

# Serbia - Food Insecurity Experience Scale (FIES)

**FAO Statistics Division**

Report generated on: July 11, 2021

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# Overview

## Identification

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### ID NUMBER

SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

## Overview

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### 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 documentations 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]

### UNITS OF ANALYSIS

Individuals

## Scope

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### NOTES

This dataset contains demographic variables related to number of adults and children in the household, age, education, area (urban/rural), gender, and income. 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?

#### TOPICS

Topic	Vocabulary	URI
SDGs		
Food Access		

#### KEYWORDS

Food Insecurity, SDG

## Coverage

#### GEOGRAPHIC COVERAGE

National

#### UNIVERSE

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

## Producers and Sponsors

#### PRIMARY INVESTIGATOR(S)

Name	Affiliation
FAO Statistics Division	FAO

## Metadata Production

#### METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Office of the Chief Statistician	OCS	FAO	Metadata producer

#### DDI DOCUMENT VERSION

SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS\_v01

#### DDI DOCUMENT ID

DDI\_SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS\_FAO

## Sampling

### Sampling Procedure

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The sample was drawn proportional to the population and the country was stratified by region and by population size strata.

Exclusions: NA

Design effect: 1.65

### Weighting

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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.

## Questionnaires

No content available

## Data Collection

### Data Collection Dates

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<b>Start</b>	<b>End</b>	<b>Cycle</b>
2020-11-04	2020-12-01	N/A

### Data Collection Mode

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Computer Assisted Telephone Interview [CATI]

## Data Processing

### Data Editing

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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.

### Other Processing

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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.

## File Description

## Variable List

**SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**

Content	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
Variable(s)	23
Structure	Type: Keys: ()
Version	
Producer	
Missing Data	

**Variables**

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



Unique respondent identifier(Random\_ID)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

Type: Continuous	Valid cases: 1000
Format: numeric	Invalid: 0
Width: 10	Minimum: 111145325
Decimals: 0	Maximum: 211034625
Range: 111145325-211034625	Mean: 161342809.3
	Standard deviation: 29277474.7

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

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

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

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

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

Type: Discrete	Valid cases: 993
Format: character	Invalid: 7
Width: 12	
Range: 0-1	

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

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

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

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

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

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

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

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

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

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

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

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

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

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

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

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

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

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

Post-stratification sampling weights(wt)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

Type: Continuous	Valid cases: 1000
Format: numeric	Invalid: 0
Width: 10	Minimum: 0.4
Decimals: 0	Maximum: 4
Range: 0.435186941959364-3.98207593137056	Mean: 1
	Standard deviation: 0.8

## Year when the study was administered in the country(year)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Type: Discrete	Valid cases: 1000
Format: numeric	Invalid: 0
Width: 12	
Decimals: 0	
Range: 1-1	

## Number of adults 15 years of age and above in household(N\_adults)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Type: Discrete	Valid cases: 989
Format: character	Invalid: 11
Width: 12	
Range: 1-9	

## Number of children under 15 years of age in household(N\_child)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Type: Discrete	Valid cases: 995
Format: character	Invalid: 5
Width: 12	
Range: 0-8	

## Sum of Affirmative responses to FIES questions(Raw\_score)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Type: Continuous	Valid cases: 1000
Format: numeric	Invalid: 0
Width: 10	Minimum: 0
Decimals: 0	Maximum: 8
Range: 0-8	Mean: 0.9
	Standard deviation: 1.9

## Estimated person parameters using the Rasch model(Raw\_score\_par)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Type: Continuous	Valid cases: 1000
Format: numeric	Invalid: 0
Width: 10	Minimum: -2.3
Decimals: 0	Maximum: 2.8
Range: -2.34708139943471-2.76288235019311	Mean: -1.8
	Standard deviation: 1.2

## Estimated person parameter errors using the Rasch model(Raw\_score\_par\_error)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Type: Continuous  
Format: numeric  
Width: 10  
Decimals: 0  
Range: 0.57676506809478-1.05100802113969

Valid cases: 1000  
Invalid: 0  
Minimum: 0.6  
Maximum: 1.1  
Mean: 1  
Standard deviation: 0.2

## Probability of being moderately or severely food insecure(Prob\_Mod\_Sev)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Type: Continuous  
Format: numeric  
Width: 10  
Decimals: 0  
Range: 0-0.998280264757138

Valid cases: 1000  
Invalid: 0  
Minimum: 0  
Maximum: 1  
Mean: 0.1  
Standard deviation: 0.3

## Probability of being severely food insecure(Prob\_sev)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Type: Continuous  
Format: numeric  
Width: 10  
Decimals: 0  
Range: 0-0.800744051342683

Valid cases: 1000  
Invalid: 0  
Minimum: 0  
Maximum: 0.8  
Mean: 0  
Standard deviation: 0.1

## Age of the respondent(Age)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Type: Continuous  
Format: numeric  
Width: 10  
Decimals: 0  
Range: 15-100

Valid cases: 1000  
Invalid: 0  
Minimum: 15  
Maximum: 100  
Mean: 41.1  
Standard deviation: 17

## Education of the respondent(Education)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Type: Discrete  
Format: numeric  
Width: 12  
Decimals: 0  
Range: 1-5

Valid cases: 1000  
Invalid: 0

## Area(Area)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Type: Discrete  
Format: numeric  
Width: 12  
Decimals: 0  
Range: 1-2

Valid cases: 1000  
Invalid: 0

## Gender of the respondent(Gender)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Type: Discrete  
Format: numeric  
Width: 12  
Decimals: 0  
Range: 1-2

Valid cases: 1000  
Invalid: 0

## Income quintile(Income)

File: SRB\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Type: Discrete  
Format: numeric  
Width: 12  
Decimals: 0  
Range: 1-5

Valid cases: 1000  
Invalid: 0

# Documentation

## Questionnaires

### FIES questions

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Title FIES questions

Description This document contains the 8 FIES questions as they were asked during the survey

Filename FIES\_Questions.pdf

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## Technical documents

### Derived variables and methodology to compute indicator 2.1.2

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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

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