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AGENDA ITEM 3

Statistical Capacity of African countries to monitor the FAO-relevant SDG indicators: the results of the SDG Gap Assessment survey

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SUMMARY

This paper presents the results of the “Statistical Capacity Assessment for the FAO-relevant SDG Indicators 2018/19” survey for the African countries. The objective of the assessment is to measure countries’ statistical capacity to monitor and report the Sustainable Development Goals (SDG) indicators for which the Food and Agriculture Organization of the United Nations (FAO) is the custodian agency. The survey includes questions on national coordination mechanisms for SDG reporting, countries’ capacity to produce and disseminate the required statistical data as well as technical and financial assistance needs.

A total of 31 countries in Africa (57%) submitted their questionnaires, and the survey results showed that:

- The majority of African countries do not regularly conduct most of the key data collection activities that provide the main data sources to compile the SDG indicators related to food and agriculture.
- The data collection activities which have not been carried out recently are not yet planned to be carried out in the near future. This puts a continuing pressure on the compilation of the SDG indicators which are heavily relying on such data collection vehicles.
- Most of the countries suffer from weak coordination and/or information sharing among agencies at the national level and outside with international custodian agencies. Moreover, most of the countries were not able to identify an SDG-specific national focal point for almost indicators under FAO custodianship.
- Finally, 87% of African countries report that they will require some form of assistance to produce SDG indicators under FAO custodianship.

I. INTRODUCTION

The Office of Chief Statistician (OCS) at FAO, as the responsible office for the Organization’s work to monitor SDG indicators under FAO custodianship, coordinates the development of methods and standards for those indicators, and the provision of technical assistance and capacity development to member countries. In order to implement its tasks effectively and efficiently by providing comprehensive guidance to member countries and FAO technical units in charge of the compilation of SDG indicators, the OCS decided to assess countries’ statistical capacity on SDG indicators related to food and agriculture.

Before developing the survey, recent studies on statistical capacity assessment were carefully reviewed (e.g. AfDB, 2017; ESCAP, 2018; PARIS21, 2018; UNSD, 2017a and 2017b). In summary, the studies conducted by various organizations guided the overall formulation of the assessment as well as its survey instrument. However, those studies did not necessarily focus on agriculture-and-food-relevant statistics and/or SDG indicators. Therefore, they were too general or not comprehensive enough to extract lessons about the compilation the FAO-relevant SDG indicators. On the other hand, high geographical coverage and consistent information coming from various data sources are required for meaningful results. For international comparability, a standard questionnaire addressed to all countries in the world was therefore crucial.

The Statistical Capacity Assessment for the FAO-relevant SDG Indicators survey aimed to provide insights about the strengths and weaknesses of the national statistical systems worldwide concerning their capacity to monitor and report the SDG indicators under FAO custodianship (Table 1). The results intent to assist FAO-HQ and decentralized offices in designing targeted interventions and mobilizing resources to support countries in producing the FAO-relevant SDG indicators. While the countries with weak statistical systems could be supported effectively and efficiently, the countries with strong statistical systems might be useful to identify the best practices and participate in south-south cooperation activities.

Table 1: The list of SDG indicators for which FAO is the custodian agency

<p>2 ZERO HUNGER </p> <p>2.1.1 Hunger</p> <p>2.1.2 Severity of food insecurity</p> <p>2.3.1 Productivity of small-scale food producers</p> <p>2.3.2 Income of small-scale food producer</p> <p>2.4.1 Agricultural sustainability</p> <p>2.5.1.a Conservation of plant genetic resources for food and agriculture</p> <p>2.5.1.b Conservation of animal genetic resources for food and agriculture</p> <p>2.5.2 Risk status of livestock breeds</p> <p>2.a.1 Public Investment in agriculture</p> <p>2.c.1 Food price volatility</p>	<p>5 GENDER EQUALITY </p> <p>5.a.1 Women's ownership of agricultural land</p> <p>5.a.2 Women's equal rights to land ownership</p>	<p>6 CLEAN WATER AND SANITATION </p> <p>6.4.1 Water use efficiency</p> <p>6.4.2 Water stress</p>
	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION </p> <p>12.3.1 Global food losses</p>	<p>14 LIFE BELOW WATER </p> <p>14.4.1 Fish stocks sustainability</p> <p>14.6.1 Illegal, unreported unregulated fishing</p> <p>14.7.1 Value added of sustainable fisheries</p> <p>14.b.1 Access rights for small-scale fisheries</p>
	<p>15 LIFE ON LAND </p> <p>15.1.1 Forest area</p> <p>15.2.1 Sustainable forest management</p> <p>15.4.2 Mountain Green Cover</p>	

The survey questionnaire was organized in various sections to collect information on the national coordination mechanisms for SDG reporting, current food and agriculture data availability, plans for filling data gaps, and needs for technical and financial support. The target respondents were the National Coordinator for SDG

Monitoring or the SDG focal point nominated by the Director General of the National Statistics Office in each country. The data collection was conducted by the OCS and the questionnaire was disseminated in December 2018 to 195 countries, out of which 111 submitted their questionnaires (57%) as of May 2019.

This paper describes the overall data collection process, provides the aggregate results for the African countries which participated in the assessment, and lists lessons learned and suggests improvements for future assessments. Selected results at the country level are also presented in the Annex of this report. More detailed country profiles (in English, French and Spanish) can be obtained through the FAO SDG Portal (<http://www.fao.org/sustainable-development-goals/en/>) by the end of October 2019.

II. THE SCOPE OF THE ASSESSMENT

This section presents the details on the questionnaire design, the list of countries, response rate, type of respondents, timeline, survey management, and data verification and quality.

II.1 Questionnaire

The OCS developed the questionnaire in consultation with the FAO SDG focal points, and made it available in all official UN languages (Arabic, Chinese, English, French, Russian, and Spanish).

The questionnaire is organized in five sections:

- 1. Section 1 – Cover:** Presents the purpose of the assessment, collects the contact details of the respondent and of the National Coordinator for SDG Monitoring and collects information on the national coordination mechanisms for SDG reporting.
- 2. Section 2 – Instructions:** Provides the list of relevant indicators, presents information on questions types and how to fill in the questionnaire.
- 3. Section 3 – SDG indicators reporting and needs for assistance:** Collects information on SDG indicators under FAO custodianship, e.g. whether it is already compiled, or, if not, whether there are plans to compile it. The needs for assistance are also assessed in this section.
- 4. Section 4 – Data availability and statistical methods:** Collects information on the overall capacity of the country to produce statistics on agriculture, natural resources, household consumption, and economic accounts for agriculture. These data constitute the basis for the compilation of SDG indicators under FAO custodianship.
- 5. Section 5 – Respondent feedback:** Contains a short user survey to assess the quality of the questionnaire and identify areas for improvement.

The questionnaire is composed mainly of closed-ended questions and some open-ended questions for providing further details and comments. Skip rules are defined throughout the questionnaire to help reduce the burden on the respondents. The respondents are requested to answer all questions as relevant.

An electronic questionnaire (macro-enabled Excel file) was used for the assessment. Microsoft Excel was preferred in order to (i) use a tabular format; (ii) automatize the data entry; (iii) avoid Internet connection problems in some countries. Using a tabular format was crucial to minimize the burden on the respondents so that they do not need to read the same questions multiple times for different indicators and domains. Besides, the macro-enabled Excel file is well suited for automatized data entry purposes. The questionnaire was also prepared in Microsoft Word as an alternative for countries having difficulties (e.g. firewall problems which might be resulted from the macro-enabled Excel file).

A pilot survey was conducted prior to the actual data collection on 26-30 November 2018 during the “Regional Course on SDG Indicators under FAO Custodianship” at the UN Statistical Institute for Asia and the Pacific (SIAP). The countries involved in the pilot are: Afghanistan, Bhutan, India, Iran, Lao PDR, Malaysia, Maldives, Mongolia, Pakistan, Papua New Guinea, Republic of Korea, Samoa, Thailand, Turkmenistan and Uzbekistan. In

addition, Egypt volunteered to be involved in the pilot. The questionnaire was revised after the pilot and disseminated to the countries in December 2019.

II.II Countries and Response rate

UN member countries were considered as the target population. Except the countries for which the relevant contact details were not found, the questionnaire was sent to all UN member and observer countries (195 in total).

As of May 2019, 111 out of 195 (57%) countries submitted their questionnaires. Out of 54 countries in Africa, 31 countries in the region submitted their questionnaires as of May 2019 (Table 2). Therefore, the response rate in Africa is 57%.

Table 2: The list of countries in Africa which submitted their questionnaires

AFRICA (31 countries out of 54)			
No	Country	No	Country
1	Algeria	17	Mauritius
2	Angola	18	Mozambique
3	Botswana	19	Namibia
4	Burundi	20	Niger
5	Cabo Verde	21	Sao Tome and Principe
6	Chad	22	Senegal
7	Congo	23	Seychelles
8	Côte d'Ivoire	24	Sierra Leone
9	Equatorial Guinea	25	Somalia
10	Eswatini*	26	South Sudan
11	Guinea	27	Sudan
12	Kenya	28	Uganda
13	Liberia	29	United Republic of Tanzania
14	Madagascar*	30	Zambia
15	Malawi	31	Zimbabwe
16	Mali		

* Eswatini and Madagascar filled out only the first section of the questionnaire.

II.III Respondents

The target respondents for the survey were the National Coordinator for SDG Monitoring or the SDG focal point nominated by the Director General of the National Statistics Office in each country. The United Nations Statistics Division (UNSD) is the source of information for the contact details of the National SDG Coordinators. The questionnaires were sent to the National Statistics Offices if the national coordinators or the SDG focal points have not been assigned for the countries.

Since the questionnaire covers a wide range of statistical domains, the main respondents/focal points may not have all the relevant information. However, they were asked to consult with their colleagues and other relevant national agencies in charge of producing SDG indicators in order to complete the questionnaire.

FAO regional offices were informed about the assessment before the launch of the questionnaire and FAO country offices and the regional and/or sub-regional statisticians were copied on all communications.

II.IV Timeline

The questionnaires were sent by email on 14 December 2018. Two reminder emails were sent with extended deadlines to increase the response rate. The last extended deadline was 20 February 2019. However, many countries requested additional time to coordinate the data collection with different agencies/institutions in their countries. Eventually, the final submission was done in May 2019.

II.V Survey management

An HQ helpdesk and an inbox (SDG-Questionnaires@fao.org) were created to facilitate the survey management. The FAO regional and country offices, and the regional and sub-regional statisticians supported the overall data collection and follow-ups.

The HQ Help Desk organized the work by regions and focal points within the HQ help desk were assigned for those regions to monitor the status and quality of the questionnaires received from the countries.

The survey monitoring covered the following tasks:

- a. Verifying if at least one of the contacts received the email with the questionnaire by following up the undeliverable messages received. Searching for valid contact details through the FAO country offices, FAO regional and sub-regional statisticians.
- b. On a daily basis, checking the emails received and assisting countries to complete their questionnaires without inconsistencies and missing answers.
- c. Following up no-response countries to increase the response rate.

In order to improve the overall response rate, support was received from different divisions at HQ and the field, at the country and regional levels:

- i. The regional statisticians followed up with the countries through their national contacts.
- ii. FAO colleagues going to missions to any of the target countries were informed about the status of the questionnaires beforehand so that they could follow up with the countries during their missions.
- iii. Briefings given at HQ to FAO colleagues in decentralized offices were used to search for alternative contacts and support from the countries.

II.VI Data quality and verification

All questionnaires received were reviewed and classified into three categories based on the number of missing answers and inconsistencies linked to the questions with skip rules:

1. Low quality: Questionnaires with a very large number of missing answers and inconsistencies
2. Medium quality: Questionnaires with many missing answers or with inconsistencies
3. High quality: Questionnaires with few or no missing answers or with few or no inconsistencies

The countries with low and medium quality questionnaires were followed up further for their revision (by filling/clarifying missing answers and by rectifying inconsistencies). Many countries revised (more than once) their questionnaires after those follow-ups which enhanced the data quality.

After data verification, missing answers and inconsistencies were identified and the actions below were taken:

- i. Deleting answers to questions that should have been skipped.
- ii. Imputing answers for some key filtering questions based on the responses given to the follow-up questions.

III. THE RESULTS FOR AFRICA

This section presents the regional aggregates for Africa and the results are based on the African countries that submitted their questionnaires (Table 2). The results are grouped by three main domains:

- I. National coordination for SDG monitoring and reporting
- II. SDG indicators reporting and needs for assistance
- III. Data availability and needs for assistance

III.I National coordination for SDG monitoring and reporting

National coordination mechanisms for SDG monitoring and reporting play a key role to improve the data flows within and between national and international statistical agencies as well as the data sharing among international organizations and with the public.

Out of the 31 countries in Africa which participated in the assessment:

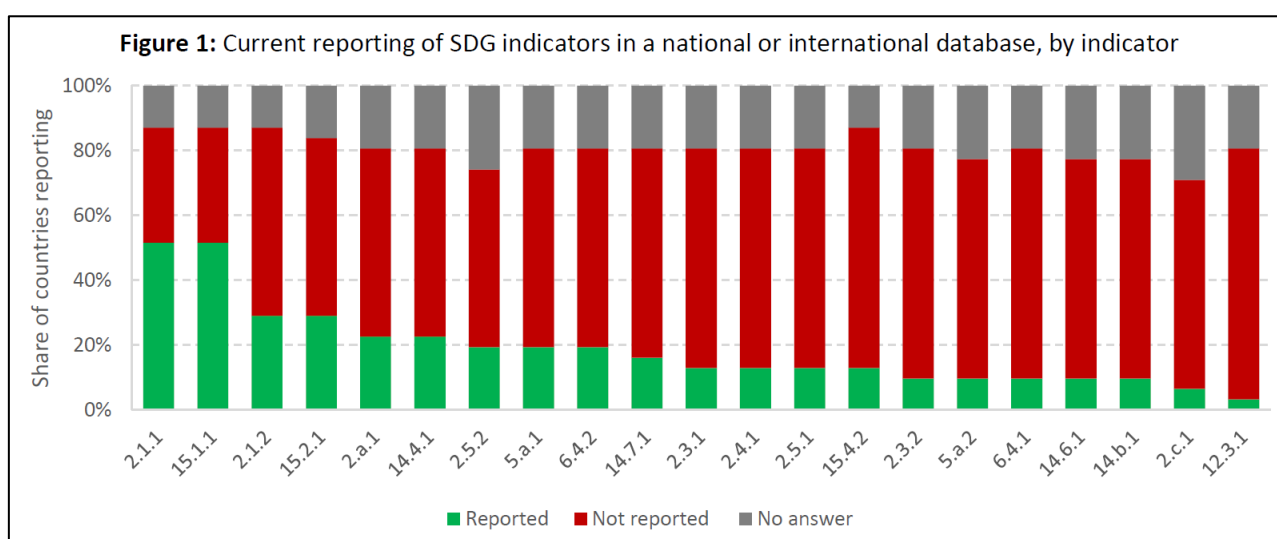
- A national committee responsible for the coordination of SDG monitoring and reporting has been established in 22 countries.
- A national coordinator for SDG monitoring and reporting has been nominated in 19 countries.
- However, most of the countries were not able to identify an SDG-specific national focal point for almost all the indicators under FAO custodianship.

Therefore, around 70% of the reporting countries in Africa established a national committee, while only around 60% have an assigned national coordinator for SDG monitoring and reporting. Yet, more efforts need to be done to identify appropriate national focal points for specific indicators.

III.II SDG indicators reporting and needs for assistance

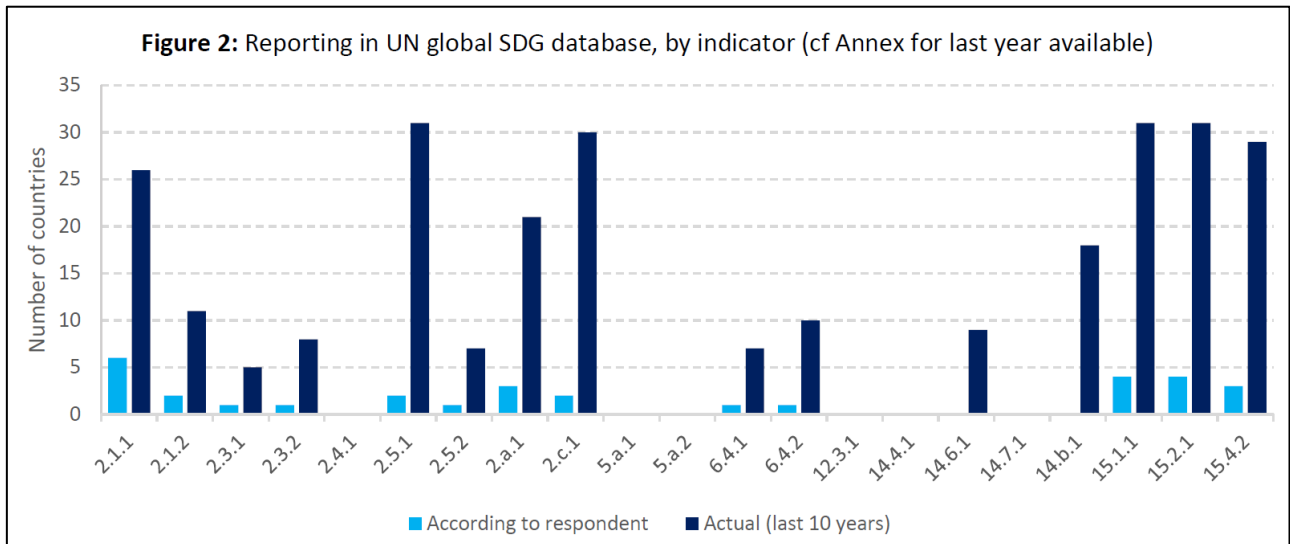
The results in this section summarize current reporting status of the FAO-relevant SDG indicators and plans for the compilation of the indicators in the short/medium term.

Figure 1 displays the current reporting status of the indicators in national or international databases. More than 50% of the African countries report that indicators 2.1.1 and 15.1.1 are currently published in national or international databases. On the contrary, reporting rates on the other indicators are less than 30%. The recent updates in Tier classifications could explain some of these findings. Since Tier III indicators are still under methodological development, countries could start compiling the indicator only after the indicator is classified as Tier II; i.e. after the methodology or standard for the indicator is internationally established. Indicators 2.3.1, 2.3.2, 2.4.1, 12.3.1 and 14.7.1 have all been updated as Tier II just before or even after the data collection has started¹, which is in line with the low data reporting share (below 20%) for those indicators.



¹ Indicators 2.3.1, 2.3.2, 2.4.1 and 12.3.1 were updated to Tier II from Tier III level on October 2018, while indicator 14.7.1 updated on April 2019 by the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs).

Figure 2 presents a comparison between answers to the question on the current publication status of the indicators and the actual available data (for the last 10 years²) in the UN Global SDG Indicators Database (<https://unstats.un.org/sdgs/indicators/database/>)³. Most of the countries did not report that they publish the indicators although data are available in the UN Global SDG Indicators Database. This could be linked to various problems, which include (i) weak coordination and information sharing among the national agencies, (ii) weak coordination and information sharing between national and international custodian agencies, and (iii) slow handover of the indicator compilations from international organizations to national agencies. These important issues require more investigation to improve the overall SDG reporting process.



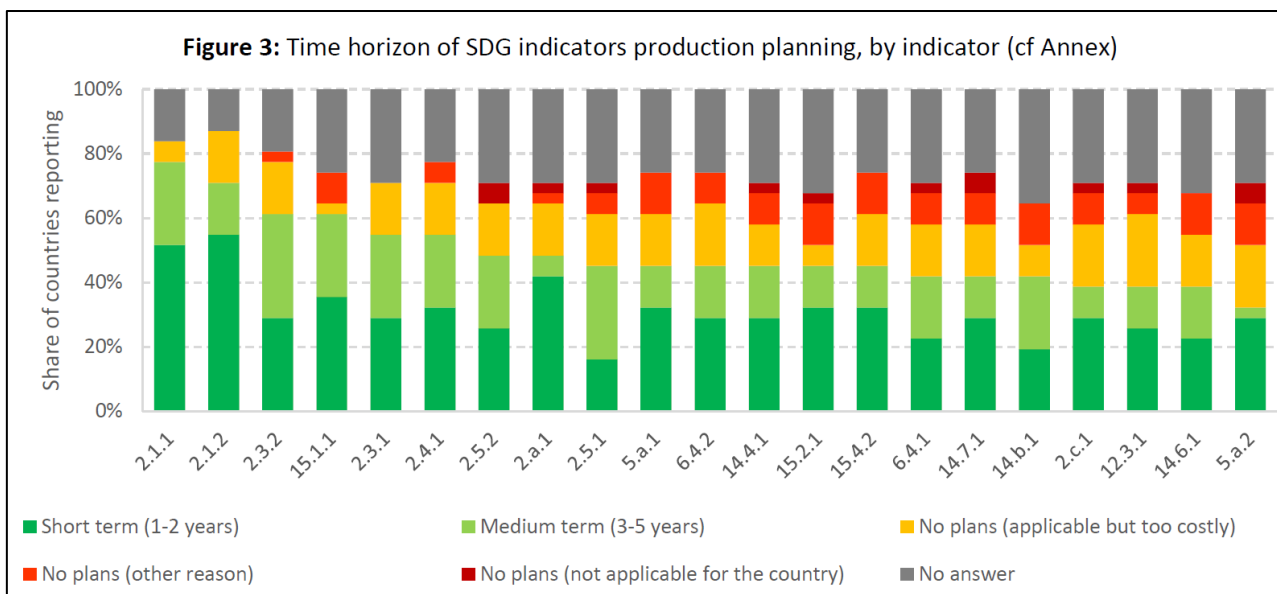
Although the indicators are currently published, the availability of data publication plans for future is crucial to ensure sustainable data reporting while minimizing data gaps. In this regard, indicator 2.1.1 is reported to be currently published and the African countries show high interest (77%) in its continuous publication for the next 5 years (Figure 3)⁴. At the same time, for the indicators which are not currently being published, the short (1-2 years) and medium (3-5 years) term plans could still give hints about the progress towards the 2030 Agenda for Sustainable Development. Although over 70% of the countries are not currently reporting indicator 2.3.2, over 60% of the countries are planning to produce it in the short and medium terms. Similarly, indicators 6.4.1, 12.3.1 and 15.4.2 indicate a potential progress in being reported more in the future; around 40% of the countries are planning to produce those indicators within 5 years' time.

The United Nations Statistical Commission in its decision 47/101(i) declares that “global indicators proposed are intended for global follow-up and review of the 2030 Agenda for Sustainable Development and are not necessarily applicable to all national contexts” (ECOSOC, 2016). In this regard, the indicators which are not applicable for the countries should be highlighted and considered separately. Figure 3 shows that indicators 14.7.1, 5.a.2 and 2.5.2 are reported to be “not applicable” to around 5% of the African countries. Besides, more than 30% of African countries are not planning to produce indicators 2.c.1, 5.a.2, 12.3.1 and 14.7.1, mostly because those indicators are too costly to produce. Both applicability and current/future availability of the indicators could give information on the countries' overall statistical capacity to compile the indicators.

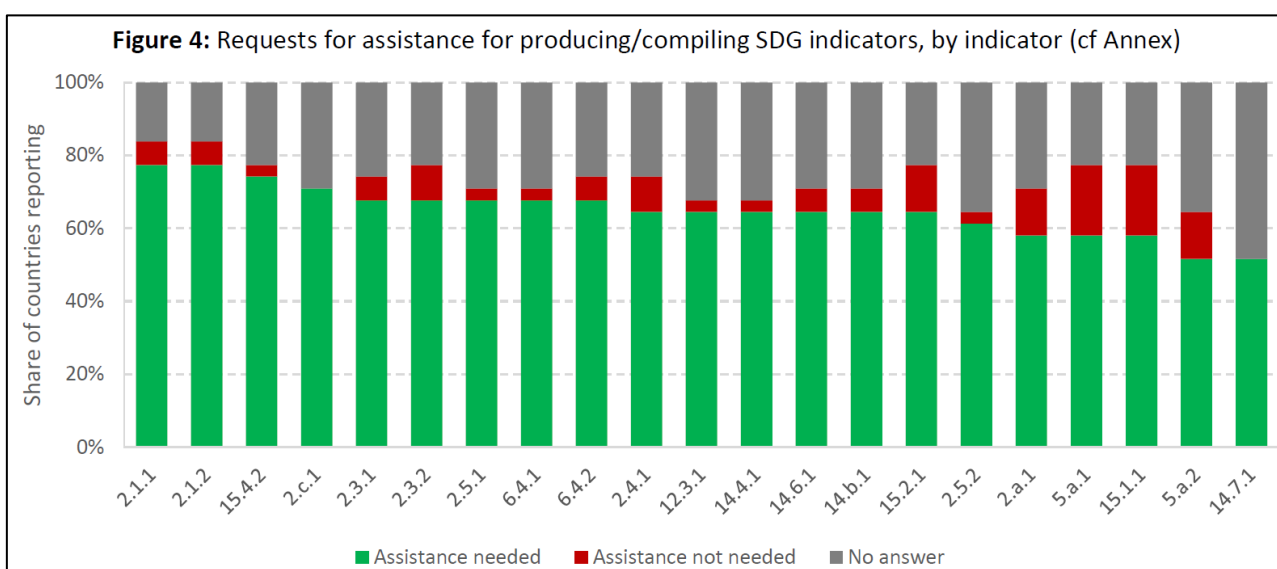
² For data availability figures in the last 5 years, refer to Annex - Table A.1. Note that there is no significant difference between the last 5 and 10 years.

³ See Annex - Table A.1 for details on the availability of data at UN Global SDG Indicators Database, per country, by indicator.

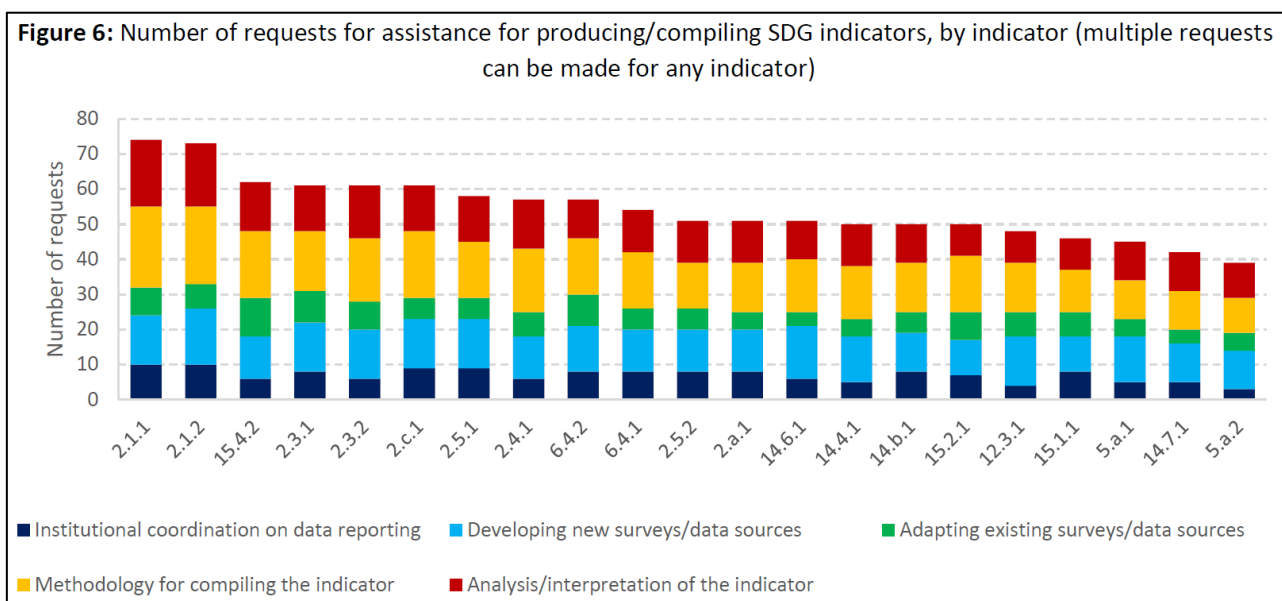
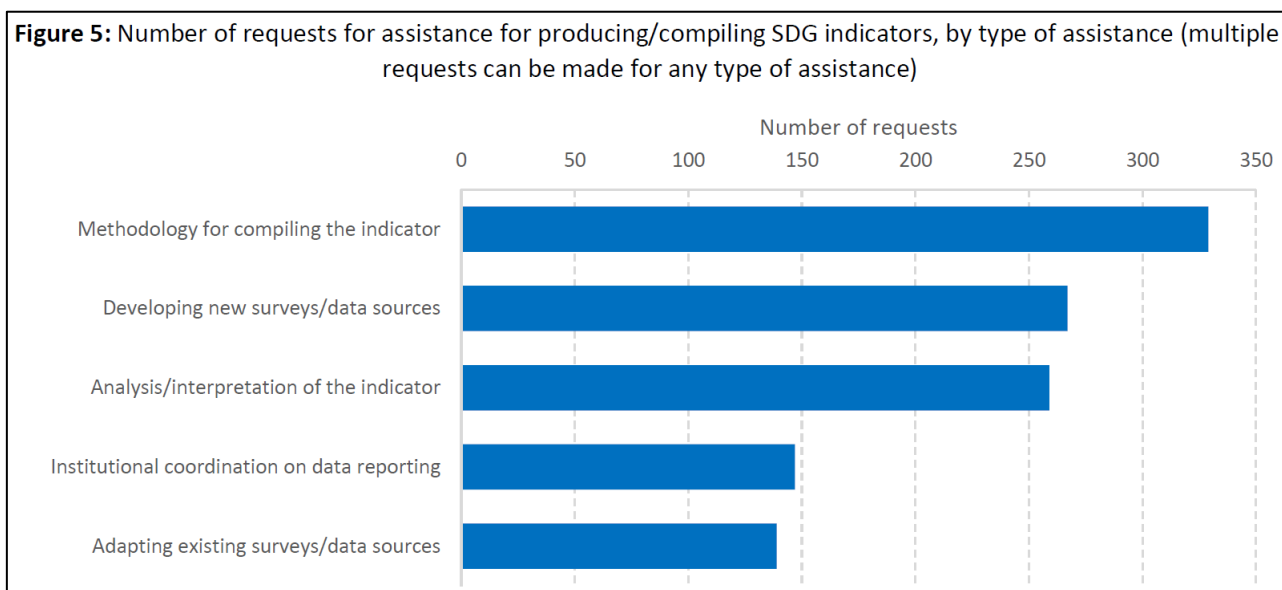
⁴ See Annex - Table A.2 for details regarding the plans to produce indicators, per country, by indicator.



Developing countries’ statistical capacity especially depends on the availability of internal and/or external resources as well as external technical assistance to maintain currently used data sources, enhance the quantity and quality of data required for the publication of SDG indicators, and improve the institutional settings. The dependency on external assistance and additional resources is an important indication of the capacity of countries’ statistical systems. Figure 4 and Table A.3 in Annex show that most of the countries in Africa request technical assistance for producing/compiling indicators, while 42% of African countries request assistance for all indicators. Overall, 87% of African countries report that they will require some form of assistance to produce SDG indicators (at least two) under FAO custodianship. Although indicators 2.1.1 and 2.1.2 are currently reported and planned to be produced in the future, the highest numbers of assistance requests are also observed for those indicators. Given these capacity development needs, technical assistance requests should therefore be taken very seriously as they might be binding for future reporting by the national statistical institutions and/or relevant national agencies.



If the type of technical assistance is considered, African countries request higher assistance on (i) methodology for compiling the indicators and applying it to the national context, (ii) developing new surveys/data sources, and (iii) analysis/interpretation of the indicators (Figure 5). The distribution of assistance type for each indicator is displayed in Figure 6.

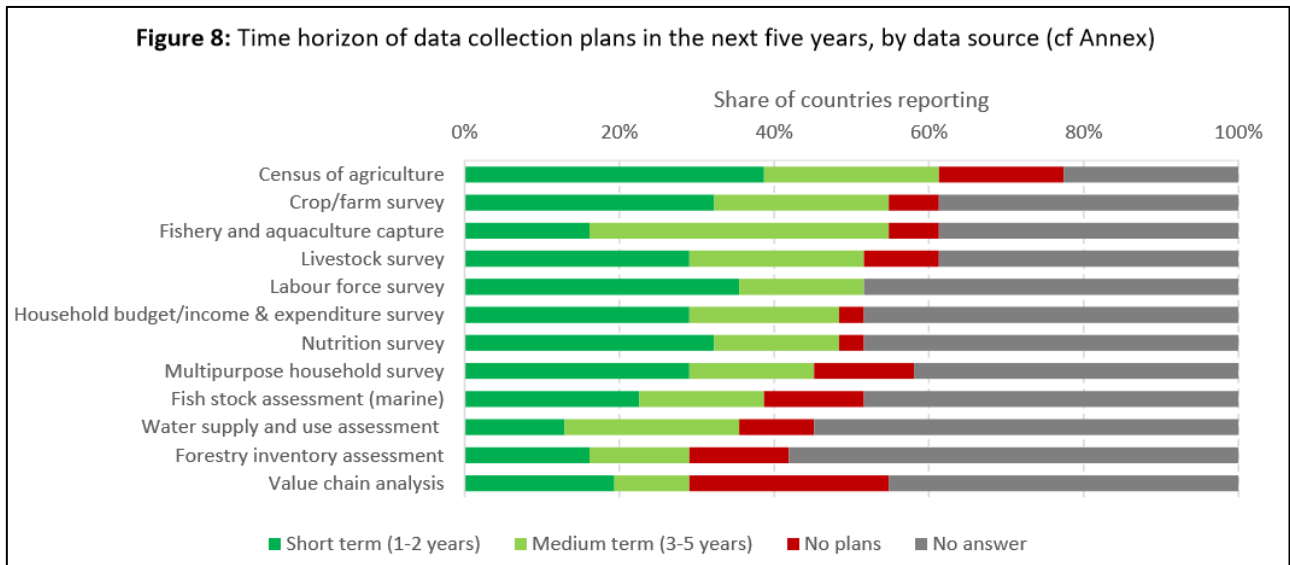
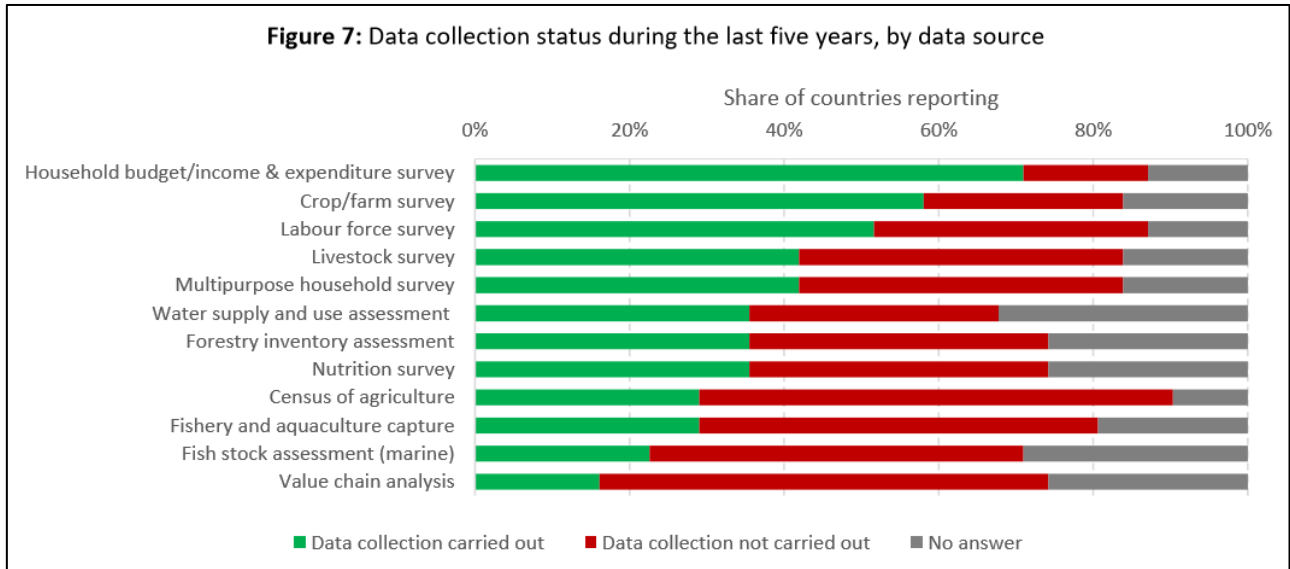


III.III Data availability and needs for assistance

National data collection status and plans signal the limitations on data availability and hence the constraints on the compilation of SDG indicators. For this reason, the evaluation of most relevant statistical data sources, i.e. censuses (i.e. Census of Agriculture) and selected surveys (e.g. Household Budget Survey/Income & Expenditure Survey, Crop/farm survey) are incorporated in this assessment⁵.

⁵ Availability and accessibility of relevant data domains (such as crop production, post-harvest losses, fish catch, etc.), level of disaggregation (by gender, age, geography, etc.), use of international classification systems, use of Earth observation data are also covered in the assessment but the results are not presented in this report.

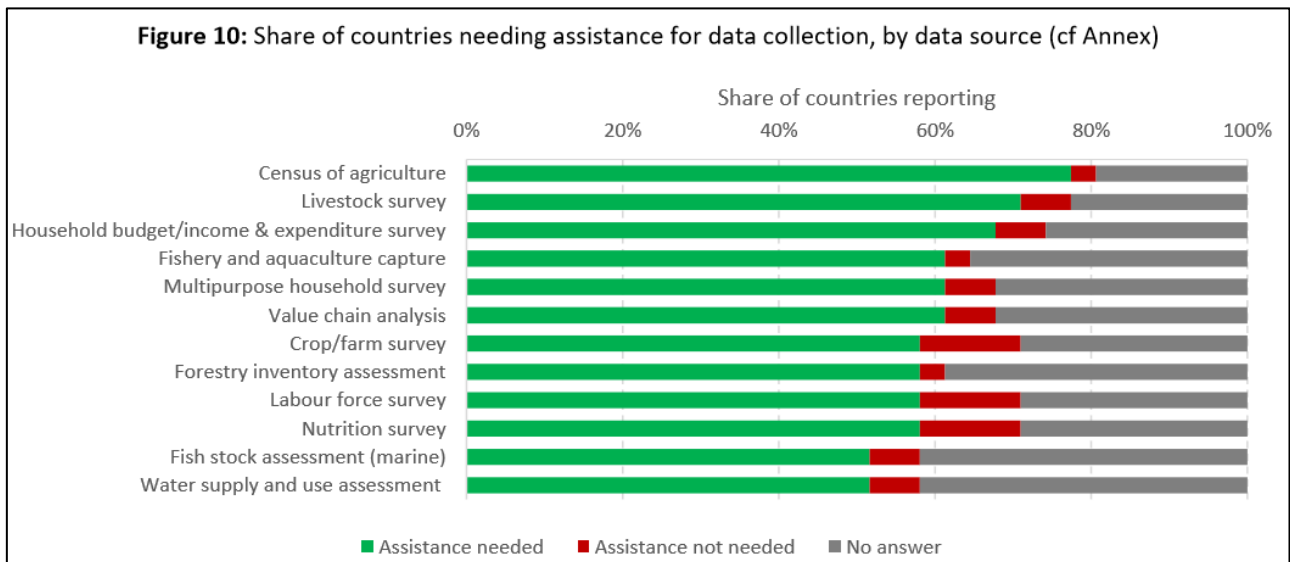
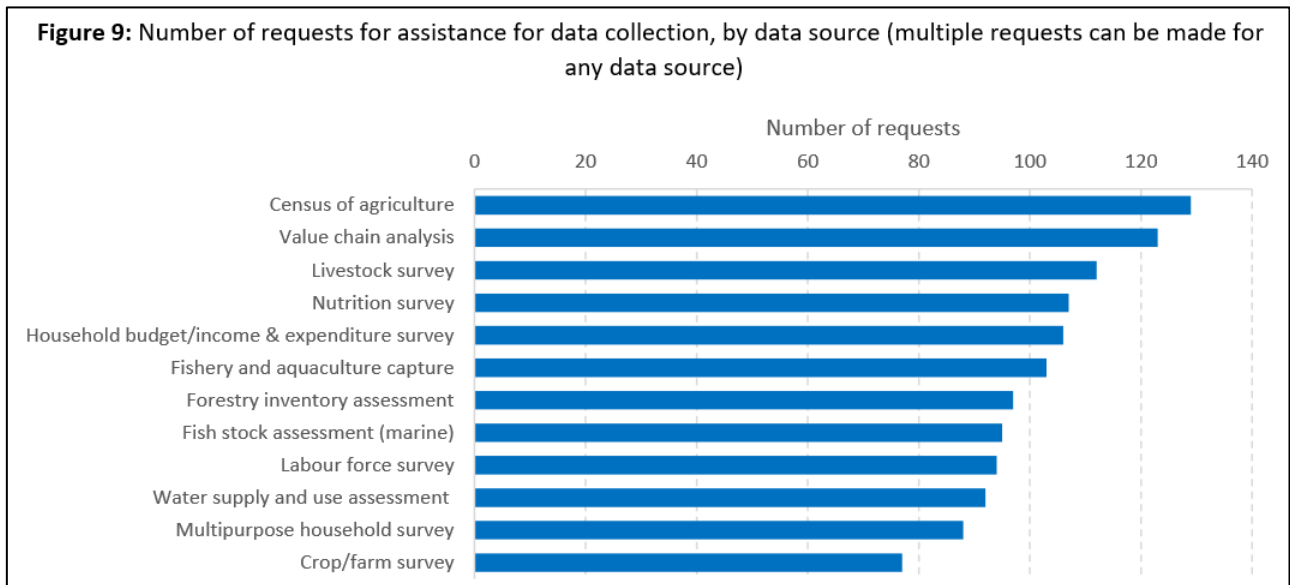
Based on the results demonstrated in Figure 7, the majority of African countries do not regularly conduct some key data collection vehicles such as forest inventories and water supply and use assessment⁶. The data collection vehicles which have not been carried out recently (i.e. during the last 5 years) are not even planned to be carried out in the short (1-2 years) or medium (3-5 years) terms (Figure 8 and Table A.4 in Annex)⁷. This puts a continuing pressure on data availability in Africa for the compilation of specific SDG indicators which are heavily relying on such data sources.



⁶ A supplementary table included at the end of Annex displays the mapping of data sources required for the completion of SDG indicators.

⁷ Unfortunately, the response rate for this question is low (Figure 8 – No Answer) therefore the interpretation of the results should be done carefully.

As in the previous sub-section, dependency on external assistance and additional resources can provide insights about the capacity of countries' statistical system. First of all, Figure 9 reflects that African countries seek technical assistance mostly for "Census of Agriculture" and "Value Chain Analysis". Especially "Value Chain Analysis" is essential for the compilation of indicator 12.3.1. Therefore, this indicates a positive sign for the publication of this indicator if the relevant support could be supplied on time. Second, Figure 10 and Table A.5 in Annex show that most of the countries in Africa request technical assistance for data sources; i.e. at least %50 of the countries request technical assistance for all key data sources. This dependency is worrying since those key data sources are highly required for the production of statistical data necessary for the compilation of SDG indicators and the countries signal a significant need for improvement.



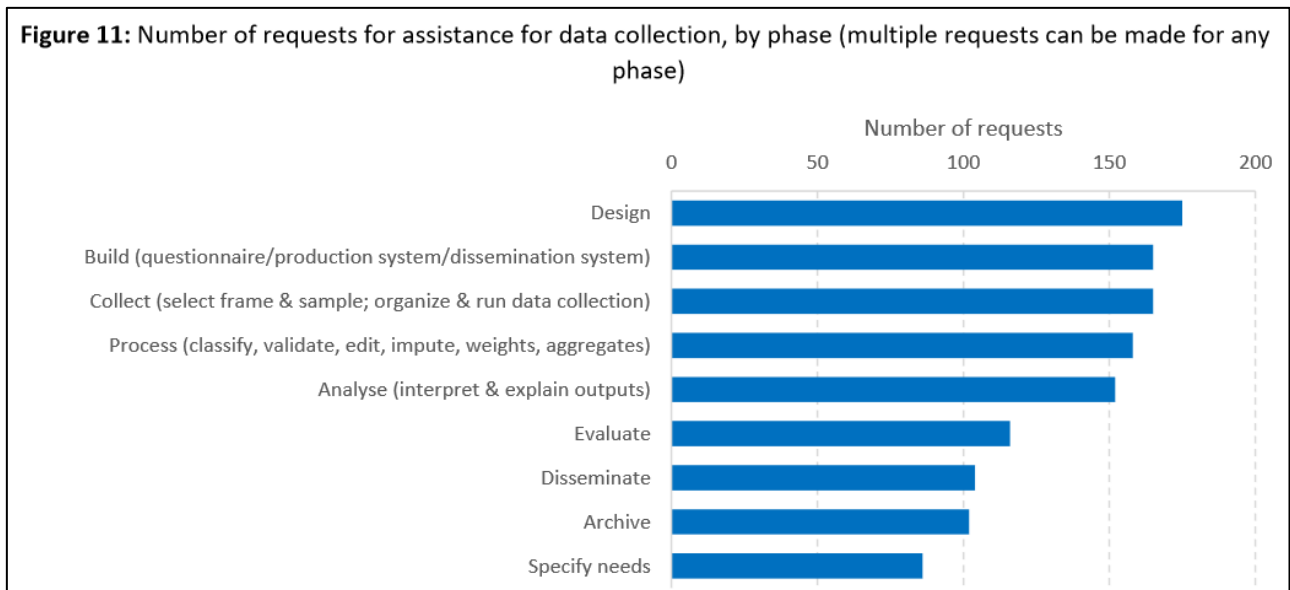
Finally, Figure 11 demonstrates which phases of data collection processes require the most/least technical assistance need. This result is useful for planning purposes; technical assistance programmes with right scope and focus for the region could be easily tailored in this way.

There are nine phases of the statistical business process according to the Generic Statistical Business Process Model (GSBPM):

1. Specify Needs;
2. Design;
3. Build;
4. Collect;
5. Process;
6. Analyse;
7. Disseminate;
8. Archive;
9. Evaluate.

The phases 1-3 are regarded as preparatory, phases 4-7 correspond to the “obvious” production, phase 8 is a saving for the future (of essential data and metadata), and phase 9 summarises and formulates an action plan.

With reference to the GSBPM, African countries show the highest interest in designing phase and the lowest interest in the phase of specifying the needs. Overall, there is a high concentration of technical assistance needs for “obvious” production and preparatory phases.



IV. CONCLUSIONS AND RECOMMENDATIONS

The capacity of statistical systems and mechanisms defines the path for measuring results at the country level. Quality data and reliable statistics are essential for measuring and monitoring progress in reaching the SDGs. By providing primary information about the effectiveness of policies and programmes, quality data and reliable statistics help governments enhance their policies and be transparent and accountable about the delivery of development results.

By collecting information on the national coordination mechanisms for SDG reporting, food and agriculture data availability, plans for filling data gaps, and needs for technical and financial support, the “Statistical Capacity Assessment for the FAO-relevant SDG Indicators 2018/19” survey attempts to assess the condition of national statistical systems. Especially, data available through the national statistical systems is accepted as an important indication of the capacity at national level.

A total of 31 countries in Africa (57%) participated in the assessment, and the survey results showed that:

- The majority of African countries do not regularly conduct most of the key data collection activities that provide the main data sources to compile the SDG indicators related to food and agriculture.
- The data collection activities which have not been carried out recently are not yet planned to be carried out in near future. This puts a continuing pressure on the compilation of the SDG indicators which are heavily relying on such data collection vehicles.
- Most of the countries suffer from weak coordination and/or information sharing among agencies at national level and outside with international custodian agencies. Moreover, most of the countries were not able to identify an SDG-specific national focal point for almost indicators under FAO custodianship.
- Finally, 87% of African countries report that they will require some form of assistance to produce SDG indicators under FAO custodianship.

A few lessons were learned from this first exercise and the recommendations for future assessments can be listed as below:

- Many countries which indicate an indicator as not applicable also asked for technical support. This requires further follow-up in order to understand if the indicator is not applicable or not possible to produce by the country.
- The availability of data for SDG indicators on fisheries may require some attention. The countries where this indicator is not applicable should be clearly defined before the data availability measures are calculated.
- Some questions (especially assistance need and future plans for data sources) have many missing answers. Follow-ups with some of the non-responding countries could help to better understand the reason.
- Additional lessons learned during the data collection process in general include:
 - Validation of the respondent list with FAO offices (HQ, regional, country) before the dissemination of the questionnaires could minimize the follow-ups linked to wrong contacts and/or contact details.
 - The survey instrument should be improved; there is a significant need for automatized skip rules and some questions could be revised; for e. g. some could be merged to decrease the number of questions.
 - The timing of the questionnaire dispatch should not be at the end of the year.
 - There is a need for communicating with the national agencies in local languages, not only in UN official languages.

V. QUESTIONS AND INVITATIONS TO AFCAS MEMBERS

AFCAS members are requested to express their views and recommendations to FAO on the following:

- *The conclusions of the assessment and possible challenges they faced that were not captured by the assessment.*

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Table A.2: Plans for production, by indicator (Figure 3)

	2.1.1	2.1.2	2.3.1	2.3.2	2.4.1	2.5.1	2.5.2	2.a.1	2.c.1	5.a.1	5.a.2	6.4.1	6.4.2	12.3.1	14.4.1	14.6.1	14.7.1	14.b.1	15.1.1	15.2.1	15.4.2	
Algeria	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	
Angola	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Botswana	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Burundi	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Cabo Verde	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Chad	Green	Yellow	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Congo	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Côte d'Ivoire	Yellow	Green	Green	Green	Red	Red	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Equatorial Guinea	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Eswatini	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Guinea	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Kenya	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Liberia	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Madagascar	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Malawi	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Mali	Green	Green	Green	Green	Red	Red	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Mauritius	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Mozambique	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Namibia	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Niger	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Sao Tome and Principe	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Senegal	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Seychelles	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Sierra Leone	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Somalia	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
South Sudan	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Sudan	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Uganda	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
United Republic of Tanzania	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Zambia	Green	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Zimbabwe	Grey	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

	2.1.1	2.1.2	2.3.1	2.3.2	2.4.1	2.5.1	2.5.2	2.a.1	2.c.1	5.a.1	5.a.2	6.4.1	6.4.2	12.3.1	14.4.1	14.6.1	14.7.1	14.b.1	15.1.1	15.2.1	15.4.2	
Algeria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Angola	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Botswana	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer
Burundi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cabo Verde	Yes	Yes	No	No	No answer	No answer	No answer	No answer	No answer	No	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer
Chad	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Congo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Côte d'Ivoire	No	No	Yes	Yes	Yes	Yes	Yes	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer
Equatorial Guinea	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Eswatini	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer
Guinea	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kenya	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Liberia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Madagascar	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer
Malawi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No
Mali	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mauritius	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Mozambique	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer
Namibia	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Niger	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sao Tome and Principe	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer	No answer
Senegal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Seychelles	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sierra Leone	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Somalia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
South Sudan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sudan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Uganda	No	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No
United Republic of Tanzania	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zambia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zimbabwe	No	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No




Table A.4: Plans for production, by data source (Figure 8)

	Census of Agriculture	Crop / Farm survey	Livestock survey	Fishery and aquaculture capture	Fish stock assessment (marine)	Water supply and use assessment	Forestry Inventory Assessment	Household Budget/Income & Expenditure survey	Labour Force survey	Multipurpose household Survey	Nutrition survey	Value chain analysis
Algeria	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Angola	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Botswana	Red	Green	Green	Green	Green	Green	Green	Red	Green	Red	Green	Green
Burundi	Red	Green	Green	Green	Red	Red	Red	Green	Green	Green	Green	Red
Cabo Verde	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Chad	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Congo	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Côte d'Ivoire	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Equatorial Guinea	Red	Red	Red	Red	Green	Green	Red	Green	Green	Green	Green	Red
Eswatini	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Guinea	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Kenya	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Liberia	Green	Green	Green	Red	Red	Red	Green	Green	Green	Green	Green	Green
Madagascar	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Malawi	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green
Mali	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Mauritius	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Mozambique	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Green	Green
Namibia	Green	Red	Green	Green	Green	Green	Green	Green	Green	Red	Red	Red
Niger	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Sao Tome and Principe	Green	Green	Green	Green	Red	Red	Red	Green	Green	Green	Green	Green
Senegal	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Seychelles	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Sierra Leone	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Somalia	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
South Sudan	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Sudan	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Uganda	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
United Republic of Tanzania	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Zambia	Red	Green	Red	Green	Red	Green	Red	Green	Green	Green	Green	Red
Zimbabwe	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red

■ Planned in the short term (1-2 years) ■ Not planned in the next five years
■ Planned in the medium term (3-5 years) ■ No answer

Table A.5: Assistance required, by data source (Figure 10)

	Census of Agriculture	Crop / Farm survey	Livestock survey	Fishery and aquaculture capture	Fish stock assessment (marine)	Water supply and use assessment	Forestry Inventory Assessment	Household Budget/Income & Expenditure survey	Labour Force survey	Multipurpose household Survey	Nutrition survey	Value chain analysis
Algeria	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Angola	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Botswana	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Burundi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cabo Verde	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Chad	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Congo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Côte d'Ivoire	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Equatorial Guinea	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Eswatini	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Guinea	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Kenya	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Liberia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Madagascar	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Malawi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mali	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mauritius	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Mozambique	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Namibia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No
Niger	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sao Tome and Principe	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Senegal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Seychelles	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sierra Leone	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Somalia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
South Sudan	No	No	No	No	No	No	No	No	No	No	No	No
Sudan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Uganda	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes
United Republic of Tanzania	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Zambia	Yes	No	No	No	No	No	Yes	No	No	No	No	Yes
Zimbabwe	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes

 Yes
 No
 No answer

Supplementary table: Mapping of data sources for the SDG indicators, by degree of relevance

Data sources	2.1.1	2.1.2	2.3.1	2.3.2	2.4.1	2.5.1	2.5.2	2.a.1	2.c.1	5.a.1	5.a.2	6.4.1	6.4.2	12.3.1	14.4.1	14.6.1	14.7.1	14.b.1	15.1.1	15.2.1	15.4.2	
Census of Agriculture																						
Crop / Farm survey																						
Livestock survey																						
Fishery and aquaculture capture																						
Fish stock assessment (marine)																						
Water supply and use assessment																						
Forestry Inventory Assessment																						
Household Budget/Income & Expenditure survey																						
Labour Force survey																						
Multipurpose household Survey																						
Nutrition survey																						
Value chain analysis																						

■ Best data source ■ Alternative data source