



Food and Agriculture Organization
of the United Nations

**UN Committee of Experts on Food Security, Agricultural and Rural
Statistics (UN-CEAG) – 2024**

Task team on

**Data quality standards and assessment framework for key food
and agricultural data**

National Quality Assurance Framework (NQAF) for Agriculture Statistics

**Checklist for self-Assessment
Statistics on Land Use for
Agriculture Purposes**

Introduction

Sound food and agricultural statistics are essential to support the national and international development agenda, particularly regarding the achievement of the Sustainable Development Goals (SDGs). In this regard, the existence of data quality standards and National Quality Assessment Frameworks (NQAFs) for food and agricultural statistics is critical for ensuring that food and agricultural statistics are “fit for purpose”.

In principle, the existence of data quality standards paired with an assessment framework guarantees consistency of statistical concepts, methodologies, as well as standards and procedures of the overall statistical program conducted by the national statistical authorities. Without a coherent system for data quality assessment, the national statistical authorities may risk losing control of the many data and statistical production processes including those related to food and agricultural statistics. Unfortunately, still today, many countries have not established (put in place) such quality frameworks; as noted in recent survey carried out by the UN SD in December 2017, only 60% of the 127 responding National Statistical Agencies declared to have a NQAF for statistics; the situation at the regional level was quite heterogeneous, ranging from 33% of Africa to the 86% of Europe¹. The reality for agriculture statistics is somehow worse since even in countries having a general NQAF, it is only partially or not yet implemented, particularly when they are produced and disseminated by different national agencies (e.g. by some line Ministries).

One of the difficulties in assuring the quality of food and agriculture statistics is the variety of sub-domains that fall under this umbrella: crops and livestock; inputs (fertilizer/pesticides; machinery; employment); prices (producers/consumers); food security/access, etc. Although the existence of data quality standards and corresponding assessment frameworks guarantees the consistency of statistical concepts, methodologies, as well as standards and procedures of the overall statistical program, an assessment focused on food and agriculture statistics requires tailored tools to be more effective and capable of identifying strengths and weaknesses. This need is identified well in the IMF Data Quality Assurance Framework (DQAF) where the generic DQAF serves as an umbrella to 7 dataset-specific frameworks in the domain of economic statistics (National accounts statistics; Consumer/producer price index; BOP/IIP, External Debt, Financial Institution and Government Finance statistics)².

The literature on data quality is quite vast; the most popular statistics QAF have many common features and typically show a “cascading” structure. Both, the UN NQAF (2019 edition) and the IMF DQAF (2012) agree on the fact that a QAF should look to the quality of the statistical institution, the quality of the statistical processes and the quality of the statistical product; in addition, the UN NQAF suggests the need to look at the overall national statistical system within which the different agencies producing and disseminating the national statistics operate.

The UN 2019 NQAF and the IMF DQAF represent the main references considered in drafting the NQAF for Agriculture Statistics that encompasses 4 levels of analysis:

- Level 1: Managing the national statistical system (NSS)
- Level 2: Managing the institutional environment
- Level 3: Managing statistical processes
- Level 4: Managing statistical outputs

¹ The survey was carried out as part of the activities of the Expert Group on National Quality Assurance Frameworks that in contributed to preparation of the 2019 UN NQAF Manual.

<https://unstats.un.org/unsd/methodology/dataquality/un-nqaf-manual/>

² <https://dsbb.imf.org/dqrs/DQAF>

Level 4 identifies the dimensions to consider in assessing the quality of the final food and agriculture statistical outputs disseminated by the national agency/agencies producing them. In line with the most popular approaches, the following dimensions are considered:

- 4.1 Relevance
- 4.2: Accuracy and reliability
- 4.3: Timeliness and punctuality
- 4.4: Accessibility and clarity
- 4.5: Coherence and comparability

To facilitate the assessment of the compliance of national agriculture statistics systems to such a general framework, a set of self-assessment checklists is being developed. They are expected to share almost the same structure, but with each dimension tailored to the specific sub-domain. Herein, we introduce the checklist for assessing the compliance of statistics on Land Use (LU) for agricultural purposes³.

The checklist is specifically tailored to LU agriculture statistics⁴ and an investigation of the key characteristics of the statistical processes (level 3) and the statistical outputs (level 4). In most of the developing countries and part of developed countries, statistics on LU for agricultural purposes are part of the agriculture statistics and are the outcome of series of statistical processes involving sample surveys, administrative data and geo-spatial data. As the focus of the checklist is solely LU for agricultural purposes, the section of the checklist referring to the statistical process (level 3) for producing LU considers multiple sources. Typically, the main source (statistical process) is the one related to agriculture holdings that covers majority of the land. Other sources (e.g. crops and vegetables survey or household and large farms surveys) may be used as complementary (e.g. for common land used) as well as administrative data. It is worth noting that LU statistics can also be provided by a recent the Agriculture Census (it conducted not earlier than 5 years before the year of the evaluation) covering all agricultural units in the country (e.g. household and non-household sector).

The checklist will investigate the key phases of the statistical process, using the Generic Statistical Business Process Model (GSBPM, v. 5.1) as a general reference⁵. As far as compliance to sound methodologies is concerned, the current checklist refers also to the SEEA Central Framework, and manuals prepared by FAO, in particular in the framework of the Agricultural Integrated Survey (AGRISurvey) Programme⁶.

The checklist is a self-assessment tool that should be compiled by the officer(s) in charge of the LU agriculture statistics in a system-wide collaborative effort, as relevant. The questions are organized in sections according to "if-then" scenarios; there are both informative questions and assessment questions. The objective of the checklist is to perform an assessment by joining the mechanisms underlying the 2019 UN NQAF Manual and the IMF's DQAF. In particular, most of the assessment-type questions in the checklist allow scoring using just 4 possible answers:

- full implementation => score=1
- Partial implementation => score=0.5
- Not implemented => score=0
- NA => Not Applicable

Then, the elementary scores should be aggregated by level of the UN NQAF. The scores for the process (level 3) can be further be disaggregated by its main phases (some of the elements of the GSBPM) while those related to the statistical outputs (level 4) can be disaggregated by quality dimensions. This

³ Agriculture is considered in strict sense thus excluding fishery and forestry sub-domains.

⁴ Referred to total agricultural land of the country, i.e. covering total agricultural area individually or commonly used by agricultural holdings, but excluding other types of land cover used for agriculture

⁵ <https://statswiki.unece.org/display/GSBPM/GSBPM+v5.1>

⁶ <http://www.fao.org/in-action/agrisurvey/en/>

disaggregation permits to compile a summary report in line with the Reports on the Observance of Standards and Codes (ROSC) prepared by the IMF DQAF that adopts a four-point rating scale:

“O” = Practice Observed: the current practices generally meet internationally accepted best practices/guidelines without any significant deficiencies.

“LO” = Practice Largely Observed: some departures from internationally accepted best practices/guidelines, but these are not seen as insufficient;

“LNO” = Practice Largely Not Observed: significant departures from internationally accepted best practices/guidelines which will need to take improvement actions;

“NO” = Practice Not Observed: internationally accepted best practices/guidelines are not met. Urgent improvement actions need to be undertaken;

NA = Not Applicable: when some items/practices do not apply to a country’s circumstances.

Note that the use of “LO” and “LNO” is intended to allow the assessor to make a subjective judgement regarding the degree or extent to which the practice is “partially” observed. Adopting a similar approach has value as many NSOs (and other national authorities) will be familiar with the ROSC assessment where a summary assessment by agency and dataset based on a four-part scale was followed by a separate section offering staff recommendations, where relevant.

National statistics on **[Land Use]** for agricultural purposes

Section 1 - Assuring Adequacy of resources

*UN NQAF, Level B- Managing the institutional environment, Principle 9- Assuring adequacy of resources
IMF DQAF. 0.2 Prerequisites for quality – Resources (0.2.1)*

1.	<p>In your Agency, are financial resources sufficient to implement the statistical work and development program(s) needed for producing [Land Use] statistics?</p> <p>[single choice]</p> <p>1. <input type="checkbox"/> Yes, fully</p> <p>2. <input type="checkbox"/> Yes, partially</p> <p>3. <input type="checkbox"/> No</p>
2.	<p>In your Agency, are human resources sufficient to implement the statistical work and development program(s) needed for producing [Land Use] statistics?</p> <p>[single choice]</p> <p>4. <input type="checkbox"/> Yes, fully</p> <p>5. <input type="checkbox"/> Yes, partially</p> <p>6. <input type="checkbox"/> No</p>
3.	<p>In your Agency, are the computing IT and the other technological resources sufficient to implement the statistical work and development program(s) needed for producing [Land Use] statistics?</p> <p>[single choice]</p> <p>1. <input type="checkbox"/> Yes, fully</p> <p>2. <input type="checkbox"/> Yes, partially</p> <p>3. <input type="checkbox"/> No</p>

Section 2 – The statistical Process

UN NQAF Level C - Managing statistical processes, Principle 10 - Assuring methodological soundness

UN NQAF Level C - Managing statistical processes, Principle 12 - Assuring appropriate statistical procedures

UN NQAF Level C - Managing statistical processes, Principle 13 - Managing the respondent burden

IMF DQAF 2. - Methodological Soundness

IMF DQAF 3.3 Statistical Techniques

4.	<p>Do you have a statistical process (sample survey, administrative data, earth observation data, mixed sources, etc.) that ensures the production of Agricultural [Land Use] statistics? [single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, on a regular basis2. <input type="checkbox"/> Yes, but not on a regular basis3. <input type="checkbox"/> No, please explain
5.	<p>If YES to question 4 Are the produced statistics on [Land Use] for agriculture purposes disseminated externally? [single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, all the statistics are disseminated externally2. <input type="checkbox"/> Yes, but just a part of the produced statistics is disseminated externally3. <input type="checkbox"/> No, they are used only for internal purposes. Please Explain:
6.	<p>If YES to question 4 How is the statistical process articulated? [multiple choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Agriculture Census2. <input type="checkbox"/> Tailored survey on [Land Use]3. <input type="checkbox"/> Data on [Land Use] collected with AGRIS like survey⁷4. <input type="checkbox"/> Data on [Land Use] collected in another general-purpose agriculture survey5. <input type="checkbox"/> Set of independent agriculture sample surveys6. <input type="checkbox"/> Exploitation of Administrative register/s7. <input type="checkbox"/> Combination of survey and administrative register8. <input type="checkbox"/> Exploitation of Earth observation data9. <input type="checkbox"/> Combination of survey and earth observation data10. <input type="checkbox"/> Combination of survey, administrative and earth observation data11. <input type="checkbox"/> Other, please specify: [free text]

⁷ “Handbook on the Agricultural Integrated Survey – AGRIS” prepared by the Global Strategy to improve Agricultural and Rural Statistics (published in 2017)

Section 2.1 – Agriculture Census

This sub-section should be filled **ONLY IF** the statistical process needed for producing [Land Use] statistics for agriculture purposes involves data collected in the Agriculture Census

7.	<p>Is Agriculture Census carried out on a regular basis (e.g. every 5 or 10 years)? [single choice]</p> <p>1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No</p>
8.	<p>What is the reference year of the data of the latest Agriculture census that are used for producing [Land use] statistics? [indicate year]</p> <p> _ _ _ _ </p>
9.	<p>Which of the following detailed variables concerning the Land Use are collected in the Agriculture Census? <i>(FAO WCA 2020 recommends nine basic land use classes: land under temporary crops; land under temporary meadows and pastures; land temporarily fallow; land under permanent crops; land under permanent meadows and pastures; land under farm buildings and farmyards; forest and other wooded land; area used for aquaculture (including inland and coastal waters if part of the holding); other area not elsewhere classified)</i> [multiple choice]</p> <p>1. <input type="checkbox"/> Temporary crops under greenhouses or high shelters 2. <input type="checkbox"/> Temporary crops outdoors or under low shelters 3. <input type="checkbox"/> Temporary fallow 4. <input type="checkbox"/> Temporary meadows and pastures 5. <input type="checkbox"/> Kitchen gardens and backyard 6. <input type="checkbox"/> Permanent crops under greenhouses or high shelters 7. <input type="checkbox"/> Permanent crops outdoors or under low shelters 8. <input type="checkbox"/> Permanent meadows and pastures 9. <input type="checkbox"/> Farm buildings and farm yards 10. <input type="checkbox"/> Forest and other wooded land 11. <input type="checkbox"/> Aquaculture on the holding 12. <input type="checkbox"/> Other land (land not in use, rocks, wetlands, etc.)</p>
10.	<p>Is the Agriculture Census collecting data that support compiling SDG indicator 2.3.1 <i>(SDG Indicator 2.3.1 - Volume of production per labour unit by classes of farming / pastoral / forestry enterprise size https://www.fao.org/sustainable-development-goals/indicators/231/en/)</i> [single choice]</p> <p>1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not applicable (e.g. the needed data are collected in a different survey, etc.)</p>

11.	<p>Is the Agriculture Census collecting data that support compiling SDG indicator 2.4.1 (SDG Indicator 2.4.1 - Proportion of agricultural area under productive and sustainable agriculture https://www.fao.org/sustainable-development-goals/indicators/241/en/) [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not applicable (e.g. the needed data are collected in a different survey, etc.)
12.	<p>How was the latest Agriculture census carried out? (guidance on agricultural censuses in the period between 2016 and 2025 is provided in two FAO 2020 manuals: https://www.fao.org/3/a-i4913e.pdf; https://www.fao.org/3/CA1963EN/ca1963en.pdf) [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> By full enumeration of <u>all</u> the agriculture holdings (including household, establishment, and any other group holdings) 2. <input type="checkbox"/> We fully enumerate <u>only</u> the agriculture holdings in the household sector 3. <input type="checkbox"/> It was based on a sample of holdings 4. <input type="checkbox"/> It was based on a modular approach with key information collected on all the holdings and additional data collected on a sample basis
13.	<p>IF the Agriculture census involves sampling (answer 3 or 4 to previous question) Is probabilistic sampling adopted? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
14.	<p>IF “Yes” to previous question (probabilistic sampling) Is the sample designed in accordance with well-known standards? (typically involving an efficient stratification and selection on two or more stages)? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
15.	<p>IF probabilistic sampling Is the sample designed to give estimates of [Land Use] statistics with a fixed maximum sampling error? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, for both national and sub-national [Land Use] statistics 2. <input type="checkbox"/> Yes, but only for national [Land Use] statistics 3. <input type="checkbox"/> No
16.	<p>IF Agriculture Census is based on sampling (probabilistic or nonprobabilistic) In developing and maintaining a sampling frame, are you following the suggestions of the FAO Handbook on master sampling frame? http://www.fao.org/3/ca6398en/ca6398en.pdf [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, completely 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No, please explain

<p>17.</p>	<p>IF Agriculture Census is based on sampling (probabilistic or nonprobabilistic) Have you assessed extent of <u>coverage</u> errors in the sampling frame used for selecting the sample? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, considering all the potential errors (under-coverage, over-coverage, duplicated records, missing data, etc) 2. <input type="checkbox"/> Yes, but only for few important errors. Please specify 3. <input type="checkbox"/> No
<p>18.</p>	<p>IF Agriculture Census is based on sampling (probabilistic or nonprobabilistic) Is the work done on sampling frame and the used sampling design documented? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, full documentation is available 2. <input type="checkbox"/> Yes, partial documentation is available 3. <input type="checkbox"/> No

Section 2.2 – Sample survey(s)

These sections should be filled **ONLY IF** the statistical process needed for producing [Land Use] statistics for agriculture purposes involves data collected in

- a) single survey (tailored survey; AGRIS like survey; general-purpose agriculture survey; answers 2-4, 7 and 9-10 to question 6).
- b) a series of independent agriculture sample surveys (answer 5 to question 6) then fill-in this section by referring to the “main” survey.

Section 2.2.1 – The “main” sample survey

These sections should be filled with information related to the single sample survey (case a) or to the “main” survey (most relevant survey for the production of [Land Use] statistics for agriculture purposes

19.	Please indicate the type of “main” survey [single choice] 1. <input type="checkbox"/> Regular survey on an annual or multi-year basis 2. <input type="checkbox"/> Ad hock survey carried out not regularly 3. <input type="checkbox"/> Other, please explain.
20.	Please indicate the reference year of the latest survey [single choice] 1. _ _ _ _

Section 2.2.1.1 – The main variables observed in the “main” sample survey

GSBPM 2.2 – Design Variable Description

21.	<p>Which is the survey statistical units? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Agricultural holding 2. <input type="checkbox"/> Household 3. <input type="checkbox"/> Parcel 4. <input type="checkbox"/> Plot 5. <input type="checkbox"/> Area segment (in case of area frame) 6. <input type="checkbox"/> Other
22.	<p>IF already implementing or planning to implement the AGRIS Is the definition of statistical units coherent with the AGRIS recommendations? <i>(Section 4.1.1.4. of the AGRIS Manual)</i> [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No, please explain
23.	<p>Which of the following detailed variables concerning the Land Use are collected? [multiple choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Temporary crops under greenhouses or high shelters 2. <input type="checkbox"/> Temporary crops outdoors or under low shelters 3. <input type="checkbox"/> Temporary fallow 4. <input type="checkbox"/> Temporary meadows and pastures 5. <input type="checkbox"/> Kitchen gardens and backyard 6. <input type="checkbox"/> Permanent crops under greenhouses or high shelters 7. <input type="checkbox"/> Permanent crops outdoors or under low shelters 8. <input type="checkbox"/> Permanent meadows and pastures 9. <input type="checkbox"/> Farm buildings and farm yards 10. <input type="checkbox"/> Forest and other wooded land 11. <input type="checkbox"/> Aquaculture on the holding 12. <input type="checkbox"/> Other land (land not in use, rocks, wetlands, etc.)
24.	<p>Is the survey collecting data that support compiling SDG indicator 2.3.1 <i>(SDG Indicator 2.3.1 - Volume of production per labour unit by classes of farming / pastoral / forestry enterprise size https://www.fao.org/sustainable-development-goals/indicators/231/en/)</i> [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not applicable (e.g. the needed data are collected in a different survey, etc.)
25.	<p>Is the survey collecting data that support compiling SDG indicator 2.4.1 <i>(SDG Indicator 2.4.1 - Proportion of agricultural area under productive and sustainable agriculture https://www.fao.org/sustainable-development-goals/indicators/241/en/)</i> [single choice]</p> <ol style="list-style-type: none"> 5. <input type="checkbox"/> Yes, fully 6. <input type="checkbox"/> Yes, partially 7. <input type="checkbox"/> No 8. <input type="checkbox"/> Not applicable (e.g. the needed data are collected in a different survey, etc.)

Section 2.2.1.2 – The sample and the sampling frame of the “main” survey

GSBPM 2.4 Design Frame and Sample

GSBPM 4.1 create Frame and Select Sample

26.	<p>Is probabilistic sampling adopted? [single choice] 3. <input type="checkbox"/> Yes 4. <input type="checkbox"/> No</p>
27.	<p>IF “Yes” to previous question (probabilistic sampling) Is the sample designed in accordance with well-known standards? <i>(typically sample on household adopts a stratified two stage sampling design while a sample of agriculture holdings is selected using a stratified one-stage sampling design; see e.g. Chapter 5 in the AGRIS Manual)?</i> [single choice] 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No</p>
28.	<p>IF probabilistic sampling Is the sample designed to give <u>national</u> estimates of [Land Use] statistics with a fixed maximum sampling error? [single choice] 1. <input type="checkbox"/> Yes, for the most important national [Land Use] statistics 2. <input type="checkbox"/> Yes, but only for few important national [Land Use] statistics 3. <input type="checkbox"/> No</p>
29.	<p>IF probabilistic sampling Is the sample designed to provide <u>sub-national</u> (district/province level) estimates of [Land Use] statistics with a fixed maximum sampling error? [single choice] 1. <input type="checkbox"/> Yes, for the most important [Land Use] product 2. <input type="checkbox"/> Yes, but only for few important [Land Use] product, depending on the region 3. <input type="checkbox"/> No</p>
30.	<p>For both probabilistic and non-probabilistic samples (if non-probabilistic samples are selected from a sampling frame; e.g. cut-off sampling) In developing and maintaining a sampling frame, are you following the suggestions of the FAO Handbook on master sampling frame? http://www.fao.org/3/ca6398en/ca6398en.pdf [single choice] 1. <input type="checkbox"/> Yes, completely 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No, please explain</p>

31.	<p>For both probabilistic and non-probabilistic samples (if non-probabilistic samples are selected from a sampling frame; e.g. cut-off sampling)</p> <p>Which are the main problems in the sampling frame?</p> <p>[multiple choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Under-coverage (not all the units are included in the frame) 2. <input type="checkbox"/> Over-coverage (part of the units included in the frame should not be there) 3. <input type="checkbox"/> Outdated information 4. <input type="checkbox"/> Missing data/frame variables 5. <input type="checkbox"/> Other, please explain
32.	<p>For both probabilistic and nonprobabilistic samples (if nonprobabilistic samples are selected from a sampling frame; e.g. cut-off sampling)</p> <p>Have you assessed the extent of <u>under-coverage</u> in the sampling frame?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> No, as it can be considered negligible 2. <input type="checkbox"/> No, it is NOT negligible but we were not able to measure its extent 3. <input type="checkbox"/> Yes, and it is negligible (below 10%) 4. <input type="checkbox"/> Yes, and it is NOT negligible. Please specify: ...
33.	<p>For both probabilistic and nonprobabilistic samples (if nonprobabilistic samples are selected from a sampling frame; e.g. cut-off sampling)</p> <p>Have you assessed the extent of <u>over-coverage</u> in the sampling frame?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> No, as it can be considered negligible 2. <input type="checkbox"/> No, it is NOT negligible but we were not able to measure its extent 3. <input type="checkbox"/> Yes, and it is negligible (below 10%) 4. <input type="checkbox"/> Yes, and it is NOT negligible
34.	<p>For both probabilistic and nonprobabilistic samples (if nonprobabilistic samples are selected from a sampling frame; e.g. cut-off sampling)</p> <p>Does the sampling frame include outdated information?</p> <p>[multiple choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, information needed for sampling design (e.g. stratification variables, etc.) 2. <input type="checkbox"/> Yes, information needed for contacting units 3. <input type="checkbox"/> Yes, information not needed for sampling purposes or for contacting units 4. <input type="checkbox"/> Other, please explain: ...

Section 2.2.2 – “Secondary” sample survey

If the statistical data needed for producing [Land Use] statistics involves a series of independent agriculture sample surveys (answer 5 to question 6) then fill-in this section by referring to the survey, other than the main one, that is considered relevant for producing [Land Use] statistics and that is selected from a sampling frame different from that of the main survey

35.	<p>Which are the main reasons for having different sampling frames? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Each frame refers to a different type of sample units (e.g. Agriculture households in one frame and commercial farms in the other) <input type="checkbox"/> 2. <input type="checkbox"/> The frames refer to the same sampling units but cover different subsets of the target population and cannot be integrated 3. <input type="checkbox"/> Other, please explain:
36.	<p>Is the sample selected using a probabilistic mechanism? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
37.	<p>IF “Yes” to previous question Is the sample <u>designed</u> in accordance with the well-known standards? <i>(typically sample on household adopt a stratified two stage sampling design while a sample of agriculture holdings is selected using a stratified one-stage sampling design; see e.g. Chapter 5 in the AGRIS Manual)?</i> [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
38.	<p>Is samples designed to provide estimates of [Land Use] statistics with a fixed maximum sampling error? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, for both national and sub-national estimates 2. <input type="checkbox"/> Yes, but only for national estimates 3. <input type="checkbox"/> No
39.	<p>Have you assessed the potential overlapping between the frame used to select this sample and that used to select the sample for the survey described in the previous section (“main” survey)? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, and it is negligible 2. <input type="checkbox"/> Yes, and since it is non-negligible we adopted some corrections to compensate it 3. <input type="checkbox"/> No, because overlapping cannot exist 4. <input type="checkbox"/> No, because overlapping can exist but we believe it is negligible 5. <input type="checkbox"/> No, because overlapping can exist but we do not have methods to assess it 6. <input type="checkbox"/> We don’t know

40.	Which are the main problems in the sampling frames? [multiple choice] 1. <input type="checkbox"/> Undercoverage (not all the units are included in the frame) 2. <input type="checkbox"/> Overcoverage (part of the units included in the frame should not be there) 3. <input type="checkbox"/> Outdated information 4. <input type="checkbox"/> Missing data 5. <input type="checkbox"/> Other, please explain
41.	For both probabilistic and nonprobabilistic samples Is the work done on sampling frame and the used sampling design documented? [single choice] 1. <input type="checkbox"/> Yes, full documentation is available 2. <input type="checkbox"/> Yes, partial documentation is available 3. <input type="checkbox"/> No

2.3 Data collection

GSBPM 2.1 Design Collection

GSBPM 4. Collect

2.3.1 Data collection in Survey/Census

To be filled when data needed for compiling Agriculture [Land Use] statistics are collected in the Agriculture Census or in one or more sample surveys

In case of different of surveys (Census and sample survey, series of sample surveys) please fill in the section referring to the most relevant source of data for compiling required statistics

42.	Is data collection designed to implement Computer Assisted Interview? [single choice] 1. <input type="checkbox"/> Yes, for all the units 2. <input type="checkbox"/> Yes, but not for all the units 3. <input type="checkbox"/> No
43.	Is the survey questionnaire designed to facilitate the data collection and reduce the response burden on respondents? <i>(e.g. a well-designed skip pattern, well-written sentences easy to be understood, removal of unnecessary questions whose information does not contribute to dissemination, etc.)</i> [single choice] 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
44.	Is data collection carried out by interviewers? <i>(please refer to all types of interviewers, e.g. permanent interviewers that part of regional staff, interviewers used for the survey data collection that are staff in the extension services of the agency; completely independent interviewers hired and trained for the survey only)</i> [single choice] 1. <input type="checkbox"/> Yes, for all the units 2. <input type="checkbox"/> Yes, but only of a subset of units 3. <input type="checkbox"/> No
45.	IF "Yes" to the previous question Is on-field data collection organized to allow efficient work for interviewers and avoid excessive workload? [single choice] 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
46.	Do you have an automated monitoring system for data collection? [single choice] 1. <input type="checkbox"/> Yes, it permits to monitor the data collection on a regular basis (daily or weekly) 2. <input type="checkbox"/> Yes, but it does not permit to monitor the data collection on a regular basis 3. <input type="checkbox"/> No

47.

Did you test the data collection in advance?

[single choice]

1. Yes, completely (questionnaire, organization of the on-field work, interviewing phase, ...)
2. Yes, partially (only some aspects). Please explain:
3. No

Section 2.3.2 Administrative Data sources

To be filled IF the statistical process needed for producing [Land Use] statistics involves one or more administrative data sources (question 6, answers 6, 7, 10, 11)

48.	<p>Please indicate the types of administrative data sources?</p> <p>[multiple choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Cadastral data 2. <input type="checkbox"/> Farm register, 3. <input type="checkbox"/> Business register 4. <input type="checkbox"/> Subsidy register 5. <input type="checkbox"/> Organic farming register 6. <input type="checkbox"/> List from extension services 7. <input type="checkbox"/> Customs 8. <input type="checkbox"/> Municipality services (typically for information on common land) 9. <input type="checkbox"/> Other, please specify
49.	<p>Do the data in the register(s) come along with adequate metadata? (e.g. definition of variables, classification used, etc.)</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
50.	<p>Do you check whether the actual geographical coverage of the register(s) is in line with needs related to compilation of Agriculture [Land Use] statistics?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
51.	<p>Do you check whether the register(s) includes all the needed variables for the production of Agriculture [Land Use] statistics?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, check for the presence of all the needed variables 2. <input type="checkbox"/> Yes, but we only check availability of the most relevant variables 3. <input type="checkbox"/> No
52.	<p>Do you check whether the definitions of the needed registers variables are in line with those needed for statistical purposes?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
53.	<p>Do you know/check for the presence of missing values in the register variables needed for the compilation of Agriculture [Land Use] statistics?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, and we calculate the fraction of missing value for each variable 2. <input type="checkbox"/> Yes, but we don't assess the fraction of missing values 3. <input type="checkbox"/> No

54.	<p>Does the reference time of data in the register(s) data permit the production of timely and relevant of Agriculture [Land Use] statistics?</p> <p><i>(in case of variables having different time references please refer to those most relevant for the productions of Land Use statistics)</i></p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
55.	<p>Do you check whether the values of a needed register variable(s) are all referred to the same time reference (time instant or time period)?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
56.	<p>Do you assess whether acquisition, treatment and processing of the administrative register(s) is worth all the efforts done (i.e. increases significantly the quality of the statistics produced at the end of the whole process)?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, in every replication of the whole process 2. <input type="checkbox"/> Yes, but only in the first occasion 3. <input type="checkbox"/> No

II.2.5 Data Integration

GSBPM 5.1 Integrate the survey data and administrative registers or different registers

To be filled IF the statistical process needed for producing [Land Use] statistics involves integration of at microdata level of different data sources (question 6, options: 5, 7, 9, 10, 11)

57.	<p>What type of data integration process is used? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Exact matching or merging (linkage based on <u>units' identifiers</u> expected to be error-free) 2. <input type="checkbox"/> Record linkage (linkage based on a set of <u>key variables</u> that permit to uniquely identify a unit like name, surname, gender, date of birth, address, etc.; or when units' identifier are not error-free) 3. <input type="checkbox"/> Mixture of the above 4. <input type="checkbox"/> Other, please specify
58.	<p>IF "Record linkage" (previous question =2 or =3) What type of record linkage is applied? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Deterministic record linkage (linkage is based on a set of rules that permit to establish whether there is a match or not) 2. <input type="checkbox"/> Probabilistic record linkage (it is estimated the probability of having a match using ad statistical models) 3. <input type="checkbox"/> Mix of probabilistic and deterministic
59.	<p>Do you check units' identifiers/key variables for the presence of errors or missing values before the linkage phase? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, extensively 2. <input type="checkbox"/> Yes, but not extensively 3. <input type="checkbox"/> No
60.	<p>Before data integration do you check whether the data sources include duplicated records? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No, because data providers ensured that the data sources do not have duplicated records 3. <input type="checkbox"/> No, because we believe that the problem of duplicated records is negligible
61.	<p>Do you assess the data integration phase? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, extensively (by calculating also an estimate of linkage errors like incorrect matches or wrongly non-matched records) 2. <input type="checkbox"/> Yes, but not extensively (without calculating an estimate of linkage errors) 3. <input type="checkbox"/> No
62.	<p>Is data integration process documented? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No

2.6 Data conversion

GSBPM 5.2 Classify and code

To be filled IF the statistical process needed for producing [Land Use] statistics involves a phase for recoding or convert the classification used for some variables (typically those coming from external sources like administrative registers whose definitions/classification may not be coherent with used for statistical purposes)

Note: this Section refers to all the data sources (Census, sample surveys, administrative data) used for the compilation of Agriculture [Land Use] Statistics

63.	How is conversion done? [single choice] <ol style="list-style-type: none">1. Automatic coding2. Interactive coding (mix of automatic and clerical coding)3. Clerical coding
64.	Were the conversion methods tested before their use? [single choice] <ol style="list-style-type: none">1. Yes2. No
65.	Do you check and assess the data conversion phase? [single choice] <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, extensively2. <input type="checkbox"/> Yes, but not extensively3. <input type="checkbox"/> No
66.	Is the classify and code appropriately documented? [single choice] <ol style="list-style-type: none">1. Yes, all conversion tables and other supporting documentation are available2. Yes, but conversion tables and supporting documentation are partially available3. No

2.7 Data editing and imputation

GSBPM 5.3 Review and validate

GSBPM 5.3 Edit and impute

Note: this Section refers to all the data sources (Census, sample surveys, administrative data) used for the compilation of Agriculture [Land Use] Statistics

67.	<p>Do you check collected data for errors (missing values, outliers, incoherent values, etc.)? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, for almost all the variables in the questionnaire 2. <input type="checkbox"/> Yes, only for the most important variables 3. <input type="checkbox"/> No
68.	<p>IF “yes” to previous question How do you detect errors in [Land Use] data? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> In a fully automatic way and part of the checks are already in the electronic questionnaire 2. <input type="checkbox"/> In a fully automatic way but after the data collection 3. <input type="checkbox"/> partly in automatic way and partly through manual checks (clerical revision) 4. <input type="checkbox"/> only through manual checks (clerical revision) 5. <input type="checkbox"/> Other, please explain
69.	<p>Do you impute missing values? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, for almost all the variables in the questionnaire 2. <input type="checkbox"/> Yes, only for the most important variables 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not applicable (missing values are not present)
70.	<p>IF “yes” to previous question How do you impute missing values? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> In an automatic way by applying well-known statistical methods (e.g. nearest neighbour donor imputation, regression imputation, etc.) 2. <input type="checkbox"/> A mixed approach involving both imputation using statistical methods and manual imputation carried out by clerks being subject matter experts 3. <input type="checkbox"/> Only manual imputation carried out by clerks being subject matter experts
71.	<p>Are the data treatment procedures (detection of errors, outlier and imputation) documented? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No

2.8 Survey Data Weighting

GSBPM 5.6 Calculate sampling weights

Note: this Section refers only to eventual data from probabilistic sample survey used for the compilation of Agriculture [Land Use] Statistics

72.	Do you modify the initial sample weights for compensating for unit nonresponse or for aligning survey estimates with known population totals (weights calibration or post-stratification)? [single choice] 5. <input type="checkbox"/> Yes 6. <input type="checkbox"/> No 7. <input type="checkbox"/> Not applicable (sample survey not adopted or nonprobability sampling is considered)
73.	IF "Yes" to previous question Is the re-weighting procedure documented? [single choice] 4. <input type="checkbox"/> Yes, fully 5. <input type="checkbox"/> Yes, partially 6. <input type="checkbox"/> No

2.6 Data processing and data backup

GSBPM 5.7 Calculate aggregates

GSBPM 5.7 Finalize data files

Note: this Section refers to all the data sources (Census, sample surveys, administrative data) used for the compilation of Agriculture [Land Use] Statistics

74.	<p>Do you check the final data-processing step (aimed at calculating the final [Land Use] estimates) for potential errors?</p> <p>[single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, the software codes have been extensively tested and checked in advance2. <input type="checkbox"/> yes, only if the software code returns an error3. <input type="checkbox"/> No
75.	<p>Are the final estimates compared with other estimates before their disseminations?</p> <p>[single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes2. <input type="checkbox"/> No3. <input type="checkbox"/> Not applicable
76.	<p>IF "Yes" to previous question</p> <p>In case of discrepancies to do you modify the estimates so to ensure coherence with other estimates</p> <p>[single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, all the estimates2. <input type="checkbox"/> Yes, some of them3. <input type="checkbox"/> No
77.	<p>Have you implemented an IT procedure for doing backup of the data?</p> <p>[single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, regularly at the end of the main phase of the statistical process2. <input type="checkbox"/> Yes, but not on a regular basis3. <input type="checkbox"/> No

3 Managing [Land Use] Statistical Outputs

Quality of the Agricultural [Land Use] statistics

3.1 Relevance

UN NQAF Level D – Managing statistical outputs, Principle 14 Assuring relevance

IMF DQAF. 0.3 Prerequisites for quality – Relevance (0.3.1)

78.	<p>Do the currently disseminated [Land Use] statistics satisfy the main needs of both <u>National</u> and international users?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Don't know
79.	<p>Do the currently disseminated [Land Use] statistics satisfy the main needs of both <u>National</u> and international users in terms of disaggregation (territorial, by type of farms, etc.)?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Don't know
80.	<p>Do you have a mechanism (survey, committee) to monitor user's satisfaction with [Land Use] statistics and understanding also their unmet needs?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, in a regular way 2. <input type="checkbox"/> Yes, but not regularly 3. <input type="checkbox"/> No
81.	<p>IF "Yes" to previous</p> <p>Are the unmet needs prioritized and taken into account to improve the statistical production process of [Land Use] statistics and the corresponding quality?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, in a regular way 2. <input type="checkbox"/> Yes, but not regularly 3. <input type="checkbox"/> No

3.2 Accuracy and Reliability

UN NQAF Level D – Managing statistical outputs, Principle 15 Assuring Accuracy and Reliability
IMF DQAF 3. Accuracy and reliability, 4.3 Revision Policy and practice

82.	<p>Is the statistical process designed to cover all the LAND used for Agricultural purposes? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, the statistics cover [Land Used] for agriculture purposes by the Agriculture holdings, Commercial farms; Common land 2. <input type="checkbox"/> No, the statistics refer to a subset of the land that however contributes to a largest fraction of the overall [Land use] for agriculture purpose 3. <input type="checkbox"/> No, the statistics refer only the subset of the units easier to be observed. Please specify 4. <input type="checkbox"/> other, please explain
83.	<p>In case of [Land Use] statistics based on one or more sample surveys, do you assess the accuracy of [Land Use] statistics in terms of sampling error (i.e. estimation of the sampling error, confidence intervals, etc.)? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, in a regular way 2. <input type="checkbox"/> Yes, occasionally 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not applicable, we do not use a sample survey to produce Agriculture [Land Use] statistics
84.	<p>Do you have tools to assess potential impact of non-sampling errors on the accuracy of [Land Use] statistics? <i>(nonsampling errors are the errors that do not depend from the sampling and may arise in any phase of a statistical production process; usually they include missing values, measurement errors, errors in data treatment, etc.). Being these errors non linked to sampling they can be present in Census and Administrative data as well.</i> [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, we regularly monitor them by calculating a set of quality indicators (fraction of missing values, number of changed/modified values because found erroneous, etc.) 2. <input type="checkbox"/> Yes, but not on a regular basis 3. <input type="checkbox"/> No
85.	<p>Do you revise already disseminated [Land Use] statistics? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, on a regular basis according to a well-defined revision policy (usually include at least 2 revisions of initial disseminated statistics) 2. <input type="checkbox"/> Yes, we disseminate provisional statistics and then replace them with the corresponding final estimates 3. <input type="checkbox"/> Yes, we revise the statistics only when errors in the disseminated figures are detected (there is not a revision policy or dissemination of provisional and final statistics) 4. <input type="checkbox"/> No
86.	<p>IF “Yes ” to the previous question Do you calculate indicators related to the direction and size of revisions of [Land Use] statistics? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, on a regular basis 2. <input type="checkbox"/> Yes, not regularly 3. <input type="checkbox"/> No

3.3 Timeliness and Punctuality

UN NQAF Level D – Managing statistical outputs, Principle 16 Assuring Timeliness and Punctuality
IMF DQAF 4. Serviceability, 4.1 Periodicity and Timeliness

87.	<p>Do you disseminate provisional estimates? [single choice]</p> <ol style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No
88.	<p>IF provisional estimates are disseminated Please indicate their timeliness in months (<i>the time-lag from the end of the reference period to the dissemination date</i>)</p> <p> _ _ months for <u>provisional</u> estimates</p>
89.	<p>IF provisional estimates are disseminated Are provisional estimates disseminated to compensate for non-timely final [Land Use] statistics? [single choice]</p> <ol style="list-style-type: none"> <input type="checkbox"/> Yes, this is the main reason <input type="checkbox"/> Yes, this is one of the reasons <input type="checkbox"/> No
90.	<p>What is the timeliness of [Land Use] statistics? (<i>please indicate the time-lag from the end of the reference period to the dissemination date</i>)</p> <p> _ _ months for <u>final</u> estimates</p>
91.	<p>In case of (almost) regular production of [Land Use] statistics over the last 5 years. What is the observed trend of timeliness? [single choice]</p> <ol style="list-style-type: none"> <input type="checkbox"/> Improving (i.e. Reduction of time-lag between reference date and dissemination date) <input type="checkbox"/> Slightly improving <input type="checkbox"/> Almost stable <input type="checkbox"/> Slightly deteriorating <input type="checkbox"/> Deteriorating <input type="checkbox"/> Not applicable (no regular production of [Land Use] statistics over the last 5 years)
92.	<p>IF previous questions = [3,4,5] Are you planning to revise the process to improve the timeliness of [Land Use] statistics? [single choice]</p> <ol style="list-style-type: none"> <input type="checkbox"/> Yes, it's the main priority <input type="checkbox"/> Yes, but it is not the main priority <input type="checkbox"/> No
93.	<p>Does a published schedule announce the [Land Use] statistics publication dates in advance of their release? [single choice]</p> <ol style="list-style-type: none"> <input type="checkbox"/> Yes <input type="checkbox"/> No

94.

Have you experienced problems in punctuality of dissemination of [Land Use] statistics? (i.e. statistics disseminated later than the scheduled date)

[single choice]

1. Yes, often
2. Yes, sometimes
3. No

3.4 Accessibility and Clarity

UN NQAF Level D – Managing statistical outputs, Principle 17 Assuring Accessibility and Clarity
IMF DQAF 5 Accessibility

95.	<p>Are the disseminated [Land Use] statistics made freely available for all users? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
96.	<p>Are the disseminated [Land Use] statistics made available to all users at the same time? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No – but embargos imposed to prevent early public disclosure 3. <input type="checkbox"/> No
97.	<p>How are [Land Use] statistics disseminated? [multiple choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Data tables 2. <input type="checkbox"/> Analytical products 3. <input type="checkbox"/> Microdata files 4. <input type="checkbox"/> Other, please specify:
98.	<p>Are the users able to extract [Land Use] data from statistical database through a public query interface in the most appropriate and common formats (xlsx, CSV, html, etc.)? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No
99.	<p>Can [Land Use] statistics be accessed via an Application Programming Interface (API)? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No
100.	<p>Are [Land Use] statistics disseminated in a clear and understandable manner? (i.e. the statistics come along with explanatory texts that clearly describes the content, well designed tables and graphical outputs, etc.) [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, all the statistics 2. <input type="checkbox"/> Yes, but only a subset of the statistics 3. <input type="checkbox"/> No
101.	<p>Has [Land Use] statistics dissemination been adapted to reflect new IT dissemination opportunities such as mobile phones? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, various methods of new IT dissemination opportunities have been adopted to reach the maximum number of users in a cost-effective way 2. <input type="checkbox"/> Yes, new IT dissemination opportunities have been adopted but the maximum number of users has not yet been reached 3. <input type="checkbox"/> No new IT dissemination system has been put in place

102.	<p>Are users informed about revisions of already disseminated [Land Use] statistics? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, always 2. <input type="checkbox"/> Yes, but occasionally 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not Applicable (revisions are NOT done)
103.	<p>Are [Land Use] statistics accompanied by the corresponding metadata needed to understand them? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, all metadata are provided 2. <input type="checkbox"/> Yes, but just a subset of metadata is provided 3. <input type="checkbox"/> No
104.	<p>Are [Land Use] statistics accompanied by up-to-date methodological documents (on concepts, scope, classifications, basis of recording, data sources, compilation methods and statistical techniques), as well as quality reports freely available to the public? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, all the documentation is provided to the users 2. <input type="checkbox"/> Yes, but the available documentation is rather limited 3. <input type="checkbox"/> No
105.	<p>Do you monitor accesses to [Land Use] statistics by calculating related indicators? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, regularly 2. <input type="checkbox"/> Yes, occasionally 3. <input type="checkbox"/> No
106.	<p>Is it possible for users to contact the agency to point out possible errors, to seek clarifications and, if necessary, to lodge complaints? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes 2. <input type="checkbox"/> No

3.5 Comparability and Coherence

UN NQAF Level D – Managing statistical outputs, Principle 18 Assuring Coherence and Comparability
IMF DQAF 4.2 Consistency

107.	<p>Do you assess the coherence of the disseminated [Land Use] statistics with similar statistics produced and disseminated by another <u>National</u> Agency? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, regularly 2. <input type="checkbox"/> Yes, sometimes 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not Applicable (There are no other National Agencies producing [Land Use] statistics)
108.	<p>Do you assess the coherence of the disseminated [Land Use] statistics with similar statistics produced and disseminated by an <u>International</u> Agency? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, regularly 2. <input type="checkbox"/> Yes, sometimes 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not Applicable (There are no other International Agencies producing [Land Use] statistics)
109.	<p>Are [Land Use] classified according to the SEEA Framework (2012) [Land Use] classification? [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially using AGRIS classification 3. <input type="checkbox"/> Yes, partially using other LU classification 4. <input type="checkbox"/> No
110.	<p>IF [2,3,4] to previous question Do you use a conversion table from internal to SEEA [Land Use] classification?</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, there is a well-established and publicly available table 2. <input type="checkbox"/> Yes, but the table is not stable over time 3. <input type="checkbox"/> No
111.	<p>Are the units of measure used in disseminating [Land Use] data compliant with international standards? <i>(typically hectares for area)</i> [single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No

112.	<p>IF [2,3] to previous question</p> <p>Is conversion of unit of measures done in accordance to established and fixed conversion table(s)?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, the table(s) are well-established and publicly available 2. <input type="checkbox"/> Yes, but the table(s) are not stable over time 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not Applicable (conversion is not done)
113.	<p>In case of (almost) regular production of [Land Use] statistics over the last 5 years, to what extent are they comparable over time?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Fully comparable 2. <input type="checkbox"/> Partially comparable 3. <input type="checkbox"/> Not comparable because of a break in the time series. Please explain the reason for the break: 4. <input type="checkbox"/> Not applicable (no regular production of [Land Use] statistics over the last 5 years or comparability over time not assessed)
114.	<p>Are [Land Use] statistics comparable for geographical areas (districts, provinces, etc.) in the country?</p> <p>[single choice]</p> <ol style="list-style-type: none"> 1. <input type="checkbox"/> Yes, fully 2. <input type="checkbox"/> Yes, partially 3. <input type="checkbox"/> No 4. <input type="checkbox"/> Not Applicable ([Land Use] statistics refer only to the whole country and no statistics are produced for geographical sub-domains)

3.6. Managing the Metadata

UN NQAF Level D – Managing statistical outputs, Principle 19 Managing Metadata

115.	<p>Do you have a metadata management system for [Land Use] statistics OR for all the statistics produced and disseminated by your Agency?</p> <p>[single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, it is fully operative2. <input type="checkbox"/> Yes, it is partially operative3. <input type="checkbox"/> No
116.	<p>IF “Yes” to the previous question</p> <p>Is the metadata management system in line with international standards (like SDMX, DDI, etc.)?</p> <p>[single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, fully2. <input type="checkbox"/> Yes, partially3. <input type="checkbox"/> No
117.	<p>Are procedures in place to ensure that metadata on [Land Use] are documented according to standardized metadata systems and regularly updated?</p> <p>[single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, on a regular basis2. <input type="checkbox"/> Yes, but not on a regular basis3. <input type="checkbox"/> No
118.	<p>Are updates of metadata on [Land Use] statistics disseminated at the same time of [Land Use] statistics themselves?</p> <p>[single choice]</p> <ol style="list-style-type: none">1. <input type="checkbox"/> Yes, all the metadata2. <input type="checkbox"/> Yes, but only a subset of relevant metadata is updated and disseminated together with the data3. <input type="checkbox"/> No