

Food Insecurity Experience Scale 2024

Food and Agriculture Organization of the United Nations

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Identification

SURVEY ID NUMBER

MNE_2024_FIES_v01_M_v01_A_ESS

TITLE

Food Insecurity Experience Scale 2024

ABBREVIATION OR ACRONYM

FIES 2024

COUNTRY/ECONOMY

Name	Country code
Montenegro	MNE

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.

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: 1.6

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
2024-08-30	2024-10-25

DATA COLLECTION MODE

Face-to-Face [f2f]

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 3.9 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

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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.

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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_MNE_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 (MNE_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
MNE_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.	1000	24

Data file: MNE_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: 1000

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: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0 Minimum: 111172491 Maximum: 210961084 Mean: 161118754.252 Standard deviation: 28773581.243
 Type: Continuous Decimal: 0 Width: 10 Range: 111172491 - 210961084 Format: Numeric

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 994 Invalid: 6
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	860	86.5%
1	Yes	134	13.5%
Sysmiss		6	

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 994 Invalid: 6
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	868	87.3%
1	Yes	126	12.7%
Sysmiss		6	

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

OverviewValid: 996 Invalid: 4
Type: Discrete Width: 12 Range: 0 - 1 Format: character**Questions and instructions**

CATEGORIES

Value	Category	Cases	
0	No	859	86.2%
1	Yes	137	13.8%
Sysmiss		4	

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

OverviewValid: 998 Invalid: 2
Type: Discrete Width: 12 Range: 0 - 1 Format: character**Questions and instructions**

CATEGORIES

Value	Category	Cases	
0	No	949	95.1%
1	Yes	49	4.9%
Sysmiss		2	

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

OverviewValid: 997 Invalid: 3
Type: Discrete Width: 12 Range: 0 - 1 Format: character**Questions and instructions**

CATEGORIES

Value	Category	Cases	
0	No	929	93.2%
1	Yes	68	6.8%
Sysmiss		3	

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 996 Invalid: 4
Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	914	91.8%
1	Yes	82	8.2%
Sysmiss		4	

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 997 Invalid: 3
Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	959	96.2%
1	Yes	38	3.8%
Sysmiss		3	

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 997 Invalid: 3
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	979	98.2%
1	Yes	18	1.8%
Sysmiss		3	

WT: Post-stratification sampling weights

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0 Minimum: 0.256 Maximum: 4.102 Mean: 1 Standard deviation: 0.773
 Type: Continuous Decimal: 0 Width: 10 Range: 0.25638654533814 - 4.10218472541024 Format: Numeric
 Weighted: yes

YEAR: Year when the GWP was administered in the country

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 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: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0
 Type: Discrete Width: 12 Range: 1 - 7 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
01	01	215	21.5%
02	02	417	41.7%
03	03	168	16.8%

04	04	139	13.9%
05	05	57	5.7%
06	06	3	0.3%
07	07	1	0.1%
Sysmiss		0	

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

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 997 Invalid: 3
 Type: Discrete Width: 12 Range: 0 - 5 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
00	00	721	72.3%
01	01	104	10.4%
02	02	133	13.3%
03	03	33	3.3%
04	04	5	0.5%
05	05	1	0.1%
Sysmiss		3	

RAW_SCORE: Sum of Affirmative responses to FIES questions

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 982 Invalid: 18 Minimum: 0 Maximum: 8 Mean: 0.631 Standard deviation: 1.63
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 8 Format: Numeric

RAW_SCORE_PAR: Estimated person parameters using the Rasch model

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 982 Invalid: 18 Minimum: -2.06 Maximum: 2.153 Mean: -1.749 Standard deviation: 0.814
 Type: Continuous Decimal: 0 Width: 10 Range: -2.05970100315757 - 2.15276713117345 Format: Numeric

RAW_SCORE_PAR_ERROR: Estimated person parameter errors using the Rasch model**Data file: MNE_2024_FIES_v01_M_v01_A_ESS****Overview**

Valid: 982 Invalid: 18 Minimum: 0.475 Maximum: 0.786 Mean: 0.743 Standard deviation: 0.097
 Type: Continuous Decimal: 0 Width: 10 Range: 0.474849205737368 - 0.786376627473077 Format: Numeric

PROB_MOD_SEV: Probability of being moderately or severely food insecure**Data file: MNE_2024_FIES_v01_M_v01_A_ESS****Overview**

Valid: 982 Invalid: 18 Minimum: 0 Maximum: 0.999 Mean: 0.08 Standard deviation: 0.24
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.999138029899194 Format: Numeric

PROB_SEV: Probability of being severely food insecure**Data file: MNE_2024_FIES_v01_M_v01_A_ESS****Overview**

Valid: 982 Invalid: 18 Minimum: 0 Maximum: 0.638 Mean: 0.011 Standard deviation: 0.074
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.637784583766988 Format: Numeric

AGE: Age of the respondent**Data file: MNE_2024_FIES_v01_M_v01_A_ESS****Overview**

Valid: 1000 Invalid: 0 Minimum: 15 Maximum: 95 Mean: 47.296 Standard deviation: 17.678
 Type: Continuous Decimal: 0 Width: 10 Range: 15 - 95 Format: Numeric

EDUCATION: Education of the respondent**Data file: MNE_2024_FIES_v01_M_v01_A_ESS****Overview**

Valid: 998 Invalid: 2
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Elementary_or_less	116	11.6%
2	Secondary	770	77.2%
3	College	112	11.2%

Sysmiss		2	
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AREA: Area

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Urban/Suburbs	509	50.9%
2	Towns/Rural	491	49.1%
Sysmiss		0	

GENDER: Gender of the respondent

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Male	470	47%
2	Female	530	53%
Sysmiss		0	

INCOME: Income quintile

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 5 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Poorest_20%	159	15.9%
2	Second_20%	151	15.1%
3	Middle_20%	191	19.1%
4	Fourth_20%	220	22%
5	Richest_20%	279	27.9%
Sysmiss		0	

DEGURBA: Degree of Urbanisation

Data file: MNE_2024_FIES_v01_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Rural areas	180	18%
2	Towns and semi-dense areas	500	50%
3	Cities	320	32%
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 Gallup_World_Poll_Methodology.pdf

Technical Methodology

title Technical Methodology
country Montenegro
filename Montenegro_2024_Methodology.pdf
