

# Food Insecurity Experience Scale 2020

**FAO Statistics Division**

report\_generated\_on: January 18, 2023

visit\_data\_catalog\_at: <https://microdata.worldbank.org/index.php>

## Identification

### SURVEY ID NUMBER

HRV\_2020\_FIES\_v01\_M\_v01\_A\_OCS

### TITLE

Food Insecurity Experience Scale 2020

### COUNTRY/ECONOMY

Name	Country code
Croatia	HRV

### 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 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]

### 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, 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?

For datasets between 2014-2018 the computed variables have been updated. The 2014-2018 updated files have been added in their respective folders and can be merged with the original datasets using the key Random\_ID

#### TOPICS

Topic
SDGs
Food Access

#### KEYWORDS

Keyword
Food Insecurity
SDG

## Coverage

#### GEOGRAPHIC COVERAGE

National coverage

#### 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

A simple stratified sample design was used for selection of landline phone samples. Within each explicit stratum (district) in the case of landline, sample of specified size was drawn using list-assisted Random Digit Dial (RDD) procedures. In the case of mobile, within each explicit stratum, sample of specified size was drawn using pure RDD procedure. Sampling was done independently within each stratum. All sampled phone numbers were pre-screened for working status.

For respondents contacted by landline telephone, random respondent selection within the household was performed by selecting an adult at random that had the next birthday. Respondents contacted by mobile telephone were screened for those aged 15 and older; no additional selection procedure was performed.

For the purpose of data collection, the total initial sample was split into random subsamples (replicate samples) and released sequentially based on the progress of interviewing in different strata. The goal was to release an optimum amount of sample each time to achieve a high response rate while completing the targeted number of interviews within the field period.

Exclusions: NA

Design effect: 1.77

#### 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
2020-11-06	2020-12-02

### DATA COLLECTION MODE

Other [oth]

## 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.

## data\_appraisal

### ESTIMATES OF SAMPLING ERROR

The margin of error is estimated as 4.1. 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.

### DATA APPRAISAL

The variable HUNGRY was not considered in the computation of the published FAO food insecurity indicator based on FIES due to the results of the validation process.

The variable WORRIED was not considered in the computation of the published FAO food insecurity indicator based on FIES due to the results of the validation process.

## Access policy

### CONTACTS

Name	Affiliation	Email	URL
FAO Statistics Division	FAO	Carlo.Cafiero@fao.org	<a href="#">Link</a>

### 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.

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- 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;
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- 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\_HRV\_2020\_FIES\_v01\_M\_v01\_A\_OCS

### PRODUCERS

Name	Abbreviation	Affiliation	Role
Office of Chief Statistician	OCS	Food and Agriculture Organization	Metadata producer
Development Economics Data Group	DECDG	The World Bank	Metadata adapted for World Bank Microdata Library

### DATE OF METADATA PRODUCTION

2023-01-18

### DDI DOCUMENT VERSION

Version 01 (January 2023): This metadata was downloaded from the FAO website (<https://microdata.fao.org/index.php/catalog>) and it is identical to FAO version (HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS). The following two metadata fields were edited - Document ID and Survey ID.

**data\_dictionary**

Data file	Cases	variables
<b>HRV_2020_FIES_v01_EN_M_v01_A_OCS</b> This dataset contains the variables used to calculate the FIES-based indicator, demographic variables and some derived variables calculated by FAO from the survey.	0	21



**Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**

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:	0
variables:	21

**variables**

ID	Name	Label	Question
V1	Random_ID	Unique respondent identifier	
V2	HEALTHY	Unable to eat healthy and nutritious food because of a lack of money or other resources	
V3	FEWFOOD	Ate only a few kinds of foods because of a lack of money or other resources	
V4	SKIPPED	Skipped a meal because there was not enough money or other resources to get food	
V5	ATELESS	Ate less than you thought you should because of a lack of money or other resources	
V6	RUNOUT	Household ran out of food because of a lack of money or other resources	
V7	WHLDAY	Went without eating for a whole day because of a lack of money or other resources?	
V8	wt	Post-stratification sampling weights	
V9	year	Year when the study was administered in the country	
V10	N_adults	Number of adults 15 years of age and above in household	
V11	N_child	Number of children under 15 years of age in household	
V12	Raw_score	Sum of Affirmative responses to FIES questions	
V13	Raw_score_par	Estimated person parameters using the Rasch model	
V14	Raw_score_par_error	Estimated person parameter errors using the Rasch model	
V15	Prob_Mod_Sev	Probability of being moderately or severely food insecure	
V16	Prob_sev	Probability of being severely food insecure	
V17	Age	Age of the respondent	
V18	Education	Education of the respondent	
V19	Area	Area	
V20	Gender	Gender of the respondent	
V21	Income	Income quintile	

total: 21





**RANDOM\_ID: Unique respondent identifier****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0 Invalid: 0

Type: Continuous Decimal: 0 Width: 10 Range: 111164537 - 211041020 Format: Numeric

**N\_ADULTS: Number of adults 15 years of age and above in household****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0 Invalid: 0

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

**Questions and instructions**

## CATEGORIES

Value	Category
01	01
02	02
03	03
04	04
05	05
06	06
07	07
08	08
09	09
10	10+

**HEALTHY: Unable to eat healthy and nutritious food because of a lack of money or other resources****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0 Invalid: 0

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

**Questions and instructions**

## CATEGORIES

Value	Category
0	No

1	Yes
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### **FEWFOOD: Ate only a few kinds of foods because of a lack of money or other resources**

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0 Invalid: 0

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

#### **Questions and instructions**

##### CATEGORIES

Value	Category
0	No
1	Yes

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

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0 Invalid: 0

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

#### **Questions and instructions**

##### CATEGORIES

Value	Category
0	No
1	Yes

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

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0 Invalid: 0

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

## Questions and instructions

### CATEGORIES

Value	Category
0	No
1	Yes

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

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Valid: 0 Invalid: 0

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

## Questions and instructions

### CATEGORIES

Value	Category
0	No
1	Yes

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

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Valid: 0 Invalid: 0

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

## Questions and instructions

### CATEGORIES

Value	Category
0	No
1	Yes

## **WT: Post-stratification sampling weights**

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

## Overview

Valid: 0 Invalid: 0

Type: Continuous Decimal: 0 Width: 10 Range: 0.233817422325923 - 3.8897524206303 Format: Numeric

Weighted: yes

## YEAR: Year when the study was administered in the country

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

## Overview

Valid: 0 Invalid: 0

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

## Questions and instructions

### CATEGORIES

Value	Category
1	2020

## N\_CHILD: Number of children under 15 years of age in household

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

## Overview

Valid: 0 Invalid: 0

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

## Questions and instructions

### CATEGORIES

Value	Category
00	00
01	01
02	02
03	03
04	04
05	05
06	06
07	07

## RAW\_SCORE: Sum of Affirmative responses to FIES questions

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Valid: 0 Invalid: 0

Type: Continuous Decimal: 0 Width: 10 Range: 0 - 6 Format: Numeric

**RAW\_SCORE\_PAR: Estimated person parameters using the Rasch model****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0 Invalid: 0

Type: Continuous Decimal: 0 Width: 10 Range: -1.91045437440273 - 2.31968860366246 Format: Numeric

**RAW\_SCORE\_PAR\_ERROR: Estimated person parameter errors using the Rasch model****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0 Invalid: 0

Type: Continuous Decimal: 0 Width: 10 Range: 0.616365148081268 - 0.968646545610181 Format: Numeric

**PROB\_MOD\_SEV: Probability of being moderately or severely food insecure****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0 Invalid: 0

Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.996702837635353 Format: Numeric

**PROB\_SEV: Probability of being severely food insecure****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0 Invalid: 0

Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.676714069800058 Format: Numeric

**AGE: Age of the respondent****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0 Invalid: 0

Type: Continuous Decimal: 0 Width: 10 Range: 15 - 100 Format: Numeric

**EDUCATION: Education of the respondent****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

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

**Questions and instructions**

## CATEGORIES

Value	Category
1	Elementary_or_less
2	Secondary
3	College
4	Dont_know
5	Refused

**AREA: Area****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

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

**Questions and instructions**

## CATEGORIES

Value	Category
1	Urban/Suburbs
2	Towns/Rural
3	Dont_know
4	Refused

**GENDER: Gender of the respondent****Data file:** HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

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

## Questions and instructions

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### CATEGORIES

Value	Category
1	Male
2	Female

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## INCOME: Income quintile

Data file: HRV\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Valid: 0    Invalid: 0

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

## Questions and instructions

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### CATEGORIES

Value	Category
1	Poorest_20%
2	Second_20%
3	Middle_20%
4	Fourth_20%
5	Richest_20%

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# study\_resources

## questionnaires

### Food Insecurity Experience Scale: Questions

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title Food Insecurity Experience Scale: Questions  
language English  
filename FIES\_Questions.pdf

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## technical\_documents

### Computed variables at respondent level

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title Computed variables at respondent level  
language English  
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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