

MANUAL OF OPERATIONS



2014 Survey on Costs & Returns of CASSAVA PRODUCTION

MARCH 2014



REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY
BUREAU OF AGRICULTURAL STATISTICS

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1. INTRODUCTION

1.1 Rationale

One of the important data sets that should be regularly generated is the costs and returns structure in producing agricultural commodities. This type of data has been gaining more attention because of its varied uses and applications. Its importance can be gleaned from the following major users' perspectives: (i) Farmers need data on costs and returns for their planning and programming activities. They can use these data in selecting the most profitable set of crops to plant during a particular season. Their production planning is also done more effectively as they will have *a-priori* knowledge on the appropriate level of inputs that need to be prepared to sustain the normal growth of their selected crops. (ii) Agricultural planners make extensive use of costs and returns data in designing appropriate programs and projects for the promotion of a particular commodity or the development of the agricultural sector as a whole. With these data, planners are also able to identify the set of incentives and interventions that can induce the wide participation of farmers in a program. (iii) The important policy concerns that require the availability of data on costs and returns are the implementation of appropriate market intervention schemes such as the imposition of ceiling price, setting of floor price, and the establishment of farm price for a commodity that can serve as incentive for farmers either to initiate or expand production. (iv) Other users' perspectives include: (a) The need of *financial institutions* for ascertaining which among the alternative agricultural projects being proposed for financing are financially feasible. This would allow prioritization and selection of projects that have the least credit risks. (b) The need of *insurance company* for determining appropriate insurance premium rates, and (c) The need of *agribusiness players* - for determining the profitability of alternative agricultural ventures.

The various important applications of data on the costs and returns of agricultural production notwithstanding, their generation has not yet been made a regular survey undertaking of the BAS. The reason is primary financial as the very limited regular budget of the Bureau precludes the regular conduct of the costs and returns survey.

Thus, with the funding support from National Rice Program, new benchmark data on cost of production will be generated to serve as input in the annual updating of cost of production.

1.2 Objectives

The general objective of the survey is to generate updated data on costs and returns of producing agricultural commodities. Specifically, the survey aims to:

- establish an up-to-date production costs structure;
- determine indicators of profitability such as gross and net returns, returns above cash cost, returns above variable cost, etc.;
- come up with an updated data sets on average use of material and labor inputs; and,
- generate other related socio-economic variables.

1.3 Reference Period

The reference period will be the production cycle for the last completed harvest within April 2013 to March 2014.

2. SURVEY METHODOLOGY

2.1 Coverage

The domain of the study is the province. The survey will cover six (6) cassava producing provinces. Cassava sample farmers who harvested cassava within the reference period and knowledgeable on the details of cassava farming particularly on the investments, material inputs, labor expenses incurred and the disposition of produce will be the target respondents of the survey. The provinces to be covered are enumerated below:

- | | |
|------------------|------------------|
| 1. Camarines Sur | 4. Basilan |
| 2. Bohol | 5. Sulu |
| 3. Bukidnon | 6. Lanao del Sur |

2.2 Sampling Design, Sample Size and Sample Selection Procedure

A two-stage sampling design is employed with the barangay as the primary sampling unit and the sample farmer as the secondary sampling unit.

Top fifteen (15) cassava producing barangays in the province will serve as sample barangays for the survey. These were identified by the Provincial Operations Center (POCs) using the available information on cassava production. The ranking is based on the barangay's total area harvested for cassava during 2013. During data collection, snowball approach will be applied to identify the sample farmers.

The total number of sample farmers per province is set at seventy-five (75) equally allocated to each sample barangays i.e., five (5) sample farmers for each sample barangay.

During data collection, sample farmers will be located using snowball sampling. The names and addresses of cassava farmers residing in the barangay will be obtained from the office of the barangay captain or any other Key Informants (KIs) in the barangay. This will serve as the data collector's starting point in searching for potential sample farmers.

A set of screening questions will be applied to confirm if those listed actually harvested cassava during the reference period and meet the other criteria for enumeration.

Whether the interviewed farmer is qualified or not, he/she will be asked to identify other cassava farmers in the barangay to be added in the initial list. The search continues, and the farmer who meets the criteria specified in the screening questions qualifies as sample for the survey and will be interviewed using the 2014 CRS for Cassava Production questionnaire. If the interview is successfully carried out (meaning, all the needed information have been supplied), the enumerator will write the household number, full name and residential address of the sample farmer in the List of Sample Farmers. Again, the enumerator can select any farmer from the list as the next potential sample for the survey. The process continues until the required number of samples in the barangay is covered.

2.3 General Guidelines in Conducting the Field Data Collection

- a. Observe the usual protocol of making a courtesy call to the Barangay Captain or any other barangay official in his/her absence. The CDC should introduce himself/herself as the data collector for the 2014 Costs and Returns Survey of Cassava Production, the agency he/she is working for, and the importance of the survey. Remember to always underscore the confidentiality of the information to be gathered from the respondents.
- b. Seek the Official's permission to undertake the survey in the barangay. Further, request assistance in identifying the names and addresses of cassava farmers residing in the barangay. Plan with him/her the best possible route in reaching for the residences of these farmers.
- c. Locate the residences of the identified cassava farmers. Once in the potential sample farmer's residence, make the proper introduction, and administer the following screening questions:

Screening Question	Instruction
1. Are you engaged in cassava farming?	<ul style="list-style-type: none"> • If “yes”, continue asking the next screening questions. • If “no” end the interview and go to the next potential sample farmer.
2. Did you harvest cassava at any time within April 2013- March 2014?	<ul style="list-style-type: none"> • If “yes”, continue asking the next screening questions. • If “no”, end the interview and go to the next potential sample farmer.
3. Was your harvest intercropped with other temporary crops?	<ul style="list-style-type: none"> • If “yes”, end the interview and go to the next potential sample farmer. • If “no”, continue asking the next screening questions.
4. Was 20% or more of your harvest damaged by flood, insects, pests and diseases, etc.?	<ul style="list-style-type: none"> • If “yes”, end the interview and go to the next potential sample farmer. • If “no”, gather the needed details using the questionnaire for CRS-Cassava.
5. Are you a contract grower? 5.1 Were you solely financed in cash?	<ul style="list-style-type: none"> • If yes ask screening question 5.1 • If no, continue interview. • If yes, continue interview. • If “no”, end the interview and go to the next potential sample farmer.

- d. If the interview is successfully carried out, write the two-digit household number, full name and residential address of the sample farmer in the List of Sample Farmers. The household number should be based on the order of successful interviews made, that is, ‘01’ for the first successfully interviewed farmer, ‘02’ for the second, and so on.
- e. Whether the interviewed farmer is qualified or not for the survey, he/she will be asked to identify other cassava farmers in the barangay to be added in the initial list.
- f. Continue looking for potential sample farmers until the required sample size for the barangay is achieved.

- g. If the desired sample size for the barangay is not met, resort to the following courses of action:
 - i. Take the additional samples from among the barangays within the CDC's assigned areas. Inform the field supervisor of the action taken.
 - ii. If the required sample size for the barangay is still not met despite the attempt, inform the field supervisor of the problem. The field supervisor will coordinate with other CDCs/field supervisors to decide in which barangays to get the additional sample farmers to cover. In this case, there will be a corresponding change in the workload distribution among the CDCs.

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Philippine Statistics Authority
(Bureau of Agricultural Statistics)
Ben-Lor Bldg., 1184 Quezon Avenue, Quezon City

Sheet ___ *of* ___

2014 SURVEY ON COSTS AND RETURNS OF CASSAVA PRODUCTION

List of Sample Farmers

Province: _____

Name of Enumerator: _____

Municipality: _____

Date of Interview: _____

Barangay: _____

Name of Field Supervisor: _____

Household No.	Name of Sample Farmer (Surname, First Name)	Residential Address (Street Name and Number, Purok or Sitio)

3. SURVEY QUESTIONNAIRE

3.1 General Instructions

1. Fill up the questionnaire during the interview using a soft lead pencil. Use the margins and back pages for notes and computations.
2. Write entries legibly in big letters or numbers. Wrong entries must be erased neatly and not crossed out.
3. Enter answers to questions in corresponding answer space(s) and/or box(es) on the questionnaire. Be careful in recording numeric answers. Strictly observe the unit of measure and number of decimal places required.
4. For pre-coded answers, encircle or indicate the code(s) corresponding to the answer given by the respondent. For open-ended questions, write the verbatim answer(s) in the appropriate answer space(s). If necessary, probe to get the desired information.
5. Do not leave blank any answer spaces. A blank may otherwise mean that the corresponding question was not asked. If the answer to a question is none or the answer is not applicable, enter a dash (-) in the corresponding answer space(s) or place a horizontal line along the particular question item to show that there is no entry for such item.

3.2 Components of the Questionnaire

The questionnaire on the **2014 Survey on Costs and Returns of Cassava Production** (Annex 2) consists of ten (10) pages and has fifteen (15) blocks namely:

Block A.	Geographic Information
Block B.	Sample Identification
Block C.	Basic Characteristics of the Farm
Block D.	Farm Investments (owned and used in focus parcel)
Block E.	Material Inputs (used in focus parcel)
Block F.	Labor Inputs (in focus parcel)
Block G.	Other Production Costs (in focus parcel)
Block H.	Production and Disposition (in focus parcel)
Block I.	Production Related Information (in focus parcel)
Block J.	Marketing Related Information (in focus parcel)
Block K.	Access to Credit (in focus parcel)
Block L.	Farmer's Participation in Cassava Programs/Projects
Block M.	Other Information (for cassava only)
Block N.	Plans and Recommendations
Block O.	Interview / Survey Particulars

3.3 Instructions in Filling up the Questionnaire

QUESTIONNAIRE CONTROL NUMBER (QC No.)

This is located at the upper right portion of the first page of the questionnaire.

This portion must be filled up after enumeration of all sample farmers in the province was completed. First, questionnaires should be arranged in chronological order by municipality and barangay. Then numbering should start from 01 up to the number of the n^{th} sample household.

Illustration 1


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2014 SURVEY ON COSTS AND RETURNS OF CASSAVA PRODUCTION
Last Completed Harvest Within April 2013 - March 2014

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CONFIDENTIALITY
(Information contained herein shall be kept strictly confidential)

QC No.

BLOCK A. GEOGRAPHIC INFORMATION

This block collects information on the geographic location where the sample farmer resides.

Items 1 - 6. Name of Region, Province, City/Municipality and Barangay - Write legibly on the spaces provided the name of region, province, city/municipality and barangay. Fill up the boxes with the corresponding code/s from the Philippine Standard Geographic Code (PSGC).

Illustration 2 Filling up of Block A

A. GEOGRAPHIC INFORMATION					
1. Region:	REGION V	<table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 20px; text-align: center;">0</td><td style="width: 20px; height: 20px; text-align: center;">5</td></tr></table>	0	5	
0	5				
2. Province:	CAMARINES SUR	<table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 20px; text-align: center;">1</td><td style="width: 20px; height: 20px; text-align: center;">7</td></tr></table>	1	7	
1	7				
3. City/Municipality:	BAAO	<table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 20px; text-align: center;">0</td><td style="width: 20px; height: 20px; text-align: center;">1</td></tr></table>	0	1	
0	1				
4. Barangay:	BAGUMBAYAN	<table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="width: 20px; height: 20px; text-align: center;">0</td><td style="width: 20px; height: 20px; text-align: center;">0</td><td style="width: 20px; height: 20px; text-align: center;">3</td></tr></table>	0	0	3
0	0	3			

BLOCK B. SAMPLE IDENTIFICATION

This block aims to gather the demographic characteristics of the sample farmer.

Item 1. Name of sample farmer/operator –Write the complete name of the sample farmer/operator in capital letters (LAST NAME and FIRST NAME then MIDDLE INITIAL). Opposite the name of the sample farmer/operator are two (2) boxes intended for the **Household Number (HH No.)**.

***sample farmer/operator** - refers to the person who operates the **cassava** farm and takes the managerial responsibility for the day-to-day operation of the farm.*

Item 2. Age (as of last birthday) - Ask the age (in years) of the sample farmer/operator as of his/her last birthday.

Item 3. Sex (encircle code) - Encircle the appropriate code “1” if sample farmer/operator is Male and “2” if Female.

Item 4. Level of education completed - Ask the highest grade or level of education completed by the sample farmer/operator. Examples of correctly recorded responses are; Grade 1, Grade 5, Elementary graduate (Grade 6), First year high school, Third year high school, High School Graduate, Second year college, College graduate, Vocational - 2 years, etc. Fill up the boxes with the corresponding code. Following are the corresponding codes for each level of education:

Level of Education	Code	Level of Education	Code
Elementary level	01	College graduate	06
Elementary graduate	02	Post-graduate	07
High school level	03	Vocational	08
High school graduate	04	Pre-school	09
College level	05	No-schooling	10

Item 5. Main Occupation - Ask the specific occupation of the sample farmer. This refers to the gainful work or activity that provides the major source of income during the reference period. If the main occupation of the sample farmer/operator is crop farmer or livestock or poultry raiser, specify the name of crop/commodity. Example: cassava farmer, swine raiser, poultry raiser, etc. Fill up the boxes with the corresponding code using Philippine Standard Occupational Classification (PSOC).

Illustration 3
Filling up of Block B

B. SAMPLE IDENTIFICATION	
1. Name of sample farmer/operator:	<u>SANTOS, PEDRO A.</u> 0 1
2. Age (as of last birthday):	<u>40</u> years old
3. Sex (<i>encircle code</i>):	1 Male 2 - Female
4. Level of education completed:	<u>3RD YEAR COLLEGE</u> 0 5
5. Main occupation:	<u>CASSAVA FARMING</u> 6 1 1 <i>(gainful work or activity that provides the major source of income)</i>
6. Number of years engaged in cassava farming (<i>as operator</i>):	<u>20</u>
7. Name of respondent:	<u>SANTOS, PEDRO A.</u>
8. Respondent's classification (<i>encircle code</i>):	<ul style="list-style-type: none"> 1 - Household head and farm operator 2 - Farm operator other than household head 3 - Household head but not farm operator 4 - Other knowledgeable household member
9. Contact number:	<u>NONE</u>

Item 6. Number of years engaged in cassava farming (as operator) - Ask the number of years the sample farmer has been engaged in **cassava** farming. Record the number of years (in whole number) in the space provided.

Item 7. Name of Respondent - Write the complete name of the respondent in capital letters (LAST NAME and FIRST NAME then MIDDLE INITIAL). It refers to the person being interviewed preferably the sample farmer. In case the sample farmer is absent, write the complete name of the interviewee who should be knowledgeable about the sample farmer's farm operation.

Item 8. Respondent's classification (encircle code) - Determine the respondent's classification and encircle the appropriate code. Encircle code "1" if the respondent is both the household head and farm operator, "2" if Farm operator other than the household head; "3" if Household head but not farm operator and "4" if Other knowledgeable household member.

Item 9. Contact number - Ask the cell phone number or the telephone number of the sample farmer / respondent and write in the space provided. In case the sample farmer has no contact number, ask for the nearest contact number available where sample farmer can be easily reached.

BLOCK C. BASIC CHARACTERISTICS OF THE FARM

This block collects basic information about the farm(s) operated by the sample farmer.

Item 1. How many farm parcels did you operate? - Ask the number of farm parcels the sample farmer is cultivating (within the province). This includes all parcels devoted to all crops (cassava, corn, palay, sugarcane and other crops) during the reference period (April 2013 - March 2014).

Item 2. What was the total physical area? - Ask the total physical area of the farm parcel/s the sample farmer/operator is cultivating. Record the area in hectare and in four (4) decimal places.

Item 3. Of the total number of farm parcels, how many were planted to cassava? - Ask the total number of parcels planted to cassava.

Item 3.1 Parcel (encircle one focus parcel only) - This is the breakdown of **cassava** farms by parcel. Encircle one (1) focus parcel only with the latest completed harvest during the reference period.

***Parcel** - refers to farm area bounded by a permanent / fixed physical structure (such as road or irrigation canal) or tenure.*

***Focus parcel** - is the particular farm parcel where the last harvest is completed within the reference period and where all relevant information for this study will be collected.*

***Total Area:** Add the physical area of all parcels in hectares and write on the space provided. Record area in four (4) decimal places.*

Item 3.2 Physical area (indicate the physical area in hectare) - Ask the area of each of the **cassava** parcels operated starting with parcel 1 down to the last parcel. Record the area in hectare and in four (4) decimal places.

***Physical area** – is the absolute area or the actual measurement of the parcel regardless of how many times it has been used.*

The criteria for selecting the focus parcel are as follows:

1. The farm parcel with the latest completed harvest.

In case of more than one parcel operated during the reference period, the following illustrations will serve as a guide in determining the focus **cassava** parcel.

Illustration 4

3.1 Parcel (Encircle the focus parcel *)	3.2 Physical Area (indicate the physical area in hectare)		
1	1.0000	→	Feb. 2013 - Jan. 2014
2	0.7500	→	March 2013 - Feb. 2014
3	2.5000	→	Feb. 2013 - Jan. 2014
4	.-----		
5	.-----		
6	.-----		
7	.-----		
8	.-----		
9	.-----		
10	.-----		
Total Area	4.2500		

There are three (3) parcels planted to **cassava** but they have different months of planting and harvesting. Consider only the parcel with the latest completed harvest as the focus parcel. In this case, parcel number 2 was encircled as focus parcel.

Illustration 5

3.1 Parcel (Encircle the focus parcel *)	3.2 Physical Area (indicate the physical area in hectare)		
1	1.0000	→	Jan.2013- Nov.2013
2	0.7500	→	Jan.2013- Nov.2013
3	2.5000	→	Jan.2013- Nov.2013
4	.-----		
5	.-----		
6	.-----		
7	.-----		
8	.-----		
9	.-----		
10	.-----		
Total Area	4.2500		

There are three (3) parcels planted to **cassava**. Months of planting and harvesting were the same for all parcels and have the same status of tenure, variety of planting materials and cropping pattern. Consider only the parcel with the largest physical area. In this case, parcel number 3 was encircled as focus parcel.

Illustration 6

3.1 Parcel (Encircle the focus parcel *)	3.2 Physical Area (indicate the physical area in hectare)	
1	1.0000	→ April 2013
2	0.7500	→ April 2013
3	2.5000	→ April 2013- Jan.2014
4	. _____	
5	. _____	
6	. _____	
7	. _____	
8	. _____	
9	. _____	
10	. _____	
Total Area	4.2500	

There are three (3) parcels planted to **cassava**. They have the same month of planting but only one parcel had completed harvest. Other parcels are not able to complete the cropping cycle for reason like 20% of the crop were stricken or damaged by insects, pests and diseases. Consider only the parcel with completed harvest. In this case, parcel number 3 was encircled as the focus parcel.

Illustration 7

3.1 Parcel (Encircle the focus parcel *)	3.2 Physical Area (indicate the physical area in hectare)	
1	1.2500	→ Jan.-Sept.2013 (planted with Cassava)
2	1.2500	→ Jan.-Sept.2013 (planted with Cassava)
3	. _____	
4	. _____	
5	. _____	
6	. _____	
7	. _____	
8	. _____	
9	. _____	
10	. _____	
Total Area	2.5000	

Two (2) parcels planted to **cassava** qualify as the focus parcel, for they have the same physical area and month harvested. Ask the sample farmer to select one (1) parcel which he/she can give all the desired information needed in the survey. In case he/she cannot give the desired information separately (costs of production), get all the information of the two parcels. During editing, all the costs incurred should be divided by two (2) to consider one (1) parcel only.

2. In case the farm parcels have different tenure status, select the farm parcel with the largest area.

Illustration 8

More than one parcel is planted to **cassava**. Each parcel has different tenurial status but with the same month of planting and harvesting. Consider only the parcel with the largest physical area. In this case, parcel number 3 was encircled as the focus parcel.

3.1 Parcel (Encircle the focus parcel *)	3.2 Physical Area (indicate the physical area in hectare)	
1	1.0000	→ April 2013. - Feb.2014 → Owned
2	0.7500	→ April 2013. - Feb.2014 → Leased/Rented
③	2.5000	→ April 2013. - Feb.2014 → Tenanted
4	-----	
5	-----	
6	-----	
7	-----	
8	-----	
9	-----	
10	-----	
Total Area	4.2500	

Illustration 9

More than one parcel is planted to **cassava**. Each parcel was intercropped with other crops but with the same month of planting and harvesting. Consider only the parcel planted with a permanent crop and cassava. In this case, parcel number 1 was encircled as the focus parcel.

3.1 Parcel (Encircle the focus parcel *)	3.2 Physical Area (indicate the physical area in hectare)	
①	1.0000	→ April 2013- Feb.2014 → Coconut-Cassava
2	0.7500	→ April 2013- Feb.2014 → Cassava-Peanut
3	2.5000	→ April 2013- Feb.2014 → Cassava-Pechay
4	-----	
5	-----	
6	-----	
7	-----	
8	-----	
9	-----	
10	-----	
Total Area	4.2500	

**with the latest completed harvest*

For focus parcel only:

For Item 4 to Item 12, the required information for cassava should be for focus parcel only.

Item 4. What is the tenurial status? - Ask the tenurial status of the focus farm parcel cultivated and indicate the appropriate code in the box or specify if necessary.

CODE	TENURIAL STATUS	DESCRIPTION
1	Fully Owned	Refers to the land operated with a title of ownership and consequently the right to determine the nature and extent of use of the land. It includes lands whose absolute ownership is vested in the holder thru sale, inheritance, etc. A parcel is also considered fully owned if the holder has an absolute deed to the sale of the land, and also those lands of the tillers with Emancipation Patent.
2	Leased/Rented	A parcel of land cultivated by a lessee, that belong to or legally possessed by another, the lessor. The rental payment is in the form of a fixed amount of money and/or produced or both.
3	Tenanted	Refers to the tenure of land wherein the arrangement between the landlord (owner of the land) and the tenant (who cultivate the land) is in the form of share of produce or harvest.
4	Amortized	A parcel of land wherein a sample farmer does not have full legal title over the land being cultivated, but he still pays amortization.
5	Rent Free	Refers to an area operated without title of ownership and without paying rent but with the consent or permission of the landowner.
6	Owner-like Possession other than CLT or CLOA	Refers to the area of the land under conditions that enable a person to operate it as he/she is the owner although he/she does not possess title of ownership. Included are inherited lands without title of ownership and one who is a holder of a land for a period of 30 years or more, or even without the permission of the owner.
7	Held under Certificate of Land Transfer (CLT) or Certificate of Land Ownership Award (CLOA)	These are lands granted under the Agrarian reform program known as the Comprehensive Agrarian Reform Law
8	Others, (specify)	Includes land held as mortgage and all other forms of tenurial status not categorized above.

Mortgage – convey of a real property to a creditor as a security on a loan.

Item 5. What is the usual cropping pattern? - Ask and indicate the usual cropping pattern. Examples: cassava-pechay; lettuce-cassava, etc. Indicate in the box the number of cropping per year regardless of commodity. This will serve as a guide in determining the percent of use of farm investments.

Illustration 10

A farmer planted cassava once a year and his usual cropping pattern is cassava-pechay

Item 5. What is the usual cropping pattern? CASSAVA-PECHAY 2

Note: Cassava is planted once a year, in *Item 5*, cassava should appear once in the cropping pattern.

Item 6. What was the area planted? - Inquire on the area of the focus farm parcel planted to **cassava** and record the response in hectare and in four (4) decimal places on the space provided.

Illustration 11

The focus parcel with an area of 1.0000 hectare was planted with coconut and cassava. If the planting density of cassava averaged 14,000 hills per hectare and the number of hills of cassava planted to focus parcel was 5,000 hills, the area planted of the focus parcel was computed as follow:

$$\begin{aligned} &= \frac{5,000 \cancel{\text{ hills}}}{14,000 \cancel{\text{ hills}} / \text{ ha.}} \\ &= 0.3571 \text{ ha.} \end{aligned}$$

Note: The physical area of the focus parcel can be equal or greater than the area planted.

Item 7. What was the area harvested? - Refers to the total area of the focus farm parcel where the actual harvesting has been done during the reference period. Inquire and indicate the area harvested in hectare and in four (4) decimal places on the space provided.

In many cases, the area harvested is exactly the same as the area planted. If the portion of the area planted to **cassava** was damaged by flood, drought, pest and diseases, etc., the area harvested should be less than the area planted. **However, if the farmer's last completed cropping was damaged by 20% or more, consider the other parcel as the focus parcel, if no other farm parcel planted and harvested to cassava within the reference period, end the interview.**

Thus, the entry in Block C, Item 7 (area harvested) maybe equal or less than the entry in Block C Item 6 (area planted).

Item 8. What month was it planted? - Ask the specific month of planting. Indicate month code in the box provided.

CODE	MONTH
01	January
02	February
03	March
04	April
05	May
06	June
07	July
08	August
09	September
10	October
11	November
12	December

Item 9. What month was it harvested? - Ask the specific month of harvest of the **cassava**. Indicate month code (refer to month code above) in the box provided. If harvesting was done in **staggered manner, record the specific month when the focus parcel was totally harvested.**

Item 10. What was the variety of cassava planted? (specify) - Ask the variety of cassava being cultivated. Specify the **name of the variety of cassava** planted in the space provided.

Item 11. What is/are the use/s of the variety planted? Encircle the appropriate code/s "1" if for **Food**; code "2" if for **Non-food** and code "3" if for **Feeds**.

Item 12. Who/What was/were the source/s of planting materials? (encircle code/s) - Ask the agency/entity/organization where the planting materials planted were obtained and encircle appropriate code(s).

CODE	SOURCE OF PLANTING MATERIALS
1	DA/RFU (Department of Agriculture/Regional Field Unit)
2	Local Government Unit (LGU)
3	Cooperative
4	Co-Farmer
5	Own Produced
6	Others: Specify _____

BLOCK D. FARM INVESTMENTS (owned and used in the focus parcel)

This block captures information on all investment items **owned** and **used/utilized** by the sample farmer in cassava production during the last completed harvest within April 2013 to March 2014. Investment items with less than one (1) year of estimated useful life should be reflected in **Block G, Other Production Costs**.

Note: To facilitate the interview, accomplish this block in horizontal manner. If there are two or more units of similar items acquired on different years/occasions, separate answers by a slash (/).

Farm investments - refer to items that the farmer acquired/owned and used/utilized for the enhancement of farm production.

Column 1. Item - Investment items are enumerated in this column such as farm land, work animals, farm buildings and other structures, farm machinery and transport facilities and farm tools and implements.

1. Farm land owned (hectare) - Refers to the focus farm parcel owned and tilled/operated by the sample farmer/operator during the reference cropping.

2. Work animals - Animals used in farm works. Examples are carabao, cattle and horse.

2.01 Carabao - Popularly known as water buffalo that originated from India, used as draft animal and also suitable for milk production.

2.02 Cattle - general term for the members of the *Bovidae family*, wild (*Bibos spp.*) or domestic (*Bos spp.*). Domestic cattle have two species: *Bos taurus* or European breeds and *Bos indicus* or Zebu breeds or oriental domestic cattle.

2.03 Horse - hooved animals belonging to the family *Equidae*.

3. Farm buildings and other structures - Structures with one or more rooms or covered by roof built for agricultural purposes.

3.01 Farm house - a structure which serves as farmer's resting place or shed and serves as storage for his farm inputs, outputs and implements. This is usually made of bamboo, wood and nipa.

3.02 Warehouse/storage - a concrete structure mainly used for storage of farm inputs, farm products and other farm equipment.

3.03 Others (specify) - any other structure present in the farm which provides major purposes for the focus parcel not previously mentioned.

4. Farm machinery and transport facilities – machinery and transport facilities which are mainly used for the preparation, maintenance, irrigation, harvesting and other farm activities.

In some cases, the sample farmer buys an engine separately intended for his/her tractor and irrigation pump. During the recording, itemize the machinery. Examples are: two-wheel tractor with engine, two-wheel tractor without engine, four-wheel tractor with engine, four-wheel tractor without engine, irrigation pump with engine and irrigation pump without engine.

4.01 Two-wheel tractor - a hand tractor with two-wheeled apparatus controlled through the handle bars by walking operator.

4.02 Four-wheel tractor - is an engine-powered vehicle used to draw other vehicles or equipment as plow or harrow.

4.03 Irrigation pump - a system of irrigation in which water is pumped from the source of supply.

4.04 Farm Vehicles- are mechanized transport facilities used in the farm operation.

4.05 Trailer/cart- a vehicle with two or four wheels used for carrying loads in the farm operation.

4.06 Others (specify) - other farm machinery and transport facilities used in the farm not previously mentioned.

5. Farm tools and implements - Farm tools and implements being used/utilized by the sample farmer in the production of cassava during the reference period.

5.01 Plow (araro) - an animal drawn implement with a blade used to cut, lift and turn over soil.

5.02 Harrow (suyod) - a cultivating implement set with spikes spring teeth or disks and used primarily for pulverizing the soil.

5.03 Sprayer (pambomba) - a device such as atomizer used in applying pesticides, fungicides, molluscicides and herbicides to crops.

5.04 Weeder (pang-alis ng damo) - any mechanical device for eliminating weeds.

5.05 Grass Cutter - is a machine use in cutting grass or lawn mower.

5.06 Shovel/Spade (pala) - a broad blade/heavy flat-bladed long-handled tool used for digging.

5.07 Bolo (itak) - a large single-edged knife used for cutting.

5.08 Hoe (asarol) - a tool with a thin blade sets across the end of a long handle, used for weeding, loosening soil, etc.

5.09 Sled (paragos) - rural transport equipment with wooden runners.

5.10 Spading fork (tinidor) - a hand tool with flat tines for turning soil.

5.11 Post hole digger (panghukay) - it is a tool made of flat or round bars with sharp end for digging.

5.12 Yoke (singkaw) – a wooden frame or bar with loops or bows used for harnessing together a pair of oxen.

5.13 Rake (kalaykay) - any long-handled tool with teeth or prongs at one end; used for gathering loose grass, hay, leaves, etc., for smoothing broken grounds.

5.14 Weighing scale (timbangan) - a device for measuring the weight of an object.

5.15 Crates – a container such as a slatted wooden case or plastic case used for storing or shipping harvested produce.

5.16 Others (specify) - refer to other farm tools and implements used in the farm not previously mentioned.

Illustration 12

D. FARM INVESTMENTS (owned and used in focus parcel)						
Item	How many units were used? (Area/Number)	What year was it acquired/constructed?	How much was the cost of acquisition / construction? (Pesos)	How much was spent for minor repair/improvement? (Pesos)	How many more years will it be useful/serviceable? (from the date of interview)	What was its percentage of use in the focus parcel?
(1)	(2)	(3)	(4)	(5)	(6)	(7)
4. Farm machinery and transport facilities						
4.01 Two-wheel tractor	1 / 1	2005 / 2009	12,000.00 / 18,000.00	3,000 / --	15 / 15	50% / 50%
4.06 Others (specify: 1) Irrigation pump w/ engine	1	2007	15,000.00	2,500.00	10	10%
2) Engine	1	2006	10,000.00	2,500.00	10	10%
5. Farm tools and implements						
5.02 Harrow (suyod)	2	2010	2,000.00	. ___	5	25%
5.04 Weeder (pang-alis ng damo)	2	2012	7,800.00	. ___	5	25%
5.07 Bolo (itak)	1 / 1 / 1	2010 / 2012 / 2013	150.00 / 180.00 / 250.00	. ___	3 / 4 / 5	25% / 50% / 50%

Column 2. How many units were used? (Area/Number) - Refers to the number of investment items owned and used/utilized by the sample farmer in the focus parcel. Area refers to the size in hectare(s) of cassava farm owned by the farmer. This should be equal to the area planted (Block C, Item 6). Indicate area in four (4) decimal places.

Column 3. What year was it acquired/constructed? - Refers to the year a unit was acquired/constructed. Year acquired should be four (4)-digit number e.g. 1985, 1995, 2003, etc.

Column 4. How much was the cost of acquisition/construction?(Pesos) - Refers to the value of investment items at the time it was acquired/constructed. Value of investment item should be in two (2) decimal places.

Note: If inherited/given/transfer of ownership, ask the market value of the investment at the time it was acquired (inherited).

Column 5. How much was spent for minor repair/improvement?(Pesos) - Refers to the expenses incurred for **minor repairs and improvements** made on the reported farm investments during the last completed cropping period.

Column 6. How many years will it be useful/serviceable? (From the date of interview) - Refers to the estimated number of years (in whole number) the investment item is found to be useful/serviceable.

Column 7. What was its percentage of use in the focus parcel? - Indicate the usage of the reported farm investment for farm operations during the reference period in percent (%). If there are more than one unit of any single item, get the percent of use of each item and separate answers by a slash (/).

*Explain to the respondent what it means and what is the intention of the question item. An investment item may be used for many purposes or different production processes on different crops. In order to reflect a closer estimate of depreciation and repairs/improvements, there is a need to get some estimation as to the extent of use of such investment item for **cassava** which is the subject of the survey questionnaire.*

Illustration13

A farmer has only one (1) parcel planted to **cassava**. That parcel is qualified as focus parcel. Now, what is the percent of use of farm machinery and equipment owned by the farmer and used in that parcel?

- The quick response of the farmer is 100 percent.

Illustration 14

Example 1

A farmer operates three (3) parcels of equal sizes. Two (2) parcels were planted to other crops and the other parcel planted to cassava. However, the hand tractor was used in all parcels. Now, what is the percent of use of the hand tractor in the focus parcel that qualifies to our survey?

- The quick response of the farmer may be 1/3 or 33 percent.

Example 2

A farmer operated three (3) parcels of different farm size and crops planted. What is the percent of use of the hand tractor in the focus parcel?

The possible response of the farmer should be closer to 2/3.5 or 57 percent.

(focus) Parcel	①	2.0000 hectares	Planted to cassava (Feb2013-Dec2013)
Parcel	2	1.0000 hectare	Planted to tomato (Jan2013-April2013)
Parcel	3	<u>0.5000 hectare</u>	Planted to corn (Feb2013-May2013)
		3.5000 hectares	

Illustration 15

A farmer has 2 parcels, both planted with cassava. If the sizes of parcels are as follows:

	Size
Parcel ①	2.0000 hectares
Parcel 2	<u>1.5000</u> hectare
	3.5000 hectares

Parcel 1 is encircled meaning that it is the focus parcel qualified for the survey. If the hand tractor is used in both parcel. "What is the percent of use in the focus parcel?" the response of the farmer should be closer to $2/3.5 = 0.57$ or 57 percent.

Illustration 16

The sample farmer owned a two-wheel tractor. He used the tractor in his four (4) parcels planted to **cassava** with absolute areas of 0.50 hectare; 0.75 hectare; 1.50 hectares and 0.75 hectare. In addition, his tractor was also rented by his co-farmers with an absolute area of 4.50 hectares.

Parcel 1	0.50 hectare
Parcel 2	0.75 hectare
Parcel 3	1.50 hectares
Focus parcel Parcel ④	0.75 hectare
Co-farmers parcels	<u>4.50 hectares</u>
	8.00 hectares

Parcel 4 is encircled as the focus parcel qualified for the survey. If the two-wheel tractor is used in all of the parcels cited above, apportion the use of the tractor considering the area of each parcel. The percentage of use of the two-wheel tractor in the focus parcel 4, should be $= 0.75 / 8 \times 100 = 9.38\%$

BLOCK E. MATERIAL INPUTS (used in the focus parcel)

This block aims to gather information on the usage and costs of material inputs of the sample farmer in his **cassava** production during the last completed cropping period. Gather all the required information for each applicable item one by one in horizontal manner.

Note: To facilitate the interview, accomplish this block in horizontal manner. If there are two or more units of similar item acquired from different sources or different mode of acquisitions, separate answers by a slash (/).

Column 1. Item - listed under this column are the material inputs used in **cassava** production.

1. Planting Materials (seed pieces/cuttings) - refer to the type of planting material used.

2. Organic Fertilizer (specify product name and N-P-K) - refers to any product whose basic ingredients are of plant and/or animal origin that has been decomposed biologically, chemically, or through any process that makes the original materials no longer recognizable or to be soil-like in texture, which can supply nutrients to plants. Examples are: azolla, sagana 100, guano, bio-N, vermicasts, etc. Record in the space provided the **product name and NPK content** of the organic fertilizer used in the focus parcel.

3. Inorganic Fertilizer (specify product name and N-P-K) - refers to any fertilizer product whose properties are determined predominantly by its content of mineral matter or synthetic chemical compounds. Also, any chemical compound, in liquid or solid form, which contains concentrated amounts of at least one among: nitrogen (N), phosphorous (P) and potassium (K). Ask what inorganic fertilizer was applied in the cassava focus parcel and encircle the corresponding code. For others (specify) ask the product name and N-P-K content of the fertilizer.

Enumerated in the questionnaire are the following:

- 3.01** Urea (45-0-0)
- 3.02** Urea (46-0-0)
- 3.03** Ammonium Sulfate (21-0-0)
- 3.04** Ammonium Phosphate (16-20-0)
- 3.05** Complete (12-12-12)
- 3.06** Complete (14-14-14)
- 3.07** Complete (16-16-16)
- 3.08** Zinc Sulfate (Zinc 21%)
- 3.09** Muriate of Potash (0-0-60)

3.10 Others (specify product name and N-P-K) - refers to other type/s of inorganic fertilizers used by the farmer. Specify the concentrated amounts of nitrogen (N), phosphorous (P) and potassium (K).

4. Soil Ameliorants (specify product name) - refer to certain elements placed or mixed into the soil to replenish depleted soil nutrients for better plant growth. Ask the farmer if he applied soil ameliorants in the focus parcel during the reference period. If so, write down in the space provided the product name of the soil ameliorants.

5. Pesticides (specify product name) - refer to chemicals used to control/eradicate insects, pests and weeds. **Pesticides of original form maybe in solid or liquid.** Record the **product name** of the pesticides used in the focus parcel.

5.1 Herbicides/Weedicides - refer to a compound used to control weeds or unwanted plants. In terms of timing of application herbicides are broadly classified as pre-emergence and post-emergence herbicides, referring to the stage of growth of weeds. Ask if the farmer applied herbicides/ weedicides and if so, specify the product name and write down in the space provided. The following examples are product names and the formulation types are emulsifiable concentrate (EC), soluble concentrate (SC) and wettable powder (WP). Examples are: 2,4-d Amne, 40 EC; Access Atrazine WP, and Activo 22 SC.

5.2 Insecticides - a compound used to control insect pests. Ask if the farmer applied insecticides and if so, specify the name and write down in the space provided. Examples are: ABATE SG; 5-STAR GENERAL EC; ACETAM 75 SP and AGRI-MEK 1.8 EC.

5.3 Fungicides - refer to a compound used to control fungus or fungal organisms. Ask if the farmer applied fungicides. If so, specify and write down in the space provided. Examples are: AGROMYL 50 WP; ALIETTE 80 WP; and AMISTAR 25 SC

5.4 Rodenticides - refer to chemical used to control pests like rodents or rats. Ask if the farmer applied rodenticides. If so, specify and write down in the space provided. Example is racumin.

5.5 Organic Pesticides (specify product name) – are botanical extracts/spray, they are extracted from selected plants which underwent some processing. Some of these plants are Amarillo, jetropa, kakawate and neem tree.

Columns 2 to 13 - are to be accomplished according to the type of material inputs listed in Column 1. All entries should refer to the last completed harvest within April 2013 to March 2014.

Column 2. What was the mode of acquisition? (enter code/s) - Refers to the mode of acquisition for material input used. Indicate the code of the item whether purchased, own produced or received. The following are the coded sources of inputs.

CODE	ITEM
	Purchased
1.1	Self-financed (paid in cash)
1.2	Self-financed (paid in kind)
1.3	Discounted
2.1	Own produced
	Received
3.1	From government (DA/RFU, LGU, etc.)
3.2	From private individual / organization (Trader, Co-farmer, Cooperative, etc.)

Column 3. If purchased and discounted, what was the discount rate? - If the entry in Column 2 is **purchased** and the code is 1.3, ask for the discount rate of the material input used. Write the discount rate in percent and in two (2) decimal places.

For example:

The market price of one (1) bag of fertilizer is P1,000. A farmer has a discount coupon. He paid only P800 for one (1) bag of fertilizer. Hence, the discount rate (r) would be:

$$r = \left[1 - \left(\frac{800}{1,000} \right) \right] \times 100$$

$$r = 20.00\%$$

Column 4. How many units were used/applied? - Ask the exact number of units of planting materials (seed pieces/cuttings), fertilizers, soil ameliorants and pesticides used/applied during the last completed cropping. Write in two (2) decimal places, for planting materials record in whole number.

Column 5. What was the name of local unit? – For fertilizer, soil ameliorants and pesticides, write down the unit of measure (**in its original form**) of the material input used (e.g. bottle, pack, sack, ganta, etc.). For planting materials, local unit should be in “pieces”.

Column 6. If solid input, what was the weight of one local unit in kilogram? - Determine the equivalent weight in kilogram per solid input reported in Column 5. Write in three (3) decimal places.

Column 7. If liquid input, what was the volume of one local unit in liter? - Determine the equivalent volume in liter per liquid material input reported in Column 5. Write in three (3) decimal places.

Column 8. If purchased, what was the price of one local unit? (Pesos) - Ask the price of one local unit (Column 5) and record in two (2) decimal places. **If discounted, ask and record the prevailing market price.** From the preceding example, the market price is the price that should be paid by the farmer without discount.

Column 9. If not purchased, what was the prevailing price in the locality?(Pesos) - Ask for the prevailing price of one local unit in the locality and record in two (2) decimal places.

Solid/Granule Inputs

Column 10. What was the total quantity in kilogram? - For each of the total inputs in solid/granule form, i.e. **fertilizers, soil ameliorants and pesticides**, determine the quantity in standard unit (**kilogram**). This is computed by multiplying the number of units used (Column 4) by the weight of one local unit in kilogram (Column 6).

Column 11. How much was the total value (Pesos)? - For the **fertilizer, soil ameliorants and pesticides** in column 10, determine the total value of each input by multiplying the number of units used (Column 4) by the price of one local unit (Column 8) if purchased, and by prevailing price in the locality (Column 9) if not purchased. For **Planting materials (seed pieces/cuttings)**, record the **total value** of the planting materials planted (Column 4).

Liquid Inputs

Column 12. What was the total volume in liter? - For each of the total inputs in liquid form, i.e. fertilizers, soil ameliorants and pesticides, determine the total volume in **liter**. This is computed by multiplying the number of units used (Column 4) by the volume of one local unit in liter (Column 7).

Column 13. How much was the total value (Pesos)? - For the same item included in column 12, determine the total value of each input by multiplying the number of units used (Column 4) by the price of one local unit (Column 8) if purchased, and by prevailing price in the locality (Column 9) if not purchased.

Sample Computation of Material Inputs

E. MATERIAL INPUTS (used in the focus parcel)												
Item	What is the mode of acquisition? (enter code/s)	If purchased and discounted, what is the discount rate?	How many units were used/ applied?	What is the name of local unit?	If solid input, what is the weight of one local unit in kilogram?	If liquid input, what is the volume of one local unit in liter?	If purchased, what is the price of one local unit? (Pesos)	If not purchased, what is the prevailing price in the locality? (Pesos)	Solid/Granule Inputs		Liquid Inputs	
									What is the total quantity in kilogram?	How much is the total value? (Pesos)	What is the total volume in liter?	How much is the total value? (Pesos)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) =(4) x (6)	(11) =(4) x (8) or (9)	(12) =(4) x (7)	(13) =(4) x (8) or (9)
5. Pesticides												
(specify product name)												
5.1 Herbicides / Weedicides												
1) Power	1.1	---	0.50	bottle	---	0.500	1025.00	---	---	---	0.250	512.50

CODE FOR COLUMN 2: Purchased
1.1 - self financed (paid in cash)

Illustration 17

Quantity purchased = 1 bottle = 500 milliliters

Quantity used = **0.50 bottle**

Price per bottle = **P1,025.00**

1. Conversion from milliliters (ml) to liter (L)

1 liter = 1, 000 milliliters

$$1 \text{ bottle} = 500 \cancel{\text{ml}} \left(\frac{1\text{L}}{1,000\cancel{\text{ml}}} \right) = 0.500 \text{ L}$$

Volume of one local unit (bottle) in liter = 0.500 liter

2. Total quantity used in liters (TQ_L)

TQ_L = Quantity used (Col 4) x Volume per local unit in liter (Col 7)

$$TQ_L = (0.50 \times 0.500) = 0.250\text{L}$$

3. Total value (TP_L)

TP_L = Quantity used (Col 4) x Price per local unit in pesos (Col 8)

$$TP_L = (0.50 \times 1,025.00)$$

= P 512.50

Illustration 18

Quantity purchased = 1.000 bottle of Karate @0.50 liter/bottle
Quantity used in the focus parcel = 0.500 bottle
Price per bottle = P320.00

E. MATERIAL INPUTS (used in the focus parcel)							
Item	What is the mode of acquisition? (enter code/s)	How many units were used/ applied?	What is the name of local unit?	If liquid input, what is the volume of one local unit in liter?	If purchased, what is the price of one local unit? (Pesos)	Liquid Inputs	
						What is the total volume in liter?	How much is the total value? (Pesos)
(1)	(2)	(4)	(5)	(7)	(8)	(12) =(4) x (7)	(13) =(4) x (8) or (9)
5.2 Insecticides							
1) Karate	1.1	0.50	bottle	0.500	320.00	0.250	160.00

CODE FOR COLUMN 2: Purchased
 1.1 - self financed (paid in cash)

Illustration 19

Quantity purchased = 3 sacks of Urea @ 50 kilograms/sack
Quantity used = 2.750 sacks
Price per sack = P1, 050.00

E. MATERIAL INPUTS (used in focus parcel)								
Item	What was the mode of acquisition? (enter code/s)	How many units were used/ applied?	What was the name of local unit?	If solid input, what was the weight of one local unit in kilogram?	If liquid input, what was the volume of one local unit in liter?	If purchased, what was the price of one local unit? (Pesos)	Solid/Granule Inputs	
							What was the total quantity in kilogram?	How much was the total value? (Pesos)
(1)	(2)	(4)	(5)	(6)	(7)	(8)	(10) =(4) x (6)	(11) =(4) x (8) or (9)
3. Inorganic Fertilizer								
3.02 Urea (46-0-0)	1.1	2.750	sack	50.000		1,050.00	137.500	2,887.50

CODE FOR COLUMN 2: Purchased
 1.1 - self financed (paid in cash)
 1.2 - self financed (paid in kind)
 1.3 - discounted

Produced
 2.1 Own Produced

BLOCK F. LABOR INPUTS (in focus parcel)

This block aims to gather information pertaining to labor utilization in the production of **cassava** during the reference period. The sources of labor are operator, family, exchange labor (bayanihan) and hired labor. The latter may include permanent worker, contract labor or “pakyaw” system wherein the performance of multiple farming activities is contracted for a certain amount. Since data items vary depending on the farm activity, the enumerator should get the required details of one activity (or one row) at a time.

FARM ACTIVITIES IN CASSAVA PRODUCTION:

Column 1. Farm activity – Listed in this column are the different activities involve in **cassava** production. These include land preparation, planting, care of crops, harvesting, hauling of produce, sorting, etc.

- 1. Land Preparation** - is the process of preparing the soil through primary, secondary or general tilling.

Plowing - refers to the initial tillage operations in the field to break the soil surface using a plow. Type of labor use in plowing can be man and animal, and man and machine (two-wheel tractor and/or four-wheel tractor).

1.01 Plowing (Man- animal)

1.02 Plowing (Man- machine, 2 wheel)

1.03 Plowing (Man- machine, 4 wheel)

Rotavating - refers to general tillage which combines primary and secondary tillage in open operation. It cuts the soil to a depth of 6 inches. Type of labor use in rotavating is man and machine (two-wheel tractor and or four-wheel tractor).

1.04 Rotavating (Man-machine, 2 wheel)

1.05 Rotavating (Man-machine, 4 wheel)

Harrowing - refers to break up clods and lumps of soil and to provide a finer finish, a good tilt or soil structure that is suitable for seeding and planting operations. Type of labor used can be man and animal, and man and machine (two-wheel and/or four-wheel tractor).

1.06 Harrowing (Man-animal)

1.07 Harrowing (Man-machine, 2 wheel)

1.08 Harrowing (Man-machine, 4 wheel)

Furrowing - turning the bottom of the soil and throwing a ribbon of soil into one side leaving a trench on the soil using moldboard plow. Type of labor used can be man and animal, and man and machine (two-wheel and/or four-wheel tractor).

1.09 Furrowing (Man-animal)

1.10 Furrowing (Man-machine, 2 wheel)

1.11 Furrowing (Man-machine, 4 wheel)

2. **Preparation of planting materials** – is the selection, piling and cutting of cassava stalks into seed pieces (cuttings).
3. **Hauling of planting materials** – refers to the transfer of seed pieces (cuttings) to the field.
4. **Planting** – refers to the direct planting of seed pieces (cuttings) in straight rows.
5. **Replanting** - refers to planting of seeds/seedlings to serve as replacement for damaged cassava plant.
6. **Care of Crops** – refers to process of providing plants the conditions that will make them free of weeds, pests and diseases.

Fertilizer application - application of soil and plant nutrient to the proper places in the soil like urea, ammonium phosphate, complete fertilizer, etc.

6.01 Fertilizer application (basal)

6.02 Fertilizer application (side dressing)

6.03 Fertilizer application (top dressing)

6.04 Soil ameliorant application – application of soil nutrient to enhance the condition of the soil.

6.05 Weeding (manual) - uprooting or removing weeds by hands.

6.06 Weeding (chemical spraying) - removal of weeds or unwanted grasses growing among cultivated plants by spraying herbicides/weedicides between the rows of the plants or on dikes.

6.07 Off-barring (man-animal) – refers to plowing between rows of plants with furrow slice thrown back-to-back to the center between plant rows.

6.08 Hilling-up (man-animal) - refers to plowing between rows of plants with the furrow slice thrown toward the base of the plant.

6.09 Chemical application (other than weedicide) - application of chemicals to protect the plants from insects, pests and diseases.

6.10 Irrigating - – refers to the process of conveying water artificially to farm land to enhance yield.

6.11 Pruning - To remove or cut out as superfluous.

7.01 Harvesting (man) - is the process of gathering mature crops from the fields by hands.

7.02 Harvesting (man-machine) – is the process of gathering mature crops from the fields using man and machine labor.

8. Sorting - refers to the grouping of the produce according to common physical characteristics e.g. quality, class, kind or size.

Hauling – bringing the produce to the place where it will be temporarily stocked.

9.01 Hauling of produce (man)

9.02 Hauling of produce (man-animal)

9.03 Hauling of produce (man-machine)

10. Others (specify) – indicate other activities that are not listed or mentioned above.

Columns 2 to 3. Operator labor - Refers to the production of activities performed by the farmer operator during the reference period.

Column 2. How many days were spent? - Ask the total number of days of work per activity and record in whole number.

Column 3. How many hours per day were spent? - Ask the average number of hours of work rendered by the operator and record in one (1) decimal place. To determine the average, add the total numbers of hours worked and divide the sum by the number of working days.

Columns 4 to 6. Family Labor - This refers to the production activities performed by the family members of the sample farmer-operator.

Column 4. How many persons worked in the farm? - ask for the total number of family members who performed the particular farm operation.

Column 5. On the average, how many days did they work? - Indicate the average number of days each person worked in one (1) decimal place on the space provided. This can be derived by adding the number of days worked/rendered by each family member and divide the sum by the number of observations.

Column 6. On the average, how many hours per day were spent? - Indicate the average number of hours spent working per day. To determine the average, add the total number of hours worked per person and divide the sum by the number of working days. Record in one (1) decimal place on the space provided.

Columns 7 to 9. Exchange labor (Bayanihan) – Handle the interview, computations and recording the way family labor was treated. *Bayanihan* is a custom of farmers to help each other in peak periods by working on each other's farm without any pay.

Column 10. How much was the prevailing wage rate per day in the locality? (Pesos) - Ask for the prevailing wage rate per day in the locality for (each of the items in Column 1) the activities performed by unpaid workers. This information will be needed in the computation of imputed value of operator, family and exchange labor. Record in two (2) decimal places on the space provided.

Columns 11 to 16. Hired labor - These are the production activities performed by the hired laborers including the payment of services rendered. **For Columns 11 to 13, handle the interview, computations and recording the way the family labor was treated.**

Column 14. Total mandays - Conceptually, one manday is equivalent to eight (8) hours of work. Compute for the total mandays (TMD) of hired labor by multiplying Column 11, Column 12 and Column 13, and divide the result by eight (8). Record in two (2) decimal places on the space provided.

$$Md = \frac{Np \times Nd \times Nh}{8}$$

Where:

Md = Total Mandays (Column 14)

Np = Number of persons (Column 11)

Nd = Number of days (Column 12)

Nh = Number of hours worked per day (Column 13)

Column 15. How much was paid in cash? (Pesos) - If laborers were paid in cash, ask for the total amount paid to laborers per activity performed. Cash payment refers to the actual amount of cash paid according to the agreed basis of payment. Record in two (2) decimal places on the space provided.

Payment in Cash: Example

Farm activity:	Weeding
No. of persons:	1
No. of days:	10
No. of hours worked per day:	6.0
Prevailing wage rate:	P120.00

Solution:

$$Md = \frac{Np \times Nd \times Nh}{8}$$

$$Md = \frac{1 \times 10 \times 6}{8}$$

$$= 7.50 \text{ mandays}$$

$$\text{Payment in Cash} = Md \times \text{prevailing wage rate}$$

$$= 7.50 \times P120.00 = P900.00$$

Illustration 20
Overseer's wage paid in kind

An overseer was hired by the operator. He performed farm activities other than being an overseer. He was paid 10.0 percent of the total harvest (250 sacks at 60 kilogram per sack) for being an overseer and for the farm activities he performed.

1. Ask the farm activities performed by overseer and the corresponding mandays:

Example:

	No. of days spent	No. of hours per day	Mandays
Care of Crops			
Planting	8	8.0	8.00
Fertilizer application	5	8.0	5.00
Weeding	8	6.0	6.00
Chemical application	3	8.0	3.00
Irrigating	6	8.0	6.00

2. Ask for the prevailing wage rate per day for each farm activity and multiply it by the number of mandays to get the value of labor of overseer.

Example:

	Mandays		Prevailing wage per day	Value of labor (pesos)
Care of Crops				
Planting	8.00	x	150.00	= 1,200.00
Fertilizer application	5.00	x	160.00	= 800.00
Weeding	6.00	x	200.00	= 1,200.00
Chemical application	3.00	x	180.00	= 540.00
Irrigating	6.00	x	180.00	= 1,080.00
				----- 4,820.00

Note: The above information should be filled up under hired labor paid in kind.

3. Compute for the value of produce paid to overseer and subtract the value of his labor in performing the above farm activities. The difference is the payment for his being overseer.

Example:

10% of produce found in Block H.
 (2.03 Other laborers' share) = 25 sacks at 60 kilograms/sack
 Price per local unit = 300.00/sack
 Value of produce paid to overseer = 25 sacks x 300.00/sack
 = P 7,500.00

If the value of labor rendered for farm activities other than being overseer is P4,820.00, when he received 25 sacks worth P7,500.00, the difference is P2,680.00.

4. The difference of P2,680.00 should be recorded in Block G item 2, Caretaker/Overseer's wages under non-cash payment.

Illustration 21 **Overseer's wage paid in cash**

Some farm activities were performed by the overseer but the payment for performing those farm activities was already inclusive on his monthly salary.

1. Fill up the portions for Hired Labor in Block F corresponding to the farm activities performed by the overseer.

F. LABOR INPUTS (in focus parcel)							
Farm Activity	Hired Labor						How much was the total food cost incurred? (Pesos)
	How many persons worked in the farm?	On the average ...		Total Mandays	Total payment		
		how many days did they work?	how many hours per day were spent?		How much was paid in Cash? (Pesos)	How much was paid in Kind? (Pesos)	
(1)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
6.05 Weeding (chemical spraying)	1	3	6	2.25	450.00	. _ _	. _ _
6.06 Hilling-up (man-animal)	1	6	6	4.50	675.00	. _ _	. _ _
6.08 Irrigating	1	6	8	6.00	1,050.00	. _ _	. _ _
Total					2,175.00		

2. Deduct the value of labor spent by overseer in other farm activities on his total salary received. The remaining amount is his salary as an overseer.

If the Overseer's Monthly salary = P1,500.00/month, then P 15,000.00 will be the overseer's total salary for ten (10) months from planting to harvesting.

The difference of P 15,000.00 and P2,175.00 is P 12,825.00. This amount should be recorded in Block G item 2, Caretaker/ Overseer's wages under cash payment.

G. OTHER PRODUCTION COSTS (in focus parcel)								
Item	Cash (Pesos)	Imputed (Pesos)	Non-Cash					
			What was the crop/commodity paid?	How many local units?	What was the name of local unit?	What was the weight of one local unit in kilogram?	What was the total quantity in kilogram?	How much was the total value? (Pesos)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. Caretaker/overseer's share/wages (per cropping)	12,825.00							

Illustration 22 **Contract Labor**

Two farm workers were hired to do the plowing, furrowing and fertilizer application in a one (1) hectare of cassava parcel. The contract cash payment for the three (3) activities was P1,500. The farm operator who hired them owns the hand tractor used in performing the said farm activities:

- The CDC should ask for the detail of mandays spent for each activity

Farm Activity	Hired Labor						How much was the total food cost incurred? (Pesos)
	How many persons worked in the farm?	On the average ...		Total Mandays	Total payment		
		how many days did they work?	how many hours per day were spent?		How much was paid in Cash? (Pesos)	How much was paid in Kind? (Pesos)	
(1)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. Land Preparation							
1.02 Plowing (man-machine, 2-wheel)	2	2	8.0	4.00	} 1,500.00		
1.10 Furrowing (man-machine, 2-wheel)	2	1	4.0	1.00			
6.01 Fertilizer application (basal)	2	1	4.0	1.00			

During editing, P1,500.00 contract payment should be distributed to the 3 activities using ratio and proportion based on the mandays.

Example:

Activity	Mandays	Computation	How much were paid in cash
Plowing (man-machine)	4	$4 \div 6 \times 1,500.00$	= 1,000.00
Furrowing (man-machine)	1	$1 \div 6 \times 1,500.00$	= 250.00
Fertilizer Application	<u>1</u>	$1 \div 6 \times 1,500.00$	= <u>250.00</u>
Total	6		P 1,500.00

Illustration 23
Handling of labor inputs involved with different scenarios

Scenario	Type of Labor	Level of Prevailing Wage Rate	Action to be Taken
Operator owned animal/machine and he himself or his family members did the farm activity	Man - Animal/ Man - Machine	Man- Animal/ man only , the cost of the machine will be accounted for depreciation	Reflect animal/machine in farm investments; Operator/Family labor in Block F (Labor Inputs) and quantity and cost of fuel and oil, if any, in Block G (Other Production Cost)
Operator rents animal/machine but he himself or his family members did the farm activity	Man - Animal/ Man - Machine	Man	Reflect Operator/ Family Labor in Block F, animal/machine rental and quantity and cost of fuel and oil, if any, in Block G
Operator hired man and animal/machine under one term payment	Man - Animal/ Man - Machine	Man - Animal/ Man -Machine	Reflect payment for hired labor in Block F and cost of fuel and oil, if any, in Block G
Operator hired man but owns the animal/machine	Man-Animal/ Man-Machine	Man	Reflect animal/machine in Block D (Farm Investments); payment for hired labor in Block F and quantity and cost of fuel and oil in Block G
Operator borrowed the animal/machine to his brother	Man-Animal/ Man-Machine	Man	Reflect the imputed rental value of animal/machine in Block G. Other production costs in column 3.

Column 16. How much was paid in kind?-Paid in kind maybe in the form of concerned crop/commodity (CC) or other commodities (OC). Payment in kind refers to the peso equivalent of the quantity of produce paid for a work done. Convert the payment into peso equivalent by following this procedure:

Peso equivalent of Payment in kind

$$= (\text{Total number of units of payment in-kind}) \times (\text{Price per local unit during the time of payment})$$

Payment in Kind: Example

Farm Activity: Harvesting

Block F. Labor Inputs = 12 mandays

Block H. Production and Disposition

- Price per local unit = P300.00 / sack
- H 2.02 Harvester’s share = 25.00 sacks (1/11 of total production)

$$\begin{aligned} \text{Payment in kind} &= (\text{Price per local unit} \times \text{H2.02}) \\ &= \text{P300.00} \times 25.00 \text{ sack} \\ &= \text{P7,500.00} \end{aligned}$$

Column 17. How much was the total food cost incurred? (Pesos) - When applicable, ask for the total cost incurred in the provision of food (meals/ snacks) to farm workers during a particular farm operation.

Note: Provision of food costs (meals and or snacks) applies only to exchange laborer (bayanihan) and hired farm workers during a particular farm operation.

BLOCK G. OTHER PRODUCTION COSTS (in focus parcel)

This block gathers other items of production cost **incurred on the focus parcel during the reference period**. Payments may be cash or non-cash. In case of non-cash payments or payments in kind, convert total value of goods to cash equivalent.

Column 1. Items – refer to other items of production cost incurred on the focus parcel during the reference period.

1. Land Tax-owned farm (annual) - ask the annual land tax paid for the focus parcel and enter in the space provided. If the land tax paid is for all parcels then use ratio and proportion based on area to apportion the land tax. **Impute** the land tax to owned farm in column 3 (imputed) if the farm operator did not pay tax during the reference period.

2. Caretaker/overseer's share/wages (per cropping) - refers to the payment for caretaker or overseer's in cash or in kind per cropping.

Illustration 24
Overseer's wage paid in cash

The sample farmer/operator pays P1,500.00 monthly for the services of the caretaker as overseer for his/her three (3) parcels of land. The three (3) parcels were planted with cassava. The overseer was hired for ten (10) months.

Note that we must compute for the payment of the overseer for the particular cassava focus parcel.

(focus) Parcel 1	1.50 hectares	Planted to cassava (June2013-March.2014)
Parcel 2	1.00 hectares	Planted to cassava (May 2013-Feb.2014)
Parcel 3	<u>0.50 hectares</u>	Planted to cassava (May 2013-Feb.2014)
	3.00 hectares	

To compute for the overseer's wages, simply divide the area of focus parcel to the total area of the three (3) parcels multiplied by monthly wages and number of months worked.

$$\text{Wages} = 1.50 \text{ hectares} / 3.00 \times (1,500 \times 10) = \mathbf{P 7,500.00}$$

Illustration 25
Overseer's wage paid in kind

Refer to Illustration 20, pages 35 to 36. If the value of labor rendered for farm activities other than being overseer is P4,820.00, when he received 25 sacks (P300.00 per sack) worth P7,500.00, the difference is P2,680.00.

The difference of P2,680.00 is the payment of hired workers as Caretaker/ Overseer's wages under non-cash payment. Compute the quantity of the commodity received by the caretaker/overseer as payment of labor rendered as being overseer by dividing the price of one local unit of the commodity.

Example:

$$\frac{P2,680.00}{300} = 8.93 \text{ sacks}$$

G. OTHER PRODUCTION COSTS (in the focus parcel)						
Item	Non-Cash					
	What is the crop/commodity paid?	How many local units?	What is the name of local unit?	What is the weight of one local unit in kilogram?	What is the total quantity in kilogram?	How much is the total value? (Pesos)
(1)	(4)	(5)	(6)	(7)	(8)	(9)
1. Land Tax - owned farm (annual)						
2. Caretaker/overseer's share/wages (per cropping)	cassava	8.93	sacks	60.00	535.80	2,680.00
3. Other permanent employee's salary (monthly)						
4. Lease / Rentals of:						

3. Other permanent employee's salary (monthly) - refers to the monthly payment for hired permanent farm workers doing production activities during the reference cropping period. If the payment is not monthly, convert it into monthly.

4. Lease/ Rentals of:

4.1 Land (annual) - refers to fixed payment in cash or in kind for the *use of farm land* during the reference period. Land rental should be per annum. Otherwise convert the payment annually. Example: If the land rent is paid after every harvest, multiply the rent by the number of cropping. For **farm land** with tenurial status "**Rent free**", **impute** for the land rental for the use of land during the reference period in column 3 (Imputed).

4.2 Machine (per cropping) - refers to fixed payment in cash or in kind for the *use of machine* during the reference period. Rent for *machine* should be per cropping.

4.3 Animals (per cropping) - refers to fixed payment in cash or in kind for the *use of animals* during the reference period. Rent for *animals* should be per cropping.

4.4 Tools and equipment (per cropping) - refers to fixed payment in cash or in kind for the use of *tools and equipment* during the reference period. Rent for *tools and equipment* should be per cropping.

Payment in kind may take the form of quantities of the crop being produced in the concerned farm or other crops being produced or other commodities acceptable to the owner of the land, machine, animals and tools and equipment. In such case, determine the quantity paid and the total value in cash equivalent.

5. Rental value of owned land (annual) - ask the sample farmer how much would be the annual rental value of the land cultivated for cassava if in case these have been rented. This is an **imputed cost** and recorded in the space provided.

6. Fuel (per cropping) - ask the **exact quantity in liters** and **cost of fuel (diesel, gasoline and kerosene)** consumed in the production process of cassava. If **paid in kind, record total value in cash equivalent.**

7. Oil (per cropping) - ask the **exact quantity in liters** and **cost of oil consumed** in the production process of cassava. If **paid in kind, record total value in cash equivalent.**

8. Transport cost of inputs (per cropping) - refers to the costs incurred in transporting the procured fertilizers, chemicals, and other farm inputs to the farm sites. In case of payment in kind, indicate the quantity paid and total value in cash equivalent.

9. Interest payment on crop loan (per cropping) - refers to payment in cash or in kind for the interest on borrowed capital used in the production of cassava. If paid in kind, ask for the quantity paid and total value in cash equivalent. Interest payment for crop loan should be per cropping. Otherwise convert the payment into per cropping.

10. Storage cost (per cropping) – covers the payment in storing the produce in a suitable place for a period of time before disposition or distribution.

11. Irrigation fee (per cropping) - covers payment in cash or in kind for irrigation. If paid in kind, indicate the quantity paid and total value in cash equivalent.

12. Electricity cost (monthly) – covers the monthly payment in cash for electricity consumed in the production process.

13. Landowner's Share (per cropping)- the quantity in local unit given to landowner as payment for the use of his farm land.

14. Others (specify) - refer to other items of production cost incurred during the reference period other than those mentioned above. Example is acquisition costs of investment items being utilized for less than a year, e.g. sack, kaing, basket, etc. Specify in the space provided the cost of the item per cropping.

Column 2. Cash (pesos) – are direct cash outlays or cash payment for other production costs incurred during production process.

Column 3 . Imputed (pesos) – are expenditures that do not involve actual outlays in cash or in kind; they represent the opportunity costs of using owned resources and are given the values of the best alternative uses foregone.

Column 4. What was the crop/commodity paid? – specify the crop/commodity paid, it can be either cassava or other agricultural commodity.

Column 5. How many local units? – refer to the number of local units of cassava or other agricultural commodity paid in column 4.

Column 6. What was the name of local unit? – indicate the name of local unit used in measuring the quantity paid in Column 5.

Column 7. What was the weight of one local unit? – write the equivalent weight of one local unit in kilogram.

Column 8. What was the total quantity in kilogram? – write the total quantity paid in kilogram by multiplying column 5 and column 7.

Column 9. How much was the total value? (pesos) – write the total value of the total quantity paid in column 8, it should be **prevailing market price** of the specific commodity.

BLOCK H. PRODUCTION AND DISPOSITION (in focus parcel)

This block aims to gather information on the gross volume of cassava harvested in the focus parcel during the last completed cropping within April 2013 to March 2014 as well as the breakdown of disposition. **In case the harvesting of cassava was done in staggered manner, the gross volume of production should include the total volume harvested in the focus parcel. For the gross value of production, use the weighted average price for the particular commodity.**

For Columns 2, indicate the harvested production for **Cassava Roots**; same procedure must be done for Columns 3 “**Cassava Tops**” and Column 4 “**Planting materials (seed pieces/cuttings)**”

Column 1 - Item – Listed in this column are the items for production and disposition.

Column 2 – Cassava Roots – refers to the production and disposition of produce in the form of cassava roots.

Column 3 – Cassava Tops – refers to the production and disposition of produce in the form of cassava tops.

Column 4 – Planting materials - refers to the production and disposition of produce in the form of planting materials.

Item 1 Production – refers to the total volume harvested in the focus parcel.

Item 1.1 Quantity in local unit - Enter the gross production in local unit on the space provided in two (2) decimal places. **For Planting materials (seed pieces/cuttings), record in whole number.**

Item 1.2 Name of local unit (LU) - Indicate the name of local unit used in measuring the volume of production, e.g., kilogram, sack, kaing, bundle, pieces, can, etc., in the space provided.

Item 1.3 Weight of one LU in kilogram – ask the sample farmer/operator the equivalent weight of one local unit in kilogram and write in two (2) decimal places.

ILLUSTRATION 26

Example: 1

In a one hectare of cassava farm, the farmer harvested 125 sacks of cassava roots at 60 kilograms per sack, 10 kilograms of cassava tops and 3,000 pieces of planting materials. Cassava roots were sold at P300.00 per sack, cassava tops at P5.00 per kilogram and planting materials was P0.20 per piece. Follow the illustration below in recording the gross volume and price per local unit of harvests in the focus parcel.

H. PRODUCTION AND DISPOSITION (in focus parcel)			
Item	Cassava Roots	Cassava Tops	Planting Materials
(1)	(2)	(3)	(4)
1. Production			
1.1 Quantity in local unit	125.00	10.00	3,000
1.2 Name of local unit (LU)	sack	kilogram	pieces
1.3 Weight of one LU in kilogram	60.00	1.00	
2. Disposition (quantity in local unit)			
2.01 Sold / To be sold to:			
*Price per local unit (required whether the produced was sold or not sold)	300.00	5.00	0.20

ILLUSTRATION 27

Some farmers practiced staggered harvesting to take opportunity of high price in the market. In this case, consider the following example:

Example: 2

High price of cassava in the market encouraged the farmer to harvest portion of the focus parcel. He obtained 50 sacks of cassava at 60.00 kilograms per sack and sold at P300.00 per sack during the first harvest. On the second harvest, the farmer completed the harvesting of the remaining portion of the focus parcel and yielded 30 sacks at 60.00 kilograms per sack. He sold it at P200.00 per sack. To compute for the gross volume and value of production harvested in the focus parcel, consider the illustration below:

First Harvest: Cassava roots - 50 sacks (at 60 kilograms)
 Price per sack - P300.00
 Value of produce = 50.00 X P300.00 = P15,000.00

Last harvest: Cassava roots - 30 sacks (at 60 kilograms)
 Price per sack - P200.00
 Value of produce = 30 X P200.00 = P6,000.00

To compute for the gross production = 50 + 30 = 80 sacks (at 60 kilograms)

To compute for the gross value of production:

First harvest = 50 X P300.00 = P15,000.00
 Last harvest = 30 X P200.00 = P 6,000.00
 P 21,000.00

To compute for the weighted average price per sack of cassava:

Weighted average price per sack = P21,000.00 / 80 sacks = **P262.50 per sack**

Price per local unit = P262.50

H. PRODUCTION AND DISPOSITION (in focus parcel)	
Item	Cassava Roots
(1)	(2)
1. Production	
1.1 Quantity in local unit	80.00
1.2 Name of local unit (LU)	sack
1.3 Weight of one LU in kilogram	60.00
2. Disposition (quantity in local unit)	
2.01 Sold / To be sold to:	
*Price per local unit (required whether the produced was sold or not sold)	262.50

Example 3

In a 2.00 hectare of cassava farm, the farmer harvested 250 sacks of cassava at 60 kilograms per sack. The prices differ during marketing. Those used for food were 200 sacks and sold at P300.00 per sack; 50 sacks were sold for feeds at P250.00 per sack. To get the weighted average price per local unit:

Get the total value of produce by purpose (type of use) and divide by total volume of produce.

$$= [(200 \text{ sacks} \times \text{P}300.00) + (50 \text{ sacks} \times \text{P}250.00)] / 250 \text{ sacks}$$

$$= [\text{P}60,000 + \text{P}12,500.00] / 250 \text{ sacks}$$

$$= \text{P}72,500 / 250 \text{ sacks}$$

$$= \text{P}290.00 \text{ price per local unit (sack)}$$

H. PRODUCTION AND DISPOSITION (in focus parcel)	
Item	Cassava Roots
(1)	(2)
1. Production	
1.1 Quantity in local unit	250.00
1.2 Name of local unit (LU)	sack
1.3 Weight of one LU in kilogram	60.00
2. Disposition (quantity in local unit)	
2.01 Sold / To be sold to:	
*Price per local unit (required whether the produced was sold or not sold)	290.00

Item 2. Disposition (quantity in local unit) – refers to the manner by which the farmer disposed the produce. It may be immediately after harvesting, and or drying. Record the disposition items in the number of local unit.

Item 2.01 Sold / To be sold - refers to the quantity in local unit sold or to be marketed out of the total production reported during the reference period.

Item 2.011 Trader –the quantity in local unit sold to traders.

Item 2.012 Processor for food –the quantity in local unit sold to food processor.

Item 2.013 Processor for feeds –the quantity in local unit sold to feed processor.

Item 2.014 Processor for Ethanol –the quantity in local unit sold for ethanol.

Price per local unit – ask the price of one local unit even the sample farmer/operator did not sell his/her produce. It will be used in the computation of gross value of production.

Item 2.02 Harvesters' share – the quantity in local unit given to harvesters as payment for the services rendered.

Item 2.03 Other laborers' share - the quantity in local unit given to other farm laborers as payment to services rendered.

Item 2.04 Landowner's share - the quantity in local unit given to landowner as payment for the use of his farm land.

Item 2.05 Land lease/rental - refers to quantity in local unit paid for the lease/rental of the farm land.

Item 2.06 For home consumption - the quantity in local unit consumed/ to be consumed by the farm household.

Item 2.07 For home-based processing – the quantity in local unit for home-based processing.

Item 2.08 Given away - the quantity in local unit given to other persons, relatives and other households.

Item 2.09 Paid to creditor - the quantity in local unit paid to creditors.

Item 2.10 Used / To be used for planting materials - the quantity in local unit used as planting materials (seed pieces/cuttings) reserved by the farmer for future use.

Item 2.11 Used / To be used for feeds - the quantity in local unit used as feeds.

Item 2.12 Irrigation fee – the quantity in local unit paid for irrigation services.

Item 2.13 Wastage - estimated quantity in local unit of spoilage or losses incurred during harvesting.

Item 2.14 Others (specify) - quantity in local unit used for other purposes which do not belong to the above categories.

Total disposition - add disposition item 2.01 (sold / to be sold) to 2.14 Others (specify) and write the sum in the space provided.

Production and disposition of cassava roots

Illustration 28
Filling up of Block H

In a one hectare of cassava farm, the farmer harvested 103 sacks of cassava (60 kilograms per sack). Seven (7) sacks of cassava were given away; ninety (90) sacks were sold to trader, five (5) sacks were used for home-based processing, and one (1) sack was set aside for home consumption.

Examine the illustration below how Block H of the questionnaire was filled up.

H. PRODUCTION AND DISPOSITION (in focus parcel)	
Item	Cassava Roots
(1)	(2)
1. Production	
1.1 Quantity in local unit	103.00
1.2 Name of local unit (LU)	sack
1.3 Weight of one LU in kilogram	60.00
2. Disposition (quantity in local unit)	
2.01 Sold / To be sold to:	
2.011 Trader	90.00
*Price per local unit (required whether the produced was sold or not sold)	290.00
2.06 For home consumption	1.00
2.07 For home-based processing	5.00
2.08 Given away	7.00
Total Disposition	103.00

BLOCK I. PRODUCTION RELATED INFORMATION (in focus parcel)

This block aims to gather information on the problems affecting cassava production during the reference period.

1. **How would you compare your production (roots) in the focus parcel during the reference period with the same period of last year?** Ask the sample farmer/operator to compare the quantity produce (in focus parcel) during the reference period with the same period of last year. Encircle the appropriate code provided.

- 1 – Higher than last year 3 – About the same, **go to Item 3**
 2 – Lower than last year 4 – No point of comparison, **go to Item 3**

2. **What was/were the reason/s for the change in production?** Ask the sample farmer/operator on the reason/s for the change in production. Encircle the appropriate code/s and specify verbatim answer in the space provided.

Specify:

- | | |
|---|--------------------------------------|
| <input checked="" type="radio"/> 1. Change in area | <u>Increase in area</u> |
| <input checked="" type="radio"/> 2. Weather effects | <u>Good weather condition</u> |
| 3. Pest and diseases | _____ |
| 4. Planting materials | _____ |
| <input checked="" type="radio"/> 5. Fertilizer | <u>Applied sufficient fertilizer</u> |
| 6. Irrigation | _____ |
| 7. Others (specify): | _____ |

3. **What were the cassava production related problems you have encountered?** - Ask the sample farmer/operator on the problems affecting production of **cassava** during the reference period and encircle the appropriate code/s provided or specify if necessary.

CODE	ITEM
1	Pests and diseases
2	High cost of inputs
3	Bad weather / Calamities
4	Lack of capital
5	Rough or poor road / Inadequate transport facilities
6	Inadequate supply of water / irrigation problem
7	Poor soil condition
8	Others: _____

BLOCK J. MARKETING RELATED INFORMATION (in focus parcel)

This block aims to gather information on the problems encountered in marketing their produce **during the reference period**.

1. Who was your major buyer of produce? (encircle code) – Ask the sample farmer/operator on the major buyer of his/her produce (focus parcel). Encircle the appropriate code provided and determine the percentage of cassava that was sold out of the total volume marketed. In case the total quantity marketed was sold to two (2) buyers equally, then there will be two (2) major buyers of produce.

1. Agent - a businessman who buys or sells for another in exchange for a commission.

2. Wholesaler - one who buys the produce in relatively large quantities and sells it to other traders.

3. Wholesaler-retailer - one who buys the produce in large quantities either from producers, wholesalers or contract buyers. He sells mainly to retailers on a wholesale basis and retails those that are not sold to retailers. He usually has his own stall in the market area.

4. Exporter - any person, natural or juridical, licensed to do business in the Philippines, engaged directly or indirectly in the production, manufacture or trade of products or services which earns at least fifty percent [50%] of its normal operating revenues from the sale of its products or services abroad for foreign currency.

5. Assembler - one who buys from producers and contract buyers, and assembles the products in large volume and transfer them to market centers. He sells products also on a wholesale basis.

6. Processor - a business engaged in processing agricultural products and preparing them for market.

7. Cooperative - a duly registered association of at least fifteen persons with a common bond of interest who voluntarily join together to achieve a lawful common social and economic end. It is organized by the members who equitably contribute the required share capital and accept a fair share of risks and benefits of their undertakings in accordance with universally accepted cooperative principles and practices.

8. Consumer – the end users.

9. Others (specify) – refer to other major buyers of cassava produced by the farmers not mentioned in the above identified buyers/traders.

2. What were the marketing related problems you have encountered? - Ask the sample farmer/operator on the problems affecting marketing of cassava and encircle the appropriate code/s provided or specify if necessary.

CODE	ITEM
1	Unstable prices
2	Rough roads/ high transport cost (marketing of produce)
3	Low price of produce
4	No buyer / market outlet
5	Lack of marketing information
6	Others : _____

BLOCK K. ACCESS TO CREDIT (in focus parcel)

This block aims to gather information regarding loans availed of by the sample farmer/operator for cassava production during the reference period.

1. Have you availed of loan for cassava production during the reference period? (encircle code) – Ask the sample farmer/operator if he/she availed of any loan for cassava production. Encircle the appropriate code “1” for Yes and code “2” for No. If no, go to **Block L**.

2. How much loan did you avail of? (Pesos) - Write the total amount of loan on the space provided. Record in two (2) decimal places.

3. Who/what was your major source of loan? – Ask for the major source of loan. Encircle the appropriate code or specify if necessary.

CODE	ITEM
1	Cooperative
2	Bank
3	Private individual
4	Other lending institutions: _____

4. How much was the interest rate per annum? (in percent) - Ask the interest rate charged by the creditor and record the answer in the space provided. Write the answer in percent and in two (2) decimal places.

Example 1:

Total amount borrowed: P20,000.00

Total payment after 1 year: P25,000.00

Annual interest rate:

$$= \left[\left(\frac{25,000.00}{20,000.00} \right) - 1 \right] \times 100$$
$$= 25.00\%$$

Example 2:

Total amount borrowed: P40,000.00

Total payment after 2 years: P50,000.00

Annual interest rate:

$$= \left[\left(\frac{50,000.00}{40,000.00} \right) - 1 \right] \times 100$$
$$= \frac{25.00\%}{2 \text{ years}}$$
$$= 12.50\%$$

BLOCK L. FARMER'S PARTICIPATION IN CASSAVA PROGRAMS / PROJECTS

This block aims to collect information on the farmer's participation in cassava program and projects during the reference period.

Item 1. Are you aware of any government program/intervention on cassava? (encircle code) - Ask the sample farmer/operator if he/she is aware of any government programs/intervention on cassava. Encircle the appropriate code "1" for Yes and code "2" for No. If No, go to **Block M**.

Item 2. Have you availed of any benefit from government program/intervention? (encircle code) - Ask if he/she availed of any benefit from government program/intervention. Encircle the appropriate code "1" for Yes and code "2" for No. If No, go to **Block M**.

Item 3. What benefits have you availed? (encircle code/s) - Ask the type/kind of benefits he/she availed. Encircle appropriate code/s.

L. FARMER'S PARTICIPATION IN CASSAVA PROGRAMS / PROJECTS	
3. What benefits have you availed? (encircle code/s)	
1 - Planting materials	5 - Post harvest facilities
2 - Fertilizer and other inputs	6 - Marketing support
3 - Training on farming technology	7 - Loans
4 - Irrigation facilities	8 - Others (specify): _____

Item 4. Did you use the benefit(s) in your production during the last completed cropping, April 2013 – March 2014? (encircle code) – Ask the sample farmer/operator if he/she used the benefit(s) received in his/her **cassava** production during the last completed cropping, April 2013 – March 2014. Encircle appropriate code “1” for Yes and code “2” for No.

Item 5. Did the benefit(s) received helped increase your farm income? (encircle code) – Ask if the benefit(s) received increase his/her farm income. Encircle appropriate code “1” for Yes and code “2” for No.

BLOCK M. OTHER INFORMATION (for cassava only)

This block aims to gather information relative to the effect of **climate change** in **cassava** production and **organic farming practices**. Also, the sample farmer/operators membership in any farmer’s organization and benefits received are solicited.

Climate Change – is a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Organic Farming – is a form of agriculture that relies on techniques such as crop rotation, green manure, compost, biological pest control and maintains buffer zone and borders.

Natural Farming- is a sustainable farming using natural materials (inputs) and absolutely no chemicals application.

1. Has Climate Change affected your farming practices? – Ask the sample farmer/operator if climate change affected his farming practices. Encircle the appropriate code “1” for Yes and code “2” for No. **If No, go to Item 2**

1. - Yes

2. - No

1.1 What was/were the effect/s? (encircle code/s or specify if necessary) - Ask the sample farmer/operator the effects of climate change. Encircle appropriate code/s, or specify if necessary.

M. OTHER INFORMATION	
1.1 What was/were the effects?	
(encircle code/s or specify if necessary)	
1 - Change in cropping pattern	
2 - Increase in input usage	
3 - Decrease in yield	
4- Decrease in frequency of plowing	
5 – Others (specify) _____	

2. Did you practice any of the following organic/natural farming method? - Ask the sample farmer/operator if he/she practice organic/natural farming method. Encircle the appropriate code “1” for Yes and code “2” for No. **If No, go to Item 3.**

If “**yes**”, encircle code/s, specify if necessary

CODE	ITEM
1	Hundred percent chemical free farming
2	Use of organic fertilizer (e.g.composts)
3	Maintain buffer zone or borders
4	Others (specify) _____

3. Are you a member of cassava farmers’ organization? (encircle code) – Ask the sample farmer if he/she is a member of cassava farmers’ organization. Encircle the appropriate code “1” for Yes and code “2” for No. **If No, go to Block N.**

3.1 What is the name of the organization? - Ask the name of the organization he/she belongs.

3.2 What were the benefit/s received from the organization? (encircle code/s or specify if necessary)

CODE	ITEM
1	Training/seminars
2	Financial/ credit support
3	Inputs support
4	Marketing support
5	Others: _____

BLOCK N. PLANS AND RECOMMENDATIONS

This block aims to compile the plans and recommendations of the sample farmer/operator for the improvement of his/her cassava production.

1. What is your plan regarding cassava farm operation? (encircle code or specify if necessary) - Ask the plan of the sample farmer/operator. If plan is not mentioned on the choices given, specify on the space provided.

CODE	ITEM
1	Maintain current operation
2	Expand
3	Others: _____

2. What are your recommendations in order to improve your cassava production? (encircle code/s or specify if necessary).

CODE	ITEM
1	Price support
2	Improve irrigation services
3	Infrastructure facilities
4	Regulate price of farm inputs
5	Financial support
6	Soil testing/ analysis
7	Land Reform Program
8	Environmental concern (e.g. waste disposal, erosion)
9	New/ modern farming technologies
10	Others: _____

BLOCK O. INTERVIEW / SURVEY PARTICULARS

After a thorough verification of the completeness and consistency of the responses, the Contractual Data Collector (CDC) should affix his/her name and signature and the date of accomplishing the questionnaire. The Field Supervisor / Editor, and the PASO must also affix their name and signature, and exact dates when field editing and data review work were done.

2014 Survey on Costs and Returns of Cassava Production
Timetable of Operations
January 2014 - August 2014

Activity	CASSAVA
I. PRE-SURVEY OPERATIONS	
1. 1st level training: Central Office Trainers' training	March 13, 2014
2nd level training: PASOs and POC staff	March 17-21, 2014
2. Preparation of data processing system	March-April, 2014
II. SURVEY OPERATIONS	
A. POC	
1. Training of POC staff and CDCs	March 24-28, 2014
2. Field data collection	Mar. 29-April 18, 2014
3. Manual editing and coding of survey returns	Apr. 7-25, 2014
4. Data encoding/capture	Apr. 14-30, 2014
5. Data review/correction of errors	Apr. 28-May 2, 2014
B. Central Office	
6. Submission to Central Office *	May 5, 2014

* Includes accomplished survey returns and soft copy of cleaned data file.



Republic of the Philippines
PHILIPPINE STATISTICS AUTHORITY
 (BUREAU OF AGRICULTURAL STATISTICS)
 Ben-Lor Bldg., 1184 Quezon Avenue, Quezon City

2014 SURVEY ON COSTS AND RETURNS OF CASSAVA PRODUCTION
 Last Completed Harvest Within April 2013 - March 2014

CONFIDENTIALITY
 (Information contained herein shall be kept strictly confidential)

QC No.

A. GEOGRAPHIC INFORMATION	C. BASIC CHARACTERISTICS OF THE FARM																														
1. Region: <input type="text"/> <input type="text"/> <input type="text"/> 2. Province: <input type="text"/> <input type="text"/> <input type="text"/> 3. City/Municipality: <input type="text"/> <input type="text"/> <input type="text"/> 4. Barangay: <input type="text"/> <input type="text"/> <input type="text"/>	<p>For focus parcel only:</p> 4. What is the tenurial status ? <input type="text"/> <input type="text"/> 5. What is the usual cropping pattern? <input type="text"/> <input type="text"/> 6. What was the area planted? _____ ha. 7. What was the area harvested? _____ ha. 8. What month was it planted ? <input type="text"/> <input type="text"/> 9. What month was it harvested? <input type="text"/> <input type="text"/> 10. What was the variety of cassava planted? (specify) _____ _____ 11. What is/are the use/s of the variety planted? (encircle code/s) 1 - Food 2 - Non-food 3 - Feeds 12. Who/What was/were the source/s of planting materials? (encircle code/s) 1 - DA/RFU 2 - LGU 3 - Cooperative 4 - Co-Farmer 5 - Own produced 6 - Others (specify): _____	1. How many farm parcels did you operate? _____ 2. What was the total physical area? _____ ha. 3. Of the total farm parcels, how many were planted to cassava? _____ <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width:30%;">3.1 Parcel (Encircle the focus parcel *)</th> <th style="width:70%;">3.2 Physical Area (indicate the physical area in hectare)</th> </tr> </thead> <tbody> <tr><td>1</td><td>_____</td></tr> <tr><td>2</td><td>_____</td></tr> <tr><td>3</td><td>_____</td></tr> <tr><td>4</td><td>_____</td></tr> <tr><td>5</td><td>_____</td></tr> <tr><td>6</td><td>_____</td></tr> <tr><td>7</td><td>_____</td></tr> <tr><td>8</td><td>_____</td></tr> <tr><td>9</td><td>_____</td></tr> <tr><td>10</td><td>_____</td></tr> <tr><td>Total Area</td><td>_____</td></tr> </tbody> </table> <p align="right"><small>*with the latest completed harvest</small></p>	3.1 Parcel (Encircle the focus parcel *)	3.2 Physical Area (indicate the physical area in hectare)	1	_____	2	_____	3	_____	4	_____	5	_____	6	_____	7	_____	8	_____	9	_____	10	_____	Total Area	_____					
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1	_____																														
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6	_____																														
7	_____																														
8	_____																														
9	_____																														
10	_____																														
Total Area	_____																														
<p>B. SAMPLE IDENTIFICATION</p> 1. Name of sample farmer/operator: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2. Age (as of last birthday): _____ years old 3. Sex (encircle code): 1 - Male 2 - Female 4. Level of education completed: <input type="text"/> <input type="text"/> <input type="text"/> 5. Main occupation: _____ (gainful work or activity that provides the major source of income) 6. Number of years engaged in cassava farming (as operator): _____ 7. Name of respondent: _____ 8. Respondent's classification (encircle code): 1 - Household head and farm operator 2 - Farm operator other than household head 3 - Household head but not farm operator 4 - Other knowledgeable household member 9. Contact number: _____	<p>CODES FOR BLOCK C:</p> <table style="width:100%; border: none;"> <tr> <td style="width:33%;">Tenurial Status (Item 4)</td> <td style="width:33%;">Month Planted / Harvested (Items 9 - 10)</td> <td style="width:34%;"></td> </tr> <tr> <td>1 - Fully owned</td> <td>01 - January</td> <td>04 - April</td> </tr> <tr> <td>2 - Leased/ rented</td> <td>02 - February</td> <td>05 - May</td> </tr> <tr> <td>3 - Tenanted</td> <td>03 - March</td> <td>06 - June</td> </tr> <tr> <td>4 - Amortized</td> <td>07 - July</td> <td>07 - August</td> </tr> <tr> <td></td> <td>08 - August</td> <td>08 - September</td> </tr> <tr> <td></td> <td>09 - September</td> <td>09 - October</td> </tr> <tr> <td></td> <td>10 - October</td> <td>10 - November</td> </tr> <tr> <td></td> <td>11 - November</td> <td>11 - December</td> </tr> <tr> <td></td> <td>12 - December</td> <td></td> </tr> </table>	Tenurial Status (Item 4)	Month Planted / Harvested (Items 9 - 10)		1 - Fully owned	01 - January	04 - April	2 - Leased/ rented	02 - February	05 - May	3 - Tenanted	03 - March	06 - June	4 - Amortized	07 - July	07 - August		08 - August	08 - September		09 - September	09 - October		10 - October	10 - November		11 - November	11 - December		12 - December	
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	10 - October	10 - November																													
	11 - November	11 - December																													
	12 - December																														

D. FARM INVESTMENTS (owned and used in focus parcel)						
(1) Item	(2) How many units were used? (Area/Number)	(3) What year was it acquired/constructed?	(4) How much was the cost of acquisition / construction? (Pesos)	(5) How much was spent for minor repair/improvement? (Pesos)	(6) How many years will it be useful/ serviceable? (from the date of inter/iew)	(7) What was its percentage of use in the focus parcel?
1. Farm land owned (hectare)						
2. Work animals						
2.01 Carabao						
2.02 Cattle						
2.03 Horse						
3. Farm buildings and other structures						
3.01 Farm house						
3.02 Warehouse/storage						
3.03 Others (specify)						
4. Farm machinery and transport facilities						
4.01 Two-wheel tractor						
4.02 Four-wheel tractor						
4.03 Irrigation pump						
4.04 Farm vehicles						
4.05 Trailer/cart						
4.06 Others (specify)						

D. FARM INVESTMENTS (owned and used in focus parcel)						
Item	How many units were used? (Number)	What year was it acquired?	How much was the cost of acquisition? (Pesos)	How much was spent for minor repair? (Pesos)	How many years will it be useful/ serviceable? (from the date of interview)	What was its percentage of use in the focus parcel?
(1)	(2)	(3)	(4)	(5)	(6)	(7)
5. Farm tools and implements						
5.01 Plow (araro)						
5.02 Harrow (suyod)						
5.03 Sprayer (pambomba)						
5.04 Weeder (pang-alis ng damo)						
5.05 Grass cutter						
5.06 Shovel/Spade (pala)						
5.07 Bolo (itak)						
5.08 Hoe (asarol)						
5.09 Sled (paragos)						
5.10 Spading fork (tinidor)						
5.11 Post hole digger (panghukay)						
5.12 Yoke (singkaw)						
5.13 Rake (kalaykay)						
5.14 Weighing Scale (timbangang)						
5.15 Crates						
5.16 Others (specify) _____						

E. MATERIAL INPUTS (used in focus parcel)												
Item	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	Solid/Granule Inputs		(13)
										What was the total quantity in kilogram?	How much was the total value? (Pesos)	
1. Planting Materials (seed pieces/cuttings)												
2. Organic Fertilizer (specify product name and N-P-K)					pieces							
3. Inorganic Fertilizer												
3.01 Urea (45-0-0)												
3.02 Urea (46-0-0)												
3.03 Ammonium Sulfate (21-0-0)												
3.04 Ammonium Phosphate (16-20-0)												
3.05 Complete (12-12-12)												
3.06 Complete (14-14-14)												
3.07 Complete (16-16-16)												
3.08 Zinc Sulfate (Zinc 21%)												
3.09 Muriate of Potash (0-0-60)												
3.10 Others (specify product name and N-P-K):												
4. Soil Ameliorants (specify product name)												

CODE FOR COLUMN 2:

Purchased
 1.1 - self financed (paid in cash)
 1.2 - self financed (paid in kind)
 1.3 - discounted

Produced
 2.1 Own Produced

Received
 3.1 - from government (LGU, DARFU, etc.)
 3.2 - from private individual/organization (Trader, Co-farmer, Coop., etc.)

F. LABOR INPUTS (in focus parcel)																
Farm Activity	Operator Labor		Family Labor		Exchange Labor		Hired Labor				How much was the total food cost incurred? (Pesos)					
	How many days were spent?	How many hours were spent?	How many persons worked in the farm?	On the average ...	How many persons worked in the farm?	On the average ...	How much was the prevailing wage rate per day in the locality? (Pesos)	How many persons worked in the farm?	How many days did they work?	how many hours per day were spent?		Total Mandays	How much was paid in Cash? (Pesos)	How much was paid in Kind? (Pesos)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. Land Preparation																
1.01 Plowing (man-animal)																
1.02 Plowing (man-machine, 2-wheel)																
1.03 Plowing (man-machine, 4-wheel)																
1.04 Rotavating (man-machine, 2-wheel)																
1.05 Rotavating (man-machine, 4-wheel)																
1.06 Harrowing (man-animal)																
1.07 Harrowing (man-machine, 2-wheel)																
1.08 Harrowing (man-machine, 4-wheel)																
1.09 Furrowing (man-animal)																
1.10 Furrowing (man-machine, 2-wheel)																
1.11 Furrowing (man-machine, 4-wheel)																
2. Preparation of planting materials																
3. Hauling of planting materials																
4. Planting																
5. Replanting																

Note: Col. 10 - For all activities performed by unpaid labor (operator, family and exchange), ask for the prevailing wage rate in the locality.

Col. 17 - Ask for the total cost incurred in the provision of food (meals, snacks, refreshments) to exchange and hired farm workers during a particular farm operation.

Farm Activity		Operator Labor		Family Labor		Exchange Labor		Hired Labor				Total payment		How much was the total food cost incurred? (Pesos)		
		How many days were spent?	How many hours per day were spent?	How many persons worked in the farm?	On the average ...	How many persons worked in the farm?	On the average ...	How much was the prevailing wage rate per day in the locality? (Pesos)	How many persons worked in the farm?	On the average ...	how many days did they work?	how many hours per day were spent?	Total Mandays		How much was paid in Cash? (Pesos)	How much was paid in Kind? (Pesos)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
6. Care of crops																
6.01 Fertilizer application (basal)																
6.02 Fertilizer application (side dressing)																
6.03 Fertilizer application (top dressing)																
6.04 Soil ameliorant application																
6.05 Weeding (manual)																
6.06 Weeding (chemical spraying)																
6.07 Off-barring (man-animal)																
6.08 Hilling-up (man-animal)																
6.09 Chemical application (other than weedicide)																
6.10 Irrigating																
6.11 Pruning																
7.01 Harvesting (man)																
7.02 Harvesting (man-machine)																
8. Sorting																
9.01 Hauling of produce (man)																
9.02 Hauling of produce (man-animal)																
9.03 Hauling of produce (man-machine)																
10.01 Others (specify) _____																

Note: Col. 10 - For all activities performed by unpaid labor (operator, family and exchange), ask for the prevailing wage rate in the locality.
 Col. 17 - Ask for the total cost incurred in the provision of food (meals, snacks, refreshments) to exchange and hired farm workers during a particular farm operation.

I. PRODUCTION RELATED INFORMATION (in focus parcel)	J. MARKETING RELATED INFORMATION (in focus parcel)	K. ACCESS TO CREDIT (in focus parcel)
<p>1. How would you compare your production (roots) in the focus parcel during the reference period with the same period of last year? (encircle code)</p> <p>1 - Higher than last year 2 - Lower than last year 3 - About the same (go to Item 3) 4 - No point of comparison (go to Item 3)</p> <p>2. What was/were the reason/s for the change in production? (encircle code/s and specify verbatim answer)</p> <p>Specify:</p> <p>1. Change in area _____ 2. Weather effects _____ 3. Pest and diseases _____ 4. Planting materials _____ 5. Fertilizer _____ 6. Irrigation _____ 7. Others (specify): _____</p> <p>3. What were the cassava production related problems you have encountered? (encircle code/s or specify if necessary)</p> <p>1 - Pests and diseases 2 - High cost of inputs 3 - Bad weather / Calamities 4 - Lack of capital 5 - Rough or poor road / Inadequate transport facilities 6 - Inadequate supply of water/ irrigation problem 7 - Poor soil condition 8 - Others (specify) : 1) _____ 2) _____</p>	<p>1. Who was your major buyer of produce? (encircle code)</p> <p>Indicate percent of production sold to the encircled major buyer</p> <p>1 - Agent _____ % 2 - Wholesaler _____ % 3 - Wholesaler-retailer _____ % 4 - Exporter _____ % 5 - Assembler _____ % 6 - Processor _____ % 7 - Cooperative _____ % 8 - Consumer _____ % 9 - Others (specify) : _____ %</p> <p>2. What were the marketing related problems you have encountered? (encircle code/s or specify if necessary)</p> <p>1 - Unstable prices 2 - Rough roads/ high transport cost 3 - Low price of produce 4 - No buyer/ market outlet 5 - Lack of marketing information 6 - Others (specify): _____</p>	<p>1. Have you availed of loan for cassava production during the reference period? (encircle code)</p> <p>1 - Yes 2 - No, go to Block L</p> <p>2. How much loan did you avail of? P _____</p> <p>3. Who/ What was your major source of loan? (encircle code or specify if necessary)</p> <p>1 - Cooperative 2 - Bank 3 - Private individual 4 - Other lending institutions: _____</p> <p>4. How much was the interest rate per annum? _____ %</p>
<p>L. FARMER'S PARTICIPATION IN CASSAVA PROGRAMS / PROJECTS</p>		
<p>1. Are you aware of any government program/intervention on cassava? (encircle code)</p> <p>2. Have you availed of any benefit from government program /intention? (encircle code)</p> <p>3. What benefits have you availed? (encircle code/s)</p> <p>1 - Planting materials 2 - Fertilizer and other inputs 3 - Training on farming technology 4 - Irrigation facilities 5 - Post harvest facilities 6 - Marketing support 7 - Loans 8 - Others (specify): _____</p> <p>4. Did you use the benefit(s) in your production during the last completed cropping, April 2013 - March 2014? (encircle code) 1 - Yes 2 - No</p> <p>5. Did the benefit(s) receive helped increase your farm income? (encircle code) 1 - Yes 2 - No</p>		

M. OTHER INFORMATION (for cassava only)	N. PLANS AND RECOMMENDATIONS
<p>1. Has Climate Change affected your farming practices? (encircle code) 1 - Yes 2 - No, go to Item 2</p> <p>1.1 What was/were the effects? encircle code/s or specify if necessary</p> <p>1 - Change in cropping pattern 2 - Increase in input usage 3 - Decrease in yield 4 - Decrease in frequency of plowing 5 - Others (specify): _____</p> <p>2 - Did you practice any of the following organic/natural farming method? (encircle code/s or specify if necessary)</p> <p>1 - Yes 2 - No, go to Item 3</p> <p>1 - Hundred percent chemical free farming 2 - Use of organic fertilizer (e.g, composts) 3 - Maintain buffer zone or borders 4 - Others (specify): _____</p> <p>3. Are you a member of cassava farmers' organization? (encircle code)</p> <p>1 - Yes 2 - No, go to Block N</p> <p>3.1 What is the name of the organization? _____</p> <p>3.2 What was/were the benefit/s received from the organization? (encircle code/s or specify if necessary)</p> <p>1 - Training/seminars 2 - Financial/credit support 3 - Inputs support 4 - Marketing support 5 - Others (specify): _____</p>	<p>1. What is your plan regarding cassava farm operation? (encircle code or specify if necessary)</p> <p>1 - Maintain current operation 2 - Expand 3 - Others (specify): _____</p> <p>2. What are your recommendations in order to improve your cassava production? (encircle code/s or specify if necessary)</p> <p>1 - Price support 2 - Improve irrigation services 3 - Infrastructure facilities 4 - Regulate price of farm inputs 5 - Financial support 6 - Soil testing/ analysis 7 - Land Reform Program 8 - Environmental concern (e.g, waste disposal, erosion) 9 - New/ modern farming technologies 10 - Others (specify): _____</p>
<p>O. INTERVIEW / SURVEY PARTICULARS</p>	
<p>CERTIFICATION</p> <p>I hereby certify that the data contained in this questionnaire were obtained/edited/reviewed by me personally and in accordance with the instructions</p>	
<p>_____</p> <p>(Name and signature of Data Collector)</p>	<p>_____</p> <p>(Date Accomplished)</p>
<p>_____</p> <p>(Name and signature of Field Supervisor/Editor)</p>	<p>_____</p> <p>(Date Edited)</p>
<p>_____</p> <p>(Name and signature of PASO)</p>	<p>_____</p> <p>(Date Reviewed)</p>



REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY
 (BUREAU OF AGRICULTURAL STATISTICS)
 BENCOR BLDG., 1184 QUEZON AVENUE, QUEZON CITY

TRAINING EVALUATION SHEET

 (Title of the Survey)

Province: _____

Date of training: _____

Resource Person/s: _____

INSTRUCTIONS: Rate each of the items listed below. Check the box that corresponds to your rating.

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The resource person discussed clearly the following:					
a. Objectives of the survey	<input type="checkbox"/>				
b. Survey procedures	<input type="checkbox"/>				
c. Instructions in filling up the questionnaire	<input type="checkbox"/>				
d. Basic consistency checks	<input type="checkbox"/>				
2. The resource person provided easy-to-follow examples.	<input type="checkbox"/>				
3. The objectives of the mock interview were attained.	<input type="checkbox"/>				
4. The objectives of the dry run exercise were attained.	<input type="checkbox"/>				
5. All issues and concerns raised during the lecture, mock interview and dry run exercise were addressed and resolved.	<input type="checkbox"/>				
6. I can apply in the field operation the knowledge I gained in the training.	<input type="checkbox"/>				

7. Other aspects in the conduct of training that need further improvement: _____

Signature over Printed Name of Data Collector: _____

Contact Number of Data Collector: _____

FARM STRUCTURES, MACHINERIES, AND FARM TOOLS
AND IMPLEMENTS



FARM HOUSE



WAREHOUSE/STORAGE OF



TWO-WHEEL TRACTOR



FOUR-WHEEL TRACTOR



ELECTRIC WATER PUMP



GASOLINE WATER



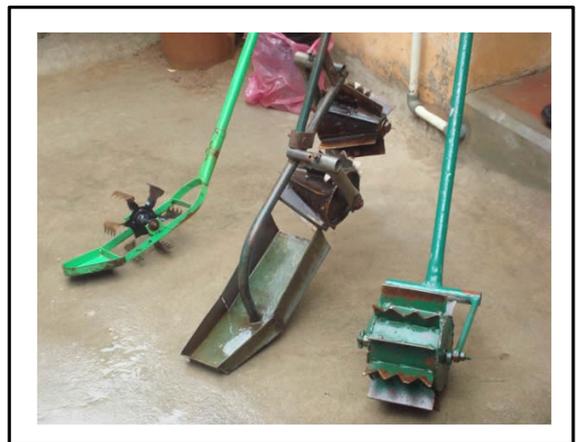
PLOW



HARROW



KNAPSACK SPRAYER



WEEDER



GRASS CUTTER



SHOVEL/SPADE



BOLO



HOE



SLED



SPADING FORK



POST HOLE DIGGER



YOKE



RAKE



WEIGHING SCALE



CRATES



IRRIGATION PUMP

Republic of the Philippines
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