

CHAPTER 3 CONCEPTS, SCOPE AND DEFINITION

Authority for the Agriculture Census

3. 01 The 2009 Agricultural Census was conducted as a joint exercise with the Ministry of Agriculture and Fisheries. Authority for the Census rested with the Government Statistician, who had the legal power to collect such information under Statistics Act 1971. The act provides for total confidentiality of the information collected in the census. The information can only be used for the purpose of compiling statistics and no individual information can be disclosed to anyone outside the census organization.

Scope of Agriculture Census

3. 02 The 2009 Agricultural Census aimed to measure Household Agricultural Activity over the 2009 period. Enumeration was carried out in November – December 2009 and households were asked about their activities since the beginning of 2009. The 2009 census covered a similar range of information as with the 1999 census with the following major changes:
- Collecting information on 6 additional crops grown
 - Collecting information on consumption of 19 crops compared to 8 in 1999
 - Deletion of sales information because of data quality problems
 - Collecting information on pet animals.

Census Methodology

3. 03 The methodology for carrying out the census of Agriculture in Samoa was a combination of complete count and sample survey. Thus the census was basically two part operation. The first part involved all households who were required to complete the Household Form. The households identified as agriculturally active from the Household Forms (Subsistence, Subsistence and Cash and Commercial) were required to complete the Holding Form for every holding operated. The second part of the questionnaire was designed to cover 25 percent of all agricultural holdings as identified in the first part, with selection made on systematic sample basis (every fourth holding selected). Thus while the Household Form was canvassed in respect of all households, the Holding Form was to be completed by agriculturally active Households only and the Parcel Form was completed in respect of 25 percent of the agricultural holdings.

Sampling Errors

3. 04 Because of the systematic sampling some of the information in this report is subject to sampling errors. The information collected from the Parcel Form, covers the plot details such as method of sowing, age of coconut and cocoa trees, and crops already harvested are based on the sample and possible sampling errors need to be considered in examining the results.

Definitions

Household

3. 05 One or more persons who live together and have their meals together. Note that:
- Just one person, living on his own and looking after himself/herself is considered a household.
 - Usually a household occupies one building but in a few cases two or even more households may share one building. For example, four households living in an apartment building containing four apartments.
 - Alternatively, one household can occupy more than one building, for example, one household using a living fale, sleeping fale, kitchen fale and three small fales.
 - An Aiga is normally composed of several households.

Head of Household

3. 06 The person who is considered to be the head by the members of a household, that is, all persons living in the household.

Level of Agricultural Activity

3. 07 *Non-Agricultural*– This means that the household does not engage in any crop production. Such households may own or look after land NOT IN USE and also own or look after livestock. It may also engage in fishing activities.
3. 08 *Minor Agricultural Activity*–The household has only very few crops defined as less than 625 sq. yards (25 x 25 yds.) of land under garden crops or less than 20 coconut trees or less than 20 Banana plants or less than 20 other tree crops.
3. 09 *Subsistence Only*– The household produces crops to feed itself (home consumption) but does not sell.
3. 10 *Subsistence and Cash Cropping*– The household's main purpose of agricultural production is to feed itself (subsistence, or home consumption) but some crops or surplus crops are sold.
3. 11 *Mainly for Sale (Commercial)* – The households in this category differ from those in category 4 by the fact that their main purpose of production is to sell their produce either locally or for export.

Holding

3. 12 An agricultural holding is an economic unit of agricultural production under single management comprising of all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form or size. Single management may be exercised by an individual or household, jointly by two or more individuals or households by a clan, or tribe or by a juridical person such as corporation, cooperative or government agency.

3. 13 The holding's land may consist of one or more parcels, located in one or more separate areas or in one or more enumeration areas, provided the parcels share the same production means used by the holding such as labour, farm buildings or machinery.

Method of Operation of Holding

3. 14 *Individual Household on Own Account*– This refers to the holding operated by member(s) of a single household.
3. 15 *In Partnership* – The holding is operated in association with one or more partners who may be related or not related but who live in different households and thus have different principal homesteads.
3. 16 *Village Association*– The holding is operated by an association or committee, an example of this is the Women's Committee, which could operate the holding for crop or livestock or poultry production or any combination of them.
3. 17 *Institution* – The holding is operated by a religious institution or organization through a hired manager. An institution is an organization providing a specific service or performing some general public function for a group of individuals such as a prison, hospital, hotel, church boarding school etc.

Operator

3. 18 An operator of agricultural holding is the person who exercises management control over the operation of the agricultural holding. Where a single household is operating the holding, the head of the household in most cases is the operator. A holding can have more than one operator especially in cases where the holding is being operated as partnership or some other form of joint operation. In some cases the operator is not necessarily the head of the household, or the owner of the place or the matai of an aiga, he/she may be a member of the owner's household, a hired manager, a tenant or a renter, a person who operates customary land as assigned to him/her by his matai or a person who operates the land under government permit.

Crops

3. 19 Crops not Grown –The crops were not on the field at time of visit nor at any time in 2009.

Crops currently growing

3. 20 The crops were on the field at time of visit.

Already Harvested - Not grown but grown in 2009

3. 21 The crops were planted in the last 12 months and have already been harvested, so are not on the field at the time of visit. This category of crops refers to short term crops.

Parcel

3. 22 A holding parcel is any piece of land entirely surrounded by other land, water, road, forest etc., and not forming part of this holding. A parcel may consist of one or more fields adjacent to each other. In other words a parcel is a contiguous piece of land in a holding. The entire land of the holding may consist of one or more than one parcel.

Illustration 1: A holding with one parcel with four plots

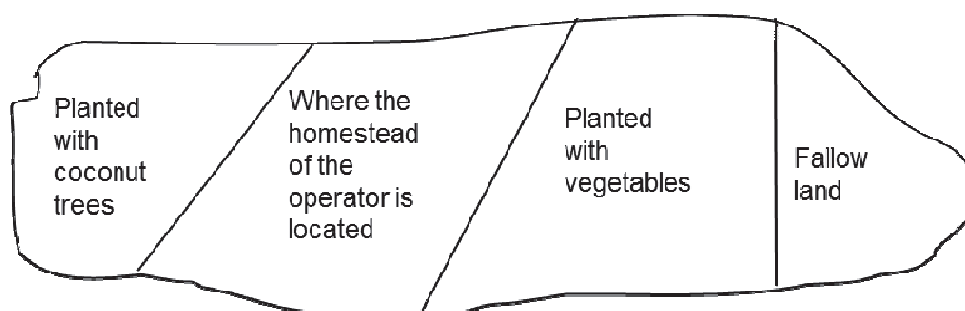


Illustration 2: A holding with two parcels in which one has two plots and the other has one plot.

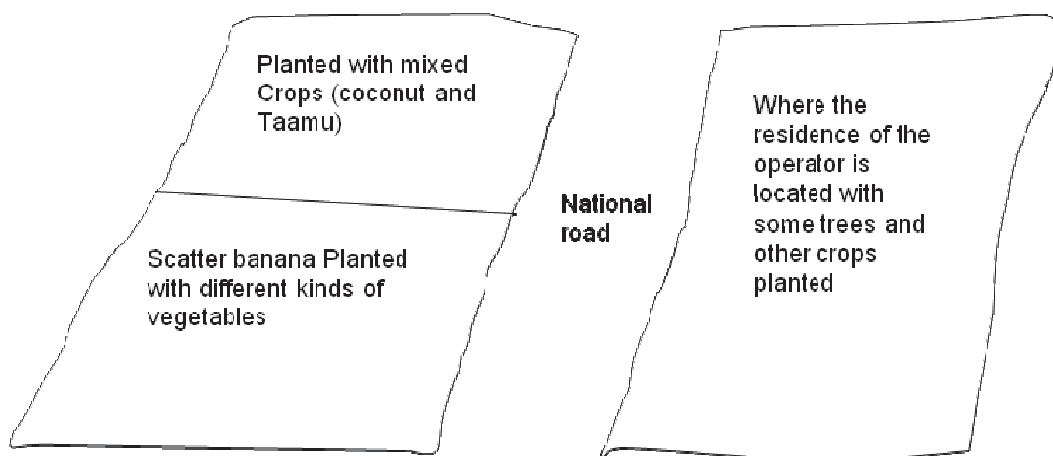
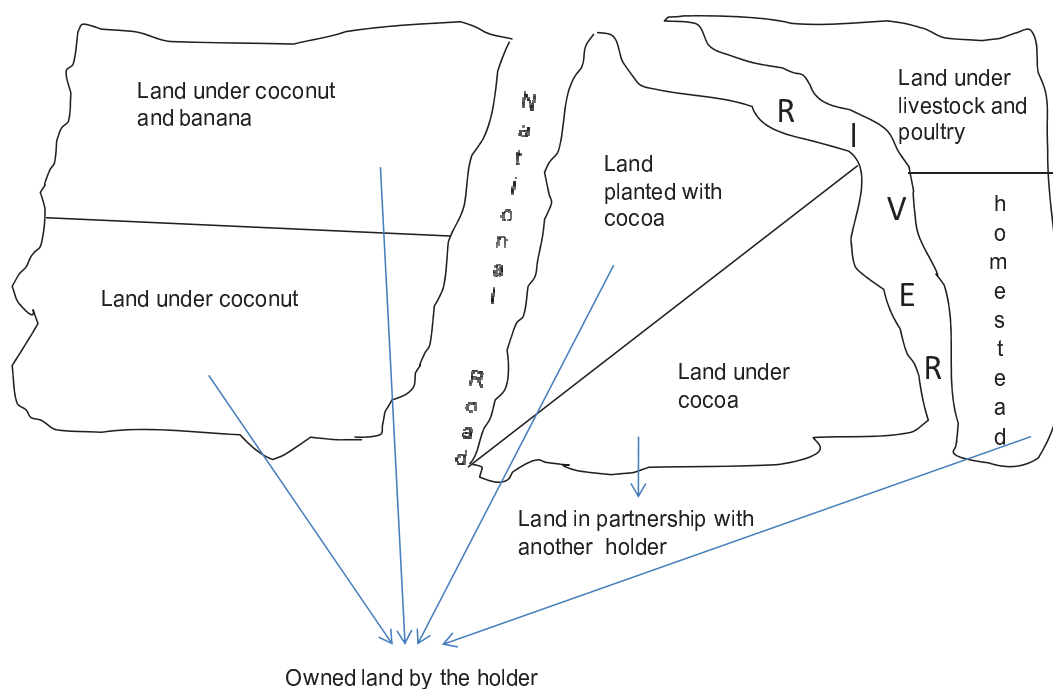


Illustration 3: A holder operates two holdings, one of his own and the other one in partnership with another holder who belongs to another household.



Note: The owned land of the holder has three parcels, two parcels with two plots each and another with one plot. The holding in partnership with another holder has only one parcel with only one plot.

Land Tenure

3. 23 Land Tenure refers to arrangements or rights under which the holder holds or uses holding land.

Land use

3. 24 This provides a classification of the holding according to the activity, which is directly related to the land, or holding, makes use of its resources or has an impact upon it.
3. 25 Land under tree crops –These are trees bearing edible fruits or nuts. The trees themselves should usually have an economic life of more than five years. Example includes mango, banana, coconut cocoa, citrus, breadfruit etc.
3. 26 Land under other crops–The other crops include field crops like taro, taamu, cassava, yam, sugarcane and vegetable crops like eggplant, beans, cabbage, tomato etc.
3. 27 Land under tree crops and other crops–If the land is both under tree crops and other crops, it should be classified as land under tree crops and other crops.

3. 28 Land under fallow–Fallow land is land that was used for growing crops sometime in the past but currently not used for growing crops.
3. 29 Land under non-agricultural uses –This is the land that is under buildings, roads and other non-agricultural uses.
3. 30 Land under livestock and poultry–This land is used for raising or tending livestock like cattle, goats, pigs, etc. and poultry like chickens, etc.

Period of Use

3. 31 This refers to the number of years that each reported parcels was used.

Plot

3. 32 A plot is a part or whole of a parcel on which a specific crop or crop mixture is cultivated. A plot can also be a fallow land or land ready for planting or bush plot or plot under other use like homestead.

Land Area

3. 33 Land area is the physical measure of the land in acres. There are 4,840 square yards in an acre. As a rough guide the following proportions of an acre are represented by squares whose sides have the following lengths.

| Area in Acres | Length of sides of square in yards |
|---------------|------------------------------------|
| 1 | 70 |
| $\frac{3}{4}$ | 60 |
| $\frac{1}{2}$ | 50 |
| $\frac{1}{4}$ | 35 |
| $\frac{1}{8}$ | 25 |

Method of Cultivation

3. 34 *Single cropped pattern*–refers to one crop’ which has been planted in a regular pattern such as rows. If there are a few other trees/plants of different crops in scattered plantings over the plot, consider the plot to be ‘single cropped’ to the crop that is planted in a regular pattern.
3. 35 *Mixed crop pattern*– refers to two or more crops which are interplant in a regular pattern such as rows. Again if there are a few scattered plantings of other crops do not consider them to be crops that are inter-planted in a “mixed cropped” combination.
3. 36 *Scattered crop pattern* –refers to crops/plants which have not been planted in any regular pattern such as rows or some uniform method of spacing. Scattered crops/plants can be found among plants of a regularly (patterned) planted plot.

Single crop equivalent

3. 37 Single crop equivalent area is an estimate of the area that a crop grown in a Mixed crop pattern or a Scattered crop pattern would cover if the same amount of crop were planted in a Single crop pattern. It is based on the information provided on the proportion in the crop and/or the number of plants in the mixed or scattered crop planting.

Fertilizers and Agricultural chemicals

3. 38 *Inorganic fertilizers*—These are manufactured mineral substances applied to soil, or irrigation water, to supply plants with the necessary nutrients.
3. 39 *Organic fertilizers*—These are materials of organic origin, either natural or processed, that can be used as sources of plant nutrients. The most commonly used are dried leaves, chicken manure or other animal manure, etc.
3. 40 *Agricultural chemicals*—These are used for controlling or eliminating pests that destroy crops or livestock. These include insecticide, herbicides and fungicides.

Fishing Activities

3. 41 *Inshore Fishing*—Fishing activity done from the shoreline to the reef.
3. 42 *Offshore Fishing*—This is a deep sea fishing activity done beyond the reef.
3. 43 *Inland Fishing*—Fishing activity done in inland water like river.

Reference Periods Agriculture Census 2009

3. 44 The general reference period is one calendar year i.e. 1st January 2009 to 31st December 2009. However, for the purpose of this census, the reference period is from January 1, 2009 to the time of visit or day of enumeration.
3. 45 The *Enumeration Period* was between 31st October and 30th November 2009.
3. 46 The reference periods for different items are given below.

Number of Holdings and Method of Operation
Calendar year 2009

Total Area of the Holding Section and Crops Grown
Day of Enumeration and Calendar Year 2009

Livestock
Day of Enumeration

Labour Inputs
One week prior to day of enumeration

Agriculture Income
Calendar year 2009

Use of Fertilizers and Agricultural Chemicals
Calendar year 2009

Fishing
Calendar year 2009

Forestry
Calendar year 2009