



Food and Agriculture
Organization of the
United Nations



Milan Urban Food Policy Pact Monitoring Framework

July 2018 version

Indicator 18: Percentage of food insecure households based on the Food Insecurity Experience Scale (FIES)

MUFPP framework of actions' category: Social and economic equity

The indicators measures severity of food insecurity experience based on the Food Insecurity Experience Scale (FIES). This is an indicator of food access, not diet quality.

Overview table

MUFPP Work stream	Social and economic equity
MUFPP action	Use cash and food transfers, and other forms of social protection systems to provide vulnerable populations with access to healthy food . This is as a means of increasing the level of food security for specific vulnerable groups.
What the indicator measures	Severity of food insecurity experience based on the Food Insecurity Experience Scale (FIES). This is an indicator of food access, not diet quality.
Which variables need to be measured / what data are needed	The data are collected using the FIES Survey module, composed of 8 yes/no questions asked to an adult respondent. The choice of additional variables to collect in the survey will depend on the objective of the survey, but should include at a minimum basic demographic information.
Unit of measurement (i.e. Percentages, averages, number of people, etc.)	Percentage people or households experiencing moderate or severe food insecurity.
Unit(s) of Analysis (i.e. people under 5 years old, etc.)	Households or individuals
Possible sources of information of such data	The FIES survey module can be included in many types of surveys, such as health and nutrition surveys and household income and expenditure surveys.
Possible methods/tools for data-collection	The FIES survey module (individual or household version)
Expertise required	Survey methodology and statistical analysis
Resources required/ estimated costs	Human and financial resources to include an 8-item survey module in a population survey, collect data in the field and conduct data analysis.

Specific observations	<p>The FIES data has been collected by FAO in over 145 countries since 2014 in the Gallup World Poll. The global data reveal that the FIES results show significant and high correlations in the expected direction with most accepted indicators of development, including child mortality, stunting, poverty measures and the Gini index.</p> <p>The FIES can be used to estimate the prevalence of moderate or severe food insecurity at the municipal level when the FIES survey module is included in a survey that is representative of the municipal population. It depends on the sample design.</p>
Examples of application	<p>National survey data in Brazil in 2004, based on the Brazilian Food Insecurity Scale (a predecessor of the FIES), found significant differences in household food insecurity levels among the five geographical regions of the country¹. Evidence of these stark regional inequalities convinced the Brazilian government to direct resources and public policies toward the more vulnerable regions. Many other examples can be found in Lesson 5 of the FAO e-learning course: SDG Indicator 2.1.2 – Using the Food Insecurity Experience Scale. Available at: http://www.fao.org/elearning/#/elc/en/course/SDG212.</p>

Rationale/evidence

Access to enough nutritionally adequate food was declared a basic human right at the World Food Summit in Rome in 1996.

The United Nations Food and Agriculture Organization (FAO) has undertaken a project called Voices of the Hungry (VoH) to develop and support a survey-based experiential measure of access to food, called the Food Insecurity Experience Scale (FIES). It is an experience-based metric of severity of food insecurity that relies on people's direct responses to a series of questions regarding their access to adequate food.

A growing number of national governments are adopting the FIES. Its ease of application makes it accessible to people at many levels and from diverse fields, although data analysis requires a solid statistical background. Local governments, non-governmental organisations and advocacy groups can also appropriate this relatively simple instrument to monitor food insecurity locally or regionally, engaging diverse stakeholders in the process, and building bridges between people of different backgrounds. This may in fact be where their greatest potential lies to effect change and contribute to guaranteeing the human right to adequate food.

Glossary/concepts/definitions used

Food Security is said to exist when all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Preparations

Producing this indicator requires data collection in the field from a representative sample of the population. This implies preparation of the survey questionnaire (print or CAPI), a sampling framework, training of enumerators to collect the data, data collection and analysis.

¹ Brasil/IBGE (2006). Pesquisa Nacional por Amostra de Domicílios-2004, Suplemento de Segurança Alimentar; Rio de Janeiro. Available from http://biblioteca.ibge.gov.br/visualizacao/monografias/GEBIS%20-%20RJ/segalimentar/suguranca_alimentar2004.pdf.

Sampling

The sample design must guarantee representativeness of the sub-populations of interest (e.g. those that are vulnerable to food insecurity, or specific geographic areas of the city).

Data Collection and Analysis

Data collection: 8 question survey module with dichotomous (yes/no) responses

Data analysis: Thresholds can be set on the raw score to classify the food security severity status of respondents, but Rasch analyses and probabilistic assignment are recommended (as described in the e-learning course cited below).

For detailed guides for applying the FIES survey module and analysing the data, see:

the FAO e-learning course: SDG Indicator 2.1.2 – Using the Food Insecurity Experience Scale (FIES).

Available at: <http://www.fao.org/elearning/#/elc/en/course/SDG212>.

Additional important resources can be found at the Voices of the Hungry webpage at: <http://www.fao.org/in-action/voices-of-the-hungry/en/#.WoxNck2ovcs>. See in particular “Using the FIES”: <http://www.fao.org/in-action/voices-of-the-hungry/using-fies/en/>, where translations of the FIES survey module can be found in 170 languages).

The Food Insecurity Experience Scale: Measuring food insecurity through people’s experiences. Available at <http://www.fao.org/3/a-i7835e.pdf>.

The FIES Survey Module

The FIES-SM questions refer to the experiences of the individual respondent or of the respondent’s household as a whole. The questions focus on self-reported food-related behaviours and experiences associated with increasing difficulties in accessing food due to resource constraints.

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 set of eight questions compose a scale that covers a range of severity of food insecurity:



No single tool can account for the many dimensions of food and nutrition security. The FIES complements the existing set of food and nutrition security indicators. Used in combination with other measures, the FIES has the potential to contribute to a more comprehensive understanding of the causes and consequences of food insecurity and to inform more effective policies and interventions. Because the FIES is easy for professionals and institutions from any sector to use, its inclusion in diverse

types of surveys can help strengthen links between different sectorial perspectives, for example, between agriculture, social protection, health and nutrition.

Results from surveys that include the FIES can also be used to inform decisions regarding priorities for targeting programmes and resources. While it is not appropriate to use the FIES to identify individual beneficiaries for programmes, the information provided by population surveys that include the FIES can serve to identify vulnerable sub-populations or geographic areas that are more affected by food insecurity².

References and links to reports/tools

Ballard, T.J., Kepple, A.W. & Cafiero, C. 2013. The food insecurity experience scale: development of a global standard for monitoring hunger worldwide. Technical Paper. Rome, FAO. Available from <http://www.fao.org/economic/ess/ess-fs/voices/en/>.

Cafiero, C., Viviani, S., & Nord, M. (2018). Food security measurement in a global context: The food insecurity experience scale. *Measurement*, 116, 146-152.

FAO (2016). Methods for estimating comparable prevalence rates of food insecurity experienced by adults throughout the world. Rome, FAO. Available at: <http://www.fao.org/3/a-i4830e.pdf>

FAO (2017). The Food Insecurity Experience Scale: Measuring food insecurity through people's experiences. Available from <http://www.fao.org/3/a-i7835e.pdf>.

FAO (2018) FAO e-learning course: SDG Indicator 2.1.2 – Using the Food Insecurity Experience Scale (FIES). Available at: <http://www.fao.org/elearning/#/elc/en/course/SDG212>

Voices of the Hungry webpage: <http://www.fao.org/in-action/voices-of-the-hungry/en/#.WoxNck2ovcs>

² FAO (2017). The Food Insecurity Experience Scale. Available from <http://www.fao.org/in-action/voices-of-the-hungry/fies/en/>.