Data Collection Work Plan for SDG Indicator 2.4.1 – 2020/21

"Proportion of agricultural land under productive and sustainable agriculture"

Submitted by FAO to the attention of the IAEG-SDG

I.   OVERVIEW AND BACKGROUND

SDG indicator 2.4.1 is the sole indicator for monitoring progress toward target 2.4: "*By 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality*." The inclusion of this target within SDG 2 underscores the elevated importance assigned to sustainable agriculture as the necessary pathway to achieving zero hunger and improved nutrition.

The IAEG-SDG approved reclassification of SDG indicator 2.4.1 to Tier II in November 2018. Additional comments were received from countries during the period January to March 2019, aimed at further refining the Biodiversity sub-indicator as part of the 2020 Comprehensive Review of the Global Indicators Framework. In March 2019 an informal and voluntary country-led working group was established with Brazil, Canada, USA, Argentina, Chile, France and Russia as members and FAO as an observer. The group was tasked with identifying scientifically valid, universal and measurable alternative sustainability criteria for the Biodiversity sub-indicator. As a result of an iterative and consultative process, the group submitted a consolidated proposal to FAO for review in August 2019. After the consensus was reached on the final modifications in October 2019, FAO submitted the compromise consensus proposal to the IAEG-SDG, which endorsed it at its Oct 26-28 2019 meeting.

Since then, work has focused on data collection and associated country capacity development, with the aim of increasing data coverage. In support of capacity development efforts with an ultimate aim to improve data availability and reporting, FAO has organized several training workshops and bilateral trainings in 2019 and - on account of the COVID-19 pandemic - planned three virtual trainings in 2020, with all these trainings covering 70+ countries from across all regions of the world.

On the data collection front, the requisite protocols, processes and schedule for collecting data from member states has been developed and put in place. In this respect, the FAO SDG 2.4.1 data collection questionnaire has already been developed in late 2019 and thereafter tested in <u>45 pilot countries</u> from Dec 2019 to April 2020. The 2019 SDG indicator 2.4.1 pilot questionnaire dispatch resulted in low response rates that were both expected and indicative, highlighting the complexity of the underlying methodology. At the same time, the valuable information gathered through the survey and the feedback sections of the questionnaire confirmed the high level of interest among countries.

Based on the findings of this pilot, the questionnaire was refined, and the first comprehensive dispatch was sent <u>to 203 countries and territories</u> in August 2020 for the first global data collection, which in turn should allow establishing a baseline. Country responses and data are expected to be received by October 2020 - thereafter they will analyzed and validated and, provided that FAO has sufficient data points, the indicator may be reported to UNSD in 2021, with full reporting planned in 2022.

According to the methodology of SDG indicator 2.4.1, farm surveys are the suggested tool for countries to report on the indicator, ideally through one single, coherent data collection instrument that is fully integrated with the agricultural census. Nevertheless, requests for support as well as suggested use of proxies by some

developed countries indicated that there is scope for jointly developing and implementing methods to use alternative sources for collecting data on SDG indicator 2.4.1.

Additionally, upon request from countries, in 2020 the methodological note and other background documents have been translated into Arabic, French and Spanish with plans to also have it translated into Chinese and Russian in 2021.

II.   IMPLEMENTATION PLAN

The FAO data collection strategy for 2.4.1 aims at implementing an international data collection system integrated with national capacity development and trainings and development of methods to use alternative data sources. This, in turn, should allow generating sufficient data and thus enable regional and global monitoring. Its implementation has been expanded to include three components:

1) Implementation of FAO data collection process (established and recurring every year);

2) National capacity development (ongoing);

3) Development of alternative data sources options (guidelines to be developed by 2021).

1.   FAO data collection

FAO has developed the SDG indicator 2.4.1 data collection questionnaire and put in place the protocols to administer it as part of its existing FAOSTAT processes. The questionnaire was dispatched to a pilot group of 45 countries in December 2019, targeting FAO member countries that: i) contributed to SDG indicator 2.4.1 methodological refinements; ii) participated in early national pilot tests, national or regional or trainings; iii) were beneficiaries of the AGRISurvey programme or 50x2030 Initiative; and iv) other select countries.

Of the 45 questionnaires dispatched to pilot countries, by December 2019, **32** countries acknowledged receipt (71%), of which: 21 (47%) filled either the questionnaire's survey (20) or the feedback (20) section, or both; while 7 (16%) provided actual data. Among data providers, UK submitted data on all eleven SDG 2.4.1 sub-indicators, based on anecdotal knowledge and/or expert judgment, while Canada reported on seven sub-indicators, based on exiting data and proxies. Indonesia and Norway reported on six sub-indicators, Kazakhstan partially reported on three sub-indicators; while Burkina Faso and Malawi reported on one sub-indicator each. Most pilot countries requested additional technical assistance, that spurred FAO to organize the three virtual trainings in 2020.

Though the indicator periodicity of reporting is suggested at three years, dispatch the FAO SDG indicator 2.4.1 questionnaire on an annual basis is a cost-effective way to continue strengthening the dialogue between FAO and its member states, identifying opportunities for capacity development and outreach, while establishing a baseline and building the dataset needed for the first SDG indicator 2.4.1 data reporting cycle, due for full reporting in 2022. The 2020 (ongoing) and 2021 rounds of data collection, covering all member states, will be implemented as follows:

- Aug 2020: First comprehensive dispatch to 203 countries/territories completed;
- Sep-Nov 2020: 2020 Data collection, analysis, gap filling, QA/QC processes;
- Dec 2020: Draft analysis and finalization for UNSD reporting (this year reporting to UNSD will be conditional on sufficient data being reported by member states to prepare meaningful storylines and construct global and regional aggregate and trends)
- Jul-2021: 2nd dispatch sent to countries/territories;
- Jul-Nov 2021: Data collection, analysis, gap filling, QA/QC processes;
- Dec 2021: Draft analysis and finalization for UNSD reporting.

2. Capacity development to enhance national data production

The complex nature of SDG indicator 2.4.1 implies that the envisioned national data collection from countries via questionnaires is a necessary but insufficient step towards achieving a sufficient level of 2.4.1 reporting. Significant efforts in capacity development have been undertaken but more will be required to enable countries to develop and implement comprehensive farm surveys strategies in support of 2.4.1 data production. FAO plans to leverage these capacity needs on its existing farm survey programmes in order to ensure increased national data generation and thus increased international reporting.

i.   Integrated farm survey

FAO supports methodological development and associated capacity development in countries on integrated farm/household surveys, through major new initiatives. The AGRISurvey programme and 50x2030 Initiative is a fully funded initiative, supported by relevant international partners and national agencies, and explicitly including data collection efforts for 2.4.1 which aim to set up an integrated system of household and farm surveys in Low and Lower Middle Income Countries [1].

FAO has completed the necessary tasks in early 2019 in order to ensure that specific modules of the AGRISurvey programme and 50x2030 initiative can serve directly as instruments to collect relevant 2.4.1. data:

For the AGRISurvey Programme the options developed are as follows:
- Option 1: Core module : Allowing for 2.4.1 data collection in one single year (32 additional questions)
- Option 2: Economy & Production Methods and Environment (PME) modules: Allowing for 2.4.1 data collection in two consecutive years.
    - Social and economic sub-indicators data requirements integrated in the CORE and Economic modules (ECO) (13 additional questions)
    - Five Environmental sub-indicators integrated with the Production Methods and Environment Module (PME). (10 additional questions)

While for 50x2030 initiative the option is given as:
- Production Methods and Environment (PME-AG) a rotating tool of the 50x2030 initiative was selected as an instrument for collecting data on 2.4.1 and it includes all data requirements for SDG indicator 2.4.1.

The following 15 countries will receive capacity development on 2.4.1 data collection through the current AGRISurvey programme and 50X2030 initiative already in 2019-2020: *Burkina Faso, Ethiopia, Mali, Malawi, Myanmar, Nigeria, Tanzania, Uganda*, *Armenia, Cambodia, Georgia, Ghana, Kenya* (tentative), *Nepal and Senegal*. An additional 35 countries will come on board in a phased manner between 2020 and 2030.

In total, this plan will ensure regular reporting on 2.4.1 is achieved in **20 countries by 2025**, and in up to **50 countries by 2030**.

ii.   Complementing the 50x2030 initiative: Customizing existing farm surveys

FAO has furthermore developed a standalone survey questionnaire for SDG indicator 2.4.1 to fast track data collection. The short survey questionnaire consists of a minimum set of questions required to collect data on the 11 sub-indicators of 2.4.1. The survey questionnaire is designed as module that can be

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[1] The 50x2030 initiative is a USD 500 million worth project that aims to support 50 Low and Lower-middle Income Countries (L/LMIC) with survey programs from 2019-2030. The initiative was launched at United Nations General Assembly (UNGA) in 2018 and is a collaboration of FAO, World Bank (WB) and International Fund For Agricultural Development (IFAD) that integrate AGRIS with household surveys i.e. Living Standards Measurement Study-Integrated Surveys on Agriculture (LSMS-ISA). The initiative is currently supported by United States Agency for International Development (USAID), Bill and Melinda Gates Foundation, Germany's BMZ, Italy's AICS, and Australia's DFAT

administered standalone or integrated with current agriculture surveys by countries to bridge the data collection gaps and report on SDG indicator 2.4.1. The survey questionnaire has already been tested in Bangladesh, Mexico and Kenya in 2017/19 and apart from English has been translated in major UN languages in 2020 and is now available in Arabic, French and Spanish in 2020.

In parallel, additional efforts have been and will be undertaken to enhance capacities and capabilities of the countries through a well-coordinated approach involving key stakeholders. Especially for countries not covered by the 50x2030 initiative, bilateral support will be provided by FAO to selected countries to help them customize existing farm surveys to enable 2.4.1 data collection. The following capacity development efforts have already undertaken and include advocacy and capacity development workshops and trainings on collecting, processing and analyzing 2.4.1 indicators:

- Presentation at Brussels Briefings and ICAS (India) in 2019.

- Bilateral trainings to Bangladesh, Vietnam and Oman in 2019

- Trained 10 African countries in collaboration with UNECA and Ethiopian MOA (2019): Ethiopia, Ghana, Kenya, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda and Zambia

- 17 countries from Asia and North Africa (2019): Algeria, Egypt, Jordan, Lebanon, Mauritania, Morocco, Tunisia, Sudan, Angola, Cameroon, Nigeria, Namibia, Cote d'Ivoire, Malawi, Mali, Burkina Faso and Zambia from 7 -10 October 2019.

- 18 countries from Asia and Pacific (2019): Bangladesh, Bhutan, Cambodia, China, Fiji, India, Indonesia, Japan, LAO PDR, Malaysia, Mongolia, Nepal, Pakistan, Philippines, Samoa, Sri Lanka, Thailand, and Vietnam

- While in 2020, on account of travel restrictions due to COVID-19, virtual trainings have been organized to deliver technical assistance and training on indicator 2.4.1 for the following group of countries:

  - 3 days Virtual Trainings group 1: Afghanistan, Indonesia, Kazakhstan, Nepal, Pakistan and Viet Nam from 8 to 10 September 2020

  - 3 days Virtual Trainings group 2: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Paraguay, Peru, Mexico, Uruguay and Venezuela from 22 to 24 September 2020

  - 3 days Virtual Trainings group 3: Armenia, Burkina Faso, Malawi, Oman, Russian Federation and United Arab Emirates from 14 to 16 October 2020

- Dissemination of survey questionnaire, enumerator manuals, calculation procedures and e-learning course in official UN languages.
- Development and dissemination of communication material that will include brochures, leaflets, posters and presentations in multiple UN languages.

FAO will successfully train **70+ countries** through the above mentioned regional workshops, bilateral and virtual trainings by end of 2020, well above the commitment made in 2019 (which was to train 100 countries by end of 2021).

As highlighted, continuous outreach and support to countries is key to progress on sustainable agriculture reporting. As part of these efforts, several countries requested translated versions of SDG indicator 2.4.1 key documents in the course of the 2019 pilot dispatch, highlighting their need to better understand the methodology as a precondition to report effectively on the indicator. The key documents required for

translation are the SDG indicator 2.4.1 methodological note, the FAO SDG indicator 2.4.1 Questionnaire and the survey questionnaire[2].

Going forward for 2021, the following activities are proposed in close coordination with the 50x2030 Initiative, and are designed using novel approaches for capacity development to address the current limitation to movements posed by the COVID-19 crisis:

- Jan-Dec 2021: Provision of virtual trainings on the indicator's methodology to over 50 countries that during the course of 2020 already requested to be trained the methodology.
  - Oct-Dec 2020: Complete and expand current virtual trainings;
  - Jan-Feb 2021: Select new countries for Phase II training;
  - Mar-Dec 2021: Schedule and conduct virtual trainings for different groups of countries depending on the time zones;
  - Jan-Jun 2021: Develop digital lectures on SDG indicator 2.4.1;
- Jan – Dec 2021: Keep leveraging on AGRIS/50x2030 country missions to raise reporting awareness, confirm information on national Focal Points and assess national data availability.

Going forward, the objective is to provide virtual training to at least **50 additional countries by 2021** and keep continuous engagement with the 70+ that have already received assistance in 2019-2020.

Bilateral assistance, however, will be carried out as and when requested by countries, with an aim to cover 10 countries by 2025 and additional 10 by 2030.

iii.   Complementing the 50x2030 initiative: using alternative data sources

Implementation guidelines for use of alternative data for SDG 2.4.1 reporting are needed and should include guidance on alternative data sources already proposed by the SDG indicator 2.4.1 methodology (but not limited to it). The proposed work builds on and further extends ongoing efforts planned for 2020, focusing largely on the use of remote sensing information to bridge data gaps for relevant sub-indicator of SDG 2.4.1. Two international experts with experience in agricultural statistical systems, data collection and use of alternative data sources including EO, administrative records and monitoring systems, household surveys etc. will support this activity as follows:

- Oct-Dec 2020: Expand existing efforts on use of remote sensing information for SDG indicator 2.4.1;
- Jan-Mar 2021: Draft a field test protocols document and select test countries for comparing EO data with farm survey data;
- Apr-June 2021: Testing and data analysis for triangulating the farm survey and EO data;
- July-Aug 2021: Draft guidelines on how EO and other data sources can be used to report on SDG 2.4.1;
- Sep-2021: Presentation to FAO and peer review;
- Oct-Dec 2021: Finalize the guidelines for dissemination to countries.

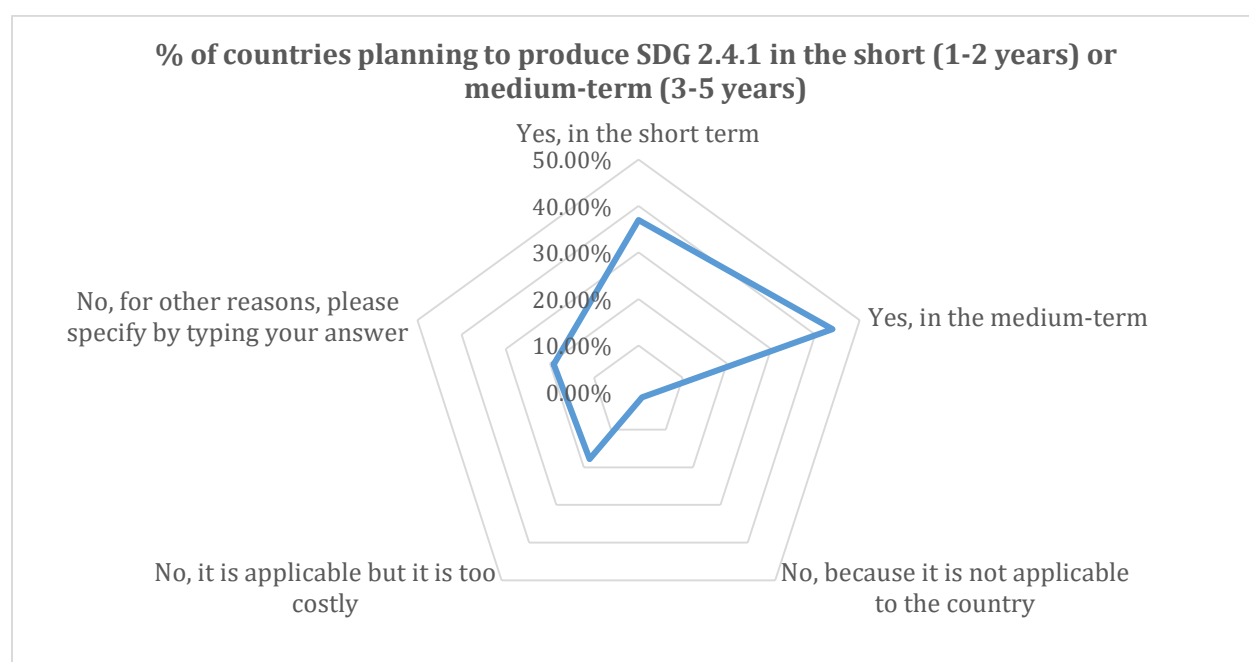### 3. Overall Outputs of FAO Data Collection Strategy

COVID-19 has slowed down capacity development, data collection and reporting as countries are focused on combating the pandemic. The multi-pronged approach that is the combination of data collection via official FAO Questionnaires, support for data collection via the AGRIS/50x2030 programs, both conventional and virtual capacity development workshops and bilateral technical assistance, and methods on alternative data sources (once developed) are expected to lead to regular reporting on 2.4.1 in 50 countries by 2025 and over 100 countries by 2030 as highlighted in 2019.

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[2] The e-learning material will be translated in official UN languages in 2021 or as soon as new funds are made available.

Cumulative ramp-up of countries reporting data on 2.4.1.

Countries	2020[3]	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Eurostat / OECD countries[4]	3	6	8	10	10	10	25	25	30	30	35
Covered by 50X2030		2	4	8	12	20	25	28	36	41	50
FAO bilateral support		2	4	6	8	10	12	14	16	18	20
Other	4[5]	8	8	10	10	15	15	15	15	15	15
Total	7	18	24	34	40	55	77	82	97	104	120

This assessment is corroborated by an NSO survey conducted by FAO in early 2019 and the pilot testing of FAO SDG 2.4.1 data collection questionnaire undertaken in 2019-2020, where the majority of countries confirmed that data collection for 2.4.1 lies within their short or medium-term priorities:

% of countries planning to produce SDG 2.4.1 in the short (1-2 years) or medium-term (3-5 years)

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[3] This is the number of countries that reported as part of 2019/20 pilot tests, however, the actual number of countries reporting the sub-set of sub-indicators (partial dashboard) may be higher for 2020 as we are still awaiting country responses that are due in October 2020 as part of the first full fledge dispatch carried out in August 2020.

[4] The assumption is that countries with developed agriculture statistical systems may be able to rapidly provide data on the eleven sub-indicators through well-established and robust data collection mechanisms (including farm surveys, Geographical Information Systems, monitoring systems and household surveys, etc.). In reaction to the pilot test, *Canada* reported 7 sub-indicators out of 11 based on exiting data and proxies. While *UK* reported 11 sub-indicators with a disclaimer that the estimates provided were based on anecdotal *knowledge* and/or expert judgment. Norway on the other hand *Norway* reported on 6 sub-indicators including through existing data, proxies and expert judgment.

[5] As part of the pilot tests, *Indonesia* reported on 6 sub-indicators based on existing data and proxies. *Burkina Faso* and *Malawi* reported on 1 sub-indicator each, while *Kazakhstan* reported partial data on 3 sub-indicators.