

# Food Insecurity Experience Scale 2022

**FAO Statistics Division**

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visit\_data\_catalog\_at: <http://catalog.ihsn.org/>

## Identification

### SURVEY ID NUMBER

JPN\_2022\_FIES\_v01\_M\_v01\_A\_OCS

### TITLE

Food Insecurity Experience Scale 2022

### COUNTRY

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 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

## 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

NA

Exclusions: For landline RDD, 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: 1.27

## 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
2022-06-09	2022-08-04

## DATA COLLECTION MODE

Computer-Assisted Telephone Interviewing [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

The margin of error is estimated as 3.5. 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 DEGURBA 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

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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 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\_JPN\_2022\_FIES\_v01\_M\_v01\_A\_OCS

## PRODUCERS

Name	Abbreviation	Affiliation	Role
Office of the Chief Statistician	OCS	FAO	Metadata producer
Development Economics Data Group	DECDG	The World Bank	Metadata adapted for World Bank Microdata Library

## DDI DOCUMENT VERSION

This metadata was downloaded from the FAO catalog (<https://microdata.fao.org/index.php/catalog>) and it is identical to FAO version (JPN\_2022\_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>JPN_2022_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.	1005	23



**Data file: JPN\_2022\_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: 1005

variables: 23

**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 study 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	

total: 23



**RANDOM\_ID: Unique respondent identifier****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 1005    Invalid: 0  
 Type: Discrete    Width: 12    Range: NA - NA    Format:

**WORRIED: Worried you would not have enough food to eat because of a lack of money or other resources****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 1005    Invalid: 0  
 Type: Discrete    Width: 12    Range: 0 - 1    Format: character

**Questions and instructions**

## CATEGORIES

Value	Category	Cases	
0	No	923	91.8%
1	Yes	82	8.2%
Sysmiss		0	

**HEALTHY: Unable to eat healthy and nutritious food because of a lack of money or other resources****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 1002    Invalid: 3  
 Type: Discrete    Width: 12    Range: 0 - 1    Format: character

**Questions and instructions**

## CATEGORIES

Value	Category	Cases	
0	No	958	95.6%
1	Yes	44	4.4%
Sysmiss		3	

**FEWFOOD: Ate only a few kinds of foods because of a lack of money or other resources****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Valid: 1005   Invalid: 0  
 Type: Discrete   Width: 12   Range: 0 - 1   Format: character

**Questions and instructions**

## CATEGORIES

Value	Category	Cases	
0	No	930	92.5%
1	Yes	75	7.5%
Sysmiss		0	

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Valid: 1004   Invalid: 1  
 Type: Discrete   Width: 12   Range: 0 - 1   Format: character

**Questions and instructions**

## CATEGORIES

Value	Category	Cases	
0	No	985	98.1%
1	Yes	19	1.9%
Sysmiss		1	

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

**Overview**

Valid: 1005   Invalid: 0  
 Type: Discrete   Width: 12   Range: 0 - 1   Format: character

**Questions and instructions**

## CATEGORIES

Value	Category	Cases	
0	No	952	94.7%

1	Yes	53	5.3%
Sysmiss		0	

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 1005 Invalid: 0  
Type: Discrete Width: 12 Range: 0 - 1 Format: character

#### **Questions and instructions**

##### CATEGORIES

Value	Category	Cases	
0	No	985	98%
1	Yes	20	2%
Sysmiss		0	

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 1005 Invalid: 0  
Type: Discrete Width: 12 Range: 0 - 1 Format: character

#### **Questions and instructions**

##### CATEGORIES

Value	Category	Cases	
0	No	969	96.4%
1	Yes	36	3.6%
Sysmiss		0	

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 1005 Invalid: 0  
Type: Discrete Width: 12 Range: 0 - 1 Format: character

## Questions and instructions

### CATEGORIES

Value	Category	Cases	
0	No	996	99.1%
1	Yes	9	0.9%
Sysmiss		0	

### WT: Post-stratification sampling weights

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

Valid: 1005 Invalid: 0 Minimum: 0.321 Maximum: 3.207 Mean: 1 Standard deviation: 0.517  
 Type: Continuous Decimal: 0 Width: 10 Range: 0.320724852847379 - 3.20724852847379 Format: Numeric  
 Weighted: yes

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

Valid: 1005 Invalid: 0  
 Type: Discrete Decimal: 0 Width: 12 Range: 1 - 1 Format: Numeric

## Questions and instructions

### CATEGORIES

Value	Category	Cases	
1	2022	1005	100%
Sysmiss		0	

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### Overview

Valid: 1002 Invalid: 3  
 Type: Discrete Width: 12 Range: 1 - 7 Format: character

## Questions and instructions

### CATEGORIES

Value	Category	Cases	
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01	01	315	31.4%
02	02	400	39.9%
03	03	168	16.8%
04	04	87	8.7%
05	05	23	2.3%
06	06	5	0.5%
07	07	4	0.4%
Sysmiss		3	

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 1002   Invalid: 3  
 Type: Discrete   Width: 12   Range: 0 - 4   Format: character

#### **Questions and instructions**

#### **CATEGORIES**

Value	Category	Cases	
00	00	835	83.3%
01	01	83	8.3%
02	02	63	6.3%
03	03	15	1.5%
04	04	6	0.6%
Sysmiss		3	

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 1005   Invalid: 0   Minimum: 0   Maximum: 8   Mean: 0.336   Standard deviation: 1.099  
 Type: Continuous   Decimal: 0   Width: 10   Range: 0 - 8   Format: Numeric

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

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

#### **Overview**

Valid: 1005   Invalid: 0   Minimum: -2.506   Maximum: 2.775   Mean: -2.285   Standard deviation: 0.71  
 Type: Continuous   Decimal: 0   Width: 10   Range: -2.50562295305423 - 2.7747162989849   Format: Numeric

**RAW\_SCORE\_PAR\_ERROR: Estimated person parameter errors using the Rasch model****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 1005   Invalid: 0   Minimum: 0.645   Maximum: 1.194   Mean: 1.141   Standard deviation: 0.144  
Type: Continuous   Decimal: 0   Width: 10   Range: 0.645087142475672 - 1.19386789570011   Format: Numeric

**PROB\_MOD\_SEV: Probability of being moderately or severely food insecure****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 1005   Invalid: 0   Minimum: 0   Maximum: 0.995   Mean: 0.044   Standard deviation: 0.171  
Type: Continuous   Decimal: 0   Width: 10   Range: 0 - 0.995135397577321   Format: Numeric

**PROB\_SEV: Probability of being severely food insecure****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 1005   Invalid: 0   Minimum: 0   Maximum: 0.774   Mean: 0.005   Standard deviation: 0.049  
Type: Continuous   Decimal: 0   Width: 10   Range: 0 - 0.774324989453548   Format: Numeric

**AGE: Age of the respondent****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 1005   Invalid: 0   Minimum: 15   Maximum: 99   Mean: 56.853   Standard deviation: 19.016  
Type: Continuous   Decimal: 0   Width: 10   Range: 15 - 99   Format: Numeric

**EDUCATION: Education of the respondent****Data file:** JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS**Overview**

Valid: 1005   Invalid: 0  
Type: Discrete   Decimal: 0   Width: 12   Range: 1 - 5   Format: Numeric

**Questions and instructions**

## CATEGORIES

Value	Category	Cases	
1	Elementary_or_less	103	10.2%

2	Secondary	595	59.2%
3	College	302	30%
4	Dont_know	0	0%
5	Refused	5	0.5%
Sysmiss		0	

## AREA: Area

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Valid: 1005 Invalid: 0

Type: Discrete Decimal: 0 Width: 12 Range: 1 - 3 Format: Numeric

### Questions and instructions

#### CATEGORIES

Value	Category	Cases	
1	Urban/Suburbs	435	43.3%
2	Towns/Rural	567	56.4%
3	Dont_know	3	0.3%
4	Refused	0	0%
Sysmiss		0	

## GENDER: Gender of the respondent

Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS

### Overview

Valid: 1005 Invalid: 0

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

### Questions and instructions

#### CATEGORIES

Value	Category	Cases	
1	Male	553	55%
2	Female	452	45%
Sysmiss		0	

**INCOME: Income quintile****Data file: JPN\_2022\_FIES\_v01\_EN\_M\_v01\_A\_OCS****Overview**

Valid: 1005    Invalid: 0

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

**Questions and instructions**

## CATEGORIES

Value	Category	Cases	
1	Poorest_20%	186	18.5%
2	Second_20%	183	18.2%
3	Middle_20%	209	20.8%
4	Fourth_20%	205	20.4%
5	Richest_20%	222	22.1%
Sysmiss		0	

# study\_resources

## questionnaires

### Food Insecurity Experience Scale: Questionnaire

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title Food Insecurity Experience Scale: Questionnaire  
 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

### 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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### Degree of Urbanisation: Harmonized Variable for Cross-country Survey Research

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title Degree of Urbanisation: Harmonized Variable for Cross-country Survey Research  
 language English  
 filename World\_Poll\_Degree\_of\_Urbanisation.pdf

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