FAO Statistics Division

Scale (FIES)

Report generated on: July 9, 2021

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Overview

Identification

ID NUMBER
GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

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]

UNITS 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	Vocabulary	URI
SDGs		
Food Access		

KEYWORDS

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 INVESTIGATOR(S)

Name	Affiliation
FAO Statistics Division	FAO

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Office of the Chief Statistician	ocs	FAO	Metadata producer

DDI DOCUMENT VERSION

GEO_2020_FIES_v01_EN_M_v01_A_OCS_v01

DDI DOCUMENT ID

DDI_GEO_2020_FIES_v01_EN_M_v01_A_OCS_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 mobile phone numbers were pre-screened for working status.

For respondents contacted by landline telephone, random respondent selection within the household was performed by enumerating the persons in the household aged 15 and older and selecting one at random. 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: 1.86

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.

Questionnaires

No content available

Data Collection

Data Collection Dates

 Start
 End
 Cycle

 2020-11-05
 2020-12-22
 N/A

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.

Other Processing

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 4.2. 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.

File Description

Variable List

GEO_2020_FIES_v01_EN_M_v01_A_OCS

This dataset contains the variables used to calculate the FIES-based indicator, deomographic variables and some derived variables calculated by FAO from the survey. Content

Cases 1000

23 Variable(s)

Type: Structure Keys: ()

Version

Producer

Missing Data

Variables

ID	NAME	LABEL	TYPE	FORMAT	QUESTION
53	Random_ID	Unique respondent identifier	contin	numeric	
54	WORRIED	Worried you would not have enough food to eat because of a lack of money or other resources	discrete	character	
55	HEALTHY	Unable to eat healthy and nutritious food because of a lack of money or other resources	discrete	character	
56	FEWFOOD	Ate only a few kinds of foods because of a lack of money or other resources	discrete	character	
57	SKIPPED	Skipped a meal because there was not enough money or other resources to get food	discrete	character	
58	ATELESS	Ate less than you thought you should because of a lack of money or other resources	discrete	character	
59	RUNOUT	Household ran out of food because of a lack of money or other resources	discrete	character	
60	HUNGRY	Hungry but did not eat because there was not enough money or other resources for food?	discrete	character	
61	WHLDAY	Went without eating for a whole day because of a lack of money or other resources?	discrete	character	
62	wt	Post-stratification sampling weights	contin	numeric	
63	year	Year when the GWP was administered in the country	discrete	numeric	
64	N_adults	Number of adults 15 years of age and above in household	discrete	character	
65	N_child	Number of children under 15 years of age in household	discrete	character	
66	Raw_score	Sum of Affirmative responses to FIES questions	contin	numeric	
67	Raw_score_par	Estimated person parameters using the Rasch model	contin	numeric	
68	Raw_score_par_error	Estimated person parameter errors using the Rasch model	contin	numeric	
69	Prob_Mod_Sev	Probability of being moderately or severely food insecure	contin	numeric	
70	Prob_sev	Probability of being severely food insecure	contin	numeric	
71	Age	Age of the respondent	contin	numeric	
72	Education	Education of the respondent	discrete	numeric	
73	Area	Area	discrete	numeric	
74	Gender	Gender of the respondent	discrete	numeric	
75	Income	Income quintile	discrete	numeric	

Unique respondent identifier(Random_ID)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Continuous Format: numeric Width: 10 Decimals: 0

Range: 111570868-211102870

Valid cases: 1000

Invalid: 0

Minimum: 111570868 Maximum: 211102870 Mean: 161838394.7

Standard deviation: 28162928.2

Worried you would not have enough food to eat because of a lack of money or other resources(WORRIED)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: character Width: 12 Range: 0-1 Valid cases: 1000 Invalid: 0

Unable to eat healthy and nutritious food because of a lack of money or other resources(HEALTHY)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: character Width: 12 Range: 0-1 Valid cases: 996 Invalid: 4

Ate only a few kinds of foods because of a lack of money or other resources(FEWFOOD)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: character Width: 12 Range: 0-1 Valid cases: 998 Invalid: 2

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

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

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

Valid cases: 999 Invalid: 1 Ate less than you thought you should because of a lack of money or other resources(ATELESS)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: character Width: 12 Range: 0-1 Valid cases: 996 Invalid: 4

Household ran out of food because of a lack of money or other resources(RUNOUT)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: character Width: 12 Range: 0-1 Valid cases: 997 Invalid: 3

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

File: GEO 2020 FIES v01 EN M v01 A OCS

Overview

Type: Discrete Format: character Width: 12 Range: 0-1 Valid cases: 1000 Invalid: 0

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

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: character Width: 12 Range: 0-1 Valid cases: 1000 Invalid: 0

Post-stratification sampling weights(wt)

File: GEO 2020 FIES v01 EN M v01 A OCS

Overview

Type: Continuous Format: numeric Width: 10 Decimals: 0

Range: 0.207152858799035-3.5676325682056

Valid cases: 1000 Invalid: 0 Minimum: 0.2 Maximum: 3.6 Mean: 1

Standard deviation: 0.9

Year when the GWP was administered in the country(year)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: numeric Width: 12 Decimals: 0 Range: 1-1 Valid cases: 1000 Invalid: 0

Number of adults 15 years of age and above in household(N_adults) File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: character Width: 12 Range: 1-9 Valid cases: 998 Invalid: 2

Number of children under 15 years of age in household(N_child)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: character Width: 12 Range: 0-8 Valid cases: 999 Invalid: 1

Sum of Affirmative responses to FIES questions(Raw_score)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Continuous Format: numeric Width: 10 Decimals: 0 Range: 0-8 Valid cases: 1000 Invalid: 0 Minimum: 0 Maximum: 8 Mean: 2.5

Standard deviation: 2.8

Estimated person parameters using the Rasch model(Raw_score_par) File: GEO 2020 FIES v01 EN M v01 A OCS

Overview

Type: Continuous Format: numeric Width: 10 Decimals: 0

Range: -2.54172866812319-2.81225997099301

Valid cases: 1000 Invalid: 0 Minimum: -2.5 Maximum: 2.8 Mean: -1

Standard deviation: 1.7

Estimated person parameter errors using the Rasch model(Raw_score_par_error)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Continuous
Format: numeric
Width: 10
Decimals: 0
Range: 0.606496102435018-1.10915334533269

Valid cases: 1000 Invalid: 0 Minimum: 0.6 Maximum: 1.1 Mean: 0.9

Standard deviation: 0.2

Probability of being moderately or severely food insecure(Prob_Mod_Sev)

File: GEO 2020 FIES v01 EN M v01 A OCS

Overview

Type: Continuous Format: numeric Width: 10 Decimals: 0

Range: 0-0.997573379857151

Valid cases: 1000 Invalid: 0 Minimum: 0 Maximum: 1 Mean: 0.3

Standard deviation: 0.4

Probability of being severely food insecure(Prob_sev)

File: GEO 2020 FIES v01 EN M v01 A OCS

Overview

Type: Continuous Format: numeric Width: 10 Decimals: 0

Range: 0-0.800816216189561

Valid cases: 1000 Invalid: 0 Minimum: 0 Maximum: 0.8 Mean: 0.1

Standard deviation: 0.2

Age of the respondent(Age)

File: GEO 2020 FIES v01 EN M v01 A OCS

Overview

Type: Continuous Format: numeric Width: 10 Decimals: 0 Range: 15-89 Valid cases: 1000 Invalid: 0 Minimum: 15 Maximum: 89 Mean: 37.7

Standard deviation: 13.5

Education of the respondent(Education)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: numeric Width: 12 Decimals: 0 Range: 1-5 Valid cases: 1000 Invalid: 0

Area(Area)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: numeric Width: 12 Decimals: 0 Range: 1-4 Valid cases: 1000 Invalid: 0

Gender of the respondent(Gender)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: numeric Width: 12 Decimals: 0 Range: 1-2 Valid cases: 1000 Invalid: 0

Income quintile(Income)

File: GEO_2020_FIES_v01_EN_M_v01_A_OCS

Overview

Type: Discrete Format: numeric Width: 12 Decimals: 0 Range: 1-5 Valid cases: 1000 Invalid: 0

Documentation

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