

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

BGR_2023_FIES_v01_M_v01_A_ESS

TITLE

Food Insecurity Experience Scale 2023

ABBREVIATION OR ACRONYM

FIES 2023

COUNTRY/ECONOMY

Name	Country code
Bulgaria	BGR

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: 1.7

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
2023-07-21	2023-10-08

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 4. 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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FAO Statistics Division	FAO	Carlo.Cafiero@fao.org	Link

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Metadata production

DDI DOCUMENT ID

DDI_BGR_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 (BGR_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
BGR_2023_FIES_v01_EN_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: BGR_2023_FIES_v01_EN_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:** BGR_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 1000 Invalid: 0 Minimum: 111194894 Maximum: 211081201 Mean: 161502440.172 Standard deviation: 28992042.28
 Type: Continuous Decimal: 0 Width: 10 Range: 111194894 - 211081201 Format: Numeric

WORRIED: Worried you would not have enough food to eat because of a lack of money or other resources**Data file:** BGR_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 988 Invalid: 12
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	842	85.2%
1	Yes	146	14.8%
Sysmiss		12	

HEALTHY: Unable to eat healthy and nutritious food because of a lack of money or other resources**Data file:** BGR_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 988 Invalid: 12
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	823	83.3%
1	Yes	165	16.7%
Sysmiss		12	

FEWFOOD: Ate only a few kinds of foods because of a lack of money or other resources**Data file: BGR_2023_FIES_v01_EN_M_v01_A_ESS****Overview**

Valid: 990 Invalid: 10

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	804	81.2%
1	Yes	186	18.8%
Sysmiss		10	

SKIPPED: Skipped a meal because there was not enough money or other resources to get food**Data file: BGR_2023_FIES_v01_EN_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	941	94.7%
1	Yes	53	5.3%
Sysmiss		6	

ATELESS: Ate less than you thought you should because of a lack of money or other resources**Data file: BGR_2023_FIES_v01_EN_M_v01_A_ESS****Overview**

Valid: 989 Invalid: 11

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	889	89.9%
1	Yes	100	10.1%
Sysmiss		11	

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

Data file: BGR_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 991 Invalid: 9
 Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	947	95.6%
1	Yes	44	4.4%
Sysmiss		9	

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

Data file: BGR_2023_FIES_v01_EN_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	950	95.4%
1	Yes	46	4.6%
Sysmiss		4	

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

Data file: BGR_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	978	98.1%
1	Yes	19	1.9%
Sysmiss		3	

WT: Post-stratification sampling weights

Data file: BGR_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0 Minimum: 0.287 Maximum: 4.739 Mean: 1 Standard deviation: 0.836
 Type: Continuous Decimal: 0 Width: 10 Range: 0.287250380768383 - 4.73895916648335 Format: Numeric
 Weighted: yes

YEAR: Year when the GWP was administered in the country

Data file: BGR_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: BGR_2023_FIES_v01_EN_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	366	36.6%
02	02	530	53%
03	03	71	7.1%
04	04	25	2.5%
05	05	5	0.5%
06	06	1	0.1%
07	07	2	0.2%
Sysmiss		0	

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

Data file: BGR_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 1000 Invalid: 0
 Type: Discrete Width: 12 Range: 0 - 9 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
00	00	802	80.2%
01	01	113	11.3%
02	02	64	6.4%
03	03	15	1.5%
04	04	3	0.3%
09	09	1	0.1%
10	10+	2	0.2%
Sysmiss		0	

RAW_SCORE: Sum of Affirmative responses to FIES questions

Data file: BGR_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 955 Invalid: 45 Minimum: 0 Maximum: 8 Mean: 0.72 Standard deviation: 1.643
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 8 Format: Numeric

RAW_SCORE_PAR: Estimated person parameters using the Rasch model**Data file:** BGR_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 955 Invalid: 45 Minimum: -2.197 Maximum: 2.312 Mean: -1.799 Standard deviation: 0.91
Type: Continuous Decimal: 0 Width: 10 Range: -2.19666137383858 - 2.31217456642188 Format: Numeric

RAW_SCORE_PAR_ERROR: Estimated person parameter errors using the Rasch model**Data file:** BGR_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 955 Invalid: 45 Minimum: 0.542 Maximum: 0.902 Mean: 0.836 Standard deviation: 0.126
Type: Continuous Decimal: 0 Width: 10 Range: 0.541774922289881 - 0.902082749982661 Format: Numeric

PROB_MOD_SEV: Probability of being moderately or severely food insecure**Data file:** BGR_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 955 Invalid: 45 Minimum: 0 Maximum: 0.998 Mean: 0.089 Standard deviation: 0.244
Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.998185880894917 Format: Numeric

PROB_SEV: Probability of being severely food insecure**Data file:** BGR_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 955 Invalid: 45 Minimum: 0 Maximum: 0.686 Mean: 0.014 Standard deviation: 0.083
Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.685819344392217 Format: Numeric

AGE: Age of the respondent**Data file:** BGR_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 1000 Invalid: 0 Minimum: 15 Maximum: 94 Mean: 57.901 Standard deviation: 18.483
Type: Continuous Decimal: 0 Width: 10 Range: 15 - 94 Format: Numeric

EDUCATION: Education of the respondent**Data file:** BGR_2023_FIES_v01_EN_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	145	14.5%
2	Secondary	619	62%
3	College	234	23.4%
4	Dont_know	0	0%
5	Refused	0	0%
Sysmiss		2	

AREA: Area

Data file: BGR_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	500	50%
2	Towns/Rural	500	50%
3	Dont_know	0	0%
4	Refused	0	0%
Sysmiss		0	

GENDER: Gender of the respondent

Data file: BGR_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	405	40.5%
2	Female	595	59.5%
Sysmiss		0	

INCOME: Income quintile

Data file: BGR_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%	119	11.9%
2	Second_20%	244	24.4%
3	Middle_20%	213	21.3%
4	Fourth_20%	191	19.1%
5	Richest_20%	233	23.3%
Sysmiss		0	

DEGURBA: Degree of Urbanisation

Data file: BGR_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	368	36.8%
2	Towns and semi-dense areas	304	30.4%
3	Cities	328	32.8%

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 Bulgaria
 filename Bulgaria_1_2023_technical_doc.pdf
