



Summary Report

Virtual Trainings 2025

SDG indicator 2.4.1.

“Proportion of Agricultural Area under Productive and Sustainable Agriculture”

3 Groups:

1. 01-03 July 2025

(RNE - 11 countries) Bahrain, Egypt, Iraq, Jordan, Lebanon, Libya, Oman, Palestine, Tunisia, United Arab Emirates, Yemen

2. 23-26 September 2025

(RAF - 12 countries) Burkina Faso, Côte d'Ivoire, Equatorial Guinea, Ethiopia, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Nigeria, South Africa, South Sudan

3. 20-23 October 2025

(REU - 19 countries) Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Ireland, Kazakhstan, Latvia, Malta, Montenegro, Portugal, Republic of Moldova, Russian Federation, Serbia, Spain, Switzerland, Türkiye

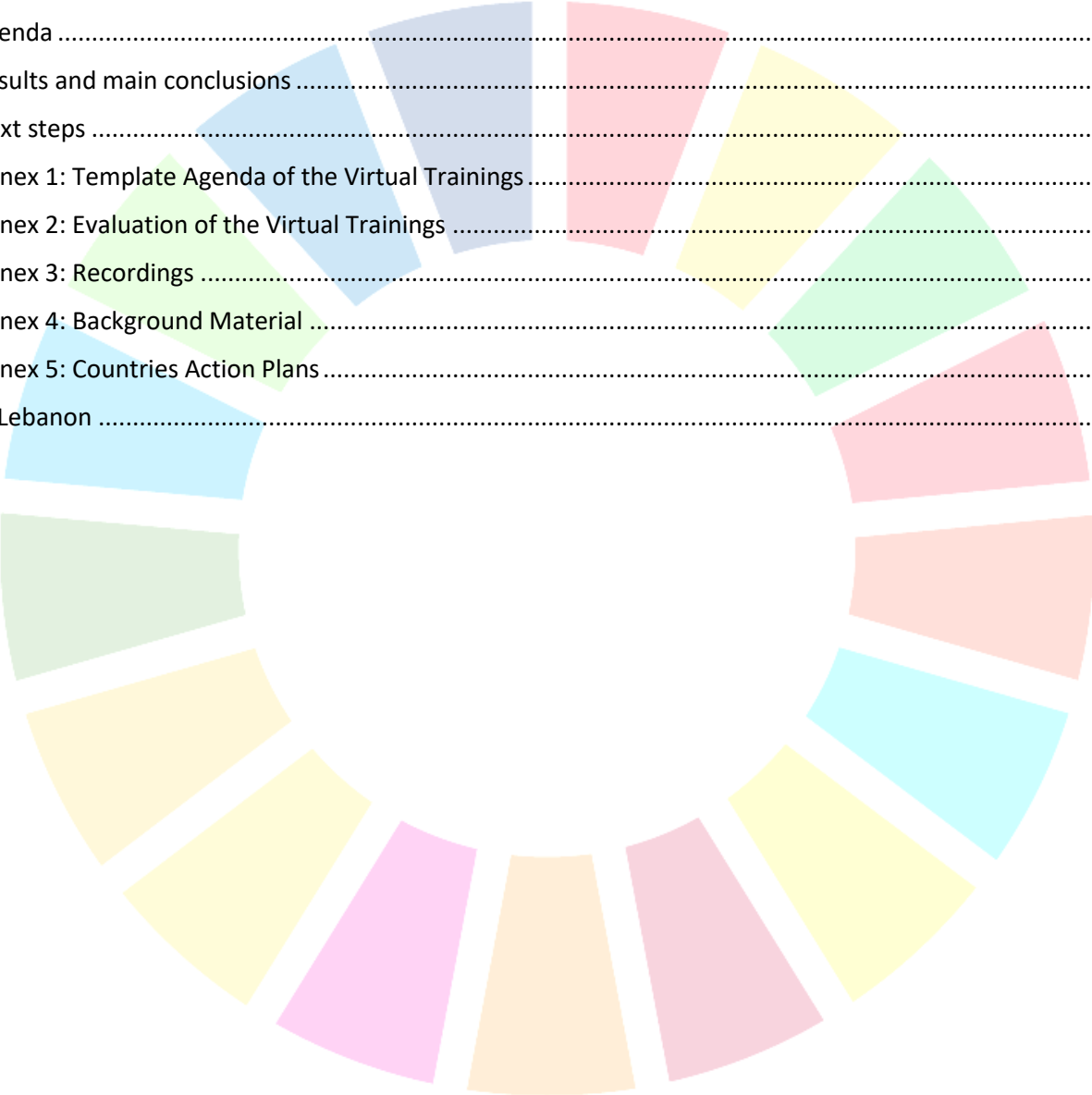
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Introduction



GOAL 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture



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.

SDG Indicator 2.4.1

Proportion of agricultural area under productive and sustainable agriculture

$$SDG2.4.1 = \frac{\text{Area under productive and sustainable agriculture}}{\text{Agricultural land area}}$$

Tier II

An internationally agreed methodology does exist; but very few data points are available

As custodian agency of 22 indicators, FAO is working closely with its member states to develop their capacity for data collection and monitoring, especially as it pertains to sustainable food and agriculture. SDG indicator 2.4.1 - Proportion of agricultural area under productive and sustainable agriculture, which is measured at a farm level using agricultural surveys – is classified as Tier II.

Between 2020 and 2024, the FAO Statistics Division's SDG 2.4.1 team expanded its global capacity development efforts through a comprehensive series of virtual trainings. These activities aimed to strengthen national capacities in applying the SDG 2.4.1 methodology and conducting data collection for sustainable agriculture monitoring.

Over this period, 16 virtual trainings were organized in collaboration with FAO Regional and Country Offices, engaging several countries across the world and training more than 1,000 national staff from ministries, statistical offices, and research institutions. The initiative ensured wide methodological

dissemination, fostered cross-regional learning, and built a foundation for countries to produce and report on SDG 2.4.1—enhancing global progress toward monitoring productive and sustainable agriculture.

Considering the great success of these previous virtual trainings, the SDG 2.4.1 team has continued to organize 3 others in 2025 to provide guidance on the SDG 2.4.1 methodology, data collection and analysis relevant to sustainable food and agriculture and on how to assess data gaps starting from available national and subnational (farm-level) information and associated reporting processes.

These virtual trainings on SDG 2.4.1 have now been conducted successfully and were attended by 42 countries from African, European and Near East Regions. The ultimate aim of these trainings was to build the capacity of the national staff on the methodology, data collection tools and reporting mechanism of SDG indicator 2.4.1. The training courses were of maximum impact, which is evident from the attendance of 181 participants including National focal points of SDG 2.4.1 and staff of National Statistical Offices (NSOs), Ministries of Agriculture (MOA), Ministries of Environment and other agencies relevant to sustainable agriculture.

One distinguishing feature of these 2020-2025 trainings was that apart from English, simultaneous translations in Arabic for the Arab-speaking countries, French for the African Region, Spanish for the Latin American group of countries and Russian for the Near East countries. This resulted in deeper engagement, improved understanding and thus uptake of these trainings by countries for which English was not their official language.

Concluding, FAO successfully trained about 1540 national staff from 127 unique countries globally in the 2020-2025 period – a vital investment in national statistical capacity to ensure the future of country reporting on sustainable agriculture.

Objectives

The core objectives of these three virtual trainings were to:

- Provide technical training to build capacity of the national staff on SDG indicator 2.4.1 farm survey-based methodology, data collection, compilation and interpretation
- Identify available national and sub-national farm level and other data useful to analyze sustainable food and agriculture
- Understand the data gaps
- Provide comprehensive training on the proxy indicator for interim reporting on SDG 2.4.1
- Discuss the country plans to collect data on the indicator in the short/medium/long term

The trainings also provided the national staff with a platform to discuss and share their experiences, constraints and strategies to overcome potential challenges in data collection, analysis and reporting of SDG indicator 2.4.1.

Outputs

The ultimate aim of the training was to provide basis for designing improved data-driven policies and international reporting. Particularly, the following outputs have been achieved through the virtual trainings:

- Trained 42 countries (181 national staff) on the methodology and tools for SDG indicator 2.4.1, so that its adoption at the country level and its reporting to FAO can be supported;
- One country (Lebanon) has submitted an action plan as a result of these trainings that summarize the current situation of data availability on the 11 sub-indicators of SDG 2.4.1 and how they plan to bridge the remaining data gaps (details in Annex 5);
- Two countries (Azerbaijan and Lebanon) submitted the stocktaking file, to assess the data gaps vis-à-vis SDG 2.4.1 data requirements
- Two countries (Azerbaijan and Lebanon) requested further bespoke technical assistance from FAO to implement the indicator (i.e. mapping of the data gaps, customization of existing agriculture surveys, sampling design, data collection and analysis to construct and finally report the indicator).

Agenda

The agenda of the virtual trainings is in Annex 1 (though it slightly varied from one group to another). The resource persons delivered presentations, steered and carried out discussions with the participants on data and capacity gaps and requirements for establishing a robust monitoring system for the SDG indicator 2.4.1. As highlighted earlier, the virtual trainings were organized for countries belonging to different regions, each training has been of a duration of 3 or 4 half-days. Each training constituted two sessions per day of about 1 hour and 30 minutes each. The dates of the trainings and group of countries that participated were as follows:

Dates	Group of Countries	No. of participants
01-03 July	(RNE) Bahrain, Egypt, Iraq, Jordan, Lebanon, Libya, Oman, Palestine, Tunisia, United Arab Emirates, Yemen	28
23-26 September	(RAF) Burkina Faso, Côte d'Ivoire, Equatorial Guinea, Ethiopia, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Nigeria, South Africa, South Sudan	92
20-23 October	(REU) Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Ireland, Kazakhstan, Latvia, Malta, Montenegro, Portugal, Republic of Moldova, Russian Federation, Serbia, Spain, Switzerland, Türkiye	61

Training proceedings (though it slightly varied from one group to another):

Opening

Mr Arbab Asfandiyar Khan, Economist, ESS, opened the virtual trainings by welcoming the participants on behalf of ESS division of FAO. In his opening remarks, he emphasized the importance of the agenda 2030 and highlighted FAO capacity development support and technical assistance to countries for implementation and monitoring of the 22 SDG indicators under FAO's custodianship. He also underlined that the implementation of the SDG monitoring framework provides an opportunity for countries to improve their agricultural and rural statistical systems. He highlighted the universal nature of the SDGs, and the role of member countries, who are in the driving seat of the Agenda, and have shaped the process; along with the role of custodian agencies, such as FAO.

Ms Stefania Bacci, Statistician, ESS, then introduced the basic rules for carrying out a smooth virtual training through the Zoom application.

Introduction on SDG indicator 2.4.1

Mr Arbab Asfandiyar Khan presented in detail the various aspects of SDG indicator 2.4.1 "Proportion of agricultural area under productive and sustainable agriculture". He described the process for development of the methodology and its fundamental building blocks at length, particularly explaining the scope, coverage, periodicity and themes and sub-indicators covered as part of the framework of SDG 2.4.1. He also gave the historical perspective and highlighted that in 2016, the FAO Strategic Program on Sustainable Agriculture and Global Strategy to Improve Agricultural and Rural Statistics (GSARS) joined forces to develop the pioneer methodology through a consultative and iterative process to reclassify the SDG indicator 2.4.1 to tier II in October 2018. He thereafter touched upon the process of further refinements carried out in the biodiversity sub-indicator that were re-endorsed by Inter Agency and Expert Group on Sustainable Development Goals (IAEG-SDG) in November 2019. He acknowledged at the outset that defining and measuring sustainable agricultural, a multi-dimensional concept is challenging as it is complex and country specific and has never been done before and that SDG 2.4.1 methodology provides the first ever framework to do so. He emphasized that:

- The endorsed methodology is a groundbreaking effort of FAO and is a result of a long participatory and consultative process that involved the contributions of thematic/subject matter experts, statisticians, policy makers and researchers from country institutions i.e. NSOs and MOAs, international organizations, civil society, private sector and academia. It was stressed that the reason behind involving key stakeholders with diverse backgrounds was to make this indicator owned by everybody, specifically countries.
- The current methodology of 2.4.1 embody the fundamental principles i.e. its universality, policy relevance and practicality.

He then elaborated the formula for calculation of the indicator i.e. the extent of agriculture land area under productive and sustainable agriculture (numerator), as well as the agricultural land area (the denominator). Lastly, he touched upon the approaches and strategy for data collection as well as the process and mechanism of reporting the indicator to FAO.

Indicator's framework – Economic, Social and Environmental Dimensions

Mr Arbab Asfandiyar Khan explained in detail the 11 sub-indicators that comprise the framework of indicator 2.4.1. It was highlighted that each sub-indicator is assessed at the level of the agricultural holding

and thereafter the sustainability status is associated with the agricultural land area of that holding and the results aggregated at the national and/or sub-national level.

He also explained that in order to capture the concept of continuous progress towards sustainability, the 'Traffic Light' approach is used, in which three sustainability levels are considered for each sub-indicator:

- **Green:** 'desirable' - Meets desirable sustainability criteria.
- **Yellow:** 'acceptable' - The sub-indicator meets the minimum sustainability criteria, but still below desirable level: significant progress still possible.
- **Red:** 'unsustainable' - The sub-indicator doesn't meet the minimum sustainability criteria: major challenges must be overcome.

Mr Arbab Asfandiyar Khan then reiterated that based on the threshold values for each sub-indicator, the farms and its agriculture land areas are assigned sustainability status using the traffic light approach. Specifically, the sub-indicators by its sustainability status are expressed as percentage of total agricultural land area at the national and/or sub-national levels. Finally, the 11 themes/sub-indicators are reported separately in a dashboard. The dashboard is reported at national level for international reporting. However, for national policy purposes (if needed) the dashboard can be produced at sub-national or other administrative levels, different holdings types i.e. household or non-household sectors, crop/livestock/mixed systems and irrigated and or non- irrigated holdings.

Moreover, he exemplified the Bangladesh pilot testing results (carried out in 2018-19) while explaining the methodology of each sub-indicator. However, it was highlighted that the tests in Bangladesh were conducted based on an earlier version of the methodology and survey questionnaire and thus it doesn't reflect the latest version of the methodology reapproved by the IAEG-SDG in November 2019. It was highlighted that the STATA scripts developed back then were to analyse Bangladesh pilot data, but that the STATA script shared with participants at the end of the training is fully harmonized with the latest methodology and survey questionnaire. This means that the STATA tool can be used for the analysis of data that will be collected as it fully encompasses all the variables that will be captured through the survey module.

The presentations were followed by Question and Answer (Q&A) sessions where participants asked several technical and process related questions to clarify the concepts, methodology, thresholds, data collection and sources and its applicability for their respective countries. They were also followed by practical examples explained through an Excel file (SDG241_Example_Calculation_11Sub-indicators.xlsx) where, for each sub-indicator, Mr Arbab Asfandiyar Khan walked the participants through the steps to calculate each single sub-indicator.

Practical session: Hands-on training - R programs for computing the 11 SDG 2.4.1 sub-indicators

Ms. Bianca Papi conducted a hands-on training session focused on the organization and management of data and folders necessary to calculate the SDG Indicator 2.4.1 sub-indicators using R. She began by guiding participants through the installation of R and RStudio, supported by a step-by-step guideline distributed prior to the session. During the training, Ms. Papi demonstrated and executed together with the participants the 13 R scripts developed for the computation of the sub-indicators, with a particular focus on selected components of the methodology. The session emphasized practical application and

aimed to build participants' capacity to independently structure, process, and analyse their data for SDG 2.4.1 reporting.

SDG 2.4.1. Data collection tools (survey questionnaire and alternative data sources)

Mr Arbab Asfandiyar Khan explained FAO strategy and the options that have been developed to enable data collection at the country level on SDG 2.4.1. Each option was then covered in detail, that include 1) standalone questionnaire module, 2) 50x2030 initiative and 3) the possibility of using existing or alternative data sources. In this session, he presented thoroughly the standalone questionnaire and the supplementary documents (including the Enumerators manual, data entry manual, calculation procedure and sampling guidance). Finally, it was highlighted that countries can use existing/alternative data sources to report on sub-indicator 2.4.1 provided the data sources fulfil the conditions recommended by the methodological note.

FAO SDG 2.4.1 data collection questionnaire

Ms Bacci showed the data collection questionnaire, the tool using which FAO collects data on SDG 2.4.1 from countries. This questionnaire was dispatched for the first time to all member countries on August 10 2020, and then regularly dispatched every year. The questionnaire is addressed to SDG 2.4.1 national focal points, the general SDG focal points and to the Head of NSOs, with copy to FAO regional and country offices. The deadline set for this year was highlighted in the presentation (12 June 2025). She also showed in detail the different parts of the questionnaires, the three Introductory sections i): cover page, – which asks country-specific information; ii): instructions - on how to complete the questionnaire and its structure; and iii): definitions - key concepts, terms and international standards used), the three data reporting sections (one for each dimension, economic, social and environmental), the dashboard sheet that comprises of two tables and a visual representation of a dashboard and aggregate value, and two supplementary information sections (metadata – that collects information on the variables and data items, its coverage, source, unit of measurement, frequency etc.; and feedback – that includes a simple survey with 9 questions that helps FAO in further improving the questionnaire. She also emphasized the importance of filling the questionnaire in the correct way, especially the data reporting sections.

Data collection and reporting status (2020/24) of SDG 2.4.1

Ms Bacci presented the results of the comprehensive dispatches of FAO data collection Questionnaire that were dispatched to all member countries from 2020 to 2024. She illustrated the background, scope and the objectives. Then she presented salient results of the tests: 77% of the countries acknowledged receipt of the questionnaire; 67% sent the questionnaire back partially or completely filled; and 28% provided actual data. She focused on the 55 countries that provided actual data and emphasized that they used both farm survey data as well as existing data from other sources, proxies and expert judgement. Moreover, she illustrated the situation of data availability by sub-indicator, presented results comparing the year after year from 2020 to 2024, and she concluded presenting the next steps.

SDG 2.4.1 Proxy Reporting

Mr. Wanner presented on the proxy for SDG Indicator 2.4.1. He provided background and motivation for the creation of the proxy and the current status for reporting of the proxy to UNSD. He listed each of the 7 proxy metrics, presented their coverage, data dissemination platforms, and underlying data reporting mechanisms. He presented the methodology for current status and trend assessments for

those with and without numerical targets and showed how the metrics are combined into a single country score and regional aggregates. He presented more information for each of the proxy metrics and concluded with results for the region and subregions.

Data reporting to FAO (with focus on FAOSTAT) – Land, Pesticides and Fertilizers Statistics

Mr Nathan Wanner presented FAOSTAT platform, an established FAO process for data collection and reporting on food and agriculture data. He then presented Pesticides Use for the region with a focus on reporting and the questionnaire. He discussed the revisions that have taken place in the database and their impact on the results for the region, including the revision of the questionnaire itself. He presented detailed reporting information for the countries present in the training, separated by countries that provide data or acknowledge the questionnaire. He discussed the methods used to harmonize data that is provided in terms of formulated products and gave results for the region and sub regions for pesticides use and trade and indicators. He concluded by listing some of the alternative data sources that countries can use for reporting.

Mr. Obli-Laryea presented on the Fertilizers statistics disseminated in FAOSTAT covering agricultural use, production and trade. The presentation also highlighted data quality in the region and also detailed by countries the reporting quality for the fertilizers questionnaires. He further highlighted the methodologies used to prepare the fertilizers data received from countries and in the absence of country reported data. The presentation also highlighted the results of the data process in FAOSTAT and a guide for participants to use FAOSTAT. He concluded by highlighting FAO's willingness and readiness to work with countries to improve reporting and data quality.

Ms. Brivio presented the Land Use data produced by the FAO and disseminated through FAOSTAT. Her presentation covered key aspects such as data coverage, the classification system adopted, and the main data sources. She provided an overview of the data collection process and timeline. The presentation described each stage, from the dispatch of questionnaires to national focal points, to data collection, quality control, and processing, as well as the use of gap-filling and imputation methods for missing data. It concluded with the dissemination phase through the FAOSTAT platform and related materials.

Ms. Brivio also illustrated the main land use changes observed at both global and regional levels. Furthermore, she presented the reporting rates of the FAO Questionnaire on Land Use, Irrigation and Agricultural Practices over the past ten years, disaggregated by region: Europe (82%), Asia (55%), the Americas (32%), Oceania (16%), and Africa (12%), compared to a global average of 41%.

Finally, she emphasized the key role of national focal points in ensuring data quality, consistency, and accuracy across all reporting countries.

FAO SDG 2.4.1 Country Case Studies

Mr Khan presented some countries case studies of pilot test. Conducting a pilot test has several advantages: it allows to conduct a stock taking of data needed; ascertain potential data sources (including alternative instruments); conduct a mapping exercise; identify variables and data gaps; select an instrument to gather the missing data; customize and finalize the chosen existing survey instruments; collect data and check feasibility of building the sub-indicators and making assessments of overall sustainability using proposed sustainability criteria; present the aggregate SDG Indicator 2.4.1 in a dashboard using the methods described; document main findings, provide recommendations on the next

steps in respect to monitoring the SDG Indicator 2.4.1 at the national level and alignment with the policy process in the country and present in the report; and finally to identify constraints, gaps or challenges encountered during the pilot and address those before scaling up data collection to the national level.

Mr Khan highlighted all the prerequisites, steps and timeframe needed to undertake a pilot in a country and showed some details of countries experiences.

Country Experiences

Ivory Coast (RAF group) and the SAP Regional Statistician (REU group) have shared their experiences in collecting and compiling the SDG 2.4.1 indicator. These presentations provided valuable opportunities for participants from other countries to learn from practical experiences and challenges, while also enabling the presenting countries to showcase their work and receive constructive feedback and suggestions. The presentations covered a range of topics, including staff training, data collection processes, sampling methods, challenges encountered (particularly in compiling sub-indicators), lessons learned, and future plans.

Indicator 2.4.1 Short/Medium/Long term expectations

In this session Mr Arbab Asfandiyar Khan covered the short, medium and long term expectations of FAO in terms of SDG 2.4.1 implementation and reporting. He highlighted that in the short run countries may only be able to report on the sub-set of the 11 sub-indicators. He emphasized that collecting information on the remaining sub-indicators to report on the entire dashboard will be a gradual process i.e. as and when data and capacity gaps are bridged by the countries over time. In the same presentation participants were also informed about the FAO data collection plans and the upcoming activities on development of guidelines on use of alternative data sources to report on the indicator.

Discussion on challenges in data collection and reporting on SDG indicator 2.4.1 and action plan to overcome it

In this session, the participants of each country were asked to discuss and elaborate on below questions:

- Are you currently using any framework to report on sustainable agriculture? If yes, can these ongoing processes help feed into 2.4.1?
- To what extent your country is ready to report on the SDG 2.4.1 based on the current farm survey approach?
- What alternative data sources and proxies do you envision that can be used to report on the respective 11 sub-indicators of SDG 2.4.1?
- What are the constraints that inhibit your country to report on SDG 2.4.1 in the short term (given the current state of agriculture statistical system)? How are you planning on overcoming these challenges in the medium to long term?
- What do you expect from FAO in terms of further support to help you improve the reporting on 2.4.1?

Though preliminary feedback was received during discussions with country participants, however, towards the end of the session, it was agreed with the participants that the stocktaking exercise for SDG 2.4.1 should be completed and sent back to FAO to assess the data gaps. As well it was decided that an action plan will be submitted by each country covering the potential future steps on implementation and reporting the indicator. In general, some countries requested further support i.e. tailored technical assistance and training to overcome the remaining challenges and resource constraints in integrating SDG 2.4.1 needs with agricultural surveys to produce required data and also data processing and analysis to

compute the 11 sub-indicators. The participants were requested to approach FAO formally, by writing to the SDG 2.4.1 team at FAO HQ while keeping in the loop their respective FAO regional and country offices (i.e. RAP/RAF/RLC/REU/RNE) for requesting further technical assistance and support on the indicator and improving the agricultural statistical systems in general.

Wrap-up

Mr Arbab Asfandiyar Khan and Ms Bacci officially closed the virtual training. They thanked and expressed their gratitude and profound appreciation to the participants and their country institutions and organizations for having supported the virtual training by making room in their busy work schedule to attend the training. They also thanked all the FAO colleagues from the Regional and Country Offices for their contributions in supporting SDG 2.4.1 team with the organizational aspects of the training, especially in making the last-minute arrangements for some of the simultaneous translations. Before closing, the attendees were requested to evaluate the course (anonymously) by filling in an online evaluation form. The results of evaluation help the SDG indicator 2.4.1 team in further improving the structure and organization of the course for future trainings. Results of the evaluation can be found in Annex 2.

Recordings of all the sessions for each Group of countries can be found in Annex 3.



Results and main conclusions

- 181 participants from 42 countries were trained on the conceptual, methodological and technical issues, data collection, compilation, reporting and interpretation of the indicator through presentations, discussions and Q&A sessions;
- FAO introduced tools for the indicator's data collection including standalone survey module and alternative data sources i.e. censuses, administrative records etc.;
- The activity triggered the process of assessment of the available national and sub-national data required to measure and report on the indicator through stocktaking exercise and action plans to be submitted by the participating countries.

Next steps

The below listed next steps were mutually agreed upon, where countries were requested to provide one official consolidated response per country to be sent to sdg241-indicator@fao.org:

- Fill in and send back to FAO 2024 data collection questionnaire using current available data.
- Fill in and send back to FAO the Stocktaking Excel Sheet to assess the data gaps vis-à-vis SDG 2.4.1 data requirements
- Prepare a two to three pages action plan for implementation of and reporting on 2.4.1: The action plan has to take into account the following questions:
 - Which sub-indicators can your country report immediately?
 - Identify and highlight the constraints/issues that inhibit your country to report on the entire dashboard of SDG 2.4.1.
 - What action will be taken and by when by your country to overcome these constraints and issues to be able to collect data on SDG 2.4.1 and report it to FAO?

Countries action plans can be found in Annex 5.

Annex 1: Template Agenda of the Virtual Trainings

SDG indicator 2.4.1			
Day 1			
Session	Description	Presenter/ Facilitator	Time Slot
			(in minutes)
Opening	Welcome address / Introduction / Objectives of the training	FAO – Arbab Asfandiyar Khan and Stefania Bacci	15
Session 1	SDG 2.4.1: Proportion of agricultural area under productive and sustainable agriculture	FAO – Arbab Asfandiyar Khan	35
Session 2	Sub-indicators in the economic dimension	FAO – Arbab Asfandiyar Khan	40
Break			90
Session 3	Sub-indicators in the environmental dimension	FAO – Arbab Asfandiyar Khan	65
Session 4	Sub-indicators in social dimension	FAO – Arbab Asfandiyar Khan	20
Session 5	Q&A and Wrap-up	FAO – Arbab Asfandiyar Khan	5
Day 2			
Session 1	SDG 2.4.1. Data collection tools (survey questionnaire and alternative data sources)	FAO – Arbab Asfandiyar Khan	30
Session 2	Steps to calculate the 11 sub-indicators through Excel	FAO – Bianca Papi	60
Break			90
Session 3	Preparation and organization of raw data	FAO – Bianca Papi	30
Session 4	R programs for computing the 11 SDG 2.4.1 sub-indicators	FAO – Bianca Papi	60
Day 3			

Session 1	SDG 2.4.1 Proxy Reporting	FAO – Nathan Wanner	60
Session 2	Pesticides statistics	FAO - Nathan Wanner	30
Break			90
Session 3	Land use statistics	FAO – Rachele Brivio	30
Session 4	Fertilizers statistics	FAO – Griffiths Oblilaryea	30
Session 5	Q&A	All	30
Day 4			
Session 1	Country experience	FAO – Obama Guy Oswald	45
Session 2	FAO SDG 2.4.1 Data collection questionnaire	FAO – Stefania Bacci	15
Session 3	Findings of the 2020-2024 dispatches of SDG 2.4.1 FAO data collection	FAO – Stefania Bacci	30
Break			90
Session 4	FAO SDG 2.4.1 Country Case Studies	FAO – Arbab Asfandiyar Khan	30
Session 5	Practical steps on national adoption and implementation of SDG 2.4.1	FAO – Arbab Asfandiyar Khan	15
Session 6	Indicator 2.4.1 Short/Medium/Long term expectations	FAO – Arbab Asfandiyar Khan	15
Session 7	Discussion on challenges in data collection and reporting on SDG indicator 2.4.1 and action plan to overcome it	All	15
Session 8	Wrap-up, next steps, evaluation and closing (group photo)	FAO – Arbab Asfandiyar Khan and Stefania Bacci	15

Annex 2: Evaluation of the Virtual Trainings

The attendees of the virtual trainings were requested to evaluate the course (anonymously) by filling in an evaluation form administered during the training in real time. The analysis of the results of this evaluation will help the SDG indicator 2.4.1 team improve the content, timing and organization of the training course for future events. The summary findings and high-level results for the evaluations are described below, however for technical issues the first group is not included in the analysis.

Here below are reproduced the 10 questions:

The main goal of the course was to help you gain a clear understanding of the SDG indicator and its methodology. More specifically the sessions are aimed at increasing your understanding about:

- key concepts and methodology of the indicator
- data collection strategies
- reporting mechanisms

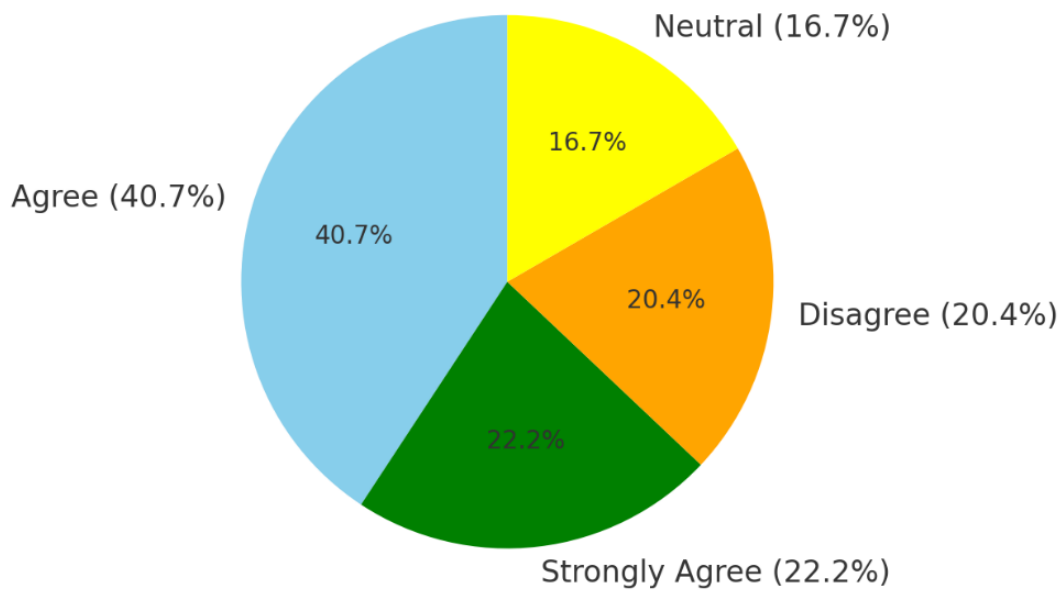
To what extent was this goal achieved?

Very Low	Low	Average	High	Very High
1	2	3	4	5

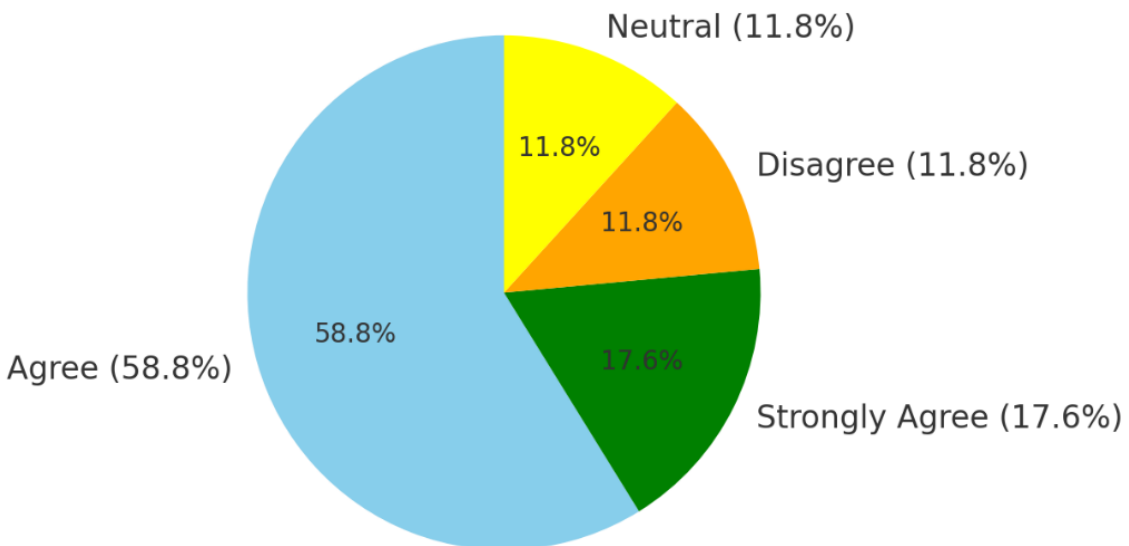
Please provide the answer that better reflect your opinion for the next 9 questions

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The Virtual Training was as good as in person training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. The overall length of the Virtual Training was adequate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. The sessions were well organized and easy to follow	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The exercises were relevant and useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. The questions raised by participants were answered appropriately	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I intend to apply the knowledge acquired to my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I intend to disseminate the knowledge acquired to the relevant actors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. The quality of the facilitation by the team was good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. The administration of the workshop (facilities, logistics, support, etc.) was adequate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

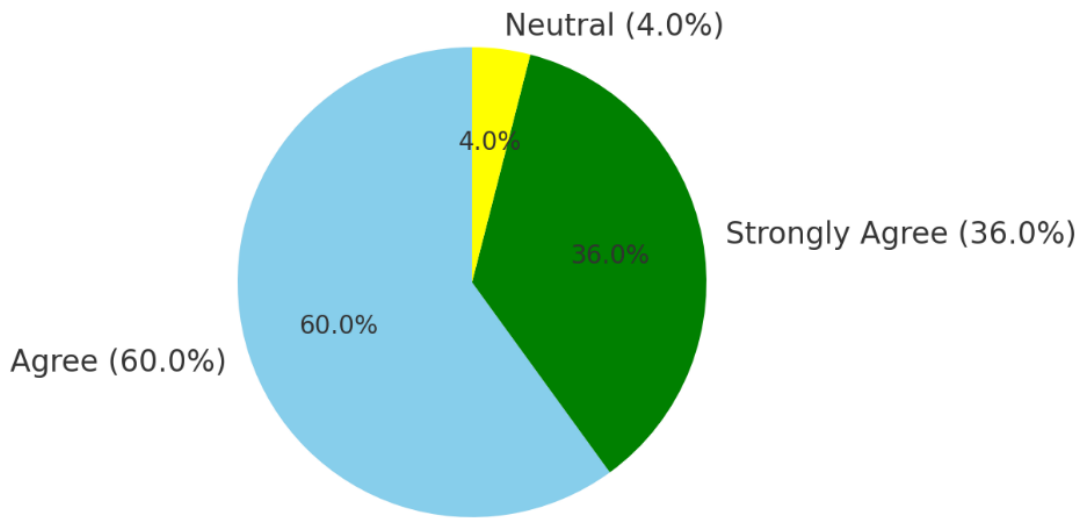
1. The Virtual Training was as good as in person training



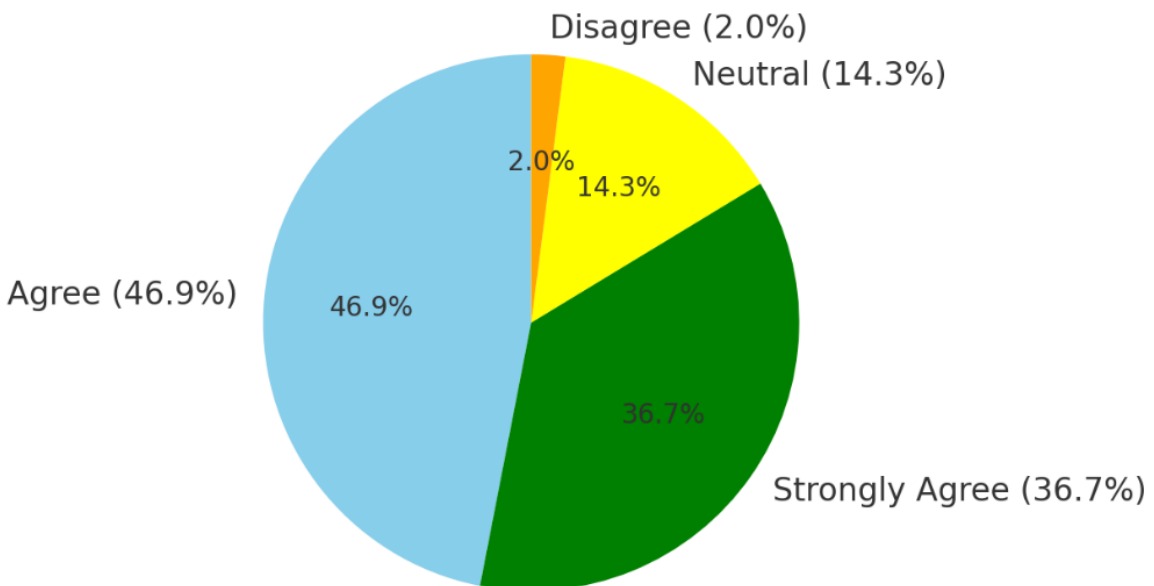
2. The overall length of the Virtual Training was adequate



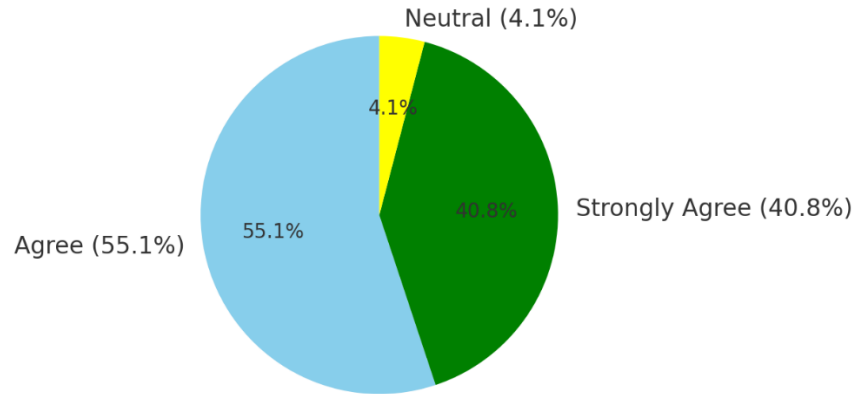
3. The sessions were well organized and easy to follow



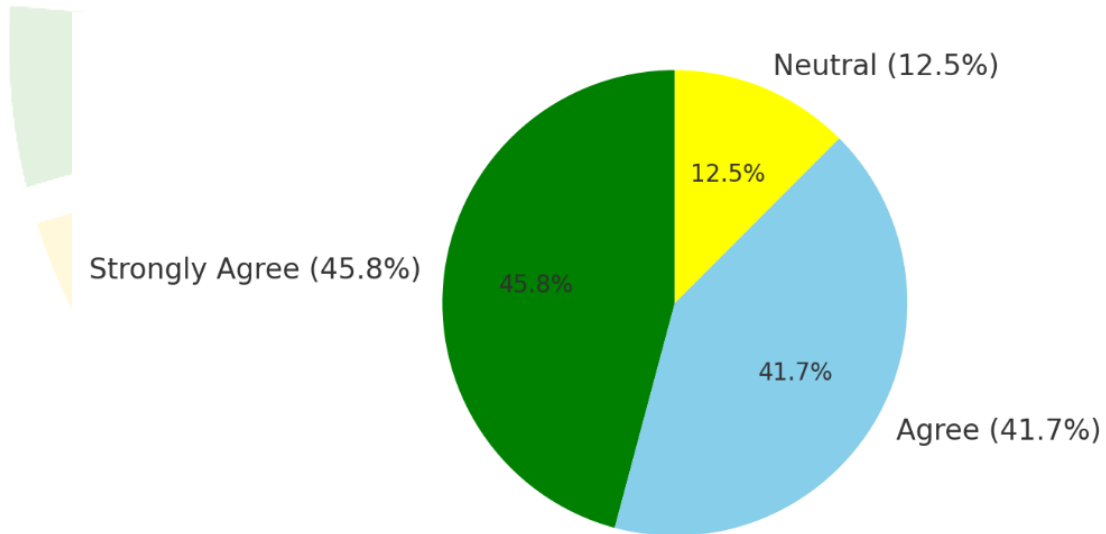
4. The exercises were relevant and useful



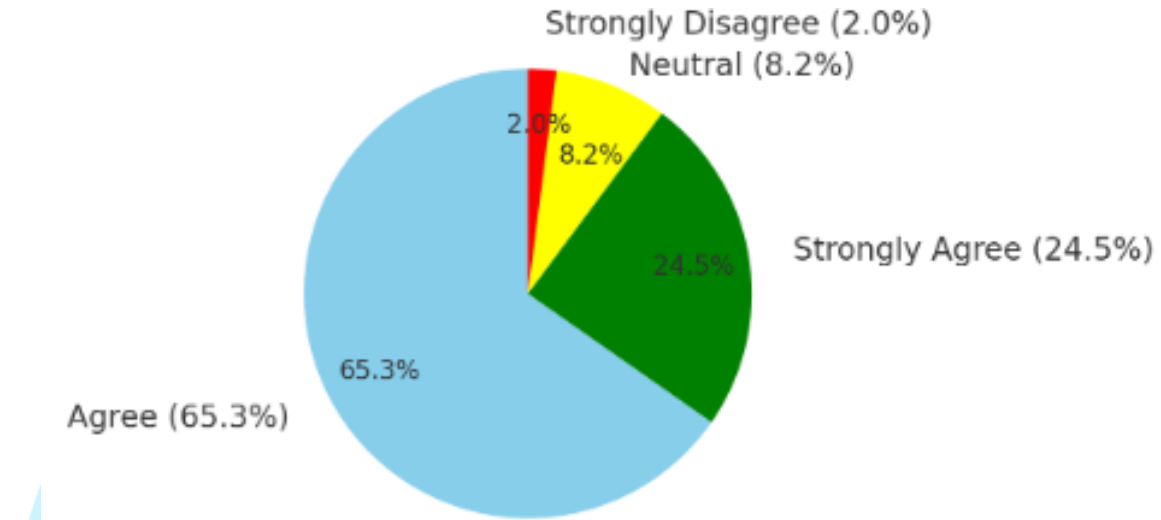
5. The questions raised by participants were answered appropriately



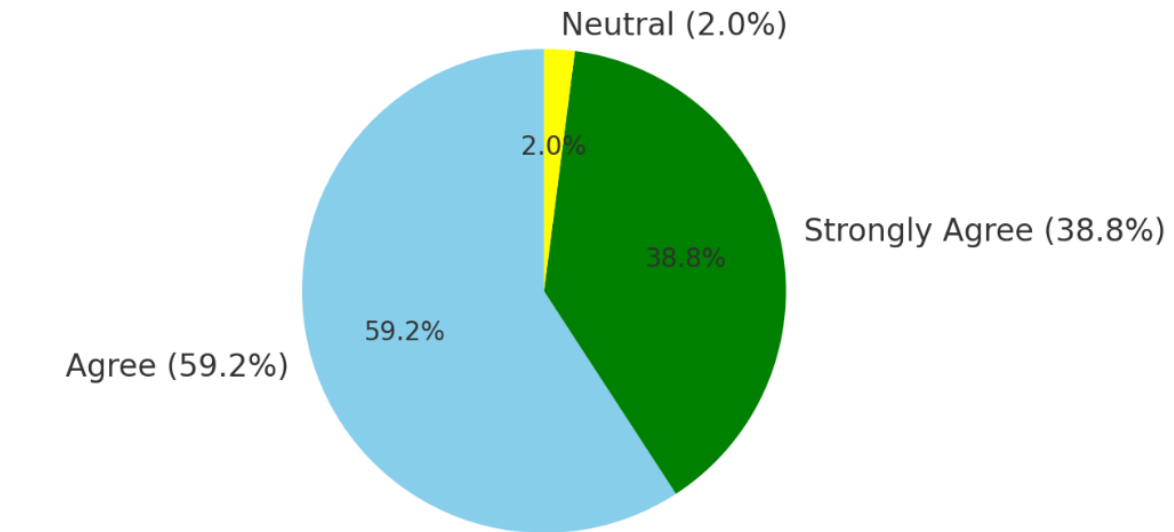
6. I intend to apply the knowledge acquired to my job



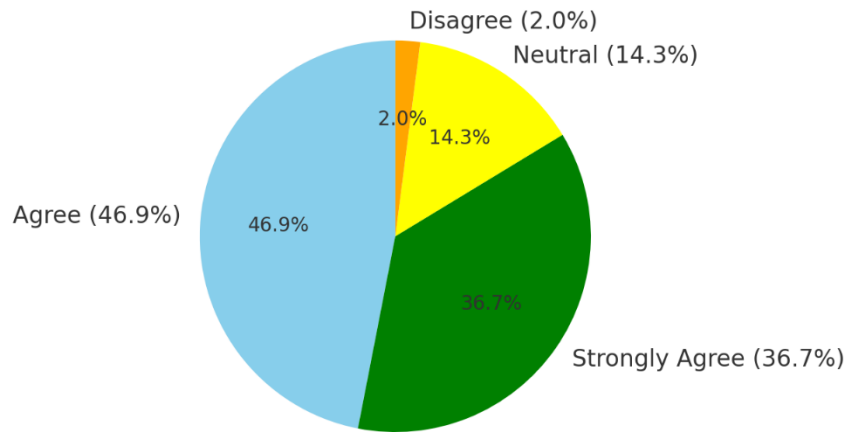
7. I intend to disseminate the knowledge acquired to the relevant actors



8. The quality of the facilitation by the team was good

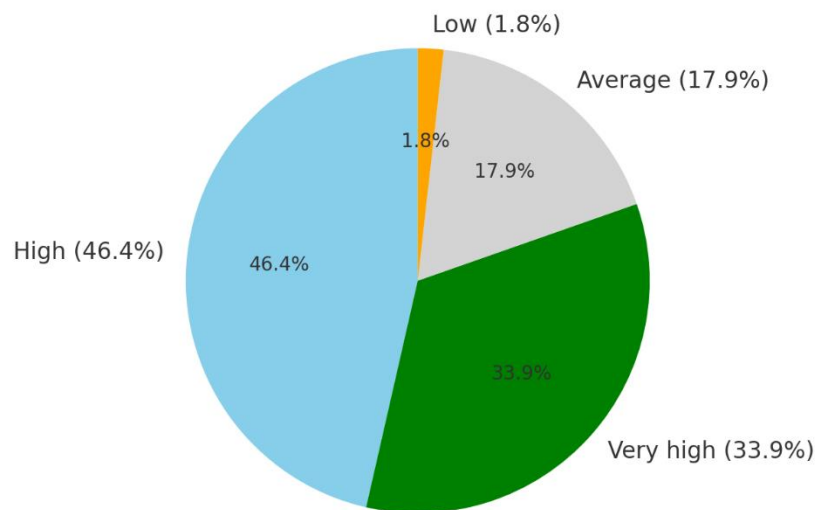


9. The administration of the workshop (facilities, logistics, support, etc.) was adequate



10. The sessions are aimed at increasing your understanding about:

- key concepts and methodology of the indicator
- data collection strategies
- reporting mechanisms



The evaluation results for the SDG 2.4.1 virtual training reveal a consistently positive perception among participants. The vast majority considered the sessions to have effectively achieved their learning goals, with most ratings falling between *High* and *Very High*. This indicates that the participants not only understood the key concepts and methodologies but also felt confident in their ability to apply them.

When comparing the virtual format to in-person training, responses were generally favorable, though with some variation. While most participants *Agreed* or *Strongly Agreed* that the online experience was as good as a face-to-face session, a small proportion remained *Neutral* or *Disagreed*, suggesting that the virtual environment still lacks certain interactive dynamics that physical settings offer.

The overall length of the training was also viewed positively. The majority of participants believed the duration was appropriate, neither too short nor overly extended. This feedback implies that the pacing and structure of the sessions were well-calibrated to maintain engagement without causing fatigue.

The organization and clarity of the sessions received strong approval. Participants appreciated how the content was structured and delivered, describing it as well-organized and easy to follow. This reflects a well-designed program with clear communication and logical sequencing. Similarly, the exercises proposed during the sessions were considered highly relevant and useful. Most respondents *Strongly Agreed* that the practical components helped reinforce the theoretical aspects, contributing significantly to their understanding.

Facilitator responsiveness was another highlight of the training. Participants agreed almost unanimously that questions were handled appropriately and that facilitators demonstrated expertise and attentiveness. This high level of satisfaction extended to the participants' intention to apply and share the knowledge acquired. The majority declared that they would use what they learned in their professional contexts and disseminate it to relevant stakeholders, demonstrating both engagement and commitment to putting the training into practice.

Finally, the facilitation quality and logistical organization were both rated exceptionally well. The team's professionalism, clarity, and efficiency were recognized by virtually all participants, with the administrative aspects—such as technical support, coordination, and overall delivery—also receiving very high marks.

Overall, the data depict a very successful training initiative. The combination of well-planned sessions, skilled facilitation, and relevant exercises fostered a strong learning experience. While there remains a slight preference for in-person interaction among a few participants, the virtual model proved highly effective and well-received. These results suggest that future sessions can confidently continue in the same format, with minor enhancements to interactivity to further engage participants.

Annex 3: Recordings

1. 1-3 July 2024 (RNE)

- Day 1:
https://fao.zoom.us/rec/share/4KAcnXLAiqSmAn_Vwxksn9_N-WSuYECil8qefUy01h_BndhHsYGWk6_cXTxlUfI7.gSX5tbqLEEHTOasG
- Day 2:
https://fao.zoom.us/rec/share/22sRjSZb40RLLJb0LxmCI44yU19TZcKBjpvbb526vd29ziJoPIOXstrbxsotc6J_U2uby5tG78WvZuGb
- Day 3:
<https://fao.zoom.us/rec/share/e5OR8nzAI6kTIN0hZSZFCwfauFzIHhxRVIZc5F-cZpNu0dX2mdrjI6Eg0JPeCceK.mbCdII5zGJkGqYnA>

2. 23-26 September 2025 (RAF)

- 23 September 2025
Original audio https://fao.zoom.us/rec/play/PQCKJs-BpVJxsyB59tRivw8s44U9JnkdoOkgz5hIOG1fFv7T46MH5nzegJRf36CKqbkXsmYZV0LRzDj_gAG8L8I1JF0W098k
French version <https://fao.zoom.us/rec/play/2y4WBUYk5IKLDIEzGDI4JlyFw7YhP0IS24IZ0cM8CxCpEZxxnbqW72hO-TMTs-fhR85WExW8LiOUw7Ek.LwulJ1yQ1LnYedu0>
- 24 September 2025
Original audio https://fao.zoom.us/rec/play/mF5hj9YldozVS2umkCvxcccZGB7vPHmhy92Bt5IXBg6ygED_X88pMLQBCTQ3NRKvsOU4Ogw1UoAphKUU.XX7e6RlpTsmqbhCg
French version https://fao.zoom.us/rec/play/Fhoa_N9swCYaVrtEW0driN3S6uRntsFF_Xb9z-04VbvWpURqqusayFmsSRh0IFyfuwRkRDkclF8of8Ti.JPuyx-DY4aeUmrch
- 25 September 2025
Original audio https://fao.zoom.us/rec/play/5yJE_4mf0l8coCrUYfjYymPO4KO9DW9u50XUetYzfiL_2RHHwzuPr8-hDNR_xhX2kFQi2EwmoZ6lgkx9.fj-0vLyzfKxCh-9C
French version https://fao.zoom.us/rec/play/OAFJI97_ypzXwZ1vnJcL_islqT3-zwzwJgrt-sFNCnDZ4PF-KhpKz0VOyLeJntwhJGgaUzqE1Ttq07V.J6Xv1tFRAXMUZRsr
- 26 September 2025
Original audio https://fao.zoom.us/rec/play/N3CrzZBNxcTAss1sFN23jnY8tYmQyiyUgBHxY1dtTU8PPHWymA4Kc-NDb9JA7-kmwpoB9ThD1hxB_fh8.P4Usl8UKnw6QInTM

French version

https://fao.zoom.us/rec/play/RcXxKGvi7Vb1gIMlaAYSPMQAuxk3T2095IwXa5D6Pj3tf96uLFzXUq7xCa5RTKFaXm_ZLUYI0K3KCiEC.boBgjFzTnt6VqWKd

3. 20-23 October 2025 (REU)

- 20 October 2025

English version

https://fao.zoom.us/rec/play/pUbjUyOONxgD9gBgwvvvXD4IZTbTMnvHUYnHDYu8fHoxkK4H_hf hAIVTdXWb4tJmkVBlyfjowlZ3eL1G.pBfgtan2Sqw-A9yS

Russian audio only

<https://fao.zoom.us/rec/play/SGU0UvxbDmPSFcvMUVqVHiLaObQIMxERWIn-HPFFdQKbmsDBL5thk8GhRiGZ7uYJsZcw1CeAwRt0KOZd.c-c24bumE5p3GsTF>

- 21 October 2025

English version https://fao.zoom.us/rec/play/kcmZ_X87apy0rWp4NIOY1AN2E8IZw3-yySvz2uQBsrVx57Ib4FGcfoLIX4IZdvYL6iNz7XxNV6faUDPN.XfdKcUvJ9IJsN_R1

Russian audio only

https://fao.zoom.us/rec/play/kiWie_9rUg1oc86dPsYEVupM6xmzXgDhcp8IDw4vY4w9aUNFCYSH7EfGIS9smnXcdDBbez-0XtkCFVMc.kmbtINav8-2gnSZ

- 22 October 2025

English version https://fao.zoom.us/rec/play/toXysuik9xwQ-vH_NzDLLv6C3MxtyxqtTyYjySCYjKxKL-y_2V-EXZUdu1dNatSjBOnqrr3N7FxeeK.Z8exQOltk1ZIJT1U

- 23 October 2025

English version https://fao.zoom.us/rec/play/JIjUsk50U_ApJagSpd-6hCY0-goatEmd2PRUMhGjeEGeFb-IBEgkUZw9xx9_EBgnW3azZZoqJXA10E4.wOEykdLFF7ejAU29

Russian version of the recordings for day 3 and 4 were attached at the email sent at the end of the training to all participants.

Annex 4: Background Material

All materials (in English and several in Arabic, French, Russian and Spanish) have been shared before and after the Virtual Trainings through links/mail attachments/SwissTransfer. The materials shared included:

- Final versions of presentations that were presented during the four days;
- Excel file with the exercises for the calculation of the 11 sub-indicators;
- Stocktaking Excel file;
- SDG 2.4.1 survey questionnaire;
- “Certificate of attendance” - please note that participant names were recorded as entered during the training: those who consistently used the same email address across all four days were recognized and issued a certificate; any variation, however minor, meant a certificate could not be issued;
- Relevant background documents that were discussed and referred to during the training (methodological note, sampling guidance, guidelines on data analysis, enumerators manual, etc.). (also available at [this link](#))
- Quizzes along with the solutions, if you wish to practice;
- SDG 2.4.1 communication brochure;
- STATCAN methodology to calculate the Net Farm Income;
- WHO Pesticides Classification 2019;
- ISCO 2008;
- FIES guidance: intended meanings of the questions and specific terms;
- Bangladesh test report and the STATA tool for the calculation of the 11 sub-indicators;
- The R script presented during the training, along with a folder containing sample (fake) data, in case you wish to practice;
- Photos taken at the closure of the training.

Detailed background on SDG 2.4.1 can be found [here](#) (Arabic), [here](#) (English), [here](#) (French), [here](#) (Russian) and [here](#) (Spanish); detailed background on the Proxy can be found [here](#) (English)

Moreover:

- Cost of Production Handbook published by Global Strategy to improve Agricultural and Rural Statistics (GSARS). Additional resources published by GSARS i.e. guidelines, technical reports

and working papers on a range of topics related to agriculture and rural statistics can be found [here](#);

- [FIES webpage](#);
- FIES tool and manual to analyze data can be found [here](#);
- World Programme for the Census of Agriculture (WCA) methodology can be found [here](#);

To consult the **SDG 2.4.1 values** reported by countries to date:

- [2.4.1 Agricultural sustainability | SDG Indicators Data Portal | Food and Agriculture Organization of the United Nations](#) (in the “result” section)
- [UNSDG](#) selecting 2.4.1
- [FAOSTAT](#) selecting 2.4.1

To review the **proxy values**:

- [SDG 2.4.1 Proxy](#)
- [UNSDG](#) selecting 2.4.1 and then 2.4.1 proxy
- [FAOSTAT](#) selecting 2.4.1 proxy

Annex 5: Countries Action Plans

Lebanon

Action Plan for SDG Indicator 2.4.1 Implementation in Lebanon

1. Introduction

SDG Indicator 2.4.1 measures the proportion of agricultural area under productive and sustainable agriculture. The Ministry of Agriculture in Lebanon can only report on two sub-indicators—land productivity and Food Security—using annual production survey and Food security survey conducted with FAO. This action plan outlines steps to expand Lebanon’s capacity to report on the full SDG 2.4.1 dashboard.

2. Current Reporting Capacity

Lebanon’s Ministry of Agriculture currently collects data on agricultural land area and crop production through its annual surveys, and food security sub indicator as well. These data allow reporting on land productivity (Sub-indicator 1) under the environmental dimension and on food security (Sub-indicator 10) under the social dimension of SDG 2.4.1.

3. Key Constraints

The ministry faces several constraints that prevent full reporting on SDG 2.4.1, including: - No data collection on soil health, water use, biodiversity, labor conditions, or farm income. - Lack of integration with other ministries and agencies holding relevant information. - No existing survey modules aligned with the SDG 2.4.1 sub-indicators. - Limited technical capacity and funding to design and implement new data systems.

4. Proposed Actions and Timeline

To expand reporting capability beyond productivity, the Ministry proposes the following actions: Action	Timeline	Lead Entity	Expected Outcome
1. Establish a national coordination group on SDG 2.4.1	Q3-Q4 2025	MoA + FAO	Coordinate with relevant agencies and data holders
2. Conduct a gap analysis of SDG 2.4.1 data	Q1 2026	MoA Statistics and Economic studies Unit	Identify missing sub-indicators and