Evaluation of
FAO's statistical work

Annex 6. Sustainable Development Goals study

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Acronyms and abbreviations

ESS	(FAO) Statistics Division
FAO	Food and Agriculture Organization of the United Nations
FIES	Food Insecurity Experience Scale
IAEG-SDG	Interagency and Expert Group on SDG indicators
IDWG-Statistics	Interdepartmental Working Group on Statistics
OCS	Office of the Chief Statistician
REU	(FAO) Regional Office for Europe
SDG	Sustainable Development Goal
TCP	Technical Cooperation Programme
ToC	Theory of change
ToR	Terms of Reference

1.   Introduction

1.   The Sustainable Development Goal (SDG) indicators are an important part of the statistical work of the Food and Agricultural Organization of the United Nations (FAO), clearly defined in the Organization's strategic documents and particularly in its regulatory framework on statistical work (FAO, 2016A). The 2030 Agenda for Sustainable Development has encouraged countries to commit to universal set of transformative goals and targets. To monitor progress towards these goals, the international community created a set of indicators, reflected in FAO's reviewed Strategic Framework 2018–2021 and embedded in the Organization's vision, global goals and strategic objectives. The sustainable development of food and agriculture systems is recognized as a key enabler of SDG implementation.

2.   This study of FAO's work on the indicators is part of the 2019 *Evaluation of FAO's statistical work* (hereafter "the evaluation"). It builds on the methodology of the 2009 *Evaluation of FAO's role and work in statistics* (hereafter "the Evaluation") to assess the key questions and sub-questions set out in the Evaluation's Terms of Reference. The study focussed on review of literature, guidelines and strategic documents on SDGs, resolutions and recommendations of the Interagency and Expert Group on SDG indicators (IAEG-SDG), project documentation, national and global reports, Voluntary National Reviews (VNR), SDG baseline assessment reports. The SDG dashboards and databases maintained by National Statistical Offices and national/localized SDG indicator frameworks were consulted to assess the level of harmonization with global indicator framework and the gaps existed.

3.   The study is structured around the analysis of the following evaluation sub-questions listed in Table 1.

Table 1: Evaluation questions and sub-questions relevant to Sustainable Development Goal study

Evaluation questions	Evaluation sub-questions
1. To what extent is FAO's statistical governance adequate and effective to meet the Organization's needs and to contribute to the international governance of agricultural statistics?	Are these statistical policies, coordination mechanisms and operational processes/systems sufficient to leverage the Organization's work on the SDG indicators?
	To what degree are FAO statistics' human and financial resources adequate to meet the Organization's needs, in general and especially within the SDG context?
	How relevant and effective is FAO's contribution to the external coordination, standard setting and governance of agricultural statistics, particularly within the SDG context?
2. To what extent is FAO able and effective in providing quality statistics to internal and external stakeholders?	How flexible is FAO in responding to new data demands, in general and especially within the SDG context?

	What are the synergies between FAO's normative work in statistics and the new statistical and methodological demands under the SDGs?
	To what extent has FAO developed appropriate and effective statistical standards, tools and methodologies for data collection, processing, interpretation and dissemination, including the 21 SDG indicators?
	To what extent has FAO managed to advance in developing SDG indicators' methodology and upgrading classification, especially related to those indicators under the Tier II and III?
	To what extent has FAO leveraged partnerships for the development of methodologies for the SDG indicators?
	How has FAO addressed gender in the development of methodologies for the SDG indicators?
3. To what extent is FAO providing relevant and effective statistical capacity building to Members?	To what extent has FAO supported Members in the process of aligning their national plans/monitoring and reporting frameworks with the SDG indicators concerned?
	How does FAO anticipate the challenges related to capacity development for the 21 SDG indicators under its custodianship?

4.   This study covers the progression of work on the SDG-related indicators from January 2016 to June 2019. It aims to assess FAO's statistical work in relation to the 21 SDG indicators (see Table 2) under its custodianship,[1] with a particular focus on SDG indicator 2.4.1 on agricultural sustainability, and all the activities associated with those indicators, including its co-contributing role on five additional SDG indicators (see Table 3).

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[1] FAO (2017b): FAO AND THE SDGs: Two of the SDG targets focus specifically on improving official national statistics: Target 17.18 ("By 2020, enhance capacity building support to developing countries") and Target 17.19 ("By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries").

Table 2: Indicators under FAO custodianship

	SDG	Indicators
2	**Zero Hunger**	2.1.1 Hunger
		2.1.2 Severity of food insecurity
		2.3.1 Productivity of small-scale food producers
		2.3.2 Income of small-scale food producer
		2.4.1 Agricultural sustainability
		2.5.1.a Conservation of plant genetic resources for food and agriculture
		2.5.1.b Conservation of animal genetic resources for food and agriculture
		2.5.2 Risk status of livestock breeds
		2.a.1 Public Investment in agriculture
		2.c.1 Food price volatility
5	**Gender Equality**	5.a.1 Women's ownership of agricultural land
		5.a.2 Women's equal rights to land ownership
6	**Clean Water and Sanitation**	6.4.1 Water use efficiency
		6.4.2 Water stress
12	**Responsible Consumption and Production**	12.3.1 Global food losses
14	**Life below Water**	14.4.1 Fish stock sustainability
		14.6.1 Illegal unreported underground fishing
		14.7.1 Value added of sustainable fisheries
		14.b.1 Access rights for small scale fisheries
15	**Life on Land**	15.1.1 Forest area as proportion of total land area,
		15.2.1 Progress towards sustainable forest management
		15.4.2 Mountain Green Cover

Table 3: Indicators for which FAO is a contributing agency

	SDG	Indicators
1	**No Poverty**	1.4.2 Secure tenure rights to land
		1.5.2 Disaster economic loss
14	**Life below Water**	14.c.1 Frameworks for conservation and sustainable use of oceans' resources
15	**Life on Land**	15.3.1 Land degradation
		15.6.1 Frameworks for fair and equitable sharing of genetic resources benefits

2. Evaluation Question 1: SDG-related statistical governance

5.   Key findings: The assessment confirmed that FAO's statistical work on the SDGs was conducted in alignment and accordance with the Organization's mandate, Strategic Objective (SO6) and Organizational Outcome 6.2. It is also largely aligned with Members' national sustainable development priorities and needs. At the Organizational level, there are numerous statistical policy[2] and methodological documents on the SDG indicators, as well as mechanisms for technical guidance, methodological work and quality standards at organizational level. However, at country level, there is less coordination, in-depth awareness and focused advocacy.

Organizational policies, coordination mechanisms and operational systems and processes

6.   Within the statistical governance context, the study looked at whether the statistical policies, coordination mechanisms and operational processes were sufficient to leverage the Organization's work on the SDG indicators. This covered relevant statistical divisions' (the FAO Office of Chief Statistician [OCS] and Statistics Division [ESS]) work on policies and guidelines related to SDG indicators, internal coordination at headquarter, regional and country levels, reporting clarity and operational feasibility.

7.   The position of Chief Statistician was found to be important for the Organization in the SDG governance context. However, staff interviewed for this study noted that FAO should consider further strengthening the role of the Chief Statistician to enable enhanced influence, effective strategic direction, leadership on the SDGs and the effective application of the quality framework. The latter could be an important aspect of FAO's statistical work, encompassing, among other things, adherence to the accountability framework for FAO's statistical activities.[3] This gives the Chief Statistician responsibility for ensuring consistency, reducing the duplication of efforts and guaranteeing the quality of FAO data,[4] including the implementation of quality principles and the harmonization of statistical standards at FAO corporate level.[5]

8.   A dedicated sub-group of the Inter Departmental Working Group (IDWG) was established on SDG indicators as an internal coordination mechanism on SDG indicators, and according to staff, is an effective platform and professional network supporting interdivisional collaboration and technical coordination from an SDG perspective. However, the group needs to bolster its decision-making and problem-solving role; much of its work currently focuses on information dissemination and exchange.

9.   According to recent Quality Assessment and Planning Survey (QAPS) results,[6] the establishment of the Office of the Chief Statistician (OCS) contributed to an increase in activities associated with the development of SDG-related statistical standards and coordination. This was considered important added value to the technical divisions' work on the SDG indicators.

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[2] Statistical data dissemination policy, international statistical classifications, regulatory standards, reporting procedures and other technical coordination documents on SDGs (defined in the *Statistical Programme of Work* (SPW) 2018–2019).
[3] FAO Administrative Circular 2015/22.
[4] Namely, approving the recruitment of consultants, the issuance of questionnaires for data collection at country level and the clearance of field projects with a statistical component.
[5] See FAO's Statistical Programme of Work 2018-19.
[6] Conducted at FAO headquarters.

10.   It was also tied to the launch of United Nations System Reform and efforts to better position the United Nations System at national level. FAO Representatives and Assistant Representatives need to be more involved in their countries' SDG reporting and statistical development activities. This could involve communication and feedback to countries on SDG-related statistical reporting and/or capacity-building, engagement in SDG data task forces and/or technical working groups and platforms, direct dialogue with main counterparts, supporting coordination with administrative data owners and national statistics offices on SDG monitoring, and supporting the alignment of national plans with the SDG indicators.

11.   SDG-related statistical work is largely dependent on extra-budgetary resources and the results of ad-hoc corporate fund leveraging. While there has been a considerable increase in interest from donors since the adoption of the 2030 Agenda, this has also led to concerns about the sustainability of statistical results. Better co-coordination with donors would reinforce FAO's position as a coordinator of donor-funded statistics projects and the lead on locally financed projects.

Human and financial resources

12.   Human and financial resources and capacity limitations have affected FAO's ability to provide the direct institutional support countries need when it comes to the SDG indicators. According to a recent assessment on country capacity and needs to advance SDG monitoring in the Asia-Pacific region,[7] the demand for assistance far outweighs what current resources can meet.

13.   Regional statisticians' involvement in the SDG indicator-related work varies from Regional Office to Regional Office, but the general impression is that they have seen an increase in workload without any additional resources. The resources that are available are not commensurate with statisticians' responsibilities, hampering effectiveness and productivity.

14.   The FAO Regional Office for Europe (REU) offers an interesting example of how to facilitate SDG-related work, by creating a network of national and international SDG consultants and an SDG coordination mechanism to support regional sustainable development forums, etc.

15.   Multilevel SDG-related coordination during the period studied was largely connected with the timely completion of the methodological work on the SDG indicators – for the most part, the Tier classification upgrade and new methodology development for Tier III indicators.

FAO`s contribution to external coordination in SDG context

16.   FAO has made a major contribution to the co-ordination of work on SDG indicators together with other United Nations agencies and resource partners (the World Food Programme, the United Nations Children's Fund, the International Fund for Agricultural Development, the Committee of the Chief Statisticians of the United Nations (CCS-UN), United Nations regional commissions, the Asian Development Bank, the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), the United States Department of Agriculture, the United Nations Statistics Division, the World Bank, and more). Effective collaboration with UNESCAP, the United Nations Economic Commission

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[7] Project document on "Strengthening the capacity for monitoring Food Security and Sustainable Agriculture in the context of Sustainable Development Goals (SDG) 2 and 12".

for Latin America and the Caribbean (ECLAC), and the Committee for the Coordination of Statistical Activities (CCSA) was observed in the Regional Office for Asia and the Pacific (RAP).

17. The evolution of FAO's (normative) work in standard setting and guidance development for a number of thematic areas in agriculture is well recognized. There was evidence of this, for example, in the forestry sector, where FAO was seen by most interviewees as a global leader in the areas of forest resource assessment (FRA), national forest monitoring (NFM) and reducing emissions from deforestation and forest degradation (REDD+). FAO's Forestry department leads core global work on forest data and indicators, including SDG indicators 15.1.1 'Forest area as proportion of total land area (FRA database)', 15.2.1 'Progress towards sustainable forest management', 15.4.1 'Coverage by protected areas of important sites for mountain biodiversity (reporting process)' and the relevant sub-indicator of SDG 2.4.1 Its data-collection tools and guidelines are commonly used by Members.

18. Numerous countries[8] have established inter-ministerial and multi-stakeholder coordination platforms to address SDG implementation under the leadership of their prime minister's office, or a relevant line ministry. Country-level collaboration with these "new" partners would also be useful for FAO's long-term programming.

19. The recently launched United Nations System Reform is an important step in the development and strategic governance of FAO's SDG-related statistical work. FAO is collaborating with the United Nations Development Programme (UNDP) and United Nations Resident Coordinator offices, among others, to support Members in producing national SDG progress reports and to advance national SDG processes. FAO is part of the United Nations Director General's Sustainable Development Working Group and is contributing to the consolidation of "mainstreaming, acceleration and policy support" (MAPS), the UNDAF revised guidelines and the guidelines for monitoring SDGs at country level. In some countries, it is assisting with the preparation of Voluntary National Reviews (VNRs), either through the United Nations Country Team collective or one-to-one with line ministers on request.

20. FAO's external coordination activities on the SDG indicators tie in with its role as custodian and co-contributing (partner) agency.[9] FAO has been involved in shaping the Global Indicator Framework (UNSTATS, 2018) in an advisory capacity to the Interagency and Expert Group on SDG indicators (IAEG-SDG) and by leading CCSA-UN. While FAO's work with regard to the SDG indicators under its custodianship is going well, the co-contributing aspect remains inadequate. Little work has been done so far, but some initial dialogue has started, mostly on two indicators; 'disaster economic loss' (1.5.2) and 'the proportion of land degraded over total land area' (SDG 15.3.1).

21. In 2019, FAO participated in the High-Level Political Forum (HLPF) and released its flagship publication *The State of Food Security and Nutrition in the World* (SOFI). The HLPF was a major joint effort to promote FAO's custodianship of food security and nutrition statistics as key SDG indicators. The consolidated SOFI report was co-produced with other United Nations agencies with SDG monitoring responsibilities, so as to include a broader focus on

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[8] Including Albania, Armenia, Georgia, Moldova and Bangladesh.
[9] FAO's responsibilities as a custodian agency, as outlined in the 2017 Report of the IAEG-SDG to the Statistical Commission (paragraph 28) and as recognized by recent United Nations Statistical Commission decision 48/101/k.

nutrition. Importantly, it captures two key SDG 2 indicators: Indicator 2.1.1: 'The prevalence of undernourishment' and Indicator 2.1.2: 'The prevalence of moderate or severe food insecurity in the population'.

22.   Overall, resource mobilization for SDG-related work at regional level was found to be fragmented in nature. Mobilization was mainly headquarters based and diverted to supporting SDG activities. Insufficient resources are mobilized at country level.

3. Evaluation Question 2: SDG data quality

23. Key findings: FAO has continued to carry out technical assistance missions to conduct country data-gap assessments and mapping lists of national SDG indicators to identify and advise on the best data sources to use and upgrade for generating the SDG indicators. While the Global Indicator Framework was recently approved not only by the United Nations Statistical Commission (March 2017), but also by the United Nations Economic and Social Council (ECOSOC) (June 2017) and the United Nations General Assembly (July 2017), many countries rely on alternative/proxy indicators that are not comparable with the official SDG indicators.

Responding to new data demands

24. OCS is analysing the new demand associated with the 21 SDG indicators through direct country dialogue and/or the Regional and Country offices. To understand the degree of assistance Members need in relation to the SDG statistics, FAO conducted an SDG gap assessment, which showed that 72 percent required external assistance to produce SDG indicators on topics such as the Food Insecurity Experience Scale (FIES), land area under sustainable agriculture, women's ownership or secure rights to agricultural land, food loss, fish stocks and forest area.

25. By and large, FAO was able to respond to country needs in a responsive and timely manner when it came to awareness-raising, knowledge-sharing and capacity development for SDG indicator methodology and guidance.

26. The Evaluation collected feedback on the demand for SDG indicator assistance. The indicators where most assistance was required were: 2.3.2 on the income of small-scale food producers and 2.4.1 on agricultural sustainability (68 percent), 2.1.2 on food security (65 percent), 2.c.1 on food price volatility (65 percent), 2.1.1 on hunger (56 percent) and 2.3.1 on small-scale farm productivity (62 percent). Demand for assistance on the other indicators was below the 60 percent threshold. Members required the least capacity-development assistance on the legal indicators (SDG 14.b.1 on fishery access rights and 5.a.2 on women's land ownership rights).

Figure 1: High country demand for SDG indicator-related capacity development
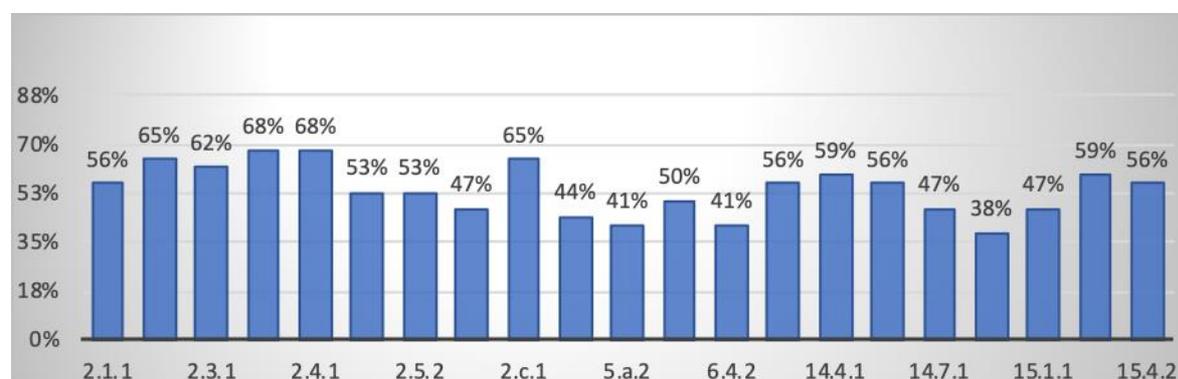
Source: Evaluation team survey, November 2019

27. Stakeholders from the data quality survey conducted as part of this evaluation (see Annex 5) believe that FAO's contribution significantly met the country needs for food security indicators (FIES and prevalence of undernourishment (PoU) - 55 and 63 percent respectively). Overall, 37 percent have perception that FAO's work does meet their demands related to all 21 SDG indicators, while only 29 percent consider it as met.

Synergies with FAO`s normative work

28. There are several points at which synergies could be realized between the production and dissemination of normative SDG-related work and the demand for new statistical-methodological work, including data quality assurance. This study uncovered potential synergies between the normative work carried out by OCS, FAO Statistics Division (ESS), the technical divisions, and the methodological demands associated with the SDGs. This was also true for the data-collection process. For example, FAO's technical divisions are required to include a number of technical recommendations in secondary data collection processes to ensure that the Organization's statistical outputs are high quality. It also found strong collaboration on the SDG front between the technical divisions, Strategic Programmes and statistical departments (ESS and OCS). However, there needs to be more regular follow-up of the normative and organizational work undertaken by OCS, as well as better-targeted coordination of its SDG and normative work.

29. The SDG indicator-related standard-setting, normative and methodological work served as a catalyst for the consolidation of inter-departmental collaboration. Still, staff said they expect to play a more active role in SDG coordination, due to the rise in country-level demand. More consistent engagement of the regional statisticians in the quality assurance process is also required.

30. Clear synergies were also found between FAO's programmes (at design level) and its statistical capacity development initiatives (Global Strategy for Improving Agricultural and Rural Statistics), the 50 by 2030 Initiative and the Agricultural Integrated Survey (AGRIS). As indicated in FAO's *Statistical Programme of Work* (SPW) 2018–2019, about 65 percent of activities involve cooperation between two or more technical divisions and/or Regional Offices. The majority of these activities relate to statistical output and capacity development within the SDG context.

Data quality, methodology development and standard setting

31. Data quality is at the heart of the SDG-related data-management process. The QAPS report (2016 and 2018) is an important tool created by OCS to collect information and feedback on FAO statistical activities for the SPW and to assess the compliance with the FAO corporate Statistics Quality Assurance Framework (SQAF). The 2018 edition includes a new section with more in-depth questions on SDG-related issues (where relevant) and additional questions exploring the production and dissemination of gender-disaggregated statistics.

32. The upgrade of Tier III indicator methodology showcases internal collaboration and the presence of synergic effects within the Organization when it comes to the SDG indicators. Other technical divisions seem to have made a critical contribution to the validation and development of methodological work on specific SDG indicators, especially with regard to SDG 2.

33.   FAO's activities are largely designed to respond to new SDG-related data demands from the Country and Regional offices.[10] In line with Evaluation Question 2, considerable effort was made by OCS on the endorsement, development and harmonization of statistical standards to meet the Organization's statistical requirements for new concepts and principles. This is an area in which FAO can do more to increase the value of its contribution. One focus of the FAO SPW 2018–2019 is statistical standards, mostly led by OCS and ESS. However, it would appear that the Regional Offices do not engage much in statistical standard development and the technical collaboration is more centralized.

34.   FAO has made good progress in developing new methodologies and guidelines on SDG indicators aimed at improving the coverage of Members' monitoring frameworks, the alignment of indicators with targets, the definition of terms and the development of metadata with relevant support to facilitate the process of monitoring and reporting.

35.   FAO has repeatedly tested and piloted indicator-related activities in a number of countries to assess the effectiveness, applicability and relevance of new methodologies, guidelines and proxies to different contexts. IDWG and the Technical Task Force have contributed to this process and a number of its statistical standards have been endorsed by the IDWG.

36.   FAO has been widely recognized for its considerable work on FIES (SDG indicator 2.1.2). This is the area where FAO has demonstrated a broad and diverse range of technical assistance building blocks encompassing the following key elements: (a) methodology and guidance for the indicator, data analysis and scientific methods; (b) a modular approach to data collection to be integrated into national household surveys; (c) the promotion of a cost-effective and feasible data-collection mechanism that can be adapted to almost any country context; (d) a global standard for measuring people's food security; (e) a replicable model that can be scaled up across regions; (f) data dissemination and publications (global and regional reports); and (g) a unique partnership scheme for collaborative work. FAO has provided FIES support to around 60 countries (FAO, 2018b). However, FIES data ownership and acceptance by national governments appears to be a serious challenge; only 75 countries had authorized FAO to publish these data (as of 2018).

37.   FAO has made efforts to develop data-processing and microdata-analytical tools for SDG indicators in a bid to capitalize on its collaborations with partners. For example, in collaboration with the World Bank's Computational Tools team, the Development Research Group, ESS created the free, standalone **ADePT-Food Security Module**[11] software, which aims to improve the quality, consistency and availability of food security statistics gathered from national household surveys. It has proved useful in producing indicator SDG 2.1.1 on the prevalence of undernourishment,[12] which assesses and monitors food security at national and subnational level.

38.   In June 2019, the Tier III upgrade process was completed. There is one Tier III indicator, SDG 14.c.1, for which FAO is a co-contributing agency with the United Nations Office of

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[10] Countries' needs vary according to their level of economic development, the soundness of their statistical system and their national political priorities. One important area of intervention in these initial stages of SDG implementation is data-gap assessment and the alignment of national indicators with the Global Indicator Framework. Only a few countries have completed a full mapping of data sources and data gaps for the SDG indicators.

[11] This activity was funded by the European Union through the Improved Global Governance for Hunger Reduction Programme.

[12] In 2011 and 2012, FAO's methodology for estimating the prevalence of undernourishment underwent extensive review. The revised methodology was introduced in the 2012 SOFI. Models describing the habitual dietary energy consumption of populations were reviewed and adjusted where national-level survey data were available.

Legal Affairs, Division for Ocean Affairs and the Law of the Sea (UN-DOALOS), UN Environment, the International Labour Organization and others. Importantly, the methodological work covered not only the reclassification from Tier III to Tier II, but also from Tier III to Tier I for some indicators (such as 2.5.1 on the conservation of food resources, 6.4.1 on water use efficiency, 14.6.1 on unreported, unregulated fishing, 14.7.1 on the value added of sustainable fisheries and 14.b.1 on access rights for small-scale fisheries) (Tier Classification for Global SDG Indicators, 2019). The forestry sector is one of the key areas of agricultural statistics where FAO is taking a clear lead. The Forestry department is responsible for the methodology and standard-setting for four SDG indicators: 15.1.1 on forest area, 15.2.1 on sustainable forest management and 15.4.2 (Mountain Green Cover Index), 2.4.1 on the forestry sub-indicator of agricultural sustainability and 15.4.1 on coverage by protected areas of important sites for mountain biodiversity.[13] Global FRA is the tool for data collection and reporting of SDG indicators 15.1.1 and 15.1.2. Countries are submitting standardized country reports in an on-line reporting and review platform containing many functionalities including facilitate reporting and increase transparency in reported data among other functionalities.

39.   Despite FAO's sterling efforts to support countries by providing appropriate and effective statistical guidance, standards and methodologies for SDG indicators, many are still not producing the requisite data. While countries are knowledgeable and have the methodological capacity and indicator specifications, gaps remain in terms of data processing and interpretation.

Partnership for development of methodology

40.   FAO was expected to capitalize on its partnerships with co-contributing agencies to develop methodologies, but this was not always possible. FAO is working with a number of international organizations, particularly in relation to SDG indicators 15.3.1 (the proportion of land degraded over total land area), 5.a.2 (women's land ownership rights), 1.5.2 (disaster economic loss), 6.4.2 (on freshwater stress) and 6.4.1 on the change in water-use efficiency over time, with the United Nations Convention to Combat Desertification (UNCCD), Germany's Gesellschaft für Zusammenarbeit (GIZ), the United Nations Office for Disaster Risk Reduction (UNISDR) and UN Environment. A collaboration with the World Bank on SDG indicator 2.1.2 on food access and indicator and 5.a.1 on women's access to land, is under way to enable the collection of relevant data through the World Bank's Living Standards Measurement Survey. Crucial cooperation was noted with UN Environment on indicator 12.3.1 on food loss and waste. The tools developed by FAO for SDG 15.3.1 on land degradation have been used and adopted by partner contributing agency United Nations Conference on Trade and Development (UNCTAD).[14] Overall, collaboration was found to be on an ad-hoc basis and not necessarily strategic.

41.   There was evidence of expanding partnerships with research institutions and academia to promote and strengthen access to new tools, innovative solutions and the improvement of methodological work in agriculture statistics for the achievement of the SDGs. The methodology for SDG 2.4.1 on agricultural sustainability, in particular, was improved by the involvement of academia and research institutions. For example, in Asia and the Pacific, the use of remote sensing and geographic information system data was promoted in close

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[13] Not an FAO custodian indicator.

[14] Good Practice Guidance for Assessing UN Sustainable Development Goal Indicator 15.3.1: Proportion of land that is degraded over total land area.

collaboration with universities and agriculture research institutions. Meanwhile, examples of FAO initiatives have been shared in learning modules and as practical case studies for international students. This contributes to the Organization's positioning as knowledge-based custodian of the SDGs. Limited evidence was found of FAO partnerships with the private sector when it came to SDG reporting, however, as companies could play a great role in providing data and information for certain SDGs.

Gender consideration in the development of methodologies for the SDG indicators

42.   FAO's designation as custodian agency for 21 SDG indicators was a sign of international confidence. It is also custodian for indicator 2.1.2 on the prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES). At the global level, considerable effort is being made to provide sex-disaggregated data for this indicator. However, FAO has yet to fully determine (based on how countries have administered the sex-disaggregated questions in their data collection) whether it is possible to disaggregate national data by sex, as some countries do not conduct such analysis.

43.   The placement of gender officers in Regional Offices and support for the gender focal-point network are helping to meet the challenges of multidimensional statistical work under the Organization's SDG custodianship. However, FAO needs to enhance technical officers' capacity to mainstream gender in their statistical work on SDGs. A more focused approach is also needed to integrate a gender perspective into SDG implementation and monitoring projects, both at regional and country level. Importantly, FAO's Programme Evaluation Report 2019 notes that though FAO's Gender Equality Policy remains relevant to its mandate and strategic goals, it should be updated to reflect external developments, such as the SDGs.

44.   There have been successful SDG-related awareness-raising projects and advocacy events in a number of countries (in the REU and the Regional Office for Africa [RAF] regions) to support the integration of the gender mainstreaming process into FAO's statistical work. REU's regional strategy now fosters gender mainstreaming and advocacy. It would seem that gender-sensitive interventions are more at an awareness-raising level, however, than embedded into core statistical interventions and data disaggregation in a way that contributes to equity and equality considerations for effective governance and decision-making.

45.   Some important partnership mechanisms were uncovered during the evaluation, such as FAO's collaboration with Germany's Gesellschaft für Internationale Zusammenarbeit (GIZ) on a legal assessment tool and methodology for SDG indicator 5.a.2, on the proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control. This is a new initiative, started in the South Caucasus. FAO is also working with the World Bank and UN-Habitat (custodians for SDG indicators on land ownership) to develop questions for data-collection mechanisms and a handbook to support countries in their data-collecting efforts.

46.   FAO also hosts a number of important databases containing sex-disaggregated data such as FAOSTAT, the global information system on water and agriculture, AQUASTAT, Employment data by gender are collected by FIA, and the Gender and Land Rights Database. However, these databases are not well known to many FAO professionals or their external counterparts. The same goes for the methodologies FAO has developed or

helped to develop for collecting gender- and women-specific data, such as Minimum Dietary Diversity for Women (MDD-W). While these initiatives are relevant, they have not been well communicated.

4. Evaluation question 3: Capacity Development

47. Key findings for evaluation sub-questions regarding capacity development are pointed towards that, many countries have prioritized building capacity to strengthen their statistical systems so as to produce reliable data. There is limited mechanism in place to monitor the increase in demand from Members associated with the SDG indicators. However, countries (such as those in Asia and the Pacific) use international forums, such as the Asia-Pacific Regional Conference and the Asia and Pacific Commission on Agricultural Statistics, to voice their needs for technical assistance from FAO and its partners.

48. FAO provided the majority of support through technical workshops and training based on particular requests from countries. It offered support to Members in aligning their national plans/monitoring and reporting frameworks with the SDG indicators, though the support itself varied from country to country. This was largely due to the process of developing or completing a national list of statistical indicators based on availability indicator data, proxy indicators and/or complementary national indicators/sub-indicators, the development of roadmaps for each indicator and the identification of gaps.

49. Feedback suggested that, in the SDG context, FAO needs to liaise with a broad spectrum of line ministry officials (beyond the traditional FAO partners) on the main elements of sustainable agriculture, cross-cutting issues and a universal framework for sustainable development.

50. The localization of food and agriculture-related SDG indicators was one the issues observed at national level when it came to data collection and compilation in the sustainable development context. This was done primarily based on national statistical capacities and the resources available, taking into account the feasibility of calculating and computing them. Hence, in most cases, Tier I indicators were selected for inclusion in national SDG indicator lists. This suggested that more efforts should be directed towards the Tier II SDG indicators to expand the scope of the localization and ensure the comparability and monitoring of Tier II SDG indicators. Country missions revealed that many countries rely on alternative or proxy indicators that are not comparable with the official SDG indicators.

51. The fragmented nature of Members' requests does not allow for proper planning of capacity-development activities. The anticipated challenges of capacity development were generally assessed ahead of any activities based on previous experience in the country in question, lessons learned and consultations with FAO Representatives, national focal points and regional statisticians. Although the bottlenecks revealed by this exercise were considered in any new project proposals and interventions, capacity-development plans are still somewhat ad hoc. There is a lack of robust interaction and systematic consultation on country/region-specific priorities and targeted actions with the beneficiary governments.

# 5. SDG indicator 2.4.1: Proportion of agricultural area under productive and sustainable agriculture

52.   FAO is custodian of indicator 2.4.1 on the proportion of agricultural area under productive and sustainable agriculture. Its calculation requires measuring both the land area being used for productive and sustainable agriculture and the land area being used for agriculture generally. It is a complex indicator, previously classified as Tier III, and it incorporated 11 sub-indicators. At the sixth meeting of IAEG-SDG in November 2017, it was submitted for Tier upgrade.

53.   The indicator reflects multiple dimensions of sustainability. It captures the main issues expressed in SDG target 2.4: resilience, productivity, ecosystem maintenance, adaptation to climate change and extreme events and soils.[15] Following the development of an approved methodology, on 27 November 2018, the indicator was reviewed at the eighth IAEG-SDG meeting and it was reclassified from Tier III to Tier II.

54.   Indicator 2.4.1. was proposed by FAO and developed in a multi-stakeholder process involving statisticians and technical experts from countries, international organizations, national statistical offices, civil society and the private sector. The indicator development process benefited from the internal contributions of FAO's technical divisions on 11 thematic aspects associated with productivity, profitability, resilience, land and water, decent work and wellbeing so as to capture the multi-dimensional nature of sustainable agriculture. The methodology was improved by drawing on the results of the consultation and suggestions provided by state and non-state stakeholders.

55.   FAO's statistical departments support countries in developing farm-based surveys as an appropriate tool for generating agricultural statistics. The measurement instrument for productive and sustainable agriculture indicators – farm surveys – will give countries the flexibility to identify priorities and challenges within the three dimensions of sustainability – economic, environmental and social. The revised methodology[16] for this indicator considers the farm-based survey to be main data-collection instrument for all sub-indicators, but also discusses the potential use of a combination of different data sources as an alternative, thus creating scope for flexibility and adaptation.

56.   FAO promotes in general a particular focus on agricultural holdings and agricultural land area as an important strategic vision when it comes to new methodologies and the use of a single instrument for data collection. This seems very much in line with Members' capacity and needs. Whenever possible, it is linked with country efforts to develop farm surveys and to benefit from FAO's work on the Agricultural Integrated Survey (AGRIS) programme. However, it should be noted that although farm surveys are good for capturing the economic dimension of sustainability, they currently have difficulties capturing the environmental and social outcomes, which are equally critical in the sustainable development context.

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[15] SDG 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.
[16] An earlier version of the methodology suggested a combination of different data collection instruments to monitor the various sub-indicators.

57. Effort is being made to finalize indicator-specific documentation, undertake cognitive testing[17] and conduct in-depth piloting to be prepared for country roll-out. However, FAO has yet to fully determine the potential and feasibility to scale up the piloted model as a practical data-collection mechanism to be adopted by national statistical organizations.

58. From 2015 to 2018, FAO, with the support of the Global Strategy to improve Agricultural and Rural Statistics (GSARS), spearheaded the work to establish a methodology for measuring progress on achieving target 2.4. Methodological work for SDG indicator 2.4.1 included the capture of preliminary pilot studies[18] and the cognitive testing of survey questionnaires for future use by Members. The indicator was proposed by FAO and thoroughly discussed with stakeholders to achieve consensus on its composition and methodological specifications. It is one of the core SDG indicators under FAO custodianship covering the multi-dimensional aspect of sustainable agriculture. Discussions with national authorities and statistical institutions explored the difficulties this complex indicator poses in terms of data collection and computation at national level, especially for the least developed countries and those developing countries with poor statistical infrastructure and scant resources. Though countries had the awareness, knowledge and specifications required to compile the indicator, it proved quite difficult for many of them, as their statistical capacity had not been taken into account.

Figure 2: Need for capacity development on SDG 2.4.1 indicator

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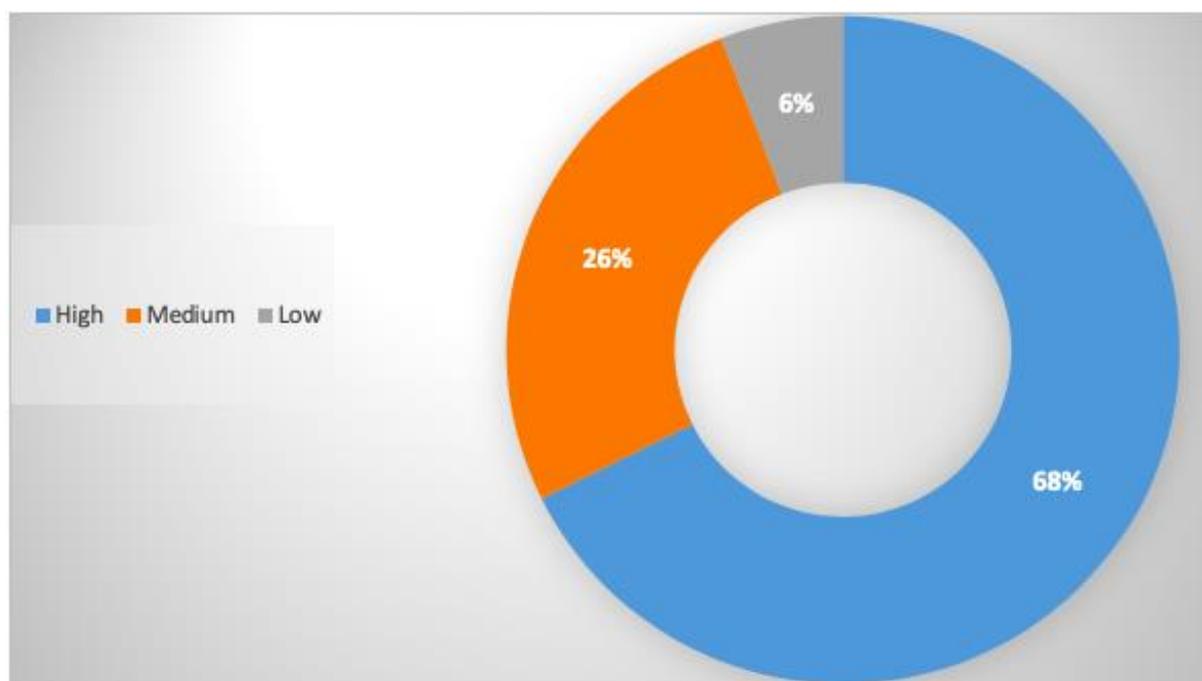
[17] The cognitive test was conducted to fine-tune the design of the questionnaire from a flow and comprehension perspective and to assess whether the questions were sufficient and fully understood by a limited number of heterogeneous respondents. It was aimed at assessing the soundness of the survey questions vis-à-vis the four elements that constitute a potential source of response error.

[18] Bangladesh, Ecuador, the Kyrgyz Republic, Rwanda and Mexico.

User survey results[19] show high country demand for assistance on SDG 2.4.1, but that FAO only managed to highly meet the needs of 17 percent of respondents. The lion's share, 43 percent, felt FAO is unable to meet demand, while 34 percent said FAO was able to meet their need to some extent. Still, half of users considered FAO's contribution in this regard to be low level.

59. At country level, Bangladesh was one of the countries[20] engaged in piloting the indicator (testing the designed methodology as well as the agricultural survey module of SDG indicator 2.4.1) and contributing to the methodological improvement. Here, it is important to mention that the conclusion of the test results states that, "according to the methodology, the sub-indicators were calculated but the process is very complicated" (FAO, 2018c). The Bangladesh Bureau of Statistics stands ready to conduct a full-scale survey to collect and calculate the SDG 2.4.1 indicator if appropriate financial resources are forthcoming.

60. The work done on indicator SDG 2.4.1. represents a unique joint effort in synergic interdepartmental relations. It is the result of high-level concentration on methodological, conceptual, data collection and processing endeavours, both in terms of policy development and technical statistical work. For example, the forestry dimension of indicator 2.4.1 is captured thanks to Forestry, ESS and OCS inter-departmental collaboration. Despite the huge amount of work done, however, the technical units expressed some concern about the risks associated with sub-indicator data-collection practices in some countries.

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[19] The survey was undertaken within the scope of the *Evaluation of FAO's work statistical work* in November 2019.
[20] Pilot desk studies were carried out in Bangladesh, Ecuador, the Kyrgyz Republic and Rwanda in the last quarter of 2017 and in Belgium in early 2018.

6. Conclusion

61.   The most noted achievement of FAO's contribution to the 2030 Agenda is its work as custodian of 21 indicators and the completion of Tier III upgrade of the SDG indicators and the advancement of methodological development, standard setting and technical support to Members. The Office of the Chief Statistician has made a positive contribution to technical divisions' work on the SDG indicators to improve the quality of data and augment collaboration. However, OCS has limited financial and human resources for effectively leading the governance and coordination process to provide country-level support.

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