SDG indicator metadata

(Harmonized metadata template - format version 1.1)

0. Indicator information (SDG_INDICATOR_INFO)

0.a. Goal (SDG_GOAL)

Goal 5: Achieve gender equality and empower all women and girls

0.b. Target (SDG_TARGET)

Target 5.a: Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws

0.c. Indicator (SDG_INDICATOR)

Indicator 5.a.1: (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure

0.d. Series (SDG_SERIES_DESCR)

Proportion of total agricultural population with ownership or secure rights over agricultural land (SP_LGL_LNDAGSEC) Share of women among owners or rights-bearers of agricultural land, by type of tenure (SP_GNP_WNOWNS)

0.e. Metadata update (META_LAST_UPDATE)

2023-05-15

0.f. Related indicators (SDG_RELATED_INDICATORS)

SDG indicator 1.4.2.

0.g. International organisations(s) responsible for global monitoring (SDG_CUSTODIAN_AGENCIES)

Food and Agriculture Organization of the United Nations (FAO)

1. Data reporter (CONTACT)

1.a. Organisation (CONTACT_ORGANISATION)

Food and Agriculture Organization of the United Nations (FAO)

2. Definition, concepts, and classifications (IND_DEF_CON_CLASS)

2.a. Definition and concepts (STAT_CONC_DEF)

Definition:

The indicator consists of two sub-indicators.

Sub-indicator 5.a.1 (a):

$$\frac{\text{No. of people in agricultural population with ownership or secure rights over agricultural land}}{} \times 100, \text{ by sex}$$

Total agricultural population

Sub-indicator 5.a.1 (a) is a prevalence measure. It measures the prevalence of people in the agricultural population with ownership or secure rights over agricultural land, disaggregated by sex.

Land ownership is a legally recognised right to acquire, to use and to transfer land. "Secure rights" in the context of indicator 5.a.1 is defined as secure tenure rights, i.e., rights to use, manage and control land, fisheries and forests, in the sense of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security[1]. *Operationally*, for the purposes of measurement of this indicator, secure tenure rights comprise both land ownership and two key alienation rights: the right to sell and the right to bequeath agricultural land.

Sub-indicator 5.a.1 (b):

$$\frac{\text{Number of women in the agricultural population with ownership or secure rights over agricultural land}}{\text{Total in the agricultural population with ownership or secure rights over agricultural land}} \times 100, \text{ by type of tenure}$$

Sub-indicator 5.a.1 (b) focuses on gender parity, measuring the extent to which women are disadvantaged in ownership or secure rights over agricultural land.

Broad types of tenure identified by the IAEG-SDG are freehold, customary and leasehold.

Concepts and terms:
The basic concepts and terms essential to collecting data needed to compute SDG indicator 5.a.1 are the following:

(1) Agricultural land
(2) Agricultural household
(3) Agricultural population
(4) Ownership or secure rights over agricultural land

(1) Agricultural land
Land is considered 'agricultural land' according to its use. The classes and definitions of land use are based on the classification of land use for the agricultural census recommended by the World Programme for the Census of Agriculture 2020[2].

As shown in Figure 1 below, agricultural land is a subset of the total land of a country. In particular, **agricultural land** includes:

- LU1- land under temporary crops[3]

[1] Refer to https://www.fao.org/tenure/voluntary-guidelines/en/
[2] FAO. 2015. World Programme for the Census of Agriculture 2020- Volume 1: Programme, concepts and definitions. FAO Statistical Development Series 15, paras 8.2.13 – 8.2.28.
[3] Defined as: "all land used for crops with a less than one-year growing cycle" (WCA 2020). Temporary crops comprise all the crops that need to be sown or planted after each harvest for new production (e.g., cereals). The full list of crops classified as 'temporary' is provided in the WCA 2020 (page 165, http://www.fao.org/3/a-i4913e.pdf)

- LU2- land under temporary meadows and pastures[4]
- LU3- land temporarily fallow[5]
- LU4- land under permanent crops[6]
- LU5- land under permanent meadows and pastures[7]

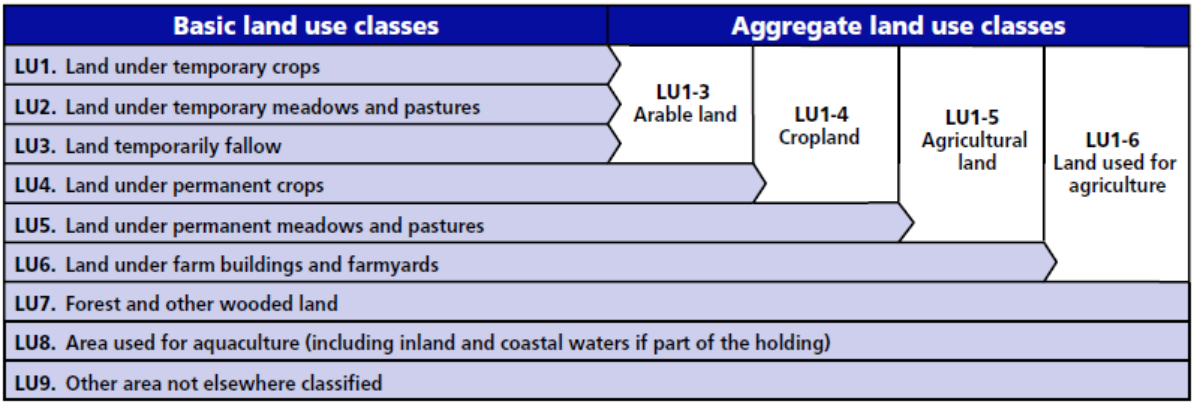


Figure 1. Classification of land use (WCA 2020)

Since indicator 5.a.1 focuses on agricultural land, it *excludes* all the forms of land that are not considered 'agricultural', namely:

- LU6- land under farm buildings and farmyards
- LU7- forest and other wooded land
- LU8- area used for aquaculture (including inland and coastal waters if part of the holding)
- LU9- other area not elsewhere classified

The land use class of agricultural land is with respect to a specific reference period; thus, the reference period should be specified when collecting data on land use. As further discussed below, the reference period should cover a 12-month period. In agricultural censuses and surveys, this is generally the preceding 12 months.

(2) Agricultural household

Ownership or secure rights over agricultural land are specifically relevant to individuals whose livelihood relies on agriculture. These individuals are identified by way of whether their household[8] can be classified as an ***agricultural household*** which for purposes of calculating indicator 5.a.1 is characterized by the following:

- Criterion 1: A member or members of the household operated land for agricultural purposes *or* raised livestock over the past 12 months regardless of the final purpose of production

and

[4] Defined as: "land that has been cultivated for less than five years with herbaceous or forage crops for mowing or pasture".
[5] When arable land is kept at rest for at least one agricultural year because of crop rotation or other reasons, such as the impossibility to plant new crops, this is defined as temporarily fallow. This category does not include the land that it is not cultivated at the time of the survey but will be sowed and planted before the end of the agricultural year.
[6] Area that is cultivated with long term crops that do not need to be replanted every year, such as fruits and nuts, some types of stimulant crops, etc.
[7] Land cultivated with herbaceous forage crops or is left as wild prairie or grazing land for more than five years.
[8] Household is defined according to the United Nations Principles and Recommendations for Population and Housing Censuses, Revision 3 @ https://unstats.un.org/unsd/publication/seriesM/Series_M67rev3en.pdf

- Criterion 2: At least one member of the household operated land for agricultural purposes or raised livestock *as an own-account worker*.

The definition considers that since agricultural land includes *both* crop land (LU1-LU4) and meadows and pastures (LU5), ownership or secure rights over agricultural land are relevant for households operating land and/or raising or tending livestock. Engagement in forestry, logging, fishing and aquaculture activities is *not included* because the focus of the indicator is on agricultural land.

Households who own or have secure rights over agricultural land *but did not farm the land nor used the land in raising/tending livestock during the reference period are excluded*, because the indicator focuses on households whose livelihood is linked to practicing agriculture.

The long reference period-- previous 12 months-- allows to capture agricultural households even when data collection occurs during the off-season or when households are not engaged in agricultural activity at the time of the survey. That is, since agricultural work is highly irregular and strongly affected by seasonality, a short reference period would exclude such households.

The specification "regardless of the final purpose of production" ensures the inclusion of households that produce only for own consumption. It addresses a common problem where agriculture practiced only or mainly for own consumption, without any market orientation (so, with no or little income) is not perceived as an economic activity by respondents.

The second criterion for a household to be classified as an agricultural household for purposes of computing the sub-indicators 5.a.1(a) and 5.a.1(b) is that at least one household member farms or raises livestock as an own-account worker. Thus, information on the *status in employment* and, for those employed, the *industry* in which they are employed, and their *occupation* need to be collected for each member of the household.

(3) Agricultural population

The reference population for indicator 5.a.1 is the population of ***adult individuals living in agricultural households*** *(as defined above).* For purposes of international comparability, the recommended definition of "**adult**" is a person who is 18 years old or older. However, countries could use their own definitions of adult but allow for the calculation of statistics based on the 18-years old definition.

Once a household is classified as an 'agricultural household', *all* the adult household members are considered as part of the reference population (to be referred to simply as the "agricultural population" in this document).

The adoption of a household perspective is particularly important from the gender perspective, because in many agricultural households, women often consider themselves as not being involved in agriculture, even though they provide substantive support to the household's agricultural activities. In addition, the individual's livelihood cannot be completely detached from the livelihood of the other household members; and in particular, for households operating agricultural land or raising livestock, land is an important asset for all the individuals and protects them in case the household dissolves.

When the data is collected in agricultural surveys or censuses, usually the statistical unit is the *agricultural holding* or *farm*. The WCA 2020 classifies holdings into two types: (i) holdings in the household sector; i.e.,

those operated by household members and (ii) holdings in the non-household sector, such as corporations. For a given household sector holding, there may be one or more producers and the agricultural population is defined as the adult members of the households of the producers. It is important to note, that someone employed in the agricultural holding is not a producer. Holdings in the non-household sector are not relevant for the estimation of indicator 5.a.1.

(4) Ownership of agricultural land and secure rights over agricultural land

It is challenging to operationalize the definition of ownership of and secure rights to agricultural land for purposes of data collection. In addition, differences in legal systems and how legal systems protect rights to agricultural land across countries poses challenges in providing comparable statistics across countries. The discussion below:

Land ownership is a legally recognised right to acquire, to use and to transfer land. For purposes of specifying the data that needs to be collected, it is useful to recognize three broad typologies of land ownership systems:

- **Private property systems**, where land ownership is predominantly a right akin to a freehold tenure.
- **Systems where land is owned by the State**, where "land ownership" in the sense of private property systems does not exist but refers to *possession of the rights* most akin to ownership in a private property system. In this context, it is more appropriate to speak of ***tenure rights*** that capture an individual's capacity to control and take decisions over the land-- for instance, long-term leases, occupancy, tenancy or use rights granted by the State that are transferable and are granted to users for several decades (e.g., 99 years).
- **Communal land tenure system,** where land is primarily held under a tribal, communal, or traditional form of tenure. Such arrangements usually involve land being held on a tribal, village, kindred or clan basis, with land ownership being communal in character but with certain individual rights being held by virtue of membership in the social unit.

In many countries, a combination of systems of ownership as well as secure tenure rights to land may exist. A common combination would be where the private property system prevails, but with pockets of state-owned and/or communal land. For some countries, the system may primarily be that of state-owned land or communal land.

Considering the above, as well as the need for comparability of estimates across countries, to determine whether an individual is said to have ownership or secure rights to agricultural land three conditions (proxies) are considered:

Formal documentation:

Proxy 1- Presence of legally recognised documents in the name of the individual

Alienation rights:

Proxy 2- Right to sell

Proxy 3- Right to bequeath

These proxies are further described below.

Formal documentation

Proxy 1 refers to the existence of any document that an individual can use to claim property rights *before the law* over an asset by virtue of the individual's name being listed as owner/co-owner or holder/co-holder on the document.

It is not possible to provide an exhaustive list of documents that could be considered as formal proof of ownership (for private property systems) or secure tenure rights (for state-owned or communal land systems) across countries. Examples of common relevant legal documents are provided in the discussion below. It is recommended that the list of documents be customised in accordance with land ownership laws of the country. It is further recommended that:

Private property systems

For private property systems, the following are typically considered as **formal written proof of ownership:**

- **Title deed**: "*a written or printed instrument that effects a legal disposition*"[9]
- **Certificate of occupancy or land certificate**: "*A land certificate is a certified copy of an entry in a land title system and provides proof of the ownership and of encumbrances on the land at that time*"[10]
- **Purchase agreement**: *a contract between a seller and a buyer to dispose of land*
- **Registered certificate of hereditary acquisition**
- **Certificate issued for adverse possession or prescription**: *is a certificate indicating that the adverse possessor acquires the land after a prescribed statutory period*.

It is to be noted that agricultural land possessed or used under a rental contract or leasehold is outside the coverage of indicator 5.a.1. Ownership of land confers on the holder a series of crucial benefits leading to economic empowerment - from being able to use it as collateral to having a higher propensity to invest in one's own asset – these benefits are drastically reduced or even absent in the case of rentals or leases.

Customary/communal land tenure

For land covered by customary tenure laws, the types of tenure and associated rights vary considerably. Thus, it is recommended that the list of relevant documents be prepared according to each country's customary laws. An example of a relevant document is:

- **Certificate of customary tenure**: *an official state document indicating the owner or holder of the land because customary law has recognized that particular person as the rightful owner. It can be used as proof of legal right over the land.* These certificates include, among others, certificates of customary ownership and customary use.

Systems where land is owned by the state

Similarly, for state-owned land, associated formal documents of ownership-like possession should be specified according to the country's land laws. An example of a relevant document is:

- **Registered certificate of perpetual / long term lease**: "*a contractual agreement between the state and a tenant for the tenancy of land. A lease or* tenancy *agreement is the contractual document used to create a leasehold interest or tenancy*" [11]

[9] Source: *"Multilingual thesaurus on land tenure"*, FAO 2003
[10] Source: *"Multilingual thesaurus on land tenure"*, FAO 2003
[11] Source: *"Multilingual thesaurus on land tenure"*, FAO 2003

Note that findings from the Evidence and Data for Gender Equality (EDGE) project[12] clearly show that using legally recognized documents alone to establish ownership is not sufficient to analyse the complexity of rights related to land, especially in developing countries and from the gender perspective. The main factor limiting the universal applicability of legally recognized documents to define ownership is the diverse penetration of such legally binding documents.

Alienation rights

In the absence of formal written documentation **alienation rights over land**, which can be present even in contexts where tenure rights are not formally documented, can serve as a proxy for ownership or secure rights. **Alienation** is defined as the ability to transfer a given asset during lifetime (Proxy 2- right to sell) or after death (Proxy 3- right to bequeath).

The "right to sell" refers to the ability of an individual to permanently transfer the asset in question in return for cash or in-kind benefits.

The "right to bequeath" refers to the ability of an individual to pass on the asset in question to other person(s) after their death, by written will, oral will (if recognized by the country) or when the deceased left no will, through intestate succession.

The right to sell and the right to bequeath are considered as objective facts that carry legal force as opposed to a simple self-reported declaration of tenure rights over land.

For purposes of data collection for 5.a.1, countries should clearly indicate whether these two alienation rights are relevant to the concept of land ownership in their legal contexts. This is particularly important in relation to land use under systems where land is owned by the state and customary/communal land.

It is recommended that data on all three proxies be collected for purposes of compiling indicator 5.a.1. The decision to rely on the three proxies is based on the results of seven field tests conducted by the EDGE project. The tests demonstrated:

- *The lower reliability of data on reported ownership/possession*. Data on ownership/possession are often collected through a question on whether the individual owns any agricultural land. The data collected captures the self-perception of the respondent's ownership or possession status of the land, irrespective of whether the respondent has formal documentation. The study showed that such data was often neither supported by any kind of documentation nor by the possession of any alienation right.
- The need to consider as 'owners' or 'holders of tenure rights' only the individuals who are linked to the agricultural land by an objective right over it, including both formal legal possession and alienation rights.
- The need to combine different proxies, as no single proxy is universally applicable in defining land ownership or secure tenure rights.

[12] Source: *"UN Methodological Guidelines on the Production of Statistics on Asset Ownership from a Gender Perspective"* Draft Guidelines submitted at the UN Statistical Commission in March 2017

A Note on "(Self) Reported Ownership/Possession of Agricultural Land"

As mentioned above, *reported ownership or possession* is relatively less reliable than documented ownership. However, in a situation where a country has scarce data on formal documentation along with missing information on alienation rights, reported ownership could still be a temporarily useful alternative for comparing ownership between men and women. However, estimates computed based mainly on reported ownership weakens the international comparability of estimates across countries. Therefore, it is highly recommended that the survey questionnaire be modified in a manner that both documented ownership and alienation rights are included, as defined above, in order to calculate the indicator using the correct methodology.

2.b. Unit of measure (UNIT_MEASURE)

5.a.1 (a): percent (%)
5.a.1 (b): percent (%)

2.c. Classifications (CLASS_SYSTEM)

Classification of land use - World Census of Agriculture 2020 (WCA 2020).

3. Data source type and data collection method (SRC_TYPE_COLL_METHOD)

3.a. Data sources (SOURCE_TYPE)

Recommended data sources

Indicator 5.a.1 focuses on adult individuals living in agricultural households, as defined above. Thus, the data required to estimate the indicator, can be collected through agricultural surveys/ censuses or national household-based surveys having a suitable coverage of agricultural households.

Agricultural Survey: Agricultural surveys are a recommended data source for two main reasons:

1. The unit of analysis is the agricultural holding, and, in most countries, the relationship between the household-sector agricultural holding and the agricultural households is known. Therefore, agricultural surveys capture well the reference population of indicator 5.a.1
2. Agricultural surveys can easily accommodate questions on ownership or secure rights to agricultural land since they frequently collect data regarding tenure of agricultural land of the holding as well as data on agricultural producers households.

General household survey (GHS) [13] **:** Nationally representative general household surveys are a recommended data source for indicator 5.a.1 for the following reasons:

1. Nationally representative general household surveys are the most common data source available in both developed and developing countries.
2. Countries that have an integrated household survey system can integrate the data requirements for 5.a.1 as part of the core survey or as a module in one of the rounds of the survey.
3. Nationally representative general household surveys generate social, demographic, health and economic statistics (depending on their particular focus). When data requirements for 5.a.1 are integrated in the survey, it allows for exploring associations between the individual status on

[13] Examples of GHS that could be used to generate the indicator 5.a.1 are: Household Budget Surveys (HBS), Living Standard Measurement Surveys (LSMS), Living Conditions Surveys, Labour Force Surveys (LFS), Multipurpose Household Surveys, Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS).

indicator 5.a.1 and other individual or household characteristics, such as education, health, income level, etc.

However, if a GHS is used to collect data to generate estimates for indicator 5.a.1, it is necessary to have a representative sample of agricultural households in the full sample. In countries where a low proportion of households is engaged in agricultural production, oversampling may be needed, especially in urban and peri-urban areas and procedures for doing so need to be part of the survey design.

Also, some household surveys may have limitations in relation to the population coverage as defined by the age classes typically used in these surveys-- for example, having upper bound age cut-offs.

Agricultural Census: In the absence of agricultural or household-based surveys, agricultural censuses can be used for collecting data on SDG 5.a.1. However, the Census presents some disadvantages:

1. The Census is usually conducted every 10 years; therefore, it cannot provide data to closely monitor the progress on indicator 5.a.1.
2. It is much more expensive to add the questions for 5.a.1 in agricultural censuses than in surveys as the number of holdings to be enumerated is much larger.
3. With the need for a much larger number of interviewers in a census, the quality of interviewers selected may be adversely affected.

3.b. Data collection method (COLL_METHOD)

The data should be collected through surveys that collect information on an individual's land ownership and tenure rights.

In collecting data for indicator 5.a.1 through an agricultural survey, agriculture census or general household survey, two decisions need to be made:

i) Determine the number of adult members of an agricultural household (eligible respondents) on whom information is to be collected, and

ii) Determine who should report this information

Possible options are shown in Table 1 below:

Table 1. Options and respondent approaches for data collection

Number of eligible respondents	Who should report	
	Self-Respondent	Proxy-Respondent
All	Option 1	Option 3
Randomly selected number, n	Option 2	Option 4

When collecting data on asset ownership from a gender perspective, the self-respondent approach where the concerned individuals themselves are interviewed is recommended over the *proxy respondent approach*, where the most knowledgeable household member is interviewed to collect information on all the household members[14]. Thus, among the possible options, Option 1 and Option 2 are recommended:

[14] Findings from the EDGE pilot studies reveal that data from proxy respondents yield different estimates than self-reported data, with variations by asset, by type of ownership and by the sex of the owner. In particular, it was found that proxy-

- **Option 1**: *Self-respondent approach applied to all members.* Each adult member of the household is interviewed on their ownership / secure rights over agricultural land.
- **Option 2**: *Self-respondent approach applied to a random sample of adult members of the household.* Randomly selected adult household members are interviewed on their ownership / secure rights over agricultural land.

In practice, due to budget constraints and interview time limitations, interviewing only n = 1 eligible respondent per household or a proxy respondent are the most viable options. Furthermore, in agricultural surveys and censuses, only the producers respond to the whole questionnaire, so using a self-respondent approach is not viable. However, if a country wants to study intra-household dynamics or to increase the accuracy of the 5.a.1 estimates, it may decide to collect information about two or more and even all adult household members.

Minimum Set of Data

The minimum set of data needed to calculate the indicator is summarized in Table 2 below:

Table 2. Minimum set of data for indicator 5.a.1

Data Item	Purpose
Whether or not the household has operated **land** for agricultural purposes and/or raised **livestock** over the past 12 months regardless of final purpose of production	To identify agricultural households
Whether operating land or raising livestock was done only as wage labour	
Sex of agricultural household members	To identify adult agricultural population, by sex
Age of agricultural household members	
For adult agricultural population, data on ownership or secure rights to agricultural land based on the three proxies	
Whether or not the **individual owns or holds secure rights** to any **agricultural land**	Filter question on whether owns/has secure rights to agricultural land. Also provides data on (*self*-) *reported ownership*
Proxy 1: Whether or not any of the land owned or held by the individual has a **legally recognized document** that allows protecting his/her ownership/secure rights over the land	To determine ownership/secure rights based on legally recognized document
If yes to Proxy 1: Whether or not the individual is **listed as an owner or holder** on any of the legally recognized documents, either alone or jointly with someone else	
(Proxy 2) Whether or not the individual has the **right to sell** any of the agricultural land, either alone or jointly with someone else	To determine ownership/secure rights based on *possession of alienation rights*
(Proxy 3) Whether or not the individual has the **right to bequeath** any of the agricultural land, either alone or jointly with someone else	

reported data decrease both women's and men's reported ownership of agricultural land. Such underestimation is greater for men (-15 percentage points) than for women (-10 percentage points) and is less pronounced when we consider documented ownership (-7 percentage points for men and -2 percentage points for women).

Question formulation to collect minimum data items required for indicator 5.a.1

Questions to Identify agricultural households and adult Individuals in the agricultural population

As mentioned above, the reference population (denominator) for indicator 5.a.1 *are the adult individuals living in agricultural households*. The first step to identify the agricultural population is to identify agricultural households.

The module presented in Table 3 suggests how to identify agricultural households from among households covered by the data collection vehicle (survey/census) for purposes of indicator 5.a.1. The questions aim to capture the household's involvement in agriculture over the preceding 12 months and screen out households where all members are involved in agricultural activity only as wage workers. The respondent to the questions in the module should be the *most knowledgeable member of the household.*

Table 3. Module for identifying agricultural households

	Question	Function
Check Criterion 1 defining an agricultural household		
Q1	Did anyone in this **household** operate any **land**[1] for agricultural purposes in the past 12 months [2]? 1. Yes 2. No	*Screening (farming) (Response = 1)*
Q2	Did anyone in this **household raise or tend** any livestock (e.g., cattle, goats, etc.) in the last 12 months? 1. Yes 2. No (If Q1 = 2 and Q2 = 2, questions end. Else, go to Q3.)	*Screening (livestock) (Response = 1)*
Check Criterion 2 defining an agricultural household		
Q3	Identify all people in the household roster who operated land for agricultural purposes and/or raise or tend livestock in the last 12 months (i.e., Q1=1 and/or Q2=1).	*List members of agricultural households engaged in farming or raising livestock*
Q4	For each individual in the household who operated land for agricultural purposes and/or raise or tend livestock in the last 12 months, was this performed… *(tick all that apply)* 1. For use / consumption of the household? 2. For profit / trade? 3. As wage work for others?	*Filter out households where agricultural activities were done only as wage labor (Response = 3)*

[1] Including orchards and kitchen gardens

[2] Alternative phrasings:

- Did anyone in this household cultivate/use any land for agricultural purposes in the last 12 months?
- Did anyone in this household operate any land to produce crops in the last 12 months?
- Did anyone in this household cultivate/use any land to produce crops in the last 12 months?

Specific application to agricultural surveys or censuses

When we collect data using an agricultural survey or an agricultural census, the agricultural population will be all the adult members of the household of **the agricultural holder**. As per the World Programme for the Census of Agriculture 2020 Volume 1, the agricultural holder is defined as "the civil person, group of civil persons or juridical person who makes the major decisions regarding resource use and exercises management control over the agricultural holding operation. The agricultural holder has technical and economic responsibility for the holding and may uptake all responsibilities directly, or delegate responsibilities related to the day-to-day work management to a hire manager."

As the indicator refers to individuals, only household sector holdings—i.e., holdings for which the agricultural holder is a civil person (i.e., one person) or group of civil persons-- should be considered. When the agricultural holder is a (single) civil person, the adult members of the household of the single holder are part of the agricultural population. When the holder is a *group of civil persons*, adult members of households of each of the persons in the group belong to the agricultural population.

Questions to identify owners of, or holders of secure rights to agricultural land from among the agricultural population

Data on ownership of, or secure rights to agricultural land of members of the agricultural population for purposes of estimating indicator 5.a.1 refers to individual members of agricultural households (as defined above) whose *age* is 18 years old or over.

An example of a module that can be utilized for collecting the data using the self-respondent approach is presented in Table 4.

Table 4. Example of minimum set of questions for collecting data on ownership of or secure rights to agricultural land at the person/individual-level

Questions	Function
Q1. Do you own or hold secure rights[15] to any agricultural land, either alone or jointly with someone else? 1 - Yes 2 – No (end of the module)	*This question refers to whether the respondent, not the respondent's household, holds any agricultural land. It measures reported possession, which captures the respondent's self-perception of his/her possession status, irrespective of whether the respondent has a formal or legal documentation of ownership.*
Q2. Is there a formal document for any of the agricultural land you own or hold secure rights to that is issued by or registered at the Land Registry/Cadastral Agency, such as a title deed, certificate of ownership, or certificate of hereditary acquisition? 1 - Yes 2 – No >> Q4	*This question identifies whether there is a legally recognized document for any of the agricultural land the respondent reports having.* *Documented ownership/secure rights refer to the existence of any document an individual can use to claim ownership or secure rights in law over the land.*
Q3a. What type of documents are there for the agricultural land you own? **LIST UP TO 3.** **CODES FOR DOCUMENT TYPE:** **TITLE DEED.....1** **CERTIFICATE OF CUSTOMARY OWNERSHIP.....2** **CERTIFICATE OF OCCUPANCY....3** **CERTIFICATE OF HEREDITARY ACQUISITION LISTED IN REGISTRY.....4** **SURVEY PLAN.....5** **OTHER (SPECIFY).....6**	*The list of options presented here is indicative. It is of utmost importance that the list includes all the legal documents recognized/ enforceable by law according to the national land tenure system.* ***Refer to discussion in Section 2.a on formal documentation.***

[15] Alternatively 'do you have, use or occupy' …

Questions	Function
Q3b. Is your name listed on any of the documents as owner? 1 – Yes 2 – No 98 - Don't know 99 - Refusal	*Because individual names can be listed as witnesses on a document, it is important to ask if the respondent is listed "as an owner" or "holder" on the document. The respondent does not need to show the document to the enumerator.*
Q4. Do you have the right to *sell* any of the agricultural land held (alternatively 'land possessed, used or occupied'), either alone or jointly with someone else? 1 - Yes 2 – No >> Q5 98 - Don't know 99 - Refuses to respond	*Alienation rights- Proxy 2* *This question obtains information on whether the respondent believes that he/she has the right to sell any of the agricultural land s/he reports possessing. When a respondent has the right to sell the land, it means that he or she has the right to permanently transfer the land to another person or entity for cash or in-kind benefits.*
Q5. Do you have the right to *bequeath* any of the agricultural land held (alternatively 'land possessed, used or occupied'), alone or jointly with someone else? 1 - Yes 2 - No 98 - Don't know 99 - Refuses to respond	*Alienation rights- Proxy 3* *This question obtains information on whether the respondent believes that he/she has the right to bequeath any of the agricultural land he/she reports possessing.* *When a respondent has the right to bequeath the land, it means that he/she has the right to give the land by oral or written will to another person upon his/her death his/her death.*

In agricultural surveys or censuses

In agricultural surveys and censuses, usually there is a question about land tenure[16] of land used for agricultural activities. The data to calculate SDG indicator 5.a.1 can be collected by adding a few questions to the land tenure question as shown in Table 5 in the example below which uses a proxy-respondent approach:

Example

Usual question on land tenure in agricultural surveys/census:

Q1. Of the total Agricultural Area Utilized (AAU) *of the* agricultural holding, how much is:	AREA
a. **Owned with** written documentation (such as title deeds, wills, purchase agreements)	
b. **Owned without** written documentation	
c. **Rented-**in, leased or sharecropped **with** written agreement	

[16] Refer to the WCA 2020 Volumes @ https://www.fao.org/world-census-agriculture/wcarounds/wca2020/en/ or Handbook on the Agricultural Integrated Survey @ https://www.fao.org/in-action/agrisurvey/resources/resource-detail/en/c/1198081/

d. **Rented**-in, leased or sharecropped **without** written agreement	
e. State or communal land used **with** written agreement (certified use rights)	
f. State or communal land used **without** written agreement (uncertified use rights)	
g. Occupied/squatted without any permission	
Control Total land (total of options a to g)	

Add the following questions to obtain the data needed for 5.a.1:

Table 5. Q2. If Q1 = a, b, e or f, please fill the table below.

a- List all the household members of the agricultural holder/s (producers) of the holding	b- Sex of the person	c- If Q1= a or e, Is this person´s name listed as owner in the written documentation?	d- If Q1= a, b, e or f: does this person have the right to sell any of the agricultural land owned, either alone or jointly with someone else?	e- If Q1= a, b, e or f: does this person have the right to bequeath any of the agricultural land owned, either alone or jointly with someone else?
Agricultural holder/producer	F/M	Y/N	Y/N	Y/N
Member 1 F/M Y/N Y/N	Y/N			
Member 2 F/M Y/N	Y/N	Y/N	Y/N	
...				

3.c. Data collection calendar (FREQ_COLL)

The data collection calendar depends on the frequency of surveys required to compute the indicators. FAO is engaging with countries to include the questions needed to measure the indicator into their existing national surveys, i.e., household-based surveys, agricultural surveys and censuses through capacity development activities at national/ regional levels and provision of technical assistance needed to compute the indicator.

3.d. Data release calendar (REL_CAL_POLICY)

The data release depends highly on the frequency of surveys required to compute the indicators.

3.e. Data providers (DATA_SOURCE)

National Statistical Offices. If agricultural surveys or censuses are used, the responsible organization may be the Ministry of Agriculture or, more generally, the organization responsible for agricultural surveys or censuses in the country.

3.f. Data compilers (COMPILING_ORG)

Food and Agricultural Organization (FAO)

3.g. Institutional mandate (INST_MANDATE)

Article I of the FAO constitution requires that the Organization collect, analyses, interpret and disseminate information relating to nutrition, food and agriculture http://www.fao.org/3/K8024E/K8024E.pdf.

4. Other methodological considerations (OTHER_METHOD)

4.a. Rationale (RATIONALE)

Indicator 5.a.1 aims to monitor the gender balance on ownership/secure rights over agricultural land. Sub-indicator (a) and sub-indicator (b) are based on the same data and they monitor ownership/rights from two different angles. While sub-indicator (a) uses the total male/female agricultural population as reference population, and it tells us how many male/female own land, sub-indicator (b) focuses on the agricultural population with land ownership/secure rights, and it tells us how many of them are women.

Therefore, it is sufficient to have:

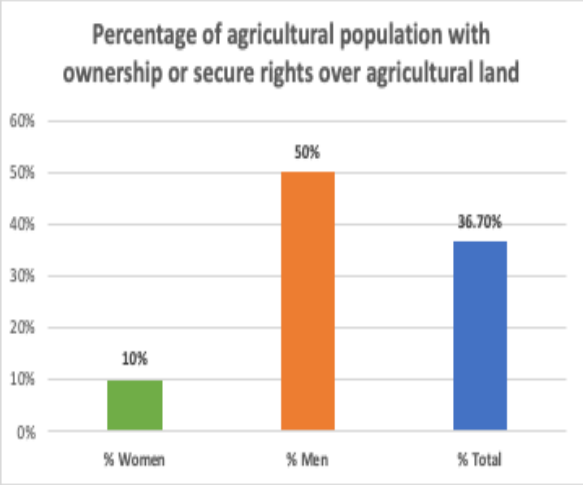
A. The number in the agricultural population with ownership or secure rights over agricultural land (by sex), and
B. The total agricultural population

An illustration of how to compute the sub-indicators is presented here, using the data in Table 6.

Table 6. Data for Illustrative example

Variable	Women	Men	Total
Number in agricultural population with ownership/secure rights over agricultural land	10	100	110
Number in agricultural population	100	200	300

Sub-indicator 5.a.1 (a): Percentage of the agricultural population with ownership or secure rights over agricultural land, by sex



The sub-indicator 5.a.1 (a) measures the percentage of individuals with ownership or secure rights over agricultural land among the total agricultural population, by sex. In this example, overall, 37 percent (110/300*100) of the agricultural population has ownership or secure rights over agricultural land. When the indicator is disaggregated by sex, gender disparities become visible: 50 per cent of the adult men living in agricultural households ((100/200)*100) own or hold secure rights over agricultural land compared to 10 per cent of adult women (10/100*100).

To construct 5.a.1 (b) we divide the number of women in the agricultural population who own or hold secure rights to agricultural land by the total number of the agricultural population who own or hold secure rights to agricultural land. In the example above the indicator value is 9 percent ((10/110)*100).

4.b. Comment and limitations (REC_USE_LIM)

One recommendation is for countries to take into consideration the impact of the expected sample size on the precision of the estimates. One way of attaining a large enough sample size is to consider collecting information on all eligible respondents through a proxy respondent, as this can be relatively easily done using the household rosters in the surveys. However, it is important to keep in mind that when a proxy respondent provides the information for the member of the household, it is likely that some bias or response errors are introduced

It is critical that the list of legally binding documents of ownership proposed to be included in questions relating to proxy 1 in this document are customized to consider only documents that are enforceable before the law and that guarantee individual's rights in the national context.

4.c. Method of computation (DATA_COMP)

How the indicator is calculated:

The indicator 5.a.1 considers as owners or holders of secure rights to agricultural land all the individuals in the reference population who:

- Are listed as 'owners' or 'holders' on a written legal document that testifies security of rights over agricultural land

OR

- Have the right to sell agricultural land

OR

- Have the right to bequeath agricultural land

The presence of one of the three proxies is sufficient to define a person as 'owner' or 'holder' of secure tenure rights over agricultural land. The advantage of this approach is its applicability to different countries.

Indeed, based on the analysis of the seven EDGE pilot countries, these proxies provide the most robust measure of ownership/tenure rights that is comparable across countries. In fact, individuals may still have the right to sell or bequeath an asset in the absence of legally recognized document, therefore the indicator combines documented ownership / tenure rights with the right to sell or bequeath to render it comparable across countries.

Operationalization of indicator 5.a.1 expressed through mathematical formulas

Sub-indicator 5.a.1 (a)

$$\frac{\text{Total agricultural population with: Legally recognized document of ownership of agricultural land OR the right to sell it OR the right to bequeath it}}{\text{Total agricultural population}} \times 100, \text{ by sex}$$

Sub-indicator 5.a.1 (b)

$$\frac{\text{Number of women in the agricultural population with: Legally recognized document of ownership of agricultural land OR the right to sell it OR the right to bequeath it}}{\text{Number of people in the agricultural population with: Legally recognized document on agricultural land OR the right to sell it OR the right to bequeath it}} \times 100, \text{ by type of tenure}$$

Use of Sampling Weights

When the data source is a sample survey, the appropriate survey sampling weights—base weights, non-response adjustments and poststratification adjustments—should be used in estimating the sub-indicators. Further, if subsampling of eligible respondents to the 5.a.1 questions is done in a census or survey, the weights need to account for this.

4.d. Validation (DATA_VALIDATION)

FAO is responsible to check the syntaxes used in the computation of the indicator as well as the questions.

4.e. Adjustments (ADJUSTMENT)

No adjustment with respect to use of standard classification and harmonization of breakdown for age groups and other dimension is performed.

4.f. Treatment of missing values (i) at country level and (ii) at regional level (IMPUTATION)

- **At country level**

No imputation of data is made at country level.

- **At regional and global levels**

No imputation of data is made at the regional and global level.

4.g. Regional aggregations (REG_AGG)

Weighted regional aggregates will be generated only if a sufficient number of countries in the region report on the indicator. This will be the case if (1) at least 50 percent of countries have a value or (2) if enough countries have a value as to cover 50 percent of the population in the region.

4.h. Methods and guidance available to countries for the compilation of the data at the national level (DOC_METHOD)

Countries can rely on the background paper describing the methodology and other relevant documents available at http://www.fao.org/sustainable-development-goals/indicators/5a1/en/?ADMCMD_view=1 as well as the e-learning available at https://elearning.fao.org/course/view.php?id=363

4.i. Quality management (QUALITY_MGMNT)

Logical and arithmetic control of reporting data is carried out.

4.j Quality assurance (QUALITY_ASSURE)

FAO is collaborating with the countries to design/complete/improve the survey questionnaires and contributing to develop and check the syntaxes used to compute the indicator. The microdata of surveys utilized in the computation of indicators are collected by the national institutions, hence their quality rests with the data producers.

4.k Quality assessment (QUALITY_ASSMNT)

Quality assessments are performed on the final estimation of the indicator when it is updated and compared with previous results. Some countries have data that needs to be assessed further, either check on the raw data and/or the processing of data.

5. Data availability and disaggregation (COVERAGE)

Data availability:
Data availability is currently limited (though growing) around the world, and most of the available data points derive from suitable surveys in countries in Africa and Asia. The limited data availability does not yet allow for producing regional and global aggregates.

Disaggregation:
We can distinguish between levels of disaggregation which are 'mandatory' for the global monitoring and levels of disaggregation which are recommended especially for the country level analysis, as they provide insights for policy making.

'Mandatory' levels of disaggregation

- [for sub-indicator (a)] sex of the individuals
- [for sub-indicator (b)] type of tenure

'Recommended' levels of disaggregation
(not exhaustive list)
[for both sub-indicators]

- Income level
- age group
- ethnic group

- geographic location (urban/rural)
- type of legally recognized document

If the country collects data by type of tenure, the disaggregation is required by type of tenure. However, if the country does not do this, the disaggregation by type of tenure would not be possible as the information will be collected at an aggregated level.

6. Comparability / deviation from international standards (COMPARABILITY)

Sources of discrepancies:
There is currently no known source of difference.

7. References and Documentation (OTHER_DOC)

1- URL: http://www.fao.org/sustainable-development-goals/indicators/5.a.1/en/

2- AGRIS handbook on the integrated agricultural surveys, https://www.fao.org/in-action/agrisurvey/resources/resource-detail/en/c/1198081/

3- Measuring Individuals' Rights to Land. An Integrated Approach to Data Collection for SDG Indicators 1.4.2 and 5.a.1. https://www.fao.org/publications/card/en/c/CA4885EN/

4- World Programme for the Census of Agriculture 2020 Volume 1.
https://www.fao.org/3/i4913e/i4913e.pdf