

2019 Niue Agriculture Census

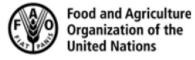
Enumerators Instruction Manual

Department of Agriculture, Forestry and Fisheries **Statistics Office** FAO

ALOFI







CONTENTS PAGE

CONTENTS PAGE	2
CHAPTER 1: INTRODUCTION	3
CHAPTER 2: GENERAL OUTLINES	
2.1 BACKGROUND	
2.2 AUTHORITY FOR THE AGRICULTURE CENSUS	4
2.3 DIVULGING INFORMATION	
2.4 SCOPE OF THE AGRICULTURE CENSUS	
2.5 METHODOLOGY OF CENSUS	
2.6 REFERENCE YEAR	
CHAPTER 3: THE JOB OF THE ENUMERATORS	
3.1 YOUR JOB	
3.2 YOUR SUPERVISOR	
3.3 YOUR HOURS OF WORK	
3.5 REFUSALS	
CHAPTER 4: HOUSEHOLD LISTS	
4.1 HOUSEHOLD LIST	
4.2 TYPES OF MAJOR CENSUS FORMS	
CHAPTER 5: INSTRUCTIONS FOR COMPLETING THE HOUSEHOLD FO	
5.1 GENERAL INSTRUCTIONS	
5.2 GEOGRAPHIC IDENTIFICATION AND OTHER RELEVANT INFORMATION	
5.3 SECTION 1: HOUSEHOLD COMPOSITION	
5.4 SECTION 2: FOOD INSECURITY EXPERIENCE SCALE (FIES)	
5.5 SECTION 3: LEVEL OF AGRICULTURAL ACTIVITY OF THE HOUSEHOLD	
5.6 SECTION 4: LIVESTOCK, POULTRY AND DOMESTIC ANIMALS	
5.7 SECTION 5: FISHERIES	23
5.8 SECTION 6: HUNTING	
CHARTER 6: DETAILS OF LAND OPERATED BY THE HOUSEHOLD	
7.3 SECTION 8. CROP PRODUCTION	
6.3 SECTION9: LABOUR INPUTS	
6.4 SECTION 10: HOUSEHOLD AGRICULTURAL SUPPORT	
6.5 SECTION11: EQUIPMENT USED BY THE HOUSEHOLD FOR AGRICULTURAL	
CHAPTER 8: INSTRUCTIONS FOR COMPLETING THE INSTITUTIONAL	L FORM Error! Bookmark not
defined.	
8.1 GENERAL INSTRUCTIONS	
8.2 GEOGRAPHIC IDENTIFICATION AND OTHER RELEVANT INFORMATION	
8.3 SECTION 1: LAND DETAILS	
8.4 SECTION 2: LABOUR INPUT	
8.5 SECTION 3: LIVESTOCK AND POULTRY	
8.6 SECTION 4: EQUIPMENT USED BY THE INSTITUTION FOR AGRICULTURAL	ACTIVITIES Error! Bookmark
not defined.	
8.5 SECTION 5: FINANCIAL SUPPORT	
8.5 SECTION 6: LAND CLEARANCE	
CHAPTER 9: CONCEPTS, DEFINITIONS, AND SOME EXPLAINATIONS.	
	, /11

CHAPTER 1: INTRODUCTION

THIS BOOK IS YOUR GUIDE.

USE IT IN PLANNING YOUR WORK.

USE IT DURING AND BETWEEN INTERVIEWS.

REVIEW IT AT HOME.

This book contains instructions for you – The Census Enumerator. It tells you – WHAT TO DO AND HOW TO DO IT. This book has eight chapters and each chapter is divided into several paragraphs.

Chapter 3 gives you general facts about your job. The other chapters give you detailed instructions to help you do your job quickly and accurately.

Study this book carefully. Keep it with you, and USE IT. No enumerator can be expected to remember all the instructions for taking a census. Refer to the instructions often to make sure you are doing all parts of your job correctly. Let your work be a credit to yourself, to your village and to your country.

CHAPTER 2: GENERAL OUTLINES

2.1 BACKGROUND

The last Agricultural census for Niue was conducted in November 2009, the first agriculture census was conducted twenty years prior to that in 1989.

The agriculture census provides vital information on the status of the sector as well as assists in policy formulation for the improvement of the sector.

However, changes in the sector must have occurred in the last ten years brought about by developments that had been undertaken, the improvements in technology and natural disasters. This is the reason why this information needs to be updated and an Agricultural Census is therefore necessary to collect such information.

2.2 AUTHORITY FOR THE AGRICULTURE CENSUS

The Agriculture Census will be conducted jointly by the Department of Agriculture, Forestry, Fisheries and the National Statistics Office. Authority for the census is governed under the Statistics Act of 2009.

2.3 DIVULGING INFORMATION

The Statistics Act stipulates that "Every person commits an offence, who, whether or not he is a census employee appointed to any duty in connection with the census, divulges or makes use of any information obtained pursuant to this Act except as required for the preparation of statistics from the data obtained at the census, and is liable to a fine not exceeding 1 penalty unit.

2.4 SCOPE OF THE AGRICULTURE CENSUS

The Household Questionnaire consists of 11 Sections viz. -

SECTION 1 - HOUSEHOLD COMPOSITION

SECTION-2: FOOD INSECURITY EXPERIENCE SCALE (FIES)

SECTION-3: LEVEL OF AGRICULTURAL ACTIVITY OF THE HOUSEHOLD

SECTION-4: LIVESTOCK, POULTRY AND DOMESTIC ANIMALS

SECTION- 5: FISHERIES SECTION-6: HUNTING

SECTION 7: LAND OPERATED EXCLUSIVELY BY THE HOUSEHOLD

SECTION 8: CROPS

SECTION 9: LABOUR INPUT

SECTION 10: HOUSEHOLDS AGRICULTURAL SUPPORT

SECTION 11: EQUIPMENTUSED BY THE HOUSEHOLD FORAGRICULTURAL ACTIVITIES

Details of the information sought in different sections and the concepts / definitions relevant thereto have been discussed in the following paragraphs.

The Census covers all the households in the country. However, different sections in the questionnaire will be canvassed depending on the level of agricultural activity of the household. For example, the Section 1 will be completed for all households but Section 8 will be completed only for those households which have grown some agricultural crops, tree/ plantation crops during the reference period i.e. responded 'yes' to question 1, section 3 in the questionnaire.

A translated questionnaire will be provided to help you with households who prefer to speak vagahau Niue.

ALL HOUSEHOLDS IN YOUR AREA, REGARDLESS WHETHER OR NOT IT IS ON THE HOUSEHOLD LIST SHOULD BE ENUMERATED

2.5 METHODOLOGY OF CENSUS

This methodology for capturing the data is called Computer Assisted Personal Interviews or CAPI. This is the first census where enumerators will be interviewing using tablets out in the field to conduct interviews.

Areas of parcels will also be captured in the CAPI.

2.6 REFERENCE PERIODS

The reference year for the 2021 Agriculture Census is 12 months prior to the census (including the month of enumeration. That is from the 1^{st} of August 2020 to the 31^{st} of July 2021 will be the reference year for the census.

While this is the general reference year, specific reference periods for certain items on which information is to be collected are included in the question concerned.

- Reference periods
 - 12 month period 1st August 2020 to 31st July 2021
 - 6 month period 1st February 2021 to 31st July 2021
 - 3 month period 1st May 2021 to 31st July 2021
 - Last month/1 month period 1st July 2021 to 31st July 2021

The questions have periods that varies. Refer to paper questionnaire for more detailed specifications

Make sure to check each question carefully when conducting the interview where there are questions that refer back to a specific period.

CHAPTER 3: THE JOB OF THE ENUMERATORS

3.1 YOUR JOB

Each enumerator will work in an area called an "Enumeration Area" or "EA". Your MAIN DUTIES as enumerator are:

- a) Visit all of the households in the area assigned to you.
- b) If there are households with no one present, absent or overseas please also make a note of this. If they are not at home during the visit see the supervisor.
- c) Introduce yourself as an employee of the Niue Statistics Office and the purpose of the census
- d) For Each household, a Household form must be filled-in regardless of agriculture activity.
- e) Section 7 and Section 8 are to be filled up in respect of all households which respond with a 'yes' to question 1 in section 3 of the household form
- f) Complete the Niue Agricultural Census Questionnaire
- g) Make sure the households know that the information provided are all CONFIDENTIAL
- h) Confirm the follow up contact details if need be



CAUTION: NO HOUSEHOLD IN YOUR ENUMERATION AREA SHOULD BE LEFT OUT.

3.2 YOUR SUPERVISOR

Your supervisor will give your enumeration area assignment and supply you with the forms if you need. He/She will review your work every now and then and if necessary, he will explain to you how you should improve your work. It is his/her duty to see that you complete your assignment as quickly and accurately as possible.

Whenever, you have some problems or questions that you cannot solve with the help of the instructions in this manual, write them down and consult your supervisor for help. Also let him/her know in advance if you need extra materials, so that your work is not delayed or interrupted.

3.3 YOUR HOURS OF WORK

No specific hours have been prescribed. However, the most important thing is that you must complete your work on time. You should plan your hours of work accordingly. In most cases, you will have to adjust your working hours to the time when you are most likely to find the people at home. The most likely or convenient time may be early in the morning or in the evening or during weekends.

3.4 HOW TO CONDUCT AN INTERVIEW

It is important that you develop effective interviewing technique and that you know what **t**o do in each household and how to do it quickly and efficiently."

Here are some points:

- a) Try and make good impression on the respondent right from the start. Be friendly and polite but do not waste time in small talk. Wear neat clothes suitable for the areas where you are enumerating.
- b) You should begin the interview with a pleasant greeting or you can use any courteous introduction.
- c) Spend some minutes or so in general conversation or make a complimentary remark about some interesting feature of the place, in which the respondent can take pride. Then you can begin to undertake the questions in the Household Form.
- d) Ask the questions as they are worded on the census forms. Be careful not to change their meaning.
- e) Use probing questions that will help you get the accurate answers of the respondents.
- f) Try to interview privately. Avoid group interviewing. Talk to the head of the household or any responsible member of the household who can accurately answer the questions. If not, find out when some responsible member of the household will be at home and take note of this.
- g) Listen carefully to the respondent's answers. You may get answers to several questions at once. Do not reveal your opinion on census questions. Do not show surprise, approval or disapproval of the replies either by the way you look or by the tone of your voice.
- h) If a respondent does not understand a question, it is sometimes helpful to repeat it. You may wish to show him blank copies of the Household Form and Parcel Form to help him understand.
- i) If the respondent seems reluctant or hesitant in answering, mention the importance and value of census information. Explain that it is strictly confidential and cannot be used for purposes of taxation, investigation or regulation etc..
- j) Do not discuss politics or other controversial subjects.
- k) You can make an appointment to interview or to complete an interview at the respondent's request.
- I) Always thank the respondent when the interview is completed. Let him know that you appreciate his contribution to the success of the census.

NOTE: YOU SHOULD NOT INFLUENCE THE RESPONDENTS ANSWERS ONLY EXPLAIN THE QUESTION IF THEY DO NOT UNDERSTAND OR IF THEIR RESPONSE DOES NOT ANSWER THE QUESTION.

3.5 REFUSALS

Most people cooperate fully in the undertaking of the census and refusals are rare. You may find a respondent who is a little bit reluctant to give information mainly because he/she does not understand why it is necessary. In such cases, try to use persuasion to overcome his/her objections.

Explain the importance of census information. Explain politely that everyone is required by law to give census information and emphasize that all information is confidential.

Under Section 18 of the Statistics Act every person commits an offence who refuses to answer any questions lawfully addressed to him by the Census Enumerator or Supervisor or any other official authorized by the Government Statistician.

Your attitude in a refusal situation is important factor in creating goodwill towards the census. You should try to remain calm and courteous. Do not argue and do not lose your temper. You should also inform the person that you are obligated to report the refusal to your supervisor who will take further action in their matter.

CHAPTER 4: HOUSEHOLD LISTS

4.1 HOUSEHOLD LIST

The household list given to you is the most up to date one available courtesy of the Department of Justice, Lands, and Survey. Some changes may have occurred since the last update. Check whether the household is still there. If so check the name of head of households.

If households are absent as they are currently overseas or living elsewhere on the island. Make a note for the supervisor in the field books.

Check whether this household has been subdivided into more than one since the last updating. If subdivided, please give a new number in the list. For example, if household number 6 has been subdivided into two households write 6.A for the new household and enter the name of the head of the household at the end of the list.

New households might have come up since the last updating. If there are households that people are residing in that are not on the map or the household list, draw it on the map with a red pen and write the name of the head of the household in the new household list.

Maps will be provided in the fieldbooks to show the households in the area in which you are enumerating.

4.2 TYPES OF MAJOR CENSUS FORMS

It is very important that you are completely familiar with the <u>INFORMATION SOUGHT IN DIFFERENT</u> <u>SECTIONS OF THE QUESTIONNAIRE</u> and that you understand relevant instructions on these before you start work.

CHAPTER 5: INSTRUCTIONS FOR COMPLETING THE HOUSEHOLD FORM

5.1 GENERAL INSTRUCTIONS

The SECTION 1 of the questionnaire is to be filled up for all households as well as for all institutions like church or Women's Committee located in your enumeration area that operates any agricultural land and/or livestock or poultry. If it is an institution, a separate questionnaire meant for INSTITUTIONS is required to be filled.

5.2 GEOGRAPHIC IDENTIFICATION AND OTHER RELEVANT INFORMATION

This section identifies the location of the household, the name of the household head and the enumerator and the date of interview. You must fill in correctly the identification particulars.

Village Name – Enter clearly and in block letters the name of the Village.

Village code –Enter the code associated with the village (provided)

Head of Household – Enter the name of the household head.

Enumerator – Enter your name.

Household Number – Put the household number as given in the Household List. If there is a change in the number because of updating, enter the new number in the Tablet.

Enumeration Area – Enter the code number of the Enumeration Area.

Date of Interview – Enter the date of interview in the forma DD/MM/YYYY.

Time Start - Time the interview starts

Time End – Time the interview ends

You may be required to enter some additional geo-information like GPS coordinates etc. for which instructions will be provided during the training sessions.

Statistical unit

The statistical unit for a data collection is the basic unit for which data are collected. As we know, the primary statistical unit for a population census is the household. But all the households in a country are generally not involved in agricultural activities. Therefore, the household engaged in own-account agricultural activities, referred to as agricultural holdings, is taken as the statistical unit for agricultural census. Normally, there is only one agricultural holding in a household.

An *agricultural holding* is defined as an economic unit of agricultural production under single management comprising 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 a corporation, cooperative or government agency. The holding's land may consist of one or more parcels, located in one or more separate areas or in one or more territorial or administrative divisions, providing the parcels share the same production means, such as labour, farm buildings, machinery or draught animals."

HOUSEHOLD

The concept of household is based on the arrangements made by persons, individually or in groups, for providing themselves with food or other essentials for living. Note that

Definition

- A household may be either (a) a one person household, that is to say, a person who makes provision for his or her own food or other essentials for living without combining with any other person to form part of a multi-person household, or (b) a multi-person household, that is to say, a group of two or more persons living together who make common provision for food or other essentials for living. The persons in the group may pool their resources and may have a common budget; they may be related or unrelated persons, or constitute a combination of persons both related and unrelated" Usually a household will occupy 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 a family will normally NOT BE one household but would be composed of several households.

Definition

HEAD OF HOUSEHOLD

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

5.3 SECTION 1: HOUSEHOLD COMPOSITION

(This information to be captured as on the Day of Enumeration)

Accomplish this section for all households. List all the members of the Household, always starting from the Head of the Household.

- **1. SI No.** Starting with household head, assign a serial number to each member of the household. The last number in column in this column would correspond to the total number of persons in the household.
- **2. Full name** Write the full name of the household member in capital letters. The first person must always be the head of the household
- **3.** Relationship with head of household Write how the person is related to the head of the household
 - 1 Self
 - 2 Spouse
 - 3 Son/Daughter
 - 4 Daughter-in-law / Son-in-law
 - 5 Grandchild
 - 6 Parent
 - 7 In-Laws
 - 8-Niece / Nephew
 - 9-Aunt / Uncle
 - 10-Other relative
 - 11 Not related

Please note that only those relatives / unrelated persons would be enumerated here who are members of the household i.e. they share food and other living essentials from this household. Occasional visitors not being part of the household are not to be enumerated here. If some persons who are normally part of the HH but are away for a short time for some work like studies, medical treatment or for social visits etc. and are likely to return to HH soon, they should be enumerated here. The criterion is whether they are normally part of the HH or not. Contractors etc. who are with the household in connection with some work are also not part of the household. Therefore, they should not be included here. If they have done some work for the HH, that can be accounted for in the Labour Input section.

- 4. Sex -Enter 1 for male, 2 for female and 3 for Others.
- 5. Date of birth Write the date of birth of the person in the format dd/mm/yyyy
- **6. Age** Completed number of years would automatically be shown on the Tablet. Please confirm the age with the respondent.
- 7. Ethnicity Write the code for ethnicity of the person,
 - 1 Niuean,
 - 2 Half-Niuean
 - 3 Non-Niuean
- **8. Country of residence** Write the code for country of residence,
 - 1 Niue
 - 2 New Zealand
 - 3 Australia
 - 4 Samoa
 - 5 Tonga
 - 6 Tuvalu

- 7 Fiji
- 8 Other Pacific Countries (specify country if 8 is selected)
- 9 Other Countries (specify country if 9 is selected)
- 9. Country of residence 1 year ago Same as above
- 10. Educational attainment Enter the code for the highest level of educational attainment
 - 1 None
 - 2 ECE (Early Childhood Education)
 - 3 Primary
 - 4 Secondary (NCEA level 1, 2, 3)
 - 5 Tertiary (Agricultural qualification)
 - 6 Tertiary (Other qualification)
 - 7 Vocational training
- 11. Marital Status Enter the appropriate code for marital status of the household member
 - 1-Never Married
 - 2-Married
 - 3-Defacto
 - 4-Widowed
 - 5-Separated
 - 6-Divorced
- **12. Main activity last week** Write the code for main activity last week
 - 1 Employed in Govt./Public sector (Those where the employer is Govt. or the public sector)
 - 2 Employed in private sector (Those where the employer is private sector)
 - 3 Producing goods/services for sale (Self Employed)
 - 4 Producing goods/services for family consumption (e.g. involved in Agriculture or making some other products for home consumption)
 - 5 Voluntary/Community work
 - 6 Domestic duties (where member is mostly engaged in activities like sweeping/vacuuming/washing dishes/feeding pets / doing laundry/preparing meals/ cleaning bathrooms/dusting/ironing, folding clothes and putting them away.
 - 7 Student
 - 8 Too young / retired/ Too old
 - 9 Unemployed (where the person is (a) in working age
 - (b) not in employment during reference period
 - (c) did some activity to seek employment
 - (d) currently available to take up employment given opportunity.
- **13. Extent of Engagement in Main Activity** Ask the respondent if he/she is full time, part time engaged in economic activity or is not engaged in economic activity. Write the code for type of engagement accordingly.
 - 1 Full time
 - 2 Part time
 - 3 None

PLEASE NOTE THAT OPTION "3-NONE" WILL BE APPLICABLE ONLY FOR CATEGORIES 8 AND 9.

14. Ave. hour/week worked on holding – Write the number of hours worked on the holding on an average per week. Please record whole hours only. Since, no specific reference period is indicated

here, the information relates to the number of hours that the household member normally put-in in the holding operations during last year.

- **15. Involvement in the holding operation** Write the code for the level of involvement in the holding operation.
 - 1 Management and work
 - 2 Work
 - 3 No involvement

It may be noted that the agricultural holder in the household sector is often, but not always, the household head. The agricultural holder may do other work in addition to being a holder; being a "farmer" may not even be his/her main occupation. A distinction should be made between an agricultural holder and a hired manager. The *hired manager* of the holding is the person who manages an agricultural holding on behalf of the agricultural holder and is responsible for the normal daily financial and production routines of running the holding. The hired manager is a paid employee.

OFTEN MORE THAN ONE HOUSEHOLD MEMBER IS INVOLVED IN MAKING DECISIONS ABOUT AGRICULTURAL ACTIVITIES OF THE HOUSEHOLD. HOWEVER, IN ORDER TO BEST APPROXIMATE TO AGRICULTURAL HOLDER, THE CODE 1 SHOULD BE GIVEN TO ONLY ONE HOUSEHOLD MEMBER WHO TAKES MOST OF THE DECISIONS ABOUT AGRICULTURAL ACTIVITIES OF THE HOUSEHOLD AND ALL OTHER MEMBERS SHOULD BE GIVEN CODE 2 OR 3 DEPENDING UPON THE EXTENT THEIR INVOLVEMENT IN HOUSEHOLD'S AGRICULTURAL ACTIVITIES.

5.4 SECTION 2: FOOD INSECURITY EXPERIENCE SCALE (FIES)

This is a new question included into the agriculture census to measure the household food security relating to SDG 2, zero hunger. Food insecurity refers to conditions related to a household not producing enough food or not having enough resources to buy food; it does not refer to other causes of hunger, such as dieting or physical inability to cook/buy food.

Ask the head/person interviewed to respond to the question by stating yes, no or don't know from their experience in the last 12 months. Make sure the question is explained clearly for the respondent.

1. During the last 12 months, was there any time, when because of lack of money or other resources:

(Ask for each of the following tables with responses to be 'yes' 'no', 'don't know')

1. You (or any other adult in the household) were worried that you would not have enough food to eat?

This question refers to a state of being worried, anxious, apprehensive, afraid, or concerned that there might not be enough food or that the respondent will run out of food because there is not enough money or other resources to get food. The worry or anxiety is due to circumstances affecting the respondent's ability to procure food, such as: loss of employment or other source of income, or other reasons for not having enough money; insufficient food production for own consumption insufficient food available for hunting and gathering; disrupted social relationships; loss of customary benefits or food assistance, environmental or political crises. It is not necessary for the respondent to have actually experienced not having enough food or running out of food to answer yes to this question.

2. You (or any other adult in the household) were unable to eat healthy and nutritious food? This question asks the respondent whether s/he was not able to get foods they considered healthy or good for them, foods that make them healthy, or those that make a nutritious or balanced diet because there was not enough money or other resources to get food. The answer depends on the respondents own perception of what they consider to be healthy and nutritious foods. This question refers to the quality of the diet and not the quantity of the food eaten.

3. You (or any other adult in the household) ate only a few kinds of food?

- a. The question asks if the respondent was forced to eat a limited variety of foods, the same foods, or just a few kinds of foods every day because there was not enough money or other resources to get food. The implication is that the diversity of foods consumed would likely increase if the household had better access to food or more resources.
- b. This question refers to the quality of the diet and not the quantity of foods eaten. It implies lack of money/resources rather than customary habits or other circumstances (i.e. health or religion) as the reason for limiting the variety of food.

4. You (or any other adult in the household) had to skip a meal?

This questions inquires about the experience of having to miss or skip a major meal (for example, breakfast, lunch, or dinner, depending on the norm for number and times of meals in the culture) that would normally have been eaten because there

was not enough money or other resources to get food. This question refers to insufficient quantity of food.

5. You (or any other adult in the household) ate less than you thought you should?

This question inquires about eating less than what the respondent considered they should, even if they did not skip a meal, because the household did not have money or other resources to get food. The answer depends on the respondents own opinion of how much they think they should be eating. This question refers to quantity of foods eaten and not the quality of the diet. It should never be intended as referring to special diets to lose weight or for health or religious reasons.

6. Your household ran out of food?

Reference should be made to any occasion when there was actually no food in the household because members did not have money, other resources, or any other means to get food.

7. You (or any other adult in the household) were hungry but did not eat?

The question asks about the physical experience of feeling hungry, and specifically, feeling hungry and not being able to eat enough because of a lack of money or resources to get enough food. It does not refer to possible consequences of special diets to lose weight or of fasting for health or religious reasons.

8. You (or any other adult in the household) went without eating for a whole day?

This question asks about a specific behavior – not eating anything all day because of lack of money and other resources to get food. It does not refer to special diets to lose weight or to fasting for health or religious reasons.

5.5 SECTION 3: LEVEL OF AGRICULTURAL ACTIVITY OF THE HOUSEHOLD

This section is designed to establish the level of agricultural activity of the household during the reference period, 12 months prior to the day of enumeration. If the answer is "Yes" to the first question then continue asking question 2, 3, 4 and so on.

If the respondent says 'no' to the first question, skip to question 5 and enquire about activities related to flower nurseries, planting of flowers, growing pandanus trees etc.

1. Did your household operate any agricultural crops, tree/plantation crops during the last 12 months?

If the answer to this question is NO, go to question 5.

Here the emphasis is on whether the household had operated or cultivated or managed any garden crops, coconuts or bananas or any other tree crops anytime from August 1, 2020 to the day of enumeration.

The question requires a yes or no response. If the response is yes, then continue with the interview, if the response is no then skip question 2, 3, and 4 of section 3 and go to question 5.



CAUTION: FOR THOSE WHO HAVE GIVEN 'NO' AS A RESPONSE TO QUESTION 1 IN SECTION 3, THEY WOULD NOT HAVE TO FILL IN SECTION 7 AND SECTION 8.

- **2.** How much land (in Acres) does your household have under agricultural crops? State the number of acres in whole number and fractions, for example, 1 ½.
- **3.** Did your household sell any crop produce, fruits or vegetables or other agricultural produce? The question requires a 'yes' or 'no' response only.
- 4. What do you consider as the purpose of your crops production?

(Enter the appropriate code)

- 1. Only for home consumption
- 2. Mainly for home consumptions and some sale
- 3. Mainly for sale and some home consumption
- 4. Only for sale
- 5. Other (specify)

The codes 1 to 4 provided above cover all possible purposes of crop production. The option 5 is a near impossibility. Therefore, be extremely cautious and probe thoroughly if the response to purpose of crop production is not reported from 1 to 4.

OPERATOR or HOLDER:

Definition

An **operator** or a **holder** of agricultural holding 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 undertake all responsibilities directly, or delegate responsibilities related to day to day work management to a hired manager. He/she may be a

person who operates customary land as assigned to him/her by his matai or a person who operates the land under government permit.

5.6 SECTION 4: LIVESTOCK, POULTRY AND DOMESTIC ANIMALS

This section asks for the number of livestock and poultry kept, slaughtered or sold alive. It also asks for the number of domestic animals kept.

This should be asked for all households regardless of the level of crop activity.

1. Does your household have any Pigs or Poultry?

Ask and establish whether the household has any Pigs or poultry on the day of interview. If response for Pigs is Yes, answer question 2 to question 5. If response for poultry is Yes, go to question 6 of this section. If the response to both Pigs and Poultry is NO, go straight to question number 11.

2. Which types of pigs are being kept by your household?

Here only Yes or No type of response for each type of pig is to be entered. Number of Pigs of different category is not required here.

3. The table provided in the section allows for better record of the information to be captured. Ask for each animal and fill in the table horizontally.

Type of Pigs - Column 1 contains the list of type of Pigs commonly found in Niue.

The number of boars and sows to be captured refers to those only for breeding purposes. The number of piglets to be captured refers to the pigs equal to or less than 4 months old.

Number Slaughtered sold, consumed, and customary (during the last 12 months) -

Ask the household whether they had slaughtered any Pigs during the last 12 months. If the answer is Yes, ask the number of Pigs slaughtered that were sold and enter the number in Column 3a. Then determine the number of Pigs slaughtered and consumed by the household and enter the number in Column 3b. Ask also the number that were slaughtered and used for customary obligations which were given away as gifts during birthday, wedding, funerals, haircutting, etc. and enter the number in Column 3c.

Number of Alive Pigs sold and/or gifted (during the last 12 months) -

Ask the household if there were any Pigs sold or gifted alive. Ask how many were sold and/or gifted in the last 12 months. This is different from the Pigs slaughtered and sold.

Number Kept (as of date of visit) -

Column 3f asks for the number of Pigs kept by the household at the time of your visit to their homestead mentioned in Column 1. Enter the number in this column.

- **4.** How many Pigpens does your household have? Ask this question only for households who stated they have pigs and enter the number of pig pens the household has.
- **5. Type of feed for pigs** Only for households who stated they have pigs and enter '1' for yes and '2' for no for each pig feed the household uses.

Question 6 to 10 in the questionnaire relate to poultry. You should ask these questions to only to those households who responded YES for poultry in question 1.

6. How are poultry being kept by your household?

This is question requires Yes / No response for options a to d.

7. Type of Poultry - Column 1 contains the list of type of Poultry on which information is to collected.

Number Slaughtered sold, consumed, and customary(during the last 12 months) -

Ask the household whether they had slaughtered any poultry during the last 12 months. If the answer is Yes, ask the number of Poultry slaughtered that were sold and enter the number in Column 7a. Then determine the number of Poultry slaughtered and consumed by the household and enter the number in Column 7b. Ask also the number that were slaughtered and used for customary obligations which were given away as gifts during birthday, wedding, funerals, haircutting, etc. and enter the number in Column 7c.

Number of Alive Pigs sold and/or gifted (during the last 12 months) -

Ask the household if there were any Poultry sold or gifted alive. Ask how many were sold and/or gifted in the last 12 months. Enter the information in 7d / 7e as applicable. This is different from the Pigs slaughtered and sold.

Number Kept (as of date of visit) -

Column 7f asks for the number of Pigs kept by the household at the time of your visit to their homestead mentioned in Column 1. Enter the number in this column.

- 8. How many chickens are kept for the purpose of egg laying and meat production?
 - Number to be recorded as of the day of visit. Please enter the number of poultry meant for laying eggs against option a and those for meat production against option b.
- **9.** How many poultry houses does your household have? Only for households who stated they have chickens and write down the number of poultry houses
- **10. Type of feed for poultry** Only for households who stated they have chickens and write '1' for yes and '2' for no for each poultry feed the household uses.
- **11.** Does the household have any domestic animals? The question asks about two main domestic animals, cats and dogs. Only capture the number of domestic animals by sex as of the day of visit. If there are no domestic animals in the household continue on to question 12.

The reason domestic animals are included in the livestock section is due to the animal services that relates to all animals.

- **12.** Is your household affected with the menace (or due to the problem) of stray animals? For this question, answer is expected in only YES / NO.
- 13. Is your household aware of the following services available at DAFF?

For this question, for different options, the answer is expected in only YES / NO.

14. Does the household use any of the general animal health services in the past 12 months? -

This question is in table form, ask the following question and enter the responses in the table provided.

List the following services provided:

1 - Vaccination

Treatment with medicine to produce immunity against diseases

2 - Castration

Removal of the testicles of a male animal or reproductive organs of a female animal

3 – Euthanizing

Humane injection to put down animals

4 – External Parasite Spray
Treatment for fleas and ticks for all animals
5 – General health care
Overall check up for all animals, including consultations

If the respondent has used any health services listed in the table in the past 12 months, write 1 for 'yes' and 2 for 'no' for each service received by animal.

For each animal also ask for the main service provider of each animal health services.

It may please be noted that Castration, Euthanizing and External parasite spraying is not applicable to poultry. Due care should be taken while recording this information.

5.7 SECTION 5: FISHERIES

This section is especially designed to capture the households engaged in fishing during the 12 months prior to enumeration. This section should be asked for all households.

1. Did any members of this household engaged in fishing anytime during the last 12 months?

Enter "1" for Yes or "2" for No. Then enter the answer in the box provided. If the answer is yes, proceed to ask the next question; if the answer is NO, then go to section 6.

2. How many members of your household were normally engaged in fishing during last 12 months?

Ascertain from the respondent the number of household members engaged in fishing. Probe the specific work they are doing for the fishing activity to be able to determine whether such household member is to be included or not. After determining the total number of household members engaged in fishing, ask the total number of female members and the total number of male members. Enter these numbers in the boxes provided

3. What type of Fishing did the Household engage in?

There are two type fishing activity that a certain household can engage in. These are:

- 1 Inshore Fishing. Fishing activity done from the shoreline to the reef.
- 2 Offshore Fishing. This is a deep sea fishing activity done beyond the reef.
- 3 Both

4. What methods did your household use for fishing and also time of fishing?

This question is to be answered in Yes or No. Ask the respondent each of the items mentioned in the question. Enter "1" for Yes and "2" for No. Then enter the reply in the box provided for each item. Continue to ask at what time they used the particular method. Enter 1 for day, 2 for night, or 3 for both.

- a) Fishing Net
- b) Hook and Line
- c) Spears
- d) Trolling
- e) Bottom Fishing
- f) Reef Fishing
- g) Other (Specify____)

5. Details of the Fishing trips made by the Household in the last 3 months, stating the main purpose of fishing and the proportion of the goods sold?

There are three main details to be captured in this question:

Number of fishing trips made during...

Enter in the box provided the number of fishing trips made during May 2021, June 2021 and July 2021. For example, if the household made four fish trips (i.e. sum total of trips made by all individuals in the household) in May 2021, enter "4".

Main purpose of fishing

There may be differing reasons why the household would have gone fishing. Use the codes and enter them for each month provided.

- 1 Only for home consumption
- 2 Mainly for home consumption and some sale
- 3 Mainly for sale and some home consumption
- 4 Only for sale
- 5 Other

Proportion sold

There is a possibility that the all the fish caught by the household was used for its own consumption or partly for the household consumption and partly for sale or entirely for sale. Use appropriate code and enter them for each month provided.

- 0 None
- 1 about 1/4
- 2 about 1/2
- 3 about 3/4
- 4 All

Ask and fill in the table provided for each month.

6. Did your household hire or borrow any of the following equipment/accessory for fishing in the last 12 months? How many equipment does your household own any of the equipment/accessory for fishing as of the day of visit?

Read out the list of equipment provided and write the number of equipment the household owns and are in working order as of the day of enumeration.

- 1. Canoes
- 2. Aluminum dinghy/boat
- 3. Inflatable dinghy
- 4. Outboard motors
- 5. Boar (charters)
- 6. Kayak
- 7. Fishing rods
- 8. Life jackets
- 9. Spear Guns
- 10. Other (specify)

For each equipment (regardless of whether the household owns one or not), ask if any of the equipment listed was hired or borrowed in the last 12 months, enter 1 for yes and 2 for no.

5.8 SECTION 6: HUNTING

This section seeks to obtain information on the number of households engaged in Uga hunting during last six months, the number of Uga caught and the main method of catching.

1. Did any member of this household engage in UGA hunting during the last 6 months? – Enter 1 for yes and 2 for no. If the response is No, then go to question 5.

2. How many members of your household were normally engaged in UGA hunting?

Ascertain from the respondent, the number of household members engaged in UGA hunting. Probe the specific work they are doing for uga hunting to be able to determine whether such household member is engaged in this activity or not. After determining the total number of household members engaged in uga hunting, ask the total number of female members and the total number of male members. Enter these numbers in the tablet appropriately.

3. What methods your household used for catching UGA -

There may be one or more methods used to catch uga. Simply ask the respondent what method was used and enter 1 for yes and 2 for no in the boxes provided for each method. More than one method might have been used for catching Uga. Therefore, this is a multiple option question. More than one option can be entered as code 1 i.e. response Yes.

- 1 Setting hunting trails
- 2 As you drive on the road
- 3 On the cliffs
- 4 Other (specify)

4. Details of the UGA caught during each of the last 6 months

The reference period of this information is six months viz. February 2021 to July 2021. The information is to be recorded for each of these six months. Capture the number of UGA caught, the main purpose of catching UGA and the proportions sold for each month and enter the information in the Tablet.

<u>Number of UGA caught during...</u> - Enter in the box provided the number of UGA caught for each of six months

<u>Main purpose of catching UGA</u> – There may be differing reasons why the household would have caught UGA. Use the codes and enter them for each month provided.

- 1 Only for home consumption
- 2 Mainly for home consumption and some sale
- 3 Mainly for sale and some home consumption
- 4 Only for sale
- 5 Other

<u>Proportion sold</u> – There is a possibility that the UGA caught by the household was eaten all by the members of the household or partly eaten and partly sold or all were sold. Use the codes and enter them for each month provided.

- 0 None
- 1 about 1/4
- 2 about 1/2

5. Has any member in your household participated in the lupe and peka shooting season in the last three months?

This is a YES / NO response type question. If the household had shot either Lupe or Peka, the response should be treated as Yes. If the response to this question is NO, go to question 7.

6. If yes, how many lupe and peka were shot in the last 3 months?

If the respondent confirms shooting of Lupe or Peka by any of the household members during the last 3 months (ie. May, June, July) ask for number of Lupe / Peka shot the 3 months and enter the information in the Tablet.

7. What are your views on the ban imposed on lupe and peka hunting? -

Ask the respondent what his/her views are on lupe and peka hunting with the options

- 1 it is good for conservation of the species and should continue
- 2 it being a social practice and the ban should be lifted
- 3 Cannot say

Record the response in the Tablet appropriately.

CHARTER 6: DETAILS OF LAND OPERATED BY THE HOUSEHOLD

AGICULTURAL HOLDING:

Definition

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 a corporation, cooperative or government agency. The holding's land may consist of one or more parcels, located in one or more separate areas or in one or more territorial or administrative divisions, providing the parcels share the same production means, such as labour, farm buildings, machinery or draught animals."

The purpose of this section is to describe land holding of the household that the members of the households are engaged in from August 1, 2020 to the date of enumeration. In **MOST CASES** the one household would **HAVE ONE HOLDING**.

However, it is possible for the members of the household to be engaged in more than one holding and in these cases holding must be listed separately.



CAUTION: THIS SECTION WILL ONLY BE COMPLETED FOR HOUSEHOLDS WHOSE AGRICULTURAL ACTIVITY IS ESTABLISHED IN QUESTION 1 OF SECTION 3 (ie. Stated 'yes' as response to question 1 section 3)

Parcel, field and plot: The agricultural holding is divided into parcels, such that 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, or forming part of the holding under a different land tenure type. A parcel may consist of one or more fields or plots adjacent to each other. The concept of a parcel used in the agricultural census may not be consistent with that used in cadastral work. The reference period for collecting data on the parcel is a point of time, usually the census reference day.

A distinction should be made between a parcel, a field and a plot. A field is a piece of land in a parcel separated from the rest of the parcel by easily recognizable demarcation lines, such as paths, cadastral boundaries, fences, waterways or hedges. A field may consist of one or more plots, where a plot is a part or whole of a field on which a specific crop or crop mixture is cultivated, or which is fallow or waiting to be planted. First, we need to establish the difference between holdings, parcels, and plots. See illustrations below:

Illustration 6: A holding with one parcel with four plots

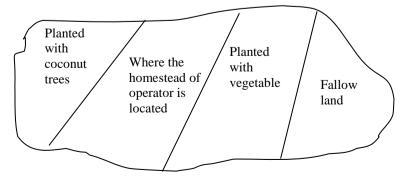


Illustration 7: A holding with two parcels in which one has two plots and the other has one plot.

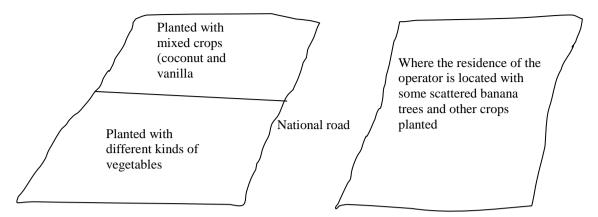
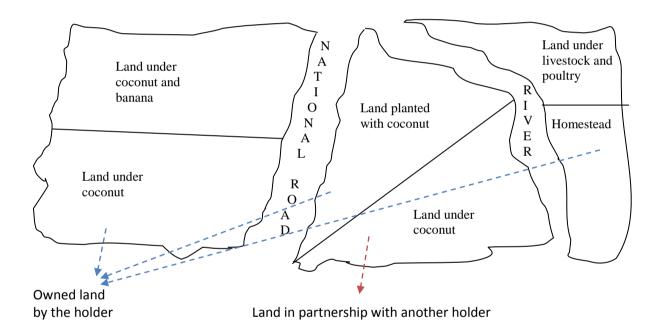


Illustration 8: A holder operates two holdings, one of his own and the other one in partnership with another holder who belongs to another household.



Note: The owned holding 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.

6.1 SECTION 7: LAND OPERATED EXCLUSIVELY BY THE HOUSEHOLD

This Section will find out some important characteristics of the parcel(s) in a holding such as location, total area, land tenure, land use and period of use. This section will also establish that the holding may consist of one or more parcels. The homestead is included also in this section.

PARCEL

Definition

A *parcel* is any piece of land entirely surrounded by other land, water, road, forest, etc., not forming part of this holding. A <u>parcel may consist of one or more fields adjacent to each other.</u>

In other words, a <u>parcel</u> is a <u>contiguous piece of land in a holding</u>. The entire land of the <u>holding may consist of one or more than one parcel</u>.

Parcel No. – This serves as an indicator of how many parcels are there in one holding. Number the parcels consecutively starting from number 1. Note that Parcel 1 is specifically for the Homestead of the operator or holder and should always be enumerated first.

Location of parcel – This refers to the location of the parcel whether located in the same village of holder's residence or in some other village. Hence, be very careful to ask the respondent about the location of each parcel. Write code 1 if the parcel is located Within the Village of residence of the holder and code 2 if the location of the parcel is Outside Village of residence of the holder.

Area Name - If the parcel is located outside the village of residence of holder, please enter here the name of the area (area, village) in which the parcel under reference is located.

Does your HH share this land with other HHs – Generally, a parcel is operated by one household only. But it is possible that some parcels are shared by more than one household, that is, inputs and outputs of crops planted on the parcel are shared by more than one household as per some formal or informal understanding. Occasional picking of some fruits or vegetables by some neighbor or friend or relative will not amount to sharing. If the parcel is shared by some other household also, enter 1 for YES otherwise enter 2 for NO.

How many other HHs operate this land?

Please see wording of this question very carefully. The question seeks information as to how many households other than the one being enumerated operate this parcel of land. So, if a total of 3 households, including this households, share this parcel, the response would be recorded as 2 i.e. two households in addition to this household. If the parcel is operated by this household alone i.e. no other household operates this parcel, the entry would be 0.

Total area of parcel (acre/frac) – The area of the parcel will be measured in whole acres and fractions of acres. Enter the whole acres in Column 6 and the fraction of an acre or acres in Column 7. Use fraction and not decimal in Column 7 to facilitate the recording of the answer of the respondent. This fraction will be converted to decimal during the data processing.

Land tenure – This column pertains to the land tenure of the parcel. **Land tenure** refers to the arrangements or rights under which the holder holds or uses the agricultural land. There are three classifications of land tenure to be considered and use for this column.

- 1 Owned / Family
- 2 Leased-in
- 3 Other (Community)

Enter the appropriate code for each parcel under this column.

Period of use – Refers to the period, this land parcel is being used by this household. Please record in completed number of years.

Soil conservation methods used: This is a new question included into this agricultural census. This question requires a yes/no response for each parcel. Ask the respondent whether any soil conservation method has been used on this particular parcel during period of reference.

Soil testing done:

This is a binary answer type question with two options 'YES' or 'NO'. If the soil testing for this parcel has been done any time in the past, please record the answer as YES (Code 1) otherwise NO (code 2)

Land use type – This column seeks to determine the main land use of the parcel during the reference period. *Land use* 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. There are 7 types of land use provided. These are

- (i) Land under temporary crops
- (ii) Land under permanent crops,
- (iii) Land under mix of permanent and temporary crops,
- (iv) Land under temporary fallow,
- (v) Land under livestock and/ or poultry,
- (vi) Land under homestead,
- (vii)Land under other non-agricultural uses

<u>Land under temporary crops</u> - <u>Temporary crops</u> are crops with a less than one-year growing cycle These crops include field crops like taro, taamu, cassava, yam, vegetable crops like eggplant, beans, cabbage, tomato etc.

How many times was this parcel planted during the 12 months?

As mentioned above, temporary crops take less than one year to complete growing cycle. Therefore, often the same piece of land is planted more than once in one year. For example, after harvesting cabbage, tomatoes are planted on the same piece of land. So, record as many times the parcel has been planted during reference year.

Land under mix of permanent and temporary crops_ If during the reference period, the land has both permanent crops and temporary crops grown on it, it should be classified as land under mix of permanent and temporary crops. Permanent crops stand on a piece of land for a long time. If on the same piece of land, some temporary crop was also sown during the reference year, the land would be categorized as land under mix of permanent and temporary crops.

<u>Land under temporary fallow</u> Fallow land is land that was used for growing crops sometime in the past but currently not used for growing crops.

<u>Land under permanent crops</u>- *Permanent crops* are crops with a more than one-year growing cycle. These are generally trees meant for edible fruits or nuts. Permanent crops may be grown in a

compact plantation or as scattered trees/plants and both should be included. A *compact plantation* includes plants, trees and shrubs planted in a regular and systematic manner, such as in an orchard. Plants, trees or shrubs forming an irregular pattern, but dense enough to be considered an orchard, are also considered a compact plantation. Example includes mango, banana, coconut cocoa, citrus, breadfruit etc.

<u>Land under livestock and poultry-</u> This land is used for raising or tending livestock like cattle, goats, pigs, etc. and poultry like chickens, etc.

<u>Land under homestead</u> – This is the land on which stands the homestead. Record the area under the homestead. Please note that this area is not only the area under the structure but also includes area in the front or back or on sides of the structure where the household has grown some flowers / grass and uses it to enjoy sun or take drinks or play with children etc.

<u>Land under other non-agricultural uses-</u> This is the land that is under buildings (other than homestead), roads and other non-agricultural uses.

7.3 SECTION 8. CROP PRODUCTION

Definition

HOLDING PARCEL

A *holding parcel* is any piece of land entirely surrounded by other land, water, road, forest, etc., 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.

Name of crop

Most of the important crops grown in Niue are to be listed in this column. Specify other crops not listed but grown by the household in this column. There might be a case that the operator or holder will just mention the major crops. See to it that all the crops (whether major or minor) that he had planted/ harvested or raised during the reference period were captured in this section. You can mention the crops listed in this column one by one so that he will not forget any crop. Then probe for some other crops that were grown by the operator but not listed in this column.

This section aims to specify all the crops grown in each holding during the period August 1, 2020 to the day of visit.

Please note that the respondent is to report each vegetable, field crop or other crops that were harvested during August 1 to July 31). Give areas planted. If this is not possible for any reason, give the number of plants. Give only one. Record either area or number of plants.

In this Section crop-wise information is to be furnished. Suppose, a particular crop was sown in three different pieces of land, the information should be consolidated and recorded. Write the names of the crops one below the other. If there are some scattered plants or trees in the plot, enter the name of the plants or trees.

Method of sowing code – For each crop reported in Column 2, enter the appropriate code for the method of sowing. There are three methods of sowing:

Code 1 – If it is single crop

Code 2 – If the crops are sown in mixture

Code 3 – If there are scattered plants or trees.

Area under crop – This is the area on which the crop is sown or planted. In case of mixed crops, the area under the mixture should be appropriately allocated to different crops and only the area allocable to this particular crop should be accounted for. For example, suppose Taro is planted on ½ acre as single crop and in mixture with cabbage on another ½ acre. Suppose in the mixture, area is found to be occupied equally i.e. 50:50, then half of ½ acre should be allocated to Taro. Thus, the total area under Taro should be reported as ¾ acre i.e. (½+¼) acre.

No. of trees/Plants – Ener the estimated number of plants if the farmer or operator is unable to give this information.

Av. Age in years – The intention here is to find to whether it is an old plantation or new one. Age in years to be give only for coconut. Sometimes, old and new plants or plants of different ages exit on a piece of land, in such a situation average age of plants should be reported. Age in years need not be given for scattered coconut plants.

Main Method of irrigation used – This question is meant to elicit information on method of irrigation used. The options provided in the questionnaire are –

- 1-Drum/ Bucket/ Bottle
- 2- Own tank
- 3- Community Tank
- 4- Main Water Supply
- 5- Other Specify
- 6-None

It is quite possible that the crop has been irrigated using more than one source. Here only the main source i.e. the most important source is to be mentioned. If the crop has not been irrigated, the code 6 i.e. none is to be recorded.

Inorganic Fert Used - Inorganic fertilizers are manufactured mineral substances applied to soil or irrigation water, to supply plants with the necessary nutrients. Inquire whether the household used inorganic fertilizers on this crop. Depending upon the reply, enter Code '1' if the answer is Yes; otherwise, enter Code '2'.

Organic Fert Used – The household may had used organic fertilizers on the crop. 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. Inquire from the household's respondent and enter the appropriate code based from his reply. If Yes, enter'1"; otherwise, enter "2".

Agricultural Chemicals Used – Agricultural chemicals are used for controlling or eliminating pests that destroy crops or livestock. These include insecticides, fungicides, fumigants, herbicides, rodenticides and various other materials.

Ask whether the household used any agricultural chemicals on the crop. If Yes, enter '1' in the tablet, if No, enter '2'.

The following are the different types of agricultural chemicals:

Insecticide – such as Actellic Dust, Attack, Banana Dip, Baygon, Conqueror Oil, DC-Tron, Delfin, Icon, Malathion, Orthene, and Vydate

Herbicide – such as Butoxone, Escort, Fusilade, Grazon, Gramoxone, Roundup and Sting
 Fungicide – such as Banana Misting Oil, Benlate, Cusol, Formalin, Foschek, Manzate, Punch and Tilt
 Other – Other Pesticides include Molluscicide such as Slug and Snail Bait or Rodenticides - such as Storm and Talon, Plant Growth Regulators such as Ethrel and Seradix and Sticker such as Agral.

These are only examples to facilitate data collection. There may be many more. Please probe the respondent for full information.

Please enter 1 for YES if a particular chemical has been used otherwise enter 2.

Proportion damaged by wild pigs – The proportion of crops damaged only by wild pigs.

Proportions are estimated by the following

- $1 \frac{1}{4}$
- $2 \frac{1}{2}$
- 3 ¾
- 4 All
- 5 None

Proportion damaged by chickens –Note that these are only proportion of crops damaged by chickens.

Proportions are estimated by the following

- $1 \frac{1}{4}$
- $2 \frac{1}{2}$
- $3 \frac{3}{4}$
- 4 All
- 5 None

Total production – record the quantity of production of this crop. Often, the respondents furnish information in varying units like in KG, numbers, bunches, baskets, sacks etc. depending upon the crop. The production quantity should be recorded as reported by the respondent but the unit of production should be specified appropriately in the next column.

Unit of production - Record the unit in which the said production is reported. Unit codes are -

- 1-KG
- 2-Numbers
- 3-Number of 5 KG Basket
- 4-Number of 20 KG Sack

Proportion Consumed— The intention here is to find out what proportion of the crop harvested was consumed by the household. Give the appropriate code. There are five codes. These are

Code 0 - None

Code 1 - 1/4

Code 2 − ½

Code $3 - \frac{3}{4}$

Code 4 – All

Proportion sold – The intention here is to find out what proportion of the crop harvested was sold. Give the appropriate code. There are five codes. These are

Code 0 – None

Code 1 - 1/4

Code 2 − ½

Code $3 - \frac{3}{4}$ Code 4 - All

Enter the appropriate code based from the reply of the respondents for each harvested crop reported.

Proportion gifted- Generally gift is made to neighbors, friends or relatives. For Gifts, no payment is received; transaction is made without any exchange of money.

6.3 SECTION9: LABOUR INPUTS

This section focuses on the paid non-household member labor inputs on the holding. First enquire whether the household employed any non-household members, age 15 years and older, to work on the holding in the last one month?

If the response is yes, complete the table that is given. If the response is no, enter 2 in the box provided and go to section 10.

1. Did the household employ any non-household member, aged 15 years and above, to work on the holding in the last month? – Enter code 1 for yes and 2 for no in the Tablet. If the answer is no, go to section 10, if the response is yes then fill in the table below.

Age – Ask the complete years as of the last birthday.

Sex - Enter "1" for male or "2" for female, "3" for Others

<u>Number of hours worked during last month</u> – Enter the number of hours worked in the last month. If it is difficult to determine the number of hours worked in the last week ask for the average number of hours worked daily for Monday to Friday. Try and ask for hours worked on Saturday because this could be much more than the other days. Information is to be recorded for each non-household member separately.

Cash Payment - Ask whether there was any payment made in cash, enter 1 for yes or 2 for no. If entry in the column 5 is 2 i.e. paid in kind, then there must be an entry at least in one of the columns 6, or 7, or 8 or in any of the two or in all the three columns.

- <u>Benefits provided</u> Other benefits, enter 1 for yes or 2 for no. This is a multiple answer question; the household may provide one or more non-cash benefits; record your response accordingly Free/subsidized house
- Free meals
- Other benefits

It may also be left blank if there were no other benefits provided.

6.4 SECTION 10: HOUSEHOLD AGRICULTURAL SUPPORT

- **1.** What is the proportion of household's total income derived from agricultural activities? Enter the code corresponding to the answer of the respondent to this question and enter it in the Tablet.
 - 0 None
 - 1 about 1/4
 - 2 about ½
 - 3 about 3/4
 - 4 All
- 2. Did any member of your household receive any financial support directly related to agricultural activities during the last 3 years?

Write 1 if the answer is yes and 2 if the answer is No.

3. What kind of financial support directly related to household's agricultural activities was received by you during the last 3 years? – The loans that should be considered here are the loans availed and used for agricultural activities. Be careful that Loans taken for consumption or social and religious functions are not to be considered here. Based on the reply of the respondent, enter the appropriate in the box provided.

Ask if the loan was received from the following:

- 1 Loan from NIUE Development bank (Kiwibank)
- 3 Government support
- 3 Donor support
- 4- NCOC Grants
- 5-Other (specify:____)

If the response is other, please ask the respondent to specify source of financial support

- 4: Did any member of your household receive any service related to the following activities during the last 12 months?
 - 1 Crop production/plant protection
 - 2 Livestock
 - 3 Fisheries
 - 4 Forestry

6.5 SECTION11: EQUIPMENT USED BY THE HOUSEHOLD FOR AGRICULTURAL ACTIVITIES

This section is about the equipment used in connection with the operation of the household's/operator's agricultural activity. The equipment may either be owned or hired/borrowed.

1. Did your household hire or borrow any of the following equipment/accessory in the last 12 months? How many equipment/accessory does your household own as of the day of visit? — For each type of equipment, ask the number owned and enter under the column "Number owned" as of the day of visit. The equipment must be in working condition. If the household is not using particular equipment, enter 2 against it. If the respondent reports that the household does not own a equipment, press on to ask if it was hired or borrowed in the last 12 months. Enter 1 for yes or 2 for no.

The equipments are as follows:

•	Knapsack	sprayer
---	----------	---------

- Wheelbarrow
- Chainsaw
- Electric Generator
- Brush cutter
- Planting stick (koho)
- Rotary hoe
- Metal husker
- Firearm
- Bush knife
- Axe
- Ride-on/motor mower
- Tractor
- Mist blower
- Motorized blower
- Slasher mower
- Other
- **2.** Did your household hire a bulldozer during the last 12 months? Ask the household if they had hired the bulldozer for clearing land for plantation from August 1, 2020 till the day of visit. If the response is Yes, enter 1. If the respondent says NO, enter 2 in the Tablet and go to Question 4.
- 3. If Yes, how many such hire by duration? -

One hour	Two hours	Three hours	Four Hours	Five Hours and more

Enquire the number of times and duration and enter in the table provided. Example: If the household had hired the bulldozer twice for one hour and once for two hours, then there should be an entry of 2 underneath "One Hour" and an entry of 1 under "Two hours".

If the response is No, enter 2 in the box provided and move to question 4.

4. Did you clear any land through methods slash-and-burn or other during last 12 months?

There are 4 options provided for the method used- Slash and burn, Tractor / Mower, Excavator and others. For each of these options, how much land was cleared using this method in acres and reason for clearing is to be recorded. Record land cleared in acres and fractions. The reasons for clearing codes are -

1 – Bulldozer was not available when required
2 - Paying for bulldozer service is not affordable

3 – Other	(Specify:
5 0 11101	OPCCITY.

Area conversion factors -

40meters x 25meters

80meters x 50meters

1/2acre= 1hr palao ½ size of a rugby field

1 Acre 4047 square meters= 2 hr palao

CHAPTER 9: CONCEPTS, DEFINITIONS, AND SOME EXPLAINATIONS

8.1 Household

One or more persons that live together and have their meals together.

Note that:

- Just one person, living on his own and looking after himself/herself would be considered a household.
- Usually a household will occupy one building but in a few cases two or even more households may share one building. For example, four households living in a apartment building containing four apartments.
- ♦ Alternatively, one household can occupy more than one building —A family will normally <u>not</u> be one household but would be composed of several households.

8.2 Head of Household

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

8.3 Holding

An agricultural holding is an economic unit of agricultural production under single management comprising of all livestock kept an 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.

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 utilized by the holding such as labor, farm buildings or machinery.

8.4 Operator

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, 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.

8.5 Parcel

A holding parcel is any piece of land entirely surrounded by other land, water, road, forest etc., not forming part of this holding. A parcel may consists 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.

8.7 Institution

An institution is an organization providing a specific service or performing some general public function for a group of individuals such a prison, hospital, hotel, church boarding school etc.

8.8 Land Tenure

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

8.10 Land Area

Land area will be measured 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	Meters
1	70	64
3/4	60	55
1/2	50	45
1/4	35	32
1/8	25	23

8.11 Single cropped

A "single cropped" pattern refers to <u>one</u> 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 <u>to be</u> 'single cropped' to the crop that is planted in a regular pattern.

8.12 Mixed Crop

A "mixed crop" pattern refers to two or more crops which are interplanted 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 interplanted in a "mixed cropping"

8.13 Scattered Crop Pattern

A scattered pattern refers to crops/plants which <u>have not</u> 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 by (pattern) planted plot.

8.14 Reference Periods

Agriculture Census 2021

The general reference period is one calendar year i.e. 12 months, However, some of the questions require different time periods so read through the questionnaire carefully.

```
12 month period -1^{st} August 2020 to 31^{st} July 2021 6 month period -1^{st} February 2021 to 31^{st} July 2021 3 month period -1^{st} May 2021 to 31^{st} July 2021
```

Enumeration Period 1st August 2021

CHAPTER 10: LIST OF CODES FOR NIUE AGRICULTURE CENSUS 2019

9.1 Village codes in Niue

SI No.	Name of the village	Code
1	Alofi South	1
2	Alofi North	2
3	Makefu	3
4	Tuapa	4
5	Namukulu	5
6	Hikutavake	6
7	Toi	7
8	Mutalau	8
9	Lakepa	9
10	Liku	10
11	Hakupu	11
12	Vaiea	12
13	Avatele	13
14	Tamakautoga	14

9.2 Codes used in Household composition – Household form

Relationship		
1	Self	
2	Spouse	
3	Son/daughter	
4	Daughter-in-law / Son-in-law	
5	Grandchild	
6	Parent	
7	In-Laws	
8	Niece/ Nephew	
9	Aunt / Uncle	
10	Other relative	
11	Not related	

Sex	
1	Male
2	Female
3	Other

	Ethnicity
1	Niuean
2	Part Niuean
3	Non-Niuean

	Country of residence		
1	Niue		
2	New Zealand		
3	Australia		
4	Samoa		
5	Tonga		
6	Tuvalu		
7	Fiji		
8	Other Pacific Countries (specify)		
9	Other countries (specify)		

	Main activity last week		
1	Employed by Government/Public sector		
2	Employed in Private sector		
3	Self employed		
4	Producing goods/services for family consumption		
5	Un-paid family worker		
6	Voluntary/community work		
7	Domestic duties		
8	Student		
9	Retired/Too old		
10	Unemployed		

Type of employment			
1	Full time		
2	Part time		
3	None		

Holding operator				
1	Manage and work			
2	Work			

9.3 Codes used in holding schedule – Number and type of holding

Holding type			
1	Individual holding		
2	Joint holding		

	Location of parcel			
1	Within the village of residence			
2	Outside the village of residence			

Land tenure			
1	Owned/Family		
2	Leased-in		
3	Lease without pay		

4 Other (community)

Land use			
1	Land under temporary crops ps		
2	Land under permanent cro		
3	Land under mix of permanent and temporary crops		
4	Land under temporary fallow		
5	Land under livestock and/or poultry		
6	Land under homestead		
7	Land under non-agricultural uses		

Period of use			
1	Less than 6 months		
2	6 – 11 months		
3	1 - 5 years		
4	6 - 10 years		
5	11 -15 years		
6	More than 15 Years		

9.3 List of crops

SI No.	Crop name	Crop code	SI No.	Crop name	Crop code
1	Ai/Foto	1	30	Nonu	30
2	Avocado	2	31	Orange	31
3	Banana other	3	32	Ornamental plants	32
4	Bean	4	33	Other NEC	33
5	Breadfruit	5	34	Panadanus	34
6	Cassava	6	35	Papaya	35
7	Chestnut (Ifi)	7	36	Passion fruit	36
8	Chillies	8	37	Pele	37
9	Chinese cabbage	9	38	Pineapple	38
10	Chinese Gooseberry (Asiu)	10	39	Plantain	39
11	Coconut	11	40	Polofua (deadly nightshade)	40
12	Coffee	12	41	Pumpkin	41
13	Corn	13	42	Saladia	42
14	Cucumber	14	43	Sefito	43
15	Dragon fruit	15	44	Silver beet	44
16	Eggplant	16	45	Sinapi	45
17	Fekakai	17	46	Sour sop	46
18	Figs	18	47	Spring onions	47
19	Gooseberry (Manini)	19	48	Star fruit	48
20	Grapefruit	20	49	Sugarcane	49
21	Head cabbage	21	50	Taro	50
22	Kape	22	51	Taro pulaka	51

23	Kava	23	52	Tava	52
24	Kumara	24	53	Tomato	53
25	Lemon	25	54	Vanilla	54
26	Lettuce	26	55	Vi	55
27	Lime	27	56	Watermelon	56
28	Luku (Ferns)	28	57	Yam	57
29	Mango	29	58		58