier (Figure 14). Households in Atauro, Ermera, and Liquiçá were most likely to report a decrease compared to the previous year (66%, 61%, and 54%, respectively).

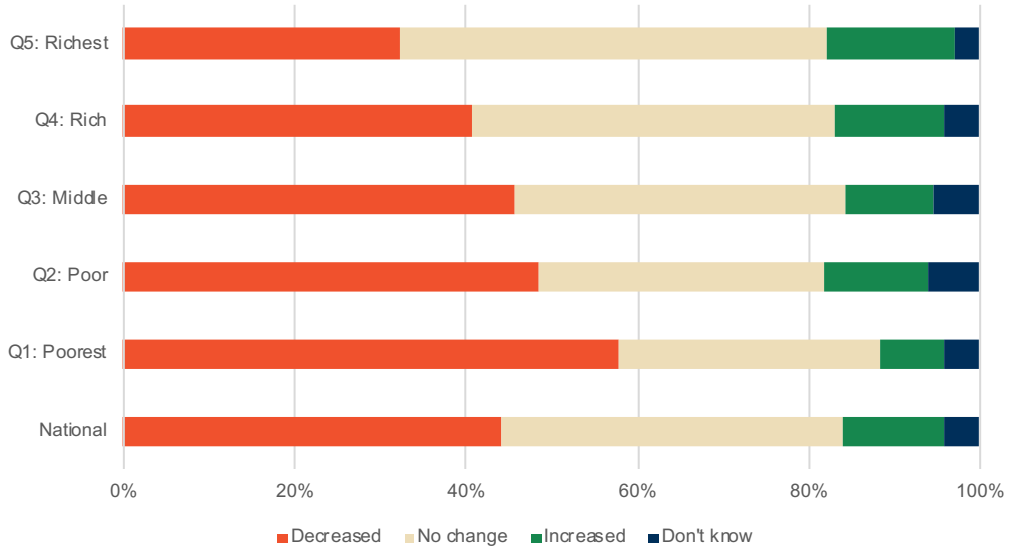
40% of households have seen a drop in their income compared to last year

Figure 14. Household income change by municipality



Households led by individuals with little to no education were more likely to report a decrease in income, with around 50% affected, compared to 39% of households headed by more educated individuals. The income disparity is also evident across economic strata, as 58% of the poorest households reported a decrease in income, in stark contrast to only 32% of the richest households. This data underscores the significant impact of educational and economic factors on household income stability in Timor-Leste.

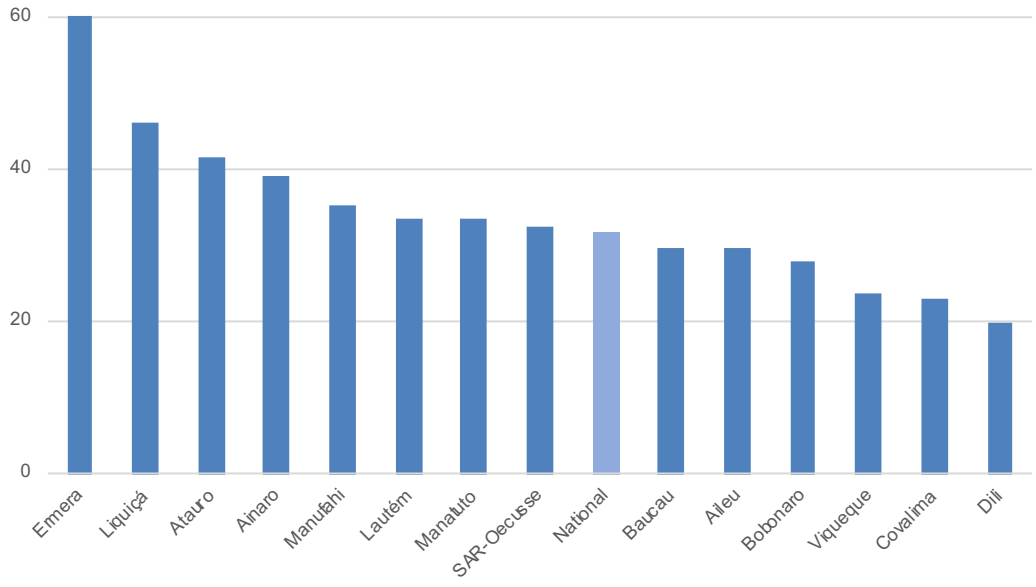
Figure 15. Household income change by wealth quintile



4.2 Debt

The September 2023 findings reveal that just over 30% of all households have some form of debt (Figure 16), with the most common source of credit being relatives, bank/credit institution/micro-credit and traders/shopkeepers. The most common reasons to take out a debt were found to be buying food and paying for school costs. Use of debt was highest in Ermera and Liquiçá (60 percent and 43 percent, respectively), indicating a higher financial burden in these areas compared to the national average. Households in Dili were least likely to report having debt (20 percent) which suggests a possible linkage between the usage of debt and rural-based households.

Figure 16. Households with any debt by municipality



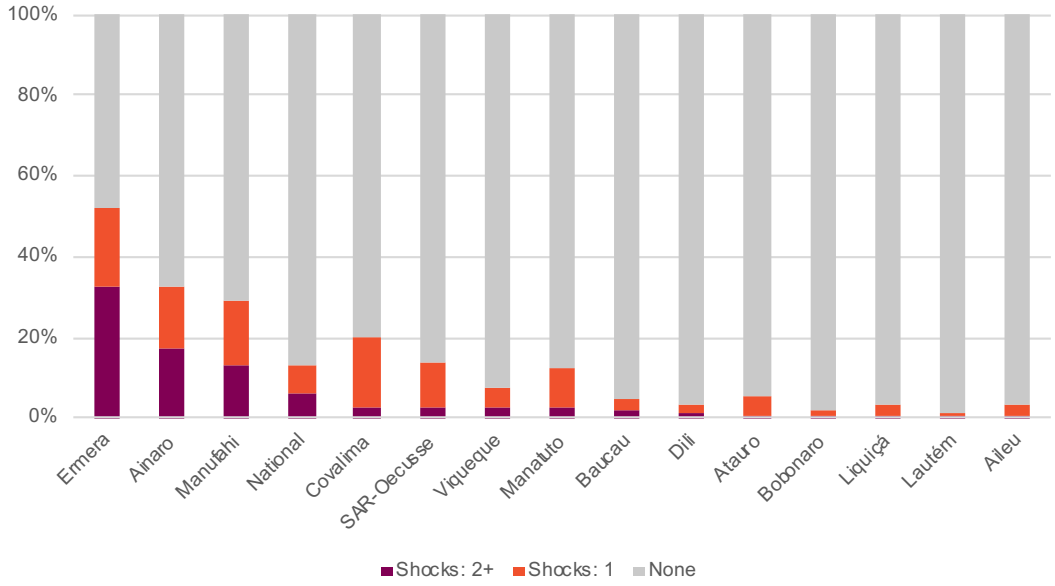
Furthermore, the survey showed a strong correlation between experiencing shocks and the likelihood of incurring debt: 61 percent of households that faced two or more shocks in the previous six months reported having debt, in stark contrast to just 29 percent of households that did not experience any shocks. This suggests that households battling consecutive shocks also incur more debt, indicating that the recovery period may extend. This increases the overall household vulnerability. Similarly, households whose income had reportedly decreased in the previous year were much more likely to have taken on debt than those without any change in income (38 percent vs. 26 percent, respectively). And 37 percent of the poorest households had some debt versus just 26 percent of the richest households.

5. Shocks and Assistance

5.1 Shocks

Crisis events and shocks pose significant threats to household well-being, often leading to food insecurity, especially for those with low resilience. In Timor-Leste, about 13% of all households have reported facing a significant shock in the previous six months, highlighting the prevalence of destabilizing events in the region (Figure 17).[16] The municipalities of Ainaro and Ermera are particularly affected, with 33% and 52% of households, respectively, reporting such experiences.

Figure 17. Shocks by municipality



Notably, in Ermera, nearly 1 in 3 households (32 percent) have experienced at least two major shocks in the past half-year. The most cited shocks in Ermera were landslides and dry spells, underlining the environmental challenges that significantly affect the livelihoods and stability of these communities.

5.2 2015/16 El Niño

In 2015/16, a strong El Niño phenomenon affected households throughout Timor-Leste. According to records at the time, more than 40% of households reported experiencing food shortages. The September 2023 food security assessment asked households how the 2015/16 event affected them personally to better understand and prepare for any potential negative outcomes that may result from the current El Niño situation deteriorating.

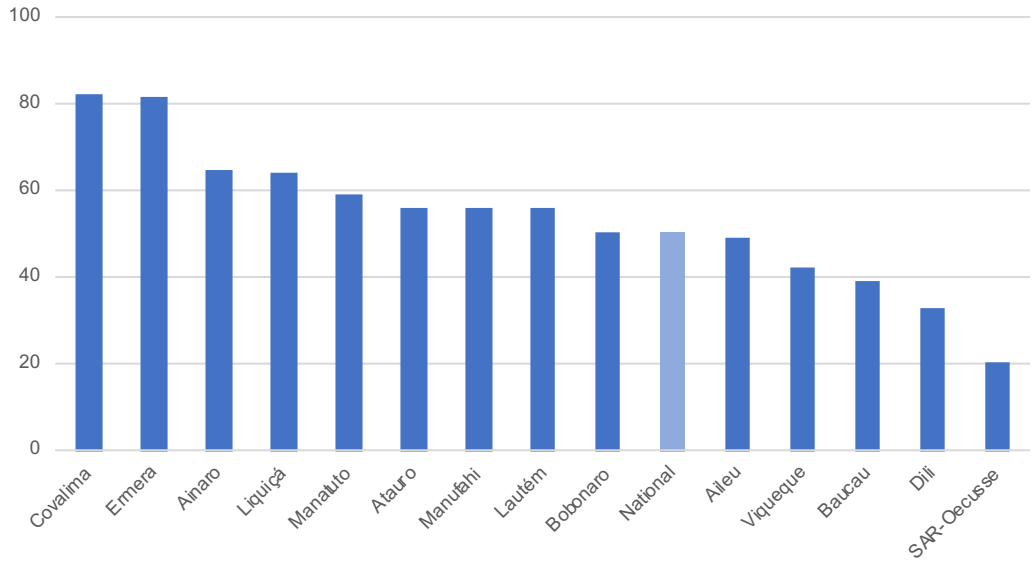
The 2015/16 El Niño event had a significant impact on households according to the assessment findings, with approximately half of all households across the country reporting effects from the drought (Figure 18). This impact was even more pronounced in specific regions, such as Covalima and Ermera, where four out of five households reported being affected.[17]

El Niño has impacted water availability for agriculture, thus reducing staple crop production

[16]In the survey, households self-reported any shocks they had experienced which were subsequently categorized by the fieldwork team into one of the following: Severe sickness of breadwinner; Death of breadwinner; Livestock disease outbreak; Drought/dry spell; Earthquake/landslide; Floods/ Heavy rains; Crop pest outbreak; Physical insecurity or conflict-related shock; Strike; Other

[17]See question 55 of the survey questionnaire in annex 5 for examples of drought impacts on households.

Figure 18. Households reportedly affected by 2015/16 El Niño drought



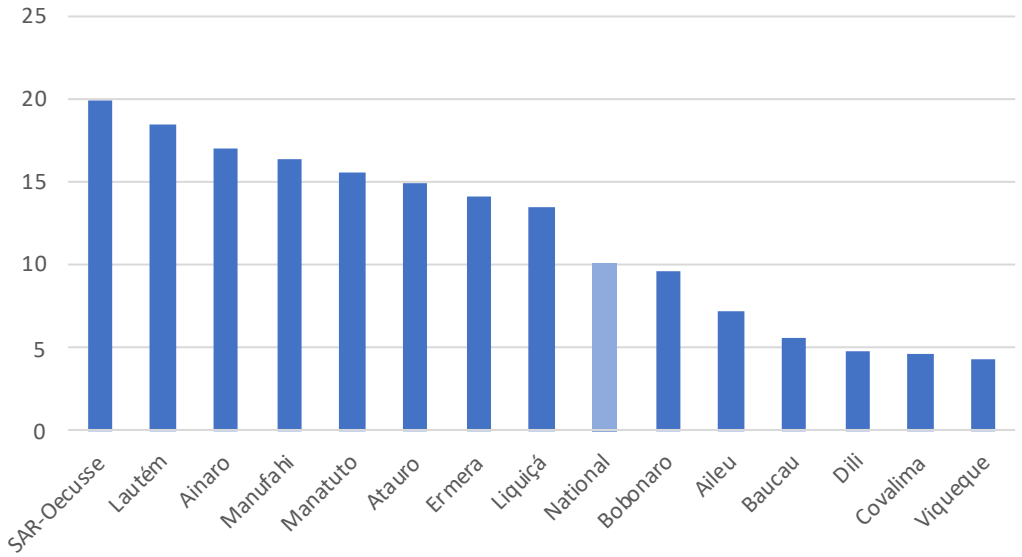
The two most cited consequences of the drought were reduced crop production, affecting 31% of households, and reduced access to drinking water, impacting 14%. This indicates a substantial disruption in both agricultural productivity and basic water needs. In Dili, nearly a quarter of the affected households specifically highlighted reduced access to water as a primary impact, underscoring the severity of the drought's effect on daily life and necessities in urban areas.

5.3 Assistance

To understand the current extent to which households in Timor-Leste are already receiving assistance, the September 2023 survey reports any assistance received in the previous 3 months.

Nationally, about 10 percent of households reported having received any assistance from government, UN or NGOs (Figure 19). The highest levels of assistance were in the municipalities of SAR-Oecusse (20 percent), Lautém (18 percent), and Ainaro (17 percent). The most common types of assistance received were non-food items (40 percent), followed by food (37 percent), and then cash (23 percent).

Figure 19. Households receiving assistance by municipality



Regarding different sub-populations, households experiencing two or more shocks in the previous six months (15 percent), households with a member having a disability (15 percent), and those with multiple elderly members (13 percent) were all more likely to report receiving assistance compared to the national average.

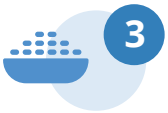
These findings are useful especially as it relates to understanding how best to expand existing assistance channels (either vertical or horizontal) and targeting considerations should the current food price and El Niño crises impacts worsen further.

6. Recommendations

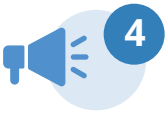
Based on the September 2023 assessment findings and current projections for how the food price and El Niño crises might evolve during 2024, a set of recommendations are provided:

SOCIAL PROTECTION TO SUPPORT THE VULNERABLE: Consider expanding targeted social protection programs (vertically or horizontally) in the face of El Niño to ensure households, especially those likely to be impacted (e.g., rainfed agriculture), receive adequate assistance. Establish and strengthen social safety nets, including in-kind and cash transfer programs, to support vulnerable populations during food crises and economic shocks.

PUT FOCUS ON CHILDREN´S NUTRITION: Implement nutrition-specific interventions that focus on maternal and child nutrition, promoting breastfeeding, and addressing micronutrient deficiencies to improve the overall health and well-being of the population.

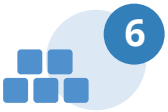


BUY FOR THE SHORT AND MEDIUM TERM: Procure rice and/or alternative cereal and Specialized Nutritious Foods (SNFs) at scale.



HELP PEOPLE ADAPT TO CLIMATE CHANGE: Promote climate-smart livelihood development exercises. Develop/support programs that build resilience within communities and educate households on various coping strategies that go beyond negative food- and livelihood-based coping strategies. This might include backyard gardening, community savings initiatives, micro-financing or small-scale entrepreneurship.

PROTECT THE FRUIT OF YOUR WORK: Enhance Food Storage and Processing: support the construction of adequate and climate-resilient food storage facilities to reduce post-harvest losses. Additionally, promote food processing and preservation techniques to extend the shelf life of perishable goods, ensuring a stable supply of food throughout the year.



PROTECT THE FOOD THAT FEEDS THE PEOPLE: Augment national stocks (Strategic Grain Reserves) to mitigate the impacts of shocks such as drought on agriculture and food supply in the country and create buffers against fluctuations in food production and prices.

SEEK OTHER FOOD SOURCES: Accelerate trials and development of alternative drought-resistant crops such as sorghum, to enhance the country's agricultural resilience, offering a broader range of food options. This contributes to sustainable food production and reduces the impact of climate-related disruptions on food security.

PROVIDE FEASIBLE ALTERNATIVE INCOMES: Strengthen food systems, improving the integration of smallholder farmers and small and medium agribusinesses into local value chains to maintain and increase the value of local products and reduce the country's reliance on external imports.

WATER ACCESS TO PEOPLE: Given the historical impact of events like the El Niño drought, invest in water management infrastructure, ensuring there is ample provision for irrigation and drinking water, especially in drought-prone areas.

USE WATER WISELY: Promote climate-smart agricultural practices to mitigate the effects of such environmental challenges. Prioritize the development and maintenance of efficient irrigation systems to mitigate the impact of changing weather patterns and recurring droughts. Access to clean water for irrigation will enhance crop productivity and reduce the vulnerability of farmers to climate-related shocks.

EXPLAIN WHAT A HEALTHY DIET IS: Support nutrition awareness campaigns focusing on the importance of balanced diets, highlighting protein sources and micronutrient-rich foods.

7. Annexes

Annexes

Annex 1: Population and sample by municipality

Municipality	Pop size (people)*	% of total pop (people)	Pop size (hh)*	% of total pop (hh)	Actual sample (hh)
Aileu	54,324	4%	9,383	4%	689
Ainaro	73,115	5%	12,328	5%	679
Atauro	10,295	1%	2,121	1%	669
Baucau	134,878	10%	24,852	10%	681
Bobonaro	106,639	8%	20,820	8%	684
Covalima	73,933	6%	15,678	6%	694
Dili	324,738	24%	57,266	23%	663
Ermera	137,750	10%	25,536	10%	649
Lautém	70,022	5%	13,345	5%	675
Liquiçá	83,658	6%	14,771	6%	705
Manatuto	50,859	4%	8,824	4%	665
Manufahi	60,665	5%	11,053	4%	669
SAR-Oecusse	80,685	6%	17,730	7%	677
Viqueque	80,176	6%	16,563	7%	689
National	**1,341,737**	**100%**	**250,270**	**100%**	**9,488**

* Source: 2022 Population Census

Annex 2: Household Characteristics

Table 1. Household Characteristics

Municipality	Household Size	Head of Household Sex [Male]	Head of Household Age	Households with PLW	Households with U5	Households with Disability
	Mean	%	Mean	%	%	%
Aileu	6.6	85.9	50	21.6	65.7	14.9
Ainaro	7.4	78.9	50	26.6	65.2	13.9
Atauro	5.1	83.3	51	10.6	41.0	13.5
Baucau	6.4	78.8	52	19.9	58.7	17.2
Bobonaro	5.7	76.2	51	19.5	54.9	12.0
Covalima	5.2	78.5	50	12.5	53.3	9.6
Dili	7.2	78.1	46	27.7	58.6	8.8
Ermera	6.2	79.7	50	20.8	63.1	24.2
Lautém	6.2	81.5	52	22.7	55.3	13.4
Liquiçá	5.6	86.2	49	16.9	52.7	15.4
Manatuto	6.8	80.3	50	25.4	58.5	11.8
Manufahi	6.8	87.1	50	25.3	61.5	12.8

SAR-Oecusse	5.1	80.7	50	11.9	44.7	8.6
Viqueque	5.9	84.4	49	19.9	55.0	15.6
National	**6.3**	**80.3**	**49**	**21.4**	**57.2**	**13.4**

Annex 3: Household Wealth Index

Wealth represents the net value of a household's physical, natural, and financial assets, considering any liabilities. The wealth index is a composite measure derived from key variables of household asset ownership. It serves as an indirect measure of household wealth and is commonly used in food security assessments to gauge a household's capacity to access food, the severity of their food insecurity, and to infer their overall economic status. Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) frequently employ wealth as a metric, categorizing households into quintiles for comparative analysis.

To construct a wealth index, variables that capture the wealth level of households are chosen (see Table 2). These variables, selected based on local contexts to accurately reflect wealth levels, may include productive and non-productive assets, household amenities, among others. The index is created using Principal Component Analysis (PCA) and households are then ranked into quintiles, applying sampling weights to ensure representative distribution.

Table 2. Wealth Index: Binary Values for PCA

Housing	**1**	**0**
Wall Material	Concrete and/or bricks, Iron sheet	Wood, Stalk of palm leaves
Roof Material	Iron sheet, Concrete, Tiles	Palm leaves
Toilet Facility	Flush toilet	Open pit latrine, None
Water Source	Piped into household/yard	Protected well into house/wall, public tap/pond, unprotected pond/spring
Light Source	Electricity/Solar	Kerosene, Wood, Candle
Assets	**1**	**0**
TV	Yes	No
Refrigerator	Yes	No
Cellphone	Yes	No
Stove	Yes	No
Computer	Yes	No
Bicycle, rickshaw	Yes	No
Motorbike, scooter	Yes	No
Tractor, power tiller	Yes	No
Car, truck, bus	Yes	No

Annex 4: Food Security Results

Table 3. Food security (rCARI)

Municipality	Food secure	Marginally food secure	Moderately food insecure	Severely food insecure
	%	%	%	%
Aileu	25.0	33.5	39.4	2.0
Ainaro	4.9	47.2	47.4	0.4
Atauro	4.3	46.0	48.0	1.6
Baucau	18.9	40.4	38.9	1.8
Bobonaro	7.0	45.6	42.3	5.0
Covalima	6.7	32.2	57.9	3.2
Dili	26.8	46.8	24.3	2.2
Ermera	0.4	38.9	59.6	1.1
Lautém	14.1	38.2	43.3	4.4
Liquiçá	1.6	50.8	45.4	2.2
Manatuto	12.0	44.7	40.6	2.7
Manufahi	8.5	53.0	34.6	3.8
SAR-Oecusse	20.7	41.2	32.5	5.6
Viqueque	19.9	38.7	40.0	1.5
National	**14.7**	**42.9**	**39.8**	**2.6**

Table 4. Food consumption groups (days of weekly consumption)

Municipality	Staples	Pulses	Dairy	Protein	Veg.	Fruit	Fats	Sugar
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Aileu	6.4	1.7	1.2	1.8	6.2	1.8	6.2	6.0
Ainaro	6.9	2.0	2.1	1.6	6.4	1.6	6.5	6.1
Atauro	6.6	3.5	1.9	4.6	2.5	2.0	5.5	3.4
Baucau	5.7	1.3	2.5	1.9	6.4	2.1	6.0	4.0
Bobonaro	5.6	1.8	2.0	2.1	5.1	2.1	4.6	3.1
Covalima	5.9	1.4	1.1	1.6	6.2	1.2	6.1	1.7
Dili	6.6	1.5	2.1	2.8	6.8	2.5	6.7	4.7
Ermera	6.5	1.6	1.2	1.8	6.4	1.4	6.3	5.5
Lautém	6.7	1.0	1.9	2.0	5.8	1.9	5.8	3.9
Liquiçá	5.8	1.6	2.8	2.2	5.7	2.2	6.0	3.2
Manatuto	6.8	1.6	1.7	2.9	6.6	3.4	6.1	2.3
Manufahi	6.8	1.9	2.7	1.7	6.6	2.1	6.5	6.2
SAR-Oecusse	6.0	1.4	1.1	2.2	5.8	2.0	4.6	3.5
Viqueque	6.9	1.4	1.5	1.8	6.7	2.0	6.6	4.5
National	**6.3**	**1.5**	**1.9**	**2.2**	**6.2**	**2.1**	**6.1**	**4.2**

Table 5. Food Consumption Score

Municipality	FCS	Acceptable	Borderline	Poor
	Mean	%	%	%
Aileu	44.1	48.3	37.4	14.3
Ainaro	47.6	58.3	34.4	7.2

Atauro	50.0	77.3	16.9	5.8
Baucau	47.2	58.8	25.7	15.5
Bobonaro	46.2	57.6	28.7	13.7
Covalima	40.7	31.1	56.4	12.5
Dili	50.7	62.1	31.5	6.4
Ermera	43.5	45.7	45.8	8.6
Lautém	44.5	46.6	30.9	22.4
Liquiçá	49.0	63.1	29.4	7.5
Manatuto	43.8	54.9	31.3	13.8
Manufahi	51.8	65.8	28.1	6.2
SAR-Oecusse	42.6	55.7	27.2	17.1
Viqueque	45.7	48.0	40.8	11.2
National	**46.7**	**55.0**	**34.0**	**11.1**

Table 6. Food-based coping strategies (rCSI)

Municipality	rCSI	High coping	Medium coping	No or low coping
	Mean	%	%	%
Aileu	8.4	15.5	29.1	55.4
Ainaro	9.8	15.2	57.5	27.3
Atauro	9.1	7.3	67.9	24.8
Baucau	6.3	8.5	37.2	54.4
Bobonaro	6.6	6.6	65.1	28.3
Covalima	6.4	5.9	47.4	46.7
Dili	7.8	16.2	32.9	50.9
Ermera	10.7	7.4	82.9	9.7
Lautém	5.2	7.1	29.9	63.0
Liquiçá	8.6	4.1	78.3	17.5
Manatuto	7.4	9.4	48.5	42.1
Manufahi	8.9	14.8	45.4	39.8
SAR-Oecusse	1.9	0.0	2.4	97.6
Viqueque	5.2	8.2	26.7	65.1
National	**7.3**	**9.8**	**44.5**	**45.8**

Table 7. Livelihood-based coping strategies (LCSI)

Municipality	None	Stress	Crisis	Emergency
	%	%	%	%
Aileu	39.4	13.0	47.3	0.2
Ainaro	11.1	15.6	69.3	3.9
Atauro	7.9	12.1	79.2	0.7
Baucau	32.5	17.5	47.6	2.4
Bobonaro	17.7	21.7	57.3	3.4
Covalima	23.5	15.1	59.3	2.1
Dili	40.7	39.3	17.7	2.3
Ermera	2.0	6.9	89.7	1.3
Lautém	27.0	24.9	44.4	3.8
Liquiçá	2.6	18.6	78.3	0.5
Manatuto	12.6	27.2	59.5	0.8
Manufahi	14.5	12.1	65.6	7.8
SAR-Oecusse	46.4	16.1	37.0	0.5
Viqueque	34.8	25.1	35.9	4.3
National	**26.1**	**22.3**	**49.3**	**2.4**

Table 8. Household Hunger Scale (HHS)

Municipality	Little to no hunger in the household	Moderate hunger in the household	Severe hunger in the household
	%	%	%
Aileu	87.6	12.4	0.0
Ainaro	80.3	18.9	0.8
Atauro	83.6	16.3	0.1
Baucau	86.5	11.8	1.7
Bobonaro	82.9	16.3	0.8
Covalima	86.5	13.1	0.4
Dili	81.6	16.7	1.7
Ermera	55.5	44.2	0.3
Lautém	86.7	12.7	0.6
Liquiçá	79.7	19.4	0.9
Manatuto	74.5	24.5	1.0
Manufahi	76.4	21.6	2.0
SAR-Oecusse	97.4	2.6	0.0
Viqueque	91.6	8.3	0.1
National	**81.5**	**17.6**	**0.9**

Table 9. Income change (year-over-year) and debt

Municipality	Income: Increased	Income: no change	Income: Decreased	Income: Don't Know	Debt: YES
	%	%	%	%	%
Aileu	7.9	54.2	37.8	0.1	29.6
Ainaro	13.0	43.0	41.5	2.5	39.2
Atauro	16.6	14.6	66.2	2.5	41.7
Baucau	8.9	48.3	40.8	2.0	29.9
Bobonaro	16.2	31.9	46.5	5.4	27.9
Covalima	16.5	29.7	45.1	8.7	22.9
Dili	9.3	52.6	35.6	2.5	19.8
Ermera	14.9	22.1	60.6	2.3	60.2
Lautém	15.6	36.9	38.4	9.1	33.6
Liquiçá	9.1	33.9	54.1	2.9	46.4
Manatuto	13.7	41.6	36.8	7.9	33.6
Manufahi	11.3	35.9	49.8	3.1	35.4
SAR-Oecusse	7.2	31.8	48.7	12.2	32.6
Viqueque	15.3	40.3	42.6	1.8	23.6
National	**11.9**	**39.8**	**44.1**	**4.2**	**31.9**

Table 10. Shocks, Assistance, 2015/16 El Nino

Municipality	Shocks: None	Shocks: 1	Shocks: 2+	Received assistance: YES	Impacted by 2015/16 El Nino
	%	%	%	%	%
Aileu	96.3	3.5	0.2	7.3	49.2
Ainaro	67.4	15.1	17.5	17.1	64.8
Atauro	94.3	5.1	0.6	14.9	56.1
Baucau	95.1	2.8	2.0	5.6	39.3
Bobonaro	98.1	1.3	0.6	9.6	50.2
Covalima	79.7	17.8	2.5	4.7	81.8
Dili	96.5	2.4	1.1	4.8	33.0
Ermera	48.1	19.6	32.3	14.2	81.3

Lautém	98.5	1.1	0.4	18.5	55.9
Liquiçá	96.8	2.8	0.4	13.5	64.1
Manatuto	87.5	10.2	2.3	15.6	58.9
Manufahi	70.7	16.3	13.0	16.4	55.9
SAR-Oecusse	86.3	11.2	2.4	19.9	20.3
Viqueque	92.8	4.8	2.4	4.3	42.1
National	86.7	7.4	5.9	**10.2**	**50.1**

Annex 5: Survey Questionnaire

A. Survey information

Date of the survey

Name of enumerator (or ID)

Sex of the enumerator

Who is the supervisor of the enumerator?

Family card number/ID electoral number

Municipality level (Admin 1 Level)

Administrative Post (Admin 2 Level)

Suco (Admin 3 Level)

Geographic Coordinates

B. Consent

1) Hello, my name is…. And I work with… . We are conducting a survey and we would like to ask you some questions about your household's food consumption, livelihoods and access to food. The survey usually takes about 30 minutes to complete. Any information that you provide will be kept strictly confidential, meaning that we will use your answers to describe the situation in the area, but we will never reveal your personal information. If you do not understand any of the questions, please say so and I will explain them. You may ask me questions at any point during the interview. Your participation is voluntary, and you can choose not to answer any or all of the questions if you want. However, we hope that you will participate since your views are important. Do you have any questions? May we begin now?

C. Demographic

2) What is your age (in years)?

3) Sex of the Respondent

4) What is your relationship with the head of household?

5) Name of the head of household:

6) What is the sex of the head of the household?

7) Age of the head of the household

8) What is the marital status of the head of the household?

9) What is the highest level of education the head of household has completed?

10) What is the total number of male infants aged 0 to 23 months (less than 2 years old) currently living in your household?

11) What is the total number of female infants aged 0 to 23 months (less than 2 years old) currently living in your household?

12) What is the total number of male children aged 24 to 59 months (2-5 years) currently living in your household?

13) What is the total number of female children aged 24 to 59 months (2-5 years) currently living in your household?

14) What is the total number of male children aged 5 to 11 years old currently living in your household?

15) What is the total number of female children aged 5 to 11 years old currently living in your household?

16) What is the total number of male members aged 12 to 17 years old currently living in your household?

17) What is the total number of female members aged 12 to 17 years old currently living in your household?

18) What is the total number of male members aged 18 to 59 years old currently living in your household?

19) What is the total number of female members aged 18 to 59 years old currently living in your household?

20) What is the total number of male members aged 60 and above currently living in your household?

21) What is the total number of female members aged 60 and above currently living in your household?

22) What is the number of Pregnant or Breasfeeding Women (PBWs) aged 15-49 living in your household?

23) What is the number of people with disability living in your household?

D. Food Consumption Score (FCS)

24) How many days over the last 7 days, did most members of your household (half or more than half of them) eat the following food items, inside or outside the home?

24.1) Cereals, grains, roots and tubers, such as: Rice, noodles, bread, maize, potato, cassava, sweet potato.

24.2) Pulses/ legumes / nuts, such as: Beans, peas, peanuts, lentils, nuts, soy, and/or other nuts.

24.3) Milk and other dairy products, such as: Milk, yogurt, cheese, other dairy products (Exclude margarine / butter or small amounts of milk for tea, a little grated cheese spread over meals)

24.4) Meat, fish and eggs, such as: Goat, beef, chicken, pork, buffalo, fish, including canned fish, escargot, and/or other seafood, eggs (do not consider: one small piece of meat/fish for 3 or more people, fish powder spread over meals, one egg for 4 or more people)

24.5) Vegetables and leaves, such as: Mustard, onion, tomatoes, carrots, eggplant, green beans, lettuce, etc. (do not consider: one or two tomatoes used as condiments)

24.6) Fruits, such as: Banana, apple, orange, mango, papaya, etc.

24.7) Oil/fat/butter, such as: Vegetable oil, palm oil, other fats/oil.

24.8) Sugar, or sweet, such as: Sugar, honey, jam, cakes, candy, cookies, pastries, cakes and other sweet (sugary drinks).

24.9) Condiments/Spices, such as: Tea, coffee/cocoa, salt, garlic, spices, yeast/baking powder, tomato/sauce, meat or fish as a condiment, condiments including small amount of milk/tea coffee.

E. Household Hunger Scale (HHS)

25) In the past [4 weeks/30 days], was there ever no food to eat of any kind in your house because of lack of resources to get food?

26) How often did this happen in the past [4 weeks/30 days]?

- Rarely (1–2 times)
- Sometimes (3–10 times)
- Often (more than 10 times)

27) In the past [4 weeks/30 days], did you or any household member go to sleep at night hungry because there was not enough food?

28) How often did this happen in the past [4 weeks/30 days]?

- Rarely (1–2 times)
- Sometimes (3–10 times)
- Often (more than 10 times)

29) In the past [4 weeks/30 days], did you or any household member go a whole day and night without eating anything at all because there was not enough food?

30) How often did this happen in the past [4 weeks/30 days]?

- Rarely (1–2 times)
- Sometimes (3–10 times)
- Often (more than 10 times)

F. Livelihood Coping Strategies (LCS-FS)

31) During the past 30 days, did anyone in your household have to engage in any of the following activities to cope with a lack of food or money to buy it?

- No, because we did not need to
- No, because we already sold those assets or have engaged in this activity within the last 12 months and cannot continue to do it
- Yes
- Not applicable (don't have access to this strategy)

31.1) Sold household assets/goods (radio, furniture, television, jewelry etc.) due to lack of food or money to buy food

31.2) Spent savings due to lack of food or money to buy food

31.3) Borrowed food or money or relied on help from friends/family to cover food needs due to lack of food or money to buy food

31.4) Sent one or more household members to eat or live elsewhere due to lack of food or money to buy food

31.5) Sold productive assets or means of transport (sewing machine, wheelbarrow, bicycle, car, etc.) due to lack of food or money to buy food

31.6) Reduced expenses on health (including medicines) or education due to lack of food or money to buy food

31.7) Consumed seed stocks that were to be saved for the next season due to lack of food or money to buy food

31.8) Harvested immature crops (e.g. green maize) due to lack of food or money to buy food

31.9) Sold last female animals due to lack of food or money to buy food

31.10) Begged and/or scavenged (asked strangers for money/food) due to lack of food or money to buy food

31.11) Sold house that the household was permanently living in or sold land due to lack of food or money to buy food

31.12) Committed crimes, engaged in socially degrading, high- risk, or exploitive jobs, or life-threatening jobs or income-generating activities (e.g., smuggling, theft, joining armed groups, prostitution) due to lack of food or money to buy food.

G. Reduced (Food) Coping Strategies (rCSI)

32) Now I will ask you about the number of days, in the last 7 days, that your household may have done some of the following actions to cope with lack of food or money to buy food.

32.1) During the last 7 days, were there days (and, if so, how many) when your household had to rely on less preferred and less expensive food to cope with a lack of food or money to buy it?

32.2) During the last 7 days, were there days (and, if so, how many) when your household had to borrow food or rely on help from a relative or friend to cope with a lack of food or money to buy it?

32.3) During the last 7 days, were there days (and, if so, how many) when your household had to limit portion size of meals at mealtimes to cope with a lack of food or money to buy it?

32.4) During the last 7 days, were there days (and, if so, how many) when your household had to restrict consumption by adults in order for small children to eat to cope with a lack of food or money to buy it?

32.5) During the last 7 days, were there days (and, if so, how many) when your household had to reduce number of meals eaten in a day to cope with a lack of food or money to buy it?

H. Income

33) Main source of income for the household.

34) What was the main source of income for the household over the past 3 months (90 days)?

- Wage Labor - Professional
- Wage Labor - Skilled
- Wage Labor - Unskilled/Casual/Agriculture
- Wage Labor - Unskilled/Casual/non-agriculture
- Pension
- Remittances
- Aid/gifts
- Borrowing money/Living off debt
- High risk activity (e.g. begging, scavenging)
- Saving/selling assets
- Petty trade/selling on streets
- Small trade (own business)
- Medium/large trade (own business)
- Small Agriculture production including livestock (own land/livestock)
- Medium/large agriculture production including livestock (own land/livestock)
- Other (specify)

35) Has the total income of your household increased/decreased/remained stable compared to a year ago?

I. Assistance: Entitlement, Utilization & Preference

36) Did your household receive any (food, non-food, cash, other) assistance from Government or NGOs or UN agencies over the last 3 months?

37) Did your household receive any (food, non-food, cash, other) assistance from NGOs or UN agencies over the last 3 months?

38) What type of assistance did your household receive from NGOs and/or UN agencies? (multiple selection possible)

- NFI assistance
- Health assistance
- Shelter assistance
- Winterization
- Food
- Cash unrestricted
- Water
- Education/training
- Transport
- Other (specify)

39) Please provide the sources/organizations that provided the assistance (multiple choice allowed).

- NGOs
- UN Agency

40) Did your household receive (food, non-food, cash, other) assistance from any other sources including government, family, friends, community, or religious organizations over the last 3 months?

41) What type of assistance did your household receive from government, family, friends, community, or religious organizations? (multiple selection possible)

- NFI assistance
- Health assistance
- Shelter assistance
- Winterization
- Food
- Cash unrestricted
- Water
- Education/training
- Transport
- Other (specify)

42) Please provide the sources/organizations that provided the assistance (multiple choice allowed).

- Government
- Family
- Friends
- Community
- Community leader
- Religious organization

- Other (specify)

J. Shock

43) In the last 6 months, has your household experienced any shock?

44) If yes, what were the two main shocks?

- Severe sickness of breadwinner
- Death of breadwinner
- Livestock disease outbreak
- Drought/dry spell
- Earthquake/landslide
- Floods/ Heavy rains
- Crop pest outbreak
- Physical insecurity or conflict-related shock
- Strike
- Other (specify)

K. Assets

45) What is the material of your house/residence (walls)?

- Concrete and/or bricks
- wood
- stalk of palm leaves
- Iron sheet
- Other (specify)

46) What is the main construction of roof in your house/residence?

- Tiles
- concrete
- Palm leaves
- Iron sheet
- Other (specify)

47) What kind of toilet facilities does your household have?

- Flushed
- open pit latrine
- none
- Other (specify)

48) What is the main source of drinking water in your house/residence?

- Piped into household/yard
- protected well into house/wall
- public tap/pond
- unprotected pond/spring
- Other (specify)

49) What is the main source of lighting in your house/residence?

- Electricity/solar

- kerosene
- wood
- candle
- Other (specify)

50) Does your household have one or more of the following items:

- TV
- refrigerator
- smartphone
- stove
- computer
- bicycle/rikshaw
- motorbike/scooter
- tractor/power tiller/tempo
- car/jeep/ truck/bus
- none

L. Debt

51) Do you or someone in your household currently have any debt?

52) From whom have you mainly borrowed this money (or contracted the debt)?

- Relatives
- Relatives (excluding remittances)
- Relatives living outside the country
- Traders, shopkeepers
- Bank, Credit institution, Micro-credit project
- Humanitarian agencies
- Cooperative
- Money lender
- Landlord (more than 1 month behind in rent)
- Informal savings group
- Employer
- Other (specify)

53) What was the main reason to borrow this money (or contract the debt)?

- To buy food
- To buy non-food items (clothes, small furniture...)
- To pay for rent of an accommodation
- To pay school, education costs
- To cover health expenses
- To pay for durable goods (scooter, TV)
- To pay for ceremonies/social events
- To buy a flat/house
- To pay ticket/cover travel for migration
- To buy agricultural land, inputs or livestock
- To invest in business
- To pay back another loan
- Other (specify)

M. Drought

54) Was your household affected by the drought of 2015/16?

55) If yes, what was the impact of the drought on the household?

- Reduced crop production
- Reduced water availability for planting or irrigation
- Reduced access to drinking water
- Reduced income due to reduced harvest
- Loss of paid work (seasonal job)
- Reduced food stocks (for household consumption)
- Increased food prices in the market (it cost more to buy food compared to before the drought)
- Increased share of income spent on food, compared to before the drought
- Had to borrow money from bank or family/friends, due to one/more of the impacts of the drought
- No impact/Don't remember
- Other (specify)

56) To what extent was your household affected by the drought (when measurable)?

- Totally or very affected
- Partially affected
- Little affected
- Does not know/Does not remember

N. Follow-up

57) Do you agree to provide 1 or 2 phone numbers the household uses; in case we have any follow-up questions in the future?

Phone number 1:

Phone number 2: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