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PROGRAM FOR THE HARMONIZATION AND MODERNIZATION OF HOUSEHOLD LIVING CONDITIONS SURVEYS IN UEMOA MEMBER STATES

ENQUÊTE HARMONISEE SUR LES CONDITIONS DE VIE DES MÉNAGES (EHCVM) DANS LES ETATS MEMBRE DE L'UEMOA /

HARMONIZED SURVEY ON HOUSEHOLDS LIVING STANDARDS

BASIC INFORMATION DOCUMENT OF THE SECOND EDITION

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1. Introduction

The Harmonized Survey on Household Living Conditions is a joint initiative of the WAEMU Commission and the World Bank, carried out as part of the Program for the Harmonization and Modernization of Surveys on Household Living Conditions within WAEMU member states (PHMCV).

The objective of the Program is to support the WAEMU Commission in strengthening the capacities of its member states to conduct household living conditions surveys that meet regional harmonized standards, and to make the collected micro-data accessible to the public. One of the main specific objectives is to produce poverty indicators, living conditions indicators, and harmonized databases that allow for analyses to inform public policies.

The beneficiaries are the eight WAEMU countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo. Besides the PHMCV beneficiary countries, Cameroon, Chad, and Congo have also conducted similar surveys using the same methodologies and have participated in the various activities. The first edition of the survey took place in 2018/2019, and the second edition, which is the subject of this document, in 2021/2022.

The survey includes four components: a household component, a community component, a price component, and a component on non-standard units (NSU).

Partners

The survey was designed and conducted in collaboration with the National Institutes of Statistics (INS), the WAEMU Commission, and the World Bank. The BCEAO, BOAD, and AFRISTAT also supported the process.

More specifically, the INS were central to the process at all phases (design, preparation, data collection, data processing).

Financing

The project is funded by the World Bank through a $40.5 million grant to the WAEMU Commission. For Côte d'Ivoire, the funding amounts to $4.5 million.

Technical Assistance

The WAEMU Commission and the World Bank provided technical assistance to the INS throughout the project implementation. Technical assistance was provided in the form of missions and regional workshops.

They provided the necessary expertise in coordination to support the harmonization process so that the produced indicators are comparable. These institutions also supported the modernization process in the phases of data collection (CAPI) and methodology (e.g., the introduction of the panel dimension in the second edition).

Organization of the document

This document is designed to provide the necessary information for understanding the data from the second edition of the Harmonized Survey on Household Living Conditions (EHCVM). It is composed of seven parts. After the introduction, the next part presents the characteristics of the survey. The presentation of the survey instruments is covered in part 3, and sampling issues are addressed in part 4. Then, the document describes the organization of fieldwork in part 5, presents the main results of the collection in part 6, and describes the databases in part 7.

2. Characteristics of the Survey

2.1 Household and Community Components

The household and community components of the survey are organized into two waves, with each wave covering half of the clusters and half of the household sample. Organizing the work into two waves allows for the consideration of seasonal variations in consumption throughout the year. Each wave of the survey was preceded by an enumeration phase to identify the households from the first edition. Data collection for the first wave took place from November 11 to December 23, 2021, and then from January 10 to February 3, 2022. The second wave took place from April 1 to July 9, 2022.

2.2 Price component

The price component is organized differently, with data being collected monthly and continuously over a period of 10 months. Price data were collected from November 12, 2021, to September 10, 2022.

2.3 NSU Component

The non-standard units (NSU) component allows for the production of conversion factors to convert the non-standard consumption units used in households (e.g., piles, bowls, ears) into standard units (e.g., kilograms, liters). Information on NSUs was collected during the 2018/2019 edition, and the produced conversion factors are still valid. Therefore, it was not necessary to conduct a new collection for this component. However, there was a supplementary collection to complete certain missing units and a collection called NSU production. The first took place from September 2 to October 9, 2021, and the second from October 26 to November 30, 2022.

3. Data Collection Instruments

The survey consists of four questionnaires: a household questionnaire, a community questionnaire, a price questionnaire, and a questionnaire on non-standard units.

3.1 Household Questionnaire

The household questionnaire is designed to collect information at both the household and individual levels. The sections for household-level information are as follows: household

identification and control details, food consumption, food security, retrospective food and non-food household expenditures, existence of agricultural enterprises, housing characteristics, household assets, transfers received by the household, COVID-19 and its impact on households, shocks and coping strategies, safety nets, agriculture, livestock, fishing, agricultural equipment, and subjective poverty.

The sections for individual-level information are: sociodemographic characteristics of household members, education, health, employment, individual non-employment income, savings and credit, characteristics of non-agricultural enterprises, and governance, peace, and security. The contents of the household questionnaire are detailed below:

- **Cover :** This section contains information on the identification and geo-spatial location of the household. It also records basic information about the head of the surveyed household and the GPS coordinates of the household.
- **Section 0 : Household Identification and Control Details:** This section provides detailed geographic information about the household and records data on the interview process, including visit dates and interview language.
- **Section 1 : Sociodemographic Characteristics of Household Members:** This section covers all household members, listing individuals and providing sociodemographic characteristics such as relationship to the head of the household, age, marital status, religion, residency status, nationality, ethnicity, parental survival, education level, and parents' occupation and industry.
- **Section 2 : Education (Individuals 3 Years and Older):** This section concerns individuals aged three years and older, recording literacy, school attendance, and education level. It also provides information on the individual's school history, difficulties encountered, and education expenses.
- **Section 3 : General Health (Individuals 5 Years and Older):** All household members report on main health issues and consultations in the 30 days before the survey visit. The section covers access to and quality of health services, consultations and health expenses in the past three months, and hospitalizations and related expenses in the past 12 months.
- **Section 4 : Employment:** This section is for household members aged 5 and older, with three subsections on labor market participation, primary employment, and secondary employment.
    - **Part A: Employment Status:** This subsection collects data on labor market participation for individuals aged 5 and older, including work activities and job search efforts in the 30 days prior to the survey.
    - **Part B: Primary Employment in the Past 12 Months:** For individuals with employment in the past year, this subsection gathers data on the main job's characteristics, including occupation, industry, employment category, sector, and salary and in-kind benefits for employees.
    - **Part C: Secondary Employment in the Past 12 Months:** This subsection focuses on secondary employment for the past year, collecting similar data to Part B.
- **Section 5 : Non-Employment Income in the Past 12 Months (Individuals 15 Years and Older):** This section collects information on non-employment income sources for individuals aged 15 and older, such as pensions, public transfers, rental

income, and other financial and property income. Private monetary transfers are covered in Section 13.

- **Section 6 : Savings and Credit:** This section collects data on access to financial institutions and services, savings, loans, repayments, and upcoming payment deadlines for household members aged 15 and older.
- **Section 7 : Food Consumption:** This section collects data on household food consumption, covering meals taken outside the home (by consumption occasion) and in-home consumption by item. It includes two main parts:
  - **Part A: Meals Taken Outside the Household in the Past 7 Days:** Information on meals consumed by household members outside the home in the past week.
  - **Part B: Food Consumption in the Past 7 Days and Purchases in the Past 30 Days:** Data on items consumed at home in the past week, including quantities, acquisition method (purchase, self-production, gift), and, if purchased, quantity and value of the purchase in the past month.
- **Section 8 : Food Security:** This module includes information on household resource capacity to ensure food security for members, based on the FAO's FIES approach, with questions covering the 12 months prior to the interview.
- **Section 9 : Retrospective Food and Non-Food Household Expenditures:** Six subsections cover most non-food expenditures except phone credit (Section 1), education (Section 2), health (Section 3), and housing (Section 11).
  - **Part A: Festivities and Ceremonies Expenditures in the Past 12 Months:** Data on expenses for religious holidays, weddings, funerals, baptisms, etc., including food, drink, clothing, shoes, and venue rental.
  - **Part B: Non-Food Expenditures in the Past 7 Days:** Information on frequent non-food expenses, such as cigarettes, kerosene, firewood, fuel, urban transport, newspapers, etc.
  - **Part C: Non-Food Expenditures in the Past 30 Days:** Data on expenses for wine, spirits, domestic gas, domestic staff salaries, and other household operating costs.
  - **Part D: Non-Food Expenditures in the Past 3 Months:** Information on expenses for interurban transport, entertainment, postal services, gardening, pet care, etc.
  - **Part E: Non-Food Expenditures in the Past 6 Months:** Data on clothing and shoes purchases, excluding those for festivities and ceremonies**.**
  - **Part F: Non-Food Expenditures in the Past 12 Months:** Data on annual or less frequent expenses, such as housing investment, housing repairs, international travel, and durable goods acquisition.
- **Section 10 : Non-Agricultural Enterprises:** This section concerns non-agricultural enterprises owned by the household.
  - **Part A: Existence of Non-Agricultural Enterprises:** Identifies if the household owns at least one non-agricultural enterprise.
  - **Part B: Characteristics of Non-Agricultural Enterprises:** Detailed information on these enterprises, including owner, industry, age, degree of formalization, accounting aggregates, family and salaried labor.

- **Section 11 : Housing Characteristics:** Data on household housing characteristics, such as roofing, flooring, walls, utilities (electricity, water, sanitation, toilets), and housing expenses (rent, water, electricity, fixed phone bills).
- **Section 12 : Household Assets:** Information on durable goods owned by the household, including appliances, furniture, transportation means, etc. For each item, the number owned, age, acquisition value, and replacement cost are recorded.
- **Section 13 : Section 13: Transfers Received by the Household:** Data on transfers received from other households, including sender characteristics, reason for transfer, transaction channel, and amount received.

Note: In the first edition, Sections A and B were included, but only Section A was retained in the second edition.

- **Section 14 : Shocks and Coping Strategies:** Information on shocks experienced by the household, divided into two parts.
  - **Part A: COVID-19 and Its Impact on Households:** Data on shocks directly related to the COVID-19 pandemic, listing potential shocks (illness, reduced work hours, decreased transfers) and their household impact.
  - **Part B: Shocks and Coping Strategies:** Data on employment, income, health, natural disasters, and other shocks, including their consequences and coping strategies used by households.
- **Section 15 : Safety Nets:** Information on access to social safety programs, such as food distribution and free healthcare for children and pregnant women, including nature and frequency of aid, recipient identification within the household, and difficulties in receiving aid.
- **Section 16 : Agriculture:** Data on household agricultural activities, divided into four subsections.
  - **Part A: Fields and Plots**: Information on plots farmed by the household, including the farmer's identity, plot area, crops, occupation mode, labor, and input use.
  - **Part B: Input Costs**: Data on the cost of inputs used by the household, including quantities used, supply source, and costs.
  - **Part C: Crops**: Information on crops grown on household plots, including harvested quantities.
  - **Part D: Production Use**: Data on how production is used (consumption, sale, stock) for each crop.
- **Section 17 Livestock:** Information on household livestock activities, including animal ownership or caretaking for others, animal numbers, operating costs, and sales of livestock products (animals, meat, milk, eggs, and by-products).
- **Section 18 : Fishing:** Data on household fishing activities, including quantities and types of fish caught, operating costs, and generated income.
- **Section 19 : : Agricultural Equipment:** Information on agricultural, livestock, and fishing equipment owned by the household, including age, acquisition value, and estimated current value.
- **Section 20 : Subjective Poverty, Governance, Peace, and Security:** Information on topics related to monetary poverty and living conditions.

  Part A: Subjective Poverty: Household self-assessment of living standards to place themselves on a well-being spectrum.

Part B: Governance: Data on governance issues, including individual freedoms, participation in major decisions, and corruption.
Part C: Peace and Security: Information on safety, including whether individuals feel secure and have experienced aggression.
Section 21: Household Member Validation: For panel households, this section matches household members in 2021/2022 with those from 2018/2019.

Note: Parts B and C of Section 20 and Section 21 were not included in the first edition questionnaire

3.2 Community questionnaire

This instrument made it possible to gather essential information about local communities. It is completed in the form of focus groups within the village/neighborhood where the cluster is located. It contains four main sections that collect general data on the community, basic social infrastructure, agricultural activity, and population participation in community activities.

- **Cover :** This section provides geospatial information about the location of the cluster. It also includes basic information about the head of the surveyed community.
- **Section 0 : List of Respondents:** This section lists the individuals who provided the information collected about the community. It also gathers the following sociodemographic characteristics of these respondents: gender, age, role in the community, number of years living in the community, and level of education.
- **Section 1 : General Characteristics of the Neighborhood/Village:** This section collects sociodemographic, economic, geographical information, and living conditions at the community level. This includes population size, languages spoken, topography, distance to the nearest town, accessibility, community organization, access to electricity, drinking water, and mobile phone networks.
- **Section 2 : Existence and Accessibility of Social Services:** This section pertains to the social infrastructure present in the community. For each infrastructure, the questionnaire provides information on accessibility in terms of transportation means, the time required between the village/neighborhood and the infrastructure, and problems encountered when using the service.
- **Section 3** : **Agriculture:** This section gathers information on the community's agricultural activities. It collects data on the types of crops grown, the existence of agricultural cooperatives, access to agricultural equipment, and the possible use of improved agricultural techniques, etc.
- **Section 4** : **Community Participation:** This sub-section collects data on citizens' participation in community life and their sense of ownership regarding the construction and maintenance of infrastructure such as roads, bridges, schools, health centers, wells, and markets.

3.3 Price Questionnaire

The price component is designed to record prices from a sample of markets. Price recordings are conducted monthly at sales points in sample localities. In each region, at least two localities are selected (one in an urban area and one in a rural area). The sales points include markets, shops, supermarkets, etc. The price questionnaire is used to record prices for food and non-food consumer goods, using the consumption modules nomenclature from the household questionnaire. The different sections are:

For homogeneous products sold in markets:

- Section 0: Information about the visited market.
- Section 1: Information about the weights and prices of products.

For products sold outside traditional markets:

- Section 0: Information about the visited sales point.
- Section 1: Information about the prices of products.

3.4 Non standard Units Questionnaire

The data collection on NSUs involves identifying the market and locating the pairs (products; units) for various food products. The agents record the weight and price, then take photos according to combinations (very small, small, medium, large, very large, eighth, quarter, half, whole, and single size unit). In addition to the geographical information of the market, the questionnaire is divided into 12 sections corresponding to a grouping of different food products:

- Section 0: Market identification
- Section 1: Cereals and bread
- Section 2: Meats
- Section 3: Fish and seafood
- Section 4: Milk, cheese, and eggs
- Section 5: Oils and fats
- Section 6: Fruits
- Section 7: Vegetables
- Section 8: Legumes and tubers
- Section 9: Sugars, honey, chocolate, and confectionery
- Section 10: Spices and condiments
- Section 11: Beverages

3.5 NSU Production Questionnaire

The questionnaire is structured into two (2) sections:

- **Section 0**: Control information - records information about the visited market.
- **Section 1**: Records information (weight, price, and photo) on the combinations of cash crops and food products.

4. Sampling

4.1 Household and Community Component

Sampling Frame

The sampling frame for the 2018/19 survey was the 2014 General Population and Housing Census (RGPH). In 2021/2022, a new enumeration was conducted in the same clusters.

Sampling Plan

The survey is a cluster panel survey, and the sampling plan is based on the 2018/2019 survey. Therefore, it is important to describe the 2018/2019 plan.

The 2018/2019 sample was designed to provide precision for the variable of interest, which is annual consumption per person. For a sample size of 13,008 households, the precision was 0.01 at the national level and varied from 0.04 to 0.09 for the regions.

Table 1.a. Distribution of initial sample (household)

Regions	Wave 1			Wave 2			Total	Relative error
	Urban	Rural	Total	Urban	Rural	Total		
DISTRICT AUTONOME D'ABIDJAN	480	24	504	480	24	504	1008	0,04
HAUT-SASSANDRA	96	204	300	96	204	300	600	0,06
PORO	72	156	228	120	108	228	456	0,06
GBEKE	144	108	252	144	108	252	504	0,06
INDENIE-DJUABLIN	84	108	192	96	96	192	384	0,07
TONKPI	132	120	252	96	156	252	504	0,06
DISTRICT AUTONOME DE YAMOUSSOUKRO	96	60	156	108	48	156	312	0,08
GONTOUGO	36	168	204	60	144	204	408	0,07
SAN-PEDRO	84	144	228	84	144	228	456	0,06
KABADOUGOU	48	72	120	24	96	120	240	0,09
N'ZI	36	96	132	48	84	132	264	0,09
MARAHOUE	96	144	240	96	144	240	480	0,06
SUD-COMOE	84	120	204	72	132	204	408	0,07
WORODOUGOU	72	60	132	24	108	132	264	0,09
LÔH-DJIBOUA	84	132	216	60	156	216	432	0,07
AGNEBY-TIASSA	96	108	204	48	156	204	408	0,07
GÔH	108	132	240	84	156	240	480	0,06
CAVALLY	84	96	180	72	108	180	360	0,07
BAFING	60	60	120	12	108	120	240	0,09
BAGOUE	60	96	156	60	96	156	312	0,08
BELIER	36	120	156	60	96	156	312	0,08
BERE	48	108	156	36	120	156	312	0,08
BOUNKANI	36	96	132	12	120	132	264	0,09
FOLON	24	108	132	12	120	132	264	0,09
GBÔKLE	48	120	168	36	132	168	336	0,08
GRANDS-PONTS	72	84	156	60	96	156	312	0,08
GUEMON	96	144	240	60	180	240	480	0,06
HAMBOL	24	144	168	84	84	168	336	0,08

Regions	Wave 1			Wave 2			Total	Relative error
	Urban	Rural	Total	Urban	Rural	Total		
IFFOU	36	108	144	36	108	144	288	0,08
LA ME	84	108	192	84	108	192	384	0,07
NAWA	72	192	264	48	216	264	528	0,06
TCHOLOGO	48	132	180	72	108	180	360	0,07
MORONOU	72	84	156	36	120	156	312	0,08
Total	**2736**	**3768**	**6504**	**2520**	**3984**	**6504**	**13008**	**0,01**

Source : EHCVM21, INS_CIV

Table 1.b. Distribution of initial sample (cluster)

Region	Wave 1			Wave 2			Total
	Urban	Rural	Total	Urban	Rural	Total	
DISTRICT AUTONOME D'ABIDJAN	40	2	42	40	2	42	84
HAUT-SASSANDRA	8	17	25	8	17	25	50
PORO	6	13	19	10	9	19	38
GBEKE	12	9	21	12	9	21	42
INDENIE-DJUABLIN	7	9	16	8	8	16	32
TONKPI	11	10	21	8	13	21	42
DISTRICT AUTONOME DE YAMOUSSOUKRO	8	5	13	9	4	13	26
GONTOUGO	3	14	17	5	12	17	34
SAN-PEDRO	7	12	19	7	12	19	38
KABADOUGOU	4	6	10	2	8	10	20
N'ZI	3	8	11	4	7	11	22
MARAHOUE	8	12	20	8	12	20	40
SUD-COMOE	7	10	17	6	11	17	34
WORODOUGOU	6	5	11	2	9	11	22
LÔH-DJIBOUA	7	11	18	5	13	18	36
AGNEBY-TIASSA	8	9	17	4	13	17	34
GÔH	9	11	20	7	13	20	40
CAVALLY	7	8	15	6	9	15	30
BAFING	5	5	10	1	9	10	20
BAGOUE	5	8	13	5	8	13	26
BELIER	3	10	13	5	8	13	26
BERE	4	9	13	3	10	13	26
BOUNKANI	3	8	11	1	10	11	22
FOLON	2	9	11	1	10	11	22
GBÔKLE	4	10	14	3	11	14	28
GRANDS-PONTS	6	7	13	5	8	13	26
GUEMON	8	12	20	5	15	20	40
HAMBOL	2	12	14	7	7	14	28
IFFOU	3	9	12	3	9	12	24
LA ME	7	9	16	7	9	16	32
NAWA	6	16	22	4	18	22	44
TCHOLOGO	4	11	15	6	9	15	30
MORONOU	6	7	13	3	10	13	26
TOTAL	**228**	**314**	**542**	**210**	**332**	**542**	**1084**

Source : EHCVM21, INS_CIV

Sampling strategy

The sample for the 2018/2019 survey was drawn using a two-stage stratified sampling plan. The stratum consisted of combinations of region and type of settlement (urban/rural). Within each stratum, at the first stage, clusters (primary sampling units) were selected with probability proportional to their size in terms of the number of households. At the second stage, 12 households were selected with equal probability within each cluster.

In 2021/2022, the strategy involves revisiting the same clusters. This entails either surveying the same 12 households from 2018/19 if they are relocated (after the enumeration phase), or surveying relocated households and supplementing the sample to 12 households in clusters where fewer are found during the enumeration phase (either because there were fewer than 12 households in the final 2018/19 database or because some households cannot be located).

4.2 Price Component

The basket of products for the EHCVM consists of products collected from traditional markets as well as those from non-traditional markets.

Sampling of products collected from traditional markets is derived from the basket of the Harmonized Index of Consumer Prices (HICP) and from the Non-Standard Units (NSU) survey. Thus, one hundred thirteen (113) products are monitored at these markets.

Sampling of products from non-traditional markets was conducted in three (3) stages: (i) Compilation of a provisional list of 437 products from the HICP basket, the household questionnaire of the EHCVM (consumption, health, etc.); (ii) Establishment of a matrix of product availability at the regional and autonomous district levels based on the provisional list. This activity involved creating elementary products, meaning the identification of a product in a point of sale; (iii) Final compilation of the basket of non-traditional market products consisting of products with a minimum national coverage rate of 70%, i.e., products available in 23 out of 33 regions.

The basket of non-traditional market products selected for the price survey comprises 398 products.

Table 2 : Market distribution by region

Region	Number of markets
AGNEBY-TIASSA	2
BAFING	4
BAGOUE	4
BELIER	2
BERE	2
BOUNKANI	4
CAVALLY	2
DISTRICT AUTONOME D'ABIDJAN	9

FOLON	2
GBEKE	2
GBÔKLE	2
GÔH	2
GONTOUGO	4
GRANDS-PONTS	4
GUEMON	2
HAMBOL	2
HAUT-SASSANDRA	2
IFFOU	2
INDENIE-DJUABLIN	4
KABADOUGOU	3
LA ME	2
LÔH-DJIBOUA	2
MARAHOUE	2
MORONOU	2
NAWA	4
N'ZI	4
PORO	2
SAN-PEDRO	2
SUD-COMOE	4
TCHOLOGO	2
TONKPI	4
WORODOUGOU	2
DISTRICT AUTONOME DE YAMOUSSOUKRO	2
Total	**94**

Source : EHCVM21, INS_CIV

4.3 NSU Component (Concumption and Production)

Data collection was conducted on a sample of 200 markets selected through reasoned choice, including 3 urban markets and 3 rural markets in each of the 31 regions and the Autonomous District of Yamoussoukro, and 5 urban markets and 3 rural markets in the Autonomous District of Abidjan. The selection of markets was carried out in collaboration with the Regional Directorates of the National Statistical Institute (INS), each in its geographical area of competence, to ensure a good representation of the country's regions.

Tableau 3 : Distribution of markets by region

Region	Number of markets
AGNEBY-TIASSA	8
BAFING	6
BAGOUE	6
BELIER	6
BERE	6
BOUNKANI	5
CAVALLY	5
DISTRICT AUTONOME D'ABIDJAN	6
FOLON	6
GBEKE	5

GBÔKLE	6
GÔH	6
GONTOUGO	5
GRANDS-PONTS	4
GUEMON	4
HAMBOL	6
HAUT-SASSANDRA	6
IFFOU	5
INDENIE-DJUABLIN	6
KABADOUGOU	6
LA ME	6
LÔH-DJIBOUA	6
MARAHOUE	6
MORONOU	6
NAWA	5
N'ZI	6
PORO	6
SAN-PEDRO	6
SUD-COMOE	6
TCHOLOGO	2
TONKPI	6
WORODOUGOU	6
DISTRICT AUTONOME DE YAMOUSSOUKRO	6
Total	**186**

Source : EHCVM21, INS_CIV

The sample for NSU production consists of all villages hosting the selected rural markets for NSU consumption. Among producer households, all possible combinations of available crop-unit pairs will be identified. This NSU production sample is supplemented by the three (3) agricultural food product aggregation centers of the OCPV located in Méagui, Kotobi, and Sinématiali.

5. Data Collection

5.1 Organization of Field Work

Household and Community Component

Data collection from households in 2021/2022 was organized into two waves, similar to 2018/2019. The survey mobilized 225 field agents for Wave 1, including 180 enumerators, 45 team leaders, 6 statistical assistants, and 12 supervisors. Data collection for the first wave took place from November 11 to December 23, 2021, and then from January 10 to February 3, 2022. Regarding the second wave, data collection occurred from April 1 to July 9, 2022. The work was organized to commence almost simultaneously across all strata and conclude around the same time.

Price Component

Data collection on prices primarily relied on INS personnel, composed of price service agents from Abidjan and Regional Directorates conducting IHPC activities only in IHPC-covered regions, as well as externally recruited individuals based on defined criteria. In total, 50 agents were deployed for price data collection, including 33 from INS and 17 external agents, organized into 25 teams.

Price data collection spanned a continuous 10-month period, starting from November 12, 2021, to September 10, 2022, covering a sample of 72 traditional markets and 4,000 points of sale. The basket of goods monitored consisted of 551 products, including 398 from non-market sources and 153 products monitored in traditional markets. Products were derived from household questionnaires and were coded to establish linkage between the two databases.

The collection focused on market and non-market products. For products sold outside markets, the initial months involved creating elemental products and collecting initial prices before compiling collection notebooks. Each agent thus created at least 2,500 elemental products. Following this stage, each team was tasked with creating at least five (5) elemental products per product in each stratum.

Regarding products sold in markets, they were collected at least twenty-two times per month per stratum. Available products were systematically collected following the established methodological approach. Market products, generally sold in non-standard units, were weighed in addition to price monitoring.

NSU Consumption Component

The survey on non-standard units involves collecting data from markets and other sales points across a sample of representative markets nationwide. Thus, data collection on non-standard units covered all 31 administrative regions of the country, as well as the Autonomous Districts of Abidjan and Yamoussoukro. The NSU data collection was conducted by 18 teams distributed nationwide, totaling 36 agents, and took place from September 2 to October 9, 2021.

Volet NSU production

5.2 Data Collection method

The Computer-Assisted Personal Interview (CAPI) technique using the "Survey Solution" (SuSo) software is employed for data collection. Three levels of control are implemented.

Firstly, field agents conduct checks directly integrated into the collection application. Secondly, team leaders review the questionnaires, executing the same checks before validating and transmitting them to headquarters. Finally, the headquarters team performs a quality control and rejection program on a set of questionnaires.

The program detects any questionnaire with potential serious errors, such as entire sections left unanswered, households without a unique head, households without any source of income, households with excessively high calorie consumption, etc. At headquarters, two options are applied: automatic rejection of the questionnaire or communication with the field team before making a decision.

6. Results of Data Collection

As previously mentioned, the data collection was conducted in two waves, with each wave covering half of the sample. Table 2 provides the distribution of the final sample, households (top row), and individuals (bottom row).

Table 4 : Number of households and individuals in the final database

Region	Category	Wave 1			Wave 2			Total
		Urban	Rural	Total	Urban	Rural	Total	
AUTONOME D'ABIDJAN	Households	530	25	555	528	12	540	1095
	Individuals	2204	115	2319	2135	35	2170	4489
HAUT-SASSANDRA	Households	107	219	326	118	213	331	657
	Individuals	462	1131	1593	485	1075	1560	3153
PORO	Households	74	165	239	133	112	245	484
	Individuals	414	744	1175	601	541	1142	2317
GBEKE	Households	149	111	260	150	112	262	522
	Individuals	677	453	1130	614	459	1073	2203
INDENIE-DJUABLIN	Households	99	114	213	102	99	201	414
	Individuals	331	525	856	445	484	929	1785
TONKPI	Households	138	122	260	106	163	269	529
	Individuals	627	545	1172	499	695	1194	2366
YAMOUSSOUKRO	Households	104	62	166	116	51	167	333
	Individuals	524	327	851	492	208	700	1551
GONTOUGO	Households	36	168	204	61	148	209	413
	Individuals	144	791	935	218	567	785	1720
SAN-PEDRO	Households	73	146	219	97	158	255	474
	Individuals	354	660	1014	356	636	992	2006
KABADOUGOU	Households	48	72	120	27	98	125	245
	Individuals	326	467	793	125	553	678	1471
N'ZI	Households	36	96	132	49	87	136	268
	Individuals	180	565	745	213	404	617	1362
MARAHOUE	Households	106	151	257	108	151	259	516

Region	Category	Wave 1			Wave 2			Total
		Urban	Rural	Total	Urban	Rural	Total	
SUD-COMOE	Individuals	491	832	1323	485	725	1210	2533
	Households	100	132	232	72	135	207	439
WORODOUGOU	Individuals	389	573	962	343	660	1003	1965
	Households	77	60	137	26	114	140	277
LÔH-DJIBOUA	Individuals	377	326	703	126	662	788	1491
	Households	91	135	226	70	162	232	458
AGNEBY-TIASSA	Individuals	445	607	1052	274	780	1054	2106
	Households	104	113	217	53	166	219	436
GÔH	Individuals	490	496	986	184	677	861	1847
	Households	120	140	260	89	159	248	508
CAVALLY	Individuals	579	645	1224	380	796	1176	2400
	Households	85	98	183	75	108	183	366
BAFING	Individuals	430	431	861	298	495	793	1654
	Households	63	61	124	13	111	124	248
BAGOUE	Individuals	351	342	693	51	598	649	1342
	Households	63	96	159	61	98	159	318
BELIER	Individuals	312	531	843	314	595	909	1752
	Households	36	125	161	63	98	161	322
BERE	Individuals	176	678	854	242	469	711	1565
	Households	53	115	168	43	124	167	335
BOUNKANI	Individuals	272	661	933	219	802	1021	1954
	Households	37	97	134	14	120	134	268
FOLON	Individuals	161	451	612	43	586	629	1241
	Households	24	108	132	12	123	135	267
GBÔKLE	Individuals	131	777	908	64	747	811	1719
	Households	50	129	179	37	135	172	351
GRANDS-PONTS	Individuals	275	682	957	198	647	845	1802
	Households	78	89	167	63	96	159	326
GUEMON	Individuals	349	437	786	290	390	680	1466
	Households	96	145	241	63	191	254	495
HAMBOL	Individuals	472	744	1216	299	853	1152	2368
	Households	25	155	180	93	84	177	357
IFFOU	Individuals	103	725	828	408	436	844	1672
	Households	44	114	158	43	116	159	317
	Individuals	185	545	730	127	498	625	1355

Region	Category	Wave 1			Wave 2			Total
		Urban	Rural	Total	Urban	Rural	Total	
LA ME	Households	85	114	199	87	109	196	395
	Individuals	345	533	878	386	403	789	1667
NAWA	Households	75	201	276	54	232	286	562
	Individuls	343	1040	1383	229	1052	1281	2664
TCHOLOGO	Households	52	132	184	75	111	186	370
	Individuals	209	761	970	398	729	1127	2097
MORONOU	Households	78	89	167	38	123	161	328
	Individuals	312	376	688	175	545	720	1408
Total	Households	2936	3899	6835	2739	4119	6858	13693
	Individuals	13457	19516	32973	11716	19802	31518	64491

Source : EHCVM2021/2022, INS-CI

The data collected on non-standard units and price surveys enabled quantification of household consumption and agricultural production. The price surveys contributed to calculating temporal and spatial deflators.

7. Datasets

7.1 Household datasets

Household databases correspond to data collected using the household questionnaire. In principle, each section of the questionnaire corresponds to a file (in Stata format). The filenames of the datasets consist of three main parts that help establish the link between the questionnaire and the Stata databases:

- The first part of the filename refers to the questionnaire section (for example, s00 for section 0, s01 for section 1, s16a for section 16a, etc.).
- The second part is "me," which indicates that these are household data (to distinguish them from community data), and it is the same for all household files.
- The third part refers to the country and the year of the survey. For example, civ2021 refers to data from Côte d'Ivoire, the 2021 edition of the survey.

For example, the file s00_me_CIV2021.dta contains data from section 0 of [country] for the 2021/2022 survey.

Each database contains variables specific to the corresponding section. Variables are named with the section number followed by the variable number. For example, s00q01 corresponds to variable q01 from section s00.

Use and data merging

In each file, the variables "cluster" (primary sampling unit) and "household" (household number) are used to identify the household and perform matching. For files with another level (individual, plot, etc.), there are additional easily identifiable variables in the databases.

Similarly, the variables "cluster" and "household" allow users to merge data from the current wave with the previous wave (EHCVM1). However, users must note that only households marked as panel in the "PanelHH" variable will have a valid value for merging with the previous wave.

In addition to the unique household identifier, each member of the households included in the survey has been assigned a unique identification number, which can be used to merge information about a specific household member across different datasets. This is referred to as the variable "s01q00a," included in the household socio-demographic characteristics module (database s01_me_CIV2021). Other datasets have been standardized to include a variable named "sXXq00a" (depending on the database being used), which refers to the respondent of the section.

7.2 Community datasets

Community databases correspond to data collected using the community questionnaire. They are constructed using the same logic. In naming these databases, the term "co" is used instead of "me". The identification variable is the cluster.

7.3 Auxiliary datasets

There are four main auxiliary databases: Price, NSU, Survey Weights, and Calories. These databases are briefly described below:

- Price. The price file is named ehcvm_prix_2021. It contains variables related to product prices. Data is collected monthly for each stratum (region/urban-rural). The main variables include:
    - Region: region of the country where data is collected
    - Urban/Rural: type of residence
    - Year: year of data collection
    - Month: month of data collection
    - Week: week number within the month
    - ProdCode: product code being collected
    - Variety: product variety under the code (a product may have multiple varieties)
    - Unit: unit of measurement
    - Weight: product weight
    - Price: product price based on the weight and unit

- NSU. The NSU file is titled ehcvm_NSU_CIV_2021. It contains variables related to conversion factors between non-standard units and standard units. Data was initially collected in 2018 and updated in 2021. The main variables include:
    - Region: region of the country where data is collected
    - Urban/Rural: type of residence
    - ProdCode: product code being collected
    - Unit: unit of measurement
    - Size: size for the unit considered
    - Weight: conversion factor to standard unit
- Survey Weights. The survey weights file is named ehcvm_ponderations_[country]2021. Weights are calculated for each household, considering the panel dimension. The variables include:
    - Cluster: primary sampling unit
    - Household: household number within the cluster
    - hhweight: household weight
- Calories. The file is named calorie_conversion_WA_2021. It allows conversion to calories per 100 grams of product for West Africa (WA). The variables include:
    - ProdCode: product code concerned
    - Refuse: percentage of waste in the product
    - Cal: calorie value per 100 grams of product

The household, community, and auxiliary databases are located in a directory (for example, "datain") with different subdirectories. The analysis databases, described below, are located in another directory (for example, "dataout").

7.4 Analysis datasets

There are four main analysis databases created for poverty analysis and other work: an individual database, a household database, a consumption database, and a database for calculating poverty indicators and other analytical work. The do-files used to create these databases are archived and accompany these files. The databases are described below.

- Individual. The individual file is titled ehcvm_individual_[country]2021. This file contains variables created for analysis purposes, either using a unique collected variable or by combining multiple variables. Given that these are analysis variables, imputations are possibly made on the original variables.
    - country: Country
    - year: Year of survey
    - hhid: Household identifier
    - cluster: Cluster number
    - household: Household number
    - panel: Panel
    - numind: Individual number
    - wave: Wave
    - zae: Agroecological zone
    - zaemil: Group (zae milieu)
    - region: Region of residence
    - department: Department of residence
    - sp_commune: Sub-prefecture or municipality of residence
    - milieu: Residence environment

    - hhweight: Household weight
    - resid: Resident
    - sexe: Gender
    - age: Age in years
    - lien: Relationship
    - mstat: Marital status
    - religion: Religion
    - ethnie: Ethnicity
    - nation: Nationality
    - agemar: Age at first marriage
    - mal30j: Health problem in the last 30 days
    - aff30j: Health issue
    - arrmal: Activity stop due to illness
    - durarr: Duration of activity stop due to illness
    - con30j: Consultation in the last 30 days
    - hos12m: Hospitalization in the last 12 months
    - couvmal: Health coverage
    - moustiq: Slept under a mosquito net last night
    - handit: Any level of disability
    - handig: Major disability alone
    - alfa: Literacy (read/write)
    - alfa2: Literacy (read/write/comprehend)
    - scol: School attendance 2020/2021
    - educ_scol: Current educational level
    - educ_hi: Highest educational level attained
    - diplome: Highest diploma
    - telpor: Has a mobile phone
    - internet: Has internet access
    - activ7j: Activity in the last 7 days
    - activ12m: Activity in the last 12 months
    - branch: Activity branch
    - sectins: Principal institutional sector of employment
    - csp: Socio-professional category of main employment
    - volhor: Annual working hours of main employment
    - salaire: Annual salary of main employment
    - emploi_sec: Secondary employment in the last 12 months
    - sectins_sec: Principal institutional sector of secondary employment
    - csp_sec: Socio-professional category of secondary employment
    - volhor_sec: Annual working hours of secondary employment
    - salaire_sec: Annual salary of secondary employment
    - bank: Has a bank account or equivalent
    - serviceconsult: Health service consulted
    - persconsult: Health personnel consulted
- Household. The household file is titled ehcvm_household_[country]2021. This file contains variables created for analysis purposes. Some household-level variables are created as in the individual file. Other variables pertain to the household head, derived from the previous file.
    - country: Country
    - hhid: Household identifier
    - cluster: Cluster

    - household: Household number in cluster
    - wave: Wave
    - logem: Housing occupation
    - mur: Walls of permanent materials
    - toit: Roof of permanent materials
    - sol: Floor of permanent materials
    - eauboi_ss: Drinking water in dry season
    - eauboi_sp: Drinking water in rainy season
    - elec_ac: Access to electricity network
    - elec_ur: Uses electricity network
    - elec_ua: Uses solar/electric group
    - ordure: Waste disposed of properly
    - toilet: Adequate toilet facilities
    - eva_toi: Feces disposed of properly
    - eva_eau: Wastewater disposed of properly
    - year: Year
    - tv: Household owns a TV
    - fer: Household owns an electric iron
    - frigo: Household owns a fridge/freezer
    - cuisin: Household has an electric/gas stove
    - ordin: Household has a computer
    - decod: Household has a decoder/antenna
    - car: Household owns a car
    - superf: Agricultural area
    - grosrum: Number of large ruminants
    - petitrum: Number of small ruminants
    - porc: Number of pigs
    - lapin: Number of rabbits
    - volail: Number of poultry
    - sh_id_demo: Idio demographic shock
    - sh_co_natu: Covariant natural shock
    - sh_co_eco: Covariant economic shock
    - sh_id_eco: Idio economic shock
    - sh_co_vio: Covariant violence shock
    - sh_co_oth: Other shocks
- Consumption. The consumption file is titled ehcvm_consumption_[country]2021. The main variable in this file is the annual consumption per product and acquisition mode.
    - cluster: Primary sampling unit
    - household: Household number in cluster
    - prodcode: Product code being collected
    - modep: Acquisition mode (purchase, self-consumption, received as gift, imputed rent, durable goods usage value)
    - depan: Annual expenditure
- Poverty. The poverty indicators file is titled ehcvm_welfare_[country]2021. This file contains variables used to calculate poverty indicators and conduct other analytical work.
    - cluster: Primary sampling unit
    - household: Household number in cluster
    - region: Region of country being surveyed
    - milieu: Residence environment
    - hhweight: Household weight

- hhsize: Household size
- pcexp: Welfare measure indicator
- zref: National poverty threshold
- hhid: Household identifier
- wave: Wave
- zae: Agroecological zone
- eqadu1: Number of FAO equivalent adults
- eqadu2: Number of alternative equivalent adults
- hgender: Gender of Household Head (HH)
- hage: Age of Household Head
- hmstat: Family status of Household Head
- hreligion: Religion of Household Head
- hnation: Nationality of Household Head
- hethnie: Ethnicity of Household Head
- halfa: Literacy (reading/writing) of HH
- halfa2: Literacy (reading/writing/comprehension) of HH
- heduc: Education of HH
- hdiploma: Diploma of HH
- hhandig: Major disability of HH
- hactiv7j: Activity in the last 7 days of HH
- hactiv12m: Activity in the last 12 months of HH
- hbranch: Activity branch of HH
- hsectins: Institutional sector of main employment of HH
- hcsp: Socio-professional category of HH
- dali: Annual food consumption of household
- dnal: Annual non-food consumption of household
- dtot: Total annual consumption of household
- pcexp: Welfare indicator
- def_spa: Spatial deflator
- def_temp: Temporal deflator

Appendix

Liste des bases de données

Questionnaire	Dataset name	Description
Section 0	s00_me_civ_2021	Household identification
Section 1	s01_me_civ_2021	Socio-demographic characteristics of household members
Section 2	s02_me_civ_2021	Education of household members
Section 3	s03_me_civ_2021	Health of household members
Section 4	s04a_me_civ_2021	Employment status
	s04b_me_civ_2021	Primary employment
	s04c_me_civ_2021	Secondary employment

Questionnaire	Dataset name	Description
Section 5	s05_me_civ_2021	Income outside employment
Section 6	s06_me_civ_2021	Savings and credit
Section 7	s07a_1_me_civ_2021	Meals taken outside the household by each household member
	s07a_2_me_civ_2021	Meals taken outside the household by several members or all household members
	s07b_me_civ_2021	Food consumption
Section 8	s08a_me_civ_2021	Food security (FIES)
Section 9	s09a_me_civ_2021	Expenditure on ceremonies and celebrations
	s09b_me_civ_2021	Non-food expenditures in the last 7 days
	s09c_me_civ_2021	Non-food expenditures in the last 30 days
	s09d_me_civ_2021	Non-food expenditures in the last 3 months
	s09e_me_civ_2021	Non-food expenditures in the last 6 months
	s09f_me_civ_2021	Non-food expenditures in the last 12 months
Section 10	s10a_me_civ_2021	Existence of a non-agricultural enterprise
	s10b_me_civ_2021	Characteristics of non-agricultural enterprises
Section 11	s11_me_civ_2021	Housing characteristics
Section 12	s12_me_civ_2021	Household assets
Section 13	s13_1_me_civ_2021	Identification of households receiving at least one transfer
	s13_2_me_civ_2021	Transfers received by the household
Section 14	s14a_me_civ_2021	Covid-19 and its impact on households
	s14b_me_civ_2021	Other shocks and survival strategies
Section 15	s15_me_civ_2021	Safety nets
Section 16	s16a_me_civ_2021	Fields and plots
	s16b_me_civ_2021	Cost of inputs
	s16c_me_civ_2021	Crops
	s16d_me_civ_2021	Use of production
Section 17	s17_me_civ_2021	Livestock
Section 18	s18_1_me_civ_2021	Identification of households engaged in fishing
	s18_2_me_civ_2021	Characteristics of households engaged in fishing
	s18_3_me_civ_2021	Characteristics of households engaged in fishing
Section 19	s19_me_civ_2021	Agricultural equipment
Section 20	s20a_me_civ_2021	Subjective poverty
	s20b_1_me_civ_2021	Governance
	s20b_2_me_civ_2021	Governance
	s20b_3_me_civ_2021	Governance
	s20c_me_civ_2021	Peace and security