Food Insecurity Experience Scale 2023

FAO Statistics Division

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visit_data_catalog_at: https://microdata.worldbank.org/index.php

Identification

SURVEY ID NUMBER
MKD_2023_FIES_v01_M_v01_A_ESS

TITLE
Food Insecurity Experience Scale 2023

ABBREVIATION OR ACRONYM
FIES 2023

COUNTRY/ECONOMY

Name	Country code
North Macedonia	MKD

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 http://www.fao.org/in-action/voices-of-the-hungry/fies/en/

The FIES-based indicators are compiled using the FIES survey module, containing 8 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
This dataset contains demographic variables related to number of adults and children in the household, age, education, area (urban/rural), gender, income and degree of urbanization. Also, 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?
2. You were unable to eat healthy and nutritious food?
3. You ate only a few kinds of foods?
4. You had to skip a meal?
5. You ate less than you thought you should?

6. Your household ran out of food?
7. You were hungry but did not eat?
8. You went without eating for a whole day?

The dataset also includes derived variables computed by FAO described in the documentation.

TOPICS

Topic
SDGs
Food Access

KEYWORDS

Keyword
Food Insecurity
FIES
SDG

Coverage

GEOGRAPHIC COVERAGE
National

UNIVERSE
Individuals of 15 years or older with access to landline and/or mobile phones.

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
FAO Statistics Division	FAO

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: 1.46

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
2023-07-13	2023-09-30

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 3.8. This is calculated around a proportion at the 95% confidence level. The maximum margin of error was calculated assuming a reported percentage of 50% and takes into account the design effect.

Access policy

CONTACTS

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Metadata production

DDI DOCUMENT ID

DDI_MKD_2023_FIES_v01_M_v01_A_ESS_FAO

PRODUCERS

Name	Abbreviation	Affiliation	Role
Data Dissemination Unit, ESS		Food and Agriculture Organization	Metadata producer
Development Economics Data Group	DECDG	The World Bank	Metadata adapted for World Bank Microdata Library

DDI DOCUMENT VERSION

Identical to a metadata (MKD_2023_FIES_v01_EN_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
MKD_2023_FIES_v01_EN_M_v01_A_ESS This dataset contains the variables used to calculate the FIES-based indicator, deomographic variables and some derived variables calculated by FAO from the survey.	1000	24

Data file	Cases	variables

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

This dataset contains the variables used to calculate the FIES-based indicator, deomographic 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: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 1000   Invalid: 0   Minimum: 111140862   Maximum: 211082261   Mean: 160459502.471   Standard deviation: 28518986.222

Type: Continuous   Decimal: 0   Width: 10   Range: 111140862 - 211082261   Format: Numeric

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

Data file: MKD_2023_FIES_v01_EN_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	766	76.8%
1	Yes	231	23.2%
Sysmiss		3	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	778	77.9%
1	Yes	221	22.1%
Sysmiss		1	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 998   Invalid: 2
Type: Discrete   Width: 12   Range: 0 - 1   Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	784	78.6%
1	Yes	214	21.4%
Sysmiss		2	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	905	90.5%
1	Yes	95	9.5%
Sysmiss		0	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	890	89%
1	Yes	110	11%
Sysmiss		0	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	939	93.9%
1	Yes	61	6.1%
Sysmiss		0	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	943	94.4%
1	Yes	56	5.6%
Sysmiss		1	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 998   Invalid: 2
Type: Discrete   Width: 12   Range: 0 - 1   Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	960	96.2%
1	Yes	38	3.8%
Sysmiss		2	

WT: Post-stratification sampling weights

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 1000   Invalid: 0   Minimum: 0.245   Maximum: 3.569   Mean: 1   Standard deviation: 0.682
Type: Continuous   Decimal: 0   Width: 10   Range: 0.24472272706316 - 3.56887310300442   Format: Numeric
Weighted: yes

YEAR: Year when the GWP was administered in the country

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	2023	1000	100%
Sysmiss		0	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 995   Invalid: 5
Type: Discrete   Width: 12   Range: 1 - 7   Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
01	01	254	25.5%
02	02	432	43.4%
03	03	170	17.1%
04	04	111	11.2%
05	05	20	2%
06	06	3	0.3%
07	07	4	0.4%
10	10+	1	0.1%
Sysmiss		5	

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

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 999   Invalid: 1
Type: Discrete   Width: 12   Range: 0 - 8   Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
00	00	726	72.7%
01	01	122	12.2%
02	02	108	10.8%
03	03	39	3.9%
04	04	1	0.1%
05	05	1	0.1%
08	08	1	0.1%
10	10+	1	0.1%
Sysmiss		1	

RAW_SCORE: Sum of Affirmative responses to FIES questions

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 991   Invalid: 9   Minimum: 0   Maximum: 8   Mean: 1.027   Standard deviation: 1.959
Type: Continuous   Decimal: 0   Width: 10   Range: 0 - 8   Format: Numeric

---

RAW_SCORE_PAR: Estimated person parameters using the Rasch model

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 991   Invalid: 9   Minimum: -1.927   Maximum: 2.103   Mean: -1.436   Standard deviation: 0.963
Type: Continuous   Decimal: 0   Width: 10   Range: -1.92710244322582 - 2.10339075544736   Format: Numeric

---

RAW_SCORE_PAR_ERROR: Estimated person parameter errors using the Rasch model

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 991   Invalid: 9   Minimum: 0.466   Maximum: 0.706   Mean: 0.646   Standard deviation: 0.094
Type: Continuous   Decimal: 0   Width: 10   Range: 0.465763956124338 - 0.70609138944508   Format: Numeric

---

PROB_MOD_SEV: Probability of being moderately or severely food insecure

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 991   Invalid: 9   Minimum: 0   Maximum: 1   Mean: 0.129   Standard deviation: 0.295
Type: Continuous   Decimal: 0   Width: 10   Range: 0 - 0.99968747755185   Format: Numeric

---

PROB_SEV: Probability of being severely food insecure

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 991   Invalid: 9   Minimum: 0   Maximum: 0.627   Mean: 0.021   Standard deviation: 0.102
Type: Continuous   Decimal: 0   Width: 10   Range: 0 - 0.626538647391646   Format: Numeric

---

AGE: Age of the respondent

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 1000   Invalid: 0   Minimum: 15   Maximum: 89   Mean: 53.359   Standard deviation: 17.699
Type: Continuous   Decimal: 0   Width: 10   Range: 15 - 89   Format: Numeric

---

EDUCATION: Education of the respondent

Data file: MKD_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 999   Invalid: 1
Type: Discrete   Decimal: 0   Width: 12   Range: 1 - 3   Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Elementary_or_less	224	22.4%
2	Secondary	577	57.8%
3	College	198	19.8%
4	Dont_know	0	0%
5	Refused	0	0%
Sysmiss		1	

AREA: Area

Data file: MKD_2023_FIES_v01_EN_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	496	49.6%
2	Towns/Rural	504	50.4%
3	Dont_know	0	0%
4	Refused	0	0%
Sysmiss		0	

GENDER: Gender of the respondent

Data file: MKD_2023_FIES_v01_EN_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	448	44.8%
2	Female	552	55.2%
Sysmiss		0	

INCOME: Income quintile

Data file: MKD_2023_FIES_v01_EN_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%	132	13.2%
2	Second_20%	192	19.2%
3	Middle_20%	207	20.7%
4	Fourth_20%	216	21.6%
5	Richest_20%	253	25.3%
Sysmiss		0	

DEGURBA: Degree of Urbanisation

Data file: MKD_2023_FIES_v01_EN_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	209	20.9%
2	Towns and semi-dense areas	391	39.1%
3	Cities	400	40%

4	Not available	0	0%
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.pdf

World Poll Methodology

title	World Poll Methodology
description	This document contains the description of the methodology used for the survey.
filename	World_Poll_Methodology_021524.pdf

Technical documentation on sampling methodology

title	Technical documentation on sampling methodology
country	North Macedonia
filename	North_Macedonia_1_2023_technical_doc.pdf