

## DETAILED AGRICULTURAL MODULE

Presented below is a sample detailed agricultural module for inclusion in the household questionnaire of the Population and Housing Census. It would replace the agricultural census and covers the data items recommended in the core of the WCA 2010 guidelines. Format, wording, response categories etc. can be tailored by countries as discussed in the Definitions and Guidance. Items in italics would be modified by countries as required.

### Land

1. Did this household operate any land for own account agricultural production during the last agricultural year?

1  Yes      2  No      → Go to **5**

2. How many separate pieces of land (parcels) are used for agricultural purposes?

3. For each separate piece of land used by the household for own account agricultural production activities, list the area, current land use, land tenure and presence of irrigation?

Parcel No	Total Area	Current Land Use (code)	Land Tenure (code)	Irrigation (Yes/No)

4. What was the main purpose of agricultural production during the last agricultural year?

*Mark ONE box*

1  Sale      2  Subsistence

### Temporary Crops

5. Did this household grow any temporary crops during the last agricultural year?

1  Yes      2  No      → Go to **8**

**6.** The following lists the most important temporary crops grown in the country. For each crop listed, state whether grown or not grown in the last agricultural year; and if grown, *the area planted OR number of plants grown?*

*Note: Questionnaire should include a pre-printed list of up to 10 crops. Final questionnaire will state either area planted or number of plants grown, with selection of unit of measure.*

Temporary Crop Name	Temporary Crop Code	Grown in Last Agricultural Year (Yes/No)	Area Planted (sq m, or acres, or local units) OR Number of Plants Grown
Name of Temporary Crop 1			
Name of Temporary Crop 2			
Name of Temporary Crop 3			
Etc.			

**7.** Were any temporary crops **sold** in the last (agricultural) year?

1  Yes      2  No      **→ Go to 8**

Value of annual sales

*Note: Final questionnaire will state if value is given as actual value in local units OR size groups OR below/above a given value*

## Permanent Crops

8. Did this household have any fruit, nut or spice trees or other permanent crops?

1  Yes

2  No → Go to **11**

9. The following lists the most important permanent crops grown in the country. For each crop listed, state whether grown or not grown; and if grown, *the area planted OR number of plants grown?*

*Note: Questionnaire should include a pre-printed list of up to 10 crops. Final questionnaire will state either area planted or number of plants grown, with selection of unit of measure*

Permanent Crop Name	Permanent Crop Code	Grown in Last Agricultural Year (Yes/No)	Area Planted (sq m, or acres, or local units) OR Number of Trees Grown
Name of Permanent Crop 1			
Name of Permanent Crop 2			
Name of Permanent Crop 3			
Etc.			

10. Were any fruit, nut or spice tree crops or other permanent crops **sold** in the last (agricultural) year?

1  Yes

2  No → Go to **11**

Value of annual sales

*Note: Final questionnaire will state if value is given as actual value in local units OR size groups OR below/above a given value*

## Livestock and Poultry

**11.** Did this household raise any livestock or poultry during the last (agricultural) year?

1  Yes      2  No      → Go to **14**

	Number of Animals
Cattle	
Pigs	
Goats	
Sheep	
Chickens	

**12.** Were any livestock or poultry **sold** in the last (agricultural) year?

1  Yes      2  No      → Go to **14**

Value of annual sales

*Note: Final questionnaire will state if value is given as actual value in local units OR size groups OR below/above a given value*

**13.** What was the main purpose of livestock and poultry during the last agricultural year?

Mark **ONE** box

1  Sale      2  Subsistence

## Forestry, fishing aquaculture and other economic activities

**14.** Does this household have any forest or other wooded land?

1  Yes      2  No

**15.** Did this household engage in any own account fishing activity in the last (agricultural) year?

1  Yes      2  No

*Note: Further questions can be included on numbers of boats, engines and fishing equipment, frequency of fishing trips and type of fishing.*

**16.** Did this household engage in any own account aquaculture activity in the last (agricultural) year?

1  Yes      2  No

*Note: Further questions can be included on purpose of production (sale or subsistence), and size of the activity (quantity harvested per annum, or number and size of ponds)*

**17.** Did this household engage in the following economic activities during the last (agricultural) year?

1  Yes      2  No      → Go to **18**

	Yes/No
Making handicrafts	
Selling cut flowers, pot plants	
Etc.	

*Note: The final questionnaire will include economic activities relevant to the country*

**18.** Which person (s) in this household takes the main decisions for the household's crop and livestock activities?  
*Use the person number given to this person(s) on the individual census questionnaire*

Name	Person Number
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

## DETAILED AGRICULTURAL MODULE - DEFINITIONS AND GUIDANCE

### Questions 1

The purpose of this question is to identify households using land for own account agricultural production activities in the last (agricultural) year..

### Question 2

Asks for the total number of pieces of land (parcels) used for agricultural production. A parcel is any piece of land, of one land tenure type, entirely surrounded by other land, water, road, forest or other features not forming part of the holding. A parcel may consist of one or more adjacent fields or plots.

Note that Questions 1 and 2 include all land used for agricultural purposes, even if agriculture is just a secondary use. Some examples of this are land used for aquaculture in the wet season and for growing crops in the dry season; temporary crops grown in forests; and scattered permanent crops grown around the household's home plot. All parcels of land used for agricultural purposes should be included in Question 2, regardless of main use.

The data about parcels refer to the day of enumeration, but reference is made to activities on the parcel during the whole agricultural year.

### Question 3

The purpose of this question is to collect information about each separate piece of land (parcel) used for agricultural production purposes. For each piece of land identified in Q2, information is collected on the area, land use, land tenure and presence of irrigation.

**Area** - reported as acres, hectares or local units. Where actual area is not widely known, area classes can be determined and codes used.

- 1- Less than 0.25 acres
- 2- 0.25 to 0.49 acres
- 3- 0.50 to 0.99 acres
- 4- 1 to 1.99 acres
- 5- 2 to 4.99 acres
- 6- 5 to 9.99 acres
- 7- 10 acres and over

**Land Use** – The following land use categories should be used:

- 1- Land under temporary crops
- 2- Land under temporary meadows
- 3- Land temporarily fallow
- 4- Land under permanent crops.
- 5- Land under permanent meadows and pastures.
- 6- Forest or other wooded land
- 7- Other land

**Land Tenure:**

- 1- Legal ownership or legal owner-like possession (customary rights)
- 2- Non-legal ownership or non-legal owner-like possession
- 3- Rented from someone else:

- Government
  - Private for rent in cash or kind
  - Private free of rent
- 4- Other types of land tenure
- Squatter basis

**Irrigation** refers to purposely providing land with water other than rain, so as to improve pastures or crop production. Infrastructure and equipment such as irrigation canals, pumps, sprinklers or localised watering systems exist to apply water to crops. Irrigation also includes manual watering of plants using buckets, watering cans or other devices. Water for irrigation may come from rivers, dams or wells, and may be part of a major scheme serving many farmers over a large area, or a local scheme serving a small community. Farmers sometimes carry out irrigation individually using informal arrangements to obtain water from rivers, streams, wells or ponds, using pumping equipment or manual methods such as buckets. In urban and peri-urban areas, irrigation may be carried out with hoses and buckets, sometimes using the municipal water supply.

Irrigation involves the fully controlled supply of water, as opposed to other types of water management where the availability of water depends on rainfall conditions. Activities such as controlling floodwaters to water crops (spate irrigation), water control methods in wetland areas, and flood recession cultivation should not be included as irrigation. The use of roof water may be included as irrigation if the water supply is reliable. Uncontrolled land flooding by overflowing of rivers or streams is not considered irrigation.

The question asks whether irrigation took place on the parcel during the last (agricultural) year. It refers to the actual use of irrigation, rather than whether the parcel is equipped for irrigation. If irrigation facilities such as canals are available but not actually used during the reference year because of water shortages, lack of fuel or inability to pay water fees, the parcel is reported as not irrigated. Conversely, the parcel is reported as irrigated if it was provided with a fully controlled supply of water, regardless of whether the quantity of water was sufficient.

#### Question 4

The main purpose of production is broadly defined as **for sale** or **for home consumption (subsistence)**. It is important to identify why the household is primarily growing crops and whether it is to feed the household or to generate an income. Many households will be engaged in both own consumption and sale. Some crops will be planted to sell whilst others will be planted purely for own consumption. The concept is, therefore, quite complex and maybe crop specific. In cases where the household is unsure of the main purpose of production or does not understand the concept, it may be helpful to consider the total value of production of the farm and then look at what proportion is sold and what is consumed.

#### Question 5

This is a 'skip' question to identify households engaged in growing temporary crops in the last (agricultural) year.

**Temporary crops** are those with a growing cycle of less than one year. This typically includes vegetable crops, root crops, herbs and some fruit crops (watermelons, melons, etc).

#### Question 6

This question aims to determine the main temporary crops planted by the household during the last (agricultural) year whether currently in the ground or already harvested. Conceptually the **area harvested** in the (agricultural) year is the information that should be recorded as a proxy for annual production but practically the **area planted** is an easier concept since it includes crops currently in the ground. Information on the total area or number of plants planted in the (agricultural) year, for each crop. **In the case of multiple plantings of a given crop, the sum of all plantings during the last (agricultural) year should be recorded.**

### Question 7

The purpose of this question is to identify the extent of the household's production of temporary crops based on whether or not the household sold any temporary crops during the last (agricultural) year and, if so, the value. The value can be recorded as the actual value, by value size groups or above and below a particular value.

### Question 8

This is a 'skip' question to identify households engaged in growing permanent crops at the time of the visit.

**Permanent crops** are those with a growing cycle of over a year, and include crops grown in a compact plantation, as well as scattered trees or plants. They may be of productive age or not yet productive but they are only included if they are grown for the purpose of producing crops. Nurseries where plant propagation materials are produced for sale or for the household's personal use are not included.

### Question 9

This question aims to determine the main permanent fruit, nut, spice and other tree crops on the household's land at the time of the visit. Information on the total area or number of trees growing for each crop is recorded. Other information such as on the age (bearing/not bearing) and condition (harvested/abandoned/diseased) can also be collected.

### Question 10

The purpose of this question is to identify the extent of the household's production of permanent crops based on whether or not the household sold any permanent crops during the last (agricultural) year and, if so, the value. The value can be recorded as the actual value, by value size groups or above and below a particular value.

### Questions 11

This is a 'skip' question to identify households engaged in the raising of livestock and/or poultry in the last (agricultural) year. For those raising such animals, the number of each type of livestock on the holding at the time of the visit should be recorded. **Livestock** includes all animals, birds and insects kept or reared in captivity mainly for agricultural purposes. Raising livestock refers to the household having primary responsibility for looking after the animals on a long-term basis, irrespective of ownership. The number includes those animals being grazed on communal land or in transit at the time of enumeration, as well as those present on the holding. Bees are counted on the basis of the number of hives. It is recommended to only record data on the main types of livestock present in the country. An 'other' category may be used for completeness.

### Question 12

This question identifies the main purpose of raising livestock (sale or subsistence). See Q4 for concepts used in determining main purpose of production.

### Question 13

The purpose of this question is to identify the extent of the household's involvement in livestock and poultry raising based on whether or not the household sold any livestock/poultry during the last (agricultural) year and, if so, the value. The value can be recorded as the actual value, by value size groups or above and below a particular value.

### Question 14

The purpose of this question is to determine whether the household has any forest or other wooded land. Data are collected in respect of the day of enumeration.

**Forest land** is land with crown cover of more than 10 percent of trees able to reach a mature height of 5 metres or more. It includes natural and plantation forests. Areas that are temporarily not under trees but are expected to revert to forest are



included. Forest tree nurseries that form an integral part of the forest are included. Other wooded land is land with: (i) crown cover of 5-10 percent for trees able to reach a height of 5 metres or more at maturity; or (ii) crown cover of more than 10 percent for trees not able to reach a height of 5 metres at maturity; or (iii) shrub or bush cover of more than 10 percent.

**Forest and other wooded land** must be distinguished from permanent crops. Rubber, palm, and other cultivated food tree crops are permanent crops, whereas bamboo, cork oak, eucalyptus for oil, and any other cultivated non-food tree crops come under forest and other wooded land.

Land used for agriculture sometimes also contains groups of forest trees or other wooded plants satisfying the criteria for forest and other wooded land. For instance, land under permanent meadows and pastures may also contain forest trees more than five metres in height with crown cover of more than 10 percent. All forest and other wooded land is reported regardless of its agricultural uses.

#### **Question 15**

Although outside the strict scope of the census of agriculture, own account fishing activity is important to the PICs. This question seeks to identify households engaged in own account fishing activity during the last (agricultural) year and, where appropriate, to record data on fishing boats, motors and equipment owned, the frequency of fishing trips and the type of fishing. The value of sales of fish in the last month can also be recorded as the actual value, by value size groups or above and below a particular value as an indicator of the importance of this activity to the household.

#### **Question 16**

Aquaculture, or fish farming, is also important in some PICs. This question seeks to identify households engaged in own account aquaculture activity during the last (agricultural) year and, where appropriate, to record data on the number and size of ponds. The value of sales of fish in the last month can also be recorded as the actual value, by value size groups or above and below a particular value as an indicator of the importance of this activity to the household.

#### **Question 17**

Questions on other economic activities of the household during the last (agricultural) year, related to agriculture, such as the making of handicrafts, sale of cut flowers, sale of pot plants, agri-processing, etc. may be included as simple Yes/No questions.

#### **Question 18**

The **agricultural holder** is the person or persons making the major decisions about the agricultural operation. The agricultural holder has technical and economic responsibility for the agricultural production and may undertake all responsibilities directly or through a hired manager.

Identifying the agricultural holder can sometimes be difficult because decision-making processes within a household are often complex. If a husband and wife make the decisions together, they are both shown in Question 18. If there are two quite separate agricultural operations in a household, each operation will have one or more main decision-makers and all are recorded in Question 18.

Note that the main agricultural decision-maker in the household may do other work in addition to being a holder (farmer). In fact farming may not even be his/her main occupation. A distinction should be made between an agricultural holder and a hired manager; a hired manager is a paid employee who manages an agricultural holding on behalf of the agricultural holder.

Enumerators need to be careful in differentiating between the household head and the agricultural holder. Sometimes, the household head – often identified by the household as the oldest male – is not actively involved in the household's

agricultural operations. Special attention also needs to be given to ensuring that the role of women is adequately acknowledged in identifying the agricultural decision-makers in the household.

For this purpose, WCA 2010 has for the first time included the concept of a **sub-holding**. A sub-holding is defined as “a group of agricultural activities on the holding managed by a particular person in the holder’s household” [WCA 2010 para 3.44]. A sub-holder is a person responsible for managing a sub-holding.

WCA 2010 provides some typical situations such as “where the holder is designated as a male and takes prime responsibility, as a sub-holder, for growing the primary crops. The holder’s wife may be a second sub-holder, with specific responsibility for managing, for example, the kitchen garden. Other household members could also be sub-holders with specific responsibilities on the holding, such as livestock. The same piece of land could be part of two sub-holdings – for instance where one person grows rice on the land in the summer and another grows vegetables on the land in the winter. The association of livestock with land needs to be carefully considered. A person responsible for cattle on the holding’s grazing land is the manager of that grazing land, whereas someone managing livestock in communal land would not be specifically managing a piece of land associated with the livestock.” (FAO, 2005, para 3.46 and 3.47).