Food and Agriculture Organization
of the United Nations

ASSESSING COUNTRY CAPACITY TO PRODUCE AGRICULTURAL AND RURAL STATISTICS

GUIDELINES

Publication prepared in the framework of the Global Strategy to improve Agricultural and Rural Statistics

Guidelines for Assessing Country Capacity to Produce Agricultural and Rural Statistics

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Global Strategy to Improve Agricultural and Rural Statistics

Contents

Acronyms

ABS	Australian Bureau of Statistics
AFCAS	African Commission on Agriculture Statistics
AfDB	African Development Bank
APCAS	Asia and the Pacific Commission of Agriculture Statistics
BMGF	Bill and Melinda Gates Foundation
CAQ	Standard Country Assessment Questionnaire
CAPI	Computer-Assisted Programme Interviewing
CATI	Computer-Assisted telephone Interviewing
CCIs	Country Capacity Indicators
CPC	Central Product Classification
ERS	Economic Research Service
FAO	Food and Agriculture Organization of the United Nations
GPS	Geographical Positioning System
IBGE	Brazilian Institute of Geography and Statistics
ICAS V	Fifth International Conference on Agricultural Statistics
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
IT	Information technology
MOA	Ministry of Agriculture
NSDS	National Strategy for Development of Statistics
NSO	National Statistics Office
OVI	Objectively verifiable indicator
ROSSTAT	Russian Federal State Statistics Service
SITC	Standard International Trade Classification
SNA	System of National Accounts
SPARS	Strategic Plan for Agriculture and Rural Statistics
UNECA	United Nations Economic Commission for Africa
UNSC	United Nations Statistical Commission
USDA	United States Department of Agriculture
WB	World Bank
WPI	Wholesale Price Index

Preface

The development of these guidelines falls under the framework of the Global Strategy to Improve Agricultural and Rural Statistics. The Global Strategy is implemented through the accompanying Global Action Plan, endorsed by the United Nations Statistical Commission at its 41st Session in February 2010. The Global Action Plan provides a comprehensive technical assistance and training programme, and a well-targeted research agenda to resolve methodological issues and implement the statistical methodology required by the strategy.

The need for a framework to measure progress under the Global Strategy was recognized at the 5th International Conference on Agriculture Statistics (ICAS V) in October 2010, when a group comprising the Economic Research Service (ERS) of the United States Department of Agriculture (USDA) and the Australian Bureau of Statistics (ABS) was formed under the leadership of FAO to work on this subject. The group was later expanded to include the World Bank (WB), the African Development Bank (AfDB), the Brazilian Institute of Geography and Statistics (IBGE), the Russian Federal State Statistics Service (ROSSTAT), the United Nations Economic Commission for Africa (UNECA), and other stakeholders.

Country assessments are the starting point for the implementation of the Global Strategy at country level. They are planned in two stages. The first stage, which is also the purpose of the present guidelines, includes assisting countries in filling out a self-administered questionnaire and establishing the baseline information on the country's statistical capacity. The second stage involves an in-depth assessment to be carried out in countries through expert missions and workshops, resulting in a detailed report that will serve as a basis for developing or updating the Strategic Plan for Agriculture and Rural Statistics (SPARS) for the implementation of the Global Strategy at country level.

These guidelines are the result of the first comprehensive effort to develop a standard methodology to assess countries' capacity to produce agricultural statistics. The presented methodology takes into account previous similar international efforts, particularly those led by the International Monetary Fund (IMF), the World Bank (WB), Paris 21, and more recently, the United Nations Statistical Commission (UNSC), for building a standard framework to assess statistical systems' capacity and data quality. The assessment framework covers the institutional infrastructure, human and financial resources available, statistical methods and practices, and data availability at the country level.

The guidelines also present a set of operational tools and methods for carrying out assessments in conformity with the proposed framework, which has been developed through an extensive consultative process and pilot testing in all regions. In addition to a standard questionnaire and guidelines on data collection, a set of indicators on different dimensions and capacity elements are also provided. These indicators will serve as a tool for monitoring progress at country level and for providing counterfactual information necessary for measuring impact in countries.

At this stage it is expected that the methodology illustrated in these guidelines will be institutionalized for periodic assessment in all countries.

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Pilot testing of the work in Asia provided important experiences and direction to this work. Country representatives offered valuable contributions through several meetings, particularly the Training Workshops at Kigali and Addis Ababa, organized by the African Development Bank (AfDB), and the meeting on the Implementation Plan for the Global Strategy at Aguascalientes, organized by the Working Group on Agriculture Statistics of United Nations Economic Commission for Latin America and the Caribbean (UNECA). Important inputs were also given by the Interstate Statistical Committee of the Commonwealth of Independent States (CIS STAT) on behalf of its countries. In addition, a large number of experts kindly offered their contribution during the High-level Stakeholder Meeting on the Global Strategy held in December 2012 in Rome, and during the subsequent Task Force meeting.

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Introduction

Overview

This publication is an international effort to develop a standard methodology using objectively verifiable indicators (OVIs) to assess the statistical capacity of developing countries. The assessments will provide data for five of the 11 indicators in the results-based assessment framework of the *Global Strategy to Improve Agriculture and Rural Statistics,* and they will serve as a starting point to implement the Global Strategy.

The assessments will gather country level information on the legal and institutional infrastructure, statistical activities, resource deployment and data availability by using a standard questionnaire. The responses will then be converted to a suite of indicators that will reflect countries capacity on agriculture statistics. This information will provide an objective baseline and means of verification to monitor the performance of the project

The Country Assessments are to be conducted in two steps. Step one is an *initial assessment* carried out in all countries using a self-reporting standard questionnaire to gather information on a country's legal and institutional infrastructure, statistical activities, resource deployment and data availability. The responses are then converted to a suite of indicators that reflect a country's capacity on agriculture statistics. The data collected through a Standard Questionnaire will be used to develop indicators in order to create a profile of a country's statistical capacity. These indicators then can be used to create country profiles and group countries into quartiles or quintiles (according to the level of development of their statistical systems) or to identify priority interventions that could be implemented at the regional level.

Step two is an *in-depth assessment* conducted in the selected priority countries through expert missions and stakeholder workshops. The in-depth assessments help provide the information necessary to prioritize capacity-development activities and identify critical areas for intervention. A common methodology and guidelines for carrying out the in-depth assessment are being developed. While the initial questionnaire-based assessments will provide a general indication of the strength and weakness of the statistical systems and a valuable perspective of the situation in a region, the in-depth assessment will provide insights into the issues and constraints in the domain of agricultural and rural statistics.

1.1 The statistical capacity assessment framework

The FAO framework for assessing statistical capacity for agriculture statistics is the result of an international collaboration effort. While it is customized to agriculture and rural statistics, it has a great deal in common with other capacity assessment frameworks, specifically *the United Nations Statistical Commission's Generic National Quality Assurance Framework (NQAF)*, *the Paris21/IMF Task Team Statistical Capacity Building Indicators* and those used by the World Bank. The tools for using the framework to assess statistical capacity at the country level have been built upon FAO's experience in conducting questionnaire-based inquiries and reviews to monitor the progress of agriculture statistics in Asia and Africa.

The agriculture and rural statistics capacity assessment framework provides a standard structure that can be applied in a wide variety of situations to assess statistical systems based on quantitative and qualitative information. It provides insight into most aspects of the statistical environment in which data are collected, processed and disseminated, and also assesses the government's commitment to provide the conditions necessary to give users confidence in the information produced, such as the legal framework, strategic vision, institutional infrastructure and resources that support sound and timely statistical practices.

The table below provides the "dimensions" and "elements" that define the proposed capacity framework for agriculture statistics. The following paragraphs and the accompanying discussion provide an explanation of these dimensions and elements of capacity and what they characterize.

Agriculture Statistics Capacity Framework	
Capacity dimensions	**Elements**
I. Institutional Infrastructure - Pillar II (PREREQUISITES)	1.1 Legal Framework 1.2 Coordination in Statistical System 1.3 Strategic Vision and Planning 1.4 Integration of Agriculture in the National Statistical System 1.5 Relevance (user interface)
II. Resources - Pillar III (INPUT DIMENSION)	2.1 Financial Resources 2.2 Human Resources: Staffing 2.3 Human Resources: Training 2.4 Physical Infrastructure
III. Statistical Methods and Practices - Pillar II (THROUGHPUT DIMENSION)	3.1 Statistical Software Capability 3.2 Data Collection Technology 3.3 IT Infrastructure 3.4 General Statistical Infrastructure 3.5 Adoption of International Standards 3.6 General Statistical Activities 3.7 Agricultural Market and Price Information 3.8 Agricultural Surveys 3.9 Analysis and Use of Data 3.10 Quality Consciousness
IV. Availability of Statistical Information - Pillar I (OUTPUT DIMENSION)	4.1 Core Data Availability 4.2 Timeliness 4.3 Overall Data Quality Perception 4.4 Data Accessibility

1.2 The Standard Country Assessment Questionnaire

The Standard Country Assessment Questionnaire (CAQ) is the basis of the system used to collect data for building indicators. Developed through international collaborative efforts, this self-reporting questionnaire is the first step towards assessing the capacity of national agricultural statistical systems. It is anticipated that all countries will complete the questionnaire and submit it through established channels (e.g. FAO's statutory bodies or specific arrangements made by implementing partners like the African Development Bank).

The new CAQ and assessment method replaces the earlier system of using ad hoc country statements to prepare country assessments for the biennial meetings of FAO's regional statutory bodies such as the Asia and the Pacific Commission of Agriculture Statistics (APCAS) and the African Commission on Agriculture Statistics (AFCAS). Plans are in place under the *Action Plan for the Global Strategy* to prepare a summary of the responses received from countries in the CAQ and present that to the relevant regional commission or a similar international body on agriculture statistics.

The scope of the new CAQ is broader than the questionnaires previously used in Africa and Asia. The Global Strategy has adopted a definition of agriculture which covers not only crops and livestock, but also the subsectors of fishery, forestry, water resources and rural income-earning activities. Consequently, the responses to the CAQ will almost always be the result of a collaborative effort among various agencies at the country level which have statistical responsibilities for crops, livestock, fishery, forestry, water resources and rural sectors. In addition, while the CAQ will normally require responses from a number of ministries and agencies of government, it is expected that the Ministry of Agriculture (MOA) and/or the National Statistics Office (NSO) will play a significant and coordinating role in providing responses.

Countries throughout the world vary greatly in the organization of their statistical activities and requirements and in the allocation of responsibilities among agencies within their systems. It is consequently unrealistic to expect that a single standard questionnaire will be used throughout the world. The solution is to allow for regional variations in the questionnaire centred around core content that is common across all regions.

To implement a common methodology for the Country Assessments and to produce a common set of internationally comparable indicators, it is necessary to use a shared core set of questions applicable to all countries and all regions. "Core information" questions are all marked with an asterisk (*), as these questions are used to build the Country Capacity Indicators (CCIs) used for identifying programme strengths and limitations and for conducting international comparisons. It critical that the core questions are included as written and that they are not in any way altered or deleted. With this exception, regions are free to adjust and tailor the questionnaire to reflect and respond to the local requirements and situations. It is quite acceptable for the questionnaires to vary from region to region, as long as they all collect the "core information" through the key questions.

1.3 Instructions and guidelines for the questionnaire

This publication contains the first version of: (1) the CAQ; (2) instructions for completing the CAQ; (3) explanations about how the statistical capacity indicators are calculated from the core questions; and (4) examples of the intended uses for the statistical capacity indicators.

The experience of pilot testing the CAQ indicated that lack of coordination at the country level was a major challenge to the data collection operation. Incomplete information – usually in terms of non-response – was the main challenge. While the actual arrangements for data collection were left to the regional coordinator, it appears necessary to establish strong mechanisms for coordination at the country level. The solution may include designating a "focal point" in each country to constitute a "task team" with representatives from all the agencies needed to complete the questions. The focal point may be located in the NSO or the MOA, depending upon which office is playing a leading role in agricultural statistics.

In some regions, the preferred practice has been to divide the questionnaire into separate modules containing questions relating to specific agencies. These modules are then referred to the appropriate agencies and the responses are returned to the focal point for consolidation. It is important to keep control of the modules to make sure that all the responses have been

amalgamated into a final response questionnaire and that any inconsistencies have been resolved. Missing responses will lead to inaccuracies in the CCIs.

Some questions (e.g. those regarding the human resources budget and the critical constraints to statistical activities) may need to be answered by each agency with agriculture statistics responsibilities. The detailed responses can then be recorded separately for each agency. If that procedure is followed, then the corresponding indicator can be compiled separately for each agency, and the national indicator can be taken as the average of individual agency indicators.
The responses to key questions will be converted to a suite of indicators that will reflect a country's capacity with regard to agriculture and rural statistics. This information will also provide objectively verifiable baseline indicators and a means of assessing a project's performance as measured by programme improvements resulting from future statistical capacity–building initiatives.

1.4 The Country Capacity Indicators (CCIs)

There is at least one indicator for each of the 23 elements listed in Table 1. Most indicators are presented on a scale of 0 to 100, although a few indicators are discrete since they can take only three or four possible values on this scale. This limitation on sensitivity is most often dependent on the number of questions available to build the indicator. The scoring criteria generally assign equal weight to all questions in the indicator. However, depending upon the number of questions used to support a specific indicator, there may be some implicit weighting. For a few indicators, some weighting has been deliberately introduced to get a balanced picture or to transform the scores from various types of questions into a single indicator.

Because many of the elements of capacity are qualitative, indicators (which are not as precise as physical measurements) must be sensitive enough to capture differences across countries and also be valid (i.e. they measure what they purport to measure). It is also desirable for indicators to be consistent and reliable (i.e. reflective of reality and not volatile). The methods to evaluate potential indicators are well-known, particularly in the social sciences, but the indicators may need a substantial amount of testing and evaluation. Also, in choosing indicators at the international level, it is essential to be cognizant of the cost associated with gathering data for building highly complex data-hungry indicators, as well as the quality and limitations of questionnaire responses that are based on self-reporting methods.

The guiding principles behind the search for capacity indicators have been simplicity, validity, feasibility and sensitivity. The objectivity of the indicators, except for a few perception-based ones, has been ensured by only asking questions about verifiable phenomenon. To eliminate potential bias in reporting, a panel of experts may be used to review the validity of responses. Despite the limitations of self-administered questionnaire assessments, the statistical programme profiles are expected to reliably portray the statistical system; support meaningful comparisons of statistical capacities among countries; and point towards areas for priority attention. In this sense, the proposed indicators are robust.

1.5 Using the Country Capacity Indicators

CCIs are used to synthesize the assessment results so that they can be compared across countries with a reasonable degree of confidence. However, these indicators are not measures of country capacity in absolute terms. They should be taken together to obtain a complete picture of the profile of a country's statistical system

Indicators of statistical capacity have been proposed for the four "dimensions" of capacity which are further broken down into 23 "elements". To aggregate the indicators for the elements into the four dimensions, composite indicators can be created using simple averaging (i.e. the arithmetic mean). The arithmetic mean, though sensitive to higher values in the scores of

different elements of capacity, is preferred because it is the simplest method to aggregate scores.[1] Users are nonetheless free to apply alternative methods of aggregating and preparing indices based upon their preferences and criteria.
While the composite indicators are very useful in summarizing assessments, they are often criticized as being of limited use because they do not provide much insight about exactly where a statistical system is strong and where it is weak. However, the initial country assessment will allow regional and global coordinators to focus the consultants who work on in-depth assessments towards specific area(s) identified as weak in order to provide needed technical assistance and training.

The second-stage assessments will determine the human and financial resources a country needs in order to build a sustainable statistical system. The second stage should also result in a work plan that may include developing or updating the Sector Strategic Plan for Agriculture and Rural Statistics to implement the Global Strategy. The Sector Strategic Plan helps identify the capacity-building requirements and when they should occur.

1.6 Classifying and grouping countries

One of the goals in conducting the statistical capacity assessments is to be able to group countries to reflect the relative level of their statistical development. By doing this, it is possible to identify countries that are the least developed, have fragile statistical capacity and are likely to benefit from a capacity-building initiative. The challenge is to obtain agreement on the most useful methodology for classifying and grouping countries, and often it is difficult to reach consensus on the boundaries of the groups. Furthermore, the CCIs are not particularly precise in comparison to the more familiar socio-economic indicators, which are based on a well-established methodology and data such as per capita GDP, price indices and rates of employment, unemployment and literacy.

There are a number of options for classifying countries according to their statistical capacity which use all the capacity indicators or a small subset of them. Once the classification or grouping criteria are established, the transition of countries from one group to another could be easily monitored.

The Global Strategy Action Plan proposes a five-group system for classifying and grouping countries according to the extent of their statistical capacity, as measured by the degree to which their agriculture and rural statistics comply with the three pillars of the Global Strategy.[2] These five groups are:

- Advanced countries - Level 5
- Progressive country - Level 4
- Developing country - Level 3
- Less-developed country - Level 2
- Least-developed, fragile and post-conflict countries - Level 1

It is also possible to prepare profiles of a country's statistical capacity using indicators of the elements of capacity and their related dimensions. The profiles can give users the liberty to

[1] The literature often recommends using a geometric mean to aggregate the indicators on the grounds that the indicators should be particularly sensitive to capturing the details about the weaknesses (where we find the smaller scores) since those are the countries in which we have the most interest. The geometric mean is not, however, without its limitations, as it does not work with zero values, which can be encountered in cases of non-response. The best solution is to encourage the country focal points to review the questionnaires before they are submitted to minimize non-response.
[2] The three pillars are: (1) establish a minimum set of core data; (2) integrate agriculture into the national statistics system using sound statistical methods and procedures; and (3) establish the foundation for a sustainable agriculture statistics system by means of governance and the necessary resources.

undertake their own groupings to meet specific interests. For example, a development partner may have specific expertise and interest in developing the use of information technology (IT). Such a user could then group countries based on, for example, the two available indicators that are most relevant to help identify countries most in need of such support (e.g. indicators of "Statistical Software Capability" and "Data Collection Technology"). Alternatively, other users who are interested in a composite indicator to depict a broad set of dimensions and elements would prefer to create a single composite CCI using a suitable average of the four "dimensions" and 23 "elements".

1.7 Monitoring progress at the country level

For monitoring and decision-making at the global or regional level, the aggregate indicators that reflect overall country capacity or the indicators for the four dimensions are more likely to be used.. At the individual country level, improvement could be measured by monitoring changes between a country's baseline information and the indicators for its individual "elements". Monitoring individual elements of capacity better supports decisions for building capacity. Aggregation and tabulation of indicators in the detailed country profiles will provide supplementary information on improvements or changes in a region over time.

Being the first assessment effort, this proposed methodology is not expected to be without faults; however, it is a substantial improvement over past practices such as those of APCAS and AFCAS. It is expected that shortcomings will be documented over the next two years, after which the questionnaire and indicators will be reviewed and revised.

However, the framework for capacity assessment is not likely to change over time, because it is the result of a comprehensive international effort to cover all aspects of statistical systems at the country level. While there might still be some differences of opinion regarding the organization of the capacity elements into clusters, users will have the flexibility to cluster the detailed indicators using a method of their choice.

2

Instructions for Completing the Standard Country Assessment Questionnaire (CAQ)

GENERAL INSTRUCTIONS

Definition of agriculture

The country assessments are designed for the entire agriculture sector. The Global Strategy defines the "agriculture sector" in broad terms to include fishery, aquaculture, forestry and rural activity because often the means of production are shared and the activities are carried out in a mixed manner. This goes beyond the usual definition of the International Standard Industrial Classification (ISIC), which includes only activities related to crops and livestock. Because the CAQ's scope includes crops, livestock, forestry, fishery and aquaculture subsectors, it will be necessary to involve all of the national agencies responsible for collecting data in these subsectors in order to complete the CAQ.

Focal points and the task team

Each country will designate a "National Focal Point" to coordinate the activities required to complete the CAQ. The Focal Point will be designated by the national government and usually will be located in the most important office which produces agriculture statistics (e.g. the MOA or the NSO). It will also be desirable to designate an "alternate focal point" in the second most important office in order to effectively coordinate the process of completing the questionnaire. In some countries, the focal point will be located in the MOA and the alternate focal point will come from the NSO, while in other countries the situation will be reversed. In any case, contributions from both the MOA and the NSO are desirable, and both focal points should work closely together to complete the CAQ and also for subsequent potential activities to be carried out under the Global Strategy.

In order to obtain the contributions of other line ministries and agencies (e.g. Commodity Boards and Export Promotion Councils for specific agricultural commodities), "contact persons" should be designated in each of these agencies. The focal points and the contact

persons will constitute a task team to complete the questionnaire. Before submitting the questionnaire to the regional coordinator, the entire task team should meet to:

- ensure all questions have been answered;
- eliminate contradictory responses;
- ensure completeness of the questionnaire; and
- make sure that the responses reflect the nationally owned position, and not the views of an agency or a person.

Modules of the questionnaire

In some regions, it has been feasible to split the CAQ into separate modules containing the questions relating to specific agencies. These modules are then referred to the appropriate agencies, and the focal point consolidates their responses. In this approach, the focal point needs to keep control of the modules and make sure that all responses are amalgamated into a final response questionnaire and that inconsistencies are resolved. Missing responses in the questionnaire will lead to inaccuracies in the CCIs which are compiled from the data provided in the questionnaire.

Depending upon the country situation, the focal points may decide that some questions (e.g. manpower, budget and the critical constraints) need to be answered by each agency separately. In this case, a method will be needed to maintain the identity of responses, and details for each respondent agency may need to be indicated separately. This approach will enable the calculation of a capacity indicator for each agency. The national CCI will then be the average of all of the agency capacity indicators for each element of capacity. Agency capacity indicators also can provide useful input during the in-depth assessment stage.

Method of collecting and processing data

Various options are available for collecting data at the country level and transmitting it to the implementation partner for data processing or further processing. These methods include:

- conventional printing and distribution of a paper version of the CAQ;
- using excel sheets/workbooks;
- using Internet-based surveys; and
- using special software to collect, validate and process data.

The choice of a method to use for data collection and processing will depend upon the level of development of the countries in the region and the resources available for data collection.

Assigning questions to the appropriate statistical agency

At the end of the questionnaire, a model table is included that indicates the most appropriate agency to respond to specific questions. In most cases, a question will be answered by the agency responsible for the specific statistical activity or the data item to which the question relates. However, the model table is only an indicative reference guide for the National Focal Point. At the beginning of the assessment exercise, the table should be revised to identify a responding agency for each section of the questionnaire or for each question, as needed, keeping in view the national situation. If special software will be used for data collection, these control mechanisms should become part of the software. It is also possible to convert the questionnaire into separate Excel sheets to be completed by different agencies. However, all the responses will need to be consolidated into a sheet or a workbook to derive the CCIs.

SPECIFIC INSTRUCTIONS

Respondent details

The first page of the consolidated questionnaire asks for the contact information of the National Focal Point. If the Focal Point delegates responsibility to officers in other government statistical offices or units, then the contact information for those officers must also be reported.

If several institutions participate in completing the questionnaire, each contributing institution must provide respondent details for the sections in which it provided responses. A box for respondent details and places for additional information must be included in each split questionnaire that is sent to respondent agencies.

Section 1: Institutional infrastructure

1.1 Administrative structure of the country

This part should be completed by the National Focal Point. The national level should be identified as the first administrative level. For some countries, the second administrative level may be ''*region*'', ''*state*'' or ''*province*''. For a geographic unit to be considered as an administrative level, it should have a defined administrative authority. Occasionally, *''states''* or *''provinces''* are grouped in ''*regions''* for data analysis or policy purposes, but there is no administrative office at that geographic unit level. In such situations, "regions with no administrative authority" must not be considered as the second level of administration. The third level could be a "*district*", and the fourth level could be "*subdistrict*" or "*village".*

1.1.1, 1.1.2, & **1.1.3** The column **"***number of subdivisions (region, district, etc.)*" refers to the number of units at each of the levels in which the country is divided administratively. For example, a country has 58 states, 360 districts and 4 500 villages.

1.2 Legal and administrative framework for the collection of statistics

1.2.1 This question refers to the overall framework for collecting statistics as enshrined in the legislation/act/law of the country. The law normally stipulates the authority and responsibilities of the various agencies to collect information from households, business enterprises or other entities for purely statistical purposes. A law might empower a specific agency to collect data from respondents, or it may enable the government to issue a subordinate legislative instrument (i.e. a decree or administrative order) for data collection. Legal provisions dealing with statistics differ widely among countries. The intention here is to know whether any such overarching law exists that covers all or most statistical activities in the country.

The "year of creation" means the year that it became the law. The term "operational" means that it is an active law which could be enforced or used to issue decrees and administrative orders relating to the collection of statistics. Assessing the force or effectiveness of the law is not the intention here.

1.2.1a. This question refers to the main government agency responsible for executing the statistical activities in the law or legislation, such as coordinating all data collection efforts in the country.

1.2.2 The legal basis for collecting agricultural statistics can come from the general law on statistics or there may be a specific law for agricultural statistics. The question here refers to the general law for all types of agricultural statistics including current statistics, and does not refer to specific laws which cover isolated activities like an agricultural census.

1.2.2a The law will be considered "fully'' adequate if all the necessary authorities and responsibilities relating to agriculture statistics are clear and unambiguous and no legal hurdles have been experienced. The answer should be a single consensus response from all those agencies involved in agricultural statistics, reflecting the general situation. Specific details could be added in the comments sections.

1.2.2b & **1.2.2c** Agriculture statistics are defined as crop, livestock, forestry, environment, aquaculture and fisheries, water resources and rural statistics.

1.2.3 In some countries, the coordination of agriculture statistics may be entrusted to a National Committee which is also responsible for the statistics on other sectors, while in other countries there may be a separate committee that coordinates the activities for the collection of statistics on subsectors of agriculture (i.e. crop, livestock, aquaculture, fisheries, forestry, water and environment) which reports to an apex body. The composition and legal/administrative basis of this body may differ from country to country. The main purpose of this question is to determine whether there is any coordination among subsectors for agriculture.
This question addresses "formal arrangements"; totally informal and ad hoc type arrangements do not have the same standing and thus are not to be reported.

1.2.3 The purpose of this question is to measure the breadth (or span) of coordination. An "active council/committee" means a functioning body that currently holds regular and periodic meetings. There may be some committees which were constituted for a specific task (e.g. an agricultural census), but have outlived their purpose and are no longer functioning.
1.2.3a Please indicate "yes" if the Council, Board or Committee is discharging its functions and "no" if it is not.

1.2.4 These questions aim to provide some information about the scope and coverage of the national statistics council, board or committee. From the list of options, please indicate all that apply.

1.2.4a Crop statistics
1.2.4b Livestock statistics
1.2.4c Forestry statistics
1.2.4d Environment statistics
1.2.4e Aquaculture and fishery statistics
1.2.4f Water resource statistics
1.2.4g Rural development statistics

1.3 Structure of the national statistical system

Note that questions 1.3.1 to 1.3.8 refer to the national statistical system as a whole and not only the part of the system responsible for agricultural statistics. Section 1.3 asks whether the institutional structure is centralized or decentralized.

1.3.1 Decentralization means that statistical activities are assigned or delegated among a number of government agencies, offices or line ministries or among various administrative levels (e.g. the national, regional or state level). The intention of this question is to capture decentralization by subjects or economic sectors (e.g. crop, livestock, forestry, fishery). "Fully decentralized" and "partially decentralized" refer to the number of economic sectors for which authority has been delegated to the concerned line ministries to collect data, rather than the extent of delegation of power.

1.3.2 Formal allocation of responsibility may be done in different ways. It may be defined in the legislation, the constitution, a law passed by the parliament or an executive order of the

government issued on the basis of a legal authority. In some cases, it may be a shared responsibility defined in a Memorandum of Understanding (MOU). Basically, all formal allocation of responsibility will be backed by some "written documents" to clearly define the roles and responsibilities of different agencies.

1.3.3 & **1.3.4** These two questions request information on the "mechanisms to ensure coordination", which usually comes through steering committees, technical working groups or a task force established by administrative orders, with a well-defined mandate and frequent periodic meetings.

1.3.5 Agencies may differ in their perceptions or opinions about the "effectiveness of a coordination mechanism". In such a situation, the National Focal Point should try to reach a consensus view through due discussion among the partner agencies in the statistical system and then should report that view on this questionnaire.

1.3.6 Please select an answer from the options that best describes cooperation and collaboration practices.

1.3.7 The existence of a general statistical system at the subnational level means that subnational institutions (e.g. provinces) have a statistical office or bureau, and they manage their own statistical programme, either independently or in collaboration with the federal (national) agency.

1.3.8 The existence or presence of the agricultural statistics system at the subnational level means that the subnational agency is engaged in collecting and publishing agriculture statistics. This is distinct from a regional or field office of the national agency. The term ''agricultural statistical system'' is used in the broad sense, including crops, livestock, fisheries, forestry and water subsectors. At the subnational level, these subsectors may not be equally important. In answering the question, please take into account the sectors that are most important.

1.4 Strategic framework

1.4.1 If there is a Sector Strategic Plan for Agriculture and Rural Statistics or Master Plan for Agriculture Statistics, report "yes"; if not, please report "no".

1.4.2 The term **"**operational" means that there is a strategic planning document for agriculture statistics which is guiding the government's agriculture statistics development policies and programmes.

1.4.3 to **1.4.5** Please choose one or more selections from the list of options that best describe the agriculture statistics programme.

1.4.6 This refers to any document which contains a vision for the development of agriculture statistics and which has been adopted by the government as the guiding document for programme planning and resource allocation. This may be a separate document specifically focussing on the agriculture sector or it may be a part of the overall national plan or strategy for the improvement of statistics.

1.4.7 The integration of the agriculture statistics sector strategy in the National Strategy for Development of Statistics (NSDS) means that the issues, challenges and vision for the development of agriculture statistics have been well considered in the NSDS. This may be verified by looking at the NSDS or a similar document. It is, however, quite possible that while there is only a limited mention of agriculture in the NSDS, a separate plan or strategy has been prepared exclusively for agriculture based on the vision contained in the NSDS. Integration of

sectoral statistics in the national strategy also means that statistical activities in the agriculture sector are not isolated from the rest of the statistical activities.

1.4.8 & **1.4.9** Please select the answer from the available options that best describes the current situation.

1.5 Dialogue with data users

This section refers to the overall culture of practices in the country. There may be situations where practices differ significantly among the different ministries and departments. In such situations, this question should be answered considering the most prominent producers of agricultural statistics. For responses from separate ministries, explanatory notes could be added in the space for additional comments.

Dialogue with data users implies that there is a two-way exchange and discussion of issues and viewpoints. The mandate for a forum for dialogue will normally have a mechanism to assess data users' needs and their perception about the quality and timeliness of the data. This is not to be confused with public contacts to disseminate data and related channels for communication, which is a one-way process.

1.5.1 The "formal forum for dialogue" means that the forum has been established through legislation or an administrative order and that its members have been selected or nominated. Such a forum normally has a mandate to provide feedback on specific issues referred to it, or it may function as a general forum with the freedom to provide feedback on any issue that it considers fit. Very often, the periodicity for its meetings could also be defined by the administrative order that established it. The recommendations of such a forum are mandatorily considered by the responsible organization.

1.5.2 The word "regular" refers to the periodicity established by the order or terms of reference under which the forum was constituted. If the order does not specify the periodicity of the meetings, the regularity may be assessed subjectively, taking into account the level of activity and the needs.

1.5.3 An "informal forum" may not have been established formally. One such forum may be a Web-based discussion group, or they also could be ad hoc meetings with changing participants in different meetings. The group may lack influence and rigor, but still may be interested in and willing to contribute to the development of agriculture statistics.

1.5.4 This question refers to the degree to which the data producers make themselves accessible to the general data users who wish to provide feedback or obtain additional information regarding the statistics. The question specifically asks if the statistical office or unit offers a Web address (www/http), e-mail or telephone number where data users can send their inquiries.

1.5.5 It is recommended that there be a consensus response from the contact persons in all agencies with responsibilities for agriculture statistics, and the response should be reported by the National Focal Point.

1.5.6 For questions 1.5.6a to 1.5.6k, please choose the answer from the selection of options that best describes the situation.

SECTION 2: RESOURCES

2.1 Financial resources

2.1.1 Please answer "yes" if there is a separate line in the budget for the following projects or activities, and answer "no" if there is not.

2.1.1a *Separate line for agriculture statistics in the NSO budget.*
2.1.1b *Separate line for crop/livestock statistics in the MOA budget.*
2.1.1c *Separate line for statistical activities in the Ministry/Department of Fisheries budget.*
2.1.1d *Separate line for statistical activities in the Ministry/Department of Forestry budget.*

2.1.2 Please select a response from the option(s) offered in 2.1.2a through 2.1.2e that best describes the percentage of the budget designated for activities relating to agriculture statistics that are funded by the government budget. Choosing this response may require some rough calculation and discussion. In choosing the response, please consider the average situation of the last three years, and ignore an abnormal situation such as a year when an agricultural census was undertaken through external support. External budgetary support for an agricultural census could be separately indicated in the comments sections.

2.1.2a *0 – 20%*
2.1.2b *20 – 40%*
2.1.2c *40 – 60%*
2.1.2d *60 – 80%*
2.1.2e *80 – 100%*

2.2 Human resources and training for statistical staff

Questions 2.2.1 and 2.2.2 request information in a two-column table regarding the number of people – both those at the professional/officer level and those in technical support posts – who are involved in agriculture statistics activities. Questions 2.2.3 and 2.2.4 seek information in a two-column table regarding training opportunities both abroad and in-country for personnel at the professional/officer level and in technical support posts.

2.2.1 Please provide your best estimate of the number of posts established for agriculture activities at both the professional and technical support levels.

2.2.2 Of the posts reported in response to question **2.2.1,** how many of the posts are filled?

2.2.3 Please answer "yes" if there is a regular government programme or training policy available to agricultural statisticians for training in-country and/or abroad.

2.2.4 For the number of people (both professional and technical) reported in question 2.2.1, please indicate how many were sent on a training course during the last 12 months, irrespective of the source of funding.

2.3 International cooperation in agricultural statistics

2.3.1 Please answer "yes" if your office received significant support from a Technical Assistance Project at some point during the past three years and "no" if not.

2.3.2 If you answered "yes" to question 2.3.1, please answer "yes" if the assistance included support for the agriculture statistics programme.

2.3.3 Please list, in order of importance, the main development partners/donor agencies, which have provided funds or technical assistance during the past three years. *(Please list the partners/donors in decreasing order of the amount of their contributions.)*

2.4 Physical infrastructure

2.4.1 In 2.4.1a through 2.4.1e, please indicate the number of transport vehicles available for statistical activities on a regular basis. Temporarily hired vehicles, often used during census operations, are to be ignored for reporting the number of the following:

2.4.1a Four-wheel drive vehicles
2.4.1b Two–wheel drive vehicles
2.4.1c Motorcycles
2.4.1d Bicycles
2.4.1e Other vehicles (please specify)

SECTION 3: STATISTICAL METHODS AND PRACTICES

3.1 Information technology

The IT infrastructure provides an indication of the degree to which the statistical offices and their personnel are equipped to process, analyse, disseminate and archive information. Although the presence of equipment and employees' accessibility to computers is not a measure of how effectively they are used, the availability of IT infrastructure is a necessary prerequisite for data quality assurance and efficient data processing and a key indicator for assessing the capacity of the statistical office and its statistical programmes.

3.1.1 Please respond "yes" if there is a Web site hosting agriculture statistics, and "no" if not.

3.1.2 If you answered "yes" to question 3.1.1, please provide the URL or Web site address.

3.1.3 Please respond "yes" if there is a database for agriculture statistics, and "no" if not .

3.1.4 If you answered "yes" to question 3.1.3 and the database and access to it is provided to external users through the Internet, please respond "yes"; respond "no" if it is not accessible.

3.1.5 If you answered "yes" to question 3.1.4, please provide the URL or Web site address.

3.1.6 Please describe, as best as you can, the IT software and related systems used in collecting, compiling, disseminating and archiving agriculture statistics by choosing from the option(s) offered in the 14 questions *3.1.6a* through *3.1.6n,* with particular reference to activities for data analysis, data processing and database management.

3.1.6a SPSS
3.1.6b SAS
3.1.6c STATA
3.1.6d ACCESS
3.1.6e EXCEL
3.1.6f Other (please specify)
3.1.6g CSPRO
3.1.6h EXCEL
3.1.6i Other (please specify)
3.1.6j PC-Axis
3.1.6k SMDX

3.1.6l ORACLE
3.1.6m EXCEL
3.1.6n Other (please specify)

3.1.7 This section addresses the technology used for the collection, entry and transfer of survey data.

Please describe, as best as you can, the data collection and field collection operations in the agriculture statistics programmes by choosing from the option(s) offered in questions *3.1.7a* through *3.1.7h*. The data collection technologies used by statistical offices and ministries indicate the degree to which they have been able to acquire and use advanced equipment and digital technologies for their field data collection operations.

When interviewers and field staff have computer technology and Geographical Positioning Systems (GPS) equipment, data entry errors of commission and omission are reduced or eliminated. Also, when data entry is done at the time of the interview, data processing is often faster and not subject to the potential data-capture bottlenecks that are often associated with centralized data entry operations. Please respond either "yes" or "no" regarding the

3.1.7a Computer-assisted telephone interview
3.1.7b Personal data assistant (PDA) or computer/tablet-assisted personal interview
3.1.7c Paper-based personal interview, followed by a separate data-entry operation
3.1.7d Paper-based personal interview, followed by scanning of questionnaires
3.17e GPS
3.1.7f Compass and measuring tapes
3.1.7g Wireless transfer of data from the field
3.1.7h Other (please specify)

A pilot trial of a technology should not be considered as being used. Say ''yes" to the use of a particular technology if it is used on a regular basis for any surveys. To respond "yes", it is not necessary for the technology to be used on *all* surveys; in fact, different surveys may use different technologies. Also, there may be various combinations of technologies (e.g. wireless data transfer from the field can be done using different technologies). The type of technology is not important for answering the question.

3.1.8 The questions in this section seek information on the number of computers available for agriculture statistics activities and their distribution between Headquarters and the Field Offices.

3.1.8a Please estimate, as accurately as possible, the total number of personal computers in the organization that are in the Headquarters and Field Offices.

3.1.8b Please estimate, as accurately as possible, the number of personal computers in the organization used primarily for agriculture statistics that are available to Headquarters personnel and those available to Field personnel.

3.1.9 Please estimate, as accurately as possible, the number of computer servers in your organization that have been installed for data storage and communication.

3.2 General statistical infrastructure

It is necessary to have a general statistical infrastructure (e.g. up-to-date cartographic material, lists, registers and frames) in order to design and implement surveys. The quality and availability of this type of material often determines the quality and reliability of the results of statistical activities. This question helps to assess the capacity of statistical methods and practices.

3.2.1 Please answer "yes" if up-to-date, digitized, topographic maps – complete with the country's administrative jurisdictions – are available for use.

3.2.2 If the answer to 3.2.1 was yes, please answer "yes" if the digitized maps are available to the government's statistical offices and agencies, including availability on a cost-recovery basis.

3.2.3 Please answer "yes" if the country has established an office or unit to process satellite or other remote sensing data in order to monitor crop conditions and production forecasts.

3.2.4 Please answer "yes" if the MOA, NSO or other government agency maintains an up-to-date list (e.g. Farm Register) of large agricultural farm operators.

3.2.5 Please answer "yes" if survey enumerators are provided with detailed large-scale maps to assist them with their data collection duties.

3.2.6 Please answer "yes" if there is an up-to-date list of agricultural households (e.g. Master Sampling Frame or Farm Register) available to the agriculture statisticians who design and select agriculture samples.
3.2.7 Please answer "yes" if the location of statistical units is geocoded. The statistical units may be households, agricultural holdings or land parcels. For some units which are scattered (e.g. agricultural holdings), it may be sufficient to have geocoordinates of the headquarters.

3.3 Adoption of classifications

Adoption of international classification systems and standards is the first step in integrating data within the country, establishing exchange protocols with other international agencies and facilitating the unambiguous preparation of the country's national accounts. This ensures that the national data are comparable to the data from other countries.

In this question, the second column of the table seeks information on the extent to which international classifications are used in the national system. The international classification systems are built on a hierarchical coding system, as shown in the examples below. The greater the number of digits, the more detailed the data. In the second column, please report the number of digits of international classifications used in the corresponding national classifications. The *''Extent of adoption (number of digits)''* refers to the maximum number of digits used in the country for building national classification systems for each of the classifications. In the third column, please report the most current version of the classification system being used in the country.

For example, the ISIC is as follows. The more digits in the codes, the more detailed the data:

01 - Crop and animal production, hunting and related service activities
011 - Growing of non-perennial crops
0111 Growing of cereals (except rice), leguminous crops and oil seeds

The Central Product Classification (CPC) is as follows:

Section:	0 - Agriculture, forestry and fishery products
Division:	01 - Products of agriculture, horticulture and market gardening
Group:	011 - Cereals
Class:	0111 – Wheat
	01111 - Wheat, seed
	01112 - Wheat, other

The Standard International Trade Classification (SITC) is as follows

Section: 0 - Food and live animals
Division: 04 - Cereals and cereal preparations
Group: 041 - Wheat (including spelt) and meslin, unmilled
041.1 - Durum wheat, unmilled
041.2 - Other wheat (including spelt) and meslin, unmilled

3.4 Population census

3.4.1 Please record the contact information for the office responsible for the population census.

3.4.2 Please enter the year of the most recent population census.

3.4.3 "Agricultural and other related activities" refers to crops, livestock, fisheries, aquaculture, forestry and other rural paid activities.

3.4.4 If the year has been identified for the next population census, please enter the year. If no date has yet been selected, enter "not applicable".

3.5 Price indices

When answering the questions on price indices, it is not necessary that all the indices be based on national coverage. There will be situations where the national price index may be calculated based on prices collected in only one part of the country.

3.5.1 Please choose which of the three options (i.e. Yes/No/Not Applicable) best describes the situation.

3.5.2 Please choose which of the three options (i.e. Yes/No/Not Applicable) best describes the situation. Please respond "yes" if there is a published Consumer Price Index of the key food crops (e.g. maize, cassava/manioc, rice, wheat or chicken) which are usually consumed directly after only home cooking.

3.5.3 Please respond "yes" if there is an agriculture input price index compiled and published for items such as chemicals fertilizer, pesticides, seeds, farm tools and equipment, and respond "no" if there is not. To respond "yes", it is sufficient if an index on these items is published for any type of prices (e.g. wholesale prices).

3.5.4 Please choose from the three answer options the one that best describes the situation.
"Terms-of-Trade" for agriculture refers to the movement of prices for goods sold by the agriculture sector to other sectors relative to the movement of? prices for goods purchased by the agriculture sector from other sectors of the economy. This index is usually a ratio of indices of prices of two sets of commodities.

3.5.5 Please choose from the three answer options the one that best describes the situation. A Wholesale Price Index (WPI) is based on price data collected from the wholesale trade of commodities, including agricultural commodities. Wholesale markets are identified for collecting price quotations, and weights of different commodities in the index are decided as part of the methodology for computing the Index. Apart from a national aggregate WPI, which is generally used to monitor economy-wide inflation, a WPI is also published by commodity groups. The intention here is to know whether the WPI is available for broad agricultural commodity groups or not. There may be variations in the methodology for computing the WPI, particularly regarding which price (e.g. pre-processing or post-processing) is taken into account; which commodities are in the basket of goods for computing the WPI; and which specific

commodities are used to collect price quotations. The intention here is not to collect that level of detail; it is sufficient to know that a system to monitor bulk prices and inflation is in place.

3.5.6 If the answer was "yes" to question 3.5.5, please respond to 3.5.6a, 3.5.6b and 3.5.6c) regarding the components of the WPI. The response to each of these three questions may be different.

3.5.7 Please answer "yes" if there is a Producer Price Index (also sometimes referred to as a Farm Product Price Index) and "no" if there is not.

The Producer Price Index is an index of the transaction prices that farmers receive when they sell their agricultural products. It can be the price that they get from either: the local market, a market stand that they themselves operate, a wholesaler who buys their product at the farm or a processor of agricultural products who buys their product either at the farm or at the door of the processing plant. The transaction price for calculating producer prices is often referred to as the *"farm gate price"* because it is the price at which the agriculture product is sold and leaves the possession of the farmer.

3.5.8 If the answer was "yes" to question 3.5.7, please respond to 3.5.8a, 3.5.8b and 3.5.8c (regarding the components of the Producer Price Index. The response to each of these three questions may be different.

3.6 Food and agricultural surveys

3.6.1 Agriculture census

3.6.1.1 Please respond "yes" if there has been an agriculture census in the last 20 years and "no" if there has not.

3.6.1.2 If you answered "yes" to question 3.6.1, please indicate the year of the most recent agriculture census, and if you answered "no", skip to question 3.6.1.8.

3.6.1.3 Please report "yes" if the agriculture census was a complete enumeration of all the country's agricultural households/holdings and "no" if it was a sample of agricultural households.
3.6.1.4 Please report "yes" if there is a legal basis for the agriculture census. The legal basis provides a requirement for the Government to undertake a census and may come from the constitution, legislation or a law, act or decree.

3.6.1.5 Please choose which type of frame is used for the agriculture census from the options identified in *3.6.1.5a* through *3.6.1.5c.* The frames are distinguished by differences in the sampling population (e.g. lists, areas or a combination). The sampling frames may come from the following sources**:**

- population census enumeration areas;
- household registers from the population census;
- agricultural census enumeration areas;
- registers of farms from the agricultural census;
- registers of farms based on administrative sources such as business registrations or tax collections; or
- area sample frames built using satellite or aerial images.

If an enumeration area is selected for further sampling or complete enumeration using a list of delineated areas, the sampling frame will be considered as a "List Frame". Area frame

methodology usually involves dividing the agricultural area of the country in "land segments", which are then directly selected using random point sampling methods or otherwise.

3.6.1.6 Please choose from the options presented in questions *3.6.1.6a* through *3.6.1.6g* the agriculture and related activities for which the agriculture census collected information.

3.6.1.7 Please indicate from the list of selections in questions *3.6.1.7a* through *3.6.1.7c* the answer(s) that best describes the programme coordination and operational relationships between the population census and agriculture census projects.

3.6.1.8 Please record the year for the next agriculture census. If the date has not been established yet, please respond with a "no".

3.6.2 Agriculture surveys conducted during the last five years

Questions **3.6.2.1** through to **3.6.2.5** are presented in the form of a table. The rows identify specific surveys that are normally conducted on an annual basis to meet the current requirements of statistics. They are common to the statistical programmes of many countries in some form or other; however, not all countries are likely to have all the surveys in the list.

There are seven questions to be answered for each survey that a country conducts, and all but one (i.e. the year of the most recent survey) can be answered with a "yes" or "no" response. The answers to these questions provide invaluable insight about the level of statistical expertise, resources and technical capacity of the agency or office responsible for the annual agriculture statistics programme. The staff connected with survey planning will understand the questions without much explanation.

3.6.3 Agriculture market information system

Market and price information is vital for improving market efficiencies and leads to better choices and decisions. These data are increasingly being seen as a key component of the agriculture statistics system. The Global Strategy defines food and agriculture price data as "core statistics" for improving agriculture and rural statistics. The indicator for market information is based on the existence of price data collection systems and the level of representation of agriculture in the collection and dissemination of price data. The indicator draws on the questions in this section and also on other related questions elsewhere in the questionnaire.

3.6.3.1 Please answer "yes" if there is a statistical programme in place to collect and disseminate price and related information from the wholesale markets and "no" if not. Prices may be collected to calculate WPI numbers, which normally are disseminated as indices rather than as an actual price per unit of the commodity. The purpose of the question is to determine if "actual price levels" prevailing in the market are collected and disseminated. Other related information could be "quantities traded" or prices according to specification of commodities. The periodicity of disseminating these prices is usually daily or weekly. In answering this question, do not consider the number of markets covered under this price collection and dissemination system.

3.6.3.2 If you answered "yes" to the existence of an information system for prices for wholesale markets and related data, please indicate the coverage of subsectors by this system. There may be different markets identified and selected for collecting prices of different crop, livestock, fish and forest products. Also indicate the number of markets from which prices are collected for products of each of the subsectors.

3.7 Household budget

3.7.1 Please answer "yes" if household budget surveys have been conducted in the country.

3.7.2 Please answer "yes" if estimates of rural household income are available.

3.7.3 Please indicate the year for the next household budget survey.

3.7.4 Please provide contact information for the statistical agency or office that is responsible for the country's household budget surveys.

3.8 National accounts and related agriculture statistics

3.8.1 Please record the name of the statistical office or agency that is responsible for the country's national accounts.

3.8.2 Please enter the year for which the most recent national accounts data are published.

3.8.3 Please choose from the selection of accounts which ones comprise the suite of accounts in the produced and published System of National Accounts (SNA).

3.8.3a Production account
3.8.3b Generation of income account
3.8.3c Use of income accounts
3.8.3d Capital and finance accounts
3.8.3e Balance sheet

3.8.4 Please respond either "yes" or "no" to the question about the preparation of quarterly accounts.

3.8.5 Please respond "yes" if subsector accounts are compiled for fisheries and aquaculture, and "no" if not compiled.

3.8.6 Please respond "yes" if there is an account for the national water supply, and "no" if not.

3.8.7 Please respond "yes" if there is any work on environment accounting, and "no" if not.

3.8.8 Please choose from the three versions of the SNA which one is the most recent version used in the country, and enter it in the box.

3.9 Availability of derived statistics and indicators

The questions in this section are presented in the form of a small table. Column one asks if the data are compiled (yes or no), column two asks for the most recent year for which the data are available and the third column asks for the name of the responsible agency or statistical office. In the table, the codes for the ''responsible agency'' are: 1. National Statistics Office; 2. Ministry of Agriculture; 3. Ministry of Environment; 4. Central Bank; 5. Others. Availability means that they are published and publicly accessible on a predetermined schedule and frequency.

3.9.1 Please answer the questions in the three columns with respect to a commodity balance for the country's "core crops".

3.9.2 Please answer the questions in the three columns with respect to a commodity balance for the country's "core livestock".

3.9.3 Please answer the questions in the three columns with respect to "satellite accounts for food and agriculture statistics". A satellite account for the food and agriculture sector is essentially a set of accounts for the food and agriculture subsector of the economy that are structured on the national accounting framework. That implies that for the food and agriculture subsector, there would be, for example, an Income and Expenditure Account, Generation of Income Account, Allocation of Primary Income Account, Capital Account and a Balance Sheet (see FAO (1996) for details).

3.9.4 Please answer the questions in the three columns with respect to food balance sheets. See FAO (2001) for details on this methodology.

3.9.5 Please answer the questions in the three columns with respect to "agro-environmental indicators".

SECTION 4: AVAILABILITY OF CORE DATA

4.1 Availability of current agricultural statistics

This table records the overall availability, quality and timeliness of the current (usually annual) agriculture statistics. The focus of this section is on availability of data, irrespective of source, rather than the statistical activities, which are examined in Section 3 of the questionnaire on Statistical Methods and Practices.

To complete this section, the focal points should refer this table to all of the identified institutions engaged in collecting agriculture statistics. The contact persons in these institutions should complete the part of the table that is relevant to them. The final response should be prepared by amalgamating the information from the different sources; this might require discussion in order to reach a consensus.

The codes provided at the end of the table should be used, wherever applicable, for the responses. In cases where there are multiple institutions producing statistics on the same data item, the response to questions on frequency, sources of data, geographical coverage, quality and reliability should relate to the most commonly used source of statistics.

The data items listed in the table refer to core crop, livestock, fishery and forestry products. The broad categories have been chosen to reflect the fact that different crops/livestock are important in different countries. The basis for deciding the "core product" can be the share in gross domestic product, agricultural area, exports value or importance of the crop for food security, as deemed appropriate at the country level. For example, a wheat-exporting country will refer to wheat as the core crop, whereas a country with rice as the staple diet will refer to rice as the core crop. Similarly, a beef-exporting country may refer to cattle as the main livestock and beef as the livestock product. Once the main product is determined, the answers should refer to the most commonly used statistical source. Some of the data items in the table might not be relevant to a country. This will be captured in the response to the column on "availability".

When responding to questions in this section, it is recommended to follow the steps listed below:

- **STEP 1:** The National Focal Point decides the "relevance'' or "not relevance e"of specific data items by consulting with agencies responsible for agriculture statistics in the government. In general, most data items will be relevant to all countries. There may be some rare cases (e.g. questions on marine fish in a landlocked country) which may be identified as "not relevant to the country". Report these in the column on availability – which refers to

the availability of data in the country as a whole – and then complete the rest of the columns only for the items relevant for that country.

- **STEP 2:** Complete column 1 on the availability of data. To decide the availability of generic data items, such as crops or livestock, refer to the most important species of crop or livestock.

- **STEP 3:** Cross out the rows for items for which data are not available (code 2) or which are not relevant for the country (code 3).Proceed to fill further columns only for items with code 1 (i.e. data available).

- **STEP 4:** Refer the table to all the institutions involved in producing agricultural and rural statistics, if needed.

- **STEP 5**: The National Focal Point should validate the merged table, if necessary, in a meeting of the contact points from different agencies.

Example of how to complete Section 4 – Availability of core data:

Statistical domain	Availability[1]	If "Yes" *(i.e. if data are available, please respond to the six columns below using response codes provided at the bottom of that page)*					
		Responsible institution(s)[2]	The year of most recent data	Frequency[3]	Main source of data[4]	Geographic coverage[5]	Quality, reliability & consistency of data[6]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Crop production quantity							
Livestock production quantity							

RESPONSE CODES:

[1]**Availability:** 1. Yes; 2. No; 3. Not relevant to the country.

[2]**Responsible institutions** *(Please indicate up to four main institutions in the order of their importance):* 1. National Statistics Office; 2. Ministry of Agriculture; 3. Other line ministries; 4. Central Bank; 5. Commodity board; 6. Producer's association; 7. Customers/Revenue Authority; 8. Others

[3]**Frequency:** 1. Annual 2. Seasonal (once every four to six months); 3. Quarterly; 4. Monthly; 5.Weekly; 6. Daily; 7. Two to five years; 8. Ad hoc.

[4]**Main source of data:** 1. Census; 2. Sample survey; 3. Administrative records; 4. Estimates/forecasts; 5. Special study; 6. Expert opinion/assessment.

[5]**Geographic coverage**: 1. National; 2.Subnational; 3. Small area.

[6] **Quality, reliability & consistency of data6** : 1. Highly reliable; 2. Reliable; 3. Acceptable; 4. Workable; 5. Unacceptable.

DEFINITIONS OF TERMS USED IN THE TABLES OF SECTION 4

Agricultural subsidies

Payments by the government to producers of agricultural products for the purpose of stabilizing food prices, ensuring plentiful food production, guaranteeing farmers' basic incomes and generally strengthening the agricultural segment of the national economy. Subsidies may also be paid to input suppliers to increase the affordability of agricultural inputs by the producers.

Biomass

Refers to the total weight of a group of living organisms or of any specific portion, within an area at a given time.

Crop production value

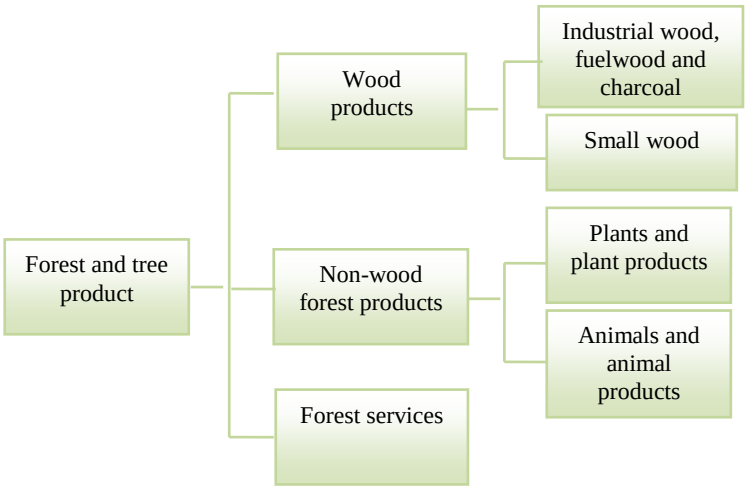
Refers to the statistics of value of production.

Crops

Normally these data should be collected by species because in some countries data for certain crop production may be available while others may not be available. However, these questions refer to the most important crops of the country. The importance of crops should be determined, for example, by the contribution to gross domestic product, exports or food security.

Forest

The forest produces a number of products and services. The term "product" refers to goods, which are tangible, whereas the "services", which are used but are non-tangible. Forest product is the output of forestry and logging activity. Forestry and logging products can be wood in the rough and non-wood forest products.



Livestock

Normally these data should be collected by species because in some countries, data on production of meat from beef cattle may be available, but data on meat from poultry production may not be available. However, these questions refer to the most important livestock in the country. The importance of specific livestock is to be determined, for example, by the contribution to gross domestic product, exports or food security.

Maximum level of disaggregation of estimates

Refers to the lowest level of administrative or geographical breakdown for the country for which estimates are available.

Non-wood forest product

Includes both food and non-food items. Examples of food products include: game meat, insects, insect eggs, bamboo shoots, berries, etc. Examples of non-food products are gums and raisins collected freely from forest trees.

Public investment in agriculture

There are two different types of investment: public and private. Public investment has its origin in the government's plans for the various economic sectors, while private investment is carried out by individual enterprises or groups of enterprises. Investments by individual farmers in land improvement, farm buildings and high value machinery are all examples of private investments.

Wood products

These include industrial wood (timber), fuelwood, charcoal and small woods. Whereas industrial wood is used after industrial processing, other types of wood, such as fuelwood, charcoal, wood chips and round wood, are used in an unprocessed form (e.g. pit-props, pulpwood).

SECTION 5: CRITICAL CONSTRAINTS IN THE AGRICULTURE STATISTICS SYSTEM

5.1 Critical constraints

The table has a list of constraints that must be evaluated independently by the NSO and MOA. The national situation will be obtained by averaging the two sets of responses.

Please use the response codes indicated below for grading:
(1) Not at all; (2): Somewhat; (3) Relevant; (4) Significant; (5) Dominant constraint.

A "dominant constraint" means that that any improvement in the situation will dramatically improve agricultural statistics. On the other hand, "Not at all" means that the constraint is inconsequential, and an improvement in this will not significantly affect the ability of the organization to provide the minimum set of core data, the quality or timeliness of the agricultural statistics or the sustainability of the agriculture statistics programme. The other codes reflect the situation in between the two extremes. Differences in codes reflect the severity of the constraint.

3

Guidelines on Compiling Country Capacity Indicators

COMPILING INDICATORS OF COUNTRY CAPACITY

This section presents definitions of CCIs, relevant questions in the CAQ and the scoring criteria to use in computing the indicators. Most of the indicators are rated on a 100-point scale.

One issue that needs to be addressed for some of the indicators at the regional level is how to get a representative indicator for the country as whole. The representative indicator may be quite different at the NSO, MOA or other important offices. Two options exist to handle this: '

1. Collect information for the indicator from the most important office responsible for the bulk of current agriculture statistics, and build the indicator from the information from only that office.
2. Collect data separately from the two or three most important institutions engaged in agriculture statistics, and then compile the relevant indicators separately for them. Average the individual agency indicators and use the result as the national indicators.

To decide which approach to use, consult with the Regional Coordinator for the Country Assessment, and then clearly mention it in the country profile.

Capacity indicator 1: Institutional infrastructure

This indicator synthesizes the assessments of the five main elements of the institutional infrastructure dimension of the country's capacity to produce agriculture statistics (i.e. legal framework; coordination in the national statistical system; strategic vision and planning for agriculture statistics; integration of agriculture in the national statistical system; and relevance of data) by calculating the geometric mean of the indicators on the five elements.

1.1 Legal framework

A legal framework and enabling legislation are fundamental prerequisites of any statistical system. The legal framework defines: the mandate of the statistical agency; its reporting relationship to the government; its responsibilities; its use and application of sound statistical practices; the legal authority to collect data and conduct surveys; and, most importantly, the legislative authority to protect the confidentiality of individually identifiable information collected for statistical purposes.

The legal framework indicator is a means to assess the existence, operation and adequacy of the legal framework for collecting agriculture statistics. The relevant questions and scoring criteria for the indicator are:

Indicator	Questions	Answer	Score
Legal framework	**1.2.1** Is there a legal or statutory basis for statistical activities in the country in general?	Yes No	1 0
	Is it operational?	Yes No	1 0
	1.2.2 Is there a legal basis for collecting agricultural statistics?	Yes No	1 0
	1.2.2a If "Yes" to 1.2.2, how adequate is the legal framework for agriculture statistics? Please answer with a code.		
	(1) Fully	Yes	2
	(2) Workable	Yes	2
	(3) Somewhat adequate	Yes	1
	(4) Somewhat inadequate	Yes	0
	(5) Totally inadequate	Yes	0

Indicator = (Total country score/ maximum score) x 100

The total country score is compiled by adding the scores obtained for each of the relevant questions for each country. This procedure is followed for most of the indicators, unless otherwise specified in the indicator definition.

1.2 Coordination in the national statistical system

Coordinating the work of the government organizations involved in collecting data on agriculture, forestry and fisheries ensures adherence to a common set of standards, minimizes duplication of efforts, avoids publication of conflicting data and provides a common forum for governance and securing of resources.

The proposed indicator for coordination reflects the existence and functioning of relevant bodies to ensure coordination and the span of their mandate (i.e. coverage of subsectors). The indicator is computed on the basis of a total country score using the relevant questions below.

Indicator	Questions	Answer	Score
Coordination in the national statistical system	**1.2.3** Has any national statistics council, board or committee been established by law or administrative order to coordinate agricultural and rural statistics?	Yes No	1 0
	1.2.3a If "yes" to **1.2.3**, is it active and discharging its functions?	Yes No	1 0
	1.2.4 If "yes" to **1.2.3**, does the mandate of the national statistics council, board or committee cover:	Yes No	3 0
	1.2.4.a/b Crop and/or livestock statistics	Yes	1
	1.2.4 c/d Forestry and/or environment statistics	Yes	1
	1.2.4 e Aquaculture and fishery statistics	Yes	1
	1.2.4 f Water resource statistics	Yes	1
	1.2.4 g Rural development statistics	Yes	1

Indicator = (Total country score/ maximum score) x 100

1.3 Strategic vision and planning for agricultural statistics

Despite the existence of many key issues that influence the development of strategies to improve statistics and the related planning process, the indicator on this element of country capacity merely focuses on the need for and importance of a strategy and a plan, and whether due consideration has been given to agriculture in preparing this plan. The responses to the key questions used for this indicator will summarize all the issues that might be raised to measure the level of strategic thinking in the statistical system. The relevant questions and scoring criteria for the indicator are as follows:

Indicator	Questions	Answer	Score
Strategic vision and planning for agricultural statistics	**1.4.6** Is there any national strategy/plan/programme specific to agriculture statistics?	Yes No	3 0
	1.4.7 If ''yes'' to **1.4.6,** is the agriculture sector strategy integrated into the NSDS?	Yes No	3 0
	1.4.9 If ''No'' to **1.4.6**, is its design in-process or intended? *(Use codes):*		
	1=Under development;	Yes	2
	2=Planned	Yes	1
	3=Not planned	Yes	0

Indicator = (Total country score/ maximum score) x 100

1.4 Integration of agriculture in the national statistical system

Integration of the statistical system improves efficiency in the costs and efforts required for data collection, provides greater scope for data analysis and increased access to data and helps avoid conflicting data. This indicator is largely based upon the degree to which the agriculture subsector is included and related to the country's other statistical programmes in the NSDS and the linkages among major statistical activities (e.g. the population and agricultural censuses). The relevant questions and scoring criteria used for building this indicator are as follows:

Indicator	Questions	Answer	Score
Integration of agriculture in the national statistical system	**1.4.1** Has the country developed a national strategic plan or programme for the development of statistics (e.g. an NSDS or national action/master plan)?	Yes No	0 0
	1.4.5 If "yes" to **1.4.1,** does the strategy include a programme of work for the subsector relating to:		
	1.4.5a and/or b Crop/livestock statistics	Yes	1
	1.4.5c and/or d Forestry/environment statistics	Yes	1
	1.4.5e Fishery and aquaculture statistics	Yes	1
	1.4.5f Water resource statistics	Yes	1
	1.4.5g Rural development statistics	Yes	1
	1.4.6 Is there any national strategy/plan/programme specific to agriculture statistics?	Yes No	- -
	1.4.7 If ''yes'' to **1.4.6**, is the agriculture sector strategy integrated into the NSDS?		1 0
	3.4.3 Were the questions on the household's participation in agricultural or related activities (agricultural holding) included in the questionnaire used in the last population census?	Yes No	1 0
	3.6.1.6 The last agriculture census included questions on: *(Tick the appropriate row from the list below, as applicable):*		-

	3.6.1.6 a Crops *3.6.1.6 b Livestock* *3.6.1.6 c Forestry related to agriculture* *3.6.1.6 d Environment related to agriculture* *3.6.1.6 e Fisheries and aquaculture* *3.6.1.6 f Water related to agriculture* *3.6.1.6 g Other income-generating activities in rural areas*		
	*If **3.6.1.6** covered any of the fishery, aquaculture, forestry, water or rural activities domains*		1
	If it covered only crops and livestock.		0
	3.6.1.7a Did the agriculture census use the cartographic material and administrative boundaries used for the population census?	Yes No	1 0
	3.6.1.7b Were questions to collect information on household participation in the agriculture sector included in the population census, to get a sampling frame for the agricultural census?	Yes No	1 0

Indicator = (Total country score/ maximum score) x 100

1.5 Relevance of data

The relevance of data refers to the interface between the statistical system and the users of its output. This indicator reflects the extent to which a user interface is built in the statistical system. This is measured by the diversity of stakeholders represented in the relevant bodies created to establish a user interface and the existence of channels of communications between users and producers. The indicator does not give any weight to the nature of the forum for dialogue (e.g. formal or informal). What is important is that the forum exists and that it meets on a regular basis. The relevant questions and scoring criteria used for building this indicator are shown below.

Indicator	Questions	Answer	Score
Relevance of data	**1.5.1** Is there a formal council, committee or forum for dialogue among suppliers and users of agricultural statistics in the country?	Yes No	1 0
	1.5.2 If ''yes'' to **1.5.1,** are regular meetings held?	Yes No	1 0
	1.5.3 If ''no'' to **1.5.1**, is there at least an informal functioning forum for dialogue between producers and users of agricultural statistics?	Yes No	1 0
	1.5.4 Are there well-established channels for receiving feedback from users of agricultural statistics (e.g. Web contact, e-mails)?	Yes No	1 0
	1.5.5 If " yes" to 1.5.1, 1.5.3 or 1.5.4, what is your assessment of the level of dialogue between data users and those producing the data? (Use codes): *1/2= Extensive/adequate* *3/4= Moderate/somewhat* *5=Inadequate*	 Yes Yes Yes	 2 1 0
	1.5.6 If ''yes'' to **1.5.1** or **1.5.3**, please indicate which of the following are represented in the formal or informal forum: *Planning bodies, Ministry of Finance/Treasury/Central Bank* *Line ministries and departments* *Representatives of academic and research community/ Representatives of socioprofessional bodies* *Media/Chamber of commerce* *Private-sector representatives, development partners (e.g. donors, NGOs)*	 Yes Yes Yes Yes Yes	 1 1 1 1 1

Indicator = (Total country score/ maximum score) x 100

Capacity indicator 2: Resources

The Resources capacity indicator combines four elements: financial resources, human resources (staffing), human resources (training) and physical infrastructure. The elements are combined and the indicator is calculated as the geometric mean of the indicators on the four elements.

2.1 Financial resources

While adequate funding is a prerequisite for all national statistics programmes, obtaining it is typically challenging. Furthermore, the system for agriculture and food statistics often exists outside the national statistics system, and responsibility for it is usually divided among, for example, the ministries of agriculture, fisheries, forestry, land and water. This makes it more difficult to secure funding for these programmes. Because the data on financial resource budgets often come from line ministries and departments, it was difficult to come up with consistent, reliable indicators for budgets and financial resources during the pilot testing of the self-administered questionnaire. The proposed indicator for financial resource deployment in this version of the questionnaire therefore relies on responses to a set of proxy and perception-based questions, which are listed below.

If different agencies provide separate responses to these questions, an average response should be computed for the country as a whole. The average figure should then be used to compute the indicator.

Indicator	Questions	Answer	Score
Financial resources	**2.1.1** Is there a separate budget line for the following:		
	2.1.1a In the NSO for agriculture statistics	Yes No	1 0
	2.1.1b In the MOA for statistical activities relating to crop/livestock	Yes No	1 0
	2.1.1c In the Ministry/Department of Fishery for statistical activities	Yes No	1 0
	2.1.1d In the Ministry Department of Forestry for statistical activities	Yes No	1 0
	2.1.2 What percentage of activities relating to agricultural statistics in the country are funded by the government budget?		
	2.1.2a 0%-20%	Yes	1
	2.1.2b 20%-40%	Yes	2
	2.1.2c 40%-60%	Yes	3
	2.1.2d 60%-80%	Yes	4
	2.1.2e 80%-100%	Yes	5
	5.1.9. To what extent is "lack of availability of funds" a constraint for planned field-oriented statistical activities?		
	(1)Not at all	Yes	3
	(2)Relevant/somewhat	Yes	2
	(3)Significant	Yes	1
	(4)Dominant	Yes	0

Indicator = (Total country score/ maximum score) x 100

2.2 Human resources: staffing

In many countries, there is insufficient availability of qualified personnel for statistical activities, which manifests itself as a large number of vacant statistical positions. This happens either because the people with the desired level of qualifications are not available in the country or there are some administrative or budget constraints in filling the vacancies. Additionally,

there may frequent staff turnover, either because of transfer policies or the availability of better employment opportunities elsewhere. The indicator on staffing covers the extent to which established posts are filled and the extent to which staff turnover is a constraint, with equal weight assigned to these two key issues.

If several agencies respond to questions 2.2.1 and 2.2.2, their responses could be pooled and averaged before computing the indicators. Similarly, the average response of different agencies to question 5.1.15 needs to be taken into account in calculating a national indicator on staffing.

Indicator	Questions	Answer	Score
Human resources: staffing	**2.2.1** Number of officially established posts to produce agricultural statistics *Professional officer level* *Technical support level*		
	2.2.2 Out of the number of posts mentioned in **2.2.1,** the number of posts filled *Professional officer level* *Technical support level*		
	5.1.15 The extent to which turnover of professional staff is a constraint in the country		
	(1) Not at all	Yes	4
	(2) Somewhat	Yes	3
	(3) Relevant	Yes	2
	(4) Significant	Yes	1
	(5) Dominant constraint	Yes	0

Indicator = [0.5* Total number of posts filled (professional + technical)/ Total number of posts established (professional + technical)] + [0.5* Country score on staff turnover / 4] * 100

2.3 Human resources: training

This indicator gives an idea about the extent to which statistical staff are kept up-to-date through training.

Indicator	Questions	Answer	Score
Human resources: training	**2.2.3** Is there an official government programme or training policy for making training available to agricultural statisticians?		
	Training abroad	Yes	1
		No	0
	National training	Yes	1
		No	0
	2.2.4 Number of staff trained (professional + technical) during the last 12 months *Training abroad* *National training*		

Indicator = 0.5* [country score on training/ 2] + 0.5* [total number of persons trained/ total number of posts filled]* 100

Question 2.2.4 could be aggregated for different agencies before computing the indicator for the country as a whole.

2.4 Physical infrastructure

Usually the availability of physical infrastructure for statistical activities is a constraint in the country. This indicator is based on the extent to which there are constraints on three main types of physical infrastructure: (1) transport equipment for field activity; (2) office space; and (3) office equipment.

Indicator	Questions	Answer	Score
Physical infrastructure	**5.1.10** The extent to which availability of transport equipment for field statistical activities is a constraint in the country		
	(1) Not at all	Yes	4
	(2) Somewhat	Yes	3
	(3) Relevant	Yes	2
	(4) Significant	Yes	1
	(5) Dominant constraint	Yes	0
	5.1.11 The extent to which availability of office space for statistical staff is a constraint in the country		
	(1) Not at all	Yes	4
	(2) Somewhat	Yes	3
	(3) Relevant	Yes	2
	(4) Significant	Yes	1
	(5) Dominant constraint	Yes	0
	5.1.12 The extent to which availability of office equipment (e.g. telephone, Internet, office furniture) for the statistical staff is a constraint in the country		
	(1) Not at all	Yes	4
	(2) Somewhat	Yes	3
	(3) Relevant	Yes	2
	(4) Significant	Yes	1
	(5) Dominant constraint	Yes	0

Indicator = (Total country Score/ maximum score) x 100

(The total country score is the total of the scores obtained by the country on all three questions.)

Capacity indicator 3: Statistical methods and practices

This indicator gives an overall picture of the country's capability to undertake statistical activities in a professional manner. This dimension of country capacity includes ten different elements. The first three elements relate to the use of IT which includes statistical software capability, data collection technology and IT infrastructure. General statistical infrastructure relates to the sampling frame, etc. The next three elements focus on the adoption of statistical standards, statistical activities and the analysis and use of the data collected. Quality consciousness is the final element. The combined indicator for statistical methods and practices is calculated as the geometric mean of the indicators for the ten elements of this dimension.

3.1 Statistical software capability

Using computers and statistical software for processing, analysing, disseminating and archiving statistical information is good statistical practice which plays a major role in ensuring data quality and providing the means for data quality assurance and greater accessibility to data. Since statistical software capability may differ across line ministries and departments, it may be simpler to assess the capability of the NSO, which is usually the most capable with IT software; this approach also could provide the most useful data for comparisons across countries in the region. The decision about whether to build this indicator based on information provided by only the NSO or multiple offices should be taken at the regional level. If many offices

participate, the national indicator can be determined by simply averaging the indicator for the individual institutions.

Indicator	Questions	Answer	Score
Statistical software capability	**3.1.6** Software and other IT-related systems used in the NSO		
	a. SPSS, SAS, STATA	Yes	2
	b. ACCESS, EXCEL (data analysis)	Yes	1
	c. CSPRO	Yes	2
	d. EXCEL (data processing)	Yes	1
	e. PC-AXIS, Oracle, SDMX	Yes	2
	f. EXCEL (databases)	Yes	1

Indicator = (Total country score/ maximum score) x 100

If 3.1.6a is "yes", that means that the country uses any of the three software data analysis programmes (i.e. SPSS, SAS, STATA) which are considered to be a slightly higher level than the second group in 3.1.6b (ACCESS and EXCEL). In any case, only one response from a or b ; c or d; e or f will be admitted. So the score obtained in each of the three groups – data analysis, data processing and databases – cannot be more than two.

3.2 Data collection technology

The data collection technologies used by statistical offices and ministries indicate the degree to which they have been able to acquire and use advanced equipment and digital technologies for their field data collection operations. These technologies minimize data entry errors of commission and omission and also offer precise measurement of areas using GPS. Computer-based interviews reduce data processing time and related errors and imputations.

A country may be considered as using the above technology if it has used it in recent years for any regular statistical programme as a fully tried and adapted technology. Sporadic use of technology on a pilot trial survey basis will not normally be considered as evidence of the technology being used in the country.

Indicator	Questions	Answer	Score
Data collection technology	**3.1.7** Technology used for collection, entry and transfer of survey data:		
	3.1.7a Computer-assisted telephone interview (CATI)	Yes	1
	3.1.7b Personal data assistant (PDA) or Computer/Tablet-assisted personal interview (CAPI)	Yes	2
	3.1.7c Paper-based personal interview and manual data entry into computer	Yes	1
	3.1.7d Paper-based personal interview and scanning of questionnaires	Yes	2
	3.1.7e Geographical position system (GPS)	Yes	2
	3.1.7f Compass as measuring tapes	Yes	1
	3.1.7g Wireless data transfer from field	Yes	2

Indicator = (Total country score/ maximum score) x 100

3.3 Information technology infrastructure

The IT infrastructure (e.g. computers, servers, Internet connections) indicates the degree to which the statistical offices and their staff are equipped to process, analyse, disseminate and archive information. Although the presence and accessibility of equipment are not measures of the effectiveness of its use, the number of employees per computer is information needed to assess data quality assurance and efficient data processing, and is a key indicator to assess the capacity of the statistical office and its statistical programmes. For simplicity, the questionnaire-based indicator is calculated based on the information supplied by the NSO, and the NSO responses will be used as the country indicator.

Indicator	Questions	Answer	Score
IT infrastructure	**3.1.8** Number of PCs in use in the NSO		
	2.2.2 Number of posts (professional + technical support) at headquarters. This is also defined as persons engaged in statistical activity		
	3.8.9 Number of computer servers installed for data storage and communication		
	If. 3.1.8 No. of PCs/person ≥1 PC	Yes	3
	No. of PCs/person is between 0.5 and 0.75	Yes	2
	No of PCs/person is up to .5 PC	Yes	1
	No. of PCs/person < .5 PC	Yes	0
	If 3.8.9 Yes (At least one)	Yes	1
		No	0

Indicator = (Total country score/ maximum score) x 100

This indicator can also be compiled separately for the MOA and the NSO and then averaged using a simple arithmetic mean to reflect the overall national situation.

3.4 General statistical infrastructure

The availability of general statistical infrastructure (e.g. up-to-date cartographic material, lists, registers and frames) is a prerequisite for designing and implementing surveys. The quality and availability of this type of material often determines the quality and reliability of the results of statistical activities. This indicator is based on responses to the following questions.

Indicator	Questions	Answer	Score
General statistical infrastructure	**3.2.1** Does the country have up-to-date topographic maps, including boundaries of administrative and/or regional subdivisions?	Yes No	1 0
	3.2.2 Are the digitized maps available to other departments for statistical purposes, including on a cost basis?	Yes No	1 0
	3.2.3 Does the country have an established unit to process the remotely-sensed satellite data for monitoring crop condition and for crop forecasting?	Yes No	1 0
	3.2.4 Does any ministry maintain an up-to-date list of a large active agricultural form (e.g. crop, livestock or fish)?	Yes No	1 0
	3.2.5 Are the enumerators provided with a printed map to collect data from the field?	Yes No	1 0
	3.2.6 Is an up-to-date master sampling frame or farm register available for current agricultural sample surveys?	Yes No	1 0
	3.2.7 Are the statistical units (e.g. location of agricultural holding headquarters, household or land parcel) geocoded?	Yes No	1 0

Indicator = (Total country score/ maximum score) x 100

3.5 Adoption of international standards

Adopting international classification systems and standards is the first step for integrating data within the country, establishing data exchange protocols with international agencies and facilitating the unambiguous preparation of the country's national accounts. Following international standards ensures that the national data are comparable to the data from other countries.

In order to keep the indicator simple, it is based upon four of the most important international classification systems: the International Standard Industrial Classification (ISIC), the Central Product Classification (CPC), the Standard International Trade Classification (SITC) and the Harmonized Commodity Description and Coding System (HS). To calculate the indicator, the weights assigned to the use of classifications are combined with information on the most recent version of the SNA used in the country. The weights assigned to each are equal, but that could be considered as arbitrary. Nonetheless, the indicator appears to capture different levels of use of the international statistical standards, and that information appears to be correlated to the other available information on data integration.

Indicator	Questions	Answer	Score
Adoption of international standards	**3.3** Adoption of classifications:		
	International Standard Industrial Classification **(ISIC)**		
	Current version (Rev 4)	Yes	5
	Previous version (Rev 3.1)	Yes	3
	Older version (Rev 3 or older)	Yes	1
	Central Product Classification **(CPC)**		
	Current version (Rev 2)	Yes	5
	Previous version (Rev 1.1)	Yes	3
	Older version (Rev 1 or older)	Yes	1
	Standard International Trade Classification **(SITC)**		
	Current version (Rev 4)	Yes	5
	Previous version (Rev 3)	Yes	3
	Older version (Rev 2 or older)	Yes	1
	Harmonized Commodity Description and Coding System **(HS)**		
	Current version (2012)	Yes	5
	Previous version (2007)	Yes	3
	Older version (2002 or older)	Yes	1
	3.8.8 Version of UN SNA currently used in the country:		
	SNA 2008	Yes	4
	SNA 1993	Yes	2
	SNA 1968	Yes	1

Indicator = 0.75*[% score on classification]+0.25*[% score on SNA] x 100

Scoring criteria: classification

Scoring scheme for adoption of a version of classification is as follows:

Use of latest version: 5 marks
Use of previous version: 3 marks
Use of older version: 1 mark
Not used: 0 marks

Scoring scheme for extent of adoption is presented below:

- If full international structure is adopted: one bonus mark
- If an aggregated structure is adopted (i.e. national classification does not conform to international classification fully up to last digits): no additional bonus mark

The total scores thus obtained for use of all four classifications is the total country score. The maximum score that can be obtained by any country is 24. The "percent score on classification" is used for building the indicator.

The following reference table provides information about the available version and the number of digits used in standard international versions of classifications.

Classification	Current version	Previous version	Older versions	International standard (digits)	Aggregated structure (digits)
ISIC	Rev 4	Rev 3.1	Rev 3 or older	4	Less than 4
CPC	Rev 2	Rev 1.1	Rev 1 or older	5	Less than 5
HS	2012	2007	2002 or older	6	Less than 6
SITC	Rev 4	Rev 3	Rev 2 or older	5	Less than 5

Indicator	Questions	Answer	Score
Adoption of international standards	3.3 Adoption of classifications:		
	International Standard Industrial Classification(ISIC)		
	Current version (Rev.4)	Yes	5
	Previous version (Rev 3.1)	Yes	3
	Older version (Rev 3. or older)	Yes	1
	Central Product Classification(CPC)		
	Current version (Rev2)	Yes	5
	Previous version (Rev 1.1)	Yes	3
	Older version (Rev 1.0 or older)	Yes	1
	Standard International Trade Classification(SITC)		
	Current version (Rev.4)	Yes	5
	Previous version (Rev. 3)	Yes	3
	Older version (Rev. 2 or older)	Yes	1
	Harmonized Commodity Description and Coding System (HS)		
	Current version (2012)	Yes	5
	Previous version (2007)	Yes	3
	Older version (2002 or older)	Yes	1
	3.8.8 Version of UN SNA currently used in the country:		
	SNA 2008	Yes	4
	SNA 1993	Yes	2
	SNA 1968	Yes	1

Indicator = 0.75*[% score on classification]+0.25*[% score on SNA]x 100

3.6 General statistical activities

This indicator is based on critical statistical activities that are fundamental to the statistical system of any country. Most of the activities included for this indicator implicitly involve agriculture statistics also. For example, national accounts of the country cannot be built unless there are data available on agricultural production and prices. The indicator does not capture the quality of agriculture statistics that feeds into these general statistical activities. The indicator is based on the following questions.

Indicator	Questions	Answer	Score
General statistical activities	**3.4.2/ 3.4.4** Has the latest population census been conducted during the last ten years or planned for next two years?	Yes No	1 0
	3.8.2 What is the most recent year for which national accounts data have been published?		
	If one year lag	Yes	2
	If two years	Yes	1
	More than two years	Yes	0
	3.8.4 Are estimates of quarterly production from the agriculture sector prepared and published in the country?	Yes No	1 0
	3.5.1 Is a Consumer Price Index (CPI) published in the country?	Yes No	1 0
	3.5.5 Is a Wholesale Price Index (WPI) published in the country?	Yes No	1 0
	3.7.2 Are estimates of rural household income available?	Yes No	1 0

Indicator = (Total country score/ maximum score) x 100

3.7 Agricultural market and price information

The Global Strategy defines food and agriculture price data as "core statistics" for improving agriculture and rural statistics. These data are a critical component of the agriculture statistics system because they are vital for calculating the value of agriculture production for the SNA, assessing market efficiencies and providing early warnings on up-and-coming market shortages or surpluses, which can be useful for assessing a change in the food security situation. The proposed indicator is based on the existence of price data collection systems and the level of representation of agriculture in collection and dissemination of data on prices.

Indicator	Questions	Answer	Score
Agricultural market and price information	**3.5.2** Does the CPI report indices of important agricultural commodities used for direct consumption separately?	Yes No	1 0
	3.5.3 Is there an index to monitor agricultural input prices?	Yes No	1 0
	3.5.5/ 3.5.7 Is an index of wholesale or producer prices published in the country?	Yes No	1 0
	3.5.6/ 3.5.8 Does the WPI/PPI report on indices separately for:		
	3.5.6a/3.5.8a Crop commodities?	Yes	1
	3.5.6b/3.5.8b Livestock products?	Yes	1
	3.5.6c/3.5.8c Fish and related products?	Yes	1
	If there are no separate reports on crop, livestock or fish, or no WPI		0
	3.6.3.1 Do the systems for collecting and disseminating price and related information from the major wholesale markets of agricultural commodities exist in the country?	Yes No	1 0

	3.6.3.2 Agricultural price collection covers subsectors:		
	3.6.3.2a Crops	Yes	1
	3.6.3.2b Livestock	Yes	1
	3.6.3.2c/d Forestry, fish and aquaculture	Yes	1

Indicator = (Total country score/ maximum score) x 100

3.8 Agricultural surveys

The number and frequency of specialized surveys is an indicator of the level of development of a country's statistical system. The intention here is to assess to what extent the country conducts specialized surveys to meet its "core data" requirements as defined in the Global Strategy for Improving Agriculture and Rural Statistics. This indicator is based on whether or not a set of core surveys are carried out in the crop, livestock, fishery, forestry and water subsectors. Weight is given to the status and regularity of the agricultural census, which serves as the foundation for agricultural surveys.

Indicator	Questions	Answer	Score
Agricultural surveys	**3.6.1.2** Please indicate the year of the last agriculture census.		
	Agriculture census done within last ten years	Yes	6
	Agriculture census done within last 20 years	Yes	3
	More than 20 years		0
	3.6.2.1 Crop surveys for major crops	(up to five)	
	3.6.2.1 a Crop area surveys (planting and harvest)	Yes	1
	3.6.2.1 b Crop production surveys	Yes	1
	3.6.2.1 c Crop yield surveys	Yes	1
	3.6.2.1 d Costs of production surveys	Yes	1
	3.6.2.1 e Post-harvest losses surveys	Yes	1
	3.6.2.2 Livestock surveys for main livestock	(up to four)	
	3.6.2.2a Livestock population or livestock inventory survey	Yes	1
	3.6.2.2b Productivity/yield survey for livestock and animal products	Yes	1
	3.6.2.2c Poultry survey	Yes	1
	3.6.2.2d Enumeration survey for nomadic and pastoral livestock population	Yes	1
	3.6.2.3 Fishery surveys	(up to four)	
	3.6.2.3a Fish production survey for marine or inland capture fisheries	Yes	1
	3.6.2.3b Fish production survey for inland capture fisheries and aquaculture	Yes	1
	3.6.2.3c Fish and fishery commodities production survey	Yes	1
	3.6.2.3d Fishery or aquaculture census/enumeration of frame information	Yes	1
	3.6.2.4 Water surveys	(up to four)	
	3.6.2.4a Area equipped for irrigation	Yes	1
	3.6.2.4b Area actually irrigated	Yes	1
	3.6.2.4c Crops irrigated	Yes	1
	3.6.2.4d Water withdrawal for irrigation (crops, forests or livestock)	Yes	1
	3.6.2.5 Forestry surveys	(up to three)	
	3.6.2.5a Household surveys covering wood energy consumption	Yes	1
	3.6.2.5b Survey for collection of forest products (wood and non-wood)	Yes	1
	3.6.2.5c Forest inventory survey	Yes	1

Indicator = 0.25 (% score on agricultural census) + 0.75 (% aggregate score on applicable surveys) x 100

This indicator is based on an assessment of the diversity and coverage of the "core data requirements" by the agriculture survey programme, rather than the quality of surveys. If a certain survey is considered to be not relevant for the country, it should be taken as "not applicable", and the corresponding maximum score and total country score should be adjusted before calculating "the percentage aggregate score on all the applicable surveys".

3.9 Analysis and use of data

Data analysis serves the agriculture statistics programme in several ways. Most importantly, it helps to improve the data quality and maintain the relevance of the programme. A strong analytic approach in the statistical system improves the possibility of using the data for policy-making and helps to create an understanding of data users' needs which is critical in order to support emerging data needs. Analytic frameworks (e.g. the SNA, food and commodity balance sheets and agri-environmental indicators) integrate and reconcile data coming from different sources and also play an important role in assessing data coherence and identifying gaps and weaknesses. To keep this indicator simple, it is defined on the basis of the key analytical activities that most statistical offices should normally undertake.

Indicator	Questions	Answer	Score
Analysis and use of data	**3.8.3** Are the following economic accounts compiled for the agriculture sector?	Yes No	- 0
	3.8.3a Production account	Yes	1
	3.8.3b Generation of income account	Yes	1
	3.8.3c Use of income account	Yes	1
	3.8.3d Capital and finance accounts	Yes	1
	3.8.3e Balance sheet	Yes	1
	3.8.4 Are estimates of quarterly production from the agriculture sector prepared and published?	Yes No	1 0
	3.5.4 Is an index number of Terms of Trade for agriculture published?	Yes No	1 0
	3.9.4 Are the food balance sheets compiled and, if so, what is the latest year? With one-year lag With more than one-year lag	 Yes No Yes No	 2 0 1 0
	3.9.5 Are agri-environmental indicators compiled?	Yes No	1 0

Indicator = (Total country score/ maximum score) x 100

3.10 Quality consciousness

Quality consciousness is normally assessed based on evidence that the statistical office not only follows sound statistical practices (i.e. statistical methodologies) and has established procedures to minimize sampling and non-sampling errors, but also that it documents and makes this information readily accessible to the public, in the form of written reports. The statistical agency should strive to build quality into all its programmes and products. To achieve success in this requires a shared concern for quality and pride among employees and managers at all levels of the statistical office.

In assessing the quality within a statistical system, it is necessary to distinguish between: (1) the quality of specific data; (2) the quality of a survey or data collection programme; and (3) the

quality of the statistical system as a whole, something which is often confused with capacity.

The indicator here focuses on a "general culture of quality consciousness" in the country, which manifests itself in using a set of good statistical practices in survey management. The extent to which these practices are adopted varies across surveys and subsectors, but that should make it a valid and sensitive indicator of quality consciousness as it is practiced in the country's agriculture statistics system.

Relevant questions

This indicator is based on the surveys carried out by the country from among the surveys listed in question 3.5.2. Quality is assessed based on whether or not the following desirable features of a survey are used:

- Probability sample used
- Sampling errors calculated
- Data published
- Metadata published
- Microdata archived

The country gets one mark for each of the five characteristics actually carried out, and the total of these marks is the "total country score".

Maximum score = Number of surveys carried out by the country x five

Indicator = {Total country score/ total marks}

Example

If a country does only ten surveys, the maximum possible score will be 10 *5 = 50. If there are only 35 "'yes" responses in the 50 cells relevant to the surveys carried out by the country, then: Indicator = 35/50 = 70%.

Because this indicator is based on practices followed in the surveys actually carried out in the country, it does not penalize a country for an absence of surveys that are not relevant and that are not part of the country's statistical programme.

Capacity indicator 4: Availability of statistical information

4.1 Core data availability

The minimum set of core data, as determined by the Global Strategy, includes statistics about the production of major crop, livestock, forestry and aquaculture and fisheries products. The second requirement is for economic data on the agricultural holding, including inputs and outputs. The third requirement is to collect data on the use of fertilizers, chemicals, tillage methods and other land-use activities to monitor how agricultural production affects the environment. The fourth requirement is to measure the social well-being of the farm and rural households. On the CAQ, respondents are asked to report on the availability of statistics that have been identified as relevant for the country from among the minimum core requirements for all agriculture statistics.

The indicator on core data availability gives an idea of the extent to which a statistical system produces the minimum core set of data for the country. In an effort to minimize response burden and the amount of detail and to facilitate analysis, the indicator focuses on the most important data item in a statistical domain, as decided at the country level, and does not require a complete inventory of the available statistical estimates. For example, the situation on the crops domain is assessed by the responses regarding the availability of statistics on 1) crop areas (areas planted and harvested); 2) crop yields; and 3) crop production (quantity and values) of the most important or significant food crop. The livestock domain aggregates responses

about the availability of statistics for the most important domestic animal used for food, and the fishery domain focuses on statistics for the most important fish.

Although the questionnaire contains 69 data items, 57 of them (which are marked with an asterisk) are core items for the Global Strategy. It is proposed that the indicator be based on the items from those 57 which are relevant for the country (see Annex 1 of the Strategy (FAO, 2010The questionnaire responses can reveal specific areas where the availability of data is weak. However, for the purpose of an overall assessment of the country situation, it is sufficient to use a single indicator based on the relevant data items.

Data availability indicator = {(Number of data items on which data is available) / (data items relevant to the country out of the 57 core data items)}* 100

The indicator could also be calculated for any other subset of data domains (e.g. market information, agricultural input information) to draw meaningful conclusions.

4.2 Timeliness

The timeliness of statistical information refers to the delay between the reference point (or the end of the reference period) to which the information pertains, and the date on which the information becomes available. The timeliness of information will influence its relevance, and an increase in timeliness is typically weighed against the accuracy of the information.

This indicator is also based on responses to a "subset of data items relevant to the country out of 57 key data items". The responses in column 4, section 4 (i.e. the year of most recent data) are used to compile this indicator. The data items that are not relevant to the country will be ignored in calculating this indicator as no response is expected in column 4 for an non-relevant item.

The indicator is calculated in two steps:

STEP 1: Calculate the "modal year of data availability", which is the most frequent year among the reported years of availability for the relevant data items. The mode of years for which data are available is calculated by counting the frequency of reported years in responses to "year of most recent data" for the relevant data items.

STEP 2: Assign scores to the country as follows:

Scoring criteria	Max. score=3
If the " modal year of data availability" = year of assessment	3
If the " modal year of data availability " = 1 year before the year of assessment	2
If the " modal year of data availability " = 2 years before the year of assessment	1
If the " modal year of data availability " > 2 years before the year of assessment	0

To enable comparisons of this indicator across countries, a common reference date should be chosen for the responses. Countries could also have the option of shifting the reference date by one month in either direction to reflect the data release date published in their crop calendar. Fixing a reference date at the regional level would make more sense because the cropping season and agroclimatic factors could be assumed to be more similar for countries within a region.

If needed, this indicator could also be computed for subdomains like crops statistics, livestock statistics or agricultural inputs statistics.

4.3 Overall data quality perception

This indicator assesses the overall perception of quality, reliability and consistency of the statistical data produced by the system as seen by the data producers who respond to the questionnaire. Quality basically refers to the degree to which the information correctly describes the phenomena it purports to measure. Users and producers of data may have different perceptions about the quality of specific data items. In most countries, this indicator will be based on the responses of producers regarding the usefulness of the data for the most important users. This indicator thus needs to be distinguished from "the quality consciousness indicator", which is based on the quality characteristics of surveys rather than on perceptions of quality.

This indicator will be based on responses to column 8 of section 4 of the CAQ, taking into account only responses to items relevant to a country and for which data are available. The responses are essentially qualitative evaluations of the available statistical estimates for each data item. There may be situations where the estimates of major crops are "highly reliable", but those of minor crops are "unacceptable". It is assumed that the responses will reflect the quality of estimates for the most important crops for the country.

The indicator is calculated in two steps:

STEP 1: Calculate the "modal quality of the available data", which is the most frequently reported grade of quality (e.g. highly reliable, reliable, acceptable, workable and unacceptable) for the available data items.

STEP 2: Assign scores to the country as follows:

Scoring criteria

			Max. score=5
If	Highly reliable	Yes	5
	Reliable	Yes	4
	Acceptable	Yes	3
	Workable	Yes	2
	Unacceptable	Yes	1

Indicator = (Total country score/ maximum score) x 100

4.4 Data accessibility

The accessibility of statistical information refers to: (1) the ease of ascertaining the existence of information; (2) the suitability of the manner by which the information can be accessed; and for some users, (3) the cost of the information.

This indicator is based on the information that is provided regarding the data dissemination facilities of the NSO and/or the MOA (i.e. the most important office for agriculture statistics). Differences, if any, between the agencies can be better identified at the time of an in-depth country assessment. Alternatively, it may be possible to calculate separate indicators for the MOA and the NSO, and then average the two to represent the country situation. The Regional Leader will decide how to calculate this indicator, keeping in view the availability of data from the countries in the region.

Indicator	Questions	Answer	Score
Data accessibility	**3.1.1** Does the NSO/MOA have a Web site for hosting agricultural statistics for the country?	Yes No	1 0
	3.1.3 Is there any database for agricultural statistics?	Yes No	1 0
	3.1.4 If ''yes'' to 3.1.3, is the database accessible to external users on the Internet?	Yes No	1 0

Indicator = (Total country score/ maximum score) x 100

4

Using Country Capacity Indicators

INTRODUCTION

CCIs are a means of synthesizing the results of assessments based on a standard self-reporting questionnaire so that the results can be compared across countries with a reasonable degree of confidence. However, these indicators are not measures of country capacity in absolute terms. They should be taken together to observe the profile of a country's statistical system.

The real strength of the CCIs is that they are simple yet sensitive enough to reliably identify countries with weak capacities. Even though rigorous testing of the questions for their validity and reliability has not been carried out, pilot testing showed that the indicators are able to distinguish between weak and strong statistical systems, as well as those in the middle of the range. These assessments, however, are in relative rather than absolute terms, and there is always the possibility of misclassification. The indicators are fairly successful in focusing attention on the limitations or constraints in specific domains of the system, such as the institutional infrastructure, resources and sustainability, statistical methodology or core data availability.

Indicators of statistical capacity have been proposed for four "dimensions" of capacity, which have been broken down further into 23 "elements". To aggregate the indicators of the elements for the dimensions, it may be best to use simple averaging (i.e. arithmetic mean) in order to maintain simplicity, even though the mean is sensitive to higher values of the capacity indicators.[3] Users are nonetheless free to apply other methods to aggregate and prepare indices based on their preferences and criteria.

Some literature suggests the use of a "composite indicator" which is based on the weighted or simple average of indicators on the four dimensions of statistical capacity: (1) institutional infrastructure; (2) resources; (3) statistical methods and practices; and (4) availability of statistical information. While the composite indicators can sometimes help in summarizing the assessments, they are often criticized as being of limited use because they do not provide much insight into where a statistical system is strong and where it is weak. The composite indicators are more useful when they are designed for taking decisions in situations where varying degrees of importance are assigned to their components.

[3] It is often recommended to use a geometric mean to aggregate the indicators on the grounds that they should be particularly sensitive to capturing the details about the weaknesses, where we find the smaller scores, for the countries in which we have the most interest. The geometric mean is not, however, without its limitations, as it does not work with zero values, which can be encountered in cases of non-response. The best solution is, however, to encourage the country focal points to review the questionnaires before they are submitted to minimize non-response.

In addition to purpose-driven indices, 28 standard indicators should be compiled for each country (i.e. indicators for the 23 elements and four dimensions and one aggregate capacity indicator). The arithmetic mean is the recommended method of averaging to obtain a higher-level indicator.

GROUPING COUNTRIES TO MONITOR PROGRESS

One of the goals of conducting the statistical capacity assessments is to be able to group countries according to their relative level of statistical development. That is a key part of the effort to identify countries that have limited statistical capacity which are likely to benefit from a capacity-building initiative.

The challenge is to obtain agreement on the most useful methodology for classifying and grouping countries. While groups aim to determine who is in the group and who is not according to clear criteria, it is often difficult to reach consensus on the boundaries of groups. Furthermore, the CCIs are not particularly precise in comparison to the more familiar socio-economic indicators, which are based on a well-established methodology and detailed data, such as per capita GDP, price indexes, rates of employment and unemployment and literacy.

There are, nonetheless, a number of options for classifying countries according to their statistical capacity that use some or all of the capacity indicators. Once the classification or grouping criteria are established, it is easy to monitor the movement of countries from one group to another.

Grouping method I

The Global Strategy Action Plan proposes a system for classifying countries into five groups according to the extent of their statistical capacity, as measured by the degree to which their agricultural and rural statistics comply with the three pillars of the Global Strategy: (1) establish a minimum set of core data; (2) integrate agriculture into the national statistics system using sound statistical methods and procedures; and (3) establish the foundation for a sustainable agriculture statistics system by means of governance and the necessary resources.

The following five groups, which are based on the concepts of the Global Strategy, could be used to monitor the progress of agricultural statistics systems:

Level 5: Advanced countries
The country: • supplies more than 80 percent of the minimum set of core data on a regular basis; • has conducted an agricultural census or population census with questions on agriculture during the last ten years; • has an existing NSDS (or similar strategic document or plan) with an agriculture component; • has a functioning system to coordinate agricultural statistics in place; and • has elements of a master sampling frame from the completion of an agricultural census or use of area frames.
Level 4: Progressive countries
The country: • produces 70–80 percent of the core data items; and • has at least three of the other four elements noted for Level 5 in place.
Level 3: Developing countries
The country: • produces 50-70 percent of the core data items; and • has at least two of the other four elements noted for Level 5.

Level 2: Less-developed countries
The country: • produces less than 50 percent of the core data items; and • has a maximum of two of the other four elements noted for Level 5.
Level 1: Least-developed, fragile and post-conflict countries
• The country does not fall in any of the above four categories. • Few, if any, core data items are available, and little or no statistical infrastructure is in place. • Resources are very limited or non-existent.

Grouping method II

Grouping can also be done based on the value of aggregate capacity indicators (i.e. the average of the four dimension-level indicators) using certain thresholds. For example, we could have:

> Group A: Countries with low statistical capacity *(aggregate capacity indicator < 50)*
> Group B: Countries with moderate to reasonable statistical capacity
> *(50 ≤ aggregate capacity indicator ≤ 75)* Group C: Countries with substantial statistical capacity
> (*aggregate capacity indicator > 75*)

The numbers 50 and 75 as thresholds are arbitrary. In fact, if deemed appropriate, these can be taken as the median and third quartile of the distribution of the aggregate capacity indicator. If we wanted to have four groups, we could use the first, second and third quartile.

Grouping method III

Alternatively, one could select the bottom 50 percent of the countries in terms of the core data availability indicator, and then classify them based on the indicators for the remaining three capacity dimensions, as shown in the following example:

> Group 1: Countries with weak institutional infrastructure, weak methods and practices and poor resource availability
> Group 2: Countries with weak institutional infrastructure and methods and practices
> Group 3: Countries with weak institutional infrastructure
> Group 4: Countries with weak methods and practices

There is an expectation that, with assistance, all countries will be able to build and strengthen their statistical capacity and improve their scores over time. The distribution of country scores over the three pillars and four dimensions thus will not be static. However, to ensure comparability over time, "benchmark scores" are needed to classify and group countries. These benchmark scores for classification should remain unchanged throughout the monitoring period. The thresholds (or group demarcation points) could be computed based on the distributions obtained in the initial baseline assessments using quintiles or other measures. It is reasonable to expect that individual country scores may show steady progressive improvement over time, but dramatic changes between any two successive assessments will not normally happen.

It is also possible to prepare profiles of a country's statistical capacity using basic capacity indicators Such profiles can serve many users who can create their own groups according to criteria that meet their specific interests. For example, a development partner may have expertise and interest in promoting the use of IT. That partner could group countries based on, for example, what it believes to be the most relevant indicators to identify countries that most need its support. Such a decision could be based solely on indicators of certain elements, e.g. "statistical software capability" and "data collection technology". On the other hand, those interested in a composite indicator to depict a broad set of dimensions and elements can create a

single composite country capacity index by averaging the four dimensions and/or the 23 elements.

MONITORING PROGRESS AT THE COUNTRY LEVEL

At the global or regional level, aggregate indicators of the overall country capacity or the ones of the four dimensions are more likely to be used for monitoring and decision-making, while at the individual country level, improvement could be observed by monitoring changes in the indicators for individual elements against the country's baseline information. This would support better decisions for building capacity. Similarly, improvements in a country with Global Strategy interventions could be compared with overall improvements in all other countries. Aggregated and tabulated indicators in the detailed country profiles will provide supplementary information about changes in a situation in an area over time.

LIMITATIONS OF COUNTRY CAPACITY INDICATORS

- Some of the indicators used to assess capacity through the standard questionnaire are strong, proven and robust, while others are new and untested. However, even the new ones have some face validity as they are based on questions that directly relate to the key issues observed in the capacity dimensions being assessed.

- Coordinating a country's response can be challenging when two or more ministries answer part of the same question(s) but provide different information. This is particularly true for information on financial resources and budgets for agricultural statistics which are distributed across line ministries and departments within a country. In the pilot version of the self-administered questionnaire, there were difficulties in developing consistent and reliable indicators for these dimensions More objective and reliable assessments should be available from the proposed in-depth assessments and, in the future, perhaps from a version of the standard questionnaire revised on the basis of experience with results from the initial indicators. For example, the proposed indicator for financial resource deployment in this version of the questionnaire relies on the responses to a set of proxy and perception-based questions, which were not part of the pilot testing. It is expected that more information on budgets and financial resources will be obtained through the in-depth assessments to enhance the reliability and validity of this indicator.

- The indicator on the "usability of available data" based on overall quality perception is far from being perfect as it entails an element of reporting bias, depending upon the respondents' level of knowledge and objectivity. Furthermore, the perceptions of data users and data producers may be substantially different.
- The weights assigned to some questions in a few indicators could be considered arbitrary and open to challenge, but generally efforts were made to assign equal weight to every question when calculating the summary indicators. This was done to avoid a debate about weighting, which would be difficult to resolve in consensus.
- Some indicators are based on only a few simple questions, while others (e.g. data availability and timeliness) are based on responses to many questions, and are thus more robust and stable.

WAY FORWARD

This publication presents the results of a global effort made during the last two years to establish a standard framework for assessing a country's capacity to produce agriculture statistics. The country assessments are the first step in implementing the Global Strategy to Improve Agricultural and Rural Statistics. The logical framework of the Global Strategy Action

Plan envisages the collection of baseline information on a set of indicators to measure the impact, outcome and output of the Global Strategy. The indicators based on the data from the self-administered standard questionnaire should be an effective tool to monitor improvements in statistical capacity over time in all participating countries. While some of the indicators identified in the monitoring framework of the Action Plan are linked to responses to specific questions, others relating to budget and core skills may need data from in-depth assessments to monitor change over time.

The standard questionnaire serves as the key source of information on a country's agricultural statistics capacity and, more specifically, its institutional infrastructure, available human and financial resources, statistical methods and practices and the availability of core data. The level of statistical development in a country, as measured by the responses to this questionnaire, will be one of the criteria for selecting countries, in order of priority, that are in need of technical assistance and training to improve their statistical programmes and capacity, which are the outputs of the Action Plan's results-based outcomes. The initial country assessment and the resulting statistical capacity indicators will allow the regional and global coordinators to orient consultants working on in-depth assessments towards specific area(s) identified as weak for providing specific technical assistance and training as part of country proposals.

The second-stage assessments will determine the human and financial resources a country needs to seek in order to build a sustainable statistical system. The second stage should also result in a work plan that may include developing or updating the Sector Strategic Plan for Agriculture and Rural Statistics for implementation of the Global Strategy. The Sector Strategic Plan or "roadmap" helps identify the capacity-building requirements and when they should occur.

Periodic reassessments of country capacities using the standard questionnaire and/or in-depth reviews will be a means to provide five of the eleven OVIs, selected in the results-based logical framework of the Action Plan for the Global Strategy.

Annex 1: The Standard Country Assessment Questionnaire (CAQ)

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Country assessment of agricultural statistics system for implementation of the:

GLOBAL STRATEGY TO IMPROVE AGRICULTURAL AND RURAL STATISTICS

REFERENCE DATE/ YEAR		
COUNTRY NAME		
COUNTRY CODE		
REGION CODE		
NATIONAL FOCAL POINT FOR COORDINATION (In the country)	a) Name	
	b) Title and Institution	
	c) E-mail	
	d) Phone – Mobile	
	e) Phone – Office	
LEAD TECHNICAL OFFICER (In the implementing partner agency)	a) Name	
	b) Institution	
	c) E-mail	
	d) Phone	
DEADLINE FOR SUBMISSION OF THE QUESTIONNAIRE		
E-MAIL ADDRESS FOR SUBMISSION	a) To	
	b) Cc	
DATE OF SUBMISSION		

RESPONDENT DETAILS[4]

NAMES	a) First name	
	b) Family name	
TITLE & INSTITUTION	a) Title	
	b) Service/Division	
	c) Department	
	d) Ministry	
	Address	
	Web site	
CONTACTS	a) Phone – Mobile	
	b) Phone – Office	
	c) Fax	
	d) E-mail	
DATE OF COMPLETION	(dd/mm/yyyy)	
COVERAGE OF SUBSECTOR IN THE QUESTIONNAIRE	Crops	
	Livestock	
	Forestry	
	Environment	
	Fishery/Aquaculture	
	Water resources	
	Rural development	
QUESTIONS FOR WHICH RESPONSES ARE PROVIDED:		
SIGNATURE OF RESPONDENT		

[4] To be provided by each respondent agency

SECTION 1: INSTITUTIONAL INFRASTRUCTURE

1.1 Administrative structure of the country

		Name of the sub-division *(province, region, district, etc)*	**Number of sub-divisions** *(province , region, district, etc.)*
1.1.1	What is the *second level* of administrative sub-division of the country?		
1.1.2	What is the *third level* of administrative sub-division of the country?		
1.1.3	What is the *fourth level* of administrative sub-division of the country?		

1.2 Legal and administrative framework for the collection of statistics

		Yes/ No	**If ''Yes''**	
			Year of creation	**Tick if Operational**
1.2.1*	Is there a legal or statutory basis for statistical activities in general in the country?			
1.2.1a	If " Yes" to 1.2.1, name the government agency(ies) for statistical activities specified in legislation or under the law:			

		Yes/ No	**If ''Yes''**	
			Year of creation	**Tick if operational**
1.2.2*	Is there a legal basis for collecting agricultural statistics?			
				Insert code
*1.2.2a**	If " Yes" to 1.2.2, how adequate is the legal framework for agricultural statistics? *Codes: (1) Fully (2) Workable (3) Somewhat adequate (4) Somewhat inadequate (5) Totally inadequate*			
1.2.2b	If " Yes" to 1.2.2, name the lead executive agency (ies) for agricultural statistics specified or delegated responsibility under the law:			**Tick the relevant**
	1. National Statistics Office			
	2. Ministry responsible for agricultural statistics			
	3. Other (please specify)			
1.2.2c	Please provide some explanation and a list of important institutions, in case the responsibility for agricultural statistics is distributed across agencies. You may wish to provide some information about the agencies' degree of autonomy and provide a copy of the relevant law/decree.			
1.2.3*				**Yes/ No**
	Has any national council, board or committee been established by law or administrative order to coordinate agricultural and rural statistics?			
1.2.3a*	If " Yes" to 1.2.3, is it active and discharging its functions?			
1.2.4*	If ''Yes'' to 1.2.3, does the mandate of this national council, board or committee cover:			**Tick as applicable**
*1.2.4a**	*Crop statistics*			
*1.2.4b**	*Livestock statistics*			
*1.2.4c**	*Forestry statistics*			
*1.2.4d**	*Environment statistics*			
*1.2.4e**	*Aquaculture and fishery statistics*			
*1.2.4f**	*Water resource statistics*			
*1.2.4g**	*Rural development statistics*			

1.3 Structure of the National Statistical System

1.3.1	Which of the following most appropriately describes the structure of the general statistical system in your country?	**Tick the relevant**
1.3.1a	*A statistical system with only one national office responsible for all types of statistics*	
1.3.1b	*A statistical system with a main operating office for general statistics but partially decentralized by sector and an established coordinating mechanism to gather statistics from other sectors, including agriculture*	
1.3.1c	*A statistical system fully decentralized by sector, with a formal coordinating authority*	
1.3.1d	*A statistical system fully decentralized by sector, with no formal coordination.*	
		Yes/ No/ N A
1.3.2	Is there a *formal allocation of responsibility*[5] among the different agencies producing statistics?	
1.3.3	If ''Yes'' to 1.3.2, is there a *mechanism to establish coordination* among different agencies producing statistics?	
1.3.4	If ''Yes'' to 1.3.3, is the *mechanism for coordination functioning*, i.e. is there adequate communication among different agencies producing statistics?	
		Insert code
1.3.5	*How effective* is the existing mechanism for coordination? *Codes: 1=Highly effective; 2= Effective; 3=Fairly effective; 4=Weakly effective; 5= Ineffective*	
1.3.6	What modalities of coordination and collaboration are practised?	**Tick the relevant**
	Periodic conference of the data-producing agencies	
	Common work plan with assigned responsibility for specific activities & outputs	
	Working group and task team on technical issues	
		Yes/ No
1.3.7	Is there a general statistical system at the subnational level?	
1.3.8	Is an agricultural statistical system[6] present at the subnational level?	

1.4 Strategic framework

			Yes/ No
1.4.1*	Has the country developed a national strategy, plan or programme for the development of statistics (e.g. National Strategy for Development of Statistics (NSDS) or National Action/Master Plan)?[7]		
1.4.2	If ''Yes'' to 1.4.1, is this strategy/plan/programme operational?		
1.4.3	If ''Yes'' to 1.4.1, state the period covered by the strategy, plan or programme:		
	Starting year		
	Ending year		
			Insert code
1.4.4	If ''No'' to 1.4.1, is its design in process or intended? *Codes: 1=Under development ; 2=Planned; 3=Not planned*		
1.4.5*	If "Yes" to 1.4.1, does the strategy include programme of work for the subsector relating to:		**Tick the relevant**
*1.4.5.a**	*Crop statistics*		
*1.4.5.b**	*Livestock statistics*		
*1.4.5.c**	*Forestry statistics*		
*1.4.5.d**	*Fishery and aquaculture statistics*		
*1.4.5.e**	*Environment statistics*		
*1.4.5.f**	*Water resources*		

[5]Formal allocation of responsibility may be in the form of a memorandum of understanding (MoU), a delegation of authority specified in the law, a decree or an executive order issued on the basis of a legal authority.

[6] Used in the broad sense of the term i.e. including crop, livestock, fishery, forestry and water subsectors.

[7] Please refer to the latest version.

1.4.5.g[*]	*Rural development*	

		Yes/ No
1.4.6[*]	Is there any national strategy/plan/programme specific to agricultural statistics?	
1.4.7[*]	If ''Yes'' to 1.4.6**,** is an agricultural statistics strategy integrated into the NSDS?	
1.4.8	If ''No'' to 1.4.6, did such a strategy exist in the past and expire?	
		Insert code
1.4.9[*]	If ''No'' to 1.4.6, is the design of a strategy in process or intended? *Codes: 1=Under development; 2=Planned; 3=Not planned*	

1.5 Dialogue with data users[8]

		Yes/ No
1.5.1[*]	Is there a *formal council, committee or forum for dialogue* among suppliers and users of agricultural statistics in the country?	
1.5.2[*]	If ''Yes'' to 1.5.1, are regular meetings held?	
1.5.3[*]	If ''No'' to 1.5.1, is there *at least an informal functioning forum for dialogue* between producers and users of agricultural statistics?	
1.5.4[*]	Are there well-established channels for receiving feedback from users of agricultural statistics (e.g. Web contact, e-mails)?	
		Insert code
1.5.5[*]	If " Yes" to 1.5.1, 1.5.3 or 1.5.4, what is your assessment of the level of dialogue between users and producers? *Codes (1-Extensive, 2-Adequate, 3-Moderate, 4- Somewhat adequate, 5- Inadequate)*	
1.5.6[*]	If ''Yes'' to 1.5.1 or 1.5.3, please indicate which of the following are represented in the formal or informal forum:	**Tick the relevant**
1.5.6a[*]	*Planning bodies (Ministry of Planning or National Planning Commission)*	
1.5.6b[*]	*Ministry of Finance/Treasury*	
1.5.6c[*]	*Line ministries and departments (e.g. water resources, environment, forestry, fisheries)*	
1.5.6d[*]	*Central bank*	
1.5.6e[*]	*Representatives of academic and research community*	
1.5.6f[*]	*Chamber of Commerce*	
1.5.6g[*]	*Media*	
1.5.6h[*]	*Representatives of socio professional bodies*	
1.5.6i[*]	*Private-sector representatives*	
1.5.6j[*]	*Development partners (e.g. donors, NGOs)*	
1.5.6k[*]	*Other (please specify)*	

[8] This question refers to the overall culture of practices in the country. There may be a situation where the practices differ significantly among different line ministries and departments. In such situations, this question needs to be answered by keeping in view the most common producers of agricultural statistics.

SECTION 2: RESOURCES

2.1 Financial Resources

	Yes/ No
2.1.1* Is there a separate budget line for the following organizations:	
2.1.1a In the National Statistics Office for agricultural statistics*	
2.1.1b In the Ministry of Agriculture for statistical activities relating to crops/ livestock*	
2.1.1c In the Ministry/Department of Fishery for statistical activities*	
2.1.1d In the Ministry Department of Forestry for statistical activities*	

	Tick only one
2.1.2* What percentage of activities relating to agricultural statistics in the country is funded by the government budget?	
2.1.2a 0%-20%	
2.1.2b 20%-40%	
2.1.2c 40%-60%	
2.1.2d 60%-80%	
2.1.2e 80%-100%	

2.2 Human Resources and Training for Statistical Staff

		Professional officer level	Technical support staff
2.2.1*	Number of officially established posts to produce agricultural statistics		
2.2.2*	Out of the number of posts mentioned in 2.2.1, the number of posts filled		

		Yes/ No	
		Training abroad	National training
2.2.3*	Is there an official government programme or training policy for training available to agricultural statisticians?		
2.2.4*	Number of staff trained (professional + technical) during the last 12 months?		

2.3 International Cooperation in Agricultural Statistics

		Yes/ No
2.3.1	Did your office benefit from a significant technical assistance programme during the last three years?	
2.3.2	''If Yes'', did it include agricultural statistics?	
2.3.3	Main development partners/donors agencies which have provided funds or technical assistance in the country during the last three years? *(List below in decreasing order of contribution)* *1. ... ...* *2. ... ...* *3. ... ...*	

2.4 Physical Infrastructure

2.4.1	Number of transport vehicles (units) available for statistical activities on a full-time basis	State the number below
2.4.1a	*Four-wheel drive*	
2.4.1b	*Two-wheel drive*	
2.4.1c	*Motorcycles*	
2.4.1d	*Bicycles*	
2.4.1e	*Other, (please specify)*	

SECTION 3: STATISTICAL METHODS AND PRACTICES

3.1 Information Technology

		Yes/ No/ NA
3.1.1*	Does the NSO/MoA have a Web site for hosting agricultural statistics for the country?	
3.1.2	If ''Yes'' to 3.1.1, give the URL:	
		Yes/ No/ NA
3.1.3*	Is there any database for agricultural statistics?	
3.1.4*	If ''Yes'' to 3.1.3, is the database accessible to external users through the Internet?	
3.1.5	If ''Yes'' to 3.1.4, give the URL:	
3.1.6*	Software and other IT-related systems used in the National Statistical Office:	
	Data analysis	**Tick the relevant**
*3 .1.6a**	*SPSS*	
*3.1.6b**	*SAS*	
*3.1.6c**	*STATA*	
*3.1.6d**	*ACCESS*	
*3.1.6e**	*EXCEL*	
*3.1.6f**	*Other (please specify)*	
	Data processing	**Tick the relevant**
*3.1.6g**	*CSPRO*	
*3.1.6h**	*EXCEL*	
*3.1.6i**	*Other (please specify)*	
	Databases	**Tick the relevant**
*3.1.6j**	*PC-Axis*	
*3.1.6k**	*SDMX*	
*3.1.6l**	*ORACLE*	
*3.1.6m**	*EXCEL*	
*3.1.6n**	*Other (please specify)*	
3.1.7*	Technology used for collection, entry and transfer of survey data	**Tick the relevant**
*3.1.7a**	*Computer-assisted telephone interview (CATI)*	
*3.1.7b**	*Personal data assistant (PDA) or Computer/Tablet-assisted personal interview (CAPI)*	
*3.1.7c**	*Paper-based personal interview and manual data entry into computer*	
*3.1.7d**	*Paper-based personal interview and scanning of questionnaires*	
*3.1.7e**	*Geographical Position System (GPS)*	
*3.1.7f**	*Compass and measuring tapes*	
*3.1.7g**	*Wireless transfer of data from the field*	
*3.1.7h**	*Other (please specify)*	

3.1.8*	Number of PCs in use in National Statistical Office:	**Headquarters**	**Field offices**
3.1.8a	*Total number*		
3.1.8b	*For agricultural statistics*		
3.1.9*	Number of computer servers installed for data storage and communication		

3.2 General Statistical Infrastructure

		Yes/ No
3.2.1*	Does the country have up-to-date topographic maps including boundaries of administrative and/or regional subdivisions?	
3.2.2*	Are the digitized maps available to other departments for statistical purposes, including on a cost-basis?	
3.2.3*	Does the country have an established unit to process the remotely-sensed satellite data for crop monitoring and production forecasting?	
3.2.4*	Does any ministry maintain an up-to-date list of large active agricultural farms	

	(crop, livestock or fish)?	
3.2.5*	Are the enumerators provided with a printed map to collect data from the field?	
3.2.6*	Is an up-to-date master sampling frame or farm register available for current agricultural sample surveys?	
3.2.7*	Are the statistical units (e.g. location of agricultural holding headquarters, household or land parcel) geocoded?	

3.3* Adoption of Classification

Name of the classification	Adopted		Version used
	Tick the relevant	Extent of adoption *(number of digits)*	
International			
International Standard Industrial Classification (ISIC)			
Central Product Classification (CPC)			
Standard International Trade Classification (SITC)			
Harmonized Commodity Description and Coding System (HS)			
Classification of Individual Consumption According to Purpose (COICOP)			
Classification of Functions of Government (COFOG)			
Regional (please specify)			
Other classifications (please specify)			

3.4 Population Census

3.4.1	The office responsible for the population census is:	
	Institution:	
	Address:	
	Web site:	
	Telephone numbers:	
	E-mail:	
3.4.2*	The year of the last population census:	
		Yes/ No
3.4.3*	Were the questions on the household's participation in agricultural or related activities (agricultural holding) included in the questionnaire used in the last population census?	
		Insert the year or NA
3.4.4*	In what year is the next population census planned?	

3.5 Price Indices

		Yes/ No
3.5.1*	Is a Consumer Price Index (CPI) published in the country?	
3.5.2*	Does the CPI separately report indices of important agricultural commodities used for direct consumption?	
3.5.3*	Is there an index to monitor agricultural input prices?	
3.5.4*	Is an index number on terms-of-trade[9] for agriculture published in the country?	
3.5.5*	Is a Wholesale Price Index (WPI) published in the country?	
3.5.6*	If ''Yes'' to 3.4.5, does the WPI report indices separately for:	
*3.5.6a**	*Crop commodities?*	
*3.5.6b**	*Livestock products?*	
*3.5.6c**	*Fish and related products?*	

[9] Terms-of-trade for agriculture refer to movement of prices of goods sold by the agriculture sector to other sectors relative to the prices of goods purchased by the agriculture sector from other sectors of the economy.

3.5.7*	Is a Producer Price Index (PPI) published in the country?	
3.5.8*	If ''Yes'' to 3.4.7, does the PPI report indices separately for:	
*3.5.8a**	*Crop commodities?*	
*3.5.8b**	*Livestock products?*	
*3.5.8c**	*Fish and related products?*	

		Yes/ No
3.6.1	**Agriculture census**	
3.6.1.1*	Has an agricultural census been conducted in the country during the last 20 years?	
		Insert the year or NA
3.6.1.2*	If ''Yes'' to 3.5.1.1, Please indicate the year of the most recent agriculture census. If no, please skip to 3.5.1.8	
		Yes/ No/ NA
3.6.1.3	Was it a complete enumeration exercise?	
3.6.1.4	Is there a legal basis for conducting the agricultural census?	
3.6.1.5	Types of frame used for the agriculture census:	**Tick one only**
3.6.1.5a	*List frame*	
3.6.1.5b	*Area frame*	
3.6.1.5c	*Multiple frame*	
3.6.1.6*	The last agriculture census covered: *(Tick the appropriate row from the list below, as applicable)*	**Tick the relevant**
3.6.1.6a	*Crops*	
3.6.1.6b	*Livestock*	
3.6.1.6c	*Forestry related to agriculture*	
3.6.1.6d	*Environment related to agriculture*	
3.6.1.6e	*Fisheries and aquaculture*	
3.6.1.6f	*Water related to agriculture*	
3.6.1.6g	*Other income-generating activities in rural areas*	
3.6.1.7	Was the agriculture census linked to the population census in any of the following ways?	**Tick the relevant**
*3.6.1.7a**	*The agricultural census used the cartographic material and administrative boundaries used for the population census*	
*3.6.1.7b**	*Were questions to collect information on household participation in the agriculture sector included in the population census, to get a sampling frame for the agricultural census?*	
3.6.1.7c	*A detailed module of questions on agriculture was included in the population census*	
		Insert the year or NA
3.6.1.8	The year in which the next agriculture census is planned	

3.6.2 Current agricultural surveys conducted in the last five years

		Yes/ No/ NA	Year of the latest survey	If "Yes" *(please respond to the five columns by "Yes " or" No")*				
				Probability Sample	Sampling errors calculated	Data published	Metadata published	Micro data archived
				(1)	*(2)*	*(3)*	*(4)*	*(5)*
3.6.2.1*	**Crop surveys for major crops**							
*3.6.2.1a**	*Crop area surveys (planting and harvest)*							
*3.6.2.1b**	*Crop production surveys*							
*3.6.2.1c**	*Crop yield surveys*							
*3.6.2.1d**	*Costs of production surveys*							
*3.6.2.1e**	*Post-harvest losses surveys*							
3.6.2.2*	**Livestock surveys for main livestock**							
*3.6.2.2a**	*Livestock population or livestock inventory survey*							
*3.6.2.2b**	*Productivity/Yield survey for livestock and animal products*							
*3.6.2.2c**	*Poultry survey*							
*3.6.2.2d**	*Enumeration survey for nomadic and pastoral livestock population*							
3.6.2.3*	**Fishery and aquaculture surveys**							
*3.6.2.3a**	*Fish production survey for marine capture fisheries*							
*3.6.2.3b**	*Fish production survey for in-land capture fisheries and aquaculture*							
*3.6.2.3c**	*Fish and fishery commodities production survey*							
*3.6.2.3d**	*Fishery or aquaculture census/ enumeration of frame information*							
3.6.2.4*	**Water surveys**							
	Survey to estimate:							
*3.6.2.4a**	*Area equipped for irrigation*							
*3.6.2.4b**	*Area actually irrigated*							
*3.6.2.4c**	*Crops irrigated*							
*3.6.2.4d**	*Water withdrawal for irrigation (crops, forests or livestock)*							
3.6.2.5*	**Forestry surveys**							
*3.6.2.5a**	*Household surveys covering wood energy consumption*							
*3.6.2.5b**	*Survey for collection of forest products (wood and non-wood)*							
*3.6.2.5c**	*Forest inventory survey*							

			Yes/ No
3.6.3	**Agricultural market information system**		
3.6.3.1*	Do systems for collecting and disseminating price and related information from the major wholesale markets of agricultural commodities exist in the country?		
3.6.3.2*	If "Yes" to 3.5.3.1, subsectors covered:	**Tick the appropriate**	**Number of markets covered**
*3.6.3.2a**	*Crops*		
*3.6.3.2b**	*Livestock*		
*3.6.3.2c**	*Forestry products*		
*3.6.3.2d**	*Fish and aquaculture products*		

3.7 Household Budget Survey

		Yes/ No/ NA	If "Yes", please indicate the latest year
3.7.1	Have any household budget surveys been conducted in the country?		
3.7.2*	Are estimates of rural household income available?		
3.7.3	What is the year of the next survey?		
3.7.4	**Agency responsible for household budget survey**:		
	Institution:		
	Address:		
	Web site:		
	Telephone number(s):		
	E-mail:		

3.8 National Accounts and Related Agriculture Statistics

3.8.1	The office (agency) responsible for national accounts statistics:	
	Institution:	
	Address:	
	Web site:	
	Telephone numbers:	
	E-mail:	
		Insert the year or NA
3.8.2*	The most recent year for which national accounts data are published.	
3.8.3*	Are the following economic accounts compiled in the country for the agriculture sector?	**Yes/ No**
*3.8.3a**	*Production account*	
*3.8.3b**	*Generation of income account*	
*3.8.3c**	*Use of income account*	
*3.8.3d**	*Capital and finance accounts*	
*3.8.3e**	*Balance sheet*	
3.8.4*	Are estimates of quarterly production from the agriculture sector prepared and published in the country?	
3.8.5	Has there been a compilation of satellite economic accounts for the fisheries and aquaculture subsector in the country?	
3.8.6	Has any national water accounting been done in the country?	
3.8.7	Has any environment accounting been done in the country?	
		SNA Version
3.8.8*	Version of UN SNA currently used in the country: *(SNA 1968, SNA 1993, SNA 2008)*	

3.9 Availability of Derived Statistics and Indicators

Indicator		Compiled? Yes/ No	If yes, latest year for which available	Responsible agency[10]
3.9.1	Commodity balance for core crops			
3.9.2	Commodity balance for core livestock			
3.9.3	Satellite account for food and agriculture statistics			
3.9.4*	Food balance sheets			
3.9.5*	Agri-environmental indicators			

[10] **Codes for responsible agency**: 1. National Statistics Office; 2. Ministry of Agriculture; 3. Ministry of Environment; 4. Central Bank; 5. Others.

SECTION 4: AVAILABILITY OF CORE DATA

Please complete all the related questions. This may involve referring this table to other national institutions engaged in collecting statistics. Please use the codes provided at the end of the table, wherever applicable, to provide responses. In cases where multiple institutions produce statistics on the same data item, responses to questions on frequency, sources of data, geographical coverage and overall quality perception should relate to the most commonly used source of statistics.

The data items mentioned below refer to the main core crops, livestock, fishery and forestry products. To determine which are the main ones, please take into account factors such as GDP, food security, crop area, total quantity produced or exports. Once the main product is determined, the answers should refer to data from the most important country source for current agricultural statistics or the main agricultural statistics programme or data series.

4.1 Availability of Current Agricultural Statistics

Data domain	*Availability[1]	If "Yes" *(i.e. if data are available, please respond to the six columns below using response codes provided at the bottom of this table)*					
		Responsible institution(s)[2]	*The year of most recent data	Frequency[3]	Main source of data[4]	Geographic detail[5]	*Overall quality perception[6]
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
A. ECONOMIC DATA							
A1. PRODUCTION							
A1.1Core crop items							
Crop production quantity*							
Crop production value*							
Crop yield per area*							
Area planted and/or harvested*							
A1.2Core livestock items							
Livestock production quantity*							
Livestock production value*							
A1.3 Core fisheries and aquaculture items							
Fishery and aquaculture production quantity*							
Fishery and aquaculture production value*							
A1.4 Core forestry items							
Forest production							

Data domain	*Availability[1]	If "Yes" (i.e. if data are available, please respond to the six columns below using response codes provided at the bottom of this table)					
		Responsible institution(s)[2]	*The year of most recent data	Frequency[3]	Main source of data[4]	Geographic detail[5]	*Overall quality perception[6]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
of wood quantity*							
Forest production of wood value*							
Forest production of non-wood quantity							
Forest production of non-wood value							

A2. EXTERNAL TRADE

Export quantity*							
Export value*							
Import quantity*							
Import value*							

A3. STOCK OF CAPITAL AND RESOURCES

Livestock inventories*							
Agricultural machinery*							
Stocks of main crops quantity*							
Land and use*							
Use of water resources							
Irrigated areas							
Types of irrigation							
Irrigated crops							
Quantity of water used							
Water quality							

A4. AGRICULTURAL INPUTS

Fertilizer quantity*							
Fertilizer value*							
Pesticide quantity*							

Data domain	*Availability[1]	If "Yes" (i.e. if data are available, please respond to the six columns below using response codes provided at the bottom of this table)					
		Responsible institution(s)[2]	*The year of most recent data	Frequency[3]	Main source of data[4]	Geographic detail[5]	*Overall quality perception[6]
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
Pesticide value*							
Crop seeds quantity*							
Crop seeds value*							
Animal feed quantity*							
Animal feed value*							
Forage quantity							
Forage value							
Animal vaccines and drugs quantity*							
Animal vaccines and drugs value							
Aquatic seeds quantity*							
Aquatic seeds value							

A5. AGROPROCESSING

Main crops*							
Post harvest losses*							
Main livestock*							
Fish quantity*							
Fish value*							

A6. PRICES

Producer prices*							
Wholesale prices*							
Consumer prices*							
Agricultural input prices*							
Agricultural export prices*							
Agricultural import							

Data domain	*Availability[1]	If "Yes" (i.e. if data are available, please respond to the six columns below using response codes provided at the bottom of this table)					
		Responsible institution(s)[2]	*The year of most recent data	Frequency[3]	Main source of data[4]	Geographic detail[5]	*Overall quality perception[6]
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
prices*							

A7. INVESTMENT SUBSIDIES OR TAXES

Public investment in agriculture*							
Agricultural subsidies*							
Fishery access fees							
Public expenditure for fishery management*							
Fishery subsidies*							
Water pricing*							

A8. RURAL INFRASTRUCTURE AND SERVICES

Area equipped for irrigation*							
Crop markets							
Livestock markets							
Rural roads(km)*							
Railways (km)*							
Communication*							
Banking and insurance*							

B DEMOGRAPHIC AND SOCIAL STATISTICS

Population dependent on agriculture*							
Agricultural workforce (by gender)*							
Fishery workforce (by gender)*							
Aquaculture workforce (by gender)*							

Data domain	*Availability[1]	If "Yes" (i.e. if data are available, please respond to the six columns below using response codes provided at the bottom of this table)					
		Responsible institution(s)[2]	*The year of most recent data	Frequency[3]	Main source of data[4]	Geographic detail[5]	*Overall quality perception[6]
(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*	*(7)*	*(8)*
Household income*							

C ENVIRONMENTAL

Soil degradation *							
Water pollution due to agriculture*							
Emissions due to agriculture*							
Water pollution due to aquaculture							
Emissions due to aquaculture							

RESPONSE CODES:

[1]**Availability:** 1. Yes; 2. No; 3. Not relevant to the country.

[2]**Responsible institutions** *(Please indicate up to four main institutions in the order of their importance):* 1. National Statistics Office; 2. Ministry of Agriculture; 3. Other line ministries; 4. Central Bank; 5. Commodity board; 6. Producer's association; 7. Customers/Revenue authority; 8. Others

[3]**Frequency:** 1. Annual 2. Seasonal (once every four to six months); 3. Quarterly; 4. Monthly; 5.Weekly; 6. Daily; 7. Two to five years; 8. Ad hoc.

[4]**Main source of data:** 1. Census; 2. Sample survey; 3. Administrative records; 4. Estimates/forecasts; 5. Special study; 6. Expert opinion/ assessment

[5]**Geographical detail**: 1. National; 2.Subnational; 3. Small area.

[6]**Overall quality perception**: 1. Highly reliable; 2. Reliable; 3. Acceptable; 4. Workable; 5. Unacceptable.

SECTION 5
CRITICAL CONSTRAINTS IN AGRICULTURE STATISTICS SYSTEM

Below is a list of commonly reported constraints (not necessarily in any preconceived order) faced by statistical systems in developing countries. Please indicate your perception of the extent to which a particular constraint affects the development of agricultural statistics in your own Ministry/Department. You are encouraged to consult your colleagues to validate your perceptions before completing this section. Ideally, these responses should be provided on the basis of the outcome of focus group discussions with stakeholders.

Please use these codes to provide responses:

Response code: (1) Not at all; (2) Somewhat; (3) Relevant; (4) Significant; (5) Dominant constraint.

A "Dominant constraint" means that any improvement in the situation in that constraint will dramatically improve agricultural statistics. On the other hand, "Not at all" means that any improvement in the situation in that constraint will in no way affect the status of agricultural statistics.

5.1 Critical Constraints

		Extent
5.1.1	Number of **professional staff at headquarters** for statistical activities	
5.1.2	Number of **technical support staff at headquarters** for statistical activities	
5.1.3	Number of **professional staff in the field** for statistical activities	
5.1.4	**Technical skills** of the available statistical staff	
5.1.5	**Lack of appreciation** of the importance of statistical activities **at the policy-making level**	
5.1.6	**Lack of support at the political level** in the Government for statistical activities	
5.1.7	Up-to-date IT **hardware**	
5.1.8	Up-to-date IT **software**	
5.1.9	**Lack of availability of funds** for planned field-oriented statistical activities	
5.1.10	**Transport equipment** for field activities	
5.1.11	**Office space**	
5.1.12	**Office equipment** (e.g. telephone, Internet, office furniture)	
5.1.13	Sound **methodology** implemented for agricultural surveys	
5.1.14	**Low** level of **demand for statistics**	
5.1.15	Turnover of **professional staff**	
	Others *(please specify)*	

SECTION 6: SUPPLEMENTARY INFORMATION

6.1	**Comments and Additional Information** *(Please provide your views on improving agricultural statistics in the country)*
6.2	**Abbreviations Used**

THANK YOU FOR ANSWERING THIS QUESTIONNAIRE

REFERENCE TABLE FOR WHO SHOULD ANSWER THE QUESTIONS

	To be filled by
SECTION 1: INSTITUTIONAL INFRASTRUCTURE	
1.1 Administrative structure of the country	National Focal Point
1.2 Legal and administrative framework for the collection of statistics	National Focal Point
1.3 Structure of the national statistical system	National Focal Point
1.4 Strategic framework	National Focal Point
1.5 Dialogue with data users	National Focal Point (jointly by NSO and MoA)
SECTION 2: RESOURCES	
2.1 Financial resources	National Focal Point (jointly by Task Team)
2.2 Human resources and training for statistical staff	National Focal Point (Fill separately by NSO and MoA and then add together. Also provide separate situation in comments.)
2.3 International cooperation in agricultural statistics	Separately for each subsector
2.4 Physical infrastructure	Separately for each subsector
SECTION 3: STATISTICAL METHODS AND PRACTICES	
3.1 Information technology	NSO, MoA and other line ministries, as needed
3.2 General statistical infrastructure	National Focal Point based upon feedback from NSO
3.3 Adoption of classifications	National Focal Point based upon feedback from NSO
3.4 Population census	National Focal Point based upon feedback from NSO
3.5 Price indices	National Focal Point based upon feedback from Task Team
3.6 Food and agricultural surveys	National Focal Point based upon feedback from Task Team
3.7 Household budget survey	National Focal Point based upon feedback from NSO
3.8 National accounts and related agriculture statistics	National Focal Point based upon feedback from NSO
3.9 Availability of derived agricultural statistics and indicators	National Focal Point based upon feedback from NSO/MOA

SECTION 4: AVAILABILITY OF CORE DATA	
4.1 Availability of current agricultural statistics	National Focal Point jointly by Task Team
SECTION 5: CRITICAL CONSTRAINTS IN AGRICULTURE STATISTICS SYSTEM	
5.1 Critical constraints	NSO and MOA, preferably separately for each subsector
SECTION 6: SUPLEMENTARY INFORMATION	
6.1 Comments and additional information	NSO and MOA, preferably separately for each subsector
6.2 Abbreviations used	NSO and MOA, preferably separately for each subsector

Annex 2: Mapping key issues to indicators and questions

Annex 2: Mapping key issues to indicators and questions			
Capacity indicators (dimensions)	**Capacity subindicators (elements)**	**Key issues**	**Key questions**
Capacity indicator 1: **Institutional infrastructure** (PREREQUISITES)	**1.1** Legal framework	- Existence, operation and adequacy of a legal framework	Q 1.2.1 Q1.2.2 Q1.2.2a
	1.2 Coordination in the national statistical system	- Existence of an active coordinating body - Span of coordination	Q 1.2.3 (a) Q 1.2.4 (a, b, c, d, e, f, g)
	1.3 Strategic vision and planning for agricultural statistics	- The need for and importance of a strategy and a plan - Level of strategic thinking in a statistical system	Q 1.4.6 Q 1.4.7 Q 1.4.9
	1.4 Integration of agriculture in the national statistical system	- Cost and effort related to efficiencies in data collection - Greater scope for data analysis - Increased access to data and avoidance of conflicting data	Q 1.4.1 Q 1.4.5 (a,b,c,d,e, f, g) Q 1.4.6 Q 1.4.7 Q 3.4.3 Q 3.6.1.6 Q 3.6.1.7 (a,b)
	1.5 Relevance of data	- Extent of user interface built - Diverse stakeholders represented in the relevant bodies	Q 1.5.1 Q 1.5.2 Q 1.5.3 Q 1.5.4 Q1.5.5 Q 1.5.6 (a,b,c,d,e,f,g,h,I,j,k)
Capacity indicator 2: **Resources** (INPUT DIMENSION)	**2.1** Financial resources	- Adequate funding	Q 2.1.1 (a, b, c, d) Q 2.1.2 (a, b, c, d, e) Q 5.1.9

Annex 2: Mapping key issues to indicators and questions

Capacity indicators (dimensions)	Capacity subindicators (elements)	Key issues	Key questions
	2.2 Human resources: staffing	- Availability of qualified personnel - Frequent staff turnover	Q 2.2.1 Q 2.2.2 Q 5.1.15
	2.3 Human resources: training	- Extent of up-to-date statistical staff through training	Q 2.2.3 Q 2.2.4
	2.4 Physical infrastructure	- Availability of transport equipment, office space and office equipment	Q 5.1.10 Q 5.1.11 Q 5.1.12
Capacity indicator 3: **Statistical methods and practices** (THROUGHPUT DIMENSION)	**3.1** Statistical software capability	- Ensure data quality - Greater accessibility to data	Q 3.1.6 (a, b, c, d, e, f, g, h, I, j, k, l, m, n)
	3.2 Data collection technology	- Advanced equipment and digital technologies for the field data collection operation	Q 3.1.7 (a, b, c, d, e, f, g, h)
	3.3 Information technology - infrastructure	- Presence of equipment - Accessibility to computers	Q 3.1.8 Q 2.2.2 Q 3.1.9
	3.4 General statistical infrastructure	- Up-to-date cartographic material, lists, registers and frames	Q 3.2.1 Q 3.2.2 Q 3.2.3 Q 3.2.4 Q 3.2.5 Q 3.2.6 Q 3.2.7
	3.5 Adoption of international standards	- Use of international standards	Q 3.3 Q 3.8.8
	3.6 General statistical activities	- Identify fundamental statistical activities of any country	Q 3.4.2 Q 3.4.4 Q 3.8.2 Q 3.8.4 Q 3.5.1

Annex 2: Mapping key issues to indicators and questions

Capacity indicators (dimensions)	Capacity subindicators (elements)	Key issues	Key questions
			Q 3.5.5 Q 3.7.2
	3.7 Agricultural markets and price information	- Existence of price data collection systems - Level of representation of agriculture in collection and dissemination of data on prices	Q 3.5.2 Q 3.5.3 Q 3.5.5/3.5.7 Q 3.5.6/3.5.8 (a, b, c) Q 3.6.3.1 Q 3.6.3.2 (a, b, c, d)
	3.8 Agricultural surveys	- Number and frequency of specialized surveys - Level of development of the statistical system	Q 3.6.1.2 Q 3.6.2.1(a, b, c ,d, e) Q 3.6.2.2 (a, b, c, d) Q 3.6.2.3 (a, b, c ,d) Q 3.6.2.4 (a, b, c, d) Q 3.6.2.5 (a, b, c)
	3.9 Analysis and use of data	- Management of data quality - Relevance of agricultural statistics programme	Q 3.8.3 (a,b,c,d,e) Q 3.8.4 Q 3.5.4 Q 3.9.4 Q 3.9.5
	3.10 Quality consciousness	- Sound statistical practices - General culture of quality consciousness	Q 3.6.2
Capacity indicator 4: **Availability of statistical information** (OUTPUT DIMENSION)	**4.1** Core data availability	- Extent of minimum core set of data	Q 4.1 (column 2)
	4.2 Timeliness	- Relevance of information	Q 4.1 (column 4)
	4.3 Overall data quality perception	- Quality, reliability and consistency of statistical data	Q 4.1 (column 8)
	4.4 Data accessibility	- Ascertain existence of statistical information - Cost of information - Data dissemination facilities	Q 3.1.1 Q 3.1.3 Q 3.1.4

Annex 3: Example of a country profile

Food and Agriculture Organization
of the United Nations

[COUNTRY FLAG]

[COUNTRY NAME]

2011 Profile of Country Capacity to Produce Agricultural and Rural Statistics

Logo(s) of implementing partner(s)

ACRONYMS

CPI	Consumer Price Index
DOS	Department of Statistics
MOA	Ministry of Agriculture and Agro-based Industry
MOPIC	Ministry of Plantation Industries and Commodities
NSA	National Statistics Agency
NSDS	National Strategy for the Development of Statistics
SITC	Standard International Trade Classification

1. COUNTRY OVERVIEW

[Include here information on a few indicators showing the importance of the agriculture and rural sector to the economy (e.g. share of agricultural land, share of agriculture in GDP, employment in agriculture, rural population and proportion of undernourished population). Most important structural changes, important policy initiatives and recent key initiatives related to agriculture statistics could also be included.]

The National Statistics Agency (NSA) has been established as an autonomous agency by an Act of Parliament: promulgation of Statistics Act, 2011 (Act No. 9 of 2012). The NSA will act as the government agency for collecting, processing, analysing and disseminating statistical information related to the socio-economic and demographic structure of the country. The Agency will take over all the functions of the earlier Department of Statistics, which functioned as the national statistics office of [COUNTRY NAME]. The lead role for agriculture statistics has also been transferred over to the NSA and the role of other contributing agencies has been defined more clearly. This Act puts particular emphasis on strict confidentiality of data collected from the target populations, and as such provides for strict penalties for breaching or contravening the Oath of Secrecy taken by each census official.

The NSA, in close consultation with the MOA, Water and Forestry (MAWF), is planning and preparing for the next agriculture census to take place in 2013/14. There is a very strong cooperative relationship between the NSA and MAWF, which should provide a strong basis for the census project.

The 2013/14 agriculture census will follow and comply with recommendations of the "World Programme for the Census of Agriculture 2010" (WCA 2010) and the Global Strategy for Improving Agriculture and Rural Statistics.

In recent years, there has been greater integration of statistical activities as a component of the national statistics system (NSS), rather than being carried out in isolation, and this is reflected in the most recent National Statistical Development Strategy (NSDS). In an integrated agricultural statistics system, the agriculture census provides certain types of data as part of an integrated set of data on food and agriculture, which is needed for decision-making regarding food, agriculture and rural development.

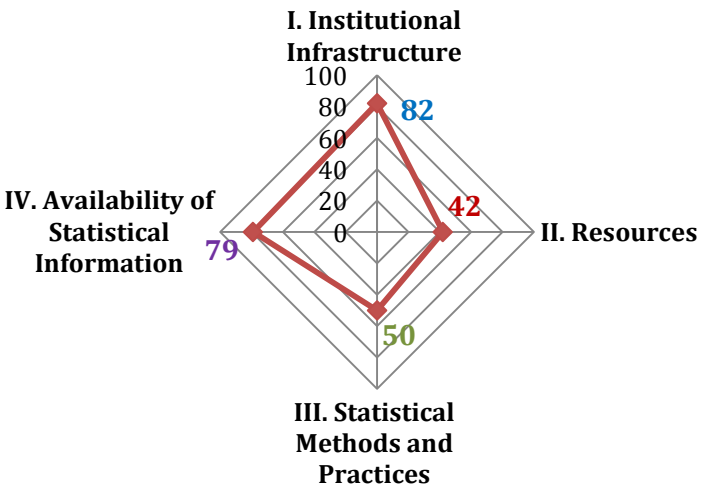
The five key economic indicators in [COUNTRY NAME] are:

Share of agricultural land area: 23.9% (2009)
Share of agriculture in the economy: 7.3% (2011)
Employment in agriculture: 13.5% (2011)
Rural population: 27.8% (2010)
Proportion of undernourished population: 22.5% (2011)

2. ASSESSMENT ON THE FOUR DIMENSIONS OF COUNTRY CAPACITY

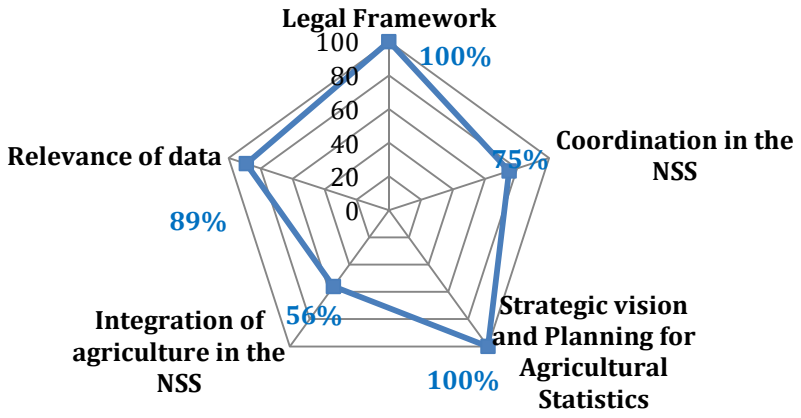
[Choose graphic or tabular presentation of the assessment, and follow the same style in all sections]

I. Institutional infrastructure	82
II. Resources	42
III. Statistical methods and practices	50
IV. Availability of statistical information	79



3. DETAILED INFORMATION ON INDIVIDUAL DIMENSIONS OF CAPACITY

I. Institutional infrastructure



1.1 Legal framework

The Statistics Act, 1965 (revised 1989) and the Census Act, 1960 (revised 1969) provided the legal basis for statistical activities in the country in general. The executive agency for statistical activities of general importance, as specified in the law, was the Department of Statistics of [COUNTRY NAME]. The law was operational but lacked autonomy and left scope for confusion over roles and functions.

The agencies contributing to agricultural statistics specified under the new law are:

- National Statistics Agency (NSA)
- Ministry of Agriculture & Agro-based Industry (agrofood)
- Ministry of Plantation Industries and Commodities (commodities)
- Ministry of Rural & Regional Development
- Ministry of Natural Resources and Environment

The new law foresees the establishment of a National Statistics Council. The mandate of the National Statistics Council includes statistics for crops, livestock, forestry, the environment, aquaculture, fisheries, water resources and rural development.

1.2 Coordination in the national statistical system

The national statistical system has traditionally been decentralized by sector, but the NSA has been designated as the coordinating authority. The NSA is to formally allocate responsibility among different agencies to produce statistics. There is a functional mechanism to coordinate among different agencies producing statistics which is fairly effective. It includes: periodic conferences of the data-producing agencies; common work planning with assigned responsibility for specific output; and a working group and task team for technical issues.

A general statistical system and an agricultural statistical system are established at the subnational level. Both the NSO and the Ministry of Agriculture and Agro-based Industry (MOA) have their field offices for data collection.

1.3 Strategic vision and planning for agricultural statistics

The Corporate Strategic Plan, prepared by the Department of Statistics (DOS), describes the strategic thinking for the development of statistics. The plan is operational and covers the period from 2010 to 2014. It includes a programme of work for developing statistics for the subsectors relating to crops, livestock, forestry, the environment, aquaculture, fisheries, water resources and rural development.

The country also has a national strategy specific to the agriculture sector which is integrated into the NSDS.

1.4 Integration of agriculture in the national statistical system

The DOS conducted an agricultural census in the country during 2005. There was a legal basis for conducting the agricultural census. It was conducted as a complete enumeration exercise using a list frame and covered the crop, livestock, aquaculture, fishery and forestry (logging activities) subsectors as well as other income-generating activities.

The agricultural census was linked to the population census. It used the same cartographic material and administrative boundaries as was used for the population census. A few questions were included in the population census to collect information on the participation of household members in the agriculture sector in order to get a sampling frame for the agricultural census. The next agricultural census is planned for 2015.

A special census on the socio-economic conditions of fishermen was done for the marine capture fisheries sector in 2007. A census on smallholder farmers was done in 2002.

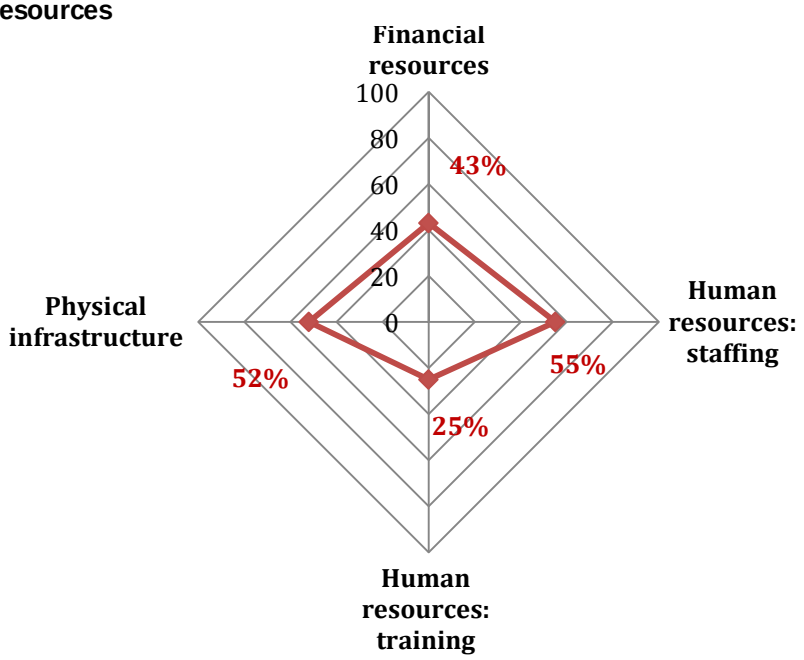
1.5 Relevance of data

There is an official forum for dialogue between suppliers and users of agricultural statistics, with representatives from water, environment, forestry, fisheries and rural development departments. There are regular meetings of the forum as well as official channels for receiving feedback from users. The level of dialogue between users and producers is considered adequate.

The following agencies are represented in the forum:

- Planning bodies (e.g. Ministry of Planning or National Planning Commission)
- Ministry of Finance/Treasury
- Line ministries and departments (e.g. water resources, environment, forestry, fisheries)
- Central Bank
- Representatives of academic and research community
- Media
- Private sector representatives

II. Resources



2.1 Financial resources

The NSO has a separate budget which it manages for statistical activities, but MOA has a separate budget line for statistical activities. On the whole, only about 20 percent of the activities related to agricultural statistics are funded by the government budget. The extent of the lack of available funds represents a constraint in the sense that any improvement in the situation will only slightly change the status of agricultural statistics.

2.2 Human resources: staffing

Example

The DOS has established 114 posts with statistical functions related to agriculture statistics, but only 75 of these are filled. The turnover of professional staff is a relevant constraint in the country, and it is expected that any improvement in this situation will have an impact on the status of agricultural statistics.

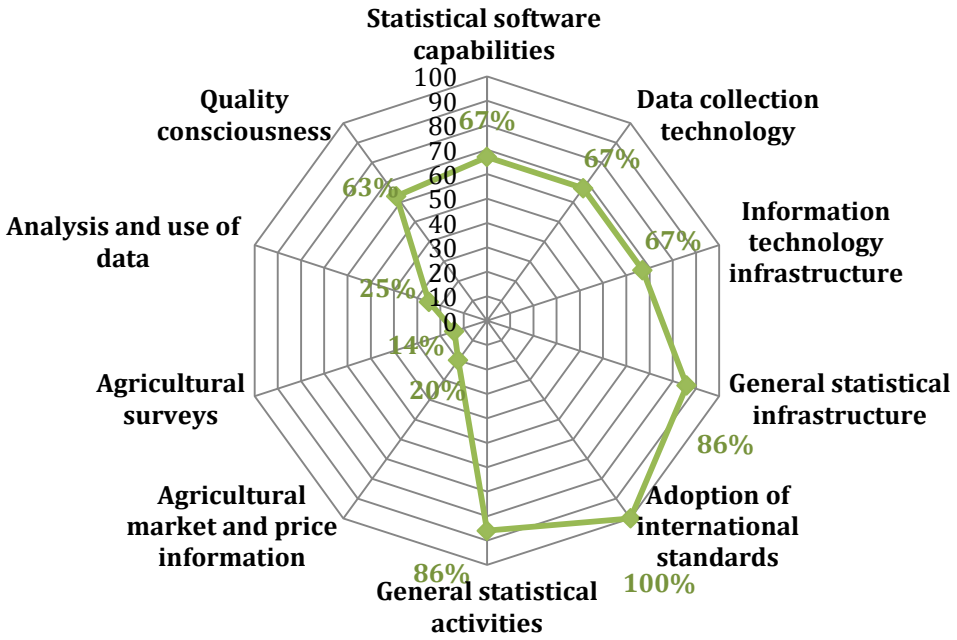
2.3 Human resources: training

There is a regular training programme for statistical staff of the DOS and the line ministries which also have some dedicated statistical staff. During the last 12 months, 74 staff members were trained in national training institutions, and 29 of those were professional staff. During the last 12 months, four statistical staff went abroad for training courses of one week or more.

2.4 Physical infrastructure

In the DOS, the transport equipment for field activities, office space and office equipment represent a significant constraint in the sense that there is an urgent need to improve the situation in order to improve the agricultural statistics.

III. Statistical methods and practices



3.1 Statistical software capabilities

The DOS uses: SPSS, SAS, STATA, ACCESS and CSPRO.

3.2 Data collection technology

Data are collected and/or captured through personal interviews, manual entry of data into a computer and/or scanning of questionnaires. PDA and The Computer-Assisted Programme Interviewing (CAPI) have been used on a trial basis in some small surveys. GPS has been used for research and development purposes only. The Computer-Assisted Telephone Interviewing (CATI) is expected to be used in the 2013 population census.

3.3 Information technology infrastructure

The DOS uses 1 198 personal computers at headquarters, 56 of which are for agricultural statistics. In addition, there are nine server computers for data storage and communication. The field offices have 2 662 personal computers, including those for agricultural statistics. The Ministry of Rural and Regional Development (MRRD) has one server, three computers at headquarters and 111 computers in 11 states.

3.4 General statistical infrastructure

The cartographic material used for the last agricultural census in 2005 was based on free images available from the Internet. The registers for different types of producers maintained by commodity boards were established at the time of the 2005 census, but there is no mechanism to keep them updated.

3.5 Adoption of international standards

[COUNTRY NAME] has adopted the international classifications shown below:

- ISIC (International Standard Industrial Classification) at four digits;
- CPC (Central Product Classification) at four digits;
- SITC (Standard International Trade Classification) at nine digits; and
- HS (Harmonized Commodity Description and Coding System) at nine digits.

The UN System of National Accounts used at the country level is SNA 1993.

3.6 General statistical activities

The DOS is responsible for conducting the population census. The last population census was in 2010, and the next one is planned for 2020. The last population census questionnaire included items about the participation of household members in agricultural or related activities.

The DOS also is responsible for compiling the national accounts statistics. The most recent year for which national accounts data are available is 2011.

- Economic accounts of agriculture are compiled only for production. Estimates of quarterly production from the agriculture sector are prepared and published.
- Economic accounts for the fisheries and aquaculture subsector have not been compiled in the country.
- A national water accounting has not been done in the country.

A Consumer Price Index (CPI) is compiled and published, as well as separate indices of important agricultural commodities used for direct consumption which are grouped in the CPI. An Index of Agricultural Producer Prices is published by the DOS. MOPIC reports indices on rubber, cocoa, pepper and tobacco. The Wholesale Price Index (WPI) includes rubber prices.

Household budget surveys are regularly conducted in the country by the DOS. The last one covered the period of 2010-2011. Estimates of rural household income and expenditures are available for this survey. The next survey is planned with a reference period of 2012/13.

3.7 Agricultural market and price information

There is a system for collecting and disseminating price information from the major wholesale markets of agricultural commodities, including rubber and palm oil. An annual publication – Average Price for Selected Agriculture Commodities – is brought out by the Federal Agriculture Marketing Authority (FAMA). This publication covers crop, livestock, marine fish and aquaculture products.

For crops and livestock, ex-farm, wholesale and retail prices are collected. Five respondents are interviewed from every outlet daily with country-wide coverage. It also covers cocoa and rubber.

For marine fish, average prices are collected at 229 Landing Complex weekly for 25 selected common species. The types of prices collected include ex-farm and wholesale, according to boat registration information. The Department of Fisheries conducts a monthly survey of average wholesale and retail prices for four main aquaculture products.

3.8 Agricultural surveys

- 2009 Paddy Production Survey carried out by the Department of Agriculture provided production and yield data.
- Good Agriculture Practices for Paddy Cultivation Survey 2009 done by Department of Agriculture provides information on cost of production.
- Post-harvest Losses for Paddy Survey was done by [COUNTRY NAME] Agricultural Research and Development Institute (AARDI) in 2007.
- Department of Veterinary Services carried out a livestock survey in 2010.
- Aquaculture Practices Survey was done by the Department of Fisheries in 2005.

Ministry of Natural Resources and Environment (MNRE) undertakes forest-related surveys:
- 2007: Wild honey bees;
- 2008: Elephants 2011: Wild ornamental plants

Ministry of Plantation Industries and Commodities (MOPIC) undertook the following surveys:
- Production surveys: Tobacco - 2009, Pepper – 2010;
- Yield survey: Cocoa – 2011;
- Cost of production surveys: Oil palm-2011, Rubber-2009, Cocoa – 2011.

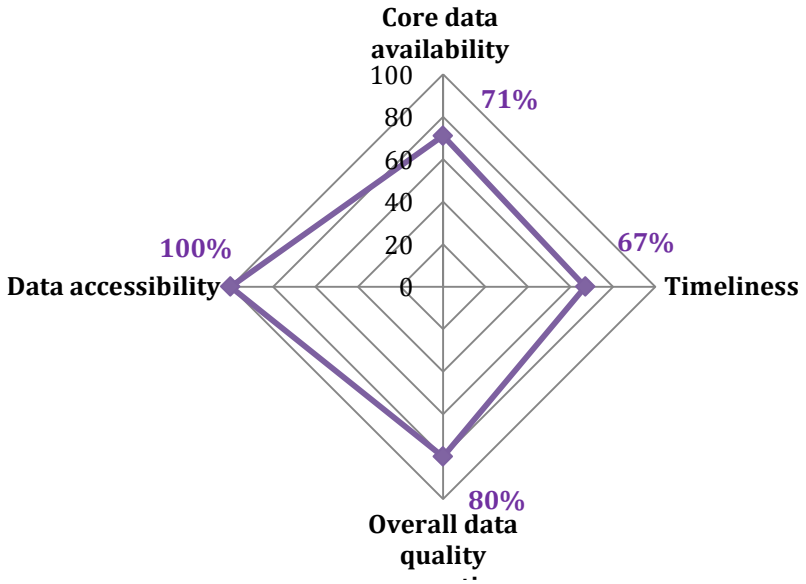
3.9 Analysis and use of data

Please write statements based on responses to relevant questions.

3.10 Quality consciousness

The methodology for most national agricultural surveys is accessible to the public. Generally, information on the sampling error of estimates, post-enumeration surveys and technical issues faced during the survey are not published. Nonetheless, the reports of surveys undertaken by MOPIC include quality information for their surveys.

IV. Availability of statistical information



4.1 Core data availability

Production

Reliable data on the crop, livestock, fishery and forestry subsectors are available through surveys on an annual basis with a one-year time lag for the entire country. However, forest production data on wood and non-wood value are not available.

External trade

Highly reliable and up-to-date data on quality and value of trade are available on a monthly basis from administrative sources.

Stock of capital and resources

Data on livestock inventories, agricultural machinery and stocks of main crops are produced annually through a sample survey by the MOA. These data are available with one-year time lag for the entire country and are considered reliable. The data on land use is available from the 2008 agricultural census. The data on quality and quantity of water used are not available.

Inputs

The data on agricultural inputs (e.g. fertilizer, seeds, pesticides, animal feed, forage, vaccines, aquatic seeds) are available from the surveys carried out by the MOA for the entire country. The data are considered reliable.

Agroprocessing

Please elaborate this section upon the responses in section IV of the questionnaire (availability of core data)

Prices

Most of the price data are considered highly reliable and are available in the country on a monthly basis. DOS is responsible for producer and consumer prices which are compiled on the basis of sample surveys. MOA produces data on wholesale prices, agricultural input prices and export and import prices from administrative sources, and these are considered to be reliable. Data series maintained by MOA and DOS are up-to-date.

Investment, subsidies or taxes

Please draft based upon the responses.

Rural infrastructure

Please draft based upon the responses

DOS produces data on the social dimension of agriculture which are available with annual frequency with a one-year lag. Most of these data are considered reliable. Gender-specific data on the agricultural and fishery workforce are available from annual sample surveys. Information is available annually about the population dependent on agriculture, the aquaculture workforce and household income.

Environmental

Reliable information on soil degradation, water pollution due to agriculture, emissions due to agriculture and aquaculture is available from the DOS and the line ministry for 2010. Administrative sources are indicated as the main source of data.

Geographic location

DOS has information available for 2010 about the geocoordinates of the statistical unit for agricultural surveys (parcel/holding or household) for the entire country

4.2 Timeliness

Most information is available with a one-year time lag, except for livestock production estimates.

4.3 Overall perception of data quality

The overall modal quality of available data is ‘’reliable’’. However, estimates of livestock production are considered to be particularly weak.

4.4 Data accessibility

DOS has a Web site (http://www.statistics.gov) that hosts official statistics for the country. There is a database for official statistics, accessible to external users on the Internet. Separate Web sites are maintained by line ministries for disseminating their data.

4. CONTACTS

The contact information should include all the institutions involved in producing agricultural statistics in the country, including the name of their departments, people responsible, address, phone and fax numbers, Web site and e-mail address.

Example:
Department of Statistics [COUNTRY NAME]
Agriculture and Environmental Statistics Division
Mrs/ Ms/Mr .....
Title:.....
Telephone:.....
Fax: ……
Web site: www.statistics.gov
E-mail: e-mail@stats.gov

Ministry of Agriculture and Agro-based Industry (agrofood) (MOA)
…….

Ministry of Rural & Regional Development (MRRD)
……

Rubber Industry Smallholders Development Authority (RISDA)
…….
Ministry of Natural Resources and Environment (NRE)
Forestry Department
Head of the Forest Economy Section, Forest Planning and Economic Division
Etc.