Clinic #2: FAO indicators in depth

Pietro Gennari
FAO Chief Statistician
2.1.2 Prevalence of moderate or severe food insecurity
INDONESIA CASE STUDY

2.a.1 Government expenditure in agriculture
MALAYSIA CASE STUDY

5.a.1 Women’s ownership of agricultural land
PHILLIPPINES CASE STUDY
EXAMPLES OF 2 DIFFERENT APPROACHES OF GLOBAL DATA COLLECTION

1. Introduction of a module with a limited number of questions in the questionnaire of a nationally representative survey (nationally funded or internationally-led)

   2.1.2 Prevalence of moderate or severe food insecurity

   5.a.1 Women’s ownership of agricultural land

2. Traditional data collection from a government agency through a macro questionnaire. FAO in charge of the compilation and dissemination of comparable data

   2.a.1 Government expenditure in agriculture
**SDG 2.1.2 — PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY**

**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 2.1.2 =** Proportion of the adult population facing difficulties in accessing food of sufficient quality and quantity, based on the Food Insecurity Experience Scale, FIES

**FIES =** Set of 8 yes/no questions, to be added to nationally representative HH surveys, which assess the problems experienced in accessing food, either at the individual or household level, and the resulting coping strategies
THE FOOD INSECURITY EXPERIENCE SCALE — FIES

✓ **New indicator** of food access for global and national monitoring fully aligned with Target 2.1. No other indicator of food access is available at international level.

✓ Building on similar experience-based scales applied for more than 20 years in countries US, Canada, Brazil, Mexico, Guatemala

✓ **Global standard** for producing food insecurity statistics comparable across countries: common thresholds for defining moderate and severe FI based on data from 150 countries

✓ Distinguishes **moderate and severe** levels of food insecurity: Indicator valid for both developed & developing countries

✓ **Simple** to apply at **low cost** — easily included in national surveys

✓ **Metric** for both households and individuals: allows analysis of gender related food insecurity disparities

✓ Produces **timely**, reliable and actionable information: useful for early warning and long-term policy measures
**COUNTRY’S SUPPORT ON THE FIES**

- **Advocacy package** for national decision-makers to explain the added value & policy relevance of the FIES

- **Tools**
  - Translations/cultural adaptation in more than 200 languages
  - Software for data processing & data analysis

- **Training** workshops at regional, sub-regional & country-level

- **Technical assistance** (remote and on-site) to:
  - Help include the FIES survey module in national surveys
  - Conduct data analysis and produce FS monitoring reports

- **Technical advisers** in regional offices and South-south technical cooperation
COUNTRY’S IMPLEMENTATION OF THE FIES

Using a similar tool:

   Brazil, Canada, Colombia, Ecuador, Guatemala, Israel, Mexico and USA

FIES already included in national surveys:

   Burkina Faso, Cameroon, Kenya, Malawi, Mauritania, Swaziland, Rwanda, the Seychelles, Pakistan, Indonesia, St. Lucia, El Salvador, the Dominican Republic, Marshall Islands

FIES to be adopted in the near future:


Partners engaged in implementing the FIES:

   World Bank (LSMS, GAFSP), GIZ, USAID, IPC, WFP, UEMOA, ESCWA, CILSS, SESRIC, CEPAL, EUROSTAT
FIES — GLOBAL DATA COLLECTION

✓ Up to now, FIES applied in an insufficient number of countries. Global Monitoring cannot be based on national sources in the short-term.

✓ For the 1st time FAO has launched a global data collection (Voices of the Hungry Project) to ensure global monitoring of food access.

✓ Since 2014 annual FIES estimates for about 150 countries, through the Gallup World Poll:
  • Definition of global standards to ensure international comparability
  • Establishment of the baseline for 2015
  • Monitoring progress at regional and global levels.

✓ National estimates published for 57 countries which have validated the FAO data. New round of country validations started for the publication of 2017 data (annual data at global level; 3-year averages at national level).
GOAL 5
Achieve gender equality and empower all women and girls

TARGET 5.A
 Undertake reforms to give women equal rights to economic resources as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws

INDICATOR 5.a.1
“Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and share of women among owners or rights-bearers of agricultural land, by type of tenure”
First endorsed by the 47th Session of the UN Statistical Commission in March 2016

FAO
UNSD and UNWOMEN as contributing agencies

Led by the Evidence and Data for Gender Equality (EDGE) project, joint initiative of UNSD and UN Women, in collaboration with the ADB, FAO and WB.

Upgraded to Tier II at the 5th IAEG-SDG (March, 2017). Now data collection can start.
PILOT COUNTRIES

7 pilot countries (in order of timing): Uganda, Mexico, Georgia, Philippines, Mongolia, Maldives, South Africa

The analysis of the 7 pilot studies helped to:

• **Provide clear suggestions on the respond setting** – eg., importance to collect self-reported data

• **Eliminate some redundant questions & Identify the minimum set of questions** – eg., the ‘right to control the proceeds of the agricultural production’ was found strongly correlated with the other questions, therefore eliminated.

• **Refine phrasing and sequence of the questions**

• **Adapt to different survey designs / questionnaires**
An individual is an owner of tenure rights over agr. land if:

- has a legally recognized document in his name
- has the right to sell
- has the right to bequeath

Challenging to define and operationalize ownership and land tenure rights in a way that provides reliable and comparable figures across countries.

Focusing on legally recognized documents not sufficient, especially in low and middle income countries

Need to consider additional characteristics which can indicate land ownership or tenure rights.
Data Collection Strategies

Minimum Set of Questions at individual level

Recommended when:

- countries are only interested in estimating SDG 5.a.1.
- 5 questions appended to a national household survey
- Unit of observation is individual

Parcel-level Module

Recommended when:

- Countries want to collect more data items for fuller understanding of land tenure rights from a gender perspective

OR:

- Survey already includes a parcel level module
<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Do you own or hold any agricultural land, either alone or jointly with someone else? (Y/N)</td>
<td>Respondent's self-perception</td>
</tr>
<tr>
<td>Q2. What legally recognized documents do you have for any of the agricultural land you own or hold? [tick all that apply]</td>
<td>Respondent has legally recognized document</td>
</tr>
<tr>
<td>(country specific list including legally recognized documents and not. Only legally recognized documents shall be considered for the computation of 5.a.1.)</td>
<td></td>
</tr>
<tr>
<td>Q3. (for each selected document) Is your name is listed as an owner or use right holder on [SELECTED DOCUMENT]? (Y/N)</td>
<td>Respondent's name is listed in the document</td>
</tr>
<tr>
<td>Q4. Do you have the right to sell or give away permanently any of the agricultural land you own or hold, either alone or jointly with someone else? (Y/N)</td>
<td>Respondent has alienation rights: sell</td>
</tr>
<tr>
<td>Q5. Do you have the right to bequeath any of the agricultural land you own or hold, either alone or jointly with someone else? (Y/N)</td>
<td>Respondent has alienation rights: bequeath</td>
</tr>
</tbody>
</table>
Recommended Data Sources

**Household Surveys** (National or Internationally-led)
Screening of agr. HHs necessary
Oversampling might be needed

- Living Standard Measurement Surveys (LSMS)
- Living Conditions Surveys
- Multipurpose Surveys
- Household Budget Surveys (HBS)
- Demographic and Health Surveys (DHS)
- Multiple Indicator Cluster Surveys (MICS)

Alternatively, **AGRIS** (integrated agricultural survey which also collects information on the livelihoods of the farms) can be used
HARMONIZATION BETWEEN 5.A.1 AND 1.4.2

SDG 1.4.2 = “Proportion of total adult population with secure tenure rights to land, with (i) legally recognized documentation and (ii) who perceive their rights to land as secure, by sex and by type of tenure”

How are the two indicators similar? And where do they differ?

- Both focus on land tenure
- Both focus on individual rights
- Both require sex disaggregated data

### 5.a.1
- Agricultural land
- Individuals in agricultural households
- De facto ownership & tenure rights (legal documentation and/or alienation rights). A holder is an individual presenting at least one of the proxies

### 1.4.2
- All types of land (i.e. also residential)
- Whole adult population in the country
- (i) legally recognized documents and (ii) perception on tenure security
FAO, UN-HABITAT, the World Bank, GDWGL and GLII are collaborating on the alignment of concepts, definitions and data collection tools, to facilitate the work of statistical offices for the generation of these indicators.

A Joint FAO/ WB / UN-HABITAT publication is planned for the second half of 2018.

- One common ‘land tenure module’ has been developed for reporting on both indicator 5.a.1 and 1.4.2.
- 5 versions of the same module are available, to facilitate integration in the range of existing national household surveys.
- Advocacy to include the common module in upcoming LSMS survey (WB) and other internationally-led HH surveys.
SDG Indicator 2.a.1 – Agricultural orientation index

\[
\text{Agriculture Share of Central Government Expenditure} = \frac{\text{Agriculture Share of GDP}}{\left(\frac{\text{Central Government Expenditure on Agriculture}}{\text{Total Central Government Expenditure}} \times 100\right) \times \left(\frac{\text{Agriculture Value Added}}{\text{GDP}} \times 100\right)}
\]

Agriculture includes forestry, fishing and hunting.
## FAO-Government Expenditure on Agriculture (GEA) Questionnaire & Indicator 2.a.1

### TABLE A:

<table>
<thead>
<tr>
<th>Functional Classification 2</th>
<th>Government expenditure on agriculture and related functions</th>
<th>General Government</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Budgetary Central Government (excluding social security funds)</td>
<td>Extrabudgetary Units</td>
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<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>7</td>
<td>EXPENDITURE (TOTAL OUTLAYS)</td>
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<tr>
<td>704</td>
<td>Economic Affairs</td>
<td></td>
</tr>
<tr>
<td>7042</td>
<td>Agriculture, forestry, fishing, and hunting</td>
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<tr>
<td></td>
<td>Recurrent</td>
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</tr>
<tr>
<td></td>
<td>Capital</td>
<td></td>
</tr>
<tr>
<td>70421</td>
<td>Agriculture (crops and animal husbandry)</td>
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<tr>
<td></td>
<td>Recurrent</td>
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<tr>
<td></td>
<td>Capital</td>
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<td>70422</td>
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<td></td>
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<td></td>
<td>Capital</td>
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<td>70423</td>
<td>Fishing and hunting</td>
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<tr>
<td></td>
<td>Recurrent</td>
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<tr>
<td></td>
<td>Capital</td>
<td></td>
</tr>
<tr>
<td>7048</td>
<td>R&amp;D Economic Affairs</td>
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</tr>
<tr>
<td>70482</td>
<td>R&amp;D Agriculture, forestry, fishing, and hunting</td>
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</tr>
<tr>
<td>705</td>
<td>Environmental protection</td>
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<td>7054</td>
<td>Protection of Biodiversity and Landscape</td>
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<tr>
<td></td>
<td>Recurrent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Capital</td>
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<tr>
<td>7055</td>
<td>R&amp;D Environmental Protection</td>
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<tr>
<td>7072</td>
<td>Other, please specify</td>
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</table>

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*Note: The table continues with similar entries for various classifications and expenditures.*
GEA Questionnaire & Indicator 2.A.1-FAO Calendar

May: dispatch GEA Questionnaire

June-Aug: Review, validate, process GEA data

Sept: Compile GEA & 2.a.1 indicators and finalize dataset

Oct-Nov: FAOSTAT and media release

Feb-Mar: Submit 2.a.1 indicator & analysis for SDG Global report
GEA Questionnaire — Data Collection Process (1)

GEA Questionnaire dispatch

Every year in May, the FAO Statistics Division (ESS) sends the GEA questionnaire to member countries together with two other FAO questionnaires (Agriculture Production, Prices Received by Farmers) in a harmonized exercise.
Between June and August, FAO:
• validates the data of the questionnaires received,
• supplement data for non-respondent countries with IMF GFS data or national online publications
• converts the data collected in USD current prices and USD 2005 constant prices.
In September, the Agriculture Share of Government Expenditure and Indicator 2.a.1 are compiled and embedded in the final GEA dataset.
**GEA Questionnaire – Data Collection Process (4)**

**Data release**

**November**
- Final GEA dataset released on FAOSTAT,
- Press release published on the FAO website,
- SDG Indicator 2.a.1 data published on the FAO SDG data and information portal

**February**
- Contribution to the Global SDG report
## GEA Questionnaire – Reporting Countries

<table>
<thead>
<tr>
<th>SDG Region</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia and New Zealand</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Central Asia and Southern Asia</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Eastern Asia and South-eastern Asia</td>
<td>9</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>10</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Northern America and Europe</td>
<td>30</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td>Oceania excluding Australia and New Zealand</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>8</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Western Asia and Northern Africa</td>
<td>8</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>70</strong></td>
<td><strong>88</strong></td>
<td><strong>97</strong></td>
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</tbody>
</table>
Indicator 2.a.1 - Compilation Challenges

Challenges compiling GEA data & Indicator 2.a.1:

- Legal Framework
- Institutional Coordination
- Methodology/Classification