

Food Insecurity Experience Scale 2023

FAO Statistics Division

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visit_data_catalog_at: <https://microdata.worldbank.org/index.php>

Identification

SURVEY ID NUMBER

JPN_2023_FIES_v01_M_v01_A_ESS

TITLE

Food Insecurity Experience Scale 2023

ABBREVIATION OR ACRONYM

FIES 2023

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 in the downloads 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, income and degree of urbanization. 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
FIES
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

With some exceptions, all samples are probability based and nationally representative of the resident adult population. The coverage area is the entire country including rural areas, and the sampling frame represents the entire civilian, non-institutionalized, aged 15 and older population.

For more details on the overall sampling and data collection methodology, see the World poll methodology attached as a resource in the downloads tab. Specific sampling details for each country are also attached as technical documents in the downloads tab.

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: 1.39

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
2023-06-13	2023-09-14

DATA COLLECTION MODE

Computer-Assisted Telephone Interviewing [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.

METHODOLOGY NOTES

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 3.6. 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 WHLDAY 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	Link

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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

DDI DOCUMENT ID

DDI_JPN_2023_FIES_v01_M_v01_A_ESS_FAO

PRODUCERS

Name	Abbreviation	Affiliation	Role
Data Dissemination Unit, ESS		Food and Agriculture Organization	Metadata producer
Development Economics Data Group	DECDG	The World Bank	Metadata adapted for World Bank Microdata Library

DDI DOCUMENT VERSION

Identical to a metadata (JPN_2023_FIES_v01_EN_M_v01_A_ESS) published on FAO microdata repository (<https://microdata.fao.org/index.php/catalog>). Some of the metadata fields have been edited.

data_dictionary

Data file	Cases	variables
JPN_2023_FIES_v01_EN_M_v01_A_ESS This dataset contains the variables used to calculate the FIES-based indicator, demographic variables and some derived variables calculated by FAO from the survey.	809	22

Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS

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: 809

variables: 22

variables

ID	Name	Label	Question
53	Random_ID	Unique respondent identifier	
54	HEALTHY	Unable to eat healthy and nutritious food because of a lack of money or other resources	
55	FEWFOOD	Ate only a few kinds of foods because of a lack of money or other resources	
56	SKIPPED	Skipped a meal because there was not enough money or other resources to get food	
57	ATELESS	Ate less than you thought you should because of a lack of money or other resources	
58	RUNOUT	Household ran out of food because of a lack of money or other resources	
59	HUNGRY	Hungry but did not eat because there was not enough money or other resources for food?	
60	wt	Post-stratification sampling weights	
61	year	Year when the GWP was administered in the country	
62	N_adults	Number of adults 15 years of age and above in household	
63	N_child	Number of children under 15 years of age in household	
64	Raw_score	Sum of Affirmative responses to FIES questions	
65	Raw_score_par	Estimated person parameters using the Rasch model	
66	Raw_score_par_error	Estimated person parameter errors using the Rasch model	
67	Prob_Mod_Sev	Probability of being moderately or severely food insecure	
68	Prob_sev	Probability of being severely food insecure	
69	Age	Age of the respondent	
70	Education	Education of the respondent	
71	Area	Area	
72	Gender	Gender of the respondent	
73	Income	Income quintile	
74	DEGURBA	Degree of Urbanisation	

total: 22

RANDOM_ID: Unique respondent identifier**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 809 Invalid: 0 Minimum: 111153661 Maximum: 210882013 Mean: 160412813.871 Standard deviation: 28138297.719

Type: Continuous Decimal: 0 Width: 10 Range: 111153661 - 210882013 Format: Numeric

HEALTHY: Unable to eat healthy and nutritious food because of a lack of money or other resources**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 809 Invalid: 0

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	764	94.4%
1	Yes	45	5.6%
Sysmiss		0	

FEWFOOD: Ate only a few kinds of foods because of a lack of money or other resources**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 807 Invalid: 2

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	748	92.7%
1	Yes	59	7.3%
Sysmiss		2	

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

food**Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS****Overview**

Valid: 809 Invalid: 0

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	788	97.4%
1	Yes	21	2.6%
Sysmiss		0	

ATELESS: Ate less than you thought you should because of a lack of money or other resources**Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS****Overview**

Valid: 808 Invalid: 1

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	765	94.7%
1	Yes	43	5.3%
Sysmiss		1	

RUNOUT: Household ran out of food because of a lack of money or other resources**Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS****Overview**

Valid: 809 Invalid: 0

Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
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0	No	788	97.4%
1	Yes	21	2.6%
Sysmiss		0	

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

Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 809 Invalid: 0
Type: Discrete Width: 12 Range: 0 - 1 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	No	784	96.9%
1	Yes	25	3.1%
Sysmiss		0	

WT: Post-stratification sampling weights

Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 809 Invalid: 0 Minimum: 0.321 Maximum: 3.144 Mean: 1 Standard deviation: 0.591
Type: Continuous Decimal: 0 Width: 10 Range: 0.320585412 - 3.143981431 Format: Numeric Weighted: yes

YEAR: Year when the GWP was administered in the country

Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 809 Invalid: 0
Type: Discrete Decimal: 0 Width: 12 Range: 1 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	2023	809	100%
Sysmiss		0	

N_ADULTS: Number of adults 15 years of age and above in household**Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS****Overview**

Valid: 800 Invalid: 9

Type: Discrete Width: 12 Range: 1 - 8 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
01	01	258	32.3%
02	02	327	40.9%
03	03	124	15.5%
04	04	67	8.4%
05	05	16	2%
06	06	3	0.4%
07	07	3	0.4%
08	08	2	0.3%
Sysmiss		9	

N_CHILD: Number of children under 15 years of age in household**Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS****Overview**

Valid: 797 Invalid: 12

Type: Discrete Width: 12 Range: 0 - 4 Format: character

Questions and instructions

CATEGORIES

Value	Category	Cases	
00	00	680	85.3%
01	01	57	7.2%
02	02	49	6.1%
03	03	10	1.3%
04	04	1	0.1%
Sysmiss		12	

RAW_SCORE: Sum of Affirmative responses to FIES questions**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 806 Invalid: 3 Minimum: 0 Maximum: 6 Mean: 0.262 Standard deviation: 0.897
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 6 Format: Numeric

RAW_SCORE_PAR: Estimated person parameters using the Rasch model**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 806 Invalid: 3 Minimum: -2.009 Maximum: 2.981 Mean: -1.791 Standard deviation: 0.748
 Type: Continuous Decimal: 0 Width: 10 Range: -2.008563092 - 2.981144848 Format: Numeric

RAW_SCORE_PAR_ERROR: Estimated person parameter errors using the Rasch model**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 806 Invalid: 3 Minimum: 0.819 Maximum: 1.371 Mean: 1.326 Standard deviation: 0.136
 Type: Continuous Decimal: 0 Width: 10 Range: 0.819181274 - 1.37079802 Format: Numeric

PROB_MOD_SEV: Probability of being moderately or severely food insecure**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 806 Invalid: 3 Minimum: 0 Maximum: 0.996 Mean: 0.051 Standard deviation: 0.182
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.996367568 Format: Numeric

PROB_SEV: Probability of being severely food insecure**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 806 Invalid: 3 Minimum: 0 Maximum: 0.711 Mean: 0.008 Standard deviation: 0.066
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 0.71116089 Format: Numeric

AGE: Age of the respondent**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 809 Invalid: 0 Minimum: 15 Maximum: 100 Mean: 57.56 Standard deviation: 19.484
 Type: Continuous Decimal: 0 Width: 10 Range: 15 - 100 Format: Numeric

EDUCATION: Education of the respondent**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 798 Invalid: 11

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	College	265	33.2%
2	Elementary_or_less	80	10%
3	Secondary	453	56.8%
Sysmiss		11	

AREA: Area**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 803 Invalid: 6

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Towns/Rural	447	55.7%
2	Urban/Suburbs	356	44.3%
Sysmiss		6	

GENDER: Gender of the respondent**Data file:** JPN_2023_FIES_v01_EN_M_v01_A_ESS**Overview**

Valid: 809 Invalid: 0

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Female	322	39.8%
2	Male	487	60.2%
Sysmiss		0	

INCOME: Income quintile

Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 809 Invalid: 0

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Fourth_20%	184	22.7%
2	Middle_20%	179	22.1%
3	Poorest_20%	130	16.1%
4	Richest_20%	168	20.8%
5	Second_20%	148	18.3%
Sysmiss		0	

DEGURBA: Degree of Urbanisation

Data file: JPN_2023_FIES_v01_EN_M_v01_A_ESS

Overview

Valid: 809 Invalid: 0

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

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Cities	385	47.6%
2	Not available	228	28.2%
3	Rural areas	42	5.2%

4	Towns and semi-dense areas	154	19%
Sysmiss		0	

study_resources

questionnaires

FIES questions

title FIES questions
 description This document contains the 8 FIES questions as they were asked during the survey
 filename FIES_Questions.pdf

technical_documents

Derived variables and methodology to compute indicator 2.1.2

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

Degree of Urbanisation Variable

title Degree of Urbanisation Variable
 description This document contains an explanation on the degree of urbanisation from Gallup, an harmonized variable for cross-country survey research
 filename World_Poll_Degree_of_Urbanisation.pdf

World Poll Methodology

title World Poll Methodology
 description This document contains the description of the methodology used for the survey.
 filename World_Poll_Methodology_021524.pdf

Technical documentation on sampling methodology

title Technical documentation on sampling methodology
 filename Japan_1_2023_technical_doc_CATI.pdf
