



Summary Report

Virtual Trainings

SDG indicator 2.4.1.

“Proportion of Agricultural Area under Productive and Sustainable Agriculture”

6 Groups:

1. 27 April 2021

Bahrein, Comoros, Egypt, Iraq, Jordan, Kuwait, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Tunisia, United Arab Emirates

2. 1-2-3 June 2021

Botswana, Burundi, Cabo Verde, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Kenya, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Rwanda, Sao Tome and Principe and Zambia

3. 28-29-30 June - 1 July 2021

Bhutan, Brunei Darussalam, Cambodia, Cook Islands, Fiji, Indonesia, Iran (Islamic Republic of), Japan, Lao People's Democratic Republic, Malaysia, Mongolia, New Zealand, Palau, Philippines, Republic of Korea, Samoa, Thailand and Timor-Leste

4. 13-14-15-16 July 2021

Bangladesh

5. 20-21-22-23 September 2021

Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Grenada, Guyana, Mexico, Panama, Paraguay, Peru, Suriname and Venezuela

6. 2-3-4-5 November 2021

Azerbaijan, Belarus, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Georgia, Lithuania, Poland, Spain, Turkey, Ukraine, United Kingdom

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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 21 indicators, FAO is working closely with its member states to develop their capacity on 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 now classified as Tier II.

In 2020, the unexpected COVID-19 pandemic engulfed the entire globe, hampering the normal statistical operations of the countries, given that regular data collection activities are no longer possible due to health reasons, budgetary constraints and shift in national priorities focused to combat the pandemic. In addition to this, COVID has also challenged the traditional capacity development activities planned by FAO to support countries on the methodology and data collection of Tier II SDG indicators. Given this context, the SDG 2.4.1 team of the Statistics Division of FAO improvised their capacity development strategy amid COVID-19 that has inhibited international travel and thus in person national and regional trainings and workshops. In this respect, in close coordination and collaboration with the Regional and Country Offices

of FAO, three Virtual Trainings on SDG 2.4.1 were organized between September and October 2020 managing to train 29 countries, resulting in 298 national staff (8-9-10 September 2020: Afghanistan, Indonesia, Kazakhstan, Nepal, Pakistan and Viet Nam; 22-23-24 September 2020: Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela; 13-14-15 October 2020: Armenia, Belarus, Burkina Faso, Malawi, Mali, Oman, Russian Federation, South Africa, Uganda, Ukraine and United Arab Emirates).

In the same lines, FAO has organized 6 virtual trainings in 2021 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 been conducted successfully and were attended by 81 countries from Asian, Latin American and Caribbean (LAC), African, European and Near East Regions. The ultimate aim of these trainings were to build capacity of the national staff on the methodology, data collection tools and reporting mechanism of SDG indicator 2.4.1. The trainings were of maximum impact, which is evident from the attendance of 488 participants. In addition, the training were cost effective in terms of its organization, as there were no expenses incurred on international travel of the participants, resource persons and on booking venues for the trainings. The virtual trainings accommodated larger number of participants, which usually is not possible in normal in-person trainings due to budgetary constraints. The attendees had diverse backgrounds, 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 trainings was that apart from the English as a working language, simultaneous translations were provided in Arabic for the ESCWA Region, French for the African Region, Spanish for the Latin American group of countries and Russian for the Near East countries. Availing this option made a huge difference in terms of participant engagement, improved understanding and thus uptake of these trainings by countries for which English was not their official language.

Concluding, FAO successfully trained about 700 national staff from 95 countries globally in the 2020-2021 biennium – a vital investment in national statistical capacity to ensure the future of country reporting on sustainable agriculture.

Objectives

The core objectives of these six virtual trainings were to:

- Provide technical training to build capacity of the national staff on SDG indicator 2.4.1 methodology, compilation and interpretation.
- Introduce the tools for data collection (including alternative data sources).
- Identify available national and sub-national farm level and other data useful to analyze sustainable food and agriculture.

- Understand the data gaps.
- Discuss the country plans to collect data on the indicator in the short/medium/long term.
- Introduce additional mechanisms/frameworks to measure and monitor sustainable agriculture.

The trainings also provided the national staff 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 virtual trainings helped the national counterparts in evaluating the availability of national and sub-national data needed to compute indicator 2.4.1, understanding its measurement challenges and introducing effective data collection and reporting mechanisms. The ultimate aim 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 81 countries (488 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;
- 6 countries have 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 6);
- As a result of the training, some countries (Equatorial Guinea, Rwanda, Samoa, Bangladesh and Turkey) also 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.

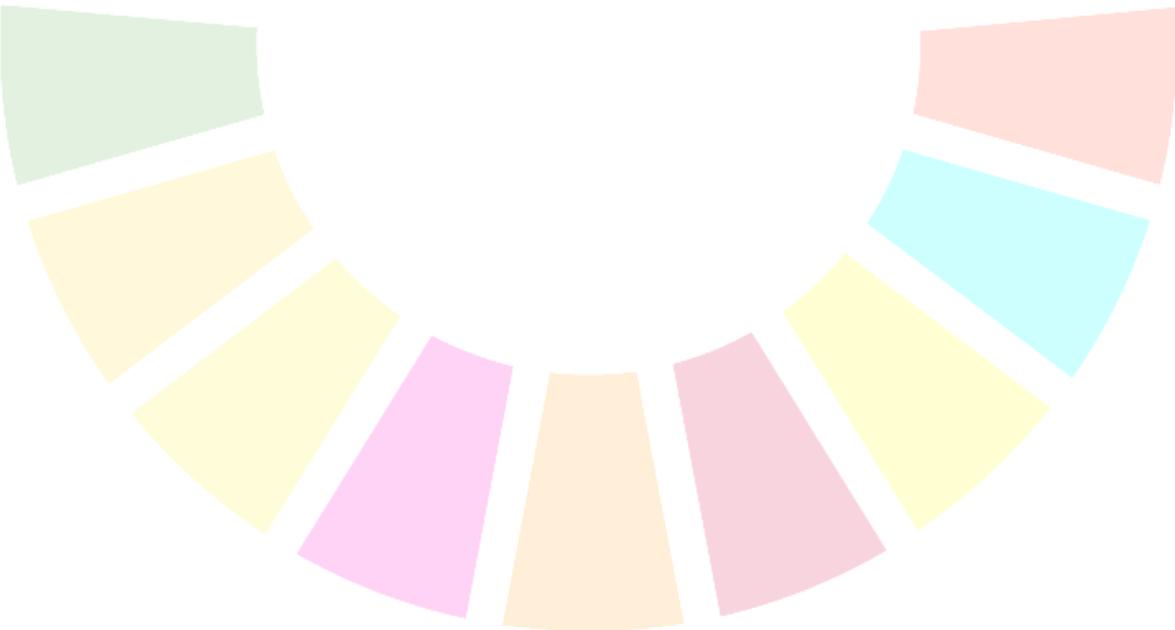
Agenda

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 to 4 half-days (with the exception of the ESCWA countries, for which the training lasted 1 half-day). 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
27 April 2021	ESCWA countries (Bahrain, Egypt, Iraq, Jordan, Kuwait, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Sudan, Somalia, the Syrian Arab Republic, Tunisia and the United Arab Emirates)	92

1-2-3 June 2021	Botswana, Burundi, Cabo Verde, Côte d'Ivoire, DRC, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Kenya, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Rwanda, Sao Tome and Principe and Zambia	73
28-29-30 June - 1 July 2021	Bhutan, Brunei Darussalam, Cambodia, Cook Islands, Fiji, Indonesia, Iran (Islamic Republic of), Japan, Lao People's Democratic Republic, Malaysia, Mongolia, New Zealand, Palau, Philippines, Republic of Korea, Samoa, Thailand and Timor-Leste	109
13-14-15-16 July 2021	Bangladesh	23
20-21-22-23 September 2021	Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Grenada, Guyana, Mexico, Panama, Paraguay, Peru, Suriname and Venezuela	166
2-3-4-5 November 2021	Azerbaijan, Belarus, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Georgia, Lithuania, Poland, Spain, Turkey, Ukraine, United Kingdom	25

The list of participants is in Annex 2.



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

Day 1 and Day 2

Opening

Mr Arbab Asfandiyar Khan, Economist, ESS, opened the virtual trainings by welcoming the participants on behalf of ESS and OCS divisions 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 21 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, hence countries were advised to carefully look into and revise the STATA scripts according to their context before applying it to their data.

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.

Day 3

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) AGRISurvey programme and 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.

SDG 2.4.1 in the context of AGRIS and 50x2030

In this session Mr. Flavio Bolliger (Senior Statistician of the Survey team at FAO HQ) introduced the Agriculture Integrated Survey (AGRIS) model (a 10 years survey programme developed by the GSARS). He then described the AGRISurvey programme and the way it operates by applying the AGRIS approach in selected countries to provide agriculture sector information at a reasonable cost. He also presented 50x2030 initiative, its integrated data collection model that includes both the AGRISurvey programme and the Living Standards Measurement Study – Integrated Surveys on Agriculture (LSMS-ISA) approach, to capture the economic, social and environmental aspects of the holding and the household associated with it.

He explained the integration of SDG 2.4.1. with AGRISurvey programme and presented two choices: to integrate 2.4.1 questions in the CORE module and collect all the data in one year; or, allow more flexibility by integrating some of the questions within the CORE Module and other questions in the Production Methods and Environment (PME) Module, thus collecting data in two consecutive years. The pros and cons of each choice were presented. In addition, 2.4.1. integration in 50X2030 Initiative was also presented. Under this approach, countries have the flexibility to adopt the customized version of PME questionnaire with 2.4.1 questions to ensure its complete coverage.

FAO SDG 2.4.1 data collection questionnaire

Ms Bacci showed the data collection questionnaire, the tool using which FAO collect data on SDG 2.4.1 from countries. This questionnaires was dispatched for the first time to all member countries on August 10, 2020 and for the second time on August 16th, 2021. The questionnaire was 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 that was set as 10 September, 2021. 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), 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 10 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.

Findings of the first comprehensive dispatch of SDG 2.4.1 FAO data collection questionnaire

Ms Bacci presented the results of the comprehensive dispatch of FAO data collection Questionnaire that was dispatched to all member countries in August 2021. She illustrated the background, scope and the objectives. Then she presented salient results of the tests: 54% of the countries acknowledged receipt of the questionnaire; 44% sent the questionnaire back partially filled or completely filled; 24% filled the feedback section; 12% provided actual data; and 24% stated they don't have any data. She focused on the 23 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 pilot test vs the comprehensive dispatch, she presented the feedback section results and concluded with next steps.

Data reporting to FAO (with focus on FAOSTAT)

Mr Nathan Wanner presented FAOSTAT platform, an established FAO process for data collection and reporting on food and agriculture data. For each FAOSTAT domain, he requested the countries that participated in the training to take a look at the national Focal Points and as well the status of data reported in the last 3 years. It was stressed that the participants coordinate with the relevant institutions and concerned officials to reconfirm the focal points, and if a given country hasn't reported data in the last 3 years, then find out the underlying reasons for this situation so that the issues can be discussed and resolved.

Day 4

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.

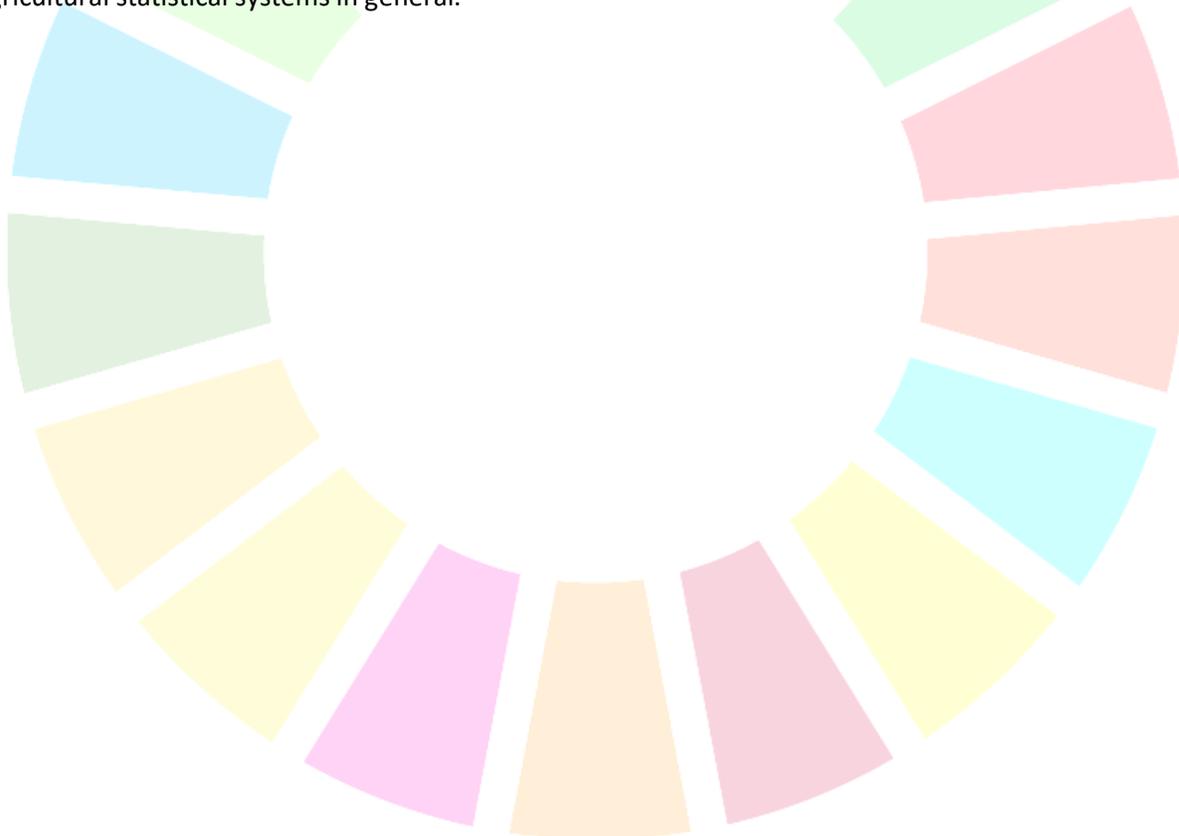
Discussion on challenges in data collection and reporting on SDG indicator 2.4.1 and action plan to overcome it

In this session the lead representatives of each country discussed and elaborated on below questions:

- To what extent your country is ready to report on the SDG 2.4.1 based on the current farm survey approach?
- Do you think assessment of sustainable agriculture using 2.4.1 framework will support your national policy making?
- 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?
- Are you currently using any framework to report on sustainable agriculture? If yes, can these ongoing processes help feed into 2.4.1?
- What alternative data sources do you envision that can be used to report on the respective 11 sub-indicators of SDG 2.4.1?

- What proxies can be used in the interim period for reporting on sustainable agriculture while countries are getting organized to implement and operationalize SDG 2.4.1 methodology?
- What do you expect from FAO in terms of further support to help you improve it reporting on 2.4.1?

Though preliminary feedback was received during discussions with country representatives, 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 (Equatorial Guinea, Rwanda, Samoa, Bangladesh and Turkey) 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 in particular and improving the agricultural statistical systems in general.



Summary of country discussions and action plans received

GROUP 1

Bahrein, Comoros, Egypt, Iraq, Jordan, Kuwait, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Tunisia, United Arab Emirates

The first group to be trained included the ESCWA countries and the training lasted only one day. No proper discussion has been done due to lack of time, but the series of Q&A are reproduced here below:

UAE	<p>Is the agriculture census enough to capture all the aspects for this indicator? Regarding the sample size, should we take the holding size or the farm size? And for the non-household do you mean commercial farm?</p>	<p>Non-household sector agriculture holdings commonly refers to large scale commercial holdings which are either be owned by the government or by corporate or by group of individuals. The definitions of the household/non-household agriculture holding are taken from to The World Census of Agriculture 2020.</p> <p>The sample size is defined as the subset of agriculture holdings and its areas that which are representative of the country agriculture land area, country decide on the minimum sample size to be included ensuring adequate representation of the country agriculture land area. The data is compiled through FAO questionnaire module, that consists of a set of minimum questions, available online in English, French, Spanish and Arabic. Countries may include this module in their agriculture survey and refer to FAO guidelines on sampling</p>
UAE	<p>My question relates to the inclusion and exclusion of the indicator around the controlled environment agriculture and other alternative food system production units that are not conventional and yet more or less follow the five principles of SFA and they have the 11 sub-indicators which we deem sustainable. Are those to be incorporated? If yes, how? If not, why not?</p>	<p>For the indicator 2.4.1, we have held virtual meetings with ADAFSA in 2020.</p> <p>There are few limitations for SDG 2.4.1. FAO was unable to cover everything related to agriculture as part of SDG 2.4.1. FAO had to draw a line somewhere. In terms of scope, all agriculture systems whether intensive or extensive, whether those take place in open field or in a controlled environment, everything which is carried out in a controlled environment will be considered as agriculture land area of the country and hence should be considered as part of the scope of indicator 2.4.1.</p> <p>For the denominator, it focuses on the crops and livestock since it is impractical to combine everything in one indicator and there are other SDGs that would cover those aspects.</p>
UAE	<p>I believe this indicator needs to put a lot of effort, time and skills to be calculated due to the different inputs and outputs.</p>	<p>We totally acknowledge that countries if wishes can use the more sophisticated or simplified options, FAO build different options for countries that have different levels of developed agriculture</p>

	Can't we calculate the profitability for each holding instead of each crop? Isn't it easy to start by calculating the profitability for each crop?	statistical systems. FAO does not prescribe countries to adopt the more data demanding and sophisticated option which will result in more resources required to be able to collect this information. Therefore, the recommended solution is to add a simple question in the agriculture survey, to ask the farmer directly as to whether his agriculture holding was profitable in the last 3 years.
UAE	What profitability refers to exactly??	It means the total output value produced by the agricultural holding at a given period minus the total cost of production.
ESCWA	What is the minimum area to be considered in hectare in these questions?	It depends on the country as to what size of agriculture holding is important to be included. FAO do not put a threshold that should be selected as a part of the sample in the country. However, FAO has prepared a document on the sampling available online.
UAE	For areas that do not have soil and use new techniques to do the farming such as hydroponic systems, how do we measure the soil?	If a given agriculture holding is engaged in activities such as hydroponic systems, vertical systems and is selected as a part of a sample, it may be considered as green, if it is not contributing to the problem of deteriorating the environment and it is not adding to the concerns related to agriculture sustainability of the country.
UAE	For the new techniques of farming, what is the methodology used to calculate the area and the productivity per area?	Even in classical traditional agriculture, measuring and monitoring sustainability was never done before. It was talked about in the past but there was no statistical framework on how to go about it. The SDG 2.4.1 as an indicator to measure progress in terms of sustainability is a very big quantum leap in terms of providing such framework. There are few limitations of SDG 2.4.1 such as commonly managed lands, for which a new indicator may be needed.
Oman	Regarding the survey of indicator 2.4.1, can it be done through mobile data collection?	Yes. But with the mobile phone and tablets, before the question is displayed on the screen, a proper explanation of the terms is needed so that the respondent are able to answer correctly.
UAE	For the organic farms, there are rules in for fertilizer usage. Once the farm has a certificate that it has an organic farming system, is it by default to match all of this or we need to make this assessment for this system?	Certification of any kind which is awarded based on practicing organic agriculture or any other form of agriculture considered to be environment friendly, from this point of view FAO did consider first while developing the methodology, to have the questions on organic certification as a filter question., Meaning if the country is using a certification for organic agriculture, some questions will be skipped, especially those related to fertilizers, pesticides and biodiversity. This idea of presence of organic certification to skip some questions was dropped on the following grounds that organic agriculture constitute a small proportion of the entire agriculture land area and in term of value of output produced; not all the organic agriculture is environment friendly; and the certification of organic agriculture does not have a common international definition, but it varies from one country to another.

		So, the questions related to fertilizers won't be skipped based on the fact if organic agriculture is practiced.
Tunisia	Can FIES questions be used for answering the indicator 2.1.2 for the sub-indicator 10?	This sub-indicator is customized for SDG 2.4.1. FIES indicator i.e. 2.1.2 covers the entire population of the country not only the agriculture household. From this point of view, the FIES estimates will cover all group of people that may not have a nationally representative sample size of agriculture holdings needed for SDG 2.4.1. So 2.1.2 may not be adequate for it to use for indicator 2.4.1. But in countries, if the agriculture population is well represented in the sample of 2.1.2, it can be used. However, it is better to add the questions related to 2.4.1. in the agriculture survey.
Kuwait	How to calculate the percentage of agricultural area devoted to productive and sustainable agriculture?	It is very simple and straight forward. It can be easily done based on the dashboard. The aggregate of 2.4.1 is the value of the sub-indicator that has reported the highest value of red or unsustainability.

At the end of the training the following was agreed with the participants as next steps:

- NSOs to draft and share their plans to implement farm surveys that include questions to calculate the indicator
- NSO to request FAO for capacity development for planned agriculture surveys, where needed
- FAO to make Enumerator manual available in the Arabic language to facilitate training of field workers
- FAO to provide training on methodology of data collection and calculation
- ESCWA to coordinate with NSOs and FAO on planned surveys

GROUP 2

Botswana, Burundi, Cabo Verde, Côte d'Ivoire, DRC, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Kenya, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Rwanda, Sao Tome and Principe and Zambia

The second group that were trained on the SDG 2.4.1 methodology using virtual training comprised of 18 African countries and 111 government officials. The open discussion held on the third day of the training and the action plans received underlined that several countries are interested and willing to implement concrete plans to implement SDG 2.4.1. Equatorial Guinea and Rwanda requested assistance from FAO in their efforts to overcome financial issues, to translate all SDG 2.4.1 material in French and to train local staff.

1. Burundi:
 - a. 4 sub-indicators ready available
 - b. For the others sub-indicators, they will get data from the Agricultural Census in 2022 and different surveys
 - c. They plan to integrate the SDG 2.4.1 sub-indicators into the national agricultural survey
 - d. They highlighted the following: lack of data and financial means to implement in the indicator
2. Equatorial Guinea:
 - a. Requested financial support (for carrying out different surveys) and technical assistance (for translating everything in French)
 - b. Highlighted that if the Ministry of Agriculture doesn't have data on the sub-indicators, they will try to get them from the INS (national accounts)
 - c. Last agricultural survey done in 2015, which can be used to estimate data
3. Rwanda:
 - a. Requested technical assistance from FAO to train national staff to report on the indicator
 - b. Highlighted the financial constraints to implement the indicator
 - c. They conduct regular agriculture surveys and it is possible to integrate some sub-indicators and start collecting data in medium-term as long as technical assistance is provided, this could bridge the data gap

GROUP 3

Bhutan, Brunei Darussalam, Cambodia, Cook Islands, Fiji, Indonesia, Iran (Islamic Republic of), Japan, Lao People's Democratic Republic, Malaysia, Mongolia, New Zealand, Palau, Philippines, Republic of Korea, Samoa, Thailand and Timor-Leste

The countries from Asian and Pacific regions showed keen interest in the 4 days virtual training reflected through participation of 18 countries and 127 government officials. Furthermore, following the training, FAO received several country action plans, thus reiterating their willingness to work towards reporting on 2.4.1. Additionally, Japan expressed interest in proxy approach using satellite images.

1. Brunei Darussalam
 - a. They have scheduled a sample survey starting in September 2021. They plan to report results to FAO in May 2022
2. Cambodia
 - a. They are plans for the next phase of AGRIS and intend to cover SDG 2.4.1 using that
 - b. Hopefully by next year data would be available
 - c. Some of the sub-indicators will be available soon thanks to data they can retrieve from the past surveys
3. Indonesia
 - a. Pandemic has caused significant challenges in conducting surveys
 - b. The Agricultural Integrated Survey (AGRIS) nationwide will cover both households and non-household institutions and will allow them to compute the indicator

- c. Adjusted the core module to capture the indicator's environmental dimension
- 4. Japan
 - a. Already have 40 national surveys, and thus mentioned that it may not be feasible to have another one
 - b. Interested in the proxy approach using satellite images
- 5. Mongolia
 - a. The country is in the process of having the national indicator framework approved by the government
 - b. Any further action towards estimating this indicator depends as to whether the indicator will be included in the national indicator framework or not
 - c. They will discuss this matter with relevant national institutions as they are going to conduct the national Agricultural Census next year
- 6. Palau
 - a. For the next State of the Environment report they will use stratified sampling to conduct farm survey and then calculate most or all sub-indicators
 - b. Palau did not include SDG 2.4.1 in its list of localized indicators
 - c. They expressed that some of the new concepts they have learned during the training may be included into their Food Systems Dialogues materials
- 7. Philippines
 - a. Data for this indicator is not yet readily available
- 8. Samoa
 - a. Request for a TA to assist Samoa in the future work especially that they have an upcoming Agriculture survey in 2025 and Household Income and Expenditure Survey in 2023
 - b. Issues highlighted: lack of administrative data or data not collected; frequency of data collection (surveys every 5 years); treatment of certain indicators that might not be applicable to Samoa
 - c. Need to refine national indicators for National Development Plan
 - d. Need to align national sub-indicator framework with SDGs
 - e. Need to address data gaps in existing sub-indicator framework
 - f. Need better alignment between National and Sector Plan indicators
 - g. Improved alignment of surveys conducted and sub-indicator needs
- 9. Timor-Leste
 - a. Technical assistance and support requested to FAO

GROUP 4

Bangladesh

The 4th bilateral Virtual Training on SDG 2.4.1 was held in July 2021 for Bangladesh Bureau of Statistics. The open discussion at the end of the training highlighted a huge interest and willingness to implement and report on SDG 2.4.1, considering also that BBS tested the methodology of SDG 2.4.1 in 2018-19.

- a. BBS is planning soon to conduct a standalone questionnaire on SDG 241 through a national level survey
- b. BBS will officially request to enter the 50x2030 initiative

GROUP 5

Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Grenada, Guyana, Mexico, Panama, Paraguay, Peru, Suriname and Venezuela

15 countries of the Latin American and the Caribbean region participated to the 5th virtual training with a total of 166 participants with different backgrounds, including representatives from National Statistical Offices, Ministry of Agriculture, Ministry of Environment and other institutions and organizations relevant to sustainability issues.

9 of the 15 countries already got training last year, and decided to participate this year as well. Due to the massive interest, available capacity, and feasibility in leveraging existing agricultural survey programs, LAC has the right ingredients and thus potential for generating 2.4.1 data and gradually moving SDG 2.4.1 closer to a Tier 1 status over time.

1. Brazil
 - a. To conduct a new survey to collect data on SDG 2.4.1, but not in the short term (because of the economic impact of pandemic. Next year they will have the population and houses census + electoral year).
 - b. Medium to long term is feasible, however they might have methodological issues because they need to construct a new survey
 - c. May have budget constraints to implement new survey: there are 70 hundred thousand agricultural holding all over Brazil (estimated cost to visit all of them: 5 million dollars)
 - d. They need to think how to minimize the cost. Maybe using new technology?
 - e. Some farms are very distant and transport is very costly
 - f. IBGE need to conceive the project first and then sensitize the high level people. They need to give to this project the priority.
 - g. FAO is ready to provide technical support, but if in the meantime they have partial data on some sub-indicators it would be appreciated to report those (probably through the census)
 - h. ADS can be tested in Brazil, if IBGE is interested
2. Panama
 - a. To conduct their agricultural census next year and will allow to report some sub-indicators
 - b. They have also other agricultural surveys
 - c. FAO can have a look to understand which data can be used for 2.4.1
 - d. FAO is ready to support and to adjust questionnaires

GROUP 6

Azerbaijan, Belarus, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Georgia, Lithuania, Poland, Spain, Turkey, Ukraine, United Kingdom

1. Georgia
 - a. Within the 50by2030 initiative they plan to do a survey including all 2.4.1 questions
 - b. Plan to carry out a pilot in 2022 for SDG 2.4.1 data collection.
2. Turkey
 - a. Will explore administrative data and crop and livestock surveys to see if relevant information can be extracted
 - b. They do not conduct a regular agricultural survey
 - c. Next year they have the agricultural census
 - d. Additional questions may also be added into some existing research
 - e. Estimated time of reporting SDG 2.4.1 by Turkstat under the most optimistic scenario is 2023-2024
3. Spain
 - a. They have data but not based on farm survey
 - b. FAO is encouraged them to report whatever they have

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 in these extraordinary circumstance.

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 forms. The results of evaluation helps 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 3.

Recordings of all the sessions for each Group of countries can be found in Annex 4.

Results and main conclusions

- 488 participants from 81 countries were trained on the conceptual, methodological and technical issues, data collection, compilation, reporting and interpretation of the indicator through presentations, discussions, Q&A sessions and quizzes;
- FAO introduced tools for the indicator's data collection including standalone survey module, AGRISurvey program and 50x2030 Initiative 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 stock taking 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 2021 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 6.



Annex 1: Template Agenda of the Virtual Trainings

SDG indicator 2.4.1			
Day 1			
Session	Description	Presenter/ Facilitator	Time Slot (in min)
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			30
Session 3	Sub-indicators in the economic dimension (cont.)	FAO – Arbab Asfandiyar Khan	85
Session 4	Q&A and Wrap-up	FAO – Arbab Asfandiyar Khan	5
Day 2			
Session 1	Sub-indicators in the environmental dimension	FAO – Arbab Asfandiyar Khan	90
Break			30
Session 2	Sub-indicators in social dimension	FAO – Arbab Asfandiyar Khan	85
Session 3	Q&A and Wrap-up	All	5
Day 3			
Session 1	SDG 2.4.1 in the context of AGRIS and 50x2030	FAO – Flavio Bolliger (AGRIS team)	45
Session 2	SDG 2.4.1. Data collection tools (survey questionnaire and alternative data sources)	FAO – Arbab Asfandiyar Khan	30
Session 3	FAO SDG 2.4.1 data collection questionnaire	FAO – Stefania Bacci	15
Break			30
Session 4	Data reporting to FAO (with focus on FAOSTAT)	FAO – Nathan Wanner	45

Session 5	Findings of the first 2020 dispatch of SDG 2.4.1 FAO data collection questionnaire	FAO – Stefania Bacci	40
Session 6	Q&A and Wrap-up	All	5
Day 4			
Session 1	Indicator 2.4.1 Short/Medium/Long term expectations	FAO – Arbab Asfandiyar Khan	40
Session 2	Lessons learned and sharing experience from countries	Country Expert	40
Session 3	Discussion on challenges in data collection and reporting on SDG indicator 2.4.1 and action plan to overcome it	All	50
Break			30
Session 4	Discussion on challenges in data collection and reporting on SDG indicator 2.4.1 and action plan to overcome it (cont.)	All	80
Session 5	Wrap-up, next steps, evaluation and closing (group photo)	FAO – Arbab Asfandiyar Khan and Stefania Bacci	10

Annex 2: List of participants

Participants of Group 1 (27 April 2021)

Bahrain, Comoros, Egypt, Iraq, Jordan, Kuwait, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Tunisia, United Arab Emirates

Country name	Name of expert	Title	NSO/ Line ministry	Email	Mobile number	26-Apr-21	27-Apr-21
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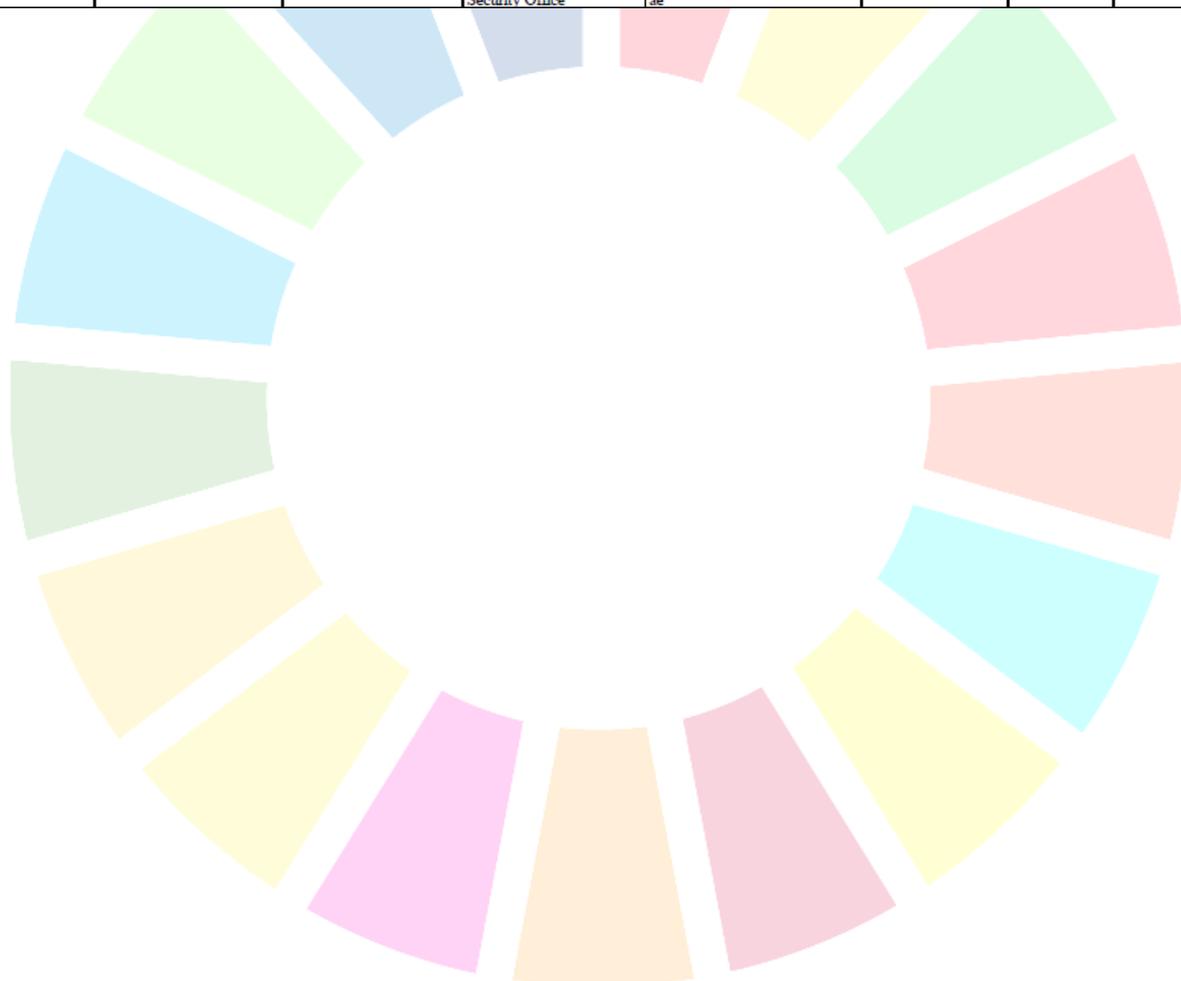
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Participants of Group 2 (1-2-3 June 2021)

Botswana, Burundi, Cabo Verde, Côte d'Ivoire, DRC, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Kenya, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Rwanda, Sao Tome and Principe and Zambia

Name	Country	DAY 1	DAY 2	DAY 3
Abou-bakar Ouattara	Côte d'Ivoire			x
Ahmed Ibrahim	Ethiopia			x
Alganesh Berhe	Eritrea	x	x	
Ali Abdulhakim	Ethiopia	x	x	x
Alia Conté	Guinea	x	x	
Alphonse Orang'o	United States		x	
Amian Bagouhan Magloire YAO YAO	Côte d'Ivoire	x	x	x
Ana Justina Almeida	Sao Tome and Principe		x	x
Andrianarivo Vonjy Harilaza	Madagascar	x	x	
Anzoumana CHERIF	Côte d'Ivoire			x
Aristide Ongone Obame	Congo, Democratic Republic of the		x	
Arsène KWIZERA	Burundi	x	x	x
Aurelio Junior	Mozambique		x	
Baoubadi Atozou	Congo, Democratic Republic of the	x	x	x
Bereket Tsehay Haile	ERITREA	x	x	x
CHINNEE Deosharma	Mauritius	x	x	
Custodio Amaral		x		
Delfina Cumbe		x	x	x
Dickson Bwalya	United States		x	
Ditshupo Gaobotse	Botswana		x	x
Dora Rodrigues	Sao Tome and Principe	x	x	x
Douglas Magunda	Ethiopia	x	x	x
EDU MBA Felipe		x		
Elvira Zemia		x	x	x
Emmanuel OUPOH OUPOH	Institut National de la Statistique	x		
ESONO MBENGONO Pascual Afugu	Equatorial Guinea	x	x	x
Eugenio Macamo	Mozambique	x	x	x
FELIX NDAYIHIMBAZE	Burundi	x	x	x
fernando camisa	Mozambique	x	x	x
GE-Pascual Afugu ESONO MBENGONO	Equatorial Guinea		x	
Getachew Adugna	Ethiopia	x	x	
Graca Manjate	FAO	x		
Hagos Wohabey	National Statistics Office	x		
Henri-Paul Eloma Ikoleki	Congo, Democratic Republic of the	x	x	x

Herold Musonda	Zambia	x	x	x
HUAWEI Y7 Prime 2019		x		
Instituto Nacional de Estatística	Mozambique	x	x	x
Inussa BARI	Cabo Verde	x	x	x
Jésus Bio	Côte d'Ivoire			x
JOHN MBURU	Kenya	x	x	
Josefina Nghuuyepa	Namibia	x	x	x
Kafkas Caprazli		x	x	x
KONAN EUGENE YAO	Côte d'Ivoire	x	x	x
KOUADIO ABEL ATTE	Côte d'Ivoire	x	x	x
Kumonika Lukas	Namibia		x	
Lukas Kumonika	Namibia		x	x
Lyna Mukwa	FAO	x		
Makhissa Keita	Guinea	x	x	x
Mamadou Tanou DIALLO	FAO	x		
Mamolupe Ntoko	Lesotho	x	x	x
Mamosebetsi Sebolai (Mamoilola)	Lesotho	x	x	x
Masiliso Sooka	United States	x	x	x
Mauricette Neves	Instituto Nacional de Estatística	x		
MAYET WILLIAM CORNEILLE		x		
Monasse Jorge Nguluve		x	x	x
Monicah Karanja	Kenya		x	
MUTEBUTSI Alexis	Rwanda	x	x	x
Nádia keshavji		x	x	x
NIKWIBITANGA Ambroise	Burundi	x	x	
OBED KAWANGA	United States		x	x
Ossey Erick Arnaud KOUASSI	Côte d'Ivoire		x	
Ousmane BAH	France	x	x	x
Paulus Amweelo	Namibia	x	x	x
Rado RAZAFIMAHANDRY	Madagascar	x	x	x
Rogers Munywoki		x		
Rosa Harris	Namibia	x	x	x
RUGHOOBUR Chandranee	Mauritius	x	x	x
Sayon OULAYE	Guinea	x	x	x
Sely Pascal Koivogui	Guinea	x	x	x
Seyoum Teame Haile	Norway	x	x	x
Tedros Zerai	Eritrea		x	x
Teklemariam# Asghedom (FAOER)		x		
WAPORI TRAORE	Côte d'Ivoire	x	x	x
Yuel Yonas	Eritrea	x	x	x
Zuvee Kahitu	Namibia	x	x	x

Participants of Group 3 (28-29-30 June - 1 July 2021)

Bhutan, Brunei Darussalam, Cambodia, Cook Islands, Fiji, Indonesia, Iran (Islamic Republic of), Japan, Lao People's Democratic Republic, Malaysia, Mongolia, New Zealand, Palau, Philippines, Republic of Korea, Samoa, Thailand and Timor-Leste

Names	Country
AFSIS# Project Co.	Thailand
AFSIS# Waraporn	Thailand
AFSIS_ Worada	Thailand
Agung Setyo	Indonesia
Alaiula Ioasa	Samoa
ali	The United States
Alice Seuseu	Samoa
Alireza Safaei	
Aniisa Rizqi	Indonesia
Anuradha	Palau
Anyada Penpon	Thailand
Atousa Bakhtiari	New Zealand
Bayu Rhamadani Wicaksono	Indonesia
Benjamin Lamberet	Cambodia
benjarat pharelai	Thailand
BN_Dept of Agriculture and Agrifood	Malaysia
Bolormaa Erdenee	Mongolia
Cambodia_Bin Sopheap (Bin Sopheap)	The Virgin Islands (U.S.)
Cambodia_Chan Samrith	Cambodia
chakriya Hang	Cambodia
Chan Samath	The United States
Chan Samrith	Cambodia
Charlene	Palau
Chhin Phy	Cambodia
Chris Sinclair	Samoa
Cook Islands_Sanjinita	The United States
Daravy Khiev	Cambodia
Dicky Muhammad Ramdhani	Indonesia
Enkhjavkhlan Khurelchuluun	Mongolia
Erdene-ochir Myagmarkhand	Mongolia
EunikeParameswari	Indonesia
Farah Ani binti Haji	Malaysia
Fitriana Nur Rachmah	Indonesia
Fritz Kruse	Samoa

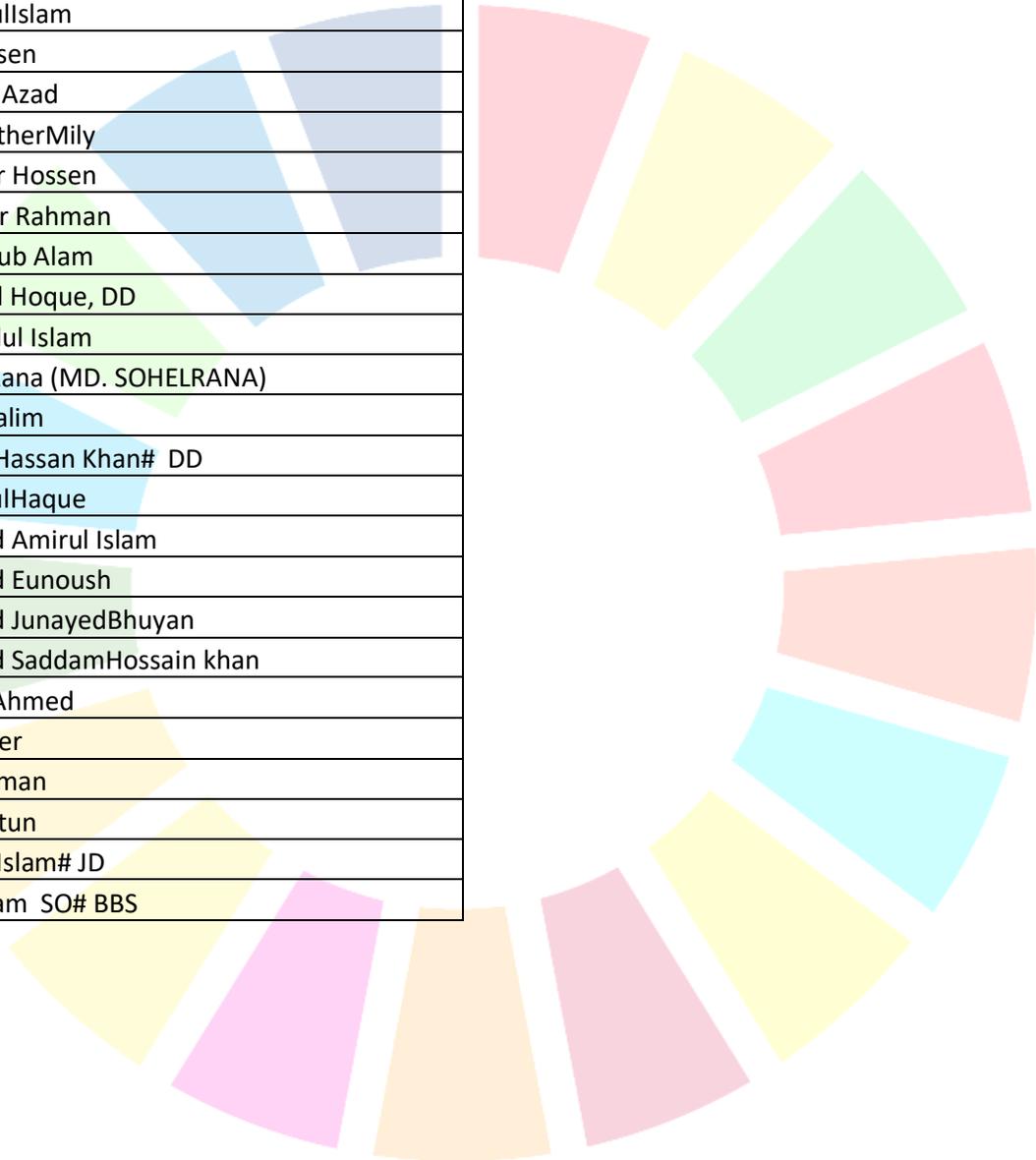
Gerold	Italy
Hairkham SISOUVAN	The United States
Hanif Palupi	Indonesia
Heng Lyhong	Cambodia
Heng Oudom	Cambodia
HOSAKA	Japan
IKEDA	Japan
Ismail Abdul Rahman	Malaysia
Isnaeni Nur Khasanah	Indonesia
Joseph Faapito	Samoa
Juditha C. Perido	The Philippines
Kadir Kadir	Indonesia
Kamonpan Soodtoetong	Thailand
KHUON SEREY	Cambodia
Leapvanrath Sean	Cambodia
Mao Chhem	The United States
Maria Natalice	The United Kingdom
Maria Natalice Ximenes	Australia
Marjan	Turkey
Martin Mapusua	Samoa
Men	Cambodia
Minhee Yun	Korea
Ms. Monthong Keochansy	Lao People's Democratic Republic
MY - Syed Abdul Bari	Malaysia
Namyoun Kim	Korea
Nattinee Fueangfupanich	Thailand
Nazri Adam	Malaysia
NOOR 'ABIDAH MOHD DAWI	Malaysia
Olivia da Costa Alves	Timor-Leste
Pattarawadee Jindathai	Thailand
Paul Berentson	New Zealand
Penny Wulandari	Indonesia
Phally Hang	The United States
Pitiphong Sukhonyuenyongkun	Thailand
Pornpun Umwong	Thailand
Rosa Viavia	Samoa
Rothana Pich	Cambodia
Sabermohammad Maghsoodi	Iran
Sakmakara Tep	Cambodia
Sanjinita	The United States
sanpetch sirisuttarom	Thailand

Sayon Phien	Cambodia
Sengphachan	Lao People's Democratic Republic
Shafique Mohamed	The United States
Shahriman Haron	The United States
Sherab Wangchuk	Bhutan
Siata Ulu -Faamoe	Samoa
Siusiuosalafai Papalii	Samoa
Socheat Khoem	Cambodia
Sona LONG	Cambodia
Sonam Euden	The United States
SOTHY	Cambodia
Sujita Rakwong	Thailand
Syed Abdul Bari bin Syed	Malaysia
takashi shinohara	The United States
Tanabodee Kheosipalard	Thailand
Tauvaga Etimani	Samoa
Thailand_Anyada Penpon	Thailand
Thin Socheat	Cambodia
THY Chea	Cambodia
Tilomai	Samoa
Tomar	Thailand
Tomohiro NIIMI	Thailand
Toya Areta	Samoa
vanida khumnirdepetch	Thailand
Vannarath Voun	Cambodia
Virisine	Fiji
Virisine Lalasava	Fiji
Vunthy Hong	Cambodia
WAN NORMA AZIRA WAN DERAMAN	Malaysia
Yan Phanna	Cambodia
Yee Chen	Malaysia
Yuki SUMI	Japan
'นายอานนท์ บุญญวัฒน์นะ (สพร.)	Thailand
'อ๊ิYupadee Methamontri	Thailand

Participants of Group 4 (13-14-15-16 July 2021)

Bangladesh

Names
AKM TahidulIslam
AlamgirHossen
Alauddin Al Azad
Ayeasha AktherMily
Md. Alamgir Hossen
Md. Habibur Rahman
Md. Mahabub Alam
Md. Nazmul Hoque, DD
Md. Shahudul Islam
Md. Sohel Rana (MD. SOHEL RANA)
Md AbdulHalim
Md Akhter Hassan Khan# DD
Md EmdadulHaque
Mohammad Amirul Islam
Mohammad Eunoush
Mohammad JunayedBhuyan
Mohammad SaddamHossain khan
MohiuddinAhmed
Naima Akther
Nayma Rahman
ShalehaKhatun
SM Kamrul Islam# JD
Wahidul Islam SO# BBS



Participants of Group 5 (20-21-22-23 September 2021)

Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Grenada, Guyana, Mexico, Panama, Paraguay, Peru, Suriname and Venezuela

User Name (Original Name)	Country/Region Name
Acquise	Guyana
Adriana	Bolivia
Alethea	United States
AlexanderGaliano Uscapi	Peru
AlexSingh	Guyana
Alfonso	United States
Amada Mantilla	Spain
AMANDA LUCIA SOTO AGUDELO	Colombia
Ana Carolina Bañuelos	Spain
Ana Jiménez	Mexico
Ana Rodriguez Perez	Dominican Republic
Andrea Torres	Spain
Anesha Stephen	Guyana
Angélica Romo	Ecuador
Anjali	United States
Anyela Másmela	Colombia
Araceli Urriola Manrique	Peru
Belén Sinchi	Ecuador
BETTY GALARZA	Ecuador
Britnee Alisa Prescod	United States
Carlos Alejandro Arias Gallegos	Mexico
Cecilia Tenecela	Ecuador
Celia Edwards	Grenada

CeliaBedoya Jimenez	Peru
Cesar Palomino	Peru
Cesar Santisteban	Peru
Christopher Hulse	Belize
Claudio fernando clavijo banda	Ecuador
DAG RITA VALLEJOS	Panama
Daryl Thomas	Grenada
David Castro	Peru
David Fredericks	Guyana
David Salazar - INEC Ecuador (David Salazar)	Ecuador
Diana Bruce	Guyana
Diana Nova	Colombia
DianaRamirez Gamboa	Peru
Donnette Ritchie	Guyana
Edgar Duran (México# INEGI)	Mexico
Edgar Espinal	United States
Edgar Rodrigo Mantilla Villarroel	Bolivia
Edwin Chumacero Jimenez	United States
Elar Sifuentes	Peru
EliecerCastillo	Panama
Elsa	Ecuador
Fabiola	Ecuador
farides vargas	Panama
Fenton Nickram	United States
FERNANDO ALAN MARTINEZ HERNANDEZ	Mexico
Fernando Gutierrez PAN (FernandoGutierrez)	Panama
Fredy Navia	Bolivia

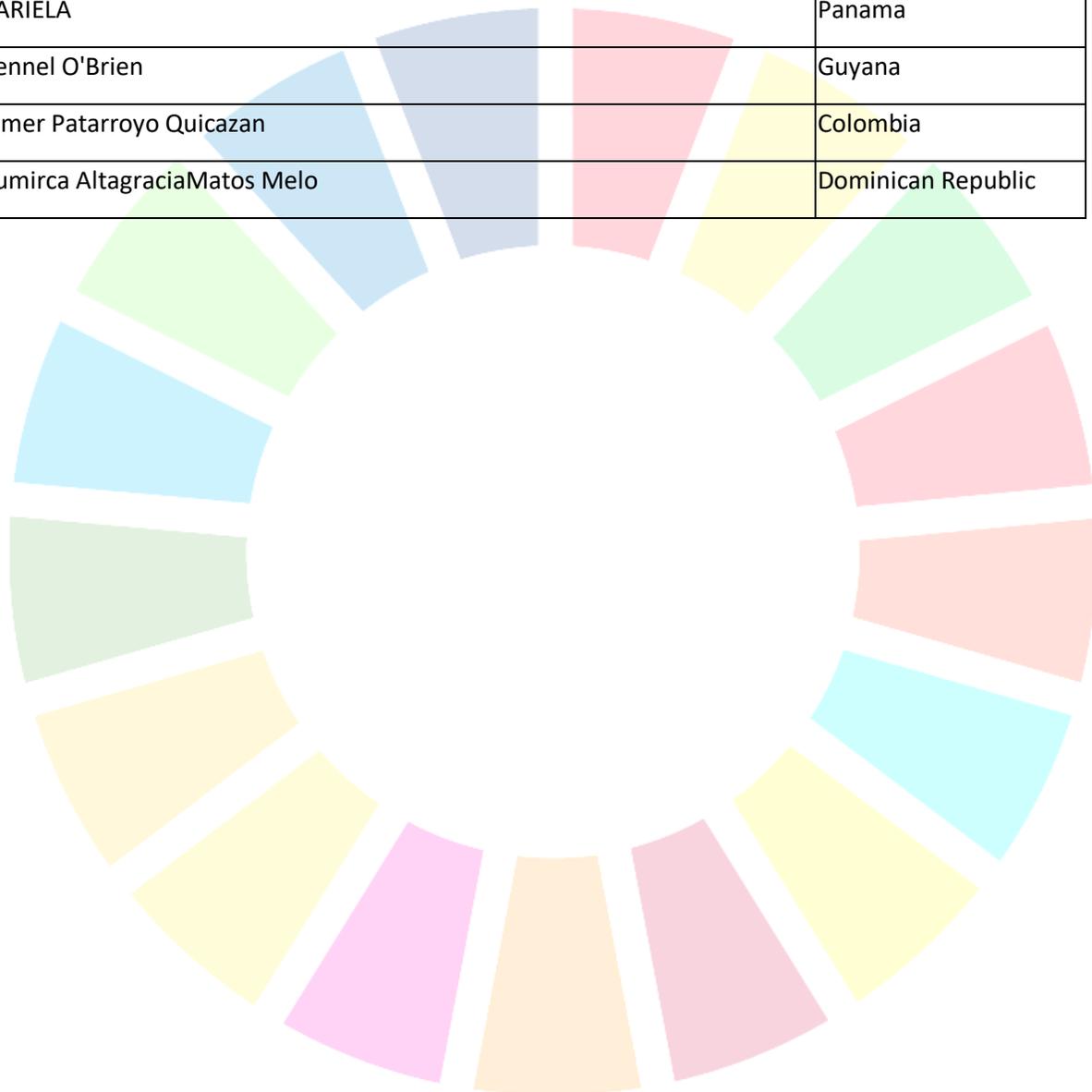
GaydyaRamnauth	United States
GeovannyNaranjo	Ecuador
Glenn Gabriel	Suriname
Gustavo Adolfo Martinez Morón	United States
Irene AngélicaLa Rosa Reyes	Peru
Iván Rojas	Mexico
Iveth Cruz	Dominican Republic
JAIME MACARIO FERNANDEZ MEJIA	Spain
JAIME SALVADORBAUTISTA VALLE	Mexico
Jermayne	Guyana
Jesus	Bolivia
JESUS CACERES GARCIA	Bolivia
JoelP	United States
JOHANNA	Spain
JOHANNA REYES	Spain
Johnelle Mc Donald	United States
Jomesha Stewart	United States
Jose	Venezuela
José Cáceres	Ecuador
José Federico González	Mexico
José Luis Hernandez	Mexico
JUAN JOSÉ CHOQUE	Bolivia
JuanMiranda	Mexico
JULIO	Ecuador
junior alexis	Grenada
Katiuska Rojas Flores	Peru
Keisha Kewley	Guyana

KELLY MEDINA	Spain
Kelvin Chinapa	Guyana
Kenita Paul	United States
Kevin Lutchman-- Fisheries Department GY--	Guyana
Kimanda	Guyana
Lajendra Rambaran	Guyana
Latecia Stuart	Guyana
LAURA MONTESINOS AGUILAR	Mexico
Laura Reinoso	Paraguay
Lauren	Grenada
Leelawattie Persaud	Guyana
LEIDY ZABALA	United States
Leon	Grenada
Levinah	Guyana
Lia Lorena de Grazia Salamea	Ecuador
Liliana Alvarez	Spain
LORENA	Ecuador
Marcelo	Ecuador
Marcelo Felipe	Bolivia
Margarita MariaLopera Mesa	Colombia
Maria TeresaTarquino Patty	Bolivia
Maridalia Rodriguez	Dominican Republic
Marina	Ecuador
MarioValdez	Bolivia
MarissaDalton	Guyana
Maritza	Ecuador
Marlon Game	Ecuador

Mauricio Chacon Navarro	Spain
MauricioRodriguez	Bolivia
Maxwell Mercon Tezolin Barros Almeida	Brazil
Mercedes JuliaCalliconde	Bolivia
Miguel ESTRADA	Bolivia
MILTON BUESTAN	Ecuador
Nancy AlejandraTeran Orsini	Bolivia
NANCY SONIA	Bolivia
NATALIA REYES ALARDIN	Mexico
Neftali	Spain
Nicholas Blair	Guyana
NicolasOrdonez	Ecuador
NirvanMatadin	Guyana
Noemi Esteba	Peru
norlan hardy	United States
OctávioCosta de Oliveira	Brazil
Olanna Bacchus	Guyana
Omario Gooding	Guyana
Orlando Morales	Ecuador
Patricia Cárdenas	Ecuador
PEDRO RAÚL TINOCO RODRÍGUEZ	Peru
Rainaldo Jesus Trujillo Hidalgo	Peru
RavindraPersaud	Guyana
Rena Noel	Grenada
Ricardo	Bolivia
RicardoRocabado	Bolivia
ROBERTO QUIJANO LUZARDO_ INEI PERU (ROBERTOQUIJANO LUZARDO)	Peru

Roly Ruiz Ribera	Bolivia
RosemaryVillanueva	Bolivia
Rosetta Hinds	United States
Rsxguazhco	Spain
Ruth Rivas	Spain
ryad adams	United States
Sandra Chicaiza Largo	Ecuador
Santiago Quituisaca	Ecuador
Selwin Crawford	Guyana
Sergio	Bolivia
Sheila Aldjah	United States
Shellon David	Guyana
Silvia Fernandez	Spain
Sissy Pacheco	Ecuador
SOTO AGUDELO	Colombia
STEPHANIE BELLOT	Bolivia
SURISADDAI.HERNANDEZ	Mexico
Sydicia Sutherland	Guyana
Theodore Quant	Dominican Republic
Tishana Arthur-Persaud	Guyana
Troy Paddy	Guyana
Tulio Medina	United States
valeria revilla	Bolivia
Veronica Cañedo	Peru
Veronica Vazquez	Mexico
vilmaCuevas	Panama
VIRGILIOSALAZAR	Panama

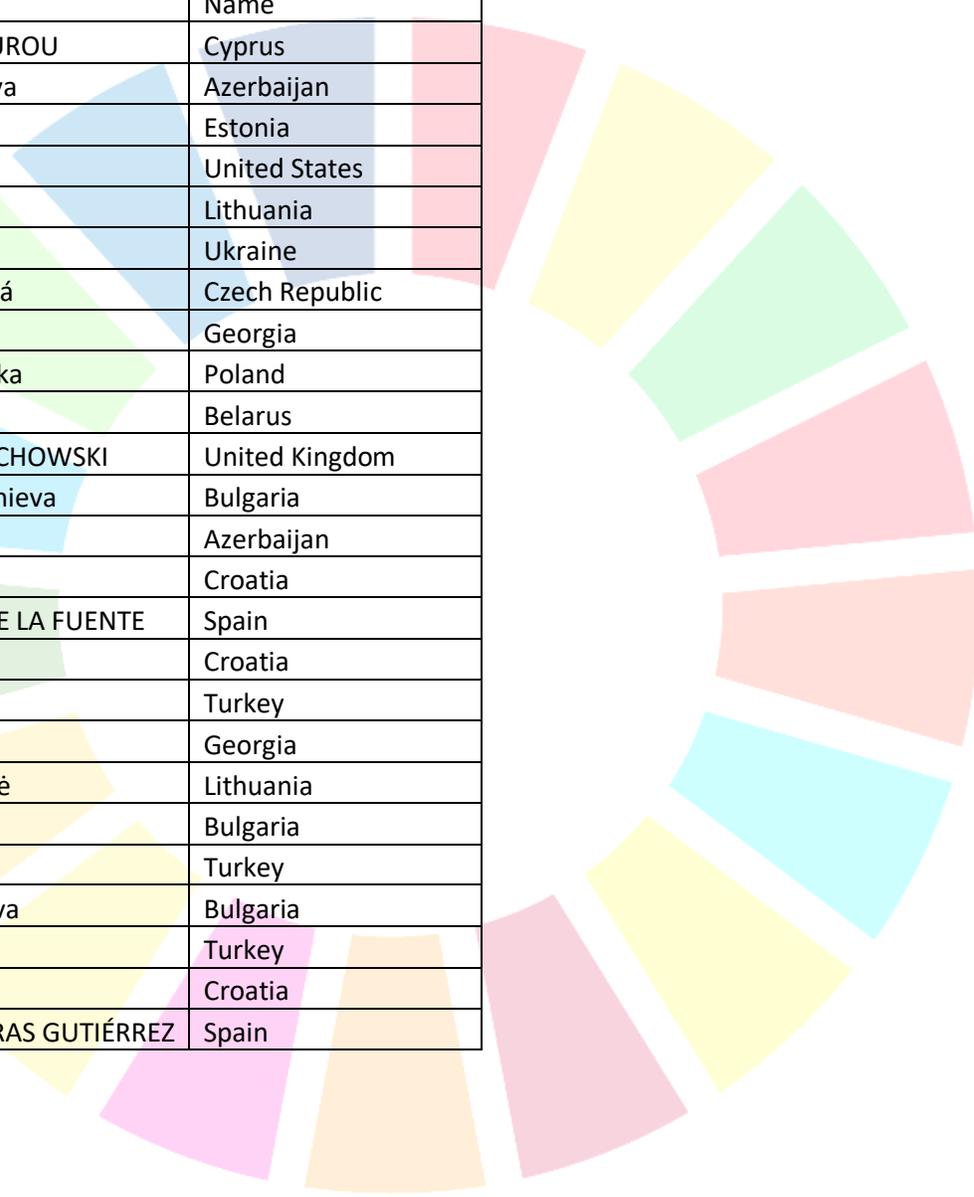
VishernauthDhanpat	Guyana
WALTER PORTILLO	United States
Warren	Guyana
Wilmer Pérez	Peru
YARIELA	Panama
Yennel O'Brien	Guyana
Yimer Patarroyo Quicazan	Colombia
Yumirca AltagraciaMatos Melo	Dominican Republic



Participants of Group 6 (2-3-4-5 November 2021)

Azerbaijan, Belarus, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Georgia, Lithuania, Poland, Spain, Turkey, Ukraine, United Kingdom

User Name (Original Name)	Country/Region Name
IOANNA KOULLOUROU	Cyprus
Aytan Beydullayeva	Azerbaijan
Katre Kirt	Estonia
Giorgi Sanadze	United States
Nerijus Bitinas	Lithuania
Oleh Prokopenko	Ukraine
Sára Černohouzová	Czech Republic
Erekle Khurodze	Georgia
Aleksandra Kubecka	Poland
Alla Zharikova	Belarus
MARIUSZ WOJCIECHOWSKI	United Kingdom
Teodora Semerdzhieva	Bulgaria
Велиев Вугар	Azerbaijan
Anita Srdarev	Croatia
OLIVIA MERINO DE LA FUENTE	Spain
Natasa Miljan	Croatia
Ebru Unal	Turkey
Goga Talakhadze	Georgia
Aušra Jablonskienė	Lithuania
Tralinska	Bulgaria
Arap Diri	Turkey
Angelina Malamova	Bulgaria
Hakan Yazicioglu	Turkey
Ana Pavetic	Croatia
ALEJANDRO LASTRAS GUTIÉRREZ	Spain



Annex 3: Evaluation of the Virtual Trainings

The attendees of the virtual trainings were requested to evaluate the course (though 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 for each group in turn. It is evident that the SDG 2.4.1 virtual trainings were a great success, as by and large the participants scored the trainings high in terms of content, relevance, usefulness and organization.

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

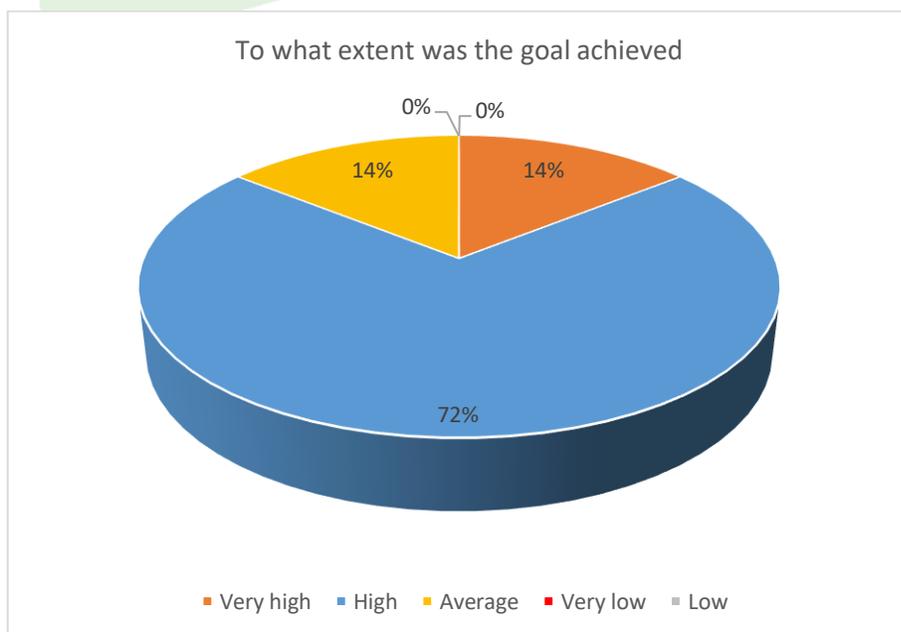
VIRTUAL TRAINING – ESCWA COUNTRIES (27 April 2021)

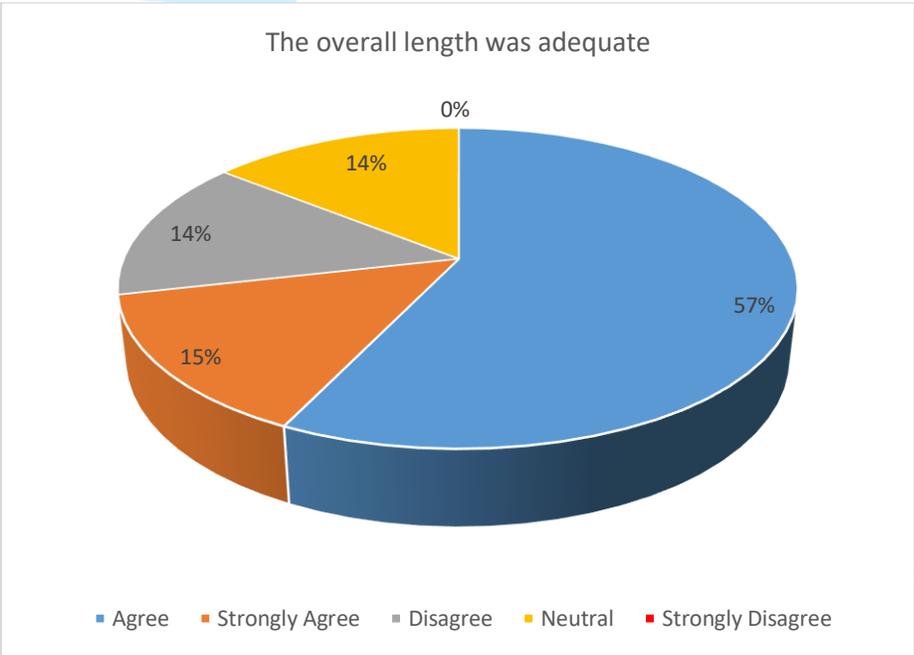
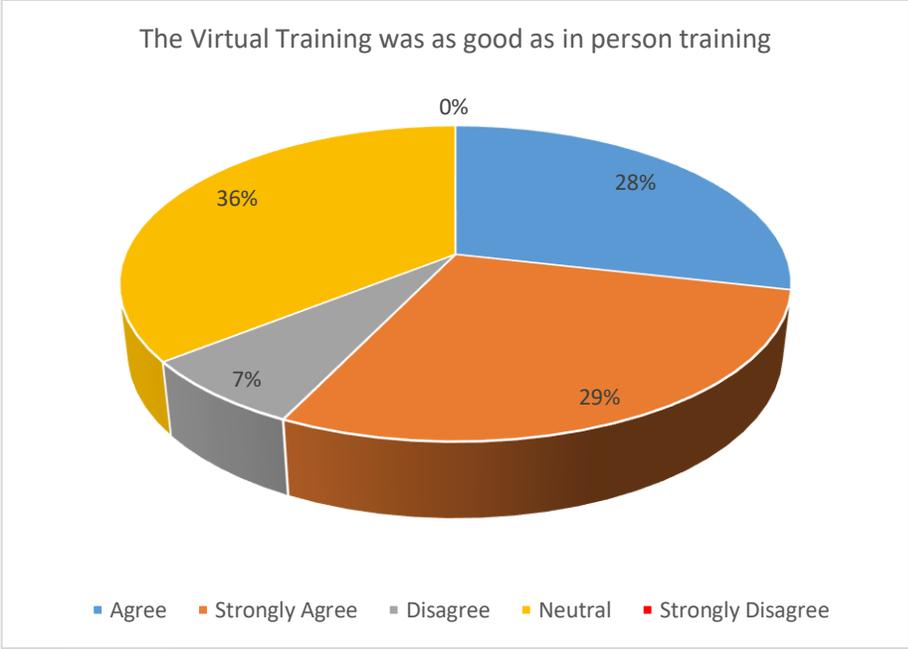
The first virtual training organized for the Arab region was administered and organized by the Economic and Social Commission for Western Asia (jointly with FAO) and included a series of SDG indicators. Being, therefore, the training not organized by the SDG 2.4.1 team, an evaluation of this training is not available.

VIRTUAL TRAINING – RAF COUNTRIES (1-2-3 June 2021)

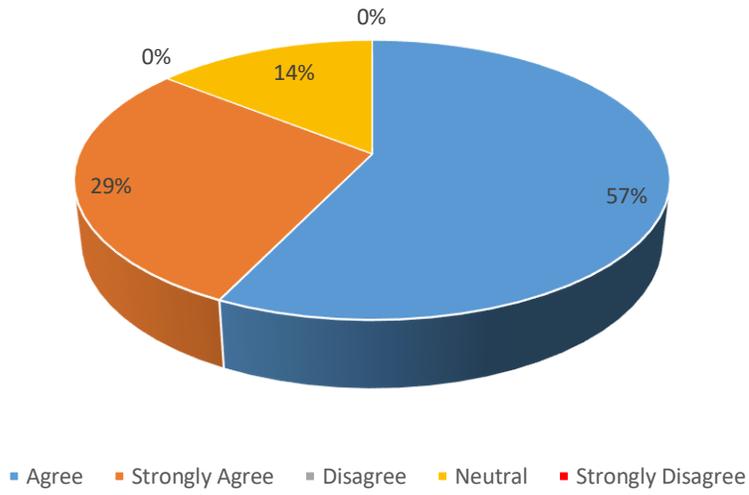
18 countries – 111 participants: Botswana, Burundi, Cabo Verde, Côte d'Ivoire, DRC, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Kenya, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Rwanda, Sao Tome and Principe and Zambia.

Very good performance of the training was perceived by the second group of countries (111 participants), as they respond to almost all questions as agree and/or strongly agree. Critical points were emphasized by the 14% stating that the overall length of the training was short and could be improved by spanning it over more days. Excellent feedback was received about the quality and knowledge of resource persons, the skills of facilitators, the intention to apply/disseminate the knowledge acquired to the job/actors and the questions raised by the participants that were fully answered. Details responses to each question are illustrated in charts given below.

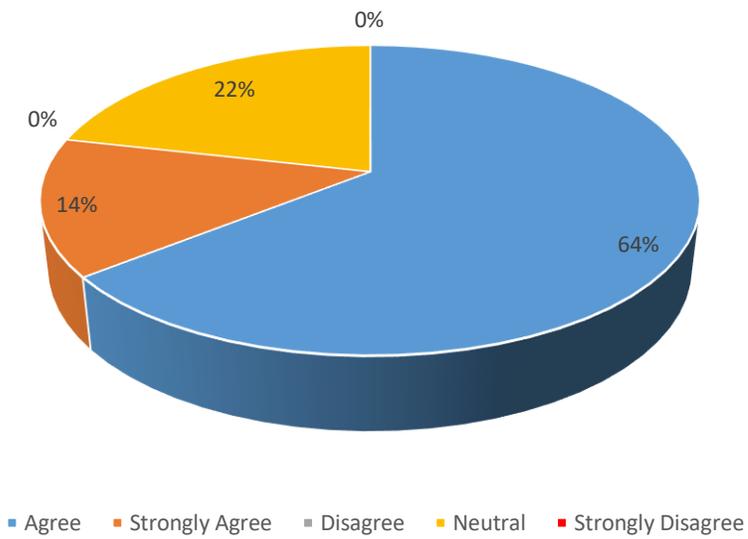




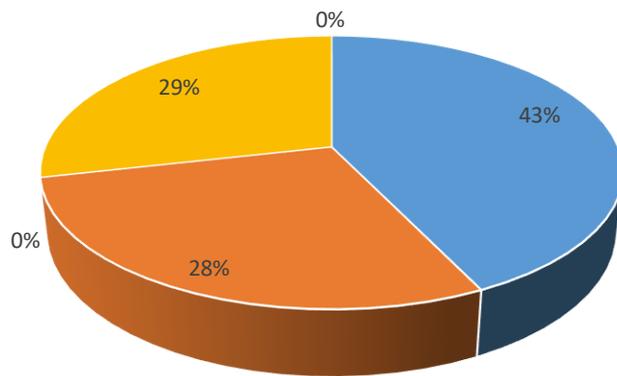
The sessions were well organized and easy to follow



The exercises were relevant and useful

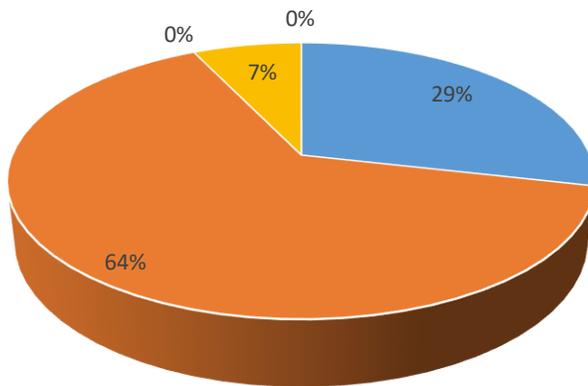


The questions raised by participants were answered appropriately



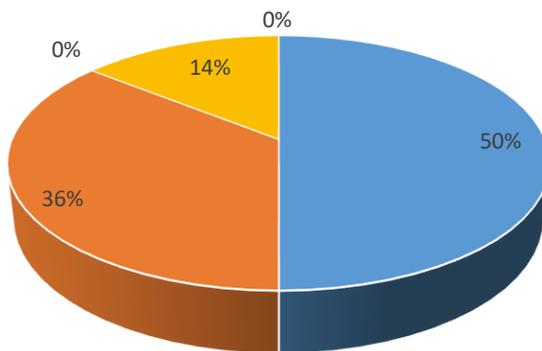
■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

I intend to apply the knowledge acquired to my job



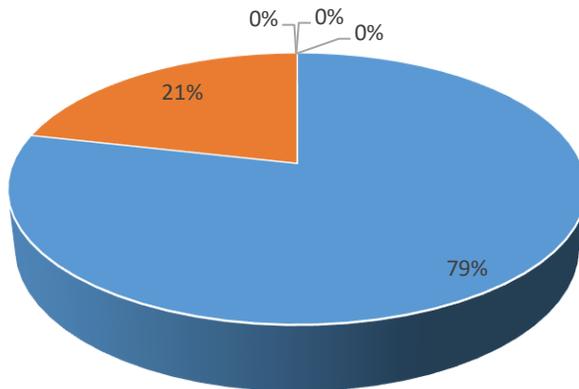
■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

I intend to disseminate the knowledge acquired to the relevant actors



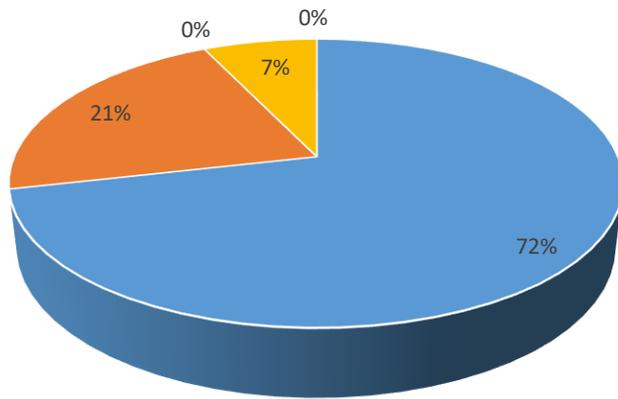
■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

The quality of the facilitation by the team was good

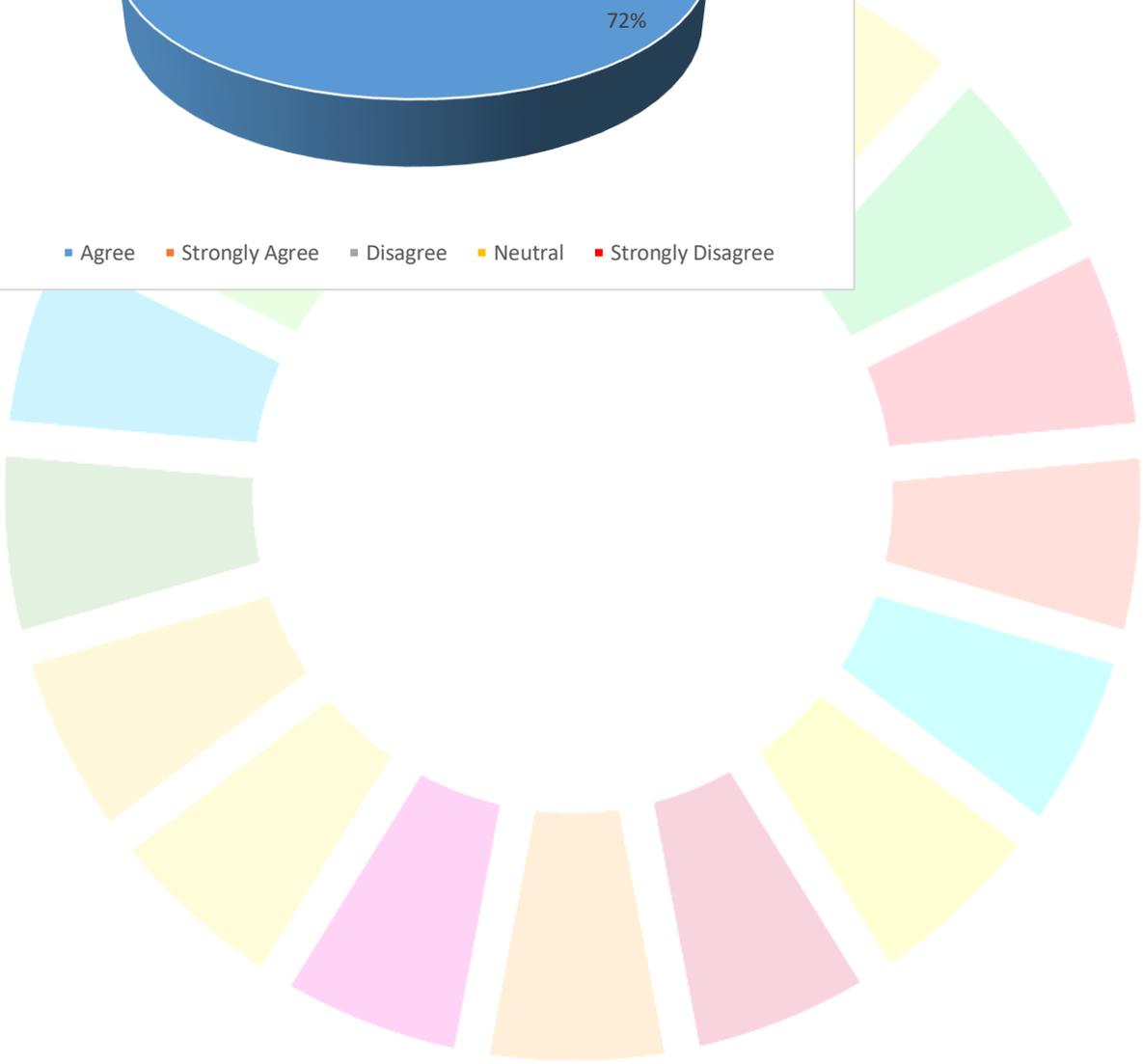


■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

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



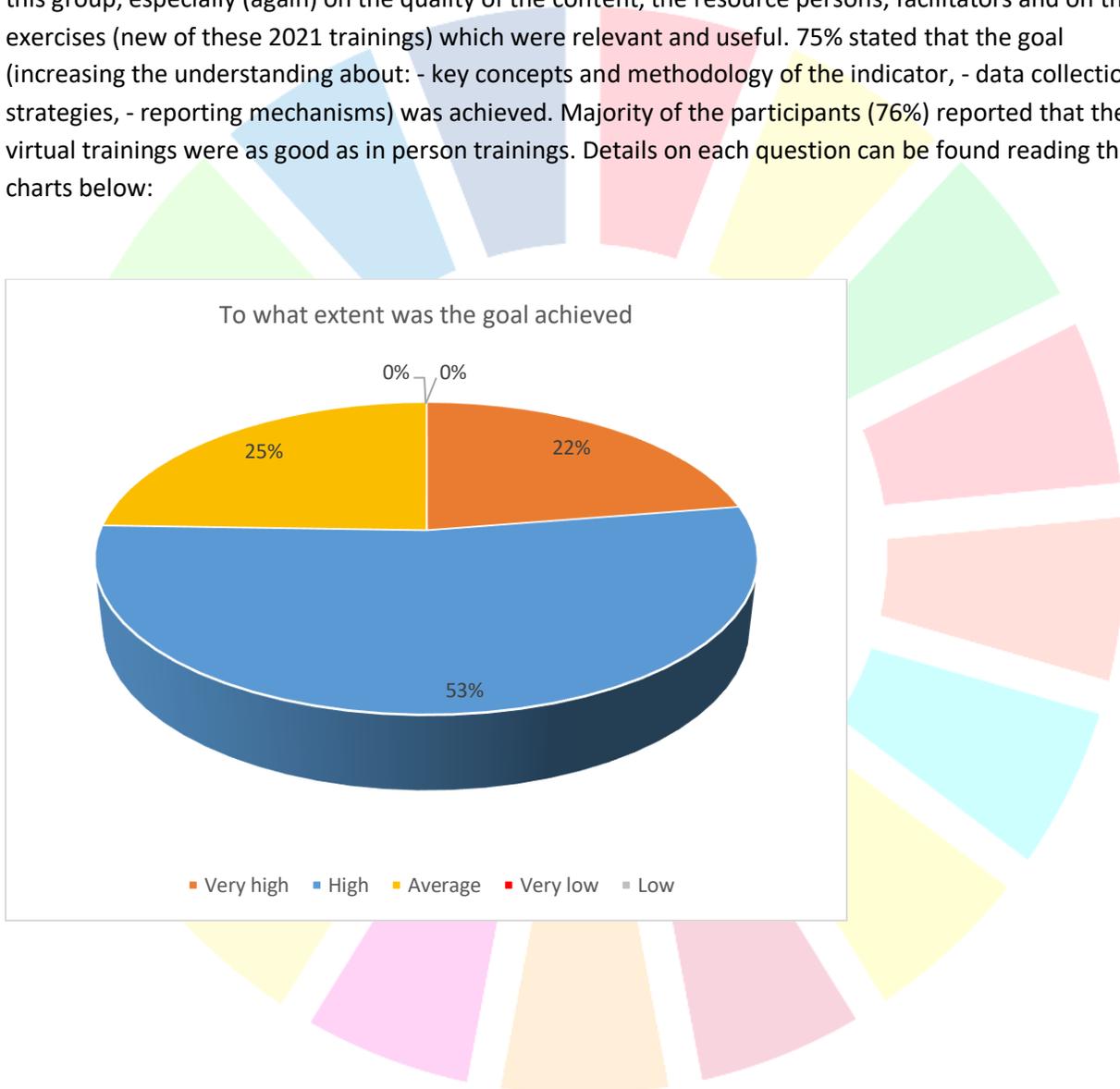
■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

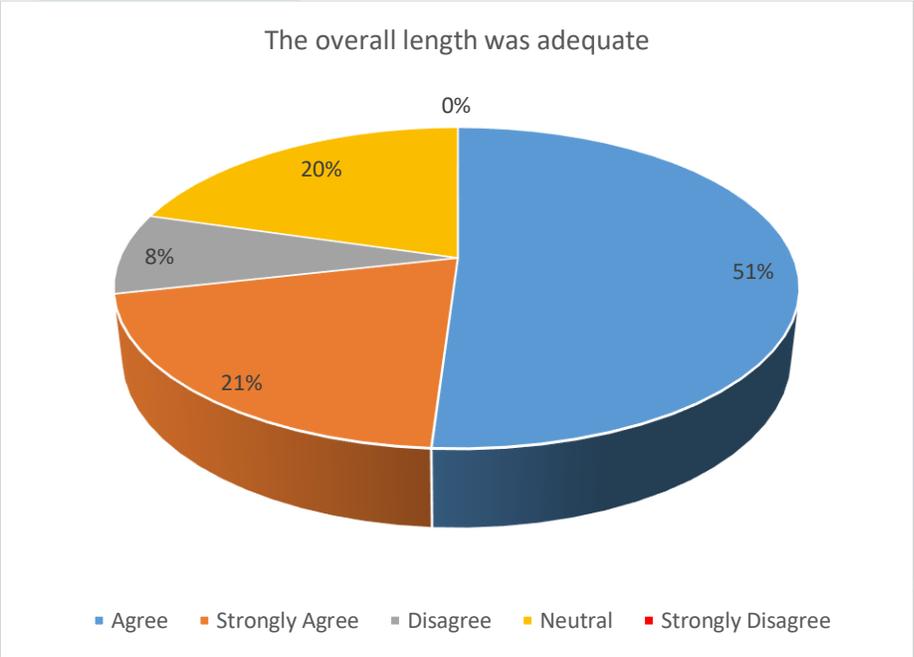
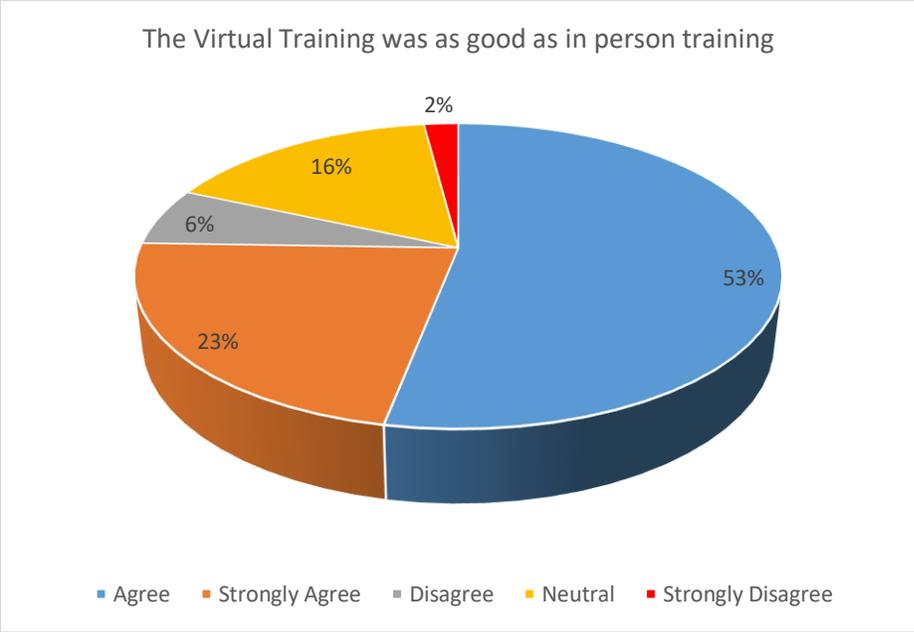


VIRTUAL TRAINING RAP COUNTRIES (28-29-30 June - 1 July 2021):

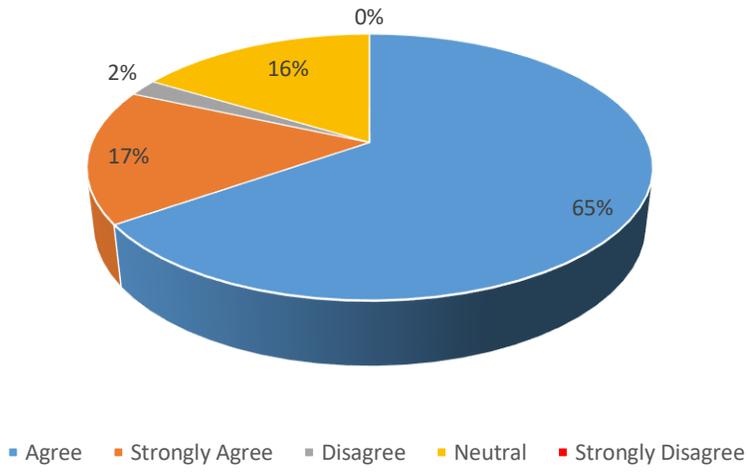
18 Countries – 127 participants: Bhutan, Brunei Darussalam, Cambodia, Cook Islands, Fiji, Indonesia, Iran (Islamic Republic of), Japan, Lao People's Democratic Republic, Malaysia, Mongolia, New Zealand, Palau, Philippines, Republic of Korea, Samoa, Thailand and Timor-Leste

The third group comprised of 18 countries with 127 participants. Higher appreciation was evident from this group, especially (again) on the quality of the content, the resource persons, facilitators and on the exercises (new of these 2021 trainings) which were relevant and useful. 75% stated that the goal (increasing the understanding about: - key concepts and methodology of the indicator, - data collection strategies, - reporting mechanisms) was achieved. Majority of the participants (76%) reported that the virtual trainings were as good as in person trainings. Details on each question can be found reading the charts below:

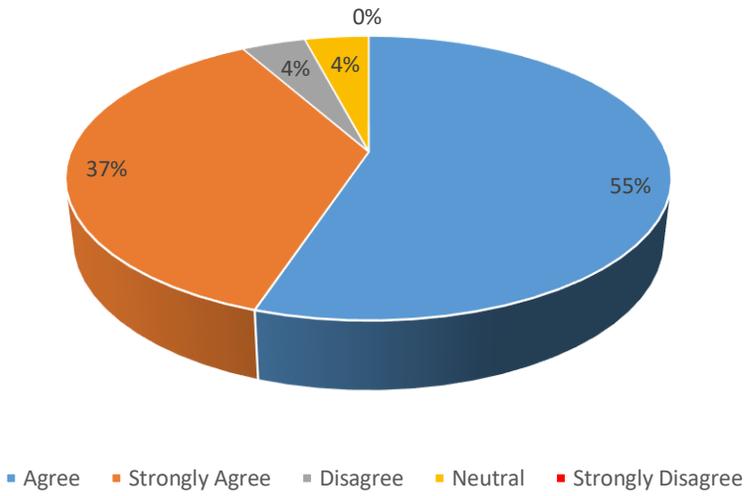




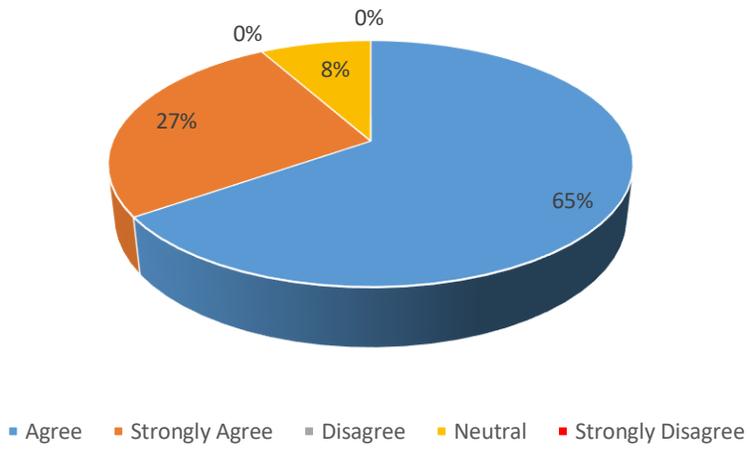
The sessions were well organized and easy to follow



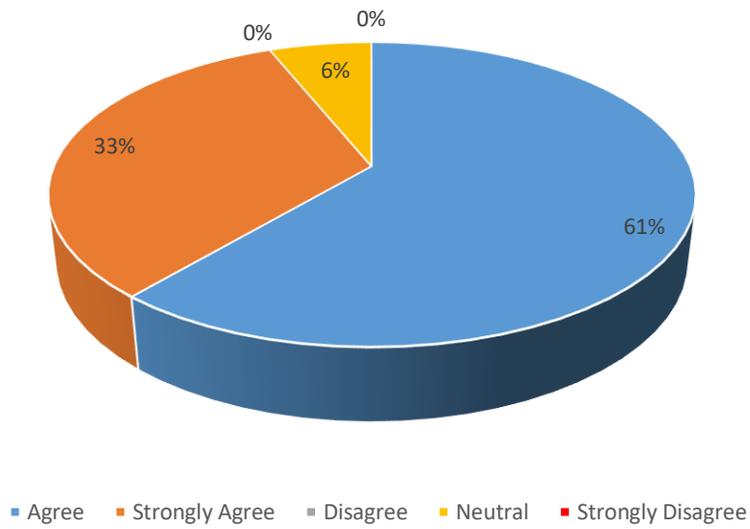
The exercises were relevant and useful



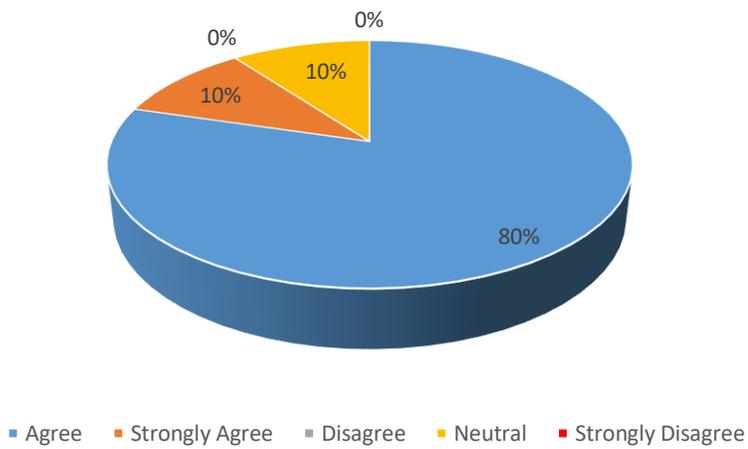
The questions raised by participants were answered appropriately



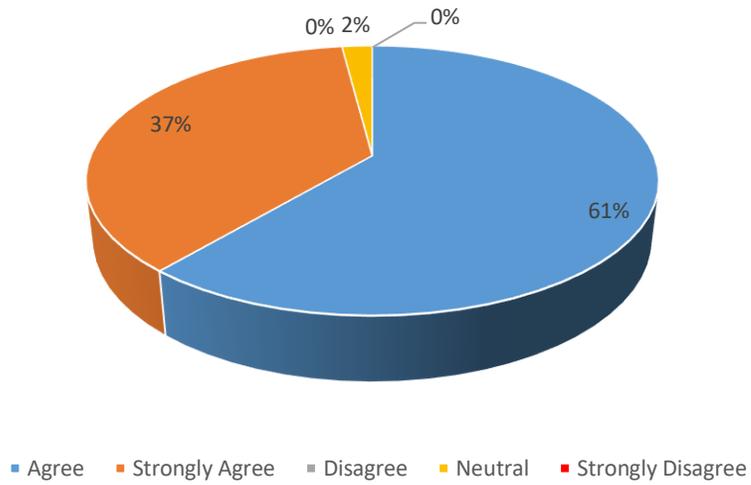
I intend to apply the knowledge acquired to my job



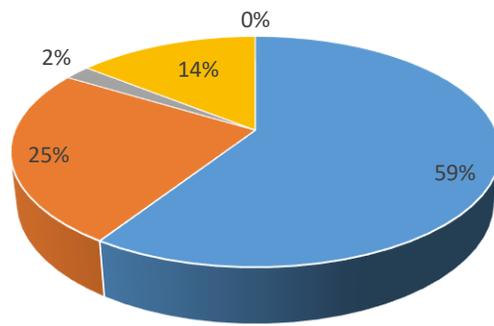
I intend to disseminate the knowledge acquired to the relevant actors



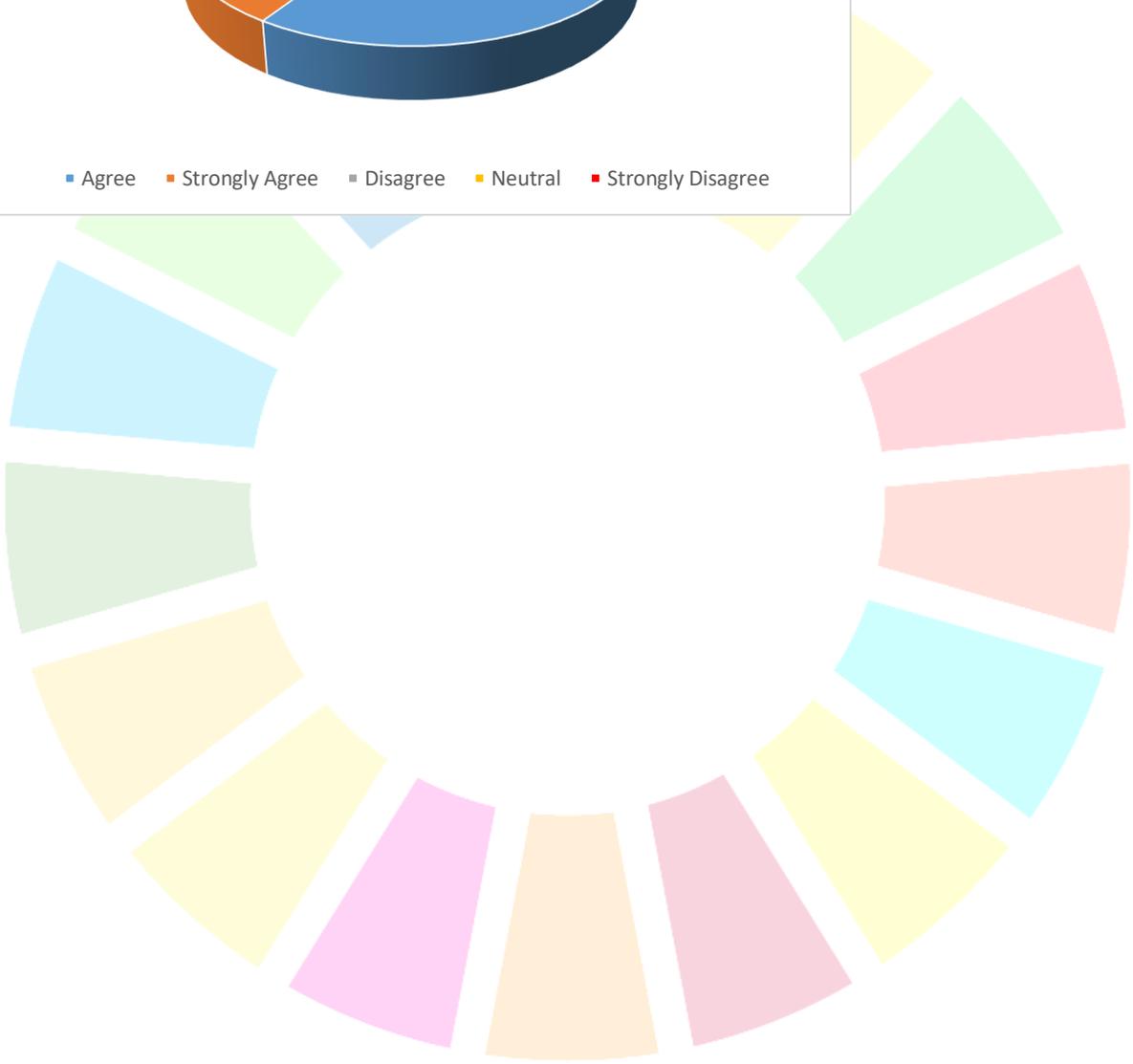
The quality of the facilitation by the team was good



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



■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

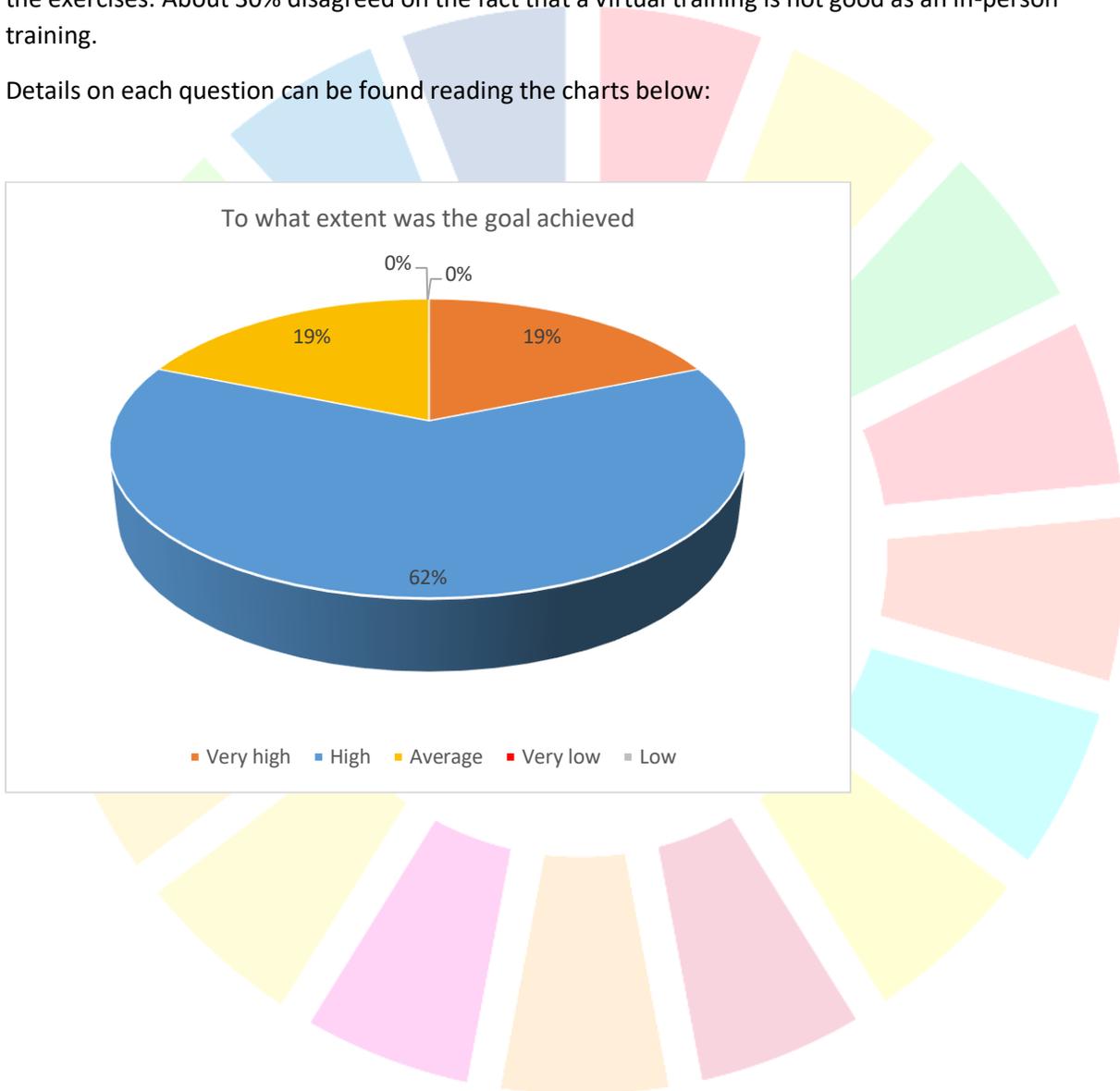


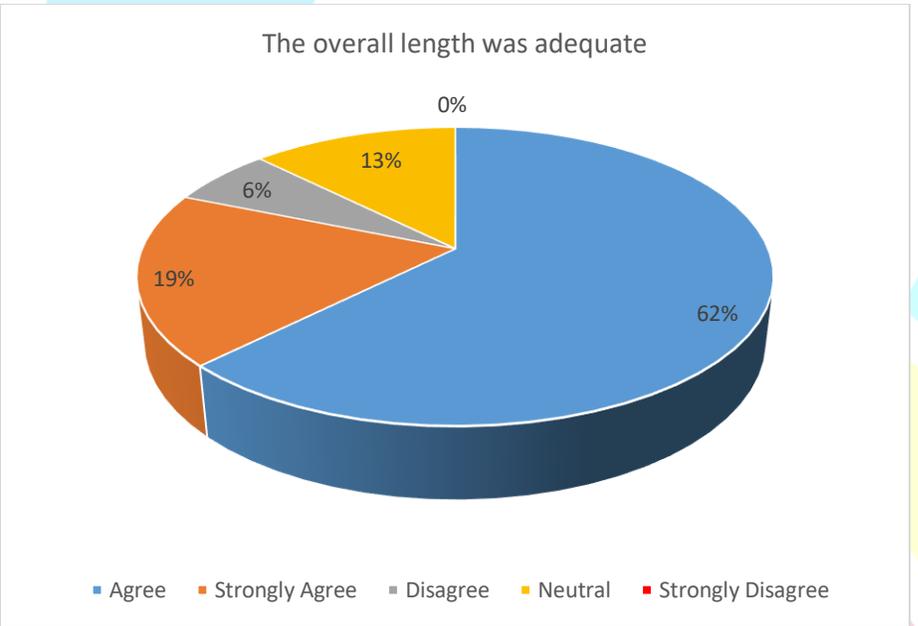
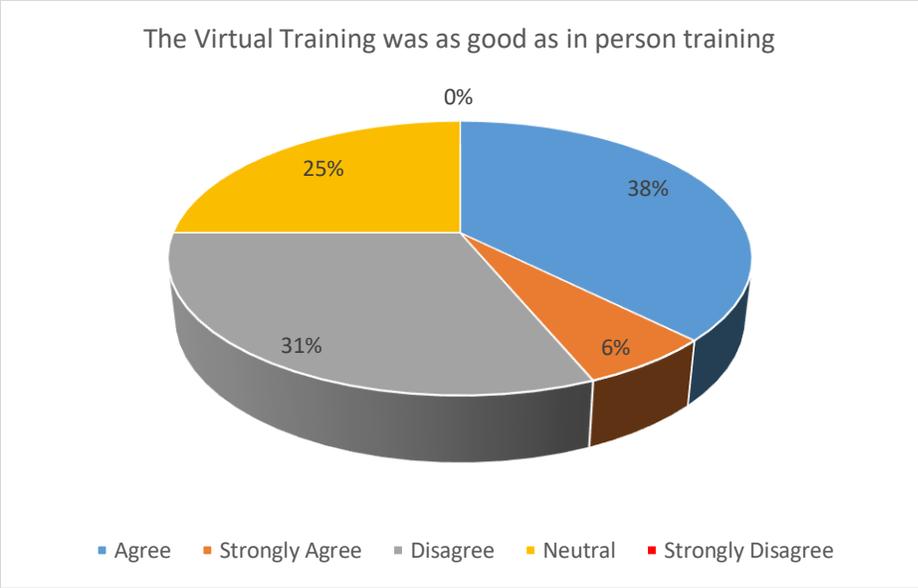
VIRTUAL TRAINING BBS (13-14-15-16 July 2021)

1 COUNTRY – 21 PARTICIPANTS: Bangladesh

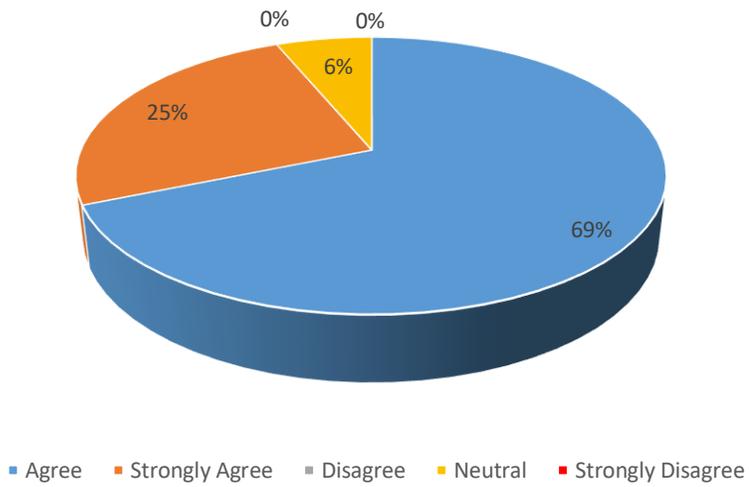
The results below got from the training to Bangladesh Bureau of Statistics confirmed that the training was well received by all participants (21 in total). About 90% of the participant said that: the content of the course and resource persons and facilitators were of high quality. 100% agreed on the relevance of the exercises. About 30% disagreed on the fact that a virtual training is not good as an in-person training.

Details on each question can be found reading the charts below:

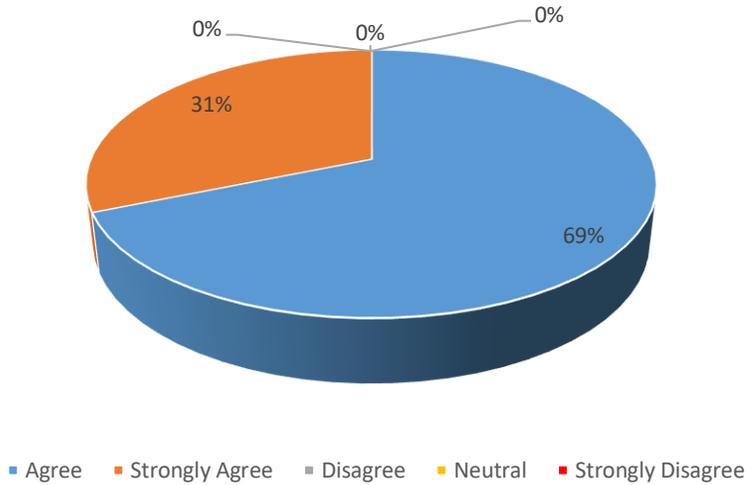




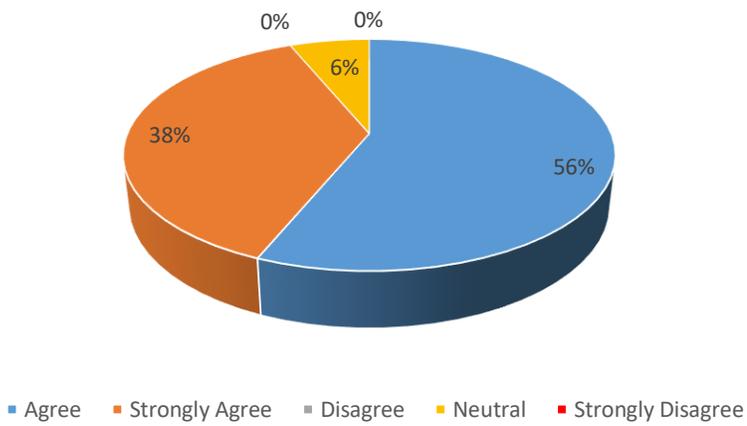
The sessions were well organized and easy to follow



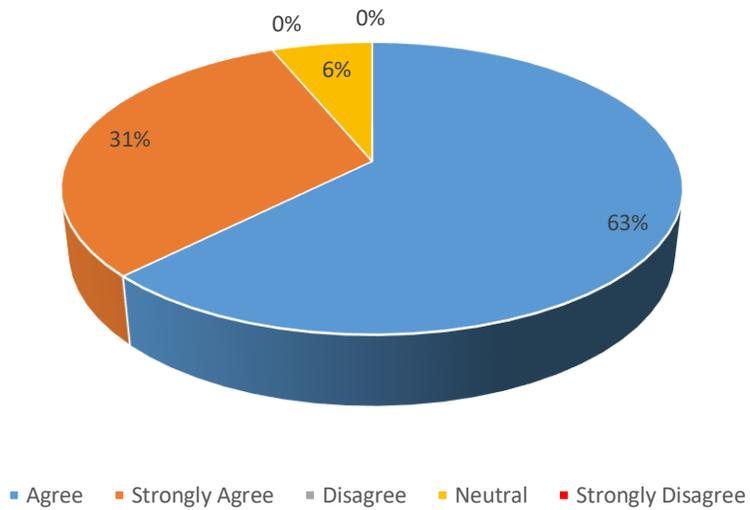
The exercises were relevant and useful

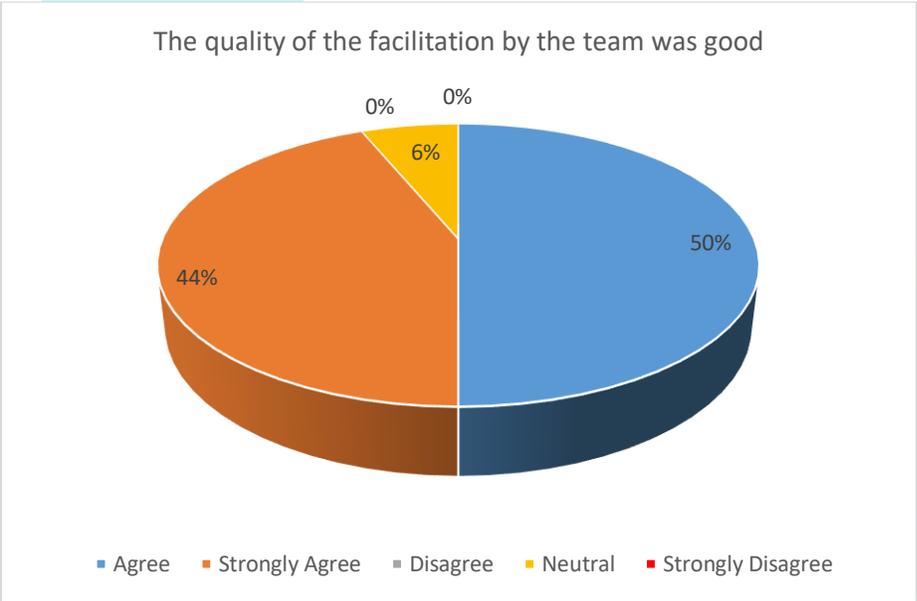
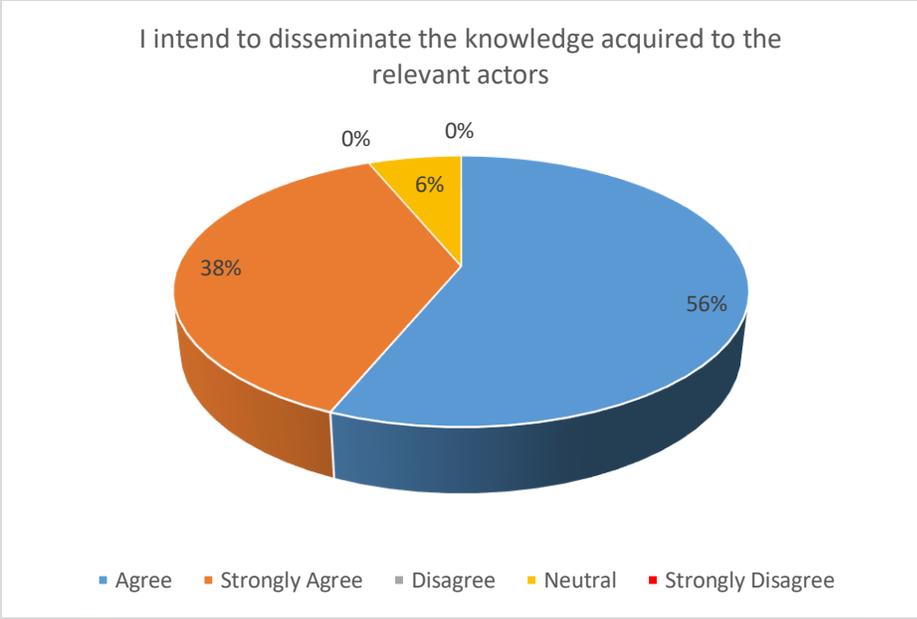


The questions raised by participants were answered appropriately

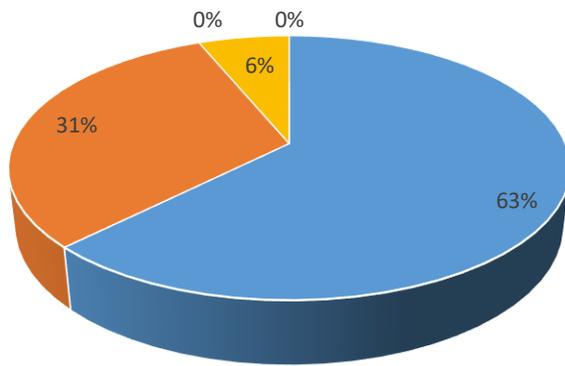


I intend to apply the knowledge acquired to my job

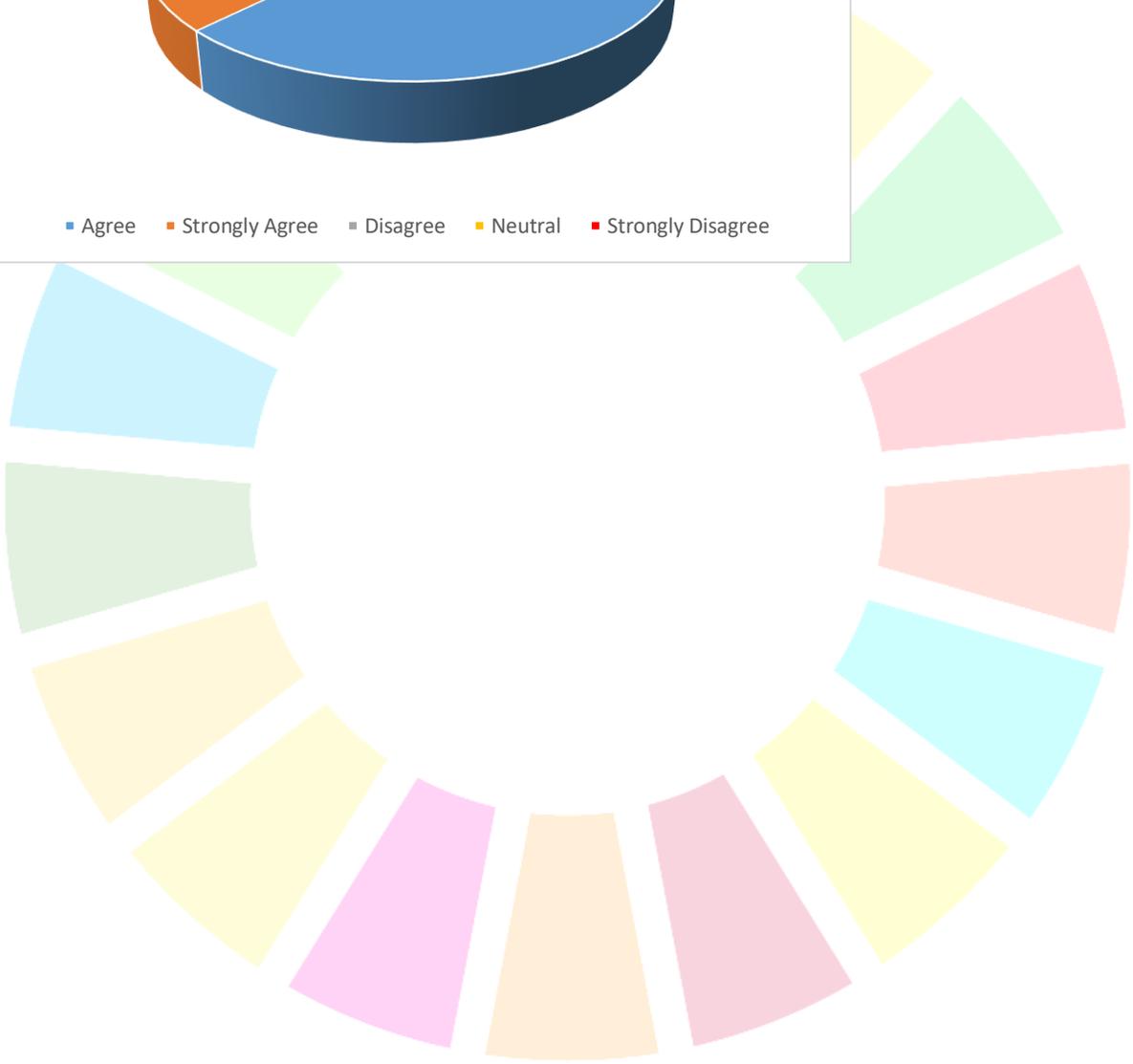




The administration of the workshop (facilities, logistics, support, etc.) was adequate



■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

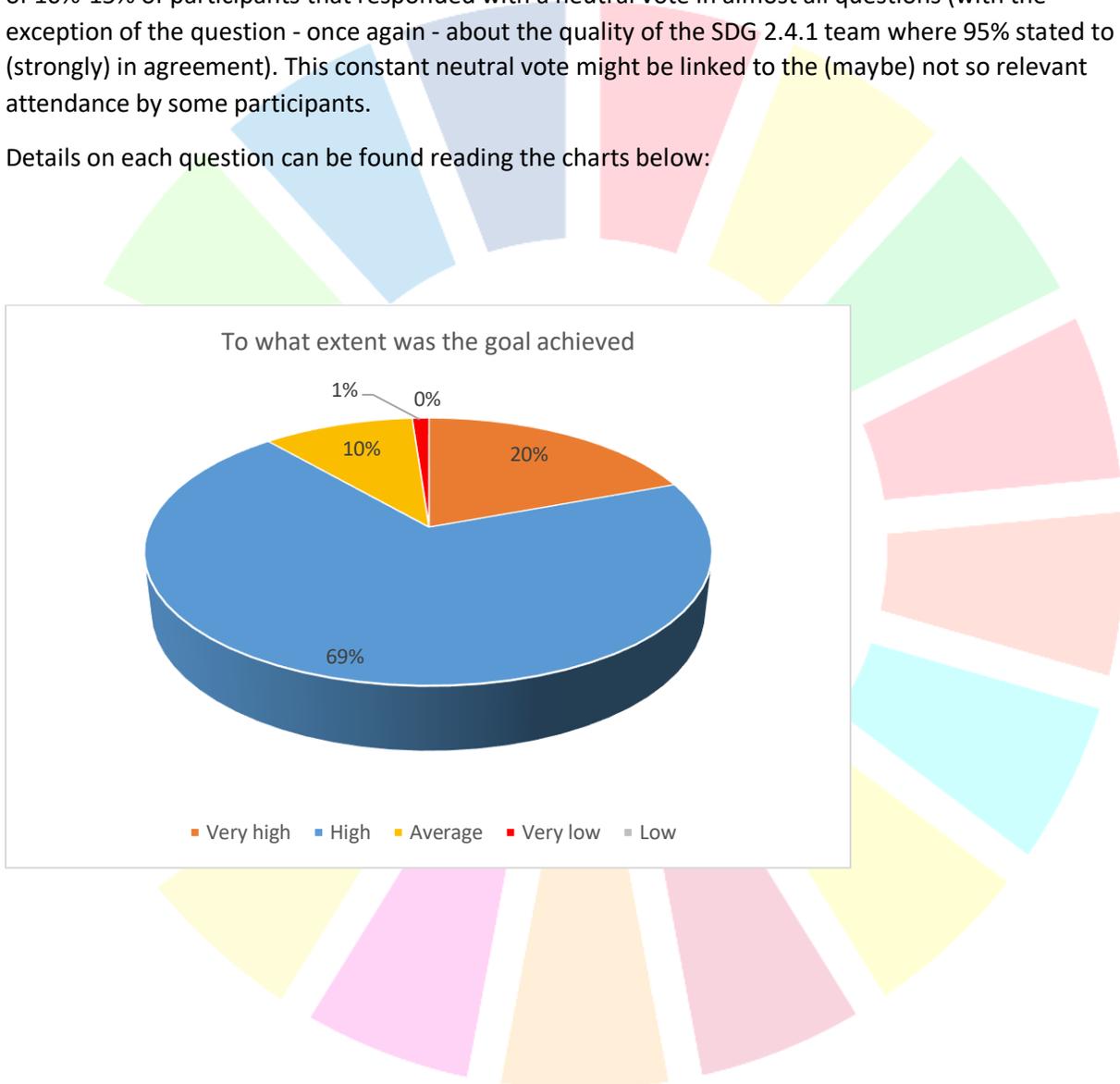


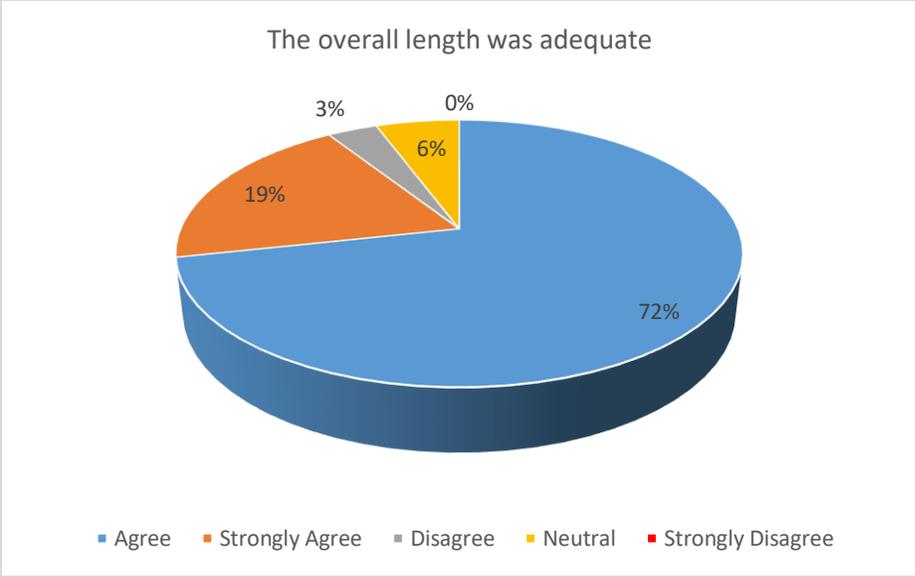
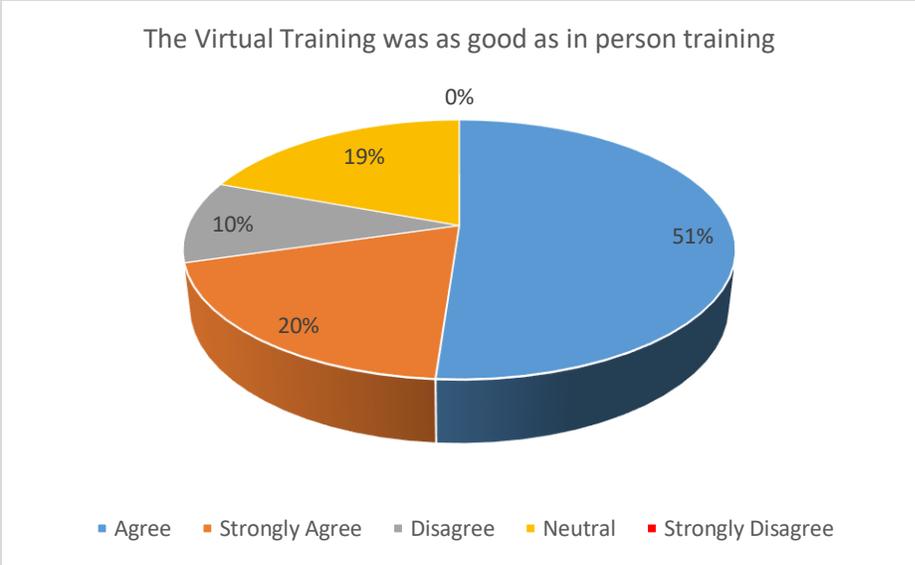
VIRTUAL TRAINING RLC (20-21-22-23 September 2021)

15 COUNTRIES – 166 PARTICIPANTS: Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Grenada, Guyana, Mexico, Panama, Paraguay, Peru, Suriname and Venezuela

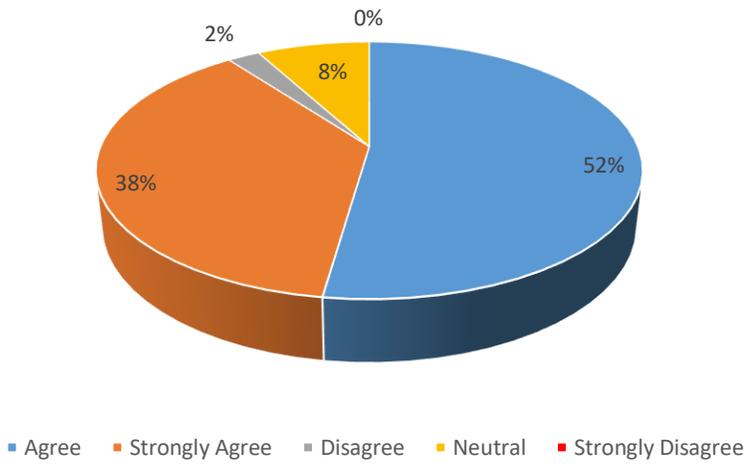
This virtual training was attended by 166 participants covering 15 countries, meaning a much extended attendance for all countries. This group has a regular percentage (that didn't appear in the other groups) of 10%-15% of participants that responded with a neutral vote in almost all questions (with the exception of the question - once again - about the quality of the SDG 2.4.1 team where 95% stated to be (strongly) in agreement). This constant neutral vote might be linked to the (maybe) not so relevant attendance by some participants.

Details on each question can be found reading the charts below:

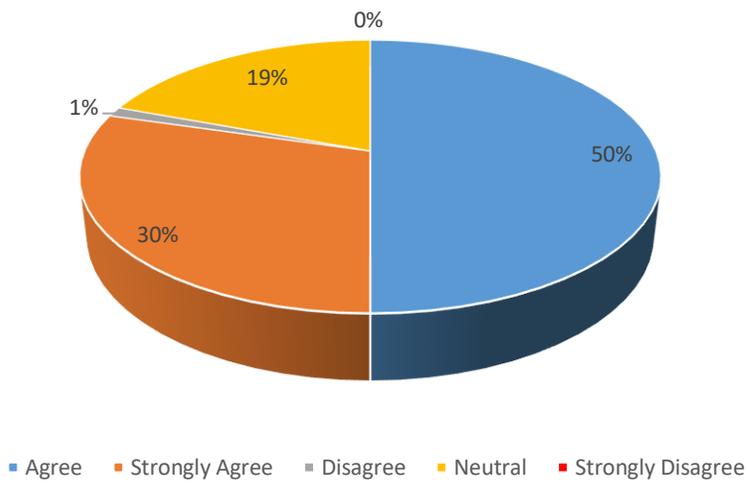




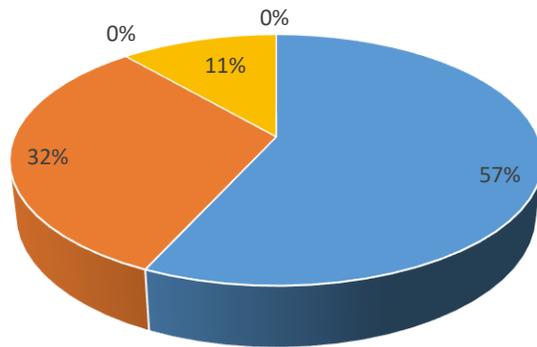
The sessions were well organized and easy to follow



The exercises were relevant and useful

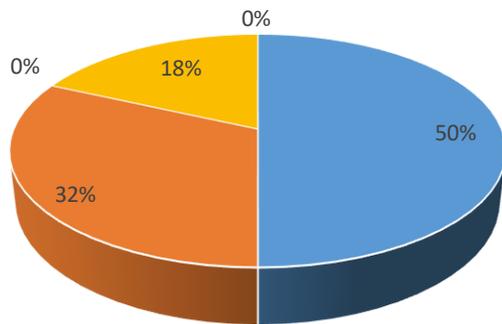


The questions raised by participants were answered appropriately



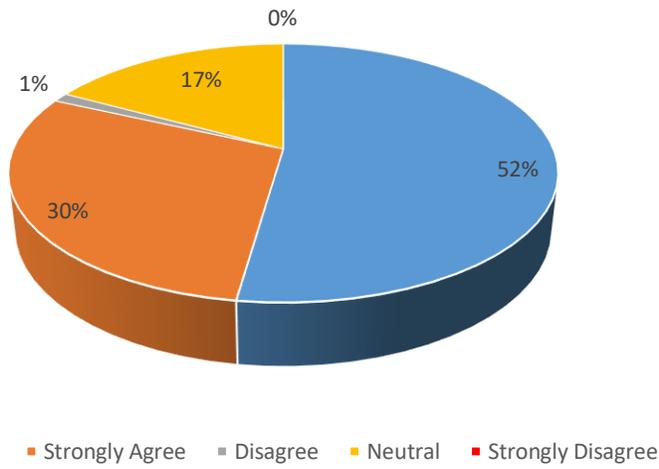
■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

I intend to disseminate the knowledge acquired to the relevant actors

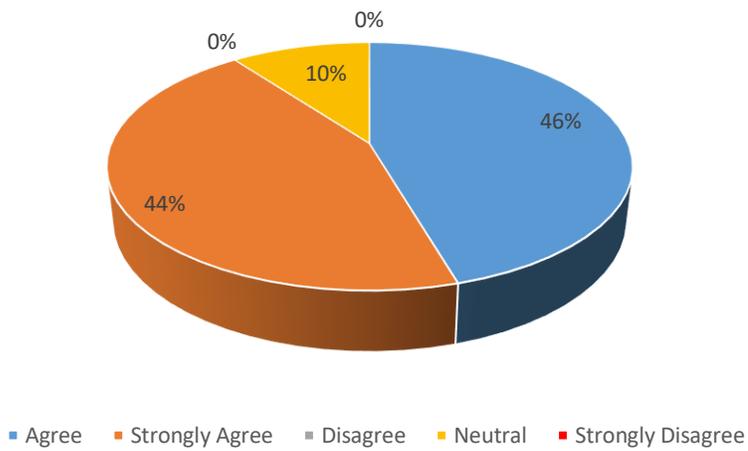


■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

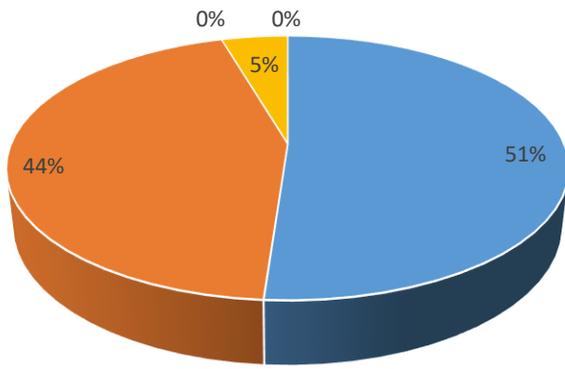
I intend to apply the knowledge acquired to my job



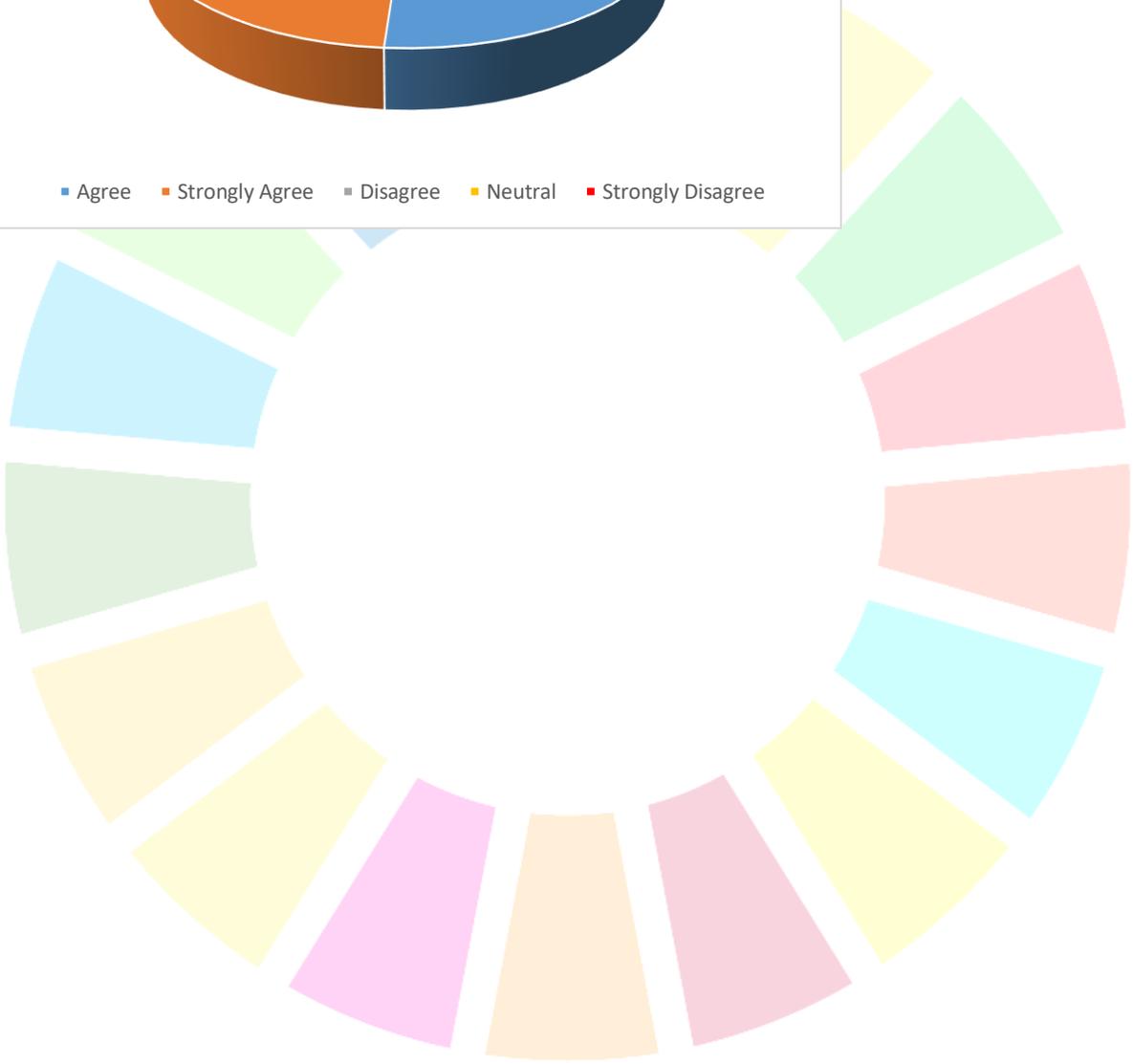
The administration of the workshop (facilities, logistics, support, etc.) was adequate



The quality of the facilitation by the team was good



■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree

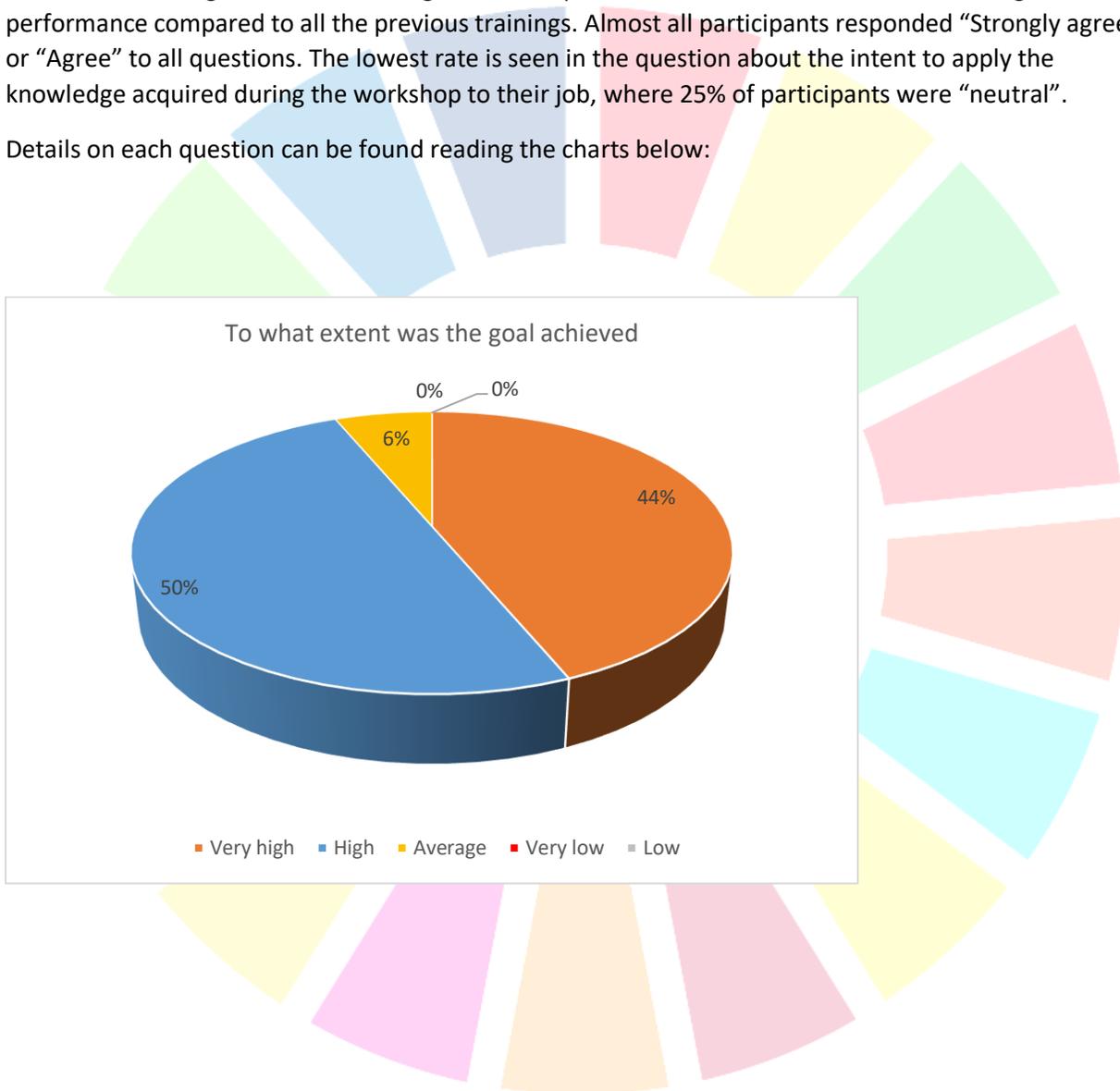


VIRTUAL TRAINING REU (2-3-4-5 November 2021)

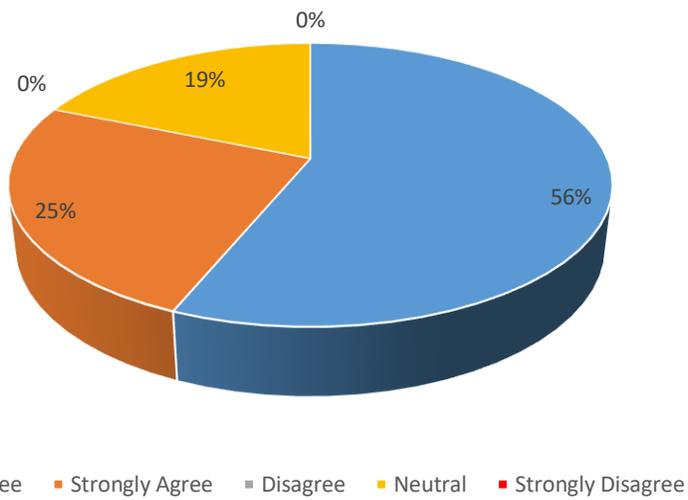
14 COUNTRIES – 25 PARTICIPANTS: Azerbaijan, Belarus, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Georgia, Lithuania, Poland, Spain, Turkey, Ukraine, United Kingdom

The results below got from the training to the European and Near East countries are showing the best performance compared to all the previous trainings. Almost all participants responded “Strongly agree” or “Agree” to all questions. The lowest rate is seen in the question about the intent to apply the knowledge acquired during the workshop to their job, where 25% of participants were “neutral”.

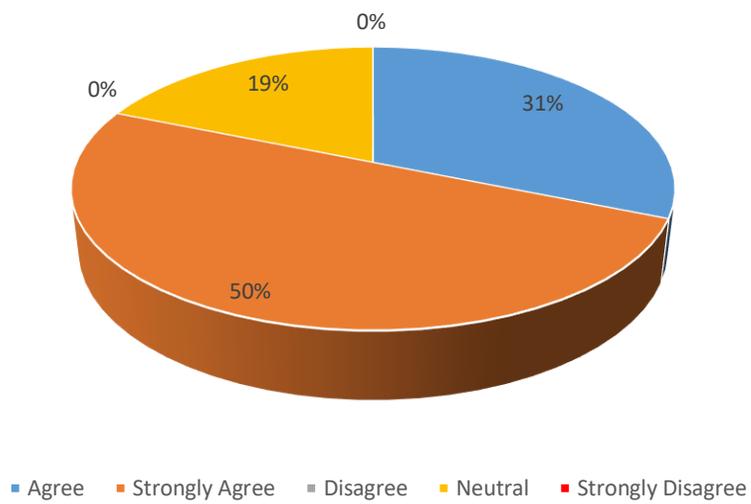
Details on each question can be found reading the charts below:



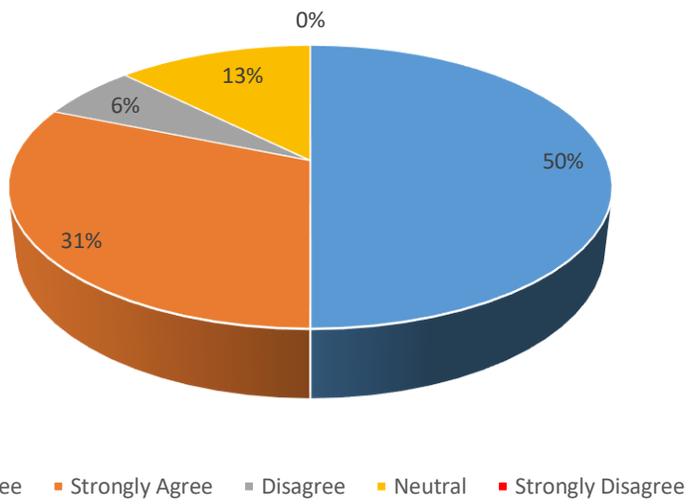
The Virtual Training was as good as in person training



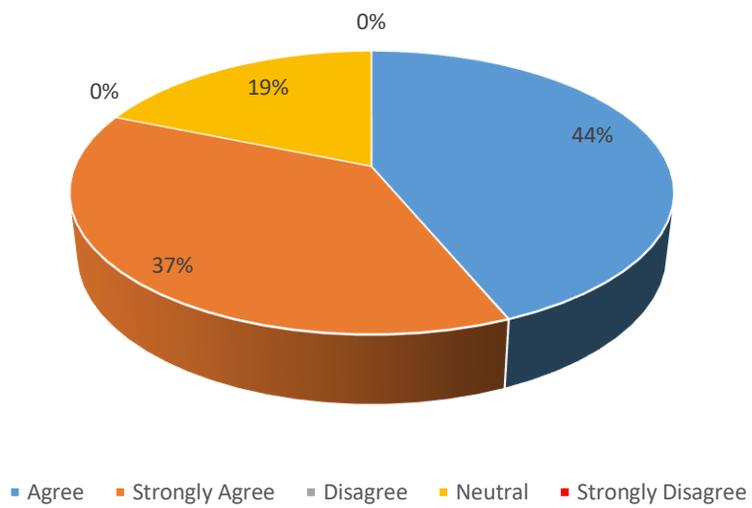
The sessions were well organized and easy to follow



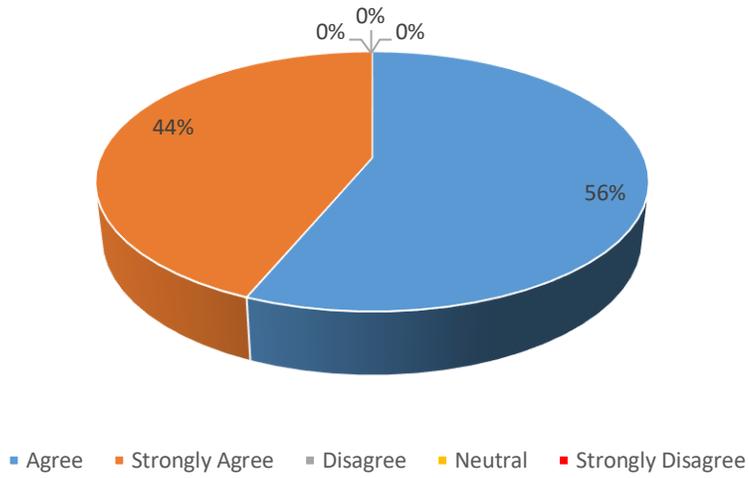
The overall length was adequate



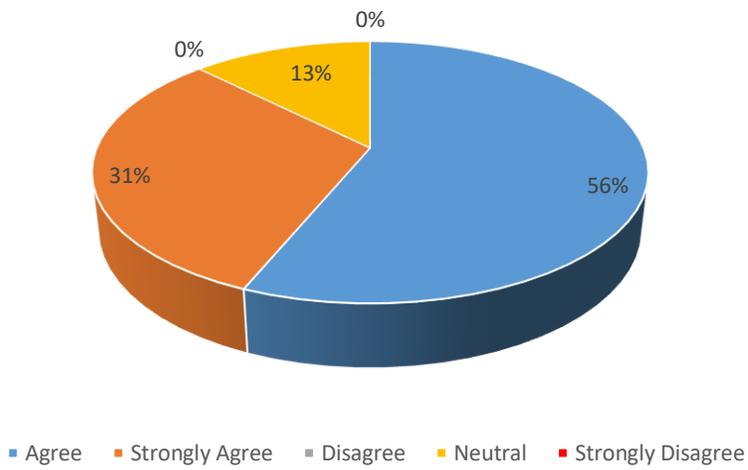
The exercises were relevant and useful



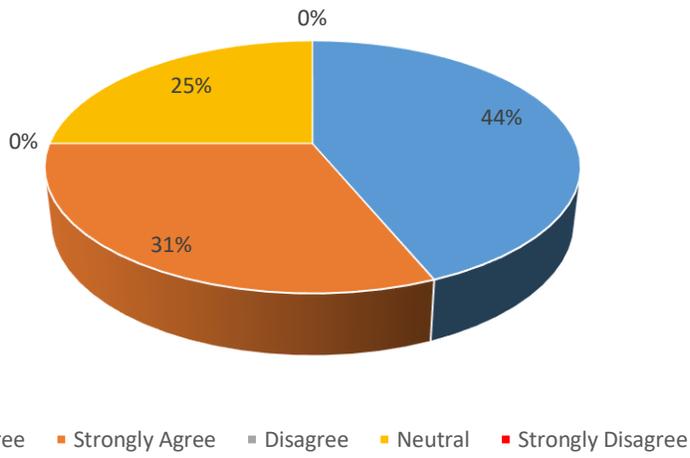
The questions raised by participants were answered appropriately



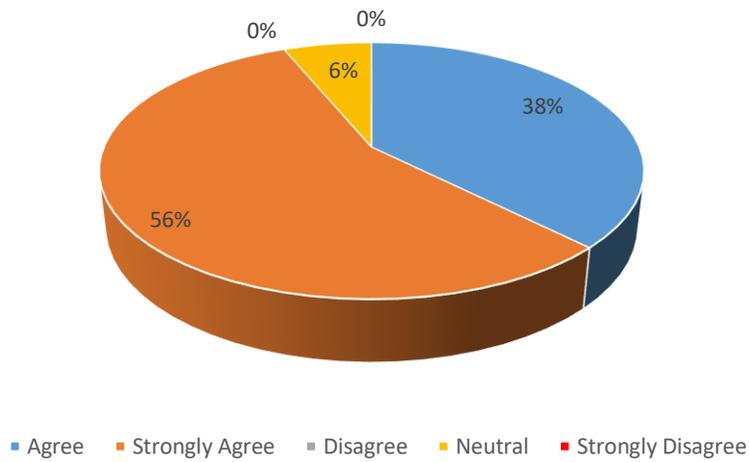
I intend to disseminate the knowledge acquired to the relevant actors



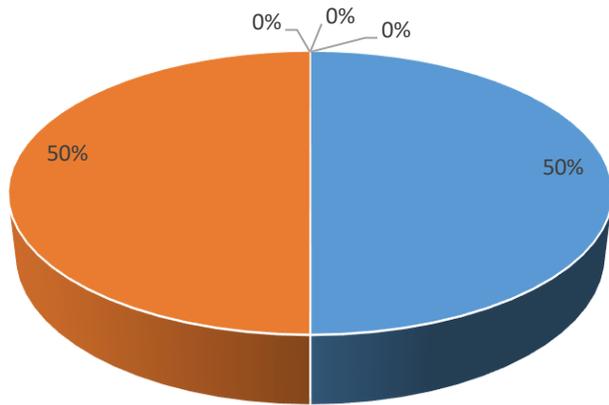
I intend to apply the knowledge acquired to my job



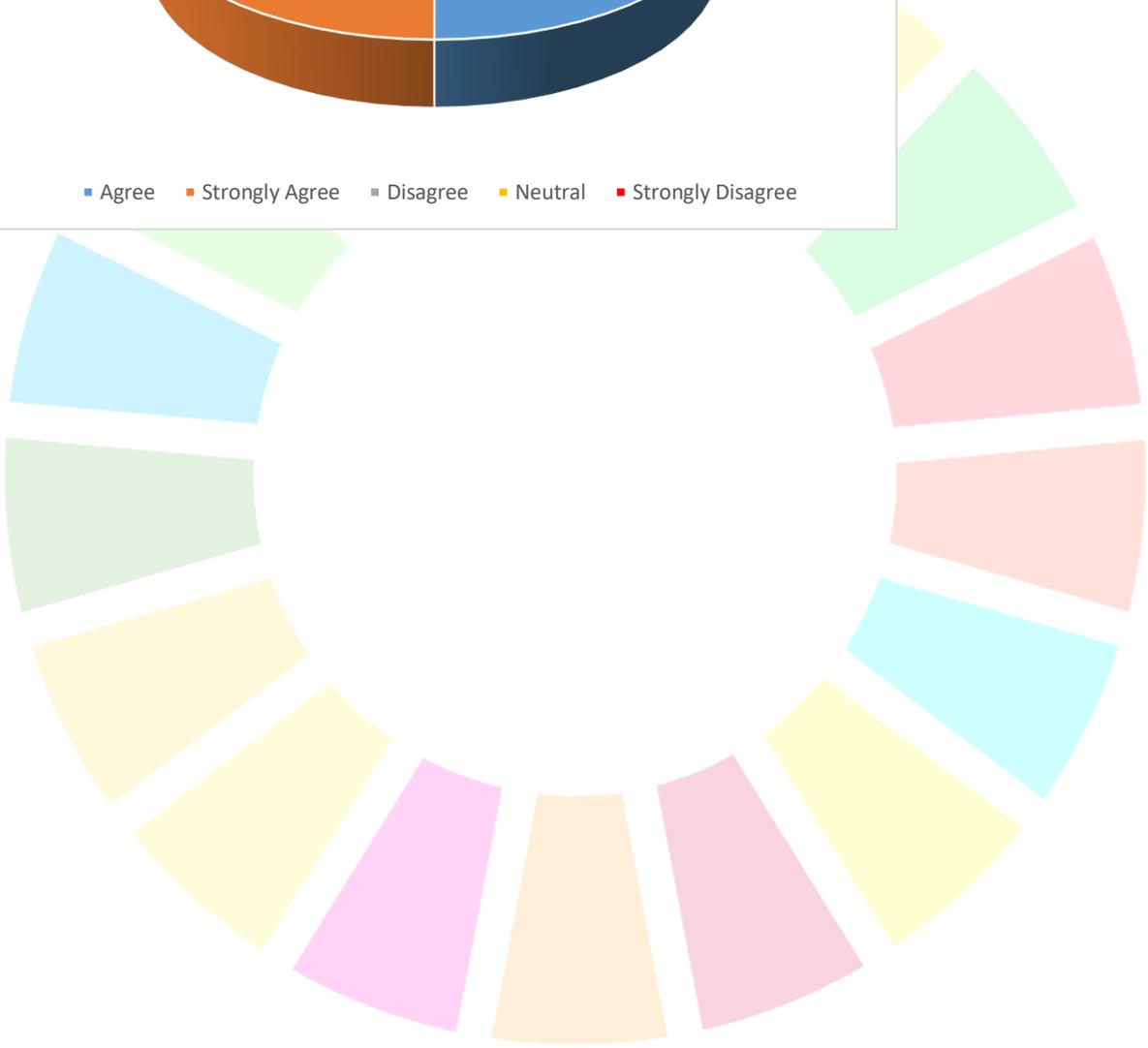
The administration of the workshop (facilities, logistics, support, etc.) was adequate



The quality of the facilitation by the team was good



■ Agree ■ Strongly Agree ■ Disagree ■ Neutral ■ Strongly Disagree



OVERALL GRAPH – EVALUATION OF THE 5 GROUPS

The summary findings of the evaluations for each group have been described above and is reproduced in a collective chart which shows all the groups together to have a clear understanding of the perception of these virtual trainings by participants.

It is evident that the SDG 2.4.1 virtual trainings were a great success, as by and large the participants scored the trainings high in terms of content, relevance, usefulness and organization.

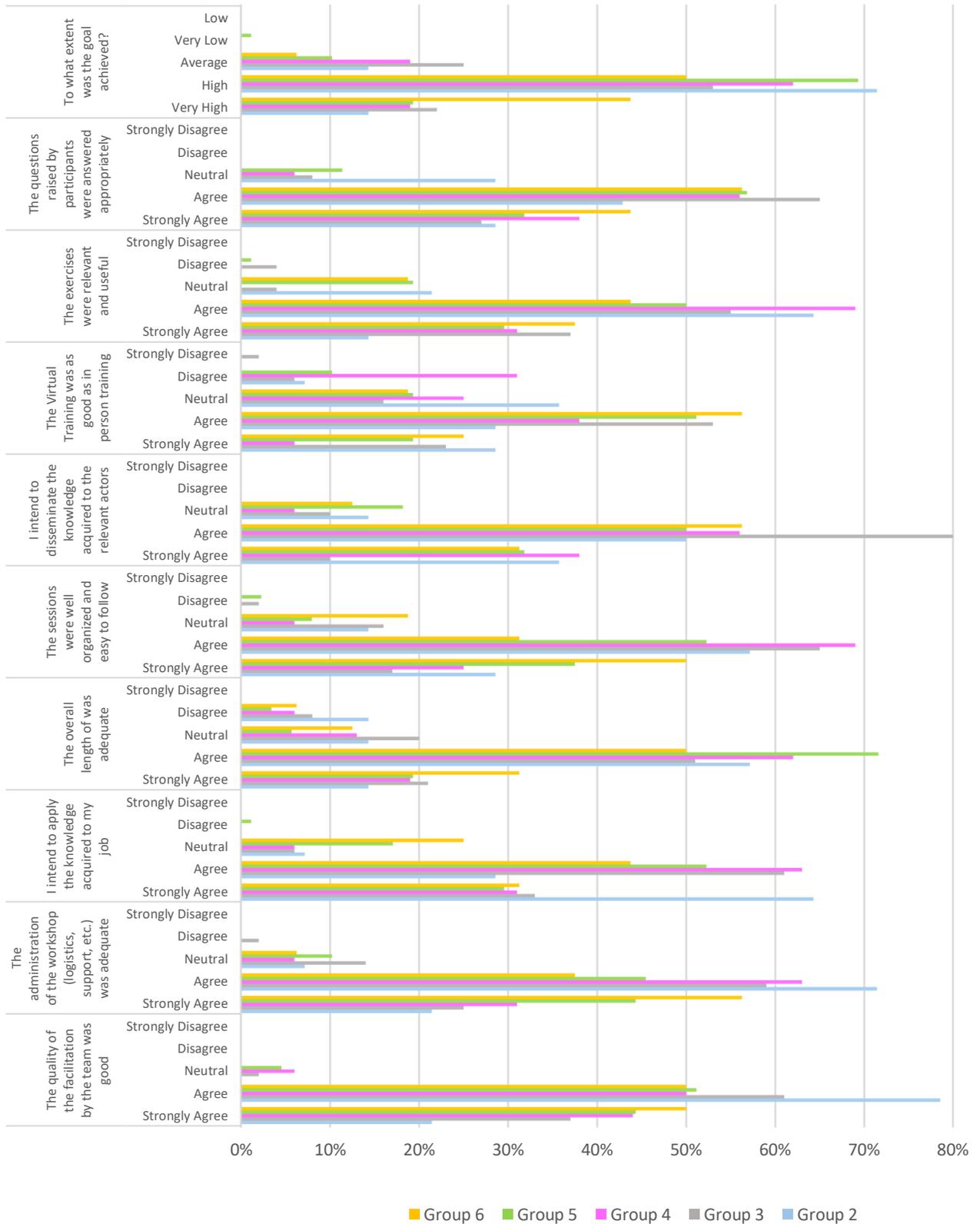
The outstanding scores go to the quality of the SDG 2.4.1 team, to the administration of the workshops and to the fact that the questions raised by participants were all answered appropriately.

Lowest scores are seen in the questions about the overall length of the training (probably due to the fact that SDG 2.4.1 a complex indicator (meaning more days would have been appreciated), and about the fact that a virtual training is as good as an in-person training. The overall score is high, which means that the participants did appreciate and absorb the methodology and concepts of the SDG 2.4.1 and are ready to apply the knowledge acquired to their job.

Here below the just described chart:



SDG 2.4.1 Virtual Trainings - 2021



Annex 4: Recordings

2. 1-2-3 June 2021

Botswana, Burundi, Cabo Verde, Côte d'Ivoire, DRC, Equatorial Guinea, Eritrea, Ethiopia, Guinea, Kenya, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Rwanda, Sao Tome and Principe and Zambia

- Day 1:
English Version https://fao.zoom.us/rec/share/T9YZtTevgS5Udti6l-mcOV6WR7J-g0M5gxwArD2KtRTcZ_Kf9X8PZ89C3Z2_O1Ak.C7IQW8AO9IOJOsWI
French Version - missing
- Day 2:
English Version <https://fao.zoom.us/rec/share/w3T2sQPdexT3ZOQugVaFfLEFOX1effxG-Ig4eir0gBf-IYOKR59IYuS8PQKPPFY.jdeEBdhwQtHAgb6d>
French Version - attached to the email sent to all participants after the training
- Day 3:
English Version
https://fao.zoom.us/rec/share/caOTIYoJy0e8XZal7DLlloMumT_y1SoFOhVvReyfyIQ1qfoYNUNiWMjmpRoZXypz.V0_yPV0F2ohfqGBJ
French Version - attached to the email sent to all participants after the training

3. 28-29-30 June - 1 July 2021

Bhutan, Brunei Darussalam, Cambodia, Cook Islands, Fiji, Indonesia, Iran (Islamic Republic of), Japan, Lao People's Democratic Republic, Malaysia, Mongolia, New Zealand, Palau, Philippines, Republic of Korea, Samoa, Thailand and Timor-Leste

- Day 1:
https://fao.zoom.us/rec/share/MRhZwXxRtMCicjbQgpZl7VsrIjh6Q2gB0pFrUsWafSjN_LljWvt5NRxt2gEaqqAK.Y3TN3bdFzai4V2Gx
- Day 2:
<https://fao.zoom.us/rec/share/uGznZ1oG4vHMn4o51wr6zMqCdG0tYfJeACYKSEM2Cej2iSbeud1ZH0d8CGltybCq.PpPY0xrOE0Oo08nF>
- Day 3: https://fao.zoom.us/rec/play/0NbGK7j2MkXIH0I5n5lQIQccqGnog5GT_belR80OHGy-BI9bYX3cF0nqLyEsEUI7JQJ3LS2CuKOzqwmI.CUW1hSuP1r1d9Fef?continueMode=true
- Day 4:
https://fao.zoom.us/rec/share/I71Umo3Lrp_jaOixjXGH2RxD44RYU3bGTW6XNr27oTalWR0SFlrJlne9KIAAHdU.Vx60LgLpC08Hnd2W

4. 13-14-15-16 July 2021

Bangladesh

- Day 1:
https://fao.zoom.us/rec/share/vKjg42B2yec58xrn2HwFgBCjf2TVwEN_Glcx_N5HrXcY8m_Bsl-tZKEz7FPSZacz.piU2_DOF168Al348
- Day 2:
https://fao.zoom.us/rec/share/_12YYWcSYcRvgEm4K851gO2XXD9ukItbMdlINC7ahIGVHdMy9ZREbA06fDbgVslt1.nHpP1Rc6ARLwOmgZ
- Day 3: https://fao.zoom.us/rec/share/N-vJMi7tJ3Q7CvyNCEW8vKAT0TnVFTNkrDGUmH-bo_nC5lefeNCrnVYur5Oj6it0.xwQtSkFqKoG1N0Zv
- Day 4: https://fao.zoom.us/rec/share/ocgLQ2rSsFB_BaWJOVC676waZq9PVOrJQipJRI-uaSCMbH0jAeD-diOOj7cU5cjB.vFxOaXvlrmO3uexL

5. 20-21-22-23 September 2021

Belize, Bolivia, Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, Grenada, Guyana, Mexico, Panama, Paraguay, Peru, Suriname and Venezuela

- Day 1:
https://fao.zoom.us/rec/share/ZXyeKzbJ6k4FCJsqLgVDpXPg9ReWsfWbRPAqHoFZ2QDRlbFCIOeK66Saqpil_zfw.V_7fkUMB2Wn2TDub
- Day 2:
<https://fao.zoom.us/rec/share/gKlvolewQd1IP51DQmgHm8hN3pVOCwwjprQxJUQ7Gvsi2la96eG7KswOSaDgKivJ.ukaXyjCcWtQRMwsG>
- Day 3: <https://fao.zoom.us/rec/share/l-i8Z8UEwV-3Xgevb1Qn7x4opN40d7PcpWNX6tYhlQ9IFZ-ttaybn3kbwVHtwa6d.fJaBickqXLFgqmuc>
- Day 4: <https://fao.zoom.us/rec/share/4WlfsPID2x7CJOylmZ1bmDQ0fJujcM-n52u19QEzdc9yJe60fQucTZyFuq3XYkv9.OVpxqARQ6qQOAvFx>

Spanish versions of day#2, day#3 and day#4 attached to the email sent to all participants after the training. Due to a technical matter, Spanish version of day#1 is missing.

6. 2-3-4-5 November 2021

Azerbaijan, Belarus, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Georgia, Lithuania, Poland, Spain, Turkey, Ukraine, United Kingdom

- Day 1: (original audio version) <https://fao.zoom.us/rec/share/lilowU0ksGa5U8lwINq1idYjxPeClYsQi7jwQrVvyg8aYvM6sGDJ4ezWlwnxQxsF.MQ3G8mivJZRmFkgO>

- Day 2: (original audio version) https://fao.zoom.us/rec/share/eaHu7jRW0GhB1GmliD-ZNMftu4QS0oYyP1DVKgCfYZTvGiwY_-fYp2b3kqNtyXQt.4TJJqxtipoJQx5Pb
- Day 3: (original audio version) https://fao.zoom.us/rec/share/6nXC8ODfbdT-LHBYrRT95icgb0-aL_smbU2y_Yjg-3Q-2ojj0rRAFUaXLBxs31pO.YDr337yFxtPJCAJh
- Day 4: (original audio version) <https://fao.zoom.us/rec/share/miNohnU4x3RWq5pQwj3UTD4qBmA9D8TnfaSRWxFZ2Nar5AxOPTzCaPmDt-K0vauO.2msb0S0nhDpPrIAC>

Russian versions attached to the email sent to all participants after the training.



Annex 5: 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/WeTransfer. The materials shared included:

- Methodological Note (Arabic, English, French, Russian and Spanish)
- Final versions of presentations that were presented during the training;
- Excel file with the exercises for the calculation of the 11 sub-indicators including the solutions;
- Stocktaking Excel file;
- SDG 2.4.1 survey questionnaire (in English, in French, in Spanish, Russian and in Arabic);
- Relevant background documents that were discussed and referred to during the training (methodological note, sampling guidance, enumerators manual). Please note these materials can be accessed also by clicking [here](#) (Arabic), [here](#) (English), [here](#) (French) , Russian ([here](#)) and [here](#) (Spanish);
- SDG 2.4.1 FAO data collection questionnaire (Arabic, English, French, Russian and Spanish)
- Quizzes that we administered during the training along with the solutions;
- SDG 2.4.1 communication brochure;
- STATCAN methodology to calculate the Net Farm Income;
- WHO Pesticides Classification 2019;
- Bangladesh test report and the STATA tool for the calculation of the 11 sub-indicators.

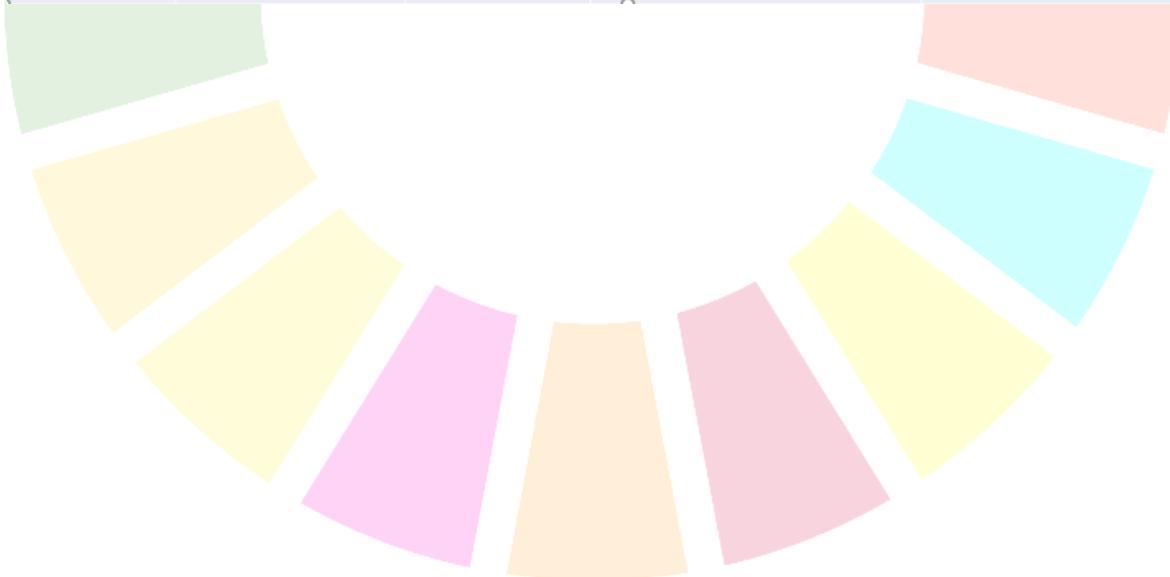
In addition:

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

Annex 6: Countries Action Plans

BRUNEI

Target	Actions	Timeline	Challenges	When & How Challenges Overcome
Project Approval	<ul style="list-style-type: none"> Submit project proposal to management 	<ul style="list-style-type: none"> September 2021 		
Survey Preparation	<ul style="list-style-type: none"> Translating FAO SDG Indicator 2.4.1 questionnaire Training of enumerators 	<ul style="list-style-type: none"> September 2021 October 2021 	<ul style="list-style-type: none"> Require translator service Enumerators' ability to communicate with respondents No manpower dedicated specific for this project 	<ul style="list-style-type: none"> To hire/engage translation agency To provide sufficient training to enumerator To allocate a team leader to focus solely on this project
Data Collection	<ul style="list-style-type: none"> Sample selection Data collection 	<ul style="list-style-type: none"> October 2021 October – December 2021 	<ul style="list-style-type: none"> Ensuring the sampling is not bias and produce accurate result Lack in manpower Time consuming Respondent willingness, comprehension and cooperation 	<ul style="list-style-type: none"> To design the sampling based on the required criteria with sufficient sampling size
Data Processing	<ul style="list-style-type: none"> Dashboard analysis Data cleaning and imputation SDGs indicator calculation 	<ul style="list-style-type: none"> January 2022 January 2022 February 2022 	<ul style="list-style-type: none"> Data analyst need to familiarize on the dashboard analysis Massive data imputation Human errors Time consuming 	<ul style="list-style-type: none"> Training on SDG Indicator 2.4.1 To allocate manpower dedicated on this project To allocate quality check from time to time to reduce human errors
Reporting & Validation	<ul style="list-style-type: none"> Preliminary report Final report 	<ul style="list-style-type: none"> March 2022 April 2022 	<ul style="list-style-type: none"> Lack of data analyst to interpret the analysis 	<ul style="list-style-type: none"> Training on SDG Indicator 2.4.1
Data Dissemination	<ul style="list-style-type: none"> Submission to FAO 	<ul style="list-style-type: none"> May 2022 		



**INSTITUT DE STATISTIQUES ET D'ETUDES
ECONOMIQUES DU BURUNDI**



DIRECTION GENERALE

**PLAN D'ACTION POUR FACILITER LE REMPLISSAGE DU QUESTIONNAIRE DE LA FAO
CONCU POUR COLLECTER LES DONNEES SUR L'INDICATEUR 2.4.1 des ODD.**

I. Contexte et justification

Pour bien renseigner le questionnaire conçu pour collecter des données sur les 11 sous-indicateurs relatifs à l'indicateur 2.4.1 des ODD, la FAO a organisé une formation virtuelle du 1er au 3 juin 2021 à la quelle le Burundi a participé. L'indicateur 2.4.1 des ODD est défini comme la « proportion de superficie agricole consacrée à une agriculture productive et durable ».

Cet indicateur mesure les progrès réalisés sur la voie d'une agriculture plus productive et plus durable. Il se compose de sous-indicateurs pertinents qui procurent aux autorités des informations stratégiques pour l'élaboration de politiques fondées sur des données probantes. Il mesure les progrès accomplis au regard de la cible 2.4 des ODD.

La notion de superficie agricole exploitée de manière productive et durable couvre les trois dimensions de la production durable, à savoir les dimensions environnementale, économique et sociale.

Pour être considérées comme faisant une utilisation productive et durable des terres, les exploitations et les surfaces agricoles associées doivent satisfaire au critère de durabilité des sous-indicateurs précis relevant des trois dimensions.

Dans le passé, il avait été défini principalement en fonction de critères environnementaux. Si le sol était mauvais ou si l'eau n'était pas bien gérée, une ferme aurait peut-être été considérée comme non durable. Ces dernières années, cependant, on s'est rendu compte que la durabilité devait aller beaucoup plus loin pour inclure les dimensions économique et sociale et placer les agriculteurs au centre. Si une ferme n'est pas économiquement saine ou résiliente aux chocs externes, ou si le bien-être de ceux qui travaillent dans une ferme n'est pas pris en compte, une ferme ne peut pas être durable.

II. Les sous- indicateur que le pays peut signaler immédiatement.

Après analyse du fichier d'inventaire en excel, nous avons constatés que seuls quatre sous indicateurs peuvent être renseignés immédiatement par le Pays. Il s'agit des sous indicateurs suivants :

- ❖ Valeur de la production agricole par hectare
- ❖ Gestion des engrais
- ❖ Gestion des pesticides
- ❖ Échelle d'expérience de l'insécurité alimentaire (FIES)

III. Les sous indicateur que le pays ne peut pas signaler immédiatement.

Sept sous indicateurs sur le total de onze ne peuvent pas être renseignés par le pays. Ces derniers sont :

- ❖ Revenu agricole net
- ❖ Mécanismes d'atténuation des risques
- ❖ Prévalence de la dégradation des sols
- ❖ Variation de la disponibilité en eau
- ❖ Utilisation des pratiques favorables à l'agro-biodiversité
- ❖ Taux de salaire dans l'agriculture
- ❖ Garantir les droits fonciers sur les terres

IV. Les contraintes/ problème qui empêchent le pays de rendre compte de l'ensemble du tableau de bord 2.4 .1.

Parmi les contraintes qui empêchent le pays à renseigner tous les sous indicateurs de l'ODD 2.4.1, on peut citer entre autre :

-l'agriculture traditionnelle (non mécanisé) pratiquée en grande partie par la population non instruite, dans ce cas il devient difficile d'évaluer toutes les dépenses liées à l'agriculture.

-l'inexistence des institutions financières qui donnent des prêts aux agriculteurs dans le pays.

-le manque des moyens financière pour la réalisation d'une étude d'identification des sols salins, sols emportés par l'érosion, sols qui ont connus la réduction de la fertilité ainsi que ceux engorgés par l'eau.

-l'absence des données sur l'irrigation des terres car seules les données des grandes exploitations sont disponibles.

-absence de données liées aux taux de salaire de tous les exploitants agricoles.

-L'absence des données officiel concernant la garantie des droits foncier sur les terres de tous les exploitants agricoles.

V. Mesure prises pays le pays pour surmonter les contraintes et problèmes afin de pouvoir collecter les données sur l'ODD 2.4.1

Pour surmonter à ces contraintes afin de pouvoir collecter les données sur l'ODD 2.4.1, le pays compte organiser un recensement général de la population, de l'habitat, de l'agriculture et de l'élevage en 2022. Après ce recensement, le pays disposera une base de sondage qui lui permettra mobiliser les moyens financiers enfin des réaliser des différentes enquêtes agricoles permettant de renseigner les différents sous indicateur de l'ODD 2.4.1. Une fois les moyens financiers disponibles, le pays compte intégrer certains sous-indicateurs dans l'enquête nationale Agricole du Burundi

**AVANCE DE COLOMBIA EN EL REPORTE DEL INDICADOR ODS 2.4.1.
Proporción de la superficie agrícola en que se practica
una agricultura productiva y sostenible**

1. Antecedentes

El reporte del indicador ODS 2.4.1. es liderado por el Departamento Administrativo Nacional de Estadística de Colombia – DANE, utilizando como principal fuente de información la Encuesta Nacional Agropecuaria – ENA que tiene por objetivo: *“estimar el uso del suelo, el área, la producción y el rendimiento de los principales cultivos transitorios, permanentes, árboles frutales dispersos, el área en pastos y forestal, la producción de leche y el inventario pecuario en 32 departamentos del territorio colombiano”*.

La ENA es una encuesta por muestreo probabilístico a partir de un marco dual (áreas y lista), con recolección de información mediante entrevista directa a los productores agropecuarios, siendo la unidad de observación la Unidad Productiva Agropecuaria - UPA.

Con el fin de iniciar el reporte del indicador, el grupo de trabajo del DANE realizó un estudio de las metodologías y herramientas entregadas por la FAO y adelantó el análisis de la información requerida para cada Subindicador.

Posteriormente, el grupo de trabajo del DANE revisó la información disponible en la ENA 2019 para el reporte de los subindicadores, encontrando los aspectos que se describen a continuación:

- **Subindicador 1. Valor de la producción agrícola:** la ENA 2019 cuenta con información parcial para el reporte del subindicador. Dispone de información del componente agropecuario y algunos precios para productos priorizados.
- **Subindicador 2. Ingreso Neto Agrícola:** la ENA 2019 no cuenta con las preguntas o información requerida para el reporte de este subindicador.
- **Subindicador 3. Mecanismos de Mitigación del Riesgo:** la ENA 2019 cuenta con información parcial para el reporte del subindicador. Dispone de preguntas sobre acceso a seguro y sobre diversificación y no cuenta con preguntas sobre crédito para completar el reporte del indicador.
- **Subindicador 4. Prevalencia de la degradación del suelo:** la ENA 2019 no cuenta con las preguntas o información para el reporte de este subindicador.
- **Subindicador 5. Variación en la disponibilidad del agua:** la ENA 2019 cuenta con información parcial para el reporte del subindicador. Dispone de preguntas relacionadas con sistemas de riegos y cuerpos de agua y no cuenta con preguntas sobre el distribuidor del agua y la disponibilidad del agua para completar el reporte del indicador.

- **Subindicador 6. Mitigación de riesgo ambiental por el uso de fertilizantes:** la ENA 2019 cuenta con información parcial para el reporte del subindicador. Dispone de preguntas sobre tipo de fertilizantes y cantidad de aplicaciones por año y no cuenta con preguntas de protocolos de aplicación, tipo de suelo, tipo de dosificación por clima y uso de leguminosas como coberturas de suelo.
- **Subindicador 7. Mitigación de riesgos para la salud y el medio ambiente por el uso de plaguicidas:** la ENA 2019 no cuenta con preguntas sobre uso de instrucciones de las etiquetas, manejo seguro de residuos y mantenimiento y limpieza de equipos de protección para reportar este subindicador.
- **Subindicador 8. Prácticas de apoyo a la agrobiodiversidad:** la ENA 2019 cuenta con información parcial para el reporte del subindicador. Dispone de preguntas sobre coberturas vegetales y raza o cruce predominante de ganado bovino y no cuenta con preguntas sobre promotores de crecimiento y vegetación para retención de humedad.
- **Subindicador 9. Tasa de salario en la agricultura (trabajo no calificado con remuneración digna):** la ENA 2019 no cuenta con las preguntas o información para el reporte de este subindicador.
- **Subindicador 10. Escala de experiencia de inseguridad alimentaria:** la ENA 2019 no cuenta con las preguntas o información para el reporte de este subindicador.
- **Subindicador 11. Derechos de tenencia sobre la tierra:** la ENA 2019 no cuenta con las preguntas o información para el reporte de este subindicador.

Este análisis fue presentado al grupo de FAO Roma con el acompañamiento de FAO Colombia, en dos sesiones de trabajo. Durante el desarrollo de las reuniones, los expertos de FAO Roma realizaron las recomendaciones para ajustar el cuestionario y poder dar el reporte de los subindicadores, brindando orientaciones sobre las preguntas a incluir teniendo en cuenta las necesidades y metodologías de las encuestas oficiales del país.

Posteriormente, el grupo ENA a partir de la orientación de los expertos de la FAO Roma, procedió a rediseñar el cuestionario de la encuesta mediante reuniones de trabajo, incluyendo nuevas preguntas y opciones de respuesta para la estimación y reporte de los subindicadores. El cuestionario rediseñado de la ENA incluye también las preguntas requeridas para el reporte de los indicadores 12.3. 1.a y el 2.3.1, además de un módulo de empleo.

A este cuestionario rediseñado se realizó una primera prueba de escritorio, seguida por una prueba en campo con el fin de evaluar el fraseo, la comprensión de las nuevas preguntas, los flujos de estas preguntas dentro del cuestionario, la carga al encuestado, el tiempo de diligenciamiento, entre otros aspectos. Esta prueba se realizó en cuatro municipios del país con la participación de 10 funcionarios del DANE durante los días 20, 21, 22, 24, 25 y 26 de mayo de 2021. Cabe resaltar que, FAO Colombia apoyó con recursos para viáticos y transporte de dos de los profesionales del DANE que realizaron esta prueba de campo.

Una vez ajustado el cuestionario a partir de los resultados de estas primeras pruebas, el grupo de trabajo del DANE elaboró todos los instrumentos requeridos para el desarrollo de la ENA rediseñada entre ellos; manuales, formatos de control, se actualizaron los aplicativos de captura

y transmisión de información, así como los aplicativos de medición de áreas y delimitación geográfica de las UPAs dentro de los conglomerados, con sus respectivas pruebas.

Igualmente se construyeron los instrumentos para el entrenamiento y selección al personal de campo los cuales se disponen en la plataforma del DANE para los procesos de entrenamiento y selección de personal de campo, y en general los demás instrumentos requeridos para el desarrollo operativo.

Como proceso final a la fase de rediseño de la ENA, el equipo de trabajo del DANE realizó la preparación de la prueba piloto, la cual se realizará en tres zonas del país (Cundinamarca-Boyacá, Huila y Valle) con el fin de probar el cuestionario y las demás instrumentos

El 8 de septiembre de 2021 se suscribió una Carta de Acuerdo 2309020 FAO, 025 DANE-FONDANE, cuyo objeto es *"contribuir a desarrollar las herramientas de medición y monitoreo apropiadas para impulsar y mejorar la medición de la agricultura productiva y sostenible y reportar el indicador de ODS 2.4.1, Proporción de la superficie agrícola en que se practica una agricultura productiva y sostenible; y las pérdidas de alimentos en la cosecha, postcosecha, transformación industrial y comercio mayorista, y reportar el indicador de ODS 12.3.1.a, Índice de pérdidas de alimentos"* la suscripción de esta carta de acuerdo permite al DANE contar con los recursos para realizar el proceso de recolección de información de la prueba piloto y el respectivo procesamiento de la información.

Para el año 2021 el DANE no cuenta con los recursos para realizar la ENA, por tanto no podremos reportar información de los ODS este año, se espera que para 2022, el país disponga de los recursos para desarrollar la ENA y con ello poder reportar los indicadores ODS 2.4.1, 12.3.1 y 2.3.1.

2. Conclusiones e información adicional

Con el fin de avanzar en el reporte del indicador, el grupo el DANE durante el 2020 y el 2021 realizó el rediseño del formulario, incluyendo variables y preguntas para el reporte del indicador 2.4.1. y otros indicadores ODS. Así como elaboró todos los instrumentos requeridos para el desarrollo de la próxima encuesta.

Por dificultades del país en la asignación de recursos, no se realizó la ENA para el 2020 y el 2021, se espera contar con estos recursos para 2022, pero aún no se han asignado.

Con la suscripción de la Carta de Acuerdo con FAO, se concluye el proceso de rediseño y quedan todos los procesos listos para la ejecución de la ENA, una vez se cuente con los recursos para ello.

GUINÉE EQUATORIALE

Au niveau de INEGE (Institut National de Statistiques de Guinée Equatoriale), je pense que pour développer des de collectes des données qu'on doit transmettre a la FAO et qui est demandé aux pays, il dois avoir un financement pour réaliser les enquêtes spécifiques, nous aimeront aussi bénéficier des formation que les autres pays ont eu dans le cadre des activés de calcul de cette indicateur.



Action Plans

1. 2.4.1 indicator data collection will be carried out by implementing the Agricultural Integrated Survey (AGRIS) nationwide this year. The survey will cover both households and non-household institutions and allow us to compute the indicator for Indonesia. The indicator also will be provided until the provincial level.
2. To compute the indicator, we adjusted the Core questionnaire to capture the indicator's environmental dimension.

Constrains

1. The pandemic that is still progressing gives significant challenges in conducting survey preparation and field enumeration. However, some mitigations have been prepared to ensure that the data collection can be conducted as expected.



JAPAN

In my understanding, wide range of data and information on each farm household are required to estimate the 11 sub-indicators and the indicator 2.4.1. This means that a nation-wide survey on this indicator is basically essential if we follow the standard method offered by FAO.

On the other hand, the Ministry of Agriculture annually conducts around 40 surveys that are frequently used for policies, research, and other purposes, utilizing limited human and financial resources. Given the priorities and the cost efficiency, it is very difficult to reach a consensus to allocate our resources to a new survey for estimating the indicator 2.4.1, currently.

Therefore, we are very much interested in a more efficient proxy method that the data of each farm household is not needed. Especially, we would like to know the results of research that FAO implemented last year to develop the method using satellite images. We also would like to know detailed information on the method applied by the countries that have already estimated the indicator. If you have related information, could you share it with us?

After collecting and analyzing above-mentioned progress of FAO and other countries, we will start to make plan to estimate the indicator 2.4.1.

MONGOLIA

At this moment, there is not any plan for estimating the indicator due to the fact that we are in the process of having our national indicator framework approved by the government. Any further action towards estimating this indicator depends on whether the indicator would be included in the national indicator framework. However, we will discuss this matter with relevant national institutions as we are going to conduct our national Agricultural Census next year.



PALAU

Although Palau did not include SDG 2.4.1 in its list of localized indicators, this makes it seem much more accessible. I hope all indicators have this level of support! I cannot speak for the Palau SDG reports, but for our next State of the Environment report we could certainly conduct a stratified sample farm survey and then calculate most or all sub-indicators. And I'm already including some of the new concepts I've learned into our Food Systems Dialogues materials.



ACTION PLAN

Rwanda has been part of other African countries represented during a training organized and delivered by FAO on the Sustainable Development goal indicator 2.4.1 entitled "The area under productive and sustainable agriculture captures the three dimensions of sustainable production: environmental, economic and social. This indicator will measure progress towards SDG Target 2.4., the FAO expected from all the countries that attended this training to:

- Fill out the Stocktaking exercise for the assessment of data availability situation on the 11 sub-indicators of the indicator 2.4.1
- Develop an Action Plan to provide an outline of the country's strategy and short to medium-term plan to overcome challenges in indicator's implementation including bridging the data, capacity, and resource gaps and addressing other issues

After the FAO training, it was the time to share with the agricultural team to analyse together the need to report on this indicator in the future. The indicator has revealed its importance and the feasibility level is so far acceptable since the indicator has proposed a reasonable methodology that has a certain level of acceptable flexibility in data collection. For instance, the adaptability to use farmers declarations allows the countries to collect data without sophisticated materials. However, given the complexity of this indicator, it is a project that needs further engagements and commitments. First because the indicator is costly and need more capacity to report on it as a stand-alone project.

The action is summarized as follows:

- There is still much need to capacitate the staff to effectively report on this indicator, thus the FAO can organize in country technical assistance to equip staff to able to report to this indicator. This would help in addressing the capacity to advance to the implementation once all other conditions are gathered.
- On the side, given that we conduct regular agriculture surveys, it is possible to integrate some sub-indicators in the future to start collecting data in medium-term as long as technical assistance is provided, this could bridge the data gap
- In regard to resource gaps, and since the indicator is costly there is no a straight answer on how to overcome this challenge.

With this indicator dedicated to agriculture at 100 percent, it is necessary to working together for its implementation in future.

SAMOA

According to SGD 2.4.1, Samoa can report immediately to land productivity, profitability, fertilizer pollution risk, decent employment and food security indicators.

Some of the main challenges encountered are the:

- Challenges in populating framework due to lack of administrative data or data not collected
 - ✓ Sub Indicator 2: component variable # 4 (Direct program payments) #5 (Percentage of total value as depreciation) and #6 (Total value of inventory change)
 - ✓ Sub Indicator 3: component variable # 3 (List of other on-farm activities apart from crops and livestock) and # 4 (Value of output of other on-farm activities apart from crops and livestock).
 - ✓ Sub Indicator 4: Soil Health
 - ✓ Sub Indicator 5: Water Use
 - ✓ Sub Indicator 8: Biodiversity (need to re-confirm from the Ministry of Natural Resources and Environment of the data availability). *pending*
- Frequency of data collection (surveys/census) for indicator update and monitoring. Have a 5year cycle except for the Agriculture Census which is every 10 years.
- The treatment of certain indicators that might NOT APPLICABLE to Samoa.
 - ✓ E.g. Sub Indicator 11: Land tenure
 - 28% - Freehold lands
 - 70% - Common lands

This is very hard to overcome so we might need to propose a plan for future indicator landscape to undertake such as:

- Need to refine national indicators for National Development Plan
- Need to align national sub-indicator framework with SDGs
- Need to address data gaps in existing sub-indicator framework
- Need better alignment between National and Sector Plan indicators
- Improved alignment of surveys conducted and sub-indicator needs

In addition, we wanted to request for a TA to assist Samoa in the future work especially that we have an upcoming Agriculture survey in 2025 and Household Income and Expenditure Survey in 2023.



TURKEY

Indicator 2.4.1: Proportion of agricultural area under productive and sustainable agriculture

<http://www.fao.org/sustainable-development-goals/indicators/241/en/>

The indicator will be reported as a dashboard of the following 11 sub indicators

No.	Theme	Sub-indicators
1	Land productivity	Farm output value per hectare
2	Profitability	Net farm income
3	Resilience	Risk mitigation mechanisms
4	Soil health	Prevalence of soil degradation
5	Water use	Variation in water availability
6	Fertilizer risk	Management of fertilizers
7	Pesticide risk	Management of pesticides
8	Biodiversity	Use of biodiversity-supportive practices
9	Decent employment	Wage rate in agriculture
10	Food security	Food insecurity experience scale (FIES)
11	Land tenure	Secure tenure rights to land

It is obtained using the following formula:

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

The denominator is the agricultural land area managed by agricultural holdings, defined as the sum of agricultural area utilized by agricultural holdings that are owned (excluding rented-out), rented-in, leased, sharecropped or borrowed.

The numerator is the agricultural land area managed by those agricultural holdings, which are considered as conducting productive and sustainable agricultural activities in the sense of each of 11 sub-indicators.

Responsible unit: Agricultural Statistics Department, Turkstat

National contact person:

Current situation

- Turkey does not conduct regular agricultural surveys because of absence of the sampling frame covering all agricultural holdings.

- Ministry of Agriculture and Forestry (MoAF) has about 16 various registers. Turkstat has compiled an integrated database based on them but coverage is incomplete, especially for small holders
- The National Development Plan for 2019-2023 envisages conducting the agricultural census in 2022 (in the classical sense, meaning complete enumeration), and based on it, establishment of the system of agricultural surveys, including regular annual surveys for production of the current agricultural statistics.
- MoAF intends to kick up a registry system covering all farms but this will not be possible without some kind of census

Proposed steps forward

- **Data will be obtained from the relevant administrative records. Additional questions may also be put into some existing research. (For example: 7 trend questions on food waste and 8 FIES questions were included in Household surveys-2021.**
- Not waiting until there is a frame for sample surveys provided by a census or a farm register, start developing questionnaires for 2.3.1-2.3.2, 2.4.1, as well as the component of food losses at farm level of Indicator 12.3.1, test it and conduct a pilot survey based on the frame compiled by Turkstat **(2020-2021)**
- In parallel, prepare for the census and conduct it **(ideally in 2022)**. The database prepared by Turkstat will be helpful for that, as well as cooperation with MoAF's initiative to create a registry system covering all agricultural holdings. To save costs, the census questionnaire can be minimized for creating a good frame of all agricultural holdings.
- Once the frame of all agricultural holdings is available, to use the developed tools for conducting a comprehensive survey and actual calculation of the indicators **(for Indicators 2.3.1-2.3.2 in 2023, for Indicator 2.4.1 – in 2024)**
- A possibility can be considered of developing a comprehensive TCP project for assistance to Turkey both for census and agricultural-survey-based SDG indicators, and possibly other SDG indicators under FAO custodianship as well **(2020-2023)**

Estimated time of production of the indicators by Turkstat under the most optimistic scenario – **2023-2024**