SIAP Training Program for Supporting the Monitoring of Sustainable Development Goals (SDGs) 2030 in the Asia Pacific Region

Overview of Data Sources for SDG indicators under FAO custodianship

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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 VOLUME OF PRODUCTION PER LABOUR UNIT BY CLASSES OF FARMING/PASTORAL/FORESTRY ENTERPRISE SIZE
2.3.2 AVERAGE INCOME OF SMALL-SCALE FOOD PRODUCERS, BY SEX AND INDIGENOUS STATUS

- **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 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.

2.4.1, PERCENTAGE OF AGRICULTURAL LAND UNDER SUSTAINABLE AND PRODUCTIVE AGRICULTURE

- **Status:** Tier III

- **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)

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

- **Status:** Tier II

- **Definition:** The <u>plant</u> component is calculated as the number of accessions of plant genetic resources secured in conservation facilities under medium or long term conditions; The <u>animal</u> 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 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

- **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, NOT-AT-RISK OR AT UNKNOWN LEVEL OF RISK OF EXTINCTION

- **Status**: Tier II

Definition: Measures the percentage of livestock local breeds (i.e. breeds occurring in only one country) classified as being at risk, not at risk or of unknown risk of extinction at a certain moment in time.

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

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

- **Status**: Tier II

- **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 II

- **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 <u>food price indices</u>.

- **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 III

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

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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 GLOBAL 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 final consumer as food. While calculated on a quantity basis, it is subsequently transformed to dietary energy supplies (in kcal) per capita 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.

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)

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.