

# Food Insecurity Experience Scale 2020

**FAO Statistics Division**

report\_generated\_on: January 20, 2023

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

## Identification

### SURVEY ID NUMBER

GTM\_2020\_FIES\_v01\_M\_v01\_A\_OCS

### TITLE

Food Insecurity Experience Scale 2020

### COUNTRY/ECONOMY

| Name      | Country code |
|-----------|--------------|
| Guatemala | GTM          |

### 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 GeoPoll. 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?

### TOPICS

| Topic       |
|-------------|
| SDGs        |
| Food Access |

## KEYWORDS

| Keyword         |
|-----------------|
| Food Insecurity |
| SDG             |

## Coverage

## GEOGRAPHIC COVERAGE

National coverage

## UNIVERSE

Individuals of 15 years or older.

## Producers and sponsors

## PRIMARY INVESTIGATORS

| Name                    | Affiliation |
|-------------------------|-------------|
| FAO Statistics Division | FAO         |

## Sampling

## SAMPLING PROCEDURE

A Random Digit Dialling (RDD) approach was used to form a random sample of telephone numbers. Stratified phone numbers made available from telephone service providers or administrative registers were also used to integrate RDD when needed. Socio-demographic characteristics collected in the survey were then compared with the available information from recent national surveys to verify the extent to which the sample mirrored the total population structure. In case of discrepancies, post-stratification sampling weights were computed to adjust for the under-represented populations, typically using sex and education level.

Exclusions: NA

Design effect: NA

## WEIGHTING

Post-stratification weights are provided. Population statistics are used to weight the data by gender, age, and, where reliable data are available, education or socioeconomic status.

## data\_collection

## DATES OF DATA COLLECTION

| Start      | End        |
|------------|------------|
| 2020-12-15 | 2021-01-15 |

## DATA COLLECTION MODE

Computer Assisted Telephone Interview [cati]

## data\_processing

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### 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

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### ESTIMATES OF SAMPLING ERROR

Not Available.

### DATA APPRAISAL

Since the population with access to mobile telephones is likely to differ from the rest of the population with respect to their access to food, post-hoc adjustments were made to control for the potential resulting bias. Post-stratification weights were built to adjust the sample distribution by gender and education of the respondent at admin-1 level, to match the same distribution in the total population. However, an additional step was needed to try to ascertain the food insecurity condition of those with access to phones compared to that of the total population.

Using FIES data collected by FAO through the GWP between 2014 and 2019, and a variable on access to mobile telephones that was also in the dataset, it was possible to compare the prevalence of food insecurity at moderate or severe level, and severe level only, of respondents with access to a mobile phone to that of the total population at national level.

## Access policy

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### CONTACTS

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

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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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- The micro dataset will only be used for statistical and/or research purposes;
- 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;
- 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 and copyrights

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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

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### DDI DOCUMENT ID

DDI\_GTM\_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

2023-01-19

### 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 (GTM\_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>GTM_2020_FIES_v01_EN_M_v01_A_OCS</b><br>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     | 22        |



**Data file: GTM\_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: | 22 |

**variables**

| ID  | Name                | Label   | Question |
|-----|---------------------|---|----------|
| V1  | Random_ID           | Unique respondent identifier  |          |
| V2  | WORRIED             | Worried you would not have enough food to eat because of a lack of money or other resources |          |
| V3  | HEALTHY             | Unable to eat healthy and nutritious food because of a lack of money or other resources     |          |
| V4  | FEWFOOD             | Ate only a few kinds of foods because of a lack of money or other resources                 |          |
| V5  | SKIPPED             | Skipped a meal because there was not enough money or other resources to get food            |          |
| V6  | ATELESS             | Ate less than you thought you should because of a lack of money or other resources          |          |
| V7  | RUNOUT              | Household ran out of food because of a lack of money or other resources                     |          |
| V8  | HUNGRY              | Hungry but did not eat because there was not enough money or other resources for food?      |          |
| V9  | WHLDAY              | Went without eating for a whole day because of a lack of money or other resources?          |          |
| V10 | wt                  | Post-stratification sampling weights  |          |
| V11 | year                | Year when the study was administered in the country   |          |
| V12 | N_adults            | Number of adults 15 years of age and above in household                                     |          |
| V13 | N_child             | Number of children under 15 years of age in household                                       |          |
| V14 | Raw_score           | Sum of Affirmative responses to FIES questions  |          |
| V15 | Raw_score_par       | Estimated person parameters using the Rasch model   |          |
| V16 | Raw_score_par_error | Estimated person parameter errors using the Rasch model                                     |          |
| V17 | Prob_Mod_Sev        | Probability of being moderately or severely food insecure                                   |          |
| V18 | Prob_sev            | Probability of being severely food insecure   |          |
| V19 | Age                 | Age of the respondent   |          |
| V20 | Education           | Education of the respondent   |          |
| V21 | Area                | Area  |          |
| V22 | Gender              | Gender of the respondent  |          |

total: 22





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

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Range: -    Format: Numeric

**WT: Post-stratification sampling weights****Data file:** GTM\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Range: -    Format: Numeric

**WORRIED: Worried you would not have enough food to eat because of a lack of money or other resources****Data file:** GTM\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

Type: Discrete    Width: 8    Range: -    Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Yes      |

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

Valid: 0    Invalid: 0

Type: Discrete    Width: 8    Range: -    Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Yes      |

**FEWFOOD: Ate only a few kinds of foods because of a lack of money or other resources****Data file:** GTM\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

Type: Discrete    Width: 8    Range: -    Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Yes      |

**SKIPPED: Skipped a meal because there was not enough money or other resources to get food****Data file:** GTM\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

Type: Discrete    Width: 8    Range: -    Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Yes      |

**ATELESS: Ate less than you thought you should because of a lack of money or other resources****Data file:** GTM\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

Type: Discrete    Width: 8    Range: -    Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Yes      |

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

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

**Overview**

Valid: 0 Invalid: 0

Type: Discrete Width: 8 Range: - Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Yes      |

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

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

**Overview**

Valid: 0 Invalid: 0

Type: Discrete Width: 8 Range: - Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Yes      |

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

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

**Overview**

Valid: 0 Invalid: 0

Type: Discrete Width: 8 Range: - Format: character

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Yes      |

**YEAR: Year when the study was administered in the country****Data file:** GTM\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

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

**Questions and instructions**

## CATEGORIES

| Value | Category |
|-------|----------|
| 1     | 2020     |

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

Valid: 0    Invalid: 0

Type: Discrete    Width: 8    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       |
| 08    | 08       |
| 09    | 09       |
| 10    | 10+      |

**N\_CHILD: Number of children under 15 years of age in household****Data file:** GTM\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

Type: Discrete    Width: 8    Range: -    Format: character

## Questions and instructions

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### CATEGORIES

| Value | Category |
|-------|----------|
| 00    | 00       |
| 01    | 01       |
| 02    | 02       |
| 03    | 03       |
| 04    | 04       |
| 05    | 05       |
| 06    | 06       |
| 07    | 07       |
| 08    | 08       |
| 09    | 09       |
| 10    | 10+      |

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

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

#### Overview

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Range: -    Format: Numeric

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### RAW\_SCORE\_PAR: Estimated person parameters using the Rasch model

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

#### Overview

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Range: -    Format: Numeric

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### RAW\_SCORE\_PAR\_ERROR: Estimated person parameter errors using the Rasch model

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

#### Overview

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Range: -    Format: Numeric

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

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Range: -    Format: Numeric

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

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Range: -    Format: Numeric

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

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Range: -    Format: Numeric

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

Valid: 0    Invalid: 0

Type: Discrete    Decimal: 0    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:** GTM\_2020\_FIES\_v01\_EN\_M\_v01\_A\_OCS

## Overview

Valid: 0 Invalid: 0

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

## Questions and instructions

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### CATEGORIES

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

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## GENDER: Gender of the respondent

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

## Overview

Valid: 0 Invalid: 0

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

## Questions and instructions

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### CATEGORIES

| Value | Category |
|-------|----------|
| 1     | Male     |
| 2     | Female   |

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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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