The **Food Insecurity Experience Scale**: the new tool to measure food access.

Merits and challenges in monitoring SDG-2

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Outline

- The context: food security in the transition from the MDGs to the SDGs
- What is the FIES
- Successes and challenges ahead

A history of the “food problem”: from widespread **hunger** to **food security for all**

- 1945 – 1974
  - Rebuild the world food economy
  - Main focus: increase production
- 1974 – 2015
  - Tensions on food markets, first food price spike (1974)
  - Shifting focus: from food supply to food access
  - Second food price spike (2007/2008)
- 2015 – 2030
  - Increased concerns for sustainability and nutrition

From the MDGs to the SDGs

MDGs:

- *"To address the problems of **extreme poverty** in its many dimensions – income poverty, hunger, disease, lack of adequate shelter, and exclusion, while promoting gender equality, education, and environmental sustainability"* (UN Millennium Project, 2005)

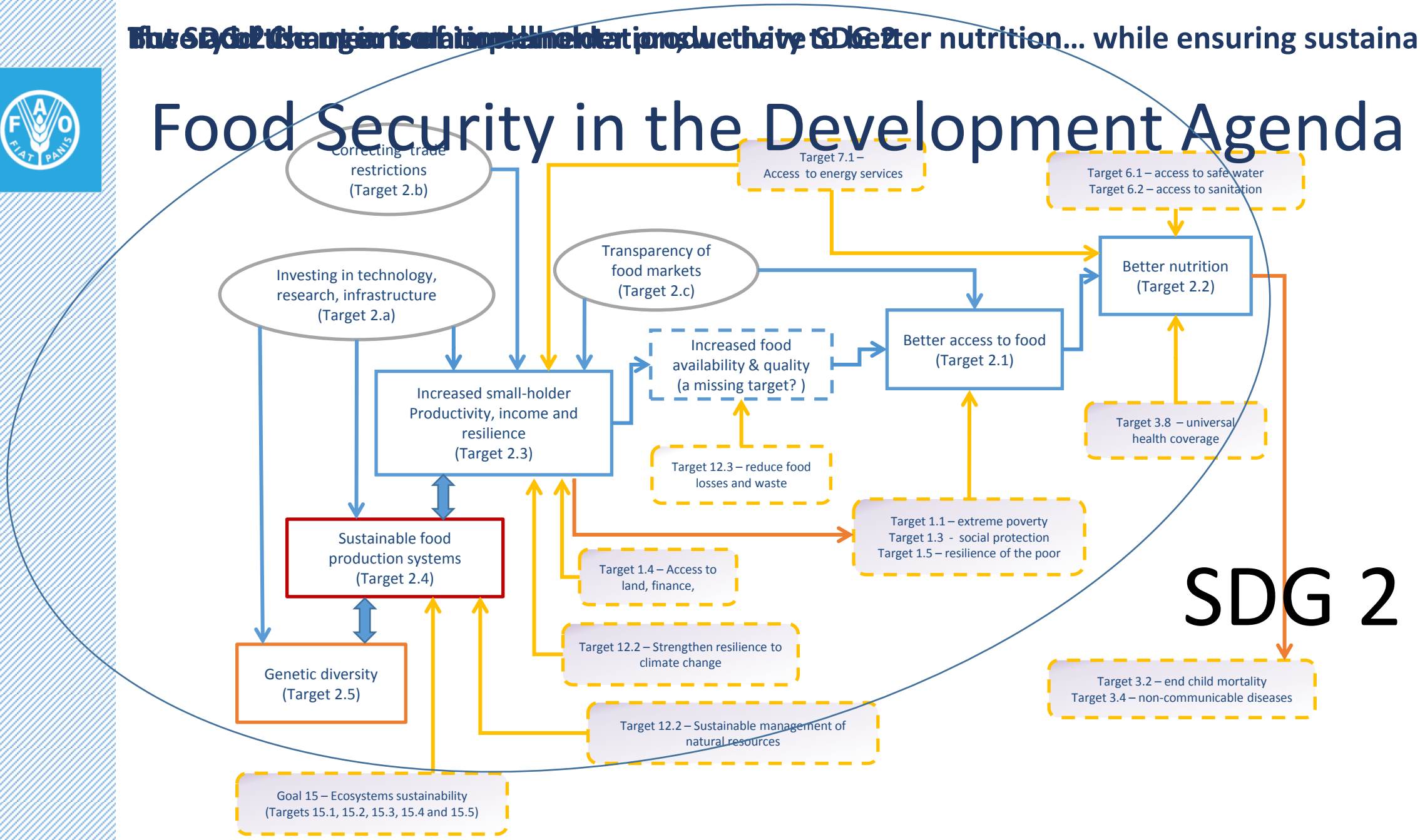
SDGs:

- Universal agenda for **People, Planet, Prosperity, Peace, Partnership**
  - *"Leave no one behind"*
  - *"Every country is a developing country"* (D. Nabarro)
  - *"The agenda is one and indivisible"*

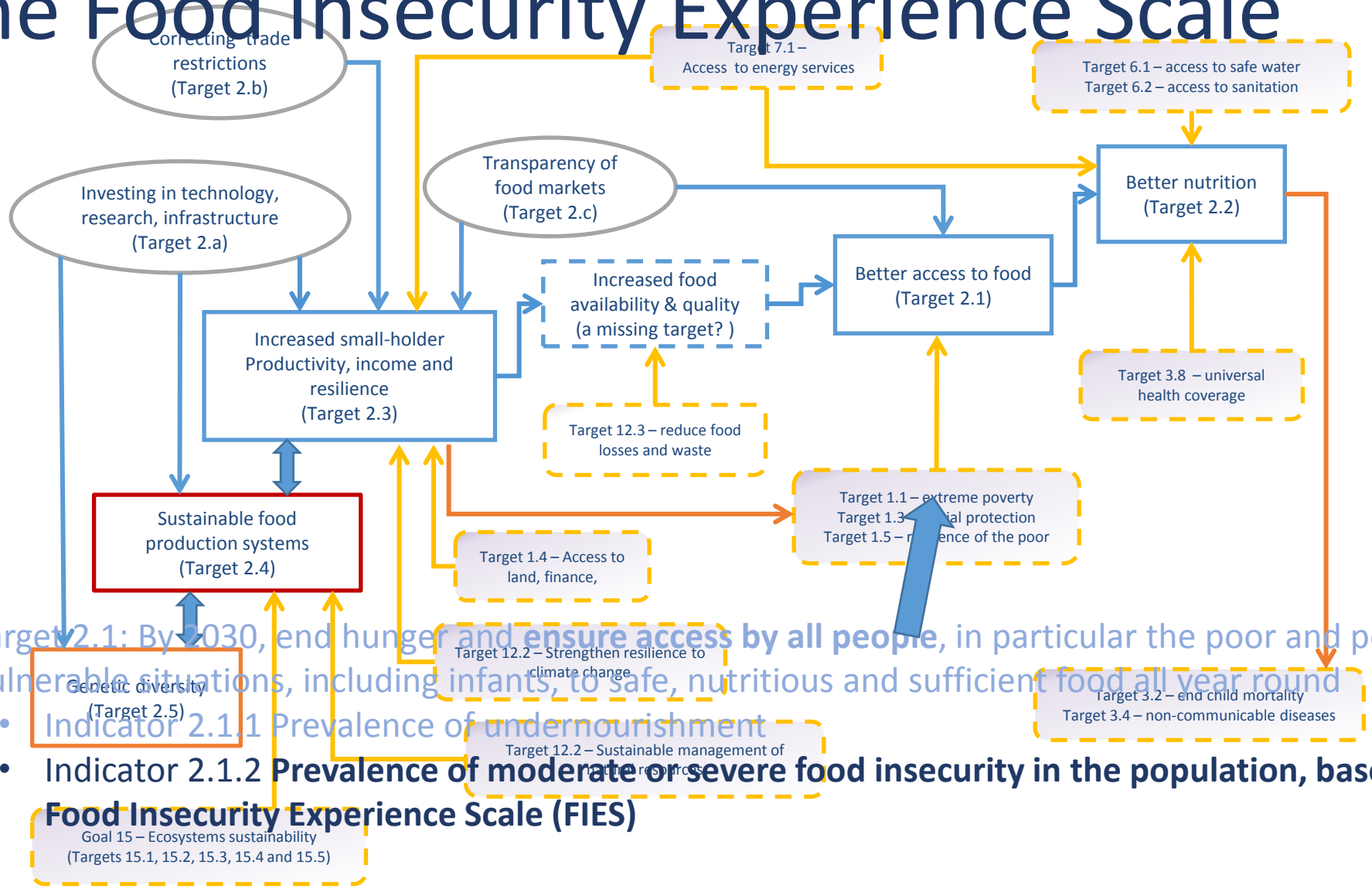
Food Security in the Development Agenda

- **MDG 1: Eradicate extreme poverty and hunger**
  - Target 1C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger
    - Indicator 1.8 Prevalence of underweight children under-five years of age
    - Indicator 1.9 Proportion of population below minimum level of dietary energy consumption
- **SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture**
  - Target 2.1: By 2030, end hunger and **ensure access by all people**, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
    - Indicator 2.1.1 Prevalence of undernourishment
    - Indicator 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)

Food Security in the Development Agenda



The Food Insecurity Experience Scale



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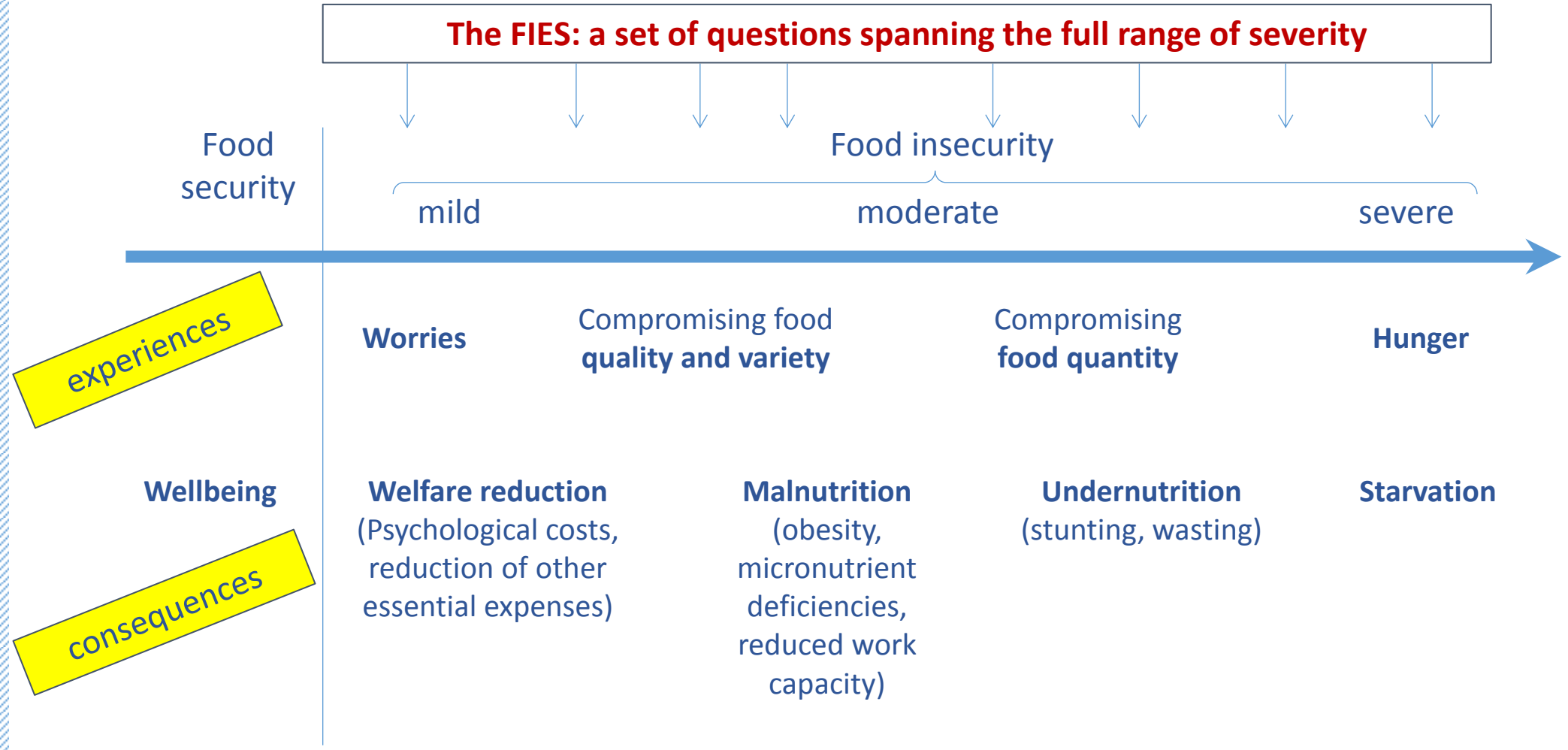
The Food Insecurity Experience Scale

The concept:

1. Food insecurity is seen **from the perspective of the people** who struggle every day to get the food they need
2. It focuses on **access to food**, not on outcomes such as quantity and quality of food intake or nutritional status
3. The severity of the condition of a household or individual is treated as a **"latent" trait** (i.e., it cannot be observed directly, but its magnitude can be inferred from observable facts)
4. Use of advanced **statistical methods** makes it possible to produce proper measures, whose **validity and reliability can be formally assessed**

The Food Insecurity Experience Scale

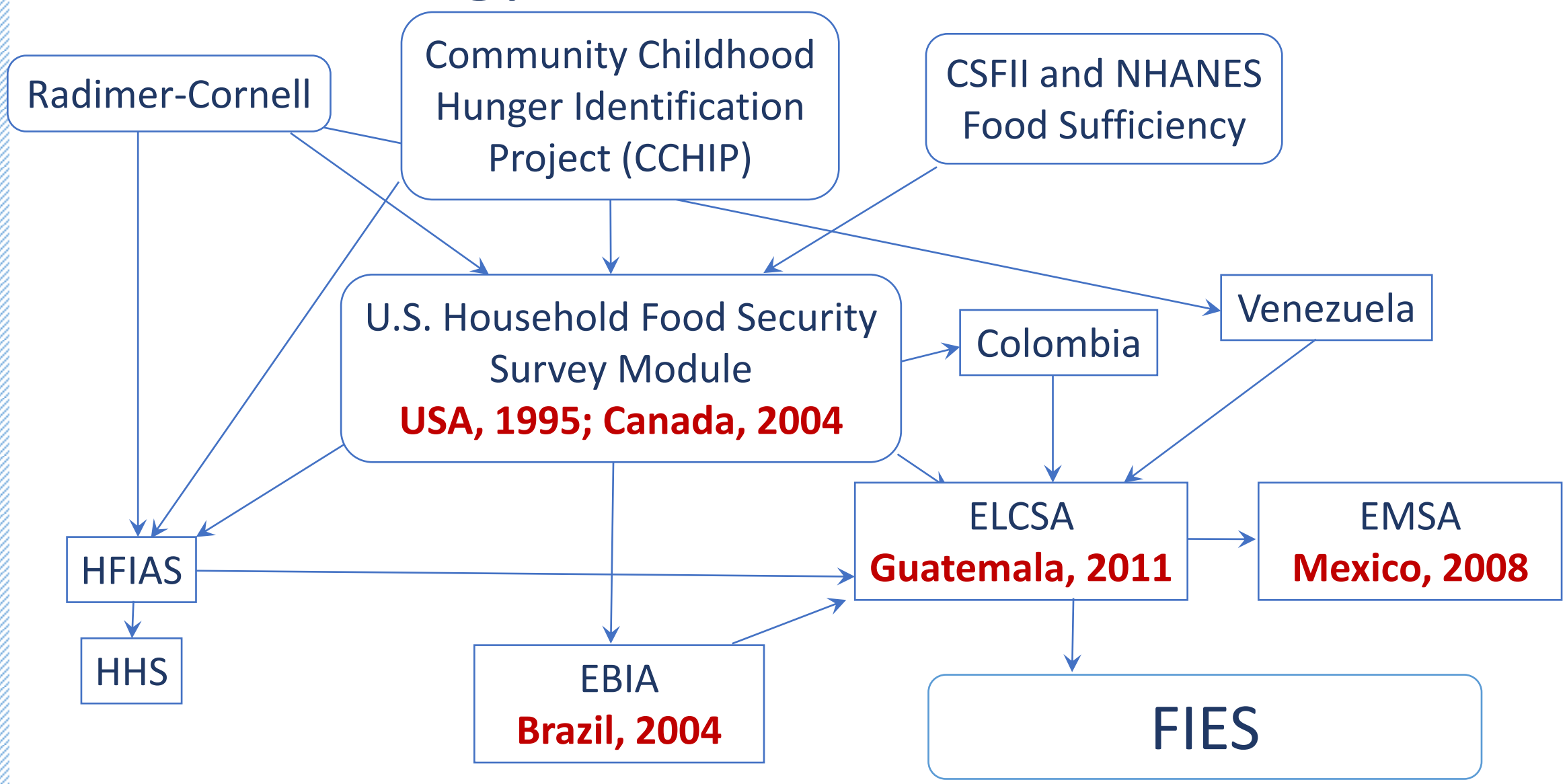


The Food Insecurity Experience Scale

During the last 12 MONTHS, was there a time when:

1. *You were **worried you would run out of food** because of a lack of money or other resources?*
2. *You were **unable to eat healthy and nutritious food** because of a lack of money or other resources?*
3. *You **ate only a few kinds of foods** because of a lack of money or other resources?*
4. *You **had to skip a meal** because there was not enough money or other resources to get food?*
5. *You **ate less than you thought you should** because of a lack of money or other resources?*
6. *Your **household ran out of food** because of a lack of money or other resources?*
7. *You **were hungry but did not eat** because there was not enough money or other resources for food?*
8. *You **went without eating for a whole day** because of a lack of money or other resources?*

FIES Genealogy



The innovations from Voices of the Hungry

- **Cross country comparability**
  - The FAO project has established a **Global FIES reference standard,** against which all Experience-based food security scales (EBFSS) can be calibrated
  - Possible **differences in people's perceptions or in food related habits** across different cultures **are taken into consideration** when calibrating the measures, so that they do not affect the measure of severity
- **Possibility to use household or individual frames**
  - Gender disparities can be captured using the individually framed version
- **Possibility to use different reference periods**
  - The FIES does not confound severity with frequency
  - Can be used to analyze **seasonal differences** in the severity of food insecurity

The merits

- **The validity and reliability of the measures can be formally assessed**
  - Statistical tests on the data, to confirm they yield **proper measures** of a single underlying latent trait
  - Sampling **and non-sampling (!)** errors can be computed
- **It is easy to implement**
  - FAO provides FIES questionnaires in **200 different languages**
  - Flexibly adapted, it can be included in **virtually any population survey**.
  - It requires an average of **3 minutes of survey time** to apply
  - Can be **easily programmed in CAPI** applications

The merits

- **It generates disaggregated information**
  - When included in large scale representative surveys, results can be disaggregated at the level of any **population group** for which the survey is representative
- **The information it produces can be used to guide policy and intervention**
  - Can be **quickly** analyzed to generate **real-time results**
  - The food insecurity condition of household and individuals is one of the most effective **predictors of malnutrition**
  - In the US, the prevalence of food insecurity among housholds has been found to be particularly **sensitive to general macroeconomic conditions** (e.g., economic crises, unemployment rates)

The successes thus far

- Indicators based on the FIES, compiled by FAO at regional and global level, **are already featured in the UN SDG progress report 2016**
  - "More than half of the adult population in Sub Saharan Africa has experienced food insecurity at moderate or severe levels"
  - "Although differences are small Food Insecurity is more prevalent among adult women than among adult men almost everywhere in the world"
- The FIES has already been included in **official population surveys** in **Burkina Faso**, **Kenya**, **Pakistan**, **El Salvador**, **The Dominican Republic**, **St. Lucia**, **The Seychelles**; its inclusion has been announced in **Indonesia** and **Rwanda**, and it is being piloted in several other countries
  - Technical support has been provided for data analysis to Burkina Faso, Pakistan, The Seychelles and St. Lucia.

The successes thus far

- The FIES is included in the indicators framework for **M&E of projects** supported by the **Global Agriculture and Food Security Program** (**GAFSP**) and by the **German Agency for International Development** (**GIZ**)
- **Research** is being conducted using FIES data by independent researchers who have been awarded a license to access the full GWP dataset (see http://www.fao.org/3/a-bl331e.pdf)
  - Results of their work has already been presented in international meetings (e.g., the 2016 Association for Public Policy Analysis & Management – APPAM - Conference in London) (https://appam.confex.com/appam/int16/webprogram/Session6578.html)

The challenges ahead

- **Still limited application worldwide**
  - Although FAO has applied it **since 2014 in more than 150 countries** every year, this has only been through the Gallup World Poll on relatively **small samples**, which are only representative at national level
  - The full potential of the FIES will be expressed when it is included in large-scale population **surveys that also collect data on other determinants and outcomes** of food insecurity
- Advocate for **inclusion of the FIES** in more large scale households surveys
  - Partnerships: World Bank LSMS, WFP VAM, UNICEF India
- Provide **capacity development**, to increase statistical and analytic capacities in the field of food security

The challenges

- **Communication**
  - Over the past 20 years, there has been a proliferation of proposed household “food security” indicators, often without sufficient attention given to the analytic soundness of the methods proposed.
  - There is still a lack of sufficient widespread statistical literacy to appreciate the advantages of the FIES.
- Give **more visibility to results** on the prevalence of food insecurity measured with the FIES, while making sure they **are properly interpreted** and the difference with the PoU or Poverty rates is understood
  - See a set of Frequently Asked Questions on the Voices of the Hungry webpage (http://www.fao.org/in-action/voices-of-the-hungry/faq/en/)
- Help governments **make use of the information** generated by the FIES **from an inter-sectoral perspective**, to address causes and consequences of food insecurity

References

- Voices of the Hungry project web page (www.fao.org/in-action/voices-of-the-hungry/)
- USDA Economic Research Service, Food Security topic (http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx)
- Cafiero *et al.* 2014, Annals of the New York Academy of Science, (available at: http://onlinelibrary.wiley.com/doi/10.1111/nyas.12594/pdf)
- "Methods for estimating comparable prevalence rates of food insecurity experienced by adults throughout the world" VoH Technical Report No 1. (www.fao.org/3/a-i48302.pdf)

Thanks!

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