

*Statistical Capacity Building Programme*  
Training Course on 'Agriculture Statistics and Food  
Security Analysis', 29-30 May 2023

# Measurement of the food and agriculture-related SDG indicators in OIC/SESRI countries

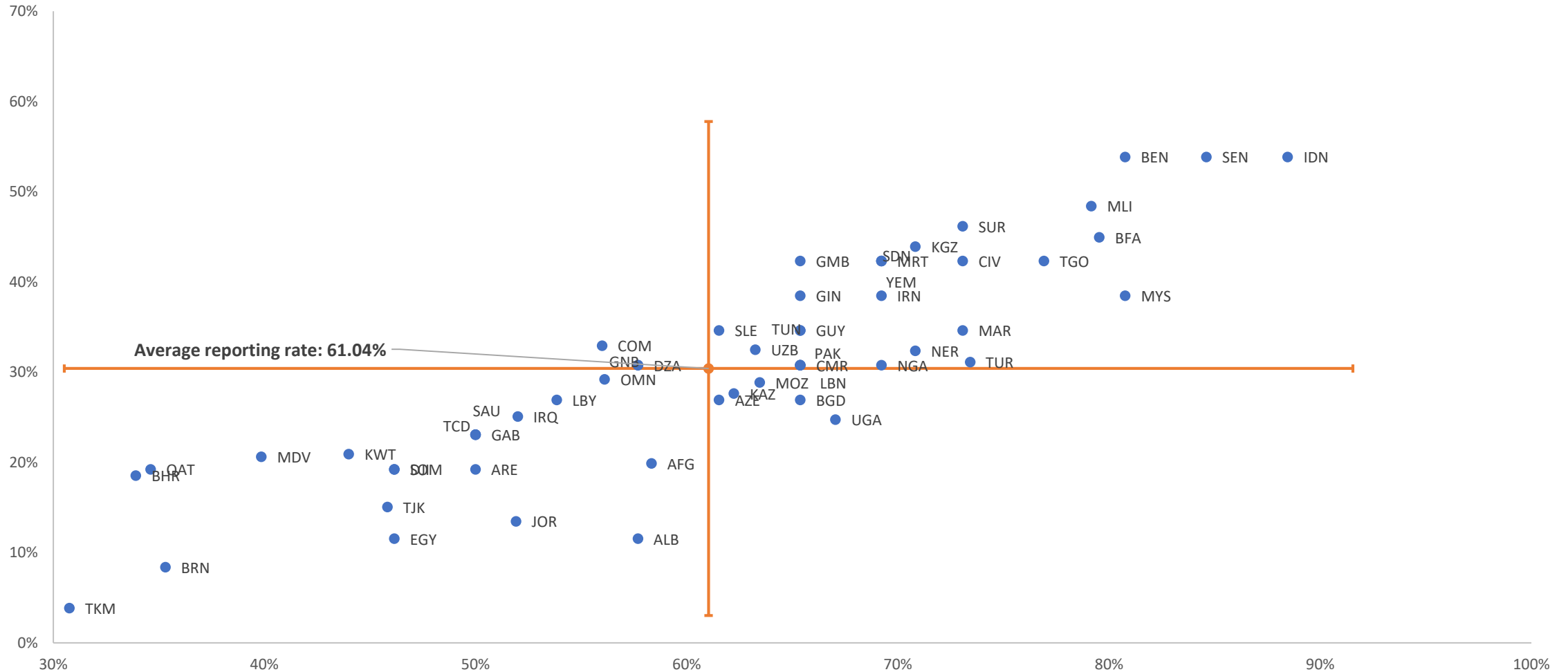
Mr. Dorian Kalamvrezos Navarro  
Statistician, Food and Agriculture Organization (FAO)



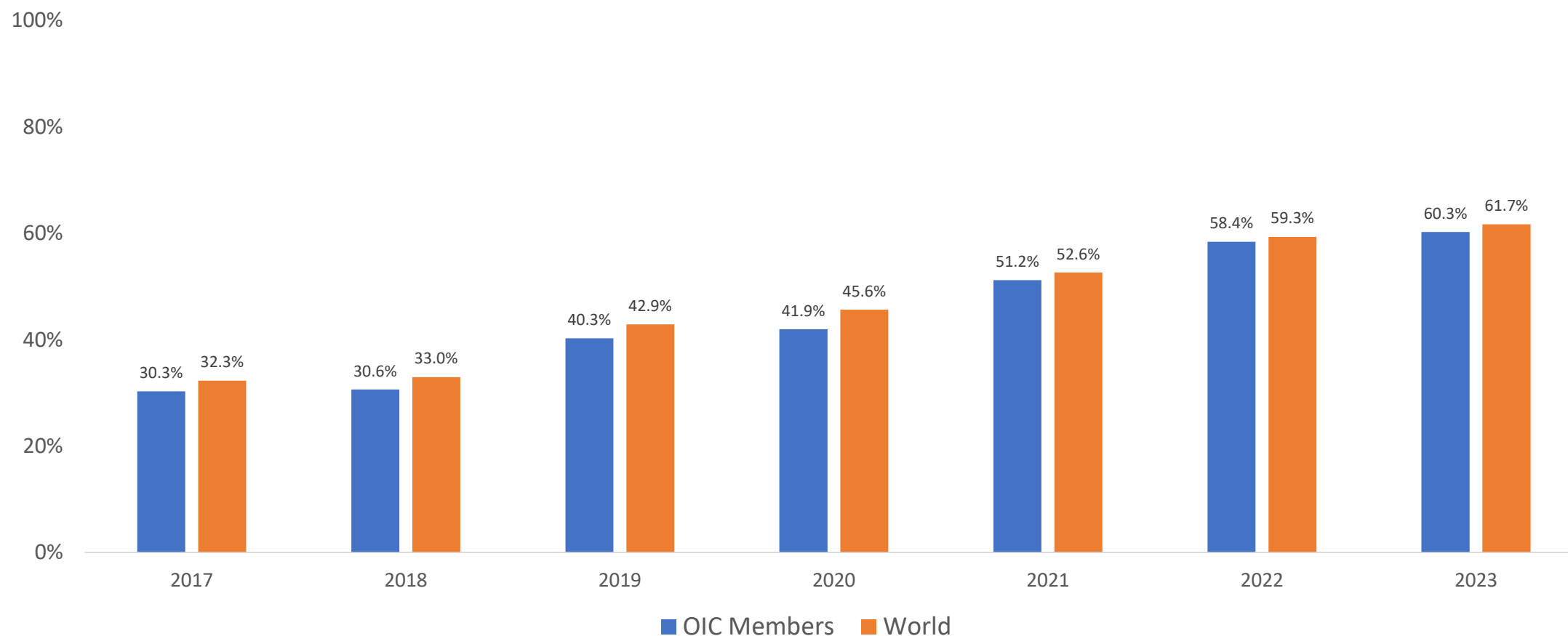
# 21 SDG INDICATORS UNDER FAO CUSTODIANSHIP

<b>GOAL 2:</b> Food security, Nutrition, Sustainable agriculture	2.1.1	2.1.2	2.3.1	2.3.2	2.4.1	2.5.1	2.5.2	2.a.1	2.c.1
<b>GOAL 5:</b> Gender equality	5.a.1	5.a.2							
<b>GOAL 6:</b> Use of water	6.4.1	6.4.2							
<b>GOAL 12:</b> Sustainable consumption and production	12.3.1								
<b>GOAL 14:</b> Oceans	14.4.1	14.6.1	14.7.1	14.b.1					
<b>GOAL 15:</b> Life on land	15.1.1	15.2.1	15.4.2						

# 2023 SDG reporting rate for OIC members compared with 2017 reporting rate



# Average reporting rate for OIC members compared with World, 2017-2023





# FAO Overall Strategy to support the monitoring of Food and Agriculture SDG indicators

## 5 AREAS

1



**Development, testing and documentation of methods** (e.g. data disaggregation techniques, use of EO data...)

2



**Data gap assessment and development of Statistics Strategic plans** (including budget) that align with the SDG Indicator

3



**Supporting implementation of new cost-effective data collection tools** (e.g. AGRIS, Remote sensing, stock assessment)

4



**Upgrading existing data collection tools to produce FAO-relevant SDG indicators**

5



**Improving data dissemination, analysis & use of FAO-SDG indicators for decision-making**

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# Corporate capacity development activities for SDG indicators (ongoing since 2016)

## AIMS

1. Enlarge the pool of **SDG monitoring experts**
2. Facilitate **South-South cooperation**
3. Facilitate pilot testing of **new methods**

## ACTIONS

**40+ training workshops** since 2017

**120 countries** attended one or more workshops from all regions of the world

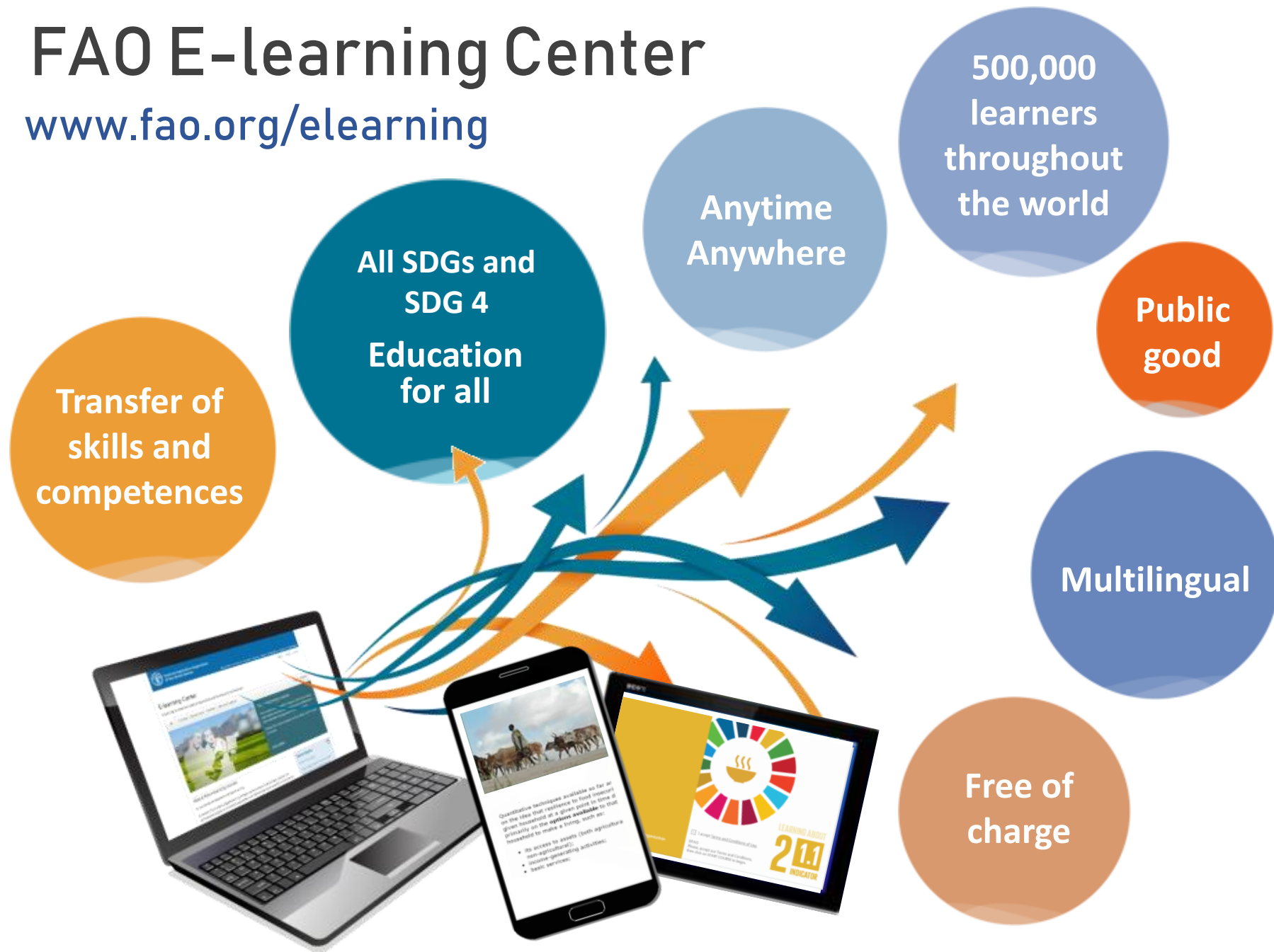
## RESULT

**Average reporting rate** rose from **32.7% in 2017** to **62.3% in 2023**



# FAO E-learning Center

[www.fao.org/elearning](http://www.fao.org/elearning)





# E-learning courses published, freely available online



# SDG portal



- 2.1.1 Hunger
- 2.1.2 Severity of food insecurity
- 2.3.1 Productivity of small-scale food producers
- 2.3.2 Income of small-scale food producer
- 2.4.1 Agricultural sustainability
- 2.5.1 Conservation of genetic resources for food and agriculture
- 2.5.2 Risk status of livestock breeds
- 2.a.1 Public Investment in agriculture
- 2.c.1 Food price volatility



- 12.3.1 Global food losses



- 5.a.1 Women's ownership of agricultural land
- 5.a.2 Women's equal rights to land ownership



- 14.4.1 Fish stocks sustainability
- 14.6.1 Illegal, unreported unregulated fishing
- 14.7.1 Value added of sustainable fisheries
- 14.b.1 Access rights for small-scale fisheries



- 6.4.1 Water use efficiency
- 6.4.2 Water stress



- 15.1.1 Forest area
- 15.2.1 Sustainable forest management
- 15.4.2 Mountain Green Cover

Webpages for the 21 Indicators under FAO custodianship and 3 Indicators where FAO is a contributing agency:

<http://www.fao.org/sustainable-development-goals/indicators/en/>





## Sustainable Development Goals



[Overview](#)

[News](#)

[Goals](#)

[Partnerships in action](#)

[Tracking progress](#)

[Indicators](#)

### 15.1.1 Forest area as a percentage of total land area

This indicator measures the proportion of the world's land area that is forested and is expressed as a percentage. Changes in forest area reflect changes in demand for land for other uses and may help in identifying unsustainable practices in the forest and agriculture sectors. The indicator will measure progress towards SDG Target 15.1.

#### Target 15.1

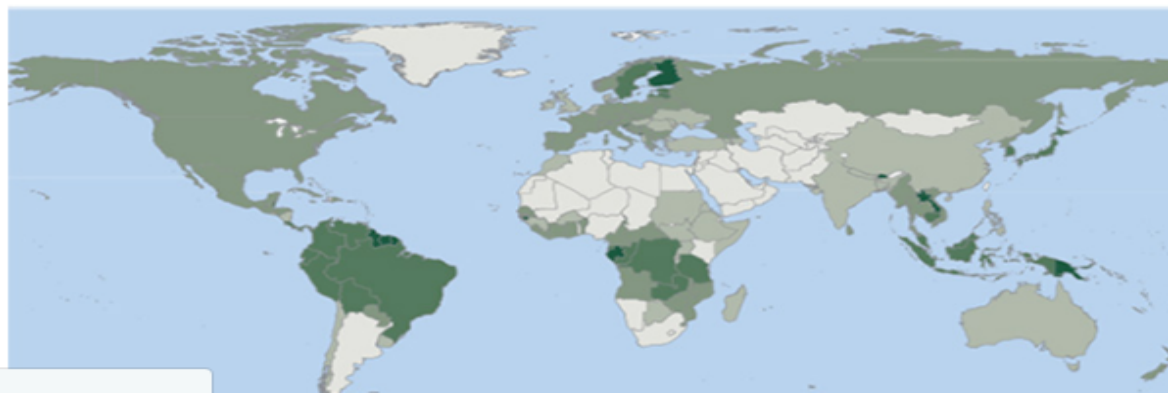
*By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.*

#### Impact

Together with indicator 15.2.1, this indicator ensures forests are efficiently managed, and a better balance is struck between conservation and sustainable use of natural resources.

#### Key results

##### Forest area as a percentage of total land area in 2015



#### Methodology

- [Metadata](#)

#### Tier: I

- [Tier Classification](#)

#### Data

- [15.1.1 - SDG Indicators Global Database](#)
- [FAOSTAT](#)

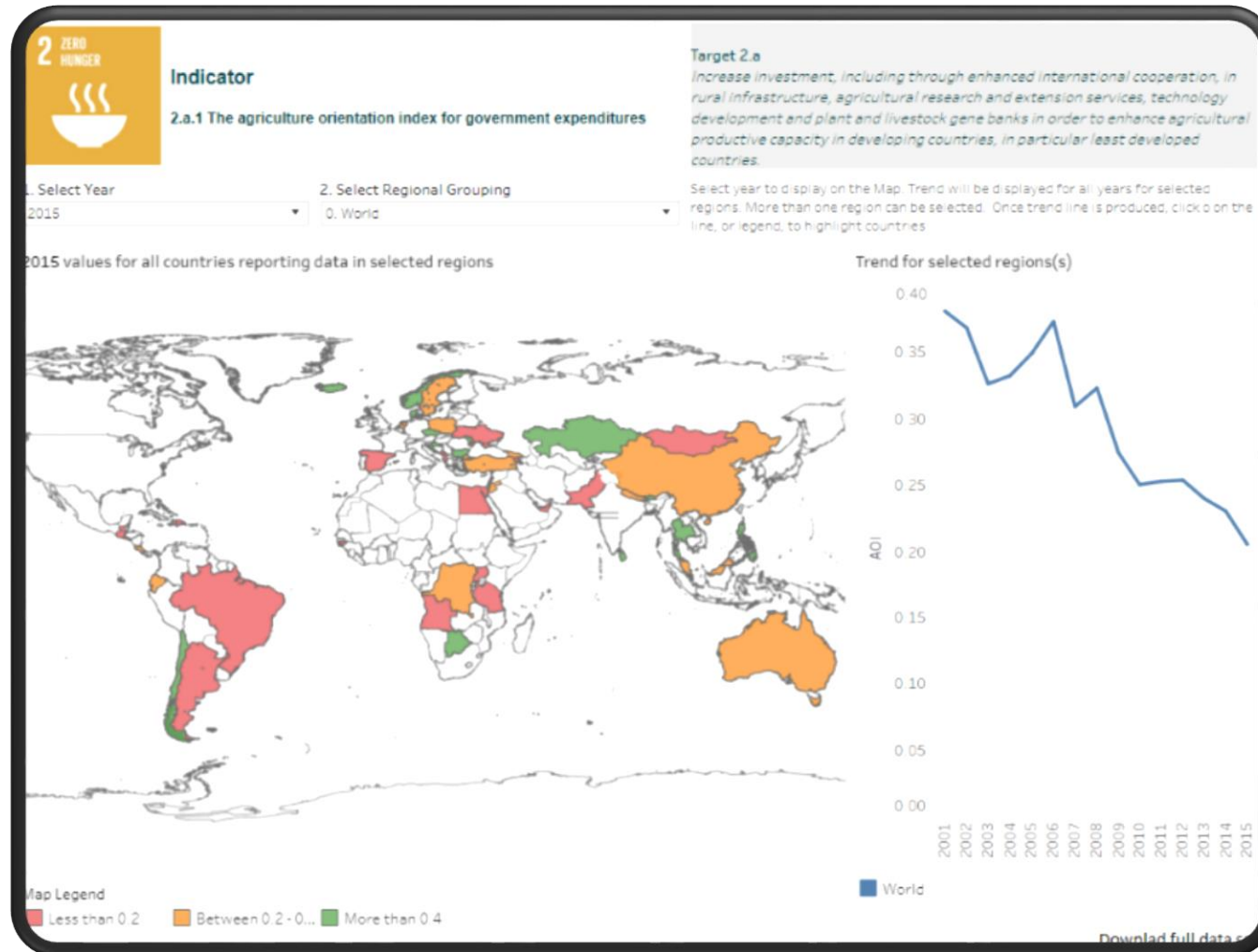
#### Capacity development

- [Expert Consultation on Global Forest Resources Assessment Towards FRA 2020](#)

#### Related links

- [Global Forest Resources Assessments](#)
- [Keeping an eye on SDG 15: Working with countries to](#)

# Data dissemination platform



Example of  
Data  
Visualization  
for Indicator  
2.a.1

# FAO's contributions to global reporting

<http://www.fao.org/sdg-progress-report/en/>



Download PDF

## Tracking progress on food and agriculture-related SDG indicators 2022



The digital report paints a grim picture of progress in the food and agriculture domain. The most recent evidence available suggests that the world is **not on track** to meeting the majority of SDG targets related to sustainable agriculture and food security

New edition launched on  
15 September 2023!



MEASURING PRODUCTIVE AND SUSTAINABLE AGRICULTURE

CONFLICT, COVID-19 AND FOOD INSECURITY SNAPSHOT

METHODS





# Short overview of the 21 SDG indicators under FAO custodianship

# Status of SDG indicators under FAO custodianship

- As of November 2015

<b>GOAL 2:</b> Food security, Nutrition, Sustainable agriculture	2.1.1	2.1.2	2.3.1	2.3.2	2.4.1	2.5.1	2.5.2	2.a.1	2.c.1
<b>GOAL 5:</b> Gender equality	5.a.1	5.a.2							
<b>GOAL 6:</b> Use of water	6.4.1	6.4.2				<b>Level of Development</b>  <b>TIER I</b> – Established methodology and data available for more than 50% of countries  <b>TIER II</b> – Methodology established but data available for less than 50% of countries  <b>TIER III</b> – Internationally agreed methodology not yet developed / approved			
<b>GOAL 12:</b> Sustainable consumption and production	12.3.1								
<b>GOAL 14:</b> Oceans	14.4.1	14.6.1	14.7.1	14.b.1					
<b>GOAL 15:</b> Life on land	15.1.1	15.2.1	15.4.2						

# STATUS OF SDG INDICATORS UNDER FAO CUSTODIANSHIP

## - AS OF MAY 2023

<b>GOAL 2:</b> Food security, Nutrition, Sustainable agriculture	2.1.1	2.1.2	2.3.1	2.3.2	2.4.1	2.5.1	2.5.2	2.a.1	2.c.1
<b>GOAL 5:</b> Gender equality	5.a.1	5.a.2							
<b>GOAL 6:</b> Use of water	6.4.1	6.4.2				<b>Level of Development</b>  <b>TIER I</b> – Established methodology exists and data already widely available  <b>TIER II</b> – Methodology established but insufficient coverage (>50% country coverage)  <b>TIER III</b> – Internationally agreed methodology not yet developed			
<b>GOAL 12:</b> Sustainable consumption and production	12.3.1								
<b>GOAL 14:</b> Oceans	14.4.1	14.6.1	14.7.1	14.b.1					
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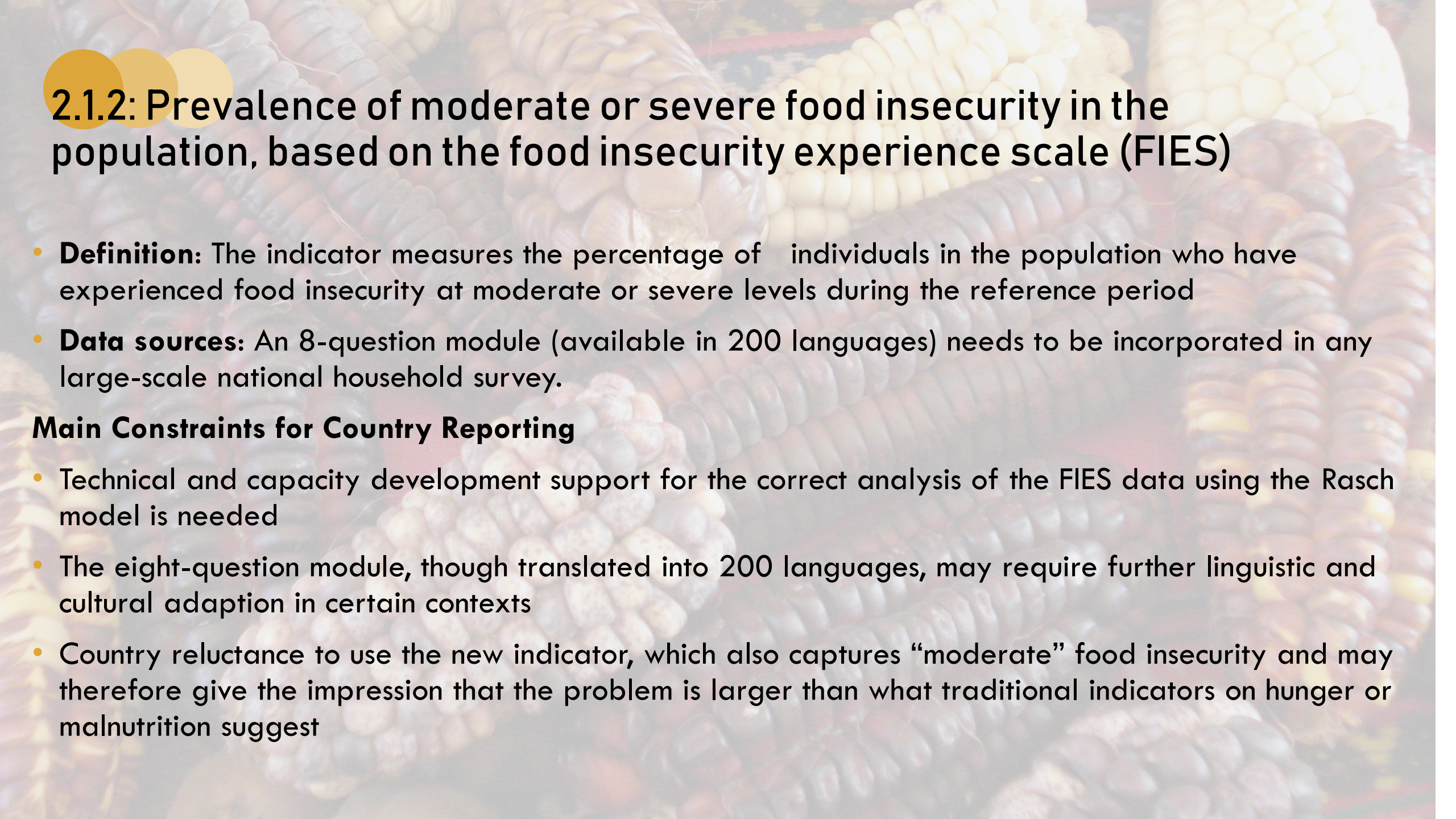
## 2.1.1: Prevalence Of Undernourishment

- **Definition:** The prevalence of undernourishment (PoU) is an estimate of the proportion of the population whose habitual food consumption is insufficient to provide the dietary energy levels that are required to maintain a normal active and healthy life.
- **Data Sources:** Food Balance Sheets, Dietary Intake Surveys, Household Income and Expenditure Surveys, Demographic Data

### Main Constraints for Country Reporting:

- Prevalent use of methodologically different national indicators (e.g., Food Poverty Ratio, proportion consuming less the average recommended dietary intake)
- Due to high cost of individual dietary intake surveys, other less-than-ideal data sources not designed to collect this type of information are used





## 2.1.2: Prevalence of moderate or severe food insecurity in the population, based on the food insecurity experience scale (FIES)

- **Definition:** The indicator measures the percentage of individuals in the population who have experienced food insecurity at moderate or severe levels during the reference period
- **Data sources:** An 8-question module (available in 200 languages) needs to be incorporated in any large-scale national household survey.

### Main Constraints for Country Reporting

- Technical and capacity development support for the correct analysis of the FIES data using the Rasch model is needed
- The eight-question module, though translated into 200 languages, may require further linguistic and cultural adaption in certain contexts
- Country reluctance to use the new indicator, which also captures “moderate” food insecurity and may therefore give the impression that the problem is larger than what traditional indicators on hunger or malnutrition suggest



## 2.1.2: The 8-question FIES module



During the **last 12 months**, was there a time when...

Q1. You were **worried** you would not have enough food to eat because of a lack of money or other resources?

Q2 You were unable to eat **healthy and nutritious food** because of a lack of money?

Q3. You ate only a **few kinds of foods** because of a lack of money or other resources?

Q4. You had to **skip a meal** because there was not enough money or other resources to get food?

Q5. You **ate less** than you thought you should because of a lack of money or other resources?

Q6. your household **ran out of food** because of a lack of money or other resources?

Q7. You were **hungry** but did not eat because there was not enough money or other resources for food?

Q8. You went **without eating for a whole day** because of a lack of money or other resources?





### 2.3.1: Productivity of small-scale food producers

### 2.3.2: Incomes of small-scale food producers

- **Definition of small-scale food producers:** producers that fall in the bottom 40 percent of the distribution of land size **and** livestock heads **and** total revenues
- **Data sources:** Agricultural Surveys collecting data at farm level (e.g. the AGRIS project of FAO) , Household surveys integrated with a module on agricultural activities (e.g. WB's LSMS-ISA and similar surveys); Administrative data sources, such as farmers' registries, combined with other data sources.

### Main Constraints for Country Reporting

- Most countries do not collect all the required data in a single survey, as needed to compute the indicator
- Countries face difficulties in adjusting existing data collection tools (especially agricultural surveys) to fit the purpose.





## 2.4.1: Percentage of agricultural land under sustainable and productive agriculture

### Overview

- Calculated based on a dashboard of 11 sub-indicators, each with specific criteria defining three levels: **sustainable**, **acceptable** and **unsustainable**.
- **Data source:** Preferred instrument for data collection is a **farm survey**, that should include the minimum set of questions needed to assess 2.4.1 (FAO has prepared a Questionnaire).
- ❖ Aligned with efforts supported by FAO to develop farm surveys as the most relevant instrument for agricultural data (see AGRIS)

### Main Constraints for Country Reporting

- Most countries do not collect the required data: existing data collection tools and sampling frames have not been adjusted to fit the purpose



## 2.4.1: The 11 sub-indicator by sustainability dimension, theme and type

	Theme	Sub-indicators	Type
Economic	Land productivity	Farm output value per hectare	Outcome
	Profitability	Net farm income	Outcome
	Resilience	Risk mitigation mechanisms	Mix
Environmental	Soil health	Prevalence of soil degradation	Outcome
	Water use	Variation in water availability	Mix
	Fertilizer pollution risk	Management of fertilizers	Practice
	Pesticide risk	Management of pesticides	Practice
	Biodiversity	Use of biodiversity-supportive practices	Practice
Social	Decent employment	Wage rate in agriculture	Outcome
	Food security	Food insecurity experience scale (FIES)	Outcome
	Land tenure	Secure tenure rights to land	Outcome



## 2.5.1.a: Number of plant genetic resources for food and agriculture secured in either medium or long-term conservation facilities

### **Methodology:**

- This sub-indicator is calculated as the total number of unique accessions of plant genetic resources, with actual or potential value for food and agriculture, secured in medium to long-term conservation facilities

### **Main Constraints to Reporting:**

- Many countries have not identified a national focal point for plant genetic resources
- Even when a national focal point has been identified, there are cases where a replacement is not communicated to FAO in the event of a change of position
- Documentation of plant genetic resources is poorly standardized within and across national repositories





### 2.5.1.b: Number of animal genetic resources for food and agriculture secured in either medium or long-term conservation facilities

- **Definition:** calculated as the number of local AND transboundary breeds stored within a genebank collection with an amount of genetic material stored which is required to reconstitute the breed.

(A local breed of a country consists of a mammalian or avian livestock belonging to a specific breed that is found ONLY in the respective country.)

#### **Data source :**

- Local breed genetic material information reported by officially nominated National Focal Points to FAO's – Domestic Animal Diversity Information System (DAD-IS)

#### **Main Constraints to Country Reporting:**

- When a national focal point has been identified, however FAO is not updated when there is a replacement in the position-holder
- National Focal Points still lack awareness of their responsibility for reporting



A background image showing a smiling man and woman in traditional clothing holding a white goat in a rural setting. The man is wearing a brown jacket and the woman is wearing a blue headscarf and a purple robe. They are both smiling and looking at the camera. The goat is white and has a blue collar. The background is a blurred outdoor scene with wooden structures and other goats.

## 2.5.2: Proportion of local breeds classified as being at risk of extinction

- **Definition:** Measures the percentage of livestock local breeds (i.e. breeds occurring in only one country) classified as being at risk of extinction at a certain moment in time.
- **Methodology:** The risk of extinction is calculated based on a number of parameters, but primarily the number of animals belonging to a breed: the lower the number the higher the risk.

### Constraints for Country Reporting

- When a national focal point has been identified in the past, there are cases where FAO is not informed regarding the change in the position
- Many countries do not regularly conduct livestock censuses **at breed level** due to the elevated costs associated



## 2.a.1: The agriculture orientation index for government expenditures

$$\text{Agriculture Orientation Index} = \frac{\text{Agriculture Share of Government Expenditures}}{\text{Agriculture value added Share of GDP}}$$

where Agriculture refers to the agriculture, forestry, fishing and hunting sector

### Data sources:

- Agriculture Share of Government Expenditures is based on **FAO's annual Government Expenditures in Agriculture (GEA) questionnaire**.
- ❖ Comparable data can also be derived from IMF questionnaire on Government Expenditures

### Main Constraints for Country Reporting

- Countries face difficulties in tracking agriculture expenditures across the various ministries involved
- Inconsistency of classifications against COFOG, leading to different expenditure classifications between countries and within countries



The background of the slide is a faded, high-angle photograph of a busy outdoor market. Several people are visible, some wearing traditional patterned clothing. In the foreground, there are large baskets and piles of fresh produce, including yellow corn cobs, green beans, and bunches of yellow bananas. A small bowl of green herbs is also visible on the right. The overall scene conveys a sense of a vibrant, local food market.

## 2.c.1: Indicator Of Food Price Anomalies (IFPA)

- **Definition:** measures the number of “Price Anomalies” that occur on a given food commodity price series over a given period of time, defined as a Compound Growth Rate (CGR) that is greater than the historic mean CGR by one standard deviation or more.
- **Methodology:** The indicator measures food price anomalies for five staple cereal commodities (maize, rice, wheat, sorghum and millet) as well as officially reported general food price indices.

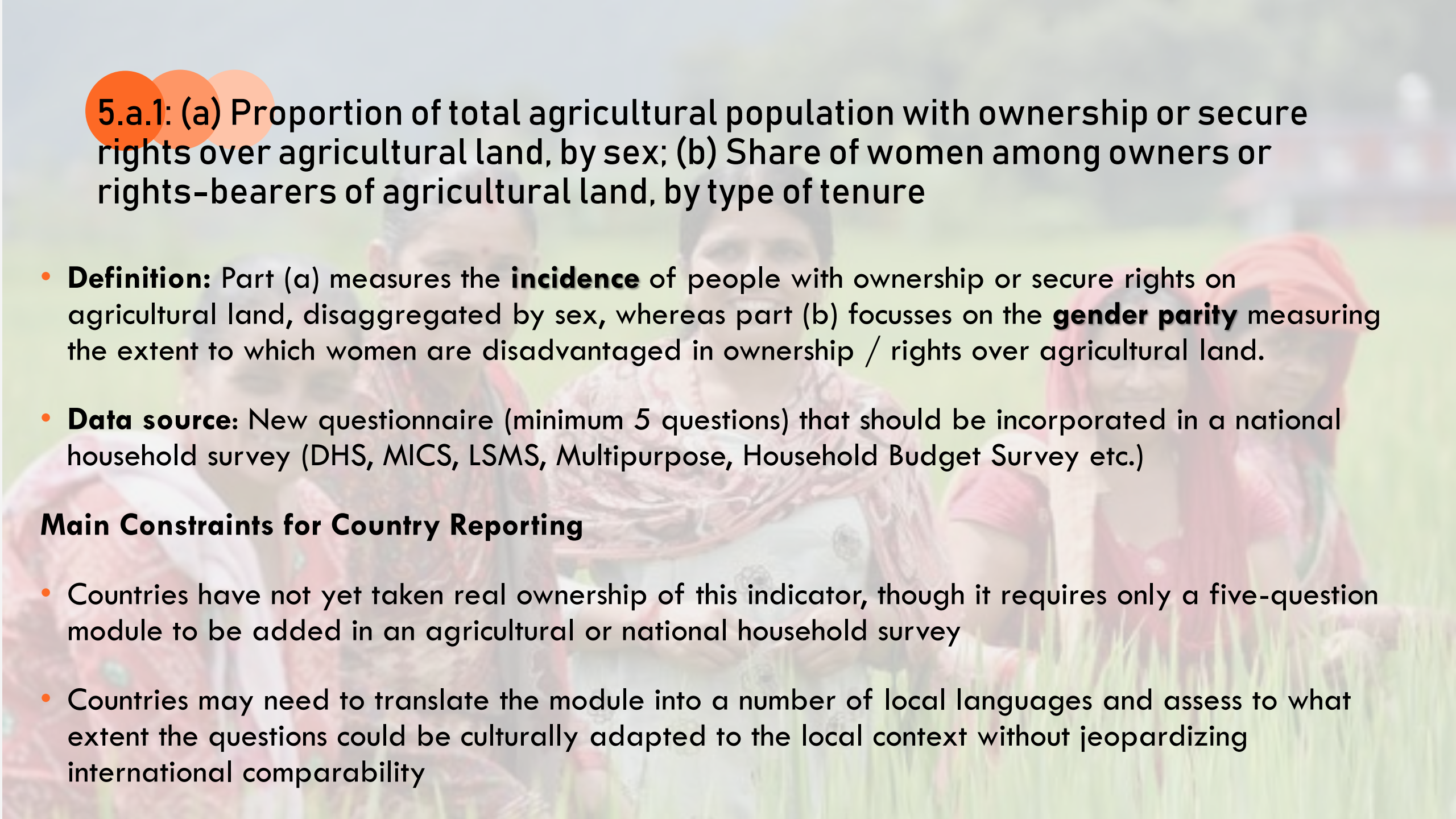
### Data sources

- Commodity level price data are harvested from national market Information systems and national statistics agencies websites

### Main Constraints for Country Reporting

- Difficulty to identify relevant, timely nationally representative official monthly food price series to allow calculation and reporting on a monthly basis
- Calculation of the indicator requires an uninterrupted monthly price series of at least five years




The background of the slide features a faded, low-contrast photograph of several women in a rural, agricultural setting. They are wearing traditional headwraps and are engaged in what appears to be a communal activity, possibly planting or tending to crops. The image is soft and serves as a backdrop for the text.

### 5.a.1: (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; (b) Share of women among owners or rights-bearers of agricultural land, by type of tenure

- **Definition:** Part (a) measures the **incidence** of people with ownership or secure rights on agricultural land, disaggregated by sex, whereas part (b) focusses on the **gender parity** measuring the extent to which women are disadvantaged in ownership / rights over agricultural land.
- **Data source:** New questionnaire (minimum 5 questions) that should be incorporated in a national household survey (DHS, MICS, LSMS, Multipurpose, Household Budget Survey etc.)

#### Main Constraints for Country Reporting

- Countries have not yet taken real ownership of this indicator, though it requires only a five-question module to be added in an agricultural or national household survey
- Countries may need to translate the module into a number of local languages and assess to what extent the questions could be culturally adapted to the local context without jeopardizing international comparability



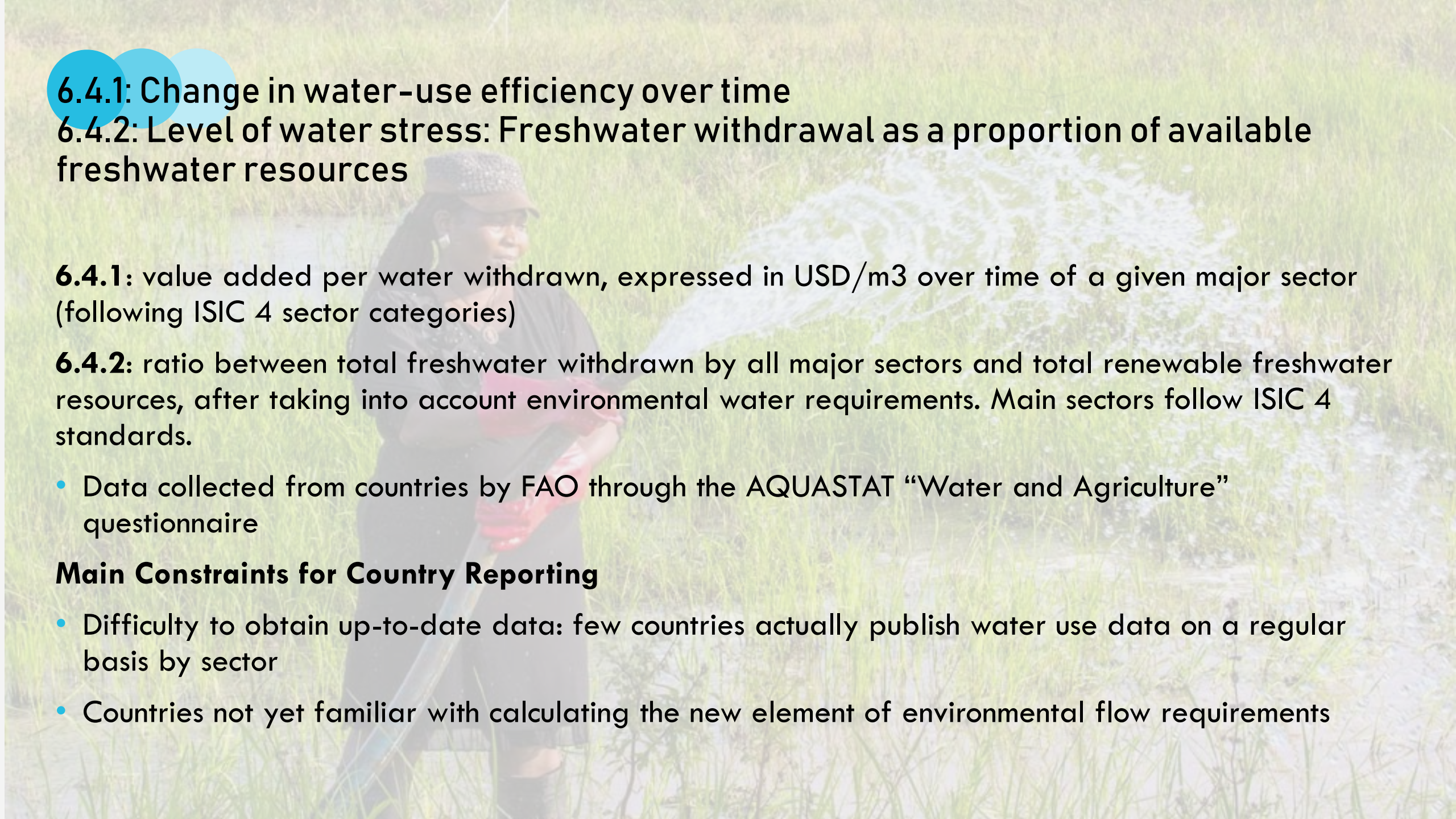
## 5.a.2: Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control

- **Definition:** The indicator “measures” the level to which a country’s legal framework supports women’s land rights, by testing that framework against six proxies drawn from international law and internationally accepted good practices
- **Data source:** A legal assessment performed by an officially nominated national legal expert, using the three forms provided by FAO for this purpose

### Main Constraints for Country Reporting

- Only a few countries have identified a national institution to oversee the necessary legal assessment. Of these, an even small number have carried out the assessment and reported to FAO.
- Engrained sensitivities and uncertainty in countries as to which Ministry should be responsible are added factors.



A background image of a woman in a field, possibly a farmer, with a blue overlay in the top left corner.

### 6.4.1: Change in water-use efficiency over time

### 6.4.2: Level of water stress: Freshwater withdrawal as a proportion of available freshwater resources

**6.4.1:** value added per water withdrawn, expressed in USD/m<sup>3</sup> over time of a given major sector (following ISIC 4 sector categories)

**6.4.2:** ratio between total freshwater withdrawn by all major sectors and total renewable freshwater resources, after taking into account environmental water requirements. Main sectors follow ISIC 4 standards.

- Data collected from countries by FAO through the AQUASTAT “Water and Agriculture” questionnaire

### **Main Constraints for Country Reporting**

- Difficulty to obtain up-to-date data: few countries actually publish water use data on a regular basis by sector
- Countries not yet familiar with calculating the new element of environmental flow requirements





### 12.3.1.a: Global Food Loss Index

- **Definition:** Crop and livestock product losses cover all quantity losses along the supply chain for all utilizations (food, feed, seed, industrial, other), up to but not including the retail/consumption level (to be measured by 12.3.1.b)
- **Methodology:** measures the percentage of food losses of ten commodities on the entire value chain occurring from the time of up to, but not including retail/consumption level, and then compares them to a base period.

#### Main Constraints for Country Reporting

- Data collection and compilation requires a comprehensive survey programme that combines different methods to measure food losses at various stages for the food supply chain for multiple products from different commodities groups
- The selection of the critical loss point may be different across products and countries, and require a comprehensive value chain analysis
- Loss data may be scattered across various agencies and units, requiring well-organized national coordination mechanisms for compilation



## 14.4.1: Proportion of fish stocks within biologically sustainable levels

- **Definition:** measures the sustainability of the world's marine capture fisheries by their abundance. A fish stock of which abundance is at or greater than the level that can produce the *maximum sustainable yield* (MSY) is classified as biologically sustainable.
- **Data sources:** The indicator requires the completion of a stock assessment that uses fish catch statistics, fishing effort data, biological information and surrogate biomass measures and fit the data to a population dynamics model.

### Main constraints in country reporting

- Few countries have the capacity to conduct proper fish stock assessments required for reporting, which use fish catch statistics, fishing effort data, biological information and surrogate biomass measures





14.6.1: Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing SDG indicator


14.b.1: Degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries

- **Data sources:** based on countries' responses to FAO's biennial survey on the **Code of Conduct on Responsible Fisheries (CCRF)**, which compiles:
  - country responses on IUU fishing action plans and on ratification and implementation of the FAO Port State Measures Agreement and the FAO Compliance Agreement,
  - and country responses on the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines)

### **Main constraints in country reporting**

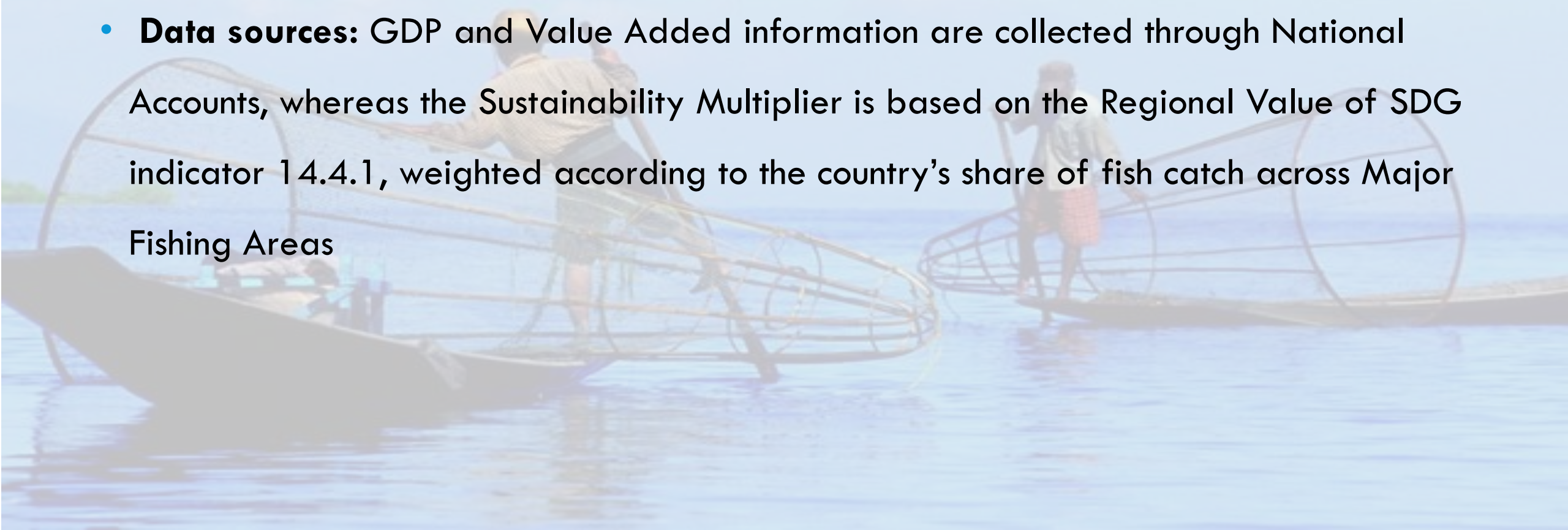
- Problems in reporting arise when a) Landlocked countries assume that this indicator is not relevant to them, although that may not be the case and b) the primary CCRF respondent does not coordinate with the competent persons for each of the relevant sections of the questionnaire





### 14.7.1: Sustainable fisheries as a percentage of GDP in small island developing states, least developed countries and all countries

- **Status:** Tier I
- **Data sources:** GDP and Value Added information are collected through National Accounts, whereas the Sustainability Multiplier is based on the Regional Value of SDG indicator 14.4.1, weighted according to the country's share of fish catch across Major Fishing Areas







**15.1.1: Forest area as a proportion of total land area**

**15.2.1: Progress towards sustainable forest management**

**15.1.1:** Tracked since 1947 and already existed in the MDG indicator framework

**15.2.1** is composed of five sub-indicators that measure progress towards all dimensions of sustainable forest management.

- Data collected from countries through FAO's Forest Resource Assessment (FRA) questionnaire, hitherto deployed every five years


### **Constraints to Reporting**

- Lack of reliable up-to-date data since assessments may be conducted infrequently in countries
- Differences in definitions over time make comparison of assessments within a country difficult
- Lack of sufficient resource allocation for national correspondents



## 15.4.2: (a) Mountain Green Cover Index and (b) Proportion of Degraded Mountain Land

- **Part A** measures the changes of the green vegetation in mountain areas, based on *Koerner et al's* Bioclimatic Zones
- Part B measures changes in land use in mountain areas, identifying land use changes that constitute degradation according to the SEEA land cover transition matrix
- **Data source:** FAO has calculated the indicator using remote sensing data from the European Space Agency.
- **Reporting constraints:** Unfamiliarity with remote sensing technology required for this indicator in countries, lack of clarity on responsible national institution, lack of



# Discrepancies between national and regional/global data: the perspective of a custodian agency



- Discrepancies between national and international indicators are the main threat to international comparability, and undermine the credibility of both national and international statistical agencies.
- According to the report “Lessons Learned from MDG Monitoring from a Statistical Perspective”, *‘discrepancies between national and international data ... created problems at the national level and tension in the international statistical community’*.
- Weakened international comparability and credibility, in turn, undermine the system of mutual accountability on which the effective implementation of the 2030 Agenda for Sustainable Development relies.
- Addressing discrepancies in a systematic way requires a concerted effort and renewed commitment by all involved parties, as well as targeted measures to address the various specificities of each type of discrepancy

# Types of Data Discrepancies

- Adoption by countries of proxy indicators (national indicators different from global indicators)
- Global indicators not included in the National monitoring framework (as ‘not relevant’)
- Data available at country-level (for example published on National SDG Reporting Platforms), but not reported to custodian agencies
- Same national and global indicators (both following agreed international standards) but discrepancies occur due to minor methodological differences in terms of definitions, data sources, compilation procedures, release periods

# Alignment between National and Global Indicator Framework

FAO has provided assistance to numerous countries and some regional organizations to foster greater alignment between national/regional and global indicator framework. There are a number of benefits to be gained:

- ✓ Clear, consistent assessments of progress, which can lead to effective evidence-based policies;
- ✓ Benchmarking of performance with other countries, guiding national policy decisions and attracting development assistance;
- ✓ Monitoring global SDG indicators does not preclude the possibility of monitoring also national indicators, however, the greater the alignment the lower are data requirements and reporting burden on countries;
- ✓ Possibility of benefitting from technical assistance programs of international agencies.

# Types of Data Discrepancies

## Adoption by countries of proxy indicators (national indicators different from global indicators)

A very common phenomenon – many countries have arbitrarily substituted official global SDG indicators with incomparable national proxy indicators

For example, many countries substitute SDG indicator 2.1.1 (prevalence of undernourishment) with:

- ✓ The percentage of people with **Average per capita daily dietary energy consumption** below thresholds based on Average Recommended Dietary Intake (ADER), usually set at 2,100 kcal
- ✓ the “**Food poverty ratio**” that measures the percentage of households who cannot afford to purchase a food basket able to provide a minimum of 2100 kcal per day.
- ✓ **Per capita annual consumption of meat**

This practice manifestly contravenes paragraph 75 of the UN Resolution on the 2030 Agenda:

*“The Goals and targets will be followed up and reviewed using a set of global indicators. These will be complemented by indicators at the regional and national levels...”*

# Types of Data Discrepancies

## Global indicators not included in the National monitoring framework (as not relevant)

Also a widespread phenomenon – many countries invoke the non-applicability of a given SDG indicator to the “national context” and do not monitor & report it, without engaging in a consultation process with the custodian agency

- Example 1: A country in West Africa declared SDG indicator 14.b.1 (small-scale fisheries) non-relevant, even though a 2016 census of artisanal fishing vessels provides details on 1,048 such vessels.
- Example 2: A Gulf country declared SDG indicator 14.6.1 (international instruments to combat IUU fishing) non-relevant, even though it has itself ratified several of the instruments within the scope of the indicator



# Types of Data Discrepancies

## Data available at country-level, but not published and/or reported to custodian agencies

A more subtle phenomenon that is more difficult to detect – usually is discovered by chance

- For SDG indicator 2.a.1 (Agricultural Orientation Index), this type of discrepancy is systematic: 2.a.1 is based on National Accounts figures that the vast majority of countries disseminate, and yet only about half of the countries in the world report to FAO systematically
- In fact, in recent years FAO has increased the country coverage of the indicator by about 35 countries by doing its own research to extract the figures from official databases, or country publications.
- However, this is a cumbersome and non very sustainable approach, so countries should make a more serious effort of reporting their data to FAO through the designated annual questionnaire

# Types of Data Discrepancies

Same national and global indicators (both following agreed international standards) but...

A broad category of discrepancies involves ostensibly the same indicator reported at national and international level, but with incongruent figures, for various reasons:

- *Different source*: A widespread case: national indicators using as denominator population figures derived from national sources vs. international organizations using UN Population Division estimates
- *Different definitions*: national figures for forest coverage often differ from SDG indicator 15.1.1 (% of forest cover), because countries use their own definitions of forests whereas SDG indicator 15.1.1 relies on one standard, universal definition
- *Slight differences in methodology*: figures for Government Expenditures in Agriculture reported under the Malabo framework differ from those reported officially to FAO or the IMF (Malabo methodological documents recognize the source of discrepancy as the non-systematic application of the COFOG classification)
- *Different figures with no apparent reason*: Prevalence of Undernourishment figures (SDG indicator 2.1.1) reported for many countries under the Malabo framework differ from the figures reported by FAO, even though the methodology is ostensibly the same



# Why data discrepancies occur

- An underlying reason for many discrepancies is a misunderstanding of the relationship between “country ownership” and international comparability. This is particularly the case for discrepancies due to the use of proxies or to global indicators not included in national indicator frameworks
- A more immediate reason for many discrepancies is a lack of capacity by national reporting entities to report the SDG indicator in compliance with the established international methodology, standards and classifications
- Lack of coordination at national level and between national, regional and global levels are also important reasons why certain discrepancies occur.

# Solutions to address data discrepancies

- Strengthen coordination between countries and custodian agencies: appointment of designated national focal points for each SDG indicator, with which custodians can enter into direct communication to try to get to the bottom of any data discrepancies
- Revamped capacity development approach by custodian agencies that not only focuses on the methodology and data collection aspect, but also includes an advocacy component targeted to decision-makers promoting greater alignment between national and global SDG monitoring frameworks
- Joint data collection of SDG data by custodian agencies and regional organizations



Thank you