NEWFORESIGHT

Report

Measurement of the Living Income Benchmark in three coffee-growing regions of Honduras: Comayagua, Copán, and El Paraíso (emphasis on coffee households)

by NewForesight

in collaboration and coordination with the **Instituto Hondureño del Café** (IHCAFE) and the **PROMECAFE**

commissioned by the International Coffee Organization (ICO) and its Coffee Public-Private Task Force (CPPTF) as part of the Task Force Roadmap 2020-2030

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Foreword

This report was authored by NewForesight. NewForesight is a strategy consultancy specializing in sustainability and market transformation. NewForesight seeks to drive innovation in the field of sustainability. Over the past years, we have worked with companies, sector initiatives and platforms, standards organizations, governments, donors, and investors to push the decent work agenda, through our work measuring wage gaps, developing wage improvement strategies to close the gaps, convening the stakeholders required, and developing practical tools for partners to make it actionable closing the wage gap.

At NewForesight we believe that today's deep-rooted sustainability issues can only be solved with market-driven solutions. To create change that lasts, sustainability needs to be an integrated part of sourcing and the entire supply chain. But for this to happen, one needs to thoroughly understand the business case for companies. At NewForesight we do precisely that: We understand not just the sustainability issues on the ground, but also how it impacts and is impacted by supply chains and markets. We understand the intricacies of supply chains and the inherent differences across market segments. We have a deep understanding of the market dynamics and develop solutions that fit within the economic reality and competitive nature of companies.

To further the work of our clients and partners in the field of Living Income and Living Wages we have developed a benchmark methodology to aid the development and spread of available Living Income and wage benchmarks. Our hope is that this will, in turn, provide even greater visibility of the current income and wage gaps, and support continuous improvement towards closure of the gaps.

The Living Income Benchmarking methodology for this study is recognized by IDH, the Sustainable Trade Initiative, and the methodology can be used in organizations' work with B Corp's standards.

This report was developed by NewForesight (Angie Lopez, Andres Ayon, Joost Backer), with the support of the Instituto Hondureño del Café (IHCAFE) and PROMECAFE. For any inquiries on the report, reach out to Daniel Viviers-Rasmussen at Daniel.Viviers-Rasmussen@newforesight.com. This report was commissioned by the International Coffee Organization and its Coffee Public-Private Task Force, as part of the Roadmap 2020-2030.





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Introduction | ICO Coffee Public-Private Task Force



This Living Income Benchmark report was commissioned by the International Coffee Organization (ICO) Coffee Public-Private Task Force (CPPTF), and specifically its Living-Prosperous Income Workstream, to conduct living income benchmarking studies in several ICO Member Countries.

These studies are a unique example of joint action by coffee companies and governments alike, and are supported through collaboration with leading regional platforms. In line with the Task Force Roadmap 2020-2030, members of the ICO Coffee Public-Private Task Force (CPPTF) have committed to jointly implementing activities to close the living income gap to reach prosperity for target producers in at least 50% of the ICO Member coffee-producing countries by 2030. To that end, the Roadmap foresees establishing living income benchmarks in 80% of ICO Member producing countries by 2025.

Therefore, the Living Income Benchmark studies are designed to support the governments of the target coffeeproducing countries to better identify the most effective strategies and activities to improve prosperity of their coffee sector. The studies will inform investment plans, developed in collaboration with private sector and civil society stakeholders, to advance a prosperous coffee sector for all actors. Ultimately, the studies form an essential step in reaching a sustainable and prosperous future for coffee producers and the sector as a whole.

Throughout the process, NewForesight has closely collaborated with the technical team of the Instituto Hondureño del Café (IHCAFE) local technical team, and PROMECAFE. The results of this study will be an important input for future investments in the long-term prosperity of the coffee sector in Honduras.







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Context | This study estimates the Living Income in rural areas of coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras

Geographical focus and socioeconomic context



- 1.https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?location
- 2. https://publications.iadb.org/es/analisis-de-politicas-agropecuariasen-honduras
- 3.https://www.ihcafe.hn/regiones-cafetaleras/
- 4.https://www.mapa.gob.es/es/ministerio/ministerioexterior/america-central-caribe/fichacomercexterior_hn_tcm30-583279 pdf
- 5.https://www.ihcafe.hn/produccion-nacional/
- 6.https://exportadoresdecafe.com/cifras
- 7. https://www.ilo.org/sanjose/sala-de-prensa/WCMS_821907/lang-es/index.htm

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- 11.Report of April 2021:
- https://www.bch.hn/estadisticas-y-publicacioneseconomicas/sector-real/indice-mensual-de-actividad economica
- 12.https://www.ine.gob.hn/V3/proyecciones-pordepartamento-2014-2030/

Geographical focus and socioeconomic context

Honduras, a low-middle-income country in Central America, experienced a 12.5% economic growth between 2020 and 2021. The agricultural sector utilizes 31% of the land, contributing 12.9% to the GDP, and representing 35.6% of national exports. Coffee production accounts for 38% of the sector's GDP3 and serves as the leading export product, followed by banana and oil palm. In 2022, Honduras produced around 0.62 MT of coffee5, with 75% being exported6, contributing 5% to the global output.

Honduras has a population of 9.6 million, with approximately 2.5 million households. Over 44.6% of the population resides in rural areas⁸, with 72% living in poverty. ⁹ The agricultural sector employs around 22.2% of the workforce. ¹⁰ Coffee production within this sector provides income opportunities for over 120,000 families, with 95% of them being small producers. ¹¹

This study targets the rural coffee-growing regions* of Comayagua (geographic departments of Comayagua, La Paz, Santa Barbara, and Intibucá), Copán (Copán, Santa Bárbara, and Ocotepeque), and El Paraíso (El Paraíso, Choluteca, and Francisco Morazán). 75% of the national coffee is produced in these three coffee-growing regions⁵ and on average 60% of the population lives in rural areas. ¹² Food prices of this study represent local markets in La Libertad and Marcala (Comayagua), Gracias and San Marcos (Copán), Danlí and Trojes (El Paraíso) frequented by the surveyed households.



^{*} The Instituto Hondureño del Café (IHCAFE) defined 6 coffee-growing regions (Comayagua, Copán, El Paraíso, Agalta, Montecillos, and Opalca) based on geographic, climate, and coffee production characteristics. The information about each of the regions is available at https://www.ihcafe.hn/regiones-cafetaleras/.

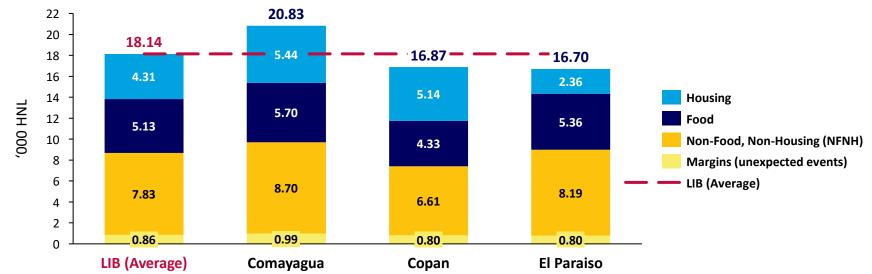
Executive summary | The Living Income benchmark in rural areas of coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras is HNL 18,135 per month

Living Income benchmarks for three coffee-growing regions¹ in Honduras

The average Living Income is HNL 18,135 per month.

- This represents the net income required for a decent standard of living for a family of 2 adults and 2.6 children in February 2023 based on actual costs of living at a basic standard of decency.
- The result has been estimated as the average values of the coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras.

Overview of the Living Income benchmarks in the three regions of the study. Local currency, in thousands.



The following pages of this report provide a detailed explanation of the key cost categories that comprise a Living Income. The results will be shown as an average for the three regions and for the reference household size we estimated for this study (2 adults + 2,6 children) in February 2023.

Key differences in the results per region, well more information on the overall data collection process, calculation methods, and data sources, can be found in the Annex.

Executive summary | In the Living Income benchmark the highest expenditure category corresponds to Non-Food, No-Housing costs followed by Food and Housing costs

Living Income benchmark results



2 adults2.6 children1.5 earners

Reference household size
Rural Honduras

The benchmark outlines the cost of a decent standard of living for reference household size of 2 adults and 2.6 children residing in the rural coffee-growing regions¹ of Comayagua, Copán, and El Paraíso in Honduras in February 2023. The benchmark is applicable for the reference household size defined based on the latest household size, fertility rate, and under-five child mortality data available for Honduras in the Global Data Lab database.¹

The cost of a decent standard of living is determined by quantifying the costs of four main items:



Food: costs of a low-cost and nutritious diet accounting for local food availability and preferences.



Housing: costs of owning or renting a house and paying utility costs that meet a standard for local decent housing



Non-Food, Non-Housing (NFNH): costs of other essential needs including education, healthcare, transportation, or clothing.



Margin for unexpected events: cost to account for potential unexpected events for the households (e.g. emergencies)

To afford a decent standard of living, a reference household of 2 adults and 2.6 children will need a Living Income of HNL 18,135 (USD 745) per month. For workers, the gross Living Wage for a full-time worker is HNL 12,775 (USD 525), given that the average number of full-time workers in the household is 1.5* (for more details on Living Wage see page 25).

Cook ookooomi	Chaus	Cost pe		
Cost category	Share	HNL	USD**	<u>Livir</u>
Food	28%	5,128	211	
Housing	24%	4,312	177	HN
Non-food, Non-housing	43%	7,831	322	U
Margin for unexpected events	5%	864	35	Fort

Living Income benchmark

HNL 18,135 / month
USD 745 / month

For the entire reference household



^{*} The total full-time workers in the reference household is approximated to the first decimal. The value corresponds to 1.4621.

^{**}Exchange rate of 24.335 HNL (21st of February of 2023). Source: https://www.oanda.com/currency-converter

https://www.ihcafe.hn/regiones-cafetaleras/

^{..} https://globaldatalab.org/areadata/hhsize/?levels=1%2B2%2B3%2B5%2B4&interpolation=1&extrapolation=1&extrapolation_years=3&nearest_real=0

Income Ladder | The Living Income benchmark is considerably higher than references of minimum income required to fulfill basic needs in Honduras

Poverty Lines

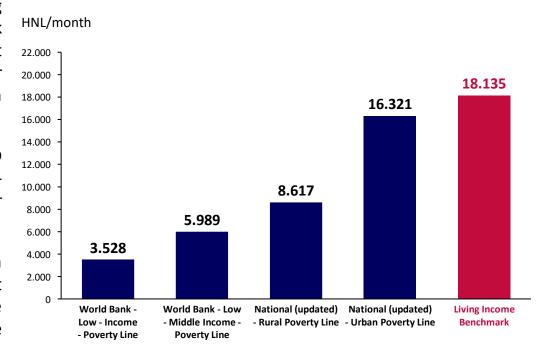
The Poverty Lines were standardized as a monthly income for a reference household of 4.6 people. These lines are then adjusted to account for inflation and purchasing power parity (PPPs)¹, ensuring their comparability with the Living Income benchmark established in this study. The Living Income benchmark surpasses national and international estimated Poverty Lines. This illustrates that current Poverty Lines are insufficient if compared with the income needed for maintaining a decent standard of life in the Comayagua, Copán, and El Paraíso in Honduras.

The latest Global Poverty Lines published by the World Bank correspond to USD 2.15 per person per day for low-income countries and USD 3.65 for low-middle-income ones, which are estimated based on 2022 prices and the purchasing power parity (PPPs) of 2017².

The most recent list of essential products that make up the National Poverty Line in Honduras was carried out in 1978. Given the debate of consistency with best international practices, the National Statistics Institute (INE) with the support of the World Bank and other organizations estimated an updated National Poverty Line for rural (1.424HNL) and urban (2.697HNL) areas in 2014-2018³.

Note: Variations in adult equivalent consumption units may exist among the benchmarks on the income ladder, although comprehensive underlying assumptions for all benchmarks are not accessible. Nonetheless, these discrepancies should not impact the primary findings, and the relative scale still provides a meaningful representation of the divergence.

Income ladder of a reference household of 4.6 people in Honduras, 2023



An exchange rate of 24.335 HNL (21st of February of 2023) was used for the estimation. Source: https://www.oanda.com/currency-converter



^{1.} The inflation rates were estimated based on the consumer prices (annual %) published by the World Bank. The purchasing power parity (PPPs) corresponds to the conversion factor published by the World Bank.

^{2.} https://www.worldbank.org/en/topic/poverty



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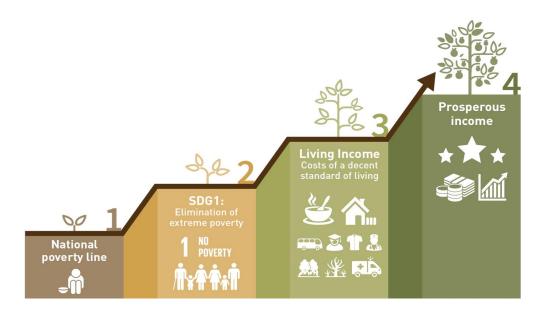
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Living Income concept | A 'Living Income' enables a household at a specific location to afford a decent standard of living, and forms a steppingstone towards a prosperous income

What is a Living Income?

According to the Living Income Community of Practice (LICOP) definition, a Living Income is the net annual income required for a household in a particular place to afford a decent standard of living for all members of that household.



How does a Living Income differ from other income concepts:

In reality, a Living Income is higher than the national or international (extreme) poverty line in most cases (see image on the left). By reaching a Living Income, Sustainable Development Goal 1 'End poverty in all its forms everywhere' is also fulfilled.

A Living Income is a steppingstone towards a prosperous income, in which a household can thrive and flourish economically, socially, and health-wise.

A Living Income is not the same as a Minimum Wage. Whereas a Minimum Wage constitutes the lowest wage in a country permitted by law or by a special agreement, a Living Income:

- Refers to an 'income' (earned by a household on a yearly basis), and not a 'Wage' (earned by an individual worker on an hourly or monthly basis)
- Is solely calculated on decent living standards, whereas the estimation of the Minimum Wage does not always fully consider these standards; instead, it considers other factors such as the country's economic and labor conditions.
- Can therefore be equal to, higher than, or lower than, a Minimum Wage.

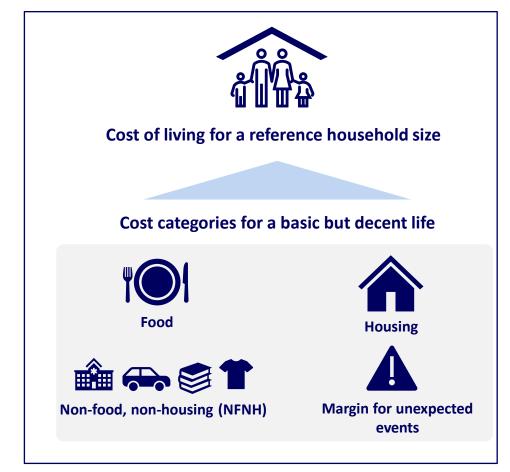
Living Income benchmark | Establishing a benchmark for Living Income helps to quantify the income any household should earn to make a decent living

A Living Income benchmark is an estimate of the cost of a basic and decent standard of living for a household. The benchmark is always time- and place-specific, depending on the cost of living and household reference size of a region or sector in a specific country, at a specific point in time.

The cost of a decent standard of living is determined by quantifying the costs of four main items:

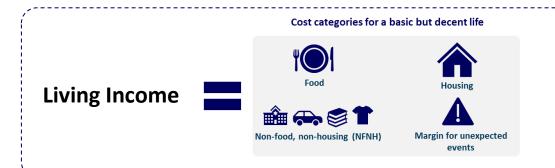
- **Cost of food**: this is estimated for a low-cost and nutritious diet accounting for local food availability and preferences.
- **Cost of housing**: this includes the costs of owning or renting a house and paying utility costs that meets a standard for local decent housing
- Non-Food, Non-Housing (NFNH): : this includes other essential needs including education, healthcare, transportation, or clothing.
- Margin for unexpected events: this includes a cost to account for potential unexpected events for the households (e.g. emergencies)

The costs of these items are multiplied by the number of persons in a household, and their respective needs. This accounts for the fact that larger households generally incur higher costs than smaller households.



Living Wage concept | A Living Wage is the gross remuneration that a full-time worker should receive to afford a decent living standard for them and their family

Living Income vs Living Wage



The **Living Income benchmark** is equivalent to the cost of living of a family



The **Living Wage benchmark** accounts for contributions of all earners in a family. It is the gross remuneration workers should receive to afford a decent

living standard for entire family

Closing the Living Income gap | Determining the Living Income Benchmark is a key phase in the journey toward closing the Living Income gap for coffee producing households

Journey towards closing the Living Income gap

Focus of this report

Determine the Living Income Benchmark

By determining, understanding, and agreeing Living Income Benchmark, coffee stakeholders reach a common target to work towards.

Cost of living for a reference household size

Cost categories for a basic but decent life



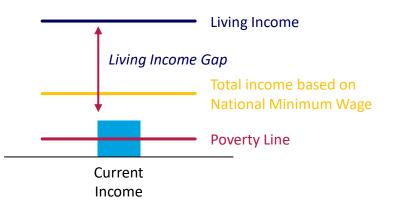




Future actions

Determine the Living Income Gap

By measuring the gap between a Living Income benchmark and current incomes, coffee stakeholders know by what level incomes need to increase to reach a Living Income.





Take action to close the Living Income gap

By determining interventions at farm-, and sector-level, coffee supply-chainstakeholders can take collective action to increase current incomes and reach a Living Income – thereby paving the way towards a Prosperous Income.



Increase yields



Promote diversification Increase price



Enhance farm size



Reduce cost of production





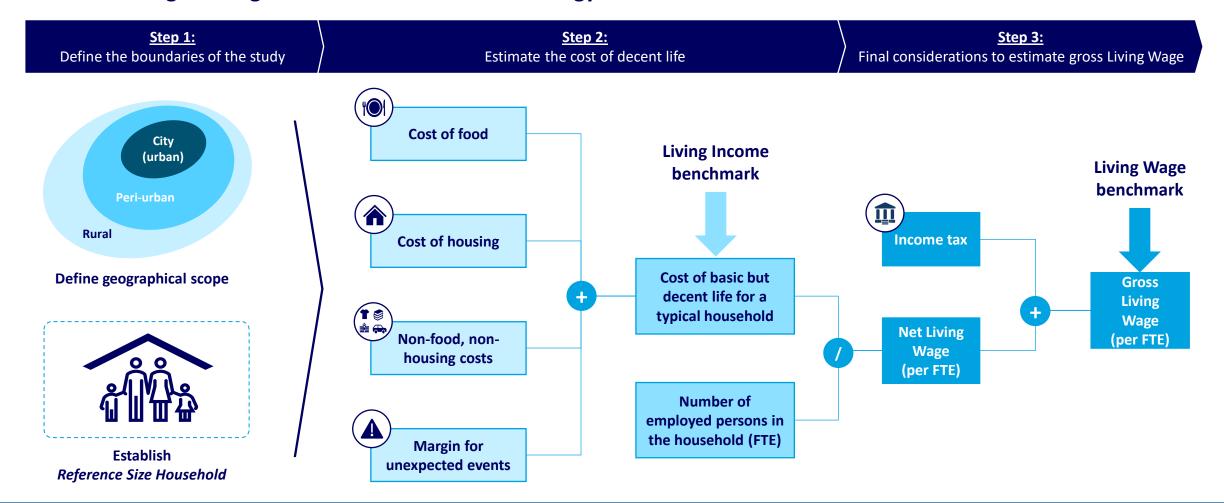
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Living Income methodology | The 3-step methodology to estimate the Living Income benchmark relies on both primary and secondary data

The NewForesight Living Income benchmark Methodology



Living Income methodology | Overview of the most relevant data sources used to estimate the Living Income benchmark

Data sources PRIMARY DATA **SECONDARY DATA ASSUMPTION** LEGEND INTERVIEW Household size, fertility rate, child mortality, disaggregated by urban vs rural and sub-region [secondary data from the Global Data labs] Reference size household Number of workers: LFPR, unemployment rate, part-time employment rate [Secondary data via ILOSTAT database] Nutritious food items for local model diet [local nutrition expert] Local Food Price Survey: Local food prices [local consultant at food venues] Cost of food Nutritional values of food items: % protein, % fat, % carbohydrates, and percentage of edible part [FAO and **USDA**1 Local standard of decent housing [following Anker Methodology] Local housing conditions & rent levels [secondary data via available national sources] Cost of housing **Cost of living survey:** Cost of decent housing & utilities [local consultant at households] Share of household expenditure [secondary data from International Monetary Fund (IMF) global database or country-specific data from national sources] Non-food, nonhousing costs Cost of living survey: NFNH questions [local consultant either in person or via phone] for cross-checks Margin for An additional 5% of the total of the other three categories to account for unexpected events unexpected events

- Primary data always collected on site, for the relevant geographic area of the study.
- Secondary data are also used to estimate Living Income benchmark.

Please refer to the **Annex** for a detailed description of the methodology





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Results summary | The Living Income benchmark for coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras is HNL 18,135 per month

Household size



2 adults

2.6 children

5 earners

Reference household size
Rural Honduras

The **reference household size of 4.6 persons (2 adults, 2.6 children)** is used in this report, based on the latest available information on the household size in the rural regions of Honduras (4 people) and in particular in the regions of Comayagua, Copán, and El Paraíso, as well as total fertility rate (TFR), and under-five child mortality (U5CM) available in the Global Data Lab from the Radboud University¹. The number of earners considers the labor force participation rate (LFPR), unemployment rate (U), and part-time employment rate and/or hours of work (PT) available in ILOSTAT.

To afford a decent standard of living, the reference household in the rural coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras will need a Living Income of HNL 18,135 (USD 745) per month.

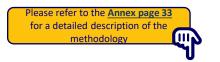
Cost category	Cost [HNL/month]	Cost [USD/month]	Results		
Food	5,128	211	The model diet is calculated based on a target of an average of 2,366 calories per person per day for the reference family. 37% of the calorie intake comes from grains and prepared cereals, followed by 14% from high-quality protein sources.		
Housing	4,312	177	Most of the interviewed households have adobe walls or blocks, zinc tile roofs, cement or slab floors, individual or communal pipe water, and independent toilets inside the houses. Costs associated with electricity are related to the fees of connection to the national grid, subsides, and the use of alternative fuels to provide adequate lighting. 82% of the households use firewood as their preferred source of cooking fuel and the costs associated are from fees to collect the wood and market prices.		
Non-Food, No Housing (NFN)	/ 831	322	The NFNH ratio is 1.53 and the main monthly expenses for essential needs are transportation (motorbike, public transport and car) representing 19%, clothing (17%), health (visit costs and medicines) 8%, and education (school/University fees) 6%.		
Margin unexped	ted 864	35	Margin to enable households to set money aside and cater for unexpected occurrences such as death, accidents, or illness.		

^{*}Exchange rate of 24.335 HNL (21st of February of 2023). Source: https://www.oanda.com/currency-converter



Results | The cost of a low-cost nutritious diet for coffee-growing regions Comayagua, Copán and El Paraíso in Honduras is HNL 5,128 per month

Breakdown of food costs

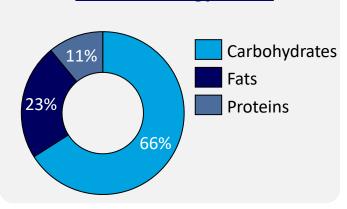


Food costs

Cost of a low-cost nutritious diet for a reference household in rural Honduras per month

HNL 5,128

Share of energy intake



Discussion of the results

Food costs were estimated by first developing a low-cost nutritious model diet consistent with local food preferences and availability and relative local food prices¹, and then calculating its cost by surveying local markets where surveyed households usually shop. The food cost of the model diet in rural coffee-growing rural regions of Comayagua, Copán and El Paraíso in Honduras is HNL 5,128 per month. This is the cost required for a low-cost nutritious diet for a typical family of 2 adults and 2.6 children. The model diet is calculated based on a target of an average of 2,366 calories per person per day for the reference family of 4.6 members. The share of energy intake from macro-nutrients is in line with WHO/FAO recommendations, with 66% of energy derived from carbohydrates, 23% derived from fats, and 11% from proteins.

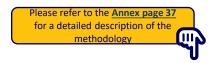
Overall, the model diet includes (see page 35 for the detailed list of food items):

- Grains and prepared cereals such as rice and pasta, which on average provide approximately 37% of the daily calorie intake, as it is popular and generally less expensive than oat.
- High quantities of casava and plantain as they are a staple within coffee-growing communities and because they are healthy food items that provide a fair amount of calories.
- Diverse protein sources should be included in the model diet to achieve WHO/FAO recommendations of more than 10% of calories from proteins. On average, high-quality protein sources (legumes and animal-based) provide 14% of the total calorie intake in the model diet. An average of 84 grams of legumes per day and 30 grams of fish or meat per day (pork, chicken and tilapia) is required.
- An average of 400 grams of vegetables and fruits, considering what was available in the season when we carried out the primary data collection (February 2023).



Results | Housing costs for coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras are HNL 4,312 per month

Breakdown of housing costs

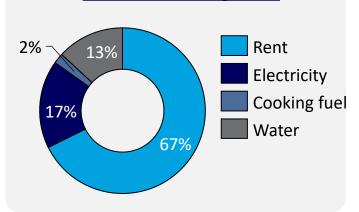


Housing costs

Cost for decent housing for a reference household in rural Honduras per month

HNL 4,312





Discussion of the results

The housing cost in coffee-growing rural regions of Comayagua, Copán and El Paraíso in Honduras for February 2023 is HNL 4,312 per month. This is the cost required to live in a house that meets local decency standards for a typical family of 2 adults and 2.6 children. Housing costs include the cost of dwellings (rent equivalent value) and costs of essential services such as water, electricity, and fuel:

- On average the housing costs in the three regions constitute 24% of the Living Income benchmark, the highest costs are in Comayagua, followed by Copán and El Paraíso (see page 31). The National Survey of Household Income and Expenses conducted in 1998 (ENIGH)¹ showed that the average monthly propensity of housing expenditure of rural households was 15%.
- Permanent walls made of bricks, cement, or stone are considered decent based on international standards. However, the minimum local decency level can change between different countries and regions (urban vs rural) based on, for example, the level of development of the country. According to the XVII Population Census and VI Housing Census², in rural areas of the coffee-growing regions of the study on average 63% of the households have walls made of adobe, 44% use zinc tile, and 43% clay tile for the roof, 48% have earth floors and 36% cement floors. In the current LI benchmark study, walls made of abode and roofs of clay tile in good condition were accepted as decent, but earth floors were not. On average 43% of the households interviewed have adobe walls (in Comayagua 85% use block), 68% use zinc tile roofs and 53% use cement floors (in Comayagua and Copán majority of households use floor slab).

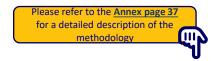
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^{1.} https://www.bch.hn/PortalEnigh/Documentacion/Cuadros%20de%20Gastos%20Ordenador/Cuadros%20de%20Propension.PDF

^{2.} https://www.ine.gob.hn/publicaciones/Censos/Censo_2013/02Tomo-II-Vivienda/index%20Censo.html

Results | Housing costs for coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras are HNL 4,312 per month

Breakdown of housing costs

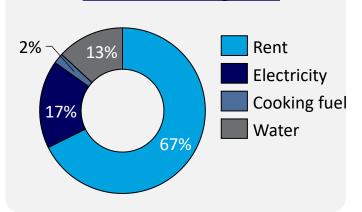


Housing costs

Cost for decent housing for a reference household in rural Honduras per month

HNL 4,312

Share of housing costs



Discussion of the results

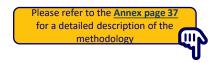
- The LXXVI Permanent Survey Of Multipurpose 2023 (EPHPM)¹ showed that 53% of the households in rural areas of Honduras use toilets and 12% septic tanks. For the coffee-growing regions of study, the XVII Population Census and VI Housing Census showed that 31% of the households have a service toilet connected to sewerage and 24% connected to a septic tank. In the current LI benchmark study, the decent criteria were to have a safe toilet in or near the house with the constructed floor slab. All of the households surveyed have independent toilets inside the houses.
- According to the EPHPM, 95% of the households in rural areas of Honduras have an adequate service
 of water and 78% use installed pipes as a principal source of water access. In the current study,
 boreholes for drinking and river water for non-drinking purposes were accepted as decent. On average,
 74% of the households surveyed use communal or own water pipelines as a source of potable water,
 and the main expenses are related to maintenance or communal fees.
- The XVII Population Census and VI Housing Census² showed that 88% of rural households use firewood as the main source of cooking fuel. Cooking outside or inside with adequate ventilation was considered decent in the current study. Most of the households surveyed had adequate cooking facilities, on average, 82% of them use firewood as the preferred source, and the main expenses are related to journals paid for collecting the firewood or the market price of the pack.³

[.] https://www.ine.gob.hn/V3/imag-doc/2023/05/RESUMEN-EJECUTIVO-IXXVI-EPMPM-Marzo2023.pdf

https://www.ine.gob.hn/publicaciones/Censos/Censo 2013/02Tomo-II-Vivienda/index%20Censo.html

Results | Housing costs for coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras are HNL 4,312 per month

Breakdown of housing costs

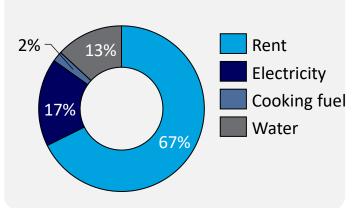


Housing costs

Cost for decent housing for a reference household in rural Honduras per month

HNL 4,312

Share of housing costs



Discussion of the results

- The LXXVI Permanent Survey Of Multipurpose 2023 (EPHPM) showed that 78% of households in rural areas of Honduras are connected to the national grid and 13% use other sources. Connection to the grid might not be available, so access to alternative fuels to provide adequate lighting was considered decent in the current LI benchmark study. The electricity costs consider the fee paid by the households subscribed to the National Electric Power Company which depends on the level of consumption and the subsidy provided by the government (from 0 to 150 kilowatts per hour is 100% subsidized). ¹
- Other costs are also considered, such as the use of alternative sources of energy like solar panels. Almost 70% of the households surveyed in El Paraíso were not connected to the national grid but instead, they use solar panels for low energy consumption (only general lighting). National reports show that El Paraiso is one of the departments that have the lowest electricity coverage index in Honduras.²

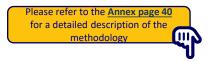


http://www.enee.hn/index.php/noticias/156-periodistas/1624-gobierno-de-la-republica-beneficiara-con-un-subsidio-de-bono-electrico-al-83-de-los-abonados-del-servicio-electri 23

https://portalunico.iaip.gob.hn/portal/ver_documento.php?uid=ODQ1NzYwODkzNDc2MzQ4NzEvNDYxOTg3MiM0Mg==

Results | NFNH costs for coffee-growing regions of Comayagua, Copán and El Paraíso in Honduras are HNL 7,831 per month

Breakdown of Non-Food Non-Housing (NFNH) costs



Non-food, Non-housing costs

Cost for essential needs for a reference household in rural Honduras per month

HNL 7,831

CPI Cost Category ¹	Weight	NFNH-Food Ratio
Food	32%	
NFNH (see categories below)	49%	1.53
NFNH category	% share (in NFNH)*	HNL/month
Education	6%	492
Health	8%	588
Transport	19%	1,459
Clothing	17%	1,317
Communication	3%	272
Other**	47%	3,703

Discussion of the results

The NFNH cost for coffee-growing rural regions of Comayagua, Copán, and El Paraíso in Honduras for February 2023 is HNL 7,831 per month. This is the cost required to cover all the household expenses for essential needs other than food and housing for a typical family of 2 adults and 2.6 children. Expenditures related to Alcoholic Beverages, Tobacco, and Narcotics are excluded as these items are not part of what has constituted a decent standard of living.

NFNH costs are determined by the NFNH-to-Food ratio, estimated food costs, and cross-checks using primary and secondary data. The ideal secondary data of rural expenditure weights comes from the 1998 and 1999 National Survey of Household Income and Expenses¹, however, national CPI weights derived from the same survey are currently more widely used by organizations like the International Monetary Fund.

NFNH costs are calculated using national CPI weights, and the education, health, and transport costs were validated with local experts. The validation was focused on survey results, computed cost values, and their relevance to the regional reality. The validation indicated that the final values reflect recent inflationary increases and challenges in accessing quality services, hence the estimated NFNH category and expenditure categories align with the reference household's expenses.

NFNH costs are cross-validated with survey results. The largest disparity is observed in education costs: 492 HNL/month compared to 1,608 HNL/month, respectively. This difference is attributed to current expenses related to sending children to schools or universities in more developed cities.



 $^{1. \}qquad \underline{https://www.bch.hn/PortalEnigh/Documentacion/Cuadros\%20de\%20Gastos\%20Ordenador/Cuadros\%20de\%20Propension.PDF} \\$

^{*} Percentages are rounded up to the nearest whole number

^{**}i)Furnishings, household equipment, and household maintenance, (ii) Recreation and culture, (iii) Restaurants and hotels, and (iv) Miscellaneous goods and services

Results | A Living Income enables a household to provide buffer for unexpected/unforeseen events and expenses

How the margin for unexpected events is determined

Margin for unexpected events

Additional funds for sustainability and emergencies

HNL 864

Margin for unexpected events is provided to serve as a buffer for households





How the margin for unexpected events is calculated

The margin for unexpected events for rural coffee-regions of Comayagua, Copán, and El Paraíso in Honduras for February 2023 is HNL 864 per month. This is the minimum additional fund required to cover unforeseen events for a typical family of 2 adults and 2.6 children.

Income variability or unexpected expenditures can put at risk the economic resilience of the household. A margin on top of the cost of a decent standard of living is provided to enable households to set money aside and cater for unexpected occurrences such as death, accidents, or illness. This additional margin should enable producers and their families to cover unforeseen expenses and help prevent them from falling into the poverty trap.

The margin for unexpected events is calculated based on the estimated amount for all other cost categories. To determine the margin for unexpected events:

- 1. Aggregate all other cost components that constitute the cost of living for the reference household size
- 2. Apply an additional 5% margin to the total cost of living



Living Income Report – Coffee growing regions of Comayagua, Copán and El Paraíso in Honduras

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Living Wage | The Living Wage benchmark for coffee-growing regions of Comayagua, Copán, and El Paraíso in Honduras is HNL 12,775 per month

How the Living Wage benchmark is determined

The Living Wage benchmark accounts for the contributions of all earners in a family. It is the gross remuneration workers should receive to afford a decent living standard for the entire family.

When considering Living Wages, it is crucial to include income taxes in order to calculate the total value of compensation that a full-time worker must earn to attain a Living Wage. Therefore, once the Living Income Benchmark (LIB) is estimated, it is divided by the total number of full-time equivalents (FTEs) within the reference household to determine the Net Living Wage. By utilizing publicly available secondary income tax data sources^{1,2}, the income tax per FTE is added to estimate the gross Living Wage.

Overall, individual residents in Honduras are subject to a specific direct income tax. Based on the collected income tax data, we estimated that a full-time worker in the reference household family would have to pay HNL 372 in income taxes. By adding up the calculated income tax costs to the net Living Wage benchmark, a gross Living Wage of HNL 12,775 is estimated for coffee-growing regions of Comayagua, Copán, and El Paraíso in Honduras.

The gross Living Wage for a full-time worker is HNL 12,775 (USD 525), given that the average number of full-time workers in the household is 1.5*

	Cost [HNL/month]	Cost** [USD/month]
Food	5,128	211
Housing	4,312	177
Non-food, Non-housing	7,831	322
Margin for unexpected events	864	35
Living Income benchmark per household (LIB)	18,135	745
Net Living Wage (LIB / Full-time workers in the reference household*)	12,403	510
Income Taxes per FTE	372	15
Gross Living Wage benchmark per FTE	12,775	525

^{*} The total full-time workers in the reference household is approximated to the first decimal. The exact value corresponds to 1.4621.



Available in: https://sca.coffee/sca-news/25/issue-18/what-would-it-cost-calculating-specialty-coffee-farmworker-living-wages-in-honduras-and-el-salvador

^{**}Exchange rate of 24.335 HNL (21st of February of 2023). Source: https://www.oanda.com/currency-converter

Wage Ladder | The Living Wage benchmark is considerably higher than the official National Minimum Wage and other wage references in Honduras

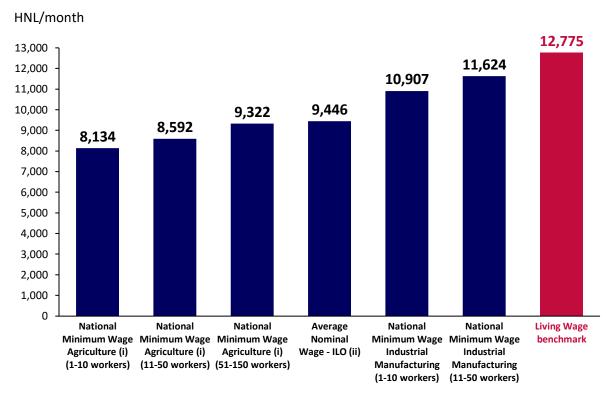
Minimum wages and estimated average wages

Available wage references are presented for 1 full-time equivalent (FTE) and adjusted to account for inflation, ensuring their comparability with the Living Wage benchmark established in this study. The Living Wage benchmark surpasses the most recent Minimum Wages established by the National Commission of Minimum Wages of Honduras for the sector encompassing agriculture, forestry, hunting, and fishing. Even when contrasting with the 11 sectors for which the Minimum Wages were established, a certain level of disparity persists, though to a lesser extent. For instance, this disparity is evident when considering industries such as Industrial Manufacturing, particularly within the subset of companies employing fewer than 50 workers. ¹

The Living Wage benchmark exceeds the available average wage presented in the International Labour Organization's Global Wage Report², which offers insights into real wages on a global scale. These disparities serve to highlight that the current earnings received by a full-time worker, for some sectors in Honduras, remain insufficient for sustaining a decent standard of living in Comayagua, Copán, and El Paraíso.

Note: Variations in household size may exist among the benchmarks on the wage ladder, although comprehensive underlying assumptions for all benchmarks are not accessible. Nonetheless, these discrepancies should not impact the primary findings, and the relative scale still provides a meaningful representation of the divergence.

Wage ladder for one FTE in Honduras, 2023



- (i) Corresponds to the Minimum National Wage of the agriculture, forestry, hunting, and fishing sector.
- (ii) Average Nominal Wage refers to the average monthly gross remuneration of all employees taking into account regular bonuses for both worked and non-worked periods. It is an overall average across all employees, without focusing on specific categories such as manufacturing employees or full-time workers (Global Wage Report 2018/19 Appendix I).



^{1.} https://www.trabajo.gob.hn/wp-content/uploads/2023/02/GACETA-21-DE-FEBRERO-DE-2023-36161-SECCION-A.pdf

^{2.} https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_762534.pdf

Moving forward

Conclusion & Implications

Conclusion

The Living Income benchmark for a reference household of 4.6 members (2 adults and 2.6 children) in coffee-growing rural regions of Comayagua, Copán, and El Paraíso in Honduras for February 2023 was estimated at 18,135 HNL/month. The related gross Living Wage benchmark, considering a total of 1.5 earners in the family, is 12,775 HNL/month per FTE.

Non-food, Non-housing costs represent the highest expenditure category (43%), followed by Food costs (28%), Housing costs (24%), and Margins for unexpected events (5%).

Implications and potential next steps

The current study should not be considered a standalone document, but rather a key phase in the journey toward closing the Living Income gap for coffee-producing households. A potential next step consists of determining the most viable drivers (e.g. yield, price, diversification) that can help close the gap, and identify interventions that can help to do so.

Meanwhile, roasters, traders, producers, governments, and other key stakeholders can already take action to reduce the Living Income gap in their own areas of influence by advancing changes at the farm-, supply chain- and policy level. To know how, reach out to relevant parties or NewForesight (Daniel.Viviers-Rasmussen@newforesight.com).







Living Income Report – Coffee growing regions of Comayagua, Copán and El Paraíso in Honduras

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Annex | Cost composition of the Living Income benchmark per coffee-growing region of Comayagua, Copán, and El Paraíso in Honduras

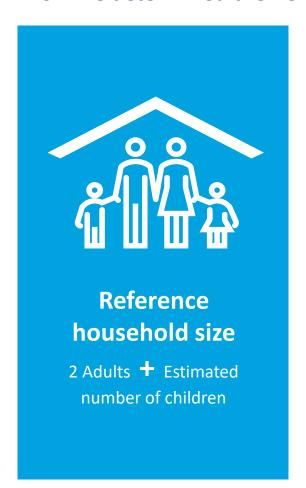
Cost composition table per region

Cost category	Cost per coffee-growing region [HNL/month]			Cost per coffee-growing region [USD/month]		
	Comayagua	Copán	El Paraíso	Comayagua	Copán	El Paraíso
Food	5,443	5,136	2,358	224	211	97
Housing	5,696	4,326	5,361	234	178	220
Non-Food, Non- Housing (NFNH)	8,699	6,607	8,188	357	272	336
Margin unexpected events	992	803	795	41	33	33

^{*}Exchange rate of 24.335 HNL (21st of February of 2023). Source: https://www.oanda.com/currency-converter

Annex | Establishing appropriate household size is important in the Living Income benchmark estimation process

How we determined the Reference household size



How we determine the Reference household size and number of workers

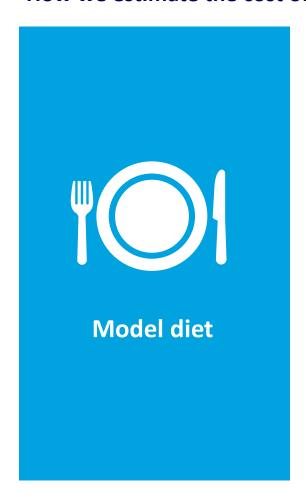
Producers should be able to support a family on a Living Income. This implies that farmers with larger family sizes will require relatively higher Living Incomes. Thus, establishing the average family size (the 'Reference Household Size') in that particular location is important. Reference Household Size serves as the reference basis for all calculations regarding costs of living.

Important parameters to estimate the Reference household size:

- *Number of adults:* We assume that the reference household size consists of 2 adults and their children. No additional adults are considered in the reference household size
- *Number of children:* The estimated number of children is calculated using Total Fertility Rate and Child (under 5 year) Mortality Rate. Data is retrieved from Global Data Labs database (Institute for Management Research of Radboud University), which is an aggregation of household survey datasets at national and regional levels.
- Number of workers: We follow the Anker Methodology approach. Data on labor force participation rate, unemployment rate, and part-time employment rate are collected from ILOSTAT explorer database, retrieving the suitable indicators by sex, age and area type. When data is not available, ILO modelled estimates and projections or national and regional sources are used.

NewForesight's Living Income Benchmarking Methodology can adjust to estimate the Living Income for other accepted household configurations, such as the standard family size of 2 adults and 2 children or other personalized household compositions.

How we estimate the cost of a local model diet



How we estimate the cost of a local model diet

Food expenditures for households in developing countries can usually make up to 50% of the total household costs. It is therefore important to collect high-quality, accurate local food price data to ensure credibility of the Living Income/Wage benchmark.

We rely on a combination of primary and secondary data to estimate the cost of the model diet:

- Daily calorie intake: Family nutritional needs are calculated based on family members' BMI and physical activity level. Following the Anker methodology, the calculation of the number of calories is based on the Schofield equations, widely used to estimate calorie needs based on age, sex, height and activity level.
- *Nutritional values:* country-specific data on calorific content, edible portion, share and amount of carbohydrates, proteins, fats of the selected food items are gathered from the FAO database INFOODS. If not available, we rely on the USDA global database.
- Food prices: we collect primary data from local venues that are typically visited by the target communities. We collect data for 38 food items

An automated mathematical optimization model ensures the selection of the cheapest options available for a healthy and nutritious diet (19 food items). The model diet is calculated for an adult male. We then use conversion factors to estimate the equivalent cost for adult female and children in the household (gathered from scientific literature¹).

Results | Methodological considerations for determining a low-cost nutritious model diet that takes into account local food availability and preferences

Local model diet and food prices



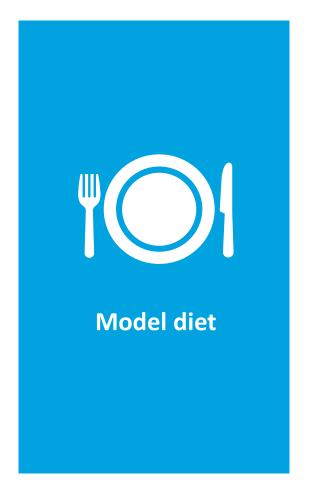
How did we define the local model diet

A Living Income should meet the expenditures for a low-cost nutritious diet that considers local food availability and preferences and that is in line with World Health Organization (WHO)/FAO recommendations. According to the WHO/FAO, a nutritious model diet covers all basic food groups (see image on the left). It should contain: (a) 50%-75% energy from carbohydrates; at least 10% of energy from high-quality proteins (animal-based proteins, pulses, legumes); 15-30% energy from fats; (b) it includes most affordable food items in each food groups; (c) at least 300 grams of vegetables & fruits per day (excluding starchy fruits and tubers); (d) at least 56 grams/day for pulses, legumes & beans; (e) It is consistent with local preferences and accounts for local availability; (f) Includes 15% additional cost to account for variability; (g) it does not include unhealthy foods (e.g. alcohol, cookies, soft drinks)

Our approach to designing a local model diet consists of three steps: (1) consult with a local nutritional expert to design long-list of food items; (2) collect food prices from 3 food venues in the region of the study; (3) define model diet based on most available and low-cost items

Venues to collect food prices were defined based on the geographical focus and the type of markets that are accessible to the target-group of the study.

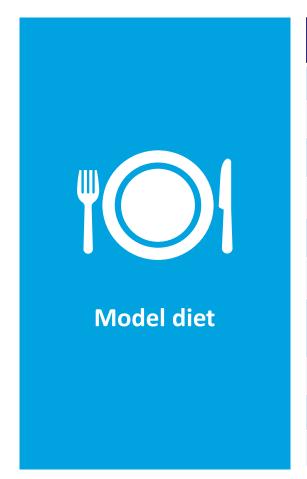
Composition of a Model Diet – Male intake (grams/day) – Comayagua prices, February 2023



Food category	Food item	Grams/day	Price (HNL/day)
Cereals and Grains	Rice	228	5
Prepared cereals	Pasta	74	2
Roots & tubers (starchy)	Cassava	267	4
Starchy fruit or vegetable	Plantain	141	2
Pulses, legumes, beans	Red beans	55	2
Pulses, legumes, beans	Peanut	29	3
Dairy	Quesillo	60	5
Eggs	Eggs	30	2
Meats	Pork	30	3
Fish	Tilapia	21	2

Food category	Food item	Grams/day	Price (HNL/day)
Green leafy vegetables	Cabbage	100	1
Other vegetables	Avocado	60	4
Other vegetables	Peppers	60	1
Other vegetables	Onion	60	2
Fruits	Banana	60	0.4
Fruits	Orange	60	0.6
Oils & Fats	Vegetable oil	34	2
Non-alcoholic beverages	Coffee	2	0.2
Other	Panela	30	1

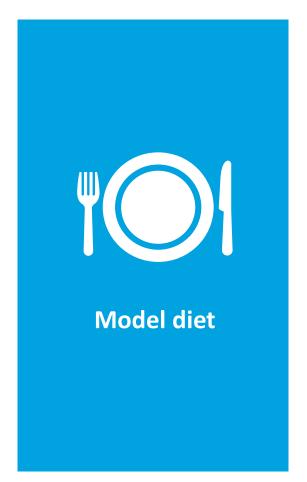
Composition of a Model Diet – Male intake (grams/day) – Copán prices, February 2023



Food category	Food item	Grams/day	Price (HNL/day)
Cereals and Grains	Rice	227	3
Prepared cereals	Pasta	75	2
Roots & tubers (starchy)	Cassava	250	4
Starchy fruit or vegetable	Plantain	117	2
Pulses, legumes, beans	Peanut	28	2
Pulses, legumes, beans	Red beans	57	2
Dairy	Powdered or pasteurized milk	60	2
Eggs	Eggs	25	2
Meats	Clean chicken	30	1
Fish	Tilapia	29	2

Food category	Food item	Grams/day	Price (HNL/day)
Green leafy vegetables	Cabbage	100	1
Other vegetables	Avocado	57	5
Other vegetables	Onion	60	2
Other vegetables	Tomato	58	1
Fruits	Banana	60	1
Fruits	Orange	60	1
Oils & Fats	Cream butter	34	2
Non-alcoholic beverages	Coffee	2	0.2
Other	White sugar	30	1

Composition of a Model Diet – Male intake (grams/day) – El Paraíso prices, February 2023



Food category	Food item	Grams/day	Price (HNL/day)
Cereals and Grains	Rice	223	5
Prepared cereals	Pasta	75	2
Roots & tubers (starchy)	Cassava	250	2
Starchy fruit or vegetable	Plantain	160	1
Pulses, legumes, beans	Red beans	56	2
Pulses, legumes, beans	Sesame	30	3
Dairy	Quesillo	60	6
Eggs	Eggs	30	3
Meats	Clean chicken	30	2
Fish	Tilapia	30	3

Food category	Food item	Grams/day	Price (HNL/day)
Green leafy vegetables	Cabbage	100	2
Other vegetables	Avocado	60	4
Other vegetables	Onion	60	2
Other vegetables	Tomato	60	1
Fruits	Banana	60	0.2
Fruits	Orange	60	1
Oils & Fats	Vegetable oil	34	2
Non-alcoholic beverages	Coffee	2	0.2
Other	White sugar	30	1

Annex | Methodology to estimate the cost of decent housing

How we estimate the cost for decent housing



How we estimate the cost for decent housing

Adequate housing standards may vary depending on the region and setting. Our 4-step approach to define local decency standard and estimate related housing cost:

- 1. Identify participants for primary data collection: with support of local partners and relevant organizations we identify participants under the conditions that are relevant to the area and sector of the of study. In total, 15 households are surveyed to establish 1 Living Income benchmark.
- 2. Carry out Cost-of-Living Survey: we developed a survey that guides interviewers on collecting data on variables that constitute the cost of housing. These include monthly cost of rent, electricity, water, cooking fuel, heating. In cases where the house is owned by the household, we adopt the following strategies:
 - we ask participants the potential rent rate they would charge if they would rent their house
 - we gather data on the construction cost of the building to determine the monthly cost of ownership
- 3. Assess condition of the house: based on the local decent housing standard, we determine if interviewed participants meet the minimum standards of decency. Our local decent housing standard include verifying the wall materials, roofing materials, number of rooms, amenities, etc.
- 4. Estimate the cost of decent housing: The cost of housing constitutes the equivalent rent cost and other essential costs such as utilities and fuel.

Results | Methodological considerations to determine local decency housing standards and estimate housing costs

Local decent housing standard for rural coffee-regions of Comayagua, Copán, and El Paraíso in Honduras

Mandatory criteria	Local decent housing standard in regions of study
Living space	2 or less persons per room excluding kitchen and toilet
Walls material	Walls in good condition and made of semi-hard bricks (a mix of soil and cement) and adobe walls are considered acceptable
Roof material	Permanent material. Accepted: Brick/cement/stone/well-joined walls/metal sheets/zinc
Floor material	Permanent material. Accepted: Cement/stone/tile/wood floor

Additional criteria	Local decent housing standard in regions of study
Toilet	Safe toilet in or near house. Unaccepted: Pit latrine without slab or open pit is unacceptable
Access to water	Borehole water for drinking and river water for non-drinking purposes is considered acceptable (<3 km distance)
Adequate cooking facility	Cooking can be done outside the house. if indoors, adequate ventilation required (minimum of a window in the kitchen)
Availability of electricity	Grid may not be available. Solar panels, alternative fuels or flashlights to provide at least adequate lighting.

How did we define the local housing standard and related costs

Producers and their families should live in decent conditions, protected from environmental elements and other hazards. Housing must be in line with (international) minimum housing standards as defined by the UN, ILO, and WHO, but tailored to the geographical context of the study. We developed a guideline to determine the acceptable conditions for decent housing in rural Honduras, based on the Anker methodology. The approach includes a set of mandatory and non-mandatory criteria (see left table). To be considered decent, a surveyed house must meet all mandatory criteria and three out of four additional criteria. Housing costs include cost of dwellings (rent equivalent value) and costs of essential services such as water, electricity, and fuel.

Our 4-step approach to estimating cost of housing:

- 1. With the support of local partners, we identified 16 households in Comayagua and El Paraíso to interview, and 15 in Copán, of which 13 met the standard's criteria in each region.
- 2. We collected primary data on housing costs and household expenditures
- 3. We assessed the conditions of households to determine if minimum standards of decency were met.
- 4. We estimate the cost of decent housing using collected primary data.

Annex | Methodology to estimate Non-food, non-housing (NFNH) costs

How we estimate NFNH costs



How we estimate non-food, non-housing costs

Non-food, non-housing costs for a *Reference Household* include expenditure on health, transportation, education, clothing and on other essential needs depending on the focus region. For this estimation, a mix of methods of data collection is used:

- 1. Collect data on the share of household expenditure: National level data can be collected from the International Monetary Fund (IMF) global database on the share of household expenditure in the country of the study. If available, the share of household expenditure at a regional level is retrieved from national household surveys from the country of the study.
- 2. Estimate NFNH costs: NFNH are estimated using the food to NFNH ratio and the estimated cost of food for the reference family:

$$NFNH costs = \frac{share of NFNH expenditure categories}{share of food expense} \times estimated cost of food for the reference family$$

• Cross-check secondary and primary data: Cross-checks are done against estimated NFNH costs by comparing them with primary data collected through the Cost-of-living Survey. Expenditure categories undergoing cross-checking are healthcare, education and transportation. When significant and clear deviation is identified compared to NFNH, costs are adjusted to reflect the costs observed in the primary data collection.

Annex | This Living Income Benchmarking report was made possible by the following parties and their technical, organizational, strategic and financial support

Authorship and enabling organizations

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