

# Food Insecurity Experience Scale 2018

**FAO Statistics Division**

report\_generated\_on: November 30, 2022

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

## Identification

### SURVEY ID NUMBER

JPN\_2018\_FIES\_v01\_M\_v01\_A\_OCS

### TITLE

Food Insecurity Experience Scale 2018

### COUNTRY/ECONOMY

Name	Country code
Japan	JPN

### 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 under the "DOCUMENTATION" tab above. 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?

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

## TOPICS

Topic
SDGs
Food Access

## KEYWORDS

Keyword
Food Insecurity
SDG

## Coverage

## GEOGRAPHIC COVERAGE

National

## UNIVERSE

Individuals of 15 years or older.

## Producers and sponsors

## PRIMARY INVESTIGATORS

Name	Affiliation
FAO Statistics Division	FAO

## Sampling

## SAMPLING PROCEDURE

Landline and Mobile RDD. The landline sample was stratified by region.

Exclusions: Agency Blacklisted numbers. Also excluded 12 municipalities near the nuclear power plant in Fukushima. These areas were designated as not-to-call districts due to the devastation from the 2011 disasters. The exclusion represents less than 1% of the population of Japan.

Design effect: 1.47

## 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
2018-06-29	2018-09-12

## DATA COLLECTION MODE

Computer Assisted Telephone Interview [cati]

## 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 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

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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- 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;
- 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\_JPN\_2018\_FIES\_v01\_M\_v01\_A\_OCS

### PRODUCERS

Name	Abbreviation	Affiliation	Role
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Office of the Chief Statistician	OCS	FAO	Metadata
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**DDI DOCUMENT VERSION**

Version 01 (September 2019). This survey documentation (DDI) is identical to the DDI published in the FAO microdata catalog except for the Document ID and Study ID.

**data\_dictionary**

Data file	Cases	variables
<b>JPN_2018_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	23



**Data file: JPN\_2018\_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:	23

**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 GWP 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	
V23	Income	Income quintile	

total: 23





**RANDOM\_ID: Unique respondent identifier****Data file:** JPN\_2018\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Width: 10    Range: 111139306 - 211021286    Format: Numeric

**WT: Post-stratification sampling weights****Data file:** JPN\_2018\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Width: 10    Range: 0.260821070058134 - 2.60821070058134    Format: Numeric  
Weighted: yes**WORRIED: Worried you would not have enough food to eat because of a lack of money or other resources****Data file:** JPN\_2018\_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

**HEALTHY: Unable to eat healthy and nutritious food because of a lack of money or other resources****Data file:** JPN\_2018\_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: JPN\_2018\_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: JPN\_2018\_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: JPN\_2018\_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: JPN\_2018\_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

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

Data file: JPN\_2018\_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: JPN\_2018\_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

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

Data file: JPN\_2018\_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	2018

## N\_ADULTS: Number of adults 15 years of age and above in household

Data file: JPN\_2018\_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
10	10+

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

**Data file:** JPN\_2018\_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

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

**Data file:** JPN\_2018\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Width: 10    Range: 0 - 8    Format: Numeric

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

**Data file:** JPN\_2018\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Width: 10    Range: -2.96798213617436 - 2.87484472195818    Format: Numeric

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

**Data file:** JPN\_2018\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Width: 10    Range: 0.718159372041858 - 1.34787104919331    Format: Numeric

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### **PROB\_MOD\_SEV: Probability of being moderately or severely food insecure**

**Data file:** JPN\_2018\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Width: 10    Range: 0 - 0.990965615196697    Format: Numeric

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### **PROB\_SEV: Probability of being severely food insecure**

**Data file:** JPN\_2018\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0    Invalid: 0

Type: Continuous    Decimal: 0    Width: 10    Range: 0 - 0.77077403893735    Format: Numeric

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### **AGE: Age of the respondent**

**Data file:** JPN\_2018\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 0    Invalid: 0

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

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### **EDUCATION: Education of the respondent**

**Data file:** JPN\_2018\_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	Elementary_or_less
2	Secondary
3	College
4	Dont_know
5	Refused

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**AREA: Area****Data file:** JPN\_2018\_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:** JPN\_2018\_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**

## CATEGORIES

Value	Category
1	Male
2	Female

**INCOME: Income quintile****Data file:** JPN\_2018\_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	Poorest_20%



2	Second_20%
3	Middle_20%
4	Fourth_20%
5	Richest_20%

# study\_resources

## questionnaires

### Food Insecurity Experience Scale 2016, Questions

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title Food Insecurity Experience Scale 2016, Questions  
language English  
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  
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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