

REPUBLIC OF MALI

One People – One Goal – One Faith

MINISTRY OF ECONOMY AND FINANCE

NATIONAL INSTITUTE OF STATISTICS (INSTAT)

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

HOUSEHOLD LIVING CONDITIONS SURVEYS (EHCVM)

**BASIC INFORMATION DOCUMENT
FOR THE SECOND EDITION**

July 2023



SUMMARY

1. Introduction	3
2. Survey Characteristics	5
3. Data Collection Instruments	6
3.3. The Price Questionnaire	9
3.4. The Non-Standard Units Questionnaire	9
4. Sampling.....	10
5. Data collection	13
6. Results of the data collection	15
7. Databases	16
7.3. Auxiliary Databases	17
7.4. Analysis Databases.....	18
ANNEXES.....	22

1. Introduction

Context

The Harmonized Survey on Household Living Conditions (EHCVM) is a joint initiative of the UEMOA Commission and the World Bank. It is conducted under the Program for the Harmonization and Modernization of Surveys on Household Living Conditions within UEMOA member states (PHMECV). The Program aims to support the UEMOA Commission in strengthening the capacities of its member states to carry out household living condition surveys that meet harmonized regional standards and to make the collected microdata accessible to the public. The specific objectives include producing indicators on poverty and living conditions, and creating harmonized databases that allow for analyses to inform public policies.

The beneficiaries are the eight UEMOA member countries: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo. Besides the PHMECV beneficiary countries, Cameroon, Chad, Guinea, and Congo have also conducted a similar survey using the same methodologies and participated in various technical activities. The first edition of the survey took place in 2018/2019, and the second, 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 between the National Institutes of Statistics (INS), the UEMOA Commission, and the World Bank. BCEAO, BOAD, and AFRISTAT also supported the process. The INS were central to the process at all stages (design, preparation, data collection, data processing, and analysis).

Funding

The program is funded by the World Bank through a grant of \$40.5 million to the UEMOA Commission. For Mali, the funding amounts to \$4.4 million.

Technical Assistance

The UEMOA Commission and the World Bank provided technical assistance to the INS throughout the project implementation. The 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. They also supported the modernization process in the collection (CAPI) and methodological phases (e.g., the introduction of the panel dimension in the second edition).

Document Organization

This document is designed to provide the necessary information to understand the data from the second edition of the Harmonized Survey on Household Living Conditions (EHCVM 2). It consists of seven parts. After the introduction, the next section presents the characteristics of the survey. The survey instruments are discussed in section 3, and sampling issues are addressed in section 4. Then, the document describes

the organization of fieldwork in section 5, presents the main results of the data collection in section 6, and describes the databases in section 7.

2. Survey Characteristics

2.1. Household and Community Components

The household and community components of the survey are organized into two waves. Each wave covers half of the sample clusters and half of the sample households. Organizing the work into two waves allows for accounting for seasonal variations in consumption throughout the year. Each wave of the survey was preceded by an enumeration phase that identified the households from the first edition. The data collection for the first wave took place from October 24 to December 24, 2021. As for the second wave, the data collection phase occurred from April 11 to July 24, 2022.

2.2. Price Component

The price component is organized differently, with data collected monthly throughout the entire duration of the survey, including the break period between the two waves. Price data were collected from December 2021 to September 2022.

2.3. Non-Standard Units (NSU) Component

The non-standard units (NSU) component is designed to produce factors to convert the non-standard consumption units used in households (e.g., heap, bowl, cob) into standard units (kilogram, liter). Information on NSUs was collected during the 2018/2019 episode, and the conversion factors produced then remain valid. Therefore, it was not necessary to conduct another data collection for this component. However, a supplementary collection was conducted to complete some missing units, which took place from June 14 to 15, 2021.

Additionally, to better quantify household agricultural production, it was useful to conduct a survey on Agricultural Non-Standard Units, which was carried out from November 9 to 23, 2022.

3. Data Collection Instruments

The survey has 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 collects information at both the household and individual levels. The sections to be filled out at the household level include: control section, food consumption, food security, non-food expenditures, existence of agricultural enterprises, housing, household assets, monetary transfers, shocks, safety nets, agriculture, livestock, fishing, agricultural equipment, subjective poverty. The sections that gather individual-level information are: sociodemographic characteristics of household members, education, health, employment, non-employment income, savings, characteristics of non-agricultural enterprises. The content of the household questionnaire is detailed below:

- **Cover Page:** Contains information on the identification and geospatial location of the household. This section also records basic information about the head of the surveyed household.
- **Section 0: Household Identification and Control Information:** This section provides detailed geographical location information of the household, including the GPS coordinates of the household. It also records data on the conduct of the interview, visit dates and the language of the interview.
- **Section 1: Sociodemographic Characteristics of Household Members:** Pertains to all household members. Lists the individuals in the household and provides sociodemographic characteristics such as relationship to the household head, age, marital status, religion, residence status, nationality, ethnicity, survival of parents, education level, occupation and industry of parents, etc.
- **Section 2: Education (Individuals Aged 3 and Older):** Pertains to individuals aged three and older. Contains variables to record literacy, schooling, and education level. Provides information on the individual's educational journey, including difficulties faced and expenses incurred.
- **Section 3: General Health:** Recorded for all household members. Provides information on major health issues and consultations that household members had in the 30 days prior to the interviewer's visit. Addresses main constraints and difficulties regarding quality and access to health services. Also covers consultations and health expenditures of the last three months, hospitalizations, and expenditures of the twelve months preceding the survey, and disabilities for those aged 5 and older.
- **Section 4: Employment:** Dedicated to household members aged 5 and older. Contains three subsections: labor market participation, main employment, and secondary employment.
 - **Part A: Activity Status (Individuals Aged 5 and Older):** Gathers information on labor market participation for individuals aged 5 and older, focusing on their activities in the 7 days preceding the interview and job search efforts in the 30 days prior.
 - **Part B: Main Employment in the Last 12 Months (Individuals Aged 5 and Older):** Concerns individuals who worked in the last 12 months and collects information on the main employment's characteristics.
 - **Part C: Secondary Employment in the Last 12 Months (Individuals Aged 5 and Older):** Focuses on secondary employment held in the last 12 months, for individuals who had such employment.

- **Section 5: Non-Employment Income:** Collects information on non-employment income for individuals aged 15 and older, exploring pensions, public transfers, rents, and other financial and asset incomes. Private transfers are covered in Section 13.
- **Section 6: Savings and Credit (Individuals Aged 15 and Older):** Collects data on access to financial institutions and prepaid services, savings, loans or credits taken, repayments made, and upcoming payment schedules for household members aged 15 and older.
- **Section 7: Meals Taken Outside the Household in the Last 7 Days:** Collects data on food consumption. It has two parts: meals taken outside (by consumption post) and consumption within the household (by item).
 - **Part A: Meals Taken Outside the Household:** Records information on meals consumed by household members in the seven days prior to the interview.
 - **Part B: Food Consumption in the Last 7 Days and Purchases in the Last 30 Days:** Collects information on items consumed within the household in the seven days prior to the interview, including quantities consumed, mode of acquisition, and last purchase details if the item was bought in the last 30 days.
- **Section 8: Food Security:** Contains information on the household's ability to ensure food security for its members, based on the FAO's FIES approach. Basic food security questions cover the 12 months preceding the interview.
- **Section 9: Retrospective Household Food and Non-Food Expenditures:** Includes six subsections covering most non-food expenditures, except for phone credit top-ups (Section 1), education (Section 2), health (Section 3), and housing (Section 11).
 - **Part A: Expenditures for Festivities and Ceremonies in the Last 12 Months:** Provides information on expenditures for celebrations such as religious festivals, weddings, funerals, baptisms, etc., organized by the household.
 - **Part B: Non-Food Expenditures in the Last 7 Days:** Provides information on frequent non-food expenditures, similar to food expenditures.
 - **Part C: Non-Food Expenditures in the Last 30 Days:** Provides information on expenses for items like alcoholic beverages, domestic gas, and domestic staff wages.
 - **Part D: Non-Food Expenditures in the Last 3 Months:** Provides information on expenses for items like intercity transport, entertainment, postal services, gardening, pet care, etc.
 - **Part E: Non-Food Expenditures in the Last 6 Months:** Provides information on expenses for clothing and shoes purchased outside of celebrations.
 - **Part F: Non-Food Expenditures in the Last 12 Months:** Relates to annual or less frequent expenses like housing investment, repairs, international travel, acquisition of durable goods, etc.
- **Section 10: Non-Agricultural Enterprises:** Pertains to non-agricultural enterprises owned by the household.
 - **Part A: Existence of Non-Agricultural Enterprises:** Indicates whether the household owns at least one non-agricultural enterprise.
 - **Part B: Characteristics of Non-Agricultural Enterprises:** Collects detailed information on non-agricultural enterprises owned by the household.
- **Section 11: Housing Characteristics:** Pertains to household housing characteristics, including materials used for the roof, floor, and walls, and amenities like electricity, water, sanitation, toilets, etc. Also details housing expenditures (rent, water bills, electricity bills, landline phone bills, etc.).
- **Section 12: Household Assets:** Provides information on durable household goods, including appliances, furniture, means of transportation, etc. Records the number of each item possessed, age, acquisition value, and replacement cost for the last acquired item.

- **Section 13: Transfers Received by the Household:** Collects information on transfers received from other households, detailing the sender's characteristics, reason for the transfer, transaction channel, and amount received.

Note: Unlike the first edition, the subsection on issued transfers (13B) is not included.

- **Section 14: Shocks and Survival Strategies:** Records information on shocks experienced by the household. Contains two parts:
 - **Part A: COVID-19 and Impact on Households:** The subsection relates to the shocks directly linked to the Covid-19 pandemic that emerged in 2020. It focuses on the potential shocks (illness, reduction in working hours, decrease in transfers, etc.) that occurred within households. Furthermore, it considers the resilience of households in the face of these shocks.
 - **Part B: Other Shocks and Survival Strategies:** Relates to employment, income, health, natural disasters, etc. Provides detailed information on the impact of shocks and strategies used to mitigate their effects.
- **Section 15: Safety Nets:** Records information on access to social security programs like food distribution and free health care for children and pregnant women. Collects data on the type and frequency of aid received, beneficiaries within the household, and challenges faced in receiving aid.
- **Section 16: Agriculture:** Pertains to household agricultural activities, containing four subsections:
 - **Part A: Fields and Plots:** Records characteristics of plots cultivated by the household, including the identity of the farmer, plot size, crops, land use, labor, and inputs used.
 - **Part B: Cost of Inputs:** Provides information on the cost of inputs used by the household, quantity used, and source of supply.
 - **Part C: Crops:** Lists crops grown on household plots and collects information on harvests for each crop.
 - **Part D: Use of Production:** Covers the use of production (consumption, sale, stock) for each crop.
- **Section 17: Livestock:** Pertains to livestock activities within the household, recording information on the number of animals owned, operating costs, and sales of livestock products (animals, meat, milk, eggs, and other by-products).
- **Section 19: Agricultural Equipment:** Identifies equipment owned by the household for agricultural, livestock, and fishing activities, recording age, acquisition value, and current estimated value.
- **Section 20: Subjective Poverty:** Provides information on themes related to monetary poverty and living conditions, capturing household perceptions of their living standards.

3.2. Community Questionnaire

This instrument collects essential information about local communities through focus groups in the village/neighborhood where the cluster is located. It contains four main sections that gather general data on the community, basic social infrastructure, agricultural activity, and community participation.

- **Cover Page:** Contains geospatial location information of the cluster and basic information about the village/neighborhood head.
- **Section 0: List of Respondents:** Lists individuals who provided community information and records their sociodemographic characteristics: sex, age, role in the community, years living in the community, and education level.

- **Section 1: General Characteristics of the Neighborhood/Village.** This section collects sociodemographic, economic, geographical information, and data on living conditions at the community level. This information includes population size, languages spoken, topography, distance from the nearest town, accessibility, associative organization, access to electricity, potable water, and mobile phone networks.
- **Section 2: Existence and Accessibility of Social Services.** This section pertains to the existing social infrastructure in the village/neighborhood. For each infrastructure, the questionnaire gathers information on accessibility in terms of transportation means to reach the infrastructure, the time required to travel between the village/neighborhood and the infrastructure, and any problems encountered when using the service.
- **Section 3: Agriculture.** This section provides information on the agricultural activity in the village/neighborhood. It collects data on the crops grown, the existence of agricultural cooperatives, access to agricultural equipment, and the potential use of improved agricultural techniques.
- **Section 4: Community Participation.** This subsection gathers 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. The Price Questionnaire

The price component is designed to collect price data from a sample of markets. Data collection is carried out monthly at sales points in selected localities. In each region, at least two localities are selected (one urban and one rural). The sales points include markets, stores, supermarkets, etc. The price questionnaire allows for the recording of prices for both food and non-food consumer goods, using the consumption modules nomenclature from the household questionnaire.

- **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. The Non-Standard Units Questionnaire

This questionnaire includes a cover page and three sections.

- **Cover Page:** Contains information related to the identification and geospatial location of the market. This section also records the name of the market and the number of visits made to the market.
- **Section 0:** Control information. This section provides data on the geographic location and the operating days of the market.
- **Section 1:** Recording of weights and prices of non-standard units of consumption. For each combination of product-unit-size of the non-standard unit, the consumer product is weighed, and the corresponding weight in kilograms is recorded.

- **Section 2:** Recording of weights and prices of non-standard units of production. For each combination of product-unit, the agricultural product is weighed, and the corresponding weight in kilograms is recorded.

4. Sampling

4.1. Household and Community Sampling

Sampling Frame

The sampling frame for the 2018/2019 survey is based on the 2009 general population and housing census (RGPH). In 2021/2022, an enumeration was conducted in the same clusters.

Sampling Plan

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

The 2018/2019 survey sample was drawn using a two-stage stratified sampling plan. The stratum is the combination of region and residence area. In each stratum, clusters (primary sampling units) were chosen with a 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.

Table 1: Distribution of the Initial Sample of Clusters

Region	Wave 1			Wave 2			Total
	Urban	Rural	Total	Urban	Rural	Total	
Kayes	12	21	33	11	21	32	65
Koulikoro	10	20	30	9	23	32	62
Sikasso	14	18	32	12	24	36	68
Ségou	9	20	29	11	21	32	61
Mopti	12	10	22	10	24	34	56
Tombouctou	8	15	23	10	17	27	50
Gao	11	18	29	13	19	32	61
Kidal	6	2	8	7	12	19	27
Bamako	31		31	32		32	63
Total	113	124	237	115	161	276	513

The 2018/2019 sample was designed to provide precision on the variable of interest, which is the annual consumption per person. For a sample size of 6,708 households, the relative error was 2.2% at the national level and varied from 4.2% to 8.7% for the regions.

In 2021/2022, the strategy is to revisit the same clusters. This involves either surveying the 12 households from 2018/2019 if they are found (after the enumeration phase), or surveying the found households and completing the sample to 12 in clusters where fewer households are found during the enumeration phase

(either because there were fewer than 12 households in the final 2018/2019 database or because some households were not found).

Table 2: Distribution of the Initial Household Sample

Region	Wave 1			Wave 2			Total	Relative error
	Urban	Rural	Total	Urban	Rural	Total		
Kayes	144	252	396	132	252	384	780	4,6
Koulikoro	120	240	360	108	276	384	744	5,2
Sikasso	168	216	384	144	288	432	816	5,6
Ségou	108	240	348	132	252	384	732	5
Mopti	144	120	264	120	288	408	672	4,2
Tombouctou	96	179	275	120	204	324	599	6,7
Gao	132	216	348	156	228	384	732	8,7
Kidal	68	16	84	84	144	228	312	4,7
Bamako	372		372	384		384	756	8,4
Total	1 352	1 479	2 831	1 380	1 932	3 312	6 143	2,2

Note: For the regions of Kidal and Timbuktu, an additional sample was added to include rural Kidal and Taoudeni in the survey. The relative error in Table 1 concerns the initial sample.

4.1. Price Component

The selection of markets was made through reasoned choice. In each region, one market in an urban area and one in a rural area were selected as observation points for the prices of homogeneous products. In total, the number of selected markets is: Each market will be visited once a week for two surveys per product. In rural areas, the largest weekly market should be considered for two product surveys and one visit to the rural market every 15 days. For each heterogeneous product, at least four surveys are conducted each month (equivalent to one survey per week of collection). These products are observed and surveys are conducted at points of sale (shops, supermarkets, etc.). Identification work for these points of sale has been conducted in all regions.

Table 3: Distribution of the initial sample of markets by region and residential area

Region	Number of markets		Total
	Urban	Rural	
Kayes	4	4	8
Koulikoro	4	4	8
Sikasso	4	4	8
Ségou	4	4	8
Mopti	4	4	8
Tombouctou	4	4	8
Gao	4	4	8
Kidal	4	4	8

Bamako	4		4
Total	36	32	68

4.2. NSU Component

The sampling for the NSU (Non-Sampling Unit) consumption component follows the same stratification as in the previous edition. Market selection was done by reasoned choice. The localities to be visited were identified to ensure adequate national coverage by locality and region. Each locality of each region will constitute a stratum. Thus, a total of 45 markets were selected for this additional collection.

Table 4: Distribution of the sample of markets by region and by locality

Region	Urban	Rural	Total
Kayes	3	3	6
Koulikoro	3	3	6
Sikasso	3	3	6
Ségou	3	3	6
Mopti	3	3	6
Tombouctou	3	3	6
Gao	3	3	6
Bamako	3		3
Total	24	21	45

Furthermore, another survey focused on non-standard units for agricultural production. Indeed, during the first edition of the survey, shortcomings were observed in estimating agricultural yields and incomes. It was therefore decided to conduct a survey on non-standard units of agricultural production during the second edition. Thus, Mali conducted a survey on non-standard measurement units for agricultural production alongside the household survey data collection. The survey took place only in rural areas, specifically in 4 villages per region. Within these villages, certain farmers were selected based on the crops they cultivate for data collection.

Table 5: Distribution of the initial sample of Number of Villages (NSU agricultural production)

Region	Total general
	Rural
Kayes	4
Koulikoro	4
Sikasso	4
Ségou	4
Mopti	4
Tombouctou	4
Total	24

However, units for certain crops lacked observations for robust conversion factor calculations. It was therefore recommended to conduct an agricultural NSU survey as a supplement to the household survey conducted during the main survey data collection. To achieve this, data collection was based on a list of crop units - state by region that lacked observations across all relevant regions (Kayes, Koulikoro, Sikasso, Ségou, Mopti, and Timbuktu.).

5. Data collection

5.1. Organization of Field Work

Household and Community Component

The enumeration for the 2021/2022 EHCVM was organized in two stages, as in 2018/2019. The first wave of enumeration took place from September 2 to 27, 2021, involving 32 field agents, including 16 mapping agents and 16 enumerators. Compared to the second wave, enumeration occurred from February 23 to March 24, 2022, with the same number of field agents involved.

Data collection from households in 2021/2022 was organized in two waves, similar to 2018/2019. The first wave data collection occurred from October 24 to December 24, 2021, mobilizing 96 field agents, including 72 interviewers and 24 supervisors/team leaders. The second wave took place from April 11 to July 24, 2022, involving 80 field agents, including 60 interviewers and 20 supervisors/team leaders. The work was organized to start almost simultaneously in all strata and to finish almost at the same time.

Price Component

The price data collection was organized differently, with data collected monthly throughout the data collection period, including during the break between the two waves. Price data was collected from December 2021 to September 2022, involving 17 IHPC data collection agents for field work.

NSU Component

Information on NSUs was collected during the 2018/2019 survey, and the produced conversion factors remain valid. In addition to the conversion factors from the first edition, supplementary collection work was conducted from June 20 to July 10, 2021, mobilizing 12 data collection agents to supplement the product list.

Non-standard units of agricultural production (NSU-Production) provide conversion factors and also aid in estimating yields and agricultural incomes for the EHCVM. Collection work was conducted from November 9 to 23, 2022, involving 18 data collection agents.

5.2. Data Collection Method

The Computer-Assisted Personal Interview (CAPI) technique using "Survey Solution" (SuSo) software is employed for all data collection components.

For household, community, and NSU components, three levels of control are implemented. First, enumerators conduct checks directly integrated into the data collection application. Second, team leaders review 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.

For the price component, the program detects any questionnaire with potential serious errors, such as entire sections left blank, units and sizes not filled in, products not collected in the market, etc. At headquarters, two options are applied: automatic rejection of the questionnaire or exchange with the field team before making a decision.

For the NSU component (consumption and agricultural production), the program detects any questionnaire with potential serious errors, such as entire sections left blank, units and sizes not filled in, products not collected in the market, crops not found in the locality, etc. Similar options are applied at headquarters for decision-making.

6. Results of the data collection

As previously indicated, the data was collected in two waves, with each wave covering half of the sample. Table 2 shows the distribution of the final sample, households, and individuals.

Table 6: Number of households and individuals in the final database

Regions		Wave 1			Wave 2			Total
		Urbain	Rural	Total	Urbain	Rural	Total	
Kayes	Household	144	252	396	132	252	384	780
	Individuals	978	1832	2 810	870	1719	2 589	5 399
Koulikoro	Household	120	240	360	108	276	384	744
	Individuals	916	2101	3 017	808	2336	3 144	6 161
Sikasso	Household	168	216	384	144	288	432	816
	Individuals	1413	2285	3 698	1134	2529	3 663	7 361
Ségou	Household	108	240	348	132	252	384	732
	Individuals	798	2148	2 946	793	1832	2 625	5 571
Mopti	Household	144	120	264	120	288	408	672
	Individuals	943	728	1 671	760	1718	2 478	4 149
Tombouctou	Household	96	179	275	120	204	324	599
	Individuals	585	1045	1 630	683	1073	1 756	3 386
Gao	Household	132	216	348	156	228	384	732
	Individuals	856	1276	2 132	1019	1375	2 394	4 526
Kidal	Household	68	16	84	84	144	228	312
	Individuals	284	42	326	431	687	1 118	1 444
Bamako	Household	372		372	384		384	756
	Individuals	2721		2 721	2754		2 754	5 475
Total	Household	1 352	1 479	2 831	1 380	1 932	3 312	6 143
	Individuals	9 494	11 457	20 951	9 252	13 269	22 521	43 472

7. Databases

7.1. Household Databases

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 (e.g., s00 for section 0, s01 for section 1, s16a for section 16a, etc.).
- The second part is "me," which indicates that it pertains to household data (to distinguish it from community data), and it remains the same for all household files.
- The third part refers to the country and the survey year. For example, mli_2021 refers to Mali's data for the 2021 survey edition.

For example, the file s00_me_mli_2021.dta contains data from section 0 for Mali in the 2021/22 survey edition.

Each database contains variables specific to the respective section. Variables are named using the section number and the variable number. For example, s00q01 corresponds to variable q01 in section s00.

Data Use and Integration

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

Similarly, variables s00q07f1 and s00q07f2, representing cluster and household for EHCVM1 survey, allow users to merge data from this wave with the previous wave. However, users should note that, for the panel component, only EHCMV2 panel households have valid values and can be merged with the previous wave.

Similar to the unique household identifier, each member of the households included in the survey was assigned a unique identification number that can be used to merge information about a specific member of the household across different datasets. This is represented by the variable "s01q00a" included in the household socio-demographic characteristics module (database s01_me_MLI2021). Other databases have been harmonized to include a variable named "sXXq00a" (depending on the database used) referring to the respondent of the section, enabling merging to import respondent's personal characteristics across different databases.

7.2. Community Databases

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

7.3. Auxiliary Databases

There are four main auxiliary databases: Prices, NSU (Non-Standard Units), Survey Weights, and Calories. These databases are briefly described below:

- **Prices:** The price file is named ehcv_m_prix_mli_2021. The price file contains variables related to product prices. Data is collected monthly for each stratum (region/urban-rural). The main variables are as follows:
 - Region: region of the country where data is collected
 - Urban/Rural: residence area
 - Year: collection year
 - Month: collection month
 - Week: week number within the month
 - ProdCode: product code being collected
 - Variety: product variety under the code (a product can have multiple varieties)
 - Unit: measurement unit
 - Weight: product weight
 - Price: product price according to the weight and unit involved
- **NSU:** The consumption NSU file is titled ehcv_m_NSU_mli_2021. This file contains variables related to conversion factors between non-standard units and standard units. Data was collected in 2018 and updated in 2021. The main variables are:
 - Region: region of the country where data is collected
 - Urban/Rural: residence area
 - ProdCode: product code being collected
 - Unit: measurement unit
 - Size: size for the considered unit
 - Weight: conversion factor to standard unit
- **Survey Weights:** The weights file is named ehcv_m_ponderations_mli_2021. Weights are calculated for each household, taking into account the panel dimension. The variables are as follows:
 - Cluster: primary sampling unit
 - Household: household number within the cluster
 - hhweight: household weight
- **Calories:** The file is titled calorie_conversion_WA_2021. The file allows conversion to calories for 100 grams of product, for West Africa (WA). The variables are as follows:
 - ProdCode: product code in question
 - Refuse: percentage of waste in the product
 - Cal: calorie value for 100 grams of product

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

7.4. Analysis Databases

Four main databases are 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 ehcv_m_individu_mli_2021. This file contains variables created for analysis work, either using a single collected variable or combining multiple variables. Since these are analysis variables, imputations are occasionally made on the starting variables. The variables contained in the database are described below:
 - country: Country
 - year: Survey year
 - wave:
 - hhid: Household identifier
 - cluster: Cluster number
 - household: Household number
 - numind: Individual number
 - zae: Agroecological zone
 - region: Residence region
 - prefecture: Residence prefecture
 - commune: Residence commune
 - milieu: Residence area
 - hhweight: Household weighting
 - resid: Resident
 - sexe: Gender
 - age: Age in years
 - lien: Kinship link
 - mstat: Family situation
 - religion: Religion
 - ethnies: Ethnicity
 - nation: Nationality
 - agemar: Age at first marriage
 - mal30j: Health issue in last 30 days
 - aff30j: Health problem
 - arrmal: Activity stopped due to illness
 - durarr: Duration of activity stop due to illness
 - con30j: Consultation in last 30 days
 - hos12m: Hospitalization in last 12 months
 - couvma: Health coverage
 - moustiq: Slept under mosquito net last night
 - handit: Disability at any level
 - handig: Major disability alone
 - alfa: Literacy read/write
 - alfa2: Literacy read/write/understand
 - scol: School attendance 2020/21
 - educ_scol: Current education level
 - educ_hi: Highest education level attained
 - diplome: Highest diploma

- telpor: Individual has mobile phone
- internet: Individual has internet access
- activ7j: Activity status in last 7 days
- activ12m: Activity status in last 12 months
- branch: Activity branch
- sectins: Institutional sector primary employment
- csp: Primary employment CSP
- volhor: Annual work hours primary employment
- salaire: Annual salary primary employment
- emploi_sec: Has secondary employment 12 months
- sectins_sec: Institutional sector secondary employment
- csp_sec: Secondary employment CSP
- volhor_sec: Annual work hours secondary employment
- salaire_sec: Annual salary secondary employment
- bank: Bank account or other
- s02q14: What level of education did %rosteritle% attend during the year?
- s02q29: What is the highest level of education attained by %rosteritle%?
- s02q31: What was the last class attended by %rosteritle% in that level?
- **Household:** The household file is titled ehcv_m_menage_mli_2021. This file contains variables created for analysis work. Some household-level variables are created as in the individual file. Other variables relate to the household head, in which case they are drawn from the previous file.
 - country: Country
 - hhid: Household identifier
 - year: Years
 - cluster: Cluster
 - household: Household number
 - wave: Wave
 - s00q07d: 0.07d. Was the household interviewed during the household survey in 2018/2019?
 - logem: Housing occupancy
 - mur: Wall material
 - toit: Roof material
 - sol: Floor material
 - eauboi_ss: Drinking water dry season
 - eauboi_sp: Drinking water rainy season
 - elec_ac: Access to electrical network
 - elec_ur: Uses electrical network
 - elec_ua: Uses solar/electric group
 - ordure: Waste disposed of properly
 - toilet: Sanitary toilets
 - eva_toi: Excreta disposed of properly
 - eva_eau: Wastewater disposed of properly
 - s11q33: 11.33. Is the household connected to an electrical network?
 - s11q37: 11.37. What is the main source of lighting in the housing?
 - tv: Household has TV
 - fer: Household has electric iron
 - frigo: Household has fridge/freezer
 - cuisin: Household has electric/gas stove
 - ordin: Household has computer

- decod: Household has decoder/antenna
- car: Household has 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 ehcv_m_conso_mli_2021. The main variable in this file is annual consumption per product and acquisition mode.
 - cluster: Primary sampling unit
 - household: Household number within cluster
 - prodcod: Product code collected
 - modep: Acquisition mode (purchase, self-consumption, received donation, imputed rent, durable goods usage value)
 - depan: Annual expenditure
- **Poverty:** The consumption file is titled ehcv_m_welfare_mli_2021. The file contains variables for calculating poverty indicators and conducting other analytical work.
 - country: Country
 - year: Survey year
 - hhid: Household identifier
 - cluster: Cluster number
 - household: Household number
 - wave: Wave
 - zae: Agroecological zone
 - region: Residence region
 - milieu: Residence area
 - hhweight: Household weighting
 - hhsize: Household size
 - eqadu1: FAO adult-equivalents
 - eqadu2: Alternative adult-equivalents
 - hgender: Gender of household head
 - hage: Age of household head
 - hmstat: Family situation of household head
 - hreligion: Religion of household head
 - hnation: Nationality of household head
 - hethnie: Ethnicity of household head
 - halfa: Household head literacy read/write
 - halfa2: Household head literacy read/write/understand
 - heduc: Education of household head
 - hdiploma: Diploma of household head
 - hhandig: Major disability of household head
 - hactiv7j: Activity of household head in last 7 days

- hactiv12m: Activity of household head in last 12 months
- hbranch: Activity branch of household head
- hsectins: Institutional sector of primary employment of household head
- hcsp: CSP of primary employment of household head
- dali: Annual household food consumption
- dnal: Annual household non-food consumption
- dtot: Annual total household consumption
- pcexp: Well-being indicator
- zzae: Agroecological zone
- zref: National poverty threshold
- def_spa: Spatial deflator
- def_temp: Temporal deflator

ANNEXES

List of databases

Questionnaire	Database name	Description
Section 0	s00_me_mli_2021	Household identification
Section 1	s01_me_mli_2021	Socio-demographic characteristics of household members
Section 2	s02_me_mli_2021	Education of household members aged 3 years and older
Section 3	s03_me_mli_2021	Health of household members
Section 4	s04a_me_mli_2021	Employment status of household members aged 5 years and older
	s04b_me_mli_2021	Primary employment of household members aged 5 years and older
	s04c_me_mli_2021	Secondary employment of household members aged 5 years and older
Section 5	s05_me_mli_2021	Non-employment income of household members aged 15 years and older
Section 6	s06_me_mli_2021	Savings and credit of household members aged 15 years and older
Section 7	s07a_1_me_mli_2021	Meals eaten outside the household by each household member
	s07a_2_me_mli_2021	Meals eaten together outside the household by at least two household members
	s07b_me_mli_2021	Food consumption in the last 7 days
Section 8	s08a_me_mli_2021	Food security according to the FAO's FIES approach
Section 9	s09a_me_mli_2021	Expenditure on ceremonies and festivities
	s09b_me_mli_2021	Non-food expenditures in the last 7 days
	s09c_me_mli_2021	Non-food expenditures in the last 30 days
	s09d_me_mli_2021	Non-food expenditures in the last 3 months
	s09e_me_mli_2021	Non-food expenditures in the last 6 months
	s09f_me_mli_2021	Non-food expenditures in the last 12 months
Section 10	s10a_me_mli_2021	Existence of a non-agricultural enterprise
	s10b_me_mli_2021	Characteristics of non-agricultural enterprises
Section 11	s11_me_mli_2021	Housing characteristics
Section 12	s12_me_mli_2021	Household assets
Section 13	s13_1_me_mli_2021	Identification of households receiving at least one transfer
	s13_2_me_mli_2021	Transfers received by the household
Section 14	s14a_me_mli_2021	Covid-19 and its impact on households
	s14b_me_mli_2021	Other shocks and survival strategies
Section 15	s15_me_mli_2021	Safety nets
Section 16	s16a_me_mli_2021	Fields and plots
	s16b_me_mli_2021	Cost of inputs
	s16c_me_mli_2021	Crops
	s16d_me_mli_2021	Use of production
Section 17	s17_me_mli_2021	Livestock
Section 19	s19_me_mli_2021	Agricultural equipment
Section 20	s20a_me_mli_2021	Subjective poverty