Food and Agriculture Organization
of the United Nations

FAO’s work on SDG indicators

07/10/2019

21 SDG indicators are under FAO custodianship

Goal	SDG indicators								
Goal 2 (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**
Goal 5 (Gender equality)	**5.a.1**	**5.a.2**							
Goal 6 (Use of Water)	**6.4.1**	**6.4.2**							
Goal 12 (Sustainable Consumption and Production)	**12.3.1**								
Goal 14 (Oceans)	**14.4.1**	**14.6.1**	**14.7.1**	**14.b.1**					
Goal 15 (Life on Land)	**15.1.1**	**15.2.1**	**15.4.2**						

FAO's work on SDG indicator methodologies

- Whereas FAO started with 13 Tier III indicators. In most cases, FAO had to develop new methodological proposals that complied with the IAEG-SDG criteria for Tier III reclassification:
  - This was the case for indicators 2.3.1, 2.3.2, 2.4.1, 2.c.1, 5.a.1, 5.a.2, 6.4.1, 12.3.1, 14.6.1, 14.b.1
- In some cases, FAO also had to develop new international definitions for key concepts, e.g.:
  - Definition of **small scale food producers** (indicators 2.3.1/2.3.2)
  - Definition of **rural/urban areas** (disaggregation for many indicators)
- For all indicators under its custodianship, FAO has been developing improved data collection tools, guidelines and supporting materials to facilitate country reporting

Status of SDG indicators under FAO custodianship

As of November 2015

Goal	Indicators								
Goal 2 (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
Goal 5 (Gender equality)	5.a.1	5.a.2							
Goal 6 (Use of Water)	6.4.1	6.4.2							
Goal 12 (Sustainable Consumption and Production)	12.3.1								
Goal 14 (Oceans)	14.4.1	14.6.1	14.7.1	14.b.1					
Goal 15 (Life on Land)	15.1.1	15.2.1	15.4.2						

TIER	LEVEL OF DEVELOPMENT
I	Established methodology exists and data already widely available
II	Methodology established but insufficient coverage (>50% country coverage)
III	Internationally agreed methodology not yet developed

STATUS OF SDG INDICATORS UNDER FAO CUSTODIANSHIP

As of April 2019									
Goal	**Indicators**								
Goal 2 (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**
Goal 5 (Gender equality)	**5.a.1**	**5.a.2**							
Goal 6 (Use of Water)	**6.4.1**	**6.4.2**							
Goal 12 (Sustainable Consumption and Production)	**12.3.1**								
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Goal 15 (Life on Land)	**15.1.1**	**15.2.1**	**15.4.2**						

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FAO'S CONTRIBUTIONS TO GLOBAL REPORTING

- FAO contributes to the annual Global SDG Reports, submitting storylines, country data, and regional and global aggregates for the **Tier I and II category** indicators
- This year's Global SDG Report fed into the **High Level Political Forum** (HLPF)
- Contribution to FAO flagship publications, reporting FAO-relevant SDG indicators (e.g. *SOFI, SOFA, SOFIA, SOFO, SOCO, PROSA*)

CORPORATE CAPACITY DEVELOPMENT ACTIVITIES FOR SDG INDICATORS 2016-18

- ✓E-LEARNING COURSES
- ✓GLOBAL, REGIONAL AND NATIONAL TRAINING WORKSHOPS
- ✓SDG DATA & COMMUNICATION PORTAL

NEW FAO vision for 2019-2030: Scale up capacity development support to maximize country reporting

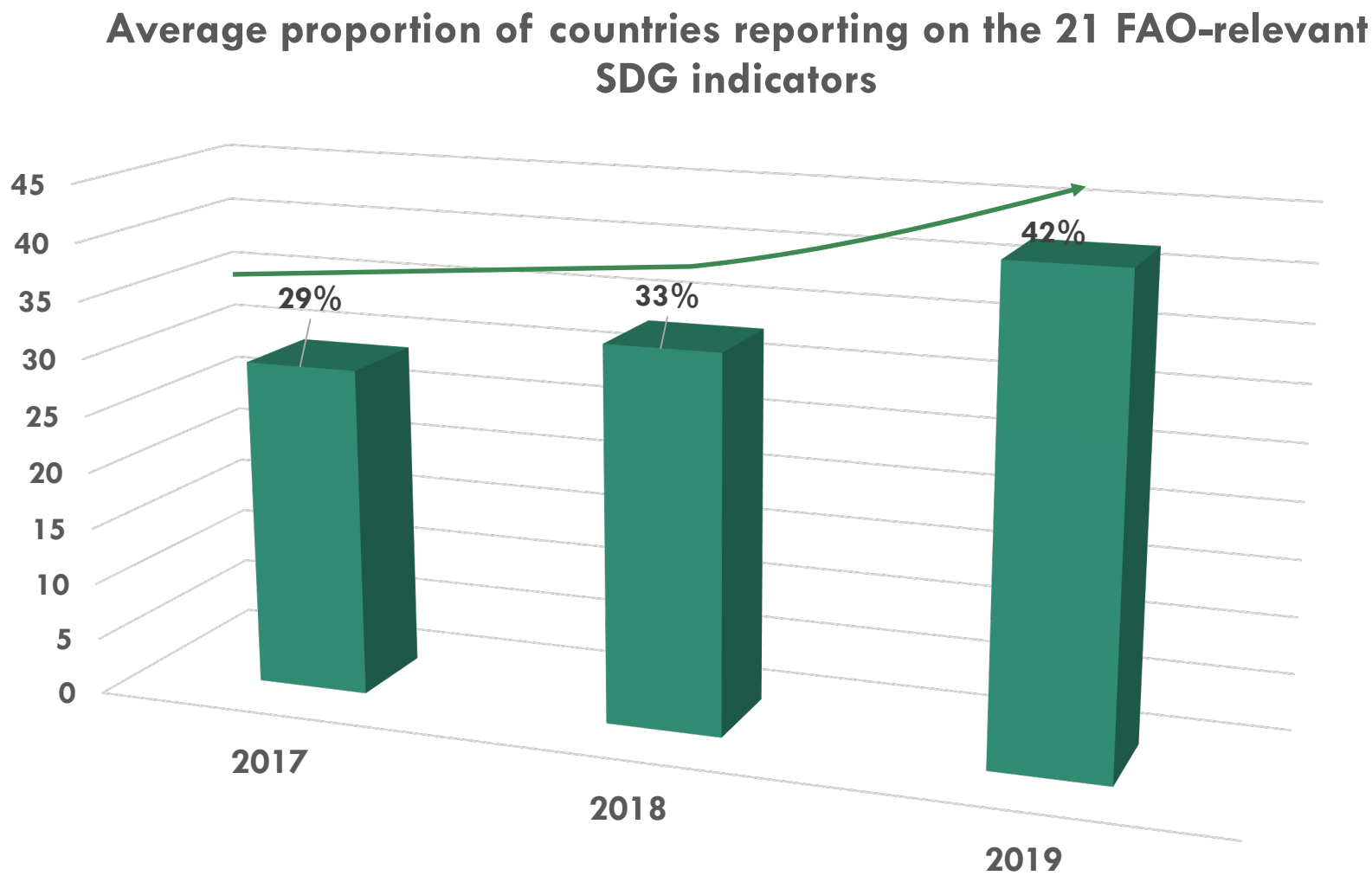
GLOBAL AND REGIONAL TRAINING WORKSHOPS 2016-2019

Aims: **Enlarge the pool of SDG monitoring experts**
Facilitate South-South cooperation
Facilitate pilot testing of new methods

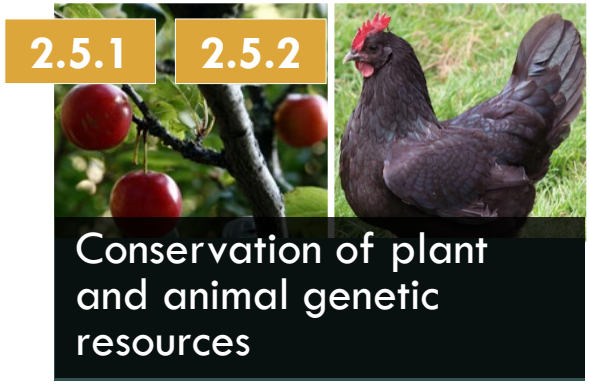
- ✓ **50+ training workshops** in 2017 and 2018
- ✓ **150 countries attended** one or more workshops from all regions of the world

Result: Increased number of reporting countries

Progress in global reporting since 2016



E-learning courses published, freely available online



E-learning courses published, freely available online

E-learning courses nearing completion

New Feature

Course Completion Certificates

2.1.1: PREVALENCE OF UNDERNOURISHMENT

- **Status:** Tier I

- **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

2.1.2: PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE POPULATION, BASED ON THE FOOD INSECURITY EXPERIENCE SCALE (FIES)

- **Status:** Tier II
- **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.

In the meantime (since 2014) FAO has included this module in the Gallup World Poll and collected data for 150 countries. In 2018, 75 of these countries authorized FAO to publish this data

2.3.1 PRODUCTIVITY OF SMALL-SCALE FOOD PRODUCERS
2.3.2 INCOMES OF SMALL-SCALE FOOD PRODUCERS

- **Status:** Tier II
- **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 AGRISurvey 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.

2.4.1, PERCENTAGE OF AGRICULTURAL LAND UNDER SUSTAINABLE AND PRODUCTIVE AGRICULTURE

- **Status:** Tier II

- **Methodology:** Assesses the sustainability of agriculture through 11 sub-indicators that span the three dimensions of sustainability

- **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 AGRISurvey)

2.5.1.A: NUMBER OF PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE SECURED IN EITHER MEDIUM OR LONG-TERM CONSERVATION FACILITIES

- **Status:** Tier I
- **Definition:** The plant component is calculated as the number of accessions of plant genetic resources secured in conservation facilities under medium or long term conditions.
- **Data source for Plant Component:** number of accessions reported by officially nominated National Focal Points to FAO's World Information and Early Warning System for plant genetic resources (WIEWS) database

2.5.1.B: NUMBER OF ANIMAL GENETIC RESOURCES FOR FOOD AND AGRICULTURE SECURED IN EITHER MEDIUM OR LONG-TERM CONSERVATION FACILITIES

- **Status:** Tier I
- **Definition:** The animal component is calculated as the number of local breeds stored within a genebank collection with an amount of genetic material stored which is required to reconstitute the breed.
- **Data source for Animal Component:** local breed genetic material information reported by officially nominated National Focal Points to FAO's – Domestic Animal Diversity Information System (DAD-IS)

2.5.2: PROPORTION OF LOCAL BREEDS CLASSIFIED AS BEING AT RISK OF EXTINCTION

- **Status:** Tier I

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.

Data source: livestock population surveys or censuses at breed level; complementary data from breeders associations

2.A.1: THE AGRICULTURE ORIENTATION INDEX FOR GOVERNMENT EXPENDITURES

- **Status:** Tier I

- **Definition:** Agriculture Share of Government Expenditures, divided by the Agriculture 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

2.C.1 INDICATOR OF FOOD PRICE ANOMALIES (IFPA)

- **Status:** Tier I

- **Definition:** measures the number of "Price Anomalies" that occur on a given food commodity price series over a given period of time, where "Price Anomaly" is defined as a Compound Growth Rate (CGR) that is greater than the historic mean CGR by one standard deviation or more. The indicator will rely on official domestic price data to calculate the indicator at national level, whereas for the global level, FAO will use countries' officially reported food price indices.

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

- Food CPI data originates from the IMF, and UNSD for countries not covered by the IMF. The FAO Food CPI dataset consists of a complete and consistent set of time series from January 2000 onwards.

5.A.1: (A) PROPORTION OF TOTAL AGRICULTURAL POPULATION WITH OWNERSHIP OR SECURE RIGHTS OVER AGRICULTURAL LAND, BY SEX; AND (B) SHARE OF WOMEN AMONG OWNERS OR RIGHTS-BEARERS OF AGRICULTURAL LAND, BY TYPE OF TENURE

- **Status:** Tier II

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.)

5.A.2 "PROPORTION OF COUNTRIES WHERE THE LEGAL FRAMEWORK (INCLUDING CUSTOMARY LAW) GUARANTEES WOMEN'S EQUAL RIGHTS TO LAND OWNERSHIP AND/OR CONTROL

- **Status:** Tier II

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

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

- **Status:** Tier II and I respectively
- **Definition:** 6.4.1: value added per water withdrawn, expressed in USD/m3 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 sources:**

➢ Gross value added of each sector = National Accounts (NSO)

➢ Volume of water used by each sector = Administrative sources (relevant Ministry), to be reported to FAO through the Aquastat "Water and Agriculture" questionnaire

12.3.1 FOOD LOSS INDEX

- **Status:** Tier II
- **Definition:** measures the totality of losses occurring from the time at which production of an agricultural product is recorded until it reaches the retail stage as food. While collected on a quantity basis, it is subsequently transformed to percentage of production that does not reach the retail stage weighted with its value of production allowing consistent aggregation and then indexed.
- **Data sources:** The primary data source for the index are loss quantities in the Food Balance Sheets as collected by FAO through its Annual Production Questionnaires to the countries.

➢ FAO advocates for a survey based and nationally representative collection of data. Other data collection methods can be used for cost-efficiency, such as experimental design and estimation models.

14.4.1: PROPORTION OF FISH STOCKS WITHIN BIOLOGICALLY SUSTAINABLE LEVELS

- **Status:** Tier I

- **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.

- Indicator not currently reported at national level

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

- **Status:** Tier II
- **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)

14.7.1: SUSTAINABLE FISHERIES AS A PERCENTAGE OF GDP IN SMALL ISLAND DEVELOPING STATES, LEAST DEVELOPED COUNTRIES AND ALL COUNTRIES

- **Status:** Tier I
- **Formula:**

$$\text{SDG 14.7.1} = \left(\frac{\text{Value Added of Marine Fisheries}}{\text{GDP}}\right) \times \text{Sustainability Multiplier}$$

- **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

- **Status:** both Tier I

- **Definition:** Indicator15.2.1 is composed of five sub-indicators that measure progress towards all dimensions of sustainable forest management.

- **Data source:** FAO's Forest Resource Assessment (FRA) questionnaire, hitherto deployed every five years

15.4.2: MOUNTAIN GREEN COVER INDEX

- **Status:** Tier I

- **Definition:** measures the changes of the green vegetation in mountain areas based on the six IPCC land cover types, i.e. forest, grassland, shrubland, cropland, otherland, wetland, and settlement, as well as across six mountain elevation classes (based on UNEP-WCMC – Kapos *et al*)

- **Data source:** FAO has calculated the indicator using Collect Earth, a free and open source tool for remote sensing, which enables data collection through Google Earth.

FAO FUTURE CAPACITY DEVELOPMENT PERSPECTIVES

5 AREAS

1. **Methodological development and testing of data disaggregation** techniques
2. **Data gap assessment and alignment** of national & global indicators
3. Supporting implementation of **new data collection tools**
4. Supporting countries in the **adoption of FAO-SDG indicators**
5. Improving analysis & **use of FAO-SDG indicators in decision-making**