

Food Insecurity Experience Scale 2024

Food and Agriculture Organization of the United Nations

report_generated_on: August 6, 2025

visit_data_catalog_at: <http://catalog.ihsn.org/>

Identification

SURVEY ID NUMBER

PRT_2024_FIES_v01_M_v01_A_ESS

TITLE

Food Insecurity Experience Scale 2024

ABBREVIATION OR ACRONYM

FIES 2024

COUNTRY

Name	Country code
Portugal	PRT

STUDY TYPE

Socio-Economic/Monitoring Survey [hh/sems]

ABSTRACT

Sustainable Development Goal (SDG) target 2.1 commits countries to end hunger, ensure access by all people to safe, nutritious and sufficient food all year around. Indicator 2.1.2, "Prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (FIES)", provides internationally-comparable estimates of the proportion of the population facing difficulties in accessing food. More detailed background information is available at <https://www.fao.org/measuring-hunger/en>.

The FIES-based indicators are compiled using the FIES survey module, containing eight questions. Two indicators can be computed:

1. The proportion of the population experiencing moderate or severe food insecurity (SDG indicator 2.1.2),
2. The proportion of the population experiencing severe food insecurity.

These data were collected by FAO through the Gallup World Poll. General information on the methodology can be found here: <https://www.gallup.com/178667/gallup-world-poll-work.aspx>. National institutions can also collect FIES data by including the FIES survey module in nationally representative surveys.

Microdata can be used to calculate the indicator 2.1.2 at national level. Instructions for computing this indicator are described in the methodological document available in the downloads tab. Disaggregating results at sub-national level is not encouraged because estimates will suffer from substantial sampling and measurement error.

KIND OF DATA

Sample survey data [ssd]

UNIT OF ANALYSIS

Individuals

Scope

NOTES

The FIES survey module includes the following questions to compute the FIES-based indicators:

During the last 12 months, was there a time when, because of lack of money or other resources:

1. You were worried you would not have enough food to eat? (labelled as WORRIED)
2. You were unable to eat healthy and nutritious food? (labelled as HEALTHY)
3. You ate only a few kinds of foods? (labelled as FEWFOOD)
4. You had to skip a meal? (labelled as SKIPPED)
5. You ate less than you thought you should? (labelled as ATELESS)
6. Your household ran out of food? (labelled as RUNOUT)
7. You were hungry but did not eat? (labelled as HUNGRY)
8. You went without eating for a whole day? (labelled as WHLDAY)

Each of these questions has the following response options:

- Yes (coded as 1)
- No (coded as 0)
- Don't know / Refuse to answer (coded as NA)

The dataset includes derived FIES variables computed by FAO described in the documentation. It also contains demographic variables related to the number of adults and children in the household, age, education, area (urban/rural), gender, income and degree of urbanization.

TOPICS

Topic
SDGs
Food Access

KEYWORDS

Keyword
Food Insecurity Experience Scale
FIES
Sustainable Development Goals
SDG
Zero Hunger
End Hunger
SDG Indicator 2.1.2

Coverage

GEOGRAPHIC COVERAGE

National

UNIVERSE

Non-institutionalized adult population (15 years of age or older) living in households with access to landline and/or mobile phones.

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
Food and Agriculture Organization of the United Nations	United Nations

Sampling

SAMPLING PROCEDURE

With some exceptions, all samples are probability based and nationally representative of the resident adult population. The coverage area is the entire country including rural areas, and the sampling frame represents the entire civilian, non-institutionalized, aged 15 and older population.

For more details on the overall sampling and data collection methodology, see the World poll methodology attached as a resource in the downloads tab. Specific sampling details for each country are also attached as technical documents in the downloads tab.

Exclusions: NA

Design effect: 1.64

WEIGHTING

The sample data was weighted to minimize bias in survey-based estimates. The weighting procedure was formulated based on the sample design and was carried out in multiple stages. A probability weight factor (base weight) was constructed to account for selection of telephone numbers from the respective frames and correct for unequal selection probabilities as a result of selecting one adult in landline households and for dual-users coming from both the landline and mobile frame. At the next step, the base weights were post-stratified to adjust for non-response and to match the weighted sample totals to known target population totals obtained from country level census data.

Data collection

DATES OF DATA COLLECTION

Start	End
2024-08-19	2024-10-09

DATA COLLECTION MODE

Computer-Assisted Telephone Interviewing [CATI]

data_processing

DATA EDITING

Statistical validation assesses the quality of the FIES data collected by testing their consistency with the assumptions of the Rasch model. This analysis involves the interpretation of several statistics that reveal 1) items that do not perform well in a given context, 2) cases with highly erratic response patterns, 3) pairs of items that may be redundant, and 4) the proportion of total variance in the population that is accounted for by the measurement model.

METHODOLOGY NOTES

As part of the statistical disclosure control process, values for number of children and number of adults that were 10 or above, were recoded as "10+" and categories for area were combined into "urban/suburbs" and "towns/rural".

data_appraisal

ESTIMATES OF SAMPLING ERROR

The margin of error is estimated as 4 percentage points. By adding and subtracting this value to the result, the confidence interval at 95% level is obtained. The margin of error was calculated assuming a reported outcome of 50% (giving the maximum sampling variability for that sample size) and takes into account the design effect.

Access policy

CONTACTS

Name	Affiliation	Email	URL
Food and Agriculture Organization of the United Nations, Statistics Division	Food and Agriculture Organization of the United Nations	Carlo.Cafiero@fao.org, FIES-help@fao.org	Link

CONFIDENTIALITY

The users shall not take any action with the purpose of identifying any individual entity (i.e. person, household, enterprise, etc.) in the micro dataset(s). If such a disclosure is made inadvertently, no use will be made of the information, and it will be reported immediately to FAO.

ACCESS CONDITIONS

Micro datasets disseminated by FAO shall only be allowed for research and statistical purposes. Any user which requests access working for a commercial company will not be granted access to any micro dataset regardless of their specified

purpose. Users requesting access to any datasets must agree to the following minimal conditions:

- The micro dataset will only be used for statistical and/or research purposes;
- Any results derived from the micro dataset will be used solely for reporting aggregated information, and not for any specific individual entities or data subjects;
- The users shall not take any action with the purpose of identifying any individual entity (i.e. person, household, enterprise, etc.) in the micro dataset(s). If such a disclosure is made inadvertently, no use will be made of the information, and it will be reported immediately to FAO;
- The micro dataset cannot be re-disseminated by users or shared with anyone other than the individuals that are granted access to the micro dataset by FAO.

Disclaimer and copyrights

DISCLAIMER

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

Metadata production

DDI DOCUMENT ID

DDI_PRT_2024_FIES_v01_M_v01_A_ESS_FAO

PRODUCERS

Name	Abbreviation	Affiliation	Role
Statistics Division	ESS	Food and Agriculture Organization of the United Nations	Metadata producer and Metadata adapted for FAM
Development Data Group	DECDG	The World Bank	Metadata adapted for World Bank Microdata Library

DDI DOCUMENT VERSION

Identical to a metadata (PRT_2024_FIES_v01_M_v01_A_ESS) published on FAO microdata repository (<https://microdata.fao.org/index.php/catalog>). Some of the metadata fields have been edited.

data_dictionary

Data file	Cases	variables
PRT_2024_FIES_v01_M_v01_A_ESS This dataset contains the variables used to calculate the FIES-based indicator, demographic variables and some derived variables calculated by FAO from the survey.	1001	24

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

This dataset contains the variables used to calculate the FIES-based indicator, demographic variables and some derived variables calculated by FAO from the survey.

Cases: 1001

variables: 24

variables

ID	Name	Label	Question
53	Random_ID	Unique respondent identifier	
54	WORRIED	Worried you would not have enough food to eat because of a lack of money or other resources	
55	HEALTHY	Unable to eat healthy and nutritious food because of a lack of money or other resources	
56	FEWFOOD	Ate only a few kinds of foods because of a lack of money or other resources	
57	SKIPPED	Skipped a meal because there was not enough money or other resources to get food	
58	ATELESS	Ate less than you thought you should because of a lack of money or other resources	
59	RUNOUT	Household ran out of food because of a lack of money or other resources	
60	HUNGRY	Hungry but did not eat because there was not enough money or other resources for food?	
61	WHLDAY	Went without eating for a whole day because of a lack of money or other resources?	
62	wt	Post-stratification sampling weights	
63	year	Year when the GWP was administered in the country	
64	N_adults	Number of adults 15 years of age and above in household	
65	N_child	Number of children under 15 years of age in household	
66	Raw_score	Sum of Affirmative responses to FIES questions	
67	Raw_score_par	Estimated person parameters using the Rasch model	
68	Raw_score_par_error	Estimated person parameter errors using the Rasch model	
69	Prob_Mod_Sev	Probability of being moderately or severely food insecure	
70	Prob_sev	Probability of being severely food insecure	
71	Age	Age of the respondent	
72	Education	Education of the respondent	
73	Area	Area	
74	Gender	Gender of the respondent	
75	Income	Income quintile	
76	DEGURBA	Degree of Urbanisation	

total: 24

RANDOM_ID: Unique respondent identifier

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1001 Invalid: 0 Minimum: 111178264 Maximum: 211095786 Mean: 161621104.937 Standard deviation: 29195579.807
 Type: Continuous Decimal: 0 Width: 10 Range: 111178264 - 211095786 Format: Numeric

WORRIED: Worried you would not have enough food to eat because of a lack of money or other resources

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 999 Invalid: 2
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	881	88.2%
1	Yes	118	11.8%
Sysmiss		2	

HEALTHY: Unable to eat healthy and nutritious food because of a lack of money or other resources

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 1
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	899	89.9%
1	Yes	101	10.1%
Sysmiss		1	

FEWFOOD: Ate only a few kinds of foods because of a lack of money or other resources

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 999 Invalid: 2

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	865	86.6%
1	Yes	134	13.4%
Sysmiss		2	

SKIPPED: Skipped a meal because there was not enough money or other resources to get food

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 1

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	936	93.6%
1	Yes	64	6.4%
Sysmiss		1	

ATELESS: Ate less than you thought you should because of a lack of money or other resources

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 1

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	906	90.6%
1	Yes	94	9.4%
Sysmiss		1	

RUNOUT: Household ran out of food because of a lack of money or other resources

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 999 Invalid: 2

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	950	95.1%
1	Yes	49	4.9%
Sysmiss		2	

HUNGRY: Hungry but did not eat because there was not enough money or other resources for food?

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 999 Invalid: 2

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	950	95.1%
1	Yes	49	4.9%
Sysmiss		2	

WHLDAY: Went without eating for a whole day because of a lack of money or other resources?

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 998 Invalid: 3
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	975	97.7%
1	Yes	23	2.3%
Sysmiss		3	

WT: Post-stratification sampling weights

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1001 Invalid: 0 Minimum: 0.247 Maximum: 4.647 Mean: 1 Standard deviation: 0.8
 Type: Continuous Decimal: 0 Width: 10 Range: 0.247166548195241 - 4.6472261602116 Format: Numeric
 Weighted: yes

YEAR: Year when the GWP was administered in the country

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1001 Invalid: 0 Minimum: 2024 Maximum: 2024 Mean: 2024 Standard deviation: 0
 Type: Continuous Decimal: 0 Width: 10 Range: 2024 - 2024 Format: Numeric

N_ADULTS: Number of adults 15 years of age and above in household

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 997 Invalid: 4
 Type: Discrete Width: 12 Range: 1 - 8 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
01	01	200	20.1%
02	02	449	45%
03	03	199	20%

04	04	114	11.4%
05	05	24	2.4%
06	06	8	0.8%
07	07	2	0.2%
08	08	1	0.1%
Sysmiss		4	

N_CHILD: Number of children under 15 years of age in household

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 997 Invalid: 4
Type: Discrete Width: 12 Range: 0 - 5 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
00	00	717	71.9%
01	01	176	17.7%
02	02	78	7.8%
03	03	16	1.6%
04	04	7	0.7%
05	05	3	0.3%
Sysmiss		4	

RAW_SCORE: Sum of Affirmative responses to FIES questions

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 996 Invalid: 5 Minimum: 0 Maximum: 8 Mean: 0.626 Standard deviation: 1.61
Type: Continuous Decimal: 0 Width: 10 Range: 0 - 8 Format: Numeric

RAW_SCORE_PAR: Estimated person parameters using the Rasch model

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 996 Invalid: 5 Minimum: -2.517 Maximum: 2.749 Mean: -2.119 Standard deviation: 1.018
Type: Continuous Decimal: 0 Width: 10 Range: -2.51702494105205 - 2.74892941099376 Format: Numeric

RAW_SCORE_PAR_ERROR: Estimated person parameter errors using the Rasch model

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 996 Invalid: 5 Minimum: 0.637 Maximum: 1.139 Mean: 1.067 Standard deviation: 0.158
 Type: Continuous Decimal: 0 Width: 10 Range: 0.636692140513894 - 1.13929707094522 Format: Numeric

PROB_MOD_SEV: Probability of being moderately or severely food insecure

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 996 Invalid: 5 Minimum: 0 Maximum: 0.996 Mean: 0.079 Standard deviation: 0.238
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.996389825911317 Format: Numeric

PROB_SEV: Probability of being severely food insecure

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 996 Invalid: 5 Minimum: 0 Maximum: 0.778 Mean: 0.018 Standard deviation: 0.097
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.778342655205287 Format: Numeric

AGE: Age of the respondent

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1001 Invalid: 0 Minimum: 15 Maximum: 100 Mean: 50.863 Standard deviation: 17.402
 Type: Continuous Decimal: 0 Width: 10 Range: 15 - 100 Format: Numeric

EDUCATION: Education of the respondent

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1001 Invalid: 0
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Elementary_or_less	167	16.7%

2	Secondary	459	45.9%
3	College	375	37.5%
Sysmiss		0	

AREA: Area

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 997 Invalid: 4

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 4 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Urban/Suburbs	432	43.3%
2	Towns/Rural	564	56.6%
4	Refused	1	0.1%
Sysmiss		4	

GENDER: Gender of the respondent

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1001 Invalid: 0

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Male	457	45.7%
2	Female	544	54.3%
Sysmiss		0	

INCOME: Income quintile

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1001 Invalid: 0

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 5 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Poorest_20%	135	13.5%
2	Second_20%	154	15.4%
3	Middle_20%	201	20.1%
4	Fourth_20%	227	22.7%
5	Richest_20%	284	28.4%
Sysmiss		0	

DEGURBA: Degree of Urbanisation

Data file: PRT_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1001 Invalid: 0

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 4 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Rural areas	197	19.7%
2	Towns and semi-dense areas	319	31.9%
3	Cities	432	43.2%
4	Not available	53	5.3%
Sysmiss		0	

study_resources

questionnaires

FIES questions

title FIES questions
description This document contains the 8 FIES questions as they were asked during the survey.
filename FIES_Questions.pdf

technical_documents

Derived variables and methodology to compute indicator 2.1.2

title Derived variables and methodology to compute indicator 2.1.2
description This document contains the methodology of the derived variables and the computation of the indicator 2.1.2.
filename Derived_variables_and_Computation_indicator.pdf

Degree of Urbanisation Variable

title Degree of Urbanisation Variable
description This document contains an explanation on the degree of urbanisation from Gallup, an harmonized variable for cross-country survey research.
filename World_Poll_Degree_of_Urbanisation_2024_FAO.pdf

World Poll Methodology

title World Poll Methodology
description This document contains the description of the methodology used for the survey.
filename <https://www.gallup.com/analytics/318875/global-research.aspx>

Technical Methodology

title Technical Methodology
country Portugal
filename Portugal_2024_Methodology.pdf
