

# Manual of Operations

## Costs and Returns Survey of Garlic and Onion Production



Department of Agriculture  
BUREAU OF AGRICULTURAL STATISTICS

December 2006

## Table of Contents

	Page
Rationale	1
Objectives	2
Methodology	
Coverage	2
Sampling Frame	2
Sampling Design, Sample Size and Sample Selection Procedure	3
The Questionnaire	
Pointers in Accomplishing the Questionnaire	5
Instructions In Filling Up the Questionnaire	
Block A - Geographic Information	6
Block B - Sample Identification	6
Block C - Basic Farm Characteristics	7
Block D - Farm Investments	9
Block E - Material Inputs	10
Block F - Labor Inputs	11
Block G - Other Production Costs	14
Block H - Production and Disposition	15
Block I - Buyer Information	16
Block J - Problems Encountered	16
Block K - Access to Credit	17
Block L - Other Information	17
Block M - Interview / Survey Particulars	18
Annex 1 - Definition of Terms	
Annex 2 - Workplan	
Annex 3 - CRS Questionnaire for Garlic	
Annex 4 - CRS Questionnaire for Onion	

## **INTRODUCTION**

### **Rationale**

The profitability of garlic and onion is one of the primary concerns among planners and policy makers in setting-up goals and strategies as they prepare the sector for global competition. Likewise, this is the concern of agribusiness players who are interested to venture in garlic and onion farming. These major considerations bring to the fore the need to generate updated information on the costs and returns of producing garlic and onion that can guide them in their decision making.

The importance of generating updated information on costs and returns in garlic and onion production is further stressed by the need to improve the supply chain of the country's basic commodities. With the availability of adequate information on the profitability of garlic and onion farming, more farm operators will be encouraged to invest in the industry. This in turn can assist in strengthening the food security situation in the country. On the part of the consumers, they will be benefited in terms of stable supply of these commodities at more reasonable prices.

The present survey is implemented under the auspices of the Diversified Farm Income and Market Development Project (DFIMDP). Its result will specifically contribute to the strengthening of the Agriculture and Fishery Marketing Information System (AFMIS) being developed under the DFIMDP.

The pages that follow contain additional information on CRS Garlic and Onion, and the instructions to be followed in accomplishing the survey questionnaire.

## **Objectives**

The general objective of the survey is to generate updated data on levels and structure of production costs and returns.

Specifically, the survey intends to generate data on the following:

- Production cost structures;
- Indicators of profitability such as gross and net returns, returns above cash costs, net profit - cost ratio, etc.;
- Average use of materials and labor inputs; and
- Other related socio-economic variables including information on new production technologies.

## **Reference Period**

The Reference Period for Costs and Returns Survey is the last cropping completed in 2006.

## **Methodology**

### **Coverage**

The survey will cover sample garlic/onion farmers in the following provinces:

For garlic: Ilocos Norte, Ilocos Sur, Nueva Ecija

For onion: Ilocos Norte, Pangasinan, Nueva Ecija

The domain of the study is the province with the last completed cropping as reference period. Thus, only farmers who harvested garlic/onion during the reference period will be the target respondents for the survey. They should also be knowledgeable on the details of garlic/onion farming particularly on the investments, material inputs and labor expenses incurred and the disposition of produce.

### **Sampling Frame**

The lists of garlic/onion producing barangays as prepared by the concerned BAS Provincial Operations Centers (POCs) serve as the sampling frame for this statistical activity. The lists are prepared for each province and contain the geographic identification, crop area for 2005 and 2006 and number of farmers. These data are obtained from the Municipal Agriculturists' Office, Agricultural Technicians, barangay officials and other barangay key informants and updated Barangay Screening Survey (BSS) results.

## 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 farmer as the secondary and ultimate sampling unit. The barangays are drawn using systematic sampling from an ordered list and the sample farmers are to be identified using snowball approach during data collection. Systematic sampling is used in the selection of sample barangays so both large and small barangays in terms of area will be represented in the sample. For the survey of garlic in Nueva Ecija, all producing barangays are taken as samples.

Total sample size by province is set at 100 farmers, equally allocated to 20 sample barangays, yielding five sample farmers per barangay. For this reason, the population of garlic producing barangays is restricted to those with at least five garlic farmers. A special case is that of the survey of garlic in Nueva Ecija wherein the number of farmers indicated in the list of samples will be covered.

In each selected barangay, sample farmers will be located during data collection using snowball sampling. Names and addresses of garlic/onion farmers living in the barangay will be obtained from the office of the barangay chairman or any other key informant in the barangay during data collection. From this list, the enumerator can select any farmer as the first potential sample. The following screening questions will be used in identifying the sample farmers:

Q1 Are you engaged in garlic/onion farming?

Ans. YES, ask Q2.

NO, end interview and search for another potential sample farmer.

Q2 Did you harvest garlic/onion at anytime in 2006?

Ans. YES, establish last completed cropping and continue with the interview.

NO, end interview and search for another potential sample farmer.

Whether the interviewed farmer is qualified or not, he/she will be asked to identify other farmers of the commodity 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 2006 CRS-Garlic/Onion questionnaire. If the interview is successfully carried out (meaning, all the needed information have been supplied), the enumerator will write the full name and address of the sample farmer in the List of Sample Farmers. Again, the enumerator can select any farmer from the list as the second potential sample for the survey. The process continues until the required number of samples in the barangay is covered.

**2006 COSTS AND RETURNS SURVEY OF GARLIC/ONION PRODUCTION**

**COMMODITY**  
(Check box)

- Garlic  
 - Onion

**List of Sample Farmers**

Province: \_\_\_\_\_

Name of Enumerator: \_\_\_\_\_

Municipality: \_\_\_\_\_

Date of Interview: \_\_\_\_\_

Barangay: \_\_\_\_\_

Name of Field Supervisor: \_\_\_\_\_

<b>Sample No.</b>	<b>Name of Sample Farmer</b> (Surname, First Name)	<b>Residential Address</b> (Street Name and Number, Purok or Sitio)

## **ACCOMPLISHMENT OF THE QUESTIONNAIRE**

### **MAJOR COMPONENTS OF THE QUESTIONNAIRE**

The questionnaires for the Costs and Returns Survey of Garlic and Onion Production consist of 10 and 12 pages, respectively. It has 13 blocks, namely:

- A. Geographic Information
- B. Sample Identification
- C. Basic Farm Characteristics
- D. Farm Investments
- E. Material Inputs
- F. Labor Inputs
- G. Other Production Costs
- H. Production and Disposition
- I. Buyer Information
- J. Problems Encountered
- K. Access to Credit
- L. Other Information
- M. Interview / Survey Particulars

### **POINTERS IN ACCOMPLISHING THE QUESTIONNAIRE**

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 the corresponding answer space(s) and / or box(es) on the questionnaire. Be careful in recording numeric answers. Observe strictly 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 space. A blank may otherwise mean that the corresponding question was not asked. If the answer to a question is none or the question is not applicable, enter a dash (-) in the corresponding answer space(s) or draw a horizontal line along the particular question item to show that there is no entry for such item.

6. Before leaving the area of enumeration, go over the entire questionnaire to make sure that not a single item has been missed.
7. Finally, review all entries and make an initial editing before submitting the accomplished questionnaires to the field supervisor.

## **INSTRUCTIONS IN FILLING UP THE QUESTIONNAIRE**

### **BLOCK A. GEOGRAPHIC INFORMATION**

This block gathers information on the exact location of the farm.

**Items 1 - 4 Name of Region, Province, City/Municipality and Barangay** - write legibly on the spaces provided the required information on the exact location of the farm.

### **BLOCK B. SAMPLE IDENTIFICATION**

This block aims to gather the demographic characteristics of the farmer/operator.

**Item 1 Name of farmer/operator** - write the complete name of the farmer/operator in capital letters (LAST NAME then FIRST NAME).

**Owner/Operator** - refers to the person who owns and/or operates the farm and takes the technical and administrative responsibility of managing the day-to-day operation of the farm.

**Item 2 Age of farmer/operator**- ask and record the age of the farmer/operator as of his/her last birthday.

**Item 3 Sex** - encircle the sex code of the farmer/operator, 1 - Male and 2 - Female.

**Item 4 Highest Educational Attainment** - ask about the highest grade or educational level completed by the farmer/operator.

**Item 5 Main occupation** - ask for the main occupation of the farmer/operator. This refers to the activity which is the major source of his/her income.

**Item 6 Number of years engaged In garlic/onion production** - ask for the number of years the farmer/operator has been engaged in the production of garlic/onion.

**Item 7 Name of respondent** - refers to the person being interviewed. This is usually the sample farmer. In case the respondent is not the sample farmer, write the complete name of the interviewee which should be knowledgeable of the sample farm's operation.

**Item 8 Relationship of respondent to farmer/operator** - encircle the code of the respondent's relationship to the farmer/operator, 1 - farmer/operator, 2 - spouse, 3 - son/daughter and 4 - others (specify on the space provided as the case maybe). If the respondent is one of the family members, be sure that he/she worked in the concerned farm.

### **BLOCK C. BASIC FARM CHARACTERISTICS**

This block seeks to gather basic information about the farmer/operator's farm.

**Item 1 Total farm area** - ask the absolute area (physical area) of the farm in hectares. Record the area in three (3) decimal places.

**Item 2 Number of parcels** - record the number of parcels the farmer/operator have.

**Col 1 Parcel number** - indicate under this column the parcel(s) being managed/operated by the farmer.

**Col 2 Land tenure** - indicate the appropriate code for the tenure status of the parcel(s) being managed/operated by the farmer.

1 - Owned

2 - Tenanted

3 - Leased

4 - Held under CLT/CLOA

5 - Owned-like Possession other than CLT/CLOA

6 - Others (specify): \_\_\_\_\_

**Col 3 Crop(s) grown** - enumerate all the crops grown by the farmers in 2006.

**Col 4 Area planted** - ask the area planted of each crop in hectare(s). Record the area in three (3) decimal places.

**Col 5 Area harvested** - ask the area harvested of each crop in hectare(s). Record the area in three (3) decimal places. In many cases, the area harvested will be exactly the same as the area planted. However, if a portion of the area planted to crop was damaged by flood, pest, and diseases, etc., the area may be less than the area planted. Thus, the entry in Column 5 may be equal or less than the entry in Column 4.

***Succeeding items refer to garlic/onion production.***

**Item 3 Focus parcel number** - record the number of the focus parcel. Focus parcel is the particular parcel where the last cropping is completed and where all relevant information for this study will be collected. If last cropping was completed in more than one parcel, information will be asked on the one having the biggest area and/or highest production.

**Variety planted** - ask about the variety being cultivated. Write the code on the space provided or specify if necessary.

***For Garlic***

- 1 - Batangas Strain
- 2 - Ilocos White
- 3 - Tan Bolters
- 4 - Others (specify): \_\_\_\_\_

***For Onion***

- 1 - Red Creole
- 2 - "Shallot" / Sibuyas Tagalog
  - 2.1 - Native
  - 2.2 - Foreign
- 3 - Yellow Granex
- 4 - Others (specify): \_\_\_\_\_

**Method of planting (for onion only)** - ask for the method of planting adopted by the farmer. Write the code on the space provided.

1 - Direct Planting

2 - Transplanting

**Month planted** - ask for the month planted of garlic/onion which was harvested during 2006 and write the code on the space provided.

**Month harvested** - ask about the month when garlic/onion was harvested during the completed cropping and write the code on the space provided.

**Usual number of croppings per year** - inquire and record the usual number of times garlic/onion is planted and harvested in one year period. Number of croppings refers to the number of completed production cycles i.e. from planting to harvesting.

#### **BLOCK D. FARM INVESTMENTS**

This block aims to gather information on all possible investment items being used in the production of garlic/onion. Fill-up only the items owned and used by the farmer/operator in garlic/onion production in focus parcel during the reference period.

**Col 1** Enumerate under this column the items of investments such as **farmland owned, work animals, farm buildings and other structures, farm machinery, farm tools, equipment and other supplies**. Inquire from the respondent which of the investment items were used/utilized in garlic/onion production during the reference period one by one. To facilitate the interview, accomplish this block in horizontal manner.

**Col 2 Inventory (Area/Number)** - area refers to the size in hectare(s) of the focus parcel owned and devoted to garlic/onion production. It should have an entry if the land tenure is owned. Indicate the area in two (2) decimal places. Number refers to the number of investment items owned and was utilized in garlic/onion farming during the reference period.

**Col 3 Year/s Acquired** - refers to the year when the investment item was purchased/acquired. If there are more than one unit of any single item purchased on different occasion, ask for the year when each item was purchased/acquired and separate answers by a slash (/). Year acquired is a four (4) digit item.

**Col 4 Acquisition Cost** - refers to the value of the investment item at the time it was purchased/acquired. If there are more than one unit of any single item purchased on different occasions, get the acquisition cost of each item and separate answers by a slash (/).

**Col 5 Repairs/Improvements** - determine and record the total costs incurred for all repairs and improvements made during the reference period on the reported farm investments.

**Col 6 Estimated Life (number of years more to last)** - ask the estimated number of years that each investment item is found useful/serviceable starting from the time of the interview. If there are more than one unit of any single item, get the estimated life of each item and separate answers by a slash (/). Entries on estimated life must be in whole numbers.

**Col 7 Percent of use in focus parcel** - an investment item may be used for many purposes or different production processes on different crops/commodities. In order to reflect a closer estimate of depreciation, there is a need to get some estimation as to the extent of use of each investment item for the crop/commodity which is the subject of the survey. Explain to the respondent what it means and what is the intention of the question item. Indicate the usage of the reported investment item to focus parcel 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 (/).

Impute the value of farm investment items inherited/received from others if possible. Investment items with less than one year of estimated useful life and were used/utilized during the last completed production cycle must be reflected in Block G (Other Production Costs) of the questionnaire.

**Col 8 Depreciation** - this column is for Central Office Use.

## **BLOCK E. MATERIAL INPUTS**

This block aims to collect information on usage and cost of material inputs in the production of garlic/onion in focus parcel during the last cropping completed.

**Col 1 Item** - under this column are list of material inputs. Inquire from the respondent if the material inputs was used and fill-up the required information in succeeding columns one item after the other.

**Cols 2 to 10** are to be accomplished according to the type of material inputs listed in Items 1 to 8 in Column 1. All entries should refer to latest garlic/onion harvest in focus parcel in 2006 period.

- Col 2 Quantity** - account for the number of unit of material inputs used in focus parcel during the reference period.
- Col 3 Unit** - write down the unit of measure of the material inputs used (e.g. piece, pack, sack, box, kilogram, bottle, liter, etc).
- Col 4 Weight Per Unit (Kilogram)** - enter the equivalent weight in kilogram per unit of the type of solid/granule material inputs used or applied, in two (2) decimal places (e.g. unit reported in sack which is equivalent to 50 kilograms; the entry should be 50.00).
- Col 5 Volume Per Unit (Liter)** - enter the equivalent volume in liter per unit of the type of liquid material inputs used or applied, in three (3) decimal places (e.g. unit reported in bottle which is equivalent to 250 milliliter; the entry should be 0.250).
- Col 6 Price Per Unit** - record the purchase price of the inputs used per unit of measure reported in Col 3.
- Col 7 Total Quantity (Kilogram)** - for each reported material input, i.e., planting materials and other inputs in solid form, determine the Total Quantity by multiplying the quantity used (Col 2) by the weight per unit (Col 4) and record the product in two (2) decimal places.
- Col 8 Total Value (P)** - for the same items included in Col 7, determine the total value by multiplying the quantity used (Col 2) by the price per unit (Col 6).
- Col 9 Total Volume (Liter)** - determine the total quantity of liquid inputs by multiplying the quantity used (Col 2) by the volume per unit (Col 5) and record in three (3) decimal places.
- Col 10 Total Value (P)** - for the same items included in Col 9, determine the total value of each input by multiplying the quantity used (Col 2) by the price per unit (Col 6).

## **BLOCK F. LABOR INPUTS**

This block seeks to gather information that pertain to labor utilization in the production of garlic/onion in focus parcel during the reference period. It has integrated gender concerns, thus, the need to determine whether labor inputs were provided by male or female farm workers. The sources of labor are operator, family, exchange labor (bayanihan) and hired labor. The latter may include permanent workers, 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 one activity (or one row) at a time.

**Col 1 Activity** - contains the different activities involve in garlic/onion production.

**Col 2 Sex** - this column pertains to the sex of the person performing the farm activities.

**Cols 3 to 5 Operator Labor** - pertains to the production activities performed by the farmer/operator.

**Col 3 Number of days** - indicate the total number of days of work per activity.

**Col 4 Number of hours per day** - ask for the average number of hours of work rendered by the operator per day and record with one (1) decimal place.

**Col 5 Mandays** - conceptually, one manday is equivalent to eight (8) hours of work. Number of mandays (Col 5) is derived as follows:

$$\text{Mandays (Col 5)} = \frac{(\text{Number of days, Col 3}) \times (\text{Number of hours per day, Col 4})}{8 \text{ hours}}$$

**Cols 6 to 9 Family Labor** - pertains to the production activities performed by the family members of the farmer/operator.

**Col 6 Number of persons** - ask for the total number of family members who performed the particular farm operation.

**Col 7 Average number of days per person** - indicate the average number of days worked per person in whole number 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.

**Col 8 Average number of hours per day** - indicate the average number of hours worked 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.

**Col 9 Mandays** - compute for the total mandays of family labor by multiplying Col 6, Col 7 and Col 8, and divide the result by eight (8). Record in two (2) decimal places on the space provided.

$$\text{Mandays (Col 9)} = \frac{[(\text{No. of persons, Col 6}) \times (\text{Average number of days per person, Col 7}) \times (\text{Average number of hours, Col 8})]}{8 \text{ hours}}$$

**Cols 10 To 13 Exchange Labor (Bayanihan)** - handle the interview and recording, including the computation for mandays, the way family labor was treated. Bayanihan is a custom of farm households to help each other in peak periods by working on each other's farm without any pay.

**Cols 14 to 19 Hired Labor** - are the production activities performed by hired laborers including the payment for the services rendered. For Columns 14 to 17, handle the interview, computations and recording the way family labor was treated.

In case a particular activity was performed by:

- a. **Permanent farm workers** - ask and record the total number of permanent employee(s), the average number of days and average number of hours worked per day for each farm activity performed. Apportion the salary of the worker(s) based on the number of mandays rendered in garlic/onion farm and enter in Col 18. In case of multiple farm activities, apportion the total amount based on the number of mandays per activity.
- b. **Contract labor** - this is commonly called "pakyaw" system. Record in Cols 14, 15 and 16 the number of persons, average number of days worked and average number of hours worked per day, respectively, for each activity performed. Apportion the total amount paid to contract laborers based on the number of mandays worked per activity and enter them under Col 18 if payment made is in cash. Otherwise, enter them under Col 19.

**Col 18 Total Payment in Cash** - 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.

**Col 19 Total Payment in Non-Cash** - non-cash payment 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 production paid for a work done. Convert the payment into peso equivalent by following this procedure:

Peso equivalent of in-kind = (Total number of local unit of in-kind payment)  
x (Price per local unit during the time of payment)

**Col 20 Total Food Cost** - when applicable, ask for the total cost incurred in the provision of food (meals/snacks/refreshments) to farm laborers during work on particular farm operation.

**Col 21 Prevailing wage rate per day** - ask for the prevailing wage rate per day in the locality for (each of the items in Col 1) the activities performed by unpaid workers. This information will be needed in the computation of imputed value of operator, family and exchange labor.

## **BLOCK G. OTHER PRODUCTION COSTS**

This block seeks to collect to other items of production cost **incurred in focus parcel during the reference period**. Payments may be in cash or non-cash. In case of non-cash payments or payment in kind, determine the commodity paid, quantity(ies), the unit of measure, weight per unit and compute for the total quantities in kilograms and the corresponding values.

**Item 1 Land tax** - if the sample farmer is owner/operator, ask for the amount of tax paid for the focus parcel. Payment of land tax is normally computed on yearly basis. Specify if payment made is on a per hectare basis, annual basis, etc.

**Item 2 Land lease/rental** - ask for the fixed payment in cash or in kind for the rent/use of farm land for the reference period. Specify if payment made is on a per hectare basis, annual basis, etc.

**Item 3 Rental value for owned land** - ask the farmer if the land used in garlic/onion farm operation will be rented how much will be the rental value for the reference period. This is an imputed cost but for purposes of recording in the questionnaire, this should be entered under cash.

**Item 4 Rentals (machine, animals, and tools and equipment)** – ask for the payments in cash or in kind for the use/rental of machine, animals, and tools and equipment.

**Item 5 Fuel and oil** – ask for the payment in cash or in kind for diesel, gasoline, oil, grease and kerosene consumed in the production process.

**Item 6 Transport cost of inputs** – ask for the cost incurred in the procurement of inputs such as feeds, fertilizers, chemicals, and other farm inputs.

**Item 7 Interest payment on loan** – ask for the payment in cash or in kind for the interest on borrowed capital used in farm operation.

**Item 8 Electricity** – ask for the payment in cash for electricity bills consumed in the production process.

**Item 9 Irrigation** – ask for the payment in cash or in kind for irrigation.

**Item 10 Storage cost** – ask for the payment in cash or in kind incurred by the farmers in storing his produce.

**Item 11 Others (specify)** – ask for the other cost items not listed. Enumerate, if any, and get the required information on costs.

## **BLOCK H. PRODUCTION AND DISPOSITION**

This block aims to gather information on the **volume of harvest in the focus parcel during the reference period** as well as the breakdown by which this harvested volume was disposed.

### **Item 1 Production**

**1.1 Volume of production (No. of local unit)** - enter the gross production in local unit in two (2) decimal places.

**1.2 Name of local unit** - indicate the name of local unit used in measuring the quantity of production whether in sacks, red bags, tiklis/kaing, etc.

**1.3 Weight of one local unit in kilogram** - write the equivalent weight in kilogram of one local unit.

### **Item 2 Disposition (in local unit)**

**2.1 Sold/To be sold** – ask for the quantity sold/marketed out of the total production and ask for the:

**2.1.1 Price per kg (P)** – ask for the price per kilogram of produce.

**2.2 Harvesters' Share** - ask for the quantity given to harvesters as payment for the services rendered.

**2.3 Other Laborers' Share** – ask for the quantity given to other farm laborers as payment for the services rendered.

- 2.4 Landowner's Share** – ask for the quantity given to landowner as payment for the use of his land.
- 2.5 Lease Rental** – ask for the quantity paid for the lease of the land.
- 2.6 For Home Consumption** – ask for the quantity consumed by the farm household.
- 2.7 Set aside for seeds** – ask for the quantity used / to be use for seeds.
- 2.8 Given Away** – ask for the quantity given to other persons, relatives and other households.
- 2.9 Wastage** – ask for the estimated quantity of spoilage or losses incurred at various post-harvest stages such as drying, transporting and storing.
- 2.10 Others (specify)** – ask for the quantity used for other purposes which do not belong to the above categories.

**NOTE:** Check if the value of harvesters' share and other laborers' share were reflected in Section F (Labor Inputs).

## **BLOCK I. BUYER INFORMATION**

This block seeks to obtain the major buyer of produce during the reference period.

Ask the respondent on the major buyer of his produce. Encircle code/s and determine the percentage of garlic/onion that was sold to each buyer out of the total volume marketed.

## **BLOCK J. PROBLEMS ENCOUNTERED**

This block aims to gather information on the problems affecting production and marketing of garlic/onion. Inquire from the respondent the specific production and marketing related problems encountered by encircling the appropriate code(s) provided. For responses which are not in the list, state them under "others (specify)".

## **BLOCK K. ACCESS TO CREDIT**

This block aims to gather information regarding loans availed by the farmer/operator, amount of loans, its sources and interest rate per annum.

**Item 1 Have you availed of any loan for crop production?** - encircle code whether (1) yes or (2) no, if no go to Block L.

**Item 2 How much loan did you avail of?** - write the amount of loan on the space provided. Record in two (2) decimal places.

**Item 3 How much was the interest rate per annum?** - write the entry on the space provided. Express the answer in percent and in two (2) decimal places.

**Item 4 What percentage of loan was actually used for garlic / onion production?** - write the percentage on the space provided. Express the answer in percent and in two (2) decimal places.

**Item 5 Who/What was your source of loan?** - encircle the code of the corresponding answer.

1 - Cooperative

2 - Bank

3 - Private individual

4 - Other lending institution (specify): \_\_\_\_\_

## **BLOCK L. OTHER INFORMATION**

This block seeks to collect information on the civic participation and affiliation of the sample farmer. It also covers the sources of technical know-how and other farm management information of the sample.

**Item 1 Is the operator a member of garlic/onion related association?** - encircle code whether (1) yes or (2) no. If yes, identify the said organization and ask for the benefits derived from being a member of such organization.

**Item 2 Does the operator consult/use advice of:** (Encircle code)

**2.1 Government extension agents?**                      1 - Yes                      2 - No

**2.2 Private extension agents?**                      1 - Yes                      2 - No

**Item 3 What are your future plans regarding garlic/onion farm operation?**  
(Encircle code)

- 1 - Maintain current operation
- 2 - Expand
- 3 - Others (specify)

**Item 4 What will you suggest to the government for the improvement of garlic/onion industry?** - ask the respondent to enumerate his/her recommendations to the government to further improve garlic/onion farming, marketing and the industry.

### **BLOCK M. INTERVIEW / SURVEY PARTICULARS**

After the thorough verification of the completeness and consistency of the responses, the data collector should affix his/her name and signature and the date of accomplishing the questionnaire. Same is through with the Field Supervisor/Editor and the PASO.

# **ANNEXES**

## DEFINITION OF TERMS

## Annex 1

**Parcel** - a piece of land in the holding is one contiguous piece of land under one form of tenure without regard to land use. Both the contiguity and one form of tenure conditions should be met for a piece of land to be classified as a parcel. Contiguous means that the piece of land is not separated by natural or man-made boundaries like road, river, canal, etc., that are not part of the holding (source: NSO)

**Cropping period** - a production cycle from pre-planting activities and ends at harvesting of the crop.

**Physical area** - refers to the actual measurement of land regardless of how many times it has been used.

**Area planted** - refers to total farm area planted to crop which the farmer operates during the reference period.

**Area harvested** - refers to total farm area in which only actual harvesting has been done.

### Land Tenure

**Owned** - refers to the land operated with a title of ownership in the name of the holder and consequently, the right to determine the nature and extent of the use of land. It includes lands whose absolute ownership is vested in the holder thru sale, inheritance, etc. A parcel, which is part of the holding, is also considered fully owned if the holder has an absolute deed to the sale of the land. Likewise, lands of the tillers with Emancipation Patent are fully owned.

**Emancipation Patent** - is the title of the land issued to a tenant upon paying completely his/her amortization of the land he/she tilled and upon compliance with other government requirements. It represents the full emancipation of the tiller from the bondage of the tenancy, hence, vested the absolute ownership of such land.

**Tenanted** - refers to the rented lands wherein the rental arrangement is in the form of share of produce or harvest.

**Leased/Rented** - refers to an area cultivated by a lessee, which belongs to or is legally possessed by another, the lessor. The rental payment is in the form of a fixed amount of either money, produce, or both.

**Held under Certificate of Land Transfer (CLT) or Certificate of Land Ownership Award (CLOA)** - includes only those parcels that are still being paid by the holder under the government land reform program of Operation Land Transfer (OLT). OLT is a systematic transfer of ownership of tenanted rice lands from the landowners to the tenant-tillers while CLOA are titles issued to farmers for their farmlot as covered by Republic Act 6657 otherwise known as Comprehensive Agrarian Reform Law. It must be noted that this category covers only those that are currently paying amortization.

**Ownerlike Possession Other than CLT or CLOA** - refers to the area of the land under conditions that enable a person to operate it as if he/she is the owner although he/she does not possess title of ownership. Area held under ownerlike possession includes those that are held under heirship and other forms in ownerlike possession.

A land is said to be held under heirship if it is inherited and the title of ownership has not been transferred to the heirs. Included are inherited lands without title of ownership.

Other forms of ownerlike possession include an area without legal title of ownership which is operated uncontestedly and uninterruptedly by the holder for a period of 30 years or more, even without the permission of the owner, and land being purchased on installment basis or under long-term contract.

**Others** - refers to those persons not falling under the above categories. These persons are exemplified by mortgagee or those who operate the land under trusteeship, as a squatter or for free.

**Garlic Varieties** (source: <http://www.da.gov.ph/tips/garlic.html>)

**Ilocos White** - is the most common variety of garlic planted for commercial production in the country. It has purple to white scales. It is moderately resistant to insect pests and diseases. It matures 90 to 110 days after planting and has a potential yield of 3.5 tons per hectare. It has a prolonged span of shelf life.

**Tan Bolters** - is not yet officially recommended for commercial production because of unconfirmed yield performance. Its clove is bigger than that of Ilocos White. It has a good keeping quality. It matures 105 to 120 days after planting.

Other varieties such as Batanes White, Batangas White, Ilocos Pink, Nueva Ecija Pink are available in the country but these varieties are not yet officially recommended for commercial production.

### ***Onion Varieties***

**Red Creole** - favored domestically due to its pungent taste and longer storage life.

**Sibuyas Tagalog** - favored domestically due to its pungent taste.

**Yellow Granex** - preferred for export market because of its sweetness.

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

**Work animals** - animals used in farm works.

### ***Farm buildings and other structures***

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

**Warehouse** - a structure meant for storing farm inputs, farm products and or other farm equipments. This is usually made of concrete materials.

**Pump house** - a structure which serves as shed for pump machine.

**Farm Machinery** - these are machines used for land cultivation and irrigation purposes.

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

**Four-wheel Tractor** - an engine-powered vehicle used to draw other vehicles or equipment as plow or harrow.

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

### ***Farm tools, equipment and other supplies***

**Plow (araro)** - an animal drawn implement used to cut, lift, and turn over soil.

**Harrow (*suyod*)** - a cultivating implement set with spikes, spring teeth or disks and used primarily for pulverizing and smoothing the soil and sometimes for mulching, covering seeds, and removing weeds.

**Sprayer (*pambomba*)** - a device such as an atomizer used in applying insecticides to crops.

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

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

**Scythe (*lilik/karet*)** - a tool with a long single edged blade set at an angle or bent wooden shaft fitted with two handles, used in cutting long grasses, etc. by hand.

**Weighing scale (*timbangan*)** - an instrument or machine to measure or apportion a definite amount or quantity and used a scale to determine how much something weighs.

**Sprinkler (*pangdilig/lagador*)** - an apparatus or a watering can for applying a substance in the form of a spray.

**Air plotter (*paleta*)** - an implement drawn by a carabao used to create plots.

**“Calavera”** - an implement drawn by a carabao used to remove weeds in between plots that create drainage canals.

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

**Planter/Direct Seeder** - an implement usually operated by three persons used in direct seeding of onion.

### **Material Inputs**

**Fertilizer** - any substance (*solid or liquid*) as manure or chemical mixture, natural or synthetic, single or a combination of materials that is applied to the soil to make it fertile on the plant to provide one or more of the essential elements to improve plant nutrition, growth, yield or quality or for producing a chemical change in the soil which will contribute to the improvement of plant nutrition and growth.

**Inorganic fertilizer** - any fertilizer product whose properties are determined predominantly by its content of mineral matter or synthetic chemical compound. Also, any chemical compound, in liquid or solid form, which contains concentrated amounts of at least one among: nitrogen, phosphorous and potassium. They are subdivided into a) old grades and b) newly locally formulated and imported fertilizers. The latter is also called foliar fertilizers or other inorganic fertilizer grades not falling under the old grades in liquid and in solid forms.

**Organic fertilizer** - 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.

**Pesticide** - any substance or product, or mixture thereof including active ingredients, adjuvants and formulations, intended to control, prevent, destroy, repel or mitigate directly or indirectly any pest. It shall be understood to include insecticide, fungicide, bactericide, nematocide, herbicide, molluscicide, avicide, rodenticide, plant regulator, defoliant, desiccant and the like.

#### ***Types of Pesticide***

**Herbicide** - a weed killer or any chemical substance used to kill herbaceous plants

**Weedicide** - chemicals used to control weeds

**Insecticide** - chemicals used to control insects

**Fungicide** - a compound used to control fungus or fungal organisms.

#### **Labor Inputs**

##### ***Sources***

**Operator labor** - services rendered by the farm operator to his own farm.

**Family labor** - when member of farmers' family takes part in any of the production activities.

**Exchange labor (bayanihan system)** - if work is done by non-household member for free.

**Hired labor** - persons employed by the operator who are paid on contract or daily basis.

### **Farm Activities for Garlic**

**Clearing of field** - the removal of small trees, pulling of dry roots and weeds, stones and other waste materials in the field.

**Plowing** - the initial tillage operations in the field to break the soil surface using a plow.

**Harrowing** - pulverizing and levelling the field with a harrow.

**Plotting / Levelling of Plots** - involves cultivation of the soil in order to have a leveled, uniform slope.

**Sorting / Selection of planting materials** - select fully matured and well developed bulbs to get medium to large cloves.

**Planting** - direct seeding of bulbs.

**Mulching** - a method of maintaining moisture around the plant especially during dry months. This may be accomplished by putting decayed farm wastes or residues around the base of plants. The commonly used mulching materials are rice straws, rice hulls, cut grass, leaves, chopped weeds, and banana stalks.

**Weeding** - removal or pulling of weeds or unwanted plants which usually grow among cultivated plants.

**Fertilizer Application** - application of plant nutrient to the proper places in the soil.

**Chemical Spraying** - application of chemicals to protect the plants from insects, pests and diseases.

**Harvesting** - pulling individual plants by hand.

**Hauling** - bringing the produce to the place where it will be temporarily stocked (or to the farmer's house).

**Braiding** - tying together harvested garlic by intertwining their stalks together to form durable handle by which the garlic can be gripped together in smaller groups of heads.

**Drying** - a natural method of drying since it relies mainly on solar energy and natural air movement.

### **Farm Activities for Onion**

Refer to garlic for same farm activities except for the following items:

**Seedbed preparation** - is the process of preparing the soil for sowing of seeds where they are cared for (18-45 days) before they are transplanted.

**Preparation of plots** - preparing an area of farm to be planted by loosening up the soil and subjecting it to various land preparations such as clearing, plowing, harrowing, furrowing whenever necessary.

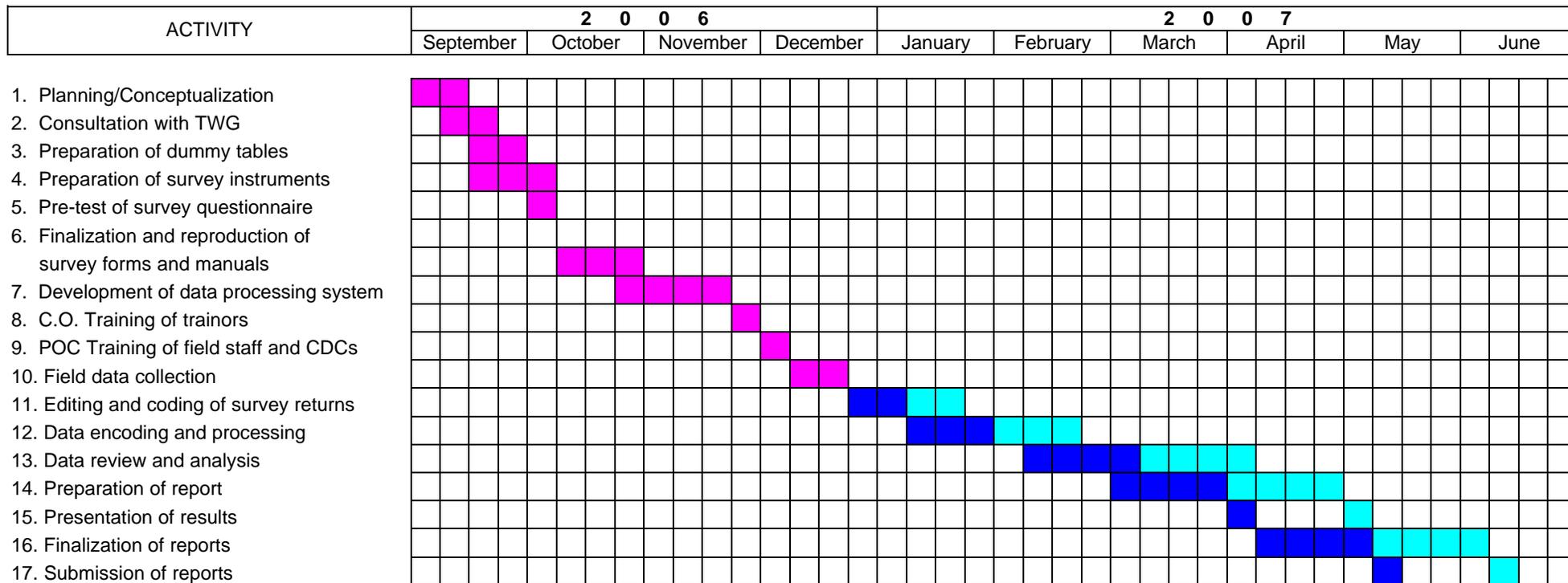
**Planting** - this is the sowing of the seeds either by direct seeding/broadcasting or transplanting the seedlings in straight rows.

**Transplanting** - transferring of seedlings in another piece of land or paddies at random or in straight rows for further growth.

**Broadcasting/Direct seeding** - method of crop establishment wherein germinated seeds are broadcasted on paddies.

**Thinning** - pulling out or removing some seedlings to lessen plant density in a certain area.

**WORKPLAN : Costs and Returns Survey of Garlic and Onion Production**



LEGEND:

█ - Onion and Garlic

█ - Onion

█ - Garlic

Republic of the Philippines  
 Department of Agriculture  
**BUREAU OF AGRICULTURAL STATISTICS**  
 Quezon City

Annex 3

**DIVERSIFIED FARM INCOME AND MARKET DEVELOPMENT PROJECT (DFIMDP)**  
**COSTS AND RETURNS SURVEY OF GARLIC PRODUCTION**  
 (Last Cropping Completed in 2006)

A. GEOGRAPHIC INFORMATION	C. BASIC FARM CHARACTERISTICS																																			
1. Region: _____ <table border="1" style="display: inline-table; vertical-align: middle; width: 40px; height: 20px;"></table> 2. Province: _____ <table border="1" style="display: inline-table; vertical-align: middle; width: 40px; height: 20px;"></table> 3. City / Municipality: _____ <table border="1" style="display: inline-table; vertical-align: middle; width: 40px; height: 20px;"></table> 4. Barangay: _____ <table border="1" style="display: inline-table; vertical-align: middle; width: 40px; height: 20px;"></table>	1. Total farm area: _____ hectares 2. Number of parcels: _____ <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 10%;">Parcel Number</th> <th style="width: 15%;">Land Tenure (indicate code <u>a/</u>)</th> <th style="width: 20%;">Crop(s) Grown</th> <th style="width: 15%;">Area Planted (ha.)</th> <th style="width: 15%;">Area Harvested (ha.)</th> </tr> <tr> <th>(1)</th> <th>(2)</th> <th>(3)</th> <th>(4)</th> <th>(5)</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td>· - - - -</td><td>· - - - -</td></tr> <tr><td>2</td><td></td><td></td><td>· - - - -</td><td>· - - - -</td></tr> <tr><td>3</td><td></td><td></td><td>· - - - -</td><td>· - - - -</td></tr> <tr><td>4</td><td></td><td></td><td>· - - - -</td><td>· - - - -</td></tr> <tr><td>5</td><td></td><td></td><td>· - - - -</td><td>· - - - -</td></tr> </tbody> </table>	Parcel Number	Land Tenure (indicate code <u>a/</u> )	Crop(s) Grown	Area Planted (ha.)	Area Harvested (ha.)	(1)	(2)	(3)	(4)	(5)	1			· - - - -	· - - - -	2			· - - - -	· - - - -	3			· - - - -	· - - - -	4			· - - - -	· - - - -	5			· - - - -	· - - - -
Parcel Number	Land Tenure (indicate code <u>a/</u> )	Crop(s) Grown	Area Planted (ha.)	Area Harvested (ha.)																																
(1)	(2)	(3)	(4)	(5)																																
1			· - - - -	· - - - -																																
2			· - - - -	· - - - -																																
3			· - - - -	· - - - -																																
4			· - - - -	· - - - -																																
5			· - - - -	· - - - -																																
B. SAMPLE IDENTIFICATION																																				
1. Name of farmer/operator: _____ <table border="1" style="display: inline-table; vertical-align: middle; width: 40px; height: 20px;"></table> 2. Age of farmer/operator (as of last birthday): _____ years old 3. Sex (Encircle code):     1 - Male            2 - Female 4. Highest educational attainment: _____ <table border="1" style="display: inline-table; vertical-align: middle; width: 40px; height: 20px;"></table> 5. Main occupation: _____ <table border="1" style="display: inline-table; vertical-align: middle; width: 40px; height: 20px;"></table> 6. No. of years engaged in garlic production: _____ years 7. Name of respondent: _____ 8. Relationship of respondent to farmer/operator (Encircle code): 1 - Farmer/Operator 2 - Spouse 3 - Son/Daughter 4 - Others (specify): _____	<p><b>NOTE: SUCCEEDING ITEMS REFER TO GARLIC PRODUCTION</b></p> 3. Focus parcel number: _____ 3.1 Variety Planted (Indicate code): <u>b/</u> _____ 3.2 Month Planted (Indicate code): <u>c/</u> _____ 3.3 Month Harvested (Indicate code): <u>c/</u> _____ 3.4 Usual number of croppings per year: _____																																			

**CODES:**

<b><u>a/</u> Land Tenure</b> 1 - Owned 2 - Tenanted 3 - Leased 4 - Held under CLT/CLOA 5 - Owned-like Possession other than CLT/CLOA 6 - Others (specify): _____	<b><u>b/</u> Variety Planted</b> 1 - Batangas Strain 2 - Ilocos White 3 - Tan Bolters 4 - Others (specify): _____
--	---

<b><u>c/</u> Month Planted / Harvested</b> 1 - January 2 - February 3 - March 4 - April 5 - May 6 - June	7 - July 8 - August 9 - September 10 - October 11 - November 12 - December
--	---

D. FARM INVESTMENTS (used in focus parcel)							Depreciation (For CO use)
Item	Inventory (Area / No.)	Year/s Acquired	Acquisition Cost (P)	Repairs / Improvement (P)	Estimated Life (Years)	Percent of Use in Focus Parcel	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Farm land owned / Focus Parcel (ha.)	. _ _ _ _		. _ _ _	. _ _ _			
2. Work animals			. _ _ _				
2.1 Carabao			. _ _ _				
2.2 Cattle			. _ _ _				
3. Farm buildings and other structures			. _ _ _	. _ _ _			. _ _ _
3.1 Farm house			. _ _ _	. _ _ _			. _ _ _
3.2 Warehouse			. _ _ _	. _ _ _			. _ _ _
3.3 Pump house			. _ _ _	. _ _ _			. _ _ _
3.4 Others: 1) _____			. _ _ _	. _ _ _			. _ _ _
2) _____			. _ _ _	. _ _ _			. _ _ _
3) _____			. _ _ _	. _ _ _			. _ _ _
4) _____			. _ _ _	. _ _ _			. _ _ _
4. Farm machinery			. _ _ _	. _ _ _			. _ _ _
4.1 Two-wheel tractor			. _ _ _	. _ _ _			. _ _ _
4.2 Four-wheel tractor			. _ _ _	. _ _ _			. _ _ _
4.3 Irrigation pump			. _ _ _	. _ _ _			. _ _ _
4.4 Others: 1) _____			. _ _ _	. _ _ _			. _ _ _
2) _____			. _ _ _	. _ _ _			. _ _ _
3) _____			. _ _ _	. _ _ _			. _ _ _
4) _____			. _ _ _	. _ _ _			. _ _ _

D. FARM INVESTMENTS (used in focus parcel) . . . continued							Depreciation (For CO use)
Item	Inventory (No.)	Year/s Acquired	Acquisition Cost (P)	Repairs / Improvement (P)	Estimated Life (Years)	Percent of Use in Focus Parcel	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
5. Farm tools, equipment and other supplies			· _ _ _	· _ _ _			· _ _ _
5.1 Plow (araro)			· _ _ _	· _ _ _			· _ _ _
5.2 Harrow (suyod)			· _ _ _	· _ _ _			· _ _ _
5.3 Sprayer (pambomba)			· _ _ _	· _ _ _			· _ _ _
5.4 Air plotter			· _ _ _	· _ _ _			· _ _ _
5.5 Shovel/spade (pala)			· _ _ _	· _ _ _			· _ _ _
5.6 Bolo (itak)			· _ _ _	· _ _ _			· _ _ _
5.7 Scythe (lilik / karet / lingkaw)			· _ _ _	· _ _ _			· _ _ _
5.8 Weighing scale (timbangan)			· _ _ _	· _ _ _			· _ _ _
5.9 Sprinkler (pangdilig / lagadera)			· _ _ _	· _ _ _			· _ _ _
5.10 Spading fork (tinidor)			· _ _ _	· _ _ _			· _ _ _
5.11 Hose			· _ _ _	· _ _ _			· _ _ _
5.12 Scissors (gunting)			· _ _ _	· _ _ _			· _ _ _
5.13 Sled (paragos)			· _ _ _	· _ _ _			· _ _ _
5.14 Trailer (panghakot)			· _ _ _	· _ _ _			· _ _ _
5.15 Grass cutter			· _ _ _	· _ _ _			· _ _ _
5.16 Others: 1) _____			· _ _ _	· _ _ _			· _ _ _
2) _____			· _ _ _	· _ _ _			· _ _ _
3) _____			· _ _ _	· _ _ _			· _ _ _
4) _____			· _ _ _	· _ _ _			· _ _ _



E. MATERIAL INPUTS (used in focus parcel) . . . continued									
Item	Quantity	Unit	Weight / Volume Per Unit		Price Per Unit (P)	Solid / Granule Inputs		Liquid Inputs	
			(Kilogram)	(Liter)		Total Quantity (Kilogram)	Total Value (P)	Total Volume (Liter)	Total Value (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (2) x (4)	(8) = (2) x (6)	(9) = (2) x (5)	(10) = (2) x (6)
5. Herbicides / Weedicides	· _ _			· _ _ _	· _ _			· _ _ _	· _ _ _
5.1 Round-up	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
5.2 Power	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
5.3 Clear-up	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
5.4 Goal	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
5.5 Onecide	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
5.6 Ronstar	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
5.7 Others: 1) _____	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
2) _____	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
6. Insecticides						· _ _	· _ _	· _ _ _	· _ _
6.1 Ascend	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
6.2 Brodan	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
6.3 Success	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
6.4 Others: 1) _____	· _ _		· _ _	· _ _ _	· _ _	· _ _	· _ _	· _ _ _	· _ _
2) _____	· _ _		· _ _	· _ _ _	· _ _	· _ _	· _ _	· _ _ _	· _ _
7. Fungicides						· _ _	· _ _	· _ _ _	· _ _
7.1 Dithane	· _ _		· _ _	· _ _ _	· _ _	· _ _	· _ _	· _ _ _	· _ _
7.2 Wokocine	· _ _			· _ _ _	· _ _			· _ _ _	· _ _
7.3 Others: 1) _____	· _ _		· _ _	· _ _ _	· _ _	· _ _	· _ _	· _ _ _	· _ _
2) _____	· _ _		· _ _	· _ _ _	· _ _	· _ _	· _ _	· _ _ _	· _ _
8. Other chemicals						· _ _	· _ _	· _ _ _	· _ _
8.1 Atonik	· _ _		· _ _	· _ _ _	· _ _	· _ _	· _ _	· _ _ _	· _ _
8.2 Others: 1) _____	· _ _		· _ _	· _ _ _	· _ _	· _ _	· _ _	· _ _ _	· _ _
2) _____	· _ _		· _ _	· _ _ _	· _ _	· _ _	· _ _	· _ _ _	· _ _

<b>F. LABOR INPUTS (in focus parcel)</b>																				
Activity		Operator Labor			Family Labor				Exchange Labor				Hired Labor					Total Food Cost (P)	Prevailing wage rate per day (P)	
		No. of days	No. of hours per day	Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Total Payment				
						days per person	hours per day			days per person	hours per day			days per person	hours per day	Cash (P)	Non-Cash (P)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
<b>LAND PREPARATION</b>																				
1. Clearing of field	1 Male		•	•			•	•			•	•			•	•	•	•	•	•
	2 Female		•	•			•	•			•	•			•	•	•	•	•	•
2. Plowing																				
2.1 Man-animal	1 Male		•	•			•	•			•	•			•	•	•	•	•	•
	2 Female		•	•			•	•			•	•			•	•	•	•	•	•
2.2 Man-machine 2-wheel tractor	1 Male		•	•			•	•			•	•			•	•	•	•	•	•
	2 Female		•	•			•	•			•	•			•	•	•	•	•	•
2.3 Man-machine 4-wheel tractor	1 Male		•	•			•	•			•	•			•	•	•	•	•	•
	2 Female		•	•			•	•			•	•			•	•	•	•	•	•
3. Harrowing																				
3.1 Man-animal	1 Male		•	•			•	•			•	•			•	•	•	•	•	•
	2 Female		•	•			•	•			•	•			•	•	•	•	•	•
3.2 Man-machine 2-wheel tractor	1 Male		•	•			•	•			•	•			•	•	•	•	•	•
	2 Female		•	•			•	•			•	•			•	•	•	•	•	•
3.3 Man-machine 4-wheel tractor	1 Male		•	•			•	•			•	•			•	•	•	•	•	•
	2 Female		•	•			•	•			•	•			•	•	•	•	•	•

**NOTE: Col. 20 - Ask the total cost incurred for the provision of food (meals, snacks, refreshments) to farm laborers.**

**Col. 21 - Get the prevailing wage rate per day for all the activities performed by unpaid workers.**

**F. LABOR INPUTS (in focus parcel) . . . continued**

Activity		Operator Labor			Family Labor				Exchange Labor				Hired Labor					Total Food Cost (P)	Prevailing wage rate per day (P)	
		No. of days	No. of hours per day	Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Total Payment				
						days per person	hours per day			days per person	hours per day			days per person	hours per day	Cash (P)	Non-Cash (P)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
4. Plotting / Levelling of Plots																				
4.1 Man	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
4.2 Man-animal	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
5. Sorting / Selection of planting materials	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
6. Planting	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
<b>CARE OF CROPS</b>																				
7. Mulching	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
8. Watering / Irrigating	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
9. Weeding																				
9.1 Manual	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
9.2 Chemical spraying (Weedicide)	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·

**NOTE: Col. 20 - Ask the total cost incurred for the provision of food (meals, snacks, refreshments) to farm laborers.**

**Col. 21 - Get the prevailing wage rate per day for all the activities performed by unpaid workers.**

F. LABOR INPUTS (in focus parcel) . . . continued																				
Activity		Operator Labor			Family Labor				Exchange Labor				Hired Labor						Total Food Cost (P)	Prevailing wage rate per day (P)
		No. of days	No. of hours per day	Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	Total Payment			
						days per person	hours per day			days per person	hours per day			days per person	hours per day		Cash (P)	Non-Cash (P)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
10. Fertilizer application (broadcast)	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
11. Chemical spraying (Insecticide, Fungicide, etc.)	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
12. Harvesting	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
13. Hauling	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
14. Drying	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
15. Bundling	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
16. Cleaning of bulbs / Sorting / Grading / Braiding	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
17. Others 1) _____	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
2) _____	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
3) _____	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·

NOTE: Col. 20 - Ask the total cost incurred for the provision of food (meals, snacks, refreshments) to farm laborers.  
 Col. 21 - Get the prevailing wage rate per day for all the activities performed by unpaid workers.

G. OTHER PRODUCTION COSTS (in focus parcel)								H. PRODUCTION AND DISPOSITION (in focus parcel)	
Item	Cash (P)	Non-cash / Imputed						1. Production	
		Commodity	Quantity	Unit of measure	Weight per unit (Kg.)	Total		1.1 Volume of production (No. of local unit): _____ . ____	
						Quantity (Kg.)	Value (P)	1.2 Name of local unit: _____	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	1.3 Weight of one local unit in kilogram: _____ . ____ kg	
								2. Disposition	
								Item	Total Quantity (in local unit)
1. Land tax	·---							2.1 Sold / To be sold	·_____
2. Land lease / rental	·---		·---		·---	·---	·---	2.1.1 Price / kg: P_____ . ____	
3. Rental value for owned land	·---							2.2 Harvesters' share	·_____
4. Rentals								2.3 Other laborers' share	·_____
4.1 Machine	·---		·---		·---	·---	·---	2.4 Landowner's share	·_____
4.2 Animals	·---		·---		·---	·---	·---	2.5 Lease rental	·_____
4.3 Tools and equipment	·---		·---		·---	·---	·---	2.6 For home consumption	·_____
5. Fuel and oil	·---		·---		·---	·---	·---	2.7 Set aside for seeds	·_____
6. Transport cost of inputs	·---		·---		·---	·---	·---	2.8 Given away	·_____
7. Interest payment on crop loan	·---		·---		·---	·---	·---	2.9 Wastage	·_____
8. Electricity	·---		·---		·---	·---	·---	2.10 Others:	
9. Irrigation fee	·---							1) _____	·_____
10. Storage cost	·---		·---		·---	·---	·---	2) _____	·_____
11. Others:								3) _____	·_____
1) Red bag	·---		·---		·---	·---	·---	4) _____	·_____
2) Tiklis / Kaing	·---		·---		·---	·---	·---	5) _____	·_____
3) _____	·---		·---		·---	·---	·---		
4) _____	·---		·---		·---	·---	·---		



Republic of the Philippines  
Department of Agriculture  
**BUREAU OF AGRICULTURAL STATISTICS**  
Quezon City

Annex 4

**DIVERSIFIED FARM INCOME AND MARKET DEVELOPMENT PROJECT (DFIMDP)**  
**COSTS AND RETURNS SURVEY OF ONION PRODUCTION**  
(Last Cropping Completed in 2006)

A. GEOGRAPHIC INFORMATION	C. BASIC FARM CHARACTERISTICS																																			
<p>1. Region: _____</p> <p>2. Province: _____</p> <p>3. City / Municipality: _____</p> <p>4. Barangay: _____</p>	<p>1. Total farm area: _____ hectares</p> <p>2. Number of parcels: _____</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="width: 10%;">Parcel Number</th> <th style="width: 15%;">Land Tenure (indicate code <u>a/</u>)</th> <th style="width: 20%;">Crop(s) Grown</th> <th style="width: 15%;">Area Planted (ha.)</th> <th style="width: 15%;">Area Harvested (ha.)</th> </tr> <tr> <td style="text-align: center;">(1)</td> <td style="text-align: center;">(2)</td> <td style="text-align: center;">(3)</td> <td style="text-align: center;">(4)</td> <td style="text-align: center;">(5)</td> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td></td> <td></td> <td style="text-align: center;">. ----</td> <td style="text-align: center;">. ----</td> </tr> <tr> <td style="text-align: center;">2</td> <td></td> <td></td> <td style="text-align: center;">. ----</td> <td style="text-align: center;">. ----</td> </tr> <tr> <td style="text-align: center;">3</td> <td></td> <td></td> <td style="text-align: center;">. ----</td> <td style="text-align: center;">. ----</td> </tr> <tr> <td style="text-align: center;">4</td> <td></td> <td></td> <td style="text-align: center;">. ----</td> <td style="text-align: center;">. ----</td> </tr> <tr> <td style="text-align: center;">5</td> <td></td> <td></td> <td style="text-align: center;">. ----</td> <td style="text-align: center;">. ----</td> </tr> </tbody> </table>	Parcel Number	Land Tenure (indicate code <u>a/</u> )	Crop(s) Grown	Area Planted (ha.)	Area Harvested (ha.)	(1)	(2)	(3)	(4)	(5)	1			. ----	. ----	2			. ----	. ----	3			. ----	. ----	4			. ----	. ----	5			. ----	. ----
Parcel Number	Land Tenure (indicate code <u>a/</u> )	Crop(s) Grown	Area Planted (ha.)	Area Harvested (ha.)																																
(1)	(2)	(3)	(4)	(5)																																
1			. ----	. ----																																
2			. ----	. ----																																
3			. ----	. ----																																
4			. ----	. ----																																
5			. ----	. ----																																
<p><b>B. SAMPLE IDENTIFICATION</b></p> <p>1. Name of farmer/operator: _____</p> <p>2. Age of farmer/operator (as of last birthday): _____ years old</p> <p>3. Sex (Encircle code):     1 - Male            2 - Female</p> <p>4. Highest educational attainment: _____</p> <p>5. Main occupation: _____</p> <p>6. No. of years engaged in onion production: _____ years</p> <p>7. Name of respondent: _____</p> <p>8. Relationship of respondent to farmer/operator (Encircle code):</p> <p style="margin-left: 20px;">1 - Farmer/Operator</p> <p style="margin-left: 20px;">2 - Spouse</p> <p style="margin-left: 20px;">3 - Son/Daughter</p> <p style="margin-left: 20px;">4 - Others (specify): _____</p>	<p><b>NOTE: SUCCEEDING ITEMS REFER TO ONION PRODUCTION</b></p> <p>3. Focus parcel number: _____</p> <p style="margin-left: 20px;">3.1 Variety Planted (Indicate code): <u>b/</u> _____</p> <p style="margin-left: 20px;">3.2 Method of Planting (Indicate code): <u>c/</u> _____</p> <p style="margin-left: 20px;">3.3 Month Planted (Indicate code): <u>d/</u> _____</p> <p style="margin-left: 20px;">3.4 Month Harvested (Indicate code): <u>d/</u> _____</p> <p style="margin-left: 20px;">3.5 Usual number of croppings per year: _____</p>																																			

**CODES: a/ Land Tenure**

- 1 - Owned
- 2 - Tenanted
- 3 - Leased
- 4 - Held under CLT/CLOA
- 5 - Owned-like Possession other than CLT/CLOA
- 6 - Others (specify): \_\_\_\_\_

**b/ Variety Planted**

- 1 - Red Creole
- 2 - "Shallot"/Sibuyas Tagalog
  - 2.1 Native
  - 2.2 Foreign
- 3 - Yellow Granex
- 4 - Others (specify): \_\_\_\_\_

**c/ Method of Planting**

- 1 - Direct Planting
- 2 - Transplanting

**d/ Month Planted / Harvested**

- |              |               |
|--------------|---------------|
| 1 - January  | 7 - July      |
| 2 - February | 8 - August    |
| 3 - March    | 9 - September |
| 4 - April    | 10 - October  |
| 5 - May      | 11 - November |
| 6 - June     | 12 - December |

D. FARM INVESTMENTS (used in focus parcel)							Depreciation (For CO use)
Item	Inventory (Area / No.)	Year/s Acquired	Acquisition Cost (P)	Repairs / Improvement (P)	Estimated Life (Years)	Percent of Use in Focus Parcel	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Farm land owned / Focus Parcel (ha.)	. _ _ _ _		. _ _ _	. _ _ _			
2. Work animals			. _ _ _				
2.1 Carabao			. _ _ _				
2.2 Cattle			. _ _ _				
3. Farm buildings and other structures			. _ _ _	. _ _ _			. _ _ _
3.1 Farm house			. _ _ _	. _ _ _			. _ _ _
3.2 Warehouse			. _ _ _	. _ _ _			. _ _ _
3.3 Pump house			. _ _ _	. _ _ _			. _ _ _
3.4 Others: 1) _____			. _ _ _	. _ _ _			. _ _ _
2) _____			. _ _ _	. _ _ _			. _ _ _
3) _____			. _ _ _	. _ _ _			. _ _ _
4) _____			. _ _ _	. _ _ _			. _ _ _
4. Farm machinery			. _ _ _	. _ _ _			. _ _ _
4.1 Two-wheel tractor			. _ _ _	. _ _ _			. _ _ _
4.2 Four-wheel tractor			. _ _ _	. _ _ _			. _ _ _
4.3 Irrigation pump			. _ _ _	. _ _ _			. _ _ _
4.4 Others: 1) _____			. _ _ _	. _ _ _			. _ _ _
2) _____			. _ _ _	. _ _ _			. _ _ _
3) _____			. _ _ _	. _ _ _			. _ _ _
4) _____			. _ _ _	. _ _ _			. _ _ _

D. FARM INVESTMENTS (used in focus parcel) . . . continued							Depreciation (For CO use)
Item	Inventory (No.)	Year/s Acquired	Acquisition Cost (P)	Repairs / Improvement (P)	Estimated Life (Years)	Percent of Use in Focus Parcel	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
5. Farm tools, equipment and other supplies			· _ _	· _ _			· _ _
5.1 Plow (araro)			· _ _	· _ _			· _ _
5.2 Harrow (suyod)			· _ _	· _ _			· _ _
5.3 Sprayer (pambomba)			· _ _	· _ _			· _ _
5.4 Shovel/spade (pala)			· _ _	· _ _			· _ _
5.5 Bolo (itak)			· _ _	· _ _			· _ _
5.6 Scythe (lilik / karet / lingkaw)			· _ _	· _ _			· _ _
5.7 Weighing scale (timbangan)			· _ _	· _ _			· _ _
5.8 Sprinkler (pangdilig / lagadera)			· _ _	· _ _			· _ _
5.9 Spading fork (tinidor)			· _ _	· _ _			· _ _
5.10 Hose			· _ _	· _ _			· _ _
5.11 Scissors (gunting)			· _ _	· _ _			· _ _
5.12 Air plotter (paleta)			· _ _	· _ _			· _ _
5.13 "Calavera"			· _ _	· _ _			· _ _
5.14 Sled (paragos)			· _ _	· _ _			· _ _
5.15 Trailer (panghakot)			· _ _	· _ _			· _ _
5.16 Direct seeder			· _ _	· _ _			· _ _
5.17 Grass cutter			· _ _	· _ _			· _ _
5.18 Others: 1) _____			· _ _	· _ _			· _ _
2) _____			· _ _	· _ _			· _ _
3) _____			· _ _	· _ _			· _ _
4) _____			· _ _	· _ _			· _ _



E. MATERIAL INPUTS (used in focus parcel) . . . continued									
Item	Quantity	Unit	Weight / Volume Per Unit		Price Per Unit (P)	Solid / Granule Inputs		Liquid Inputs	
			(Kilogram)	(Liter)		Total Quantity (Kilogram)	Total Value (P)	Total Volume (Liter)	Total Value (P)
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (2) x (4)	(8) = (2) x (6)	(9) = (2) x (5)	(10) = (2) x (6)
5. Herbicides / Weedicides	• _ _			• _ _ _	• _ _			• _ _ _	• _ _ _
5.1 Round-up	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
5.2 Power	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
5.3 Clear-up	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
5.4 Goal	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
5.5 Onecide	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
5.6 Ronstar	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
5.7 Others: 1) _____	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
2) _____	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
6. Insecticides						• _ _	• _ _	• _ _ _	• _ _
6.1 Ascend	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
6.2 Brodan	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
6.3 Success	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
6.4 Others: 1) _____	• _ _		• _ _	• _ _ _	• _ _	• _ _	• _ _	• _ _ _	• _ _
2) _____	• _ _		• _ _	• _ _ _	• _ _	• _ _	• _ _	• _ _ _	• _ _
7. Fungicides						• _ _	• _ _	• _ _ _	• _ _
7.1 Dithane	• _ _		• _ _	• _ _ _	• _ _	• _ _	• _ _	• _ _ _	• _ _
7.2 Wokocine	• _ _			• _ _ _	• _ _			• _ _ _	• _ _
7.3 Others: 1) _____	• _ _		• _ _	• _ _ _	• _ _	• _ _	• _ _	• _ _ _	• _ _
2) _____	• _ _		• _ _	• _ _ _	• _ _	• _ _	• _ _	• _ _ _	• _ _
8. Other chemicals						• _ _	• _ _	• _ _ _	• _ _
8.1 Atonik	• _ _		• _ _	• _ _ _	• _ _	• _ _	• _ _	• _ _ _	• _ _
8.2 Others: 1) _____	• _ _		• _ _	• _ _ _	• _ _	• _ _	• _ _	• _ _ _	• _ _
2) _____	• _ _		• _ _	• _ _ _	• _ _	• _ _	• _ _	• _ _ _	• _ _

<b>F. LABOR INPUTS (in focus parcel)</b>																				
Activity		Operator Labor			Family Labor				Exchange Labor				Hired Labor						Total Food Cost (P)	Prevailing wage rate per day (P)
		No. of days	No. of hours per day	Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	Total Payment			
						days per person	hours per day			days per person	hours per day			days per person	hours per day		Cash (P)	Non-Cash (P)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
<b>SEEDBED PREPARATION</b>																				
<b>1. Plowing</b>																				
1.1 Man-animal	1 Male		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
	2 Female		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
1.2 Man-machine 2-wheel tractor	1 Male		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
	2 Female		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
1.3 Man-machine 4-wheel tractor	1 Male		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
	2 Female		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
<b>2. Harrowing</b>																				
2.1 Man-animal	1 Male		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
	2 Female		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
2.2 Man-machine 2-wheel tractor	1 Male		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
	2 Female		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
2.3 Man-machine 4-wheel tractor	1 Male		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _
	2 Female		· _	· _ _			· _	· _ _			· _	· _ _			· _	· _ _	· _ _	· _ _	· _ _	· _ _

**NOTE: Col. 20 - Ask the total cost incurred for the provision of food (meals, snacks, refreshments) to farm laborers.**

**Col. 21 - Get the prevailing wage rate per day for all the activities performed by unpaid workers.**

F. LABOR INPUTS (in focus parcel) . . . continued																				
Activity		Operator Labor			Family Labor				Exchange Labor				Hired Labor						Total Food Cost (P)	Prevailing wage rate per day (P)
		No. of days	No. of hours per day	Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	Total Payment			
						days per person	hours per day			days per person	hours per day			days per person	hours per day		Cash (P)	Non-Cash (P)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
3. Plotting / Levelling of Plots																				
3.1 Man	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
3.2 Man-animal	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
3.3 Man-machine	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
4. Chemical spraying (Disinfectant)	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
5. Sowing of seeds	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
6. Mulching	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
7. Watering of seedbed	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
8. Weeding																				
8.1 Manual	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
8.2 Chemical spraying	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·

NOTE: Col. 20 - Ask the total cost incurred for the provision of food (meals, snacks, refreshments) to farm laborers.

Col. 21 - Get the prevailing wage rate per day for all the activities performed by unpaid workers.

<b>F. LABOR INPUTS (in focus parcel) . . . continued</b>																				
Activity		Operator Labor			Family Labor				Exchange Labor				Hired Labor						Total Food Cost (P)	Prevailing wage rate per day (P)
		No. of days	No. of hours per day	Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Total Payment				
						days per person	hours per day			days per person	hours per day			days per person	hours per day	Cash (P)	Non-Cash (P)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
9. Pulling of seedlings	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
<b>LAND PREPARATION</b>																				
10. Clearing of field	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
11. Plowing																				
11.1 Man-animal	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
11.2 Man-machine 2-wheel tractor	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
11.3 Man-machine 4-wheel tractor	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
12. Harrowing																				
12.1 Man-animal	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
12.2 Man-machine 2-wheel tractor	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
12.3 Man-machine 4-wheel tractor	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·

NOTE: Col. 20 - Ask the total cost incurred for the provision of food (meals, snacks, refreshments) to farm laborers.

Col. 21 - Get the prevailing wage rate per day for all the activities performed by unpaid workers.

<b>F. LABOR INPUTS (in focus parcel) . . . continued</b>																				
Activity		Operator Labor			Family Labor				Exchange Labor				Hired Labor						Total Food Cost (P)	Prevailing wage rate per day (P)
		No. of days	No. of hours per day	Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Total Payment				
						days per person	hours per day			days per person	hours per day			days per person	hours per day	Cash (P)	Non-Cash (P)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
13. Plotting / Levelling of Plots																				
13.1 Man	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
13.2 Man-animal	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
13.3 Man-machine	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
14. Planting																				
14.1 Direct seeding	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
14.2 Transplanting	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
15. Mulching	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
<b>CARE OF CROPS</b>																				
16. Thinning	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
17. Watering / Irrigation	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
18. Fertilizer application	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·

NOTE: Col. 20 - Ask the total cost incurred for the provision of food (meals, snacks, refreshments) to farm laborers.

Col. 21 - Get the prevailing wage rate per day for all the activities performed by unpaid workers.

**F. LABOR INPUTS (in focus parcel) . . . continued**

Activity		Operator Labor			Family Labor				Exchange Labor				Hired Labor						Total Food Cost (P)	Prevailing wage rate per day (P)
		No. of days	No. of hours per day	Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Mandays	No. of persons	Average no. of		Total Payment				
						days per person	hours per day			days per person	hours per day			days per person	hours per day	Cash (P)	Non-Cash (P)			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
19. Chemical spraying (Insecticide, Fungicide, etc.)	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
20. Weeding																				
20.1 Manual	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
20.2 Chemical spraying (Weedicide)	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
21. Harvesting	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
22. Drying	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
23. Cutting of leaves/ Cleaning of bulbs / Sorting / Grading	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
24. Hauling	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
25. Others 1) _____	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·
2) _____	1 Male		·	·			·	·			·	·			·	·	·	·	·	·
	2 Female		·	·			·	·			·	·			·	·	·	·	·	·

**NOTE: Col. 20 - Ask the total cost incurred for the provision of food (meals, snacks, refreshments) to farm laborers.**

**Col. 21 - Get the prevailing wage rate per day for all the activities performed by unpaid workers.**

G. OTHER PRODUCTION COSTS (in focus parcel)								H. PRODUCTION AND DISPOSITION (in focus parcel)	
Item	Cash (P)	Non-cash / Imputed						1. Production	
		Commodity	Quantity	Unit of measure	Weight per unit (Kg.)	Total		1.1 Volume of production (No. of local unit): _____ . ____	
						Quantity (Kg.)	Value (P)	1.2 Name of local unit: _____	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	1.3 Weight of one local unit in kilogram: _____ . ____ kg	
2. Disposition								Item	Total Quantity (in local unit)
1. Land tax	· ---								
2. Land lease/rental	· ---		· ---		· ---	· ---	· ---		
3. Rental value for owned land	· ---							2.1 Sold / To be sold	· _____
4. Rentals								2.1.1 Price / kg: P_____ . ____	
4.1 Machine	· ---		· ---		· ---	· ---	· ---	2.2 Harvesters' share	· _____
4.2 Animals	· ---		· ---		· ---	· ---	· ---	2.3 Other laborers' share	· _____
4.3 Tools and equipment	· ---		· ---		· ---	· ---	· ---	2.4 Landowner's share	· _____
5. Fuel and oil	· ---		· ---		· ---	· ---	· ---	2.5 Lease rental	· _____
6. Transport cost of inputs	· ---		· ---		· ---	· ---	· ---	2.6 For home consumption	· _____
7. Interest payment on crop loan	· ---		· ---		· ---	· ---	· ---	2.7 Set aside for seeds	· _____
8. Electricity	· ---		· ---		· ---	· ---	· ---	2.8 Given away	· _____
9. Irrigation fee	· ---							2.9 Wastage	· _____
10. Storage cost	· ---		· ---		· ---	· ---	· ---	2.10 Others:	
11. Others:								1) _____	· _____
1) Red bag	· ---		· ---		· ---	· ---	· ---	2) _____	· _____
2) Tiklis/Kaing	· ---		· ---		· ---	· ---	· ---	3) _____	· _____
3) _____	· ---		· ---		· ---	· ---	· ---	4) _____	· _____
4) _____	· ---		· ---		· ---	· ---	· ---	5) _____	· _____

<p><b>I. BUYER INFORMATION</b></p> <p>1. Major buyer of produce: (Encircle code and indicate percentage)</p> <p>1 - Agent - _____ %</p> <p>2 - Wholesaler - _____ %</p> <p>3 - Retailer - _____ %</p> <p>4 - Wholesaler-retailer - _____ %</p> <p>5 - Exporter - _____ %</p> <p>6 - Cooperative - _____ %</p> <p>7 - Consumer - _____ %</p> <p>8 - Processor - _____ %</p> <p>9 - Others: 1) _____ - _____ %</p> <p style="padding-left: 40px;">2) _____ - _____ %</p> <p>2. What do you think is the right price for your produce?</p> <p>P _____ . ____ / kilogram</p>	<p><b>J. PROBLEMS ENCOUNTERED</b></p> <p>1. Production related problems: (Encircle code/s)</p> <p>1 - Pests and diseases</p> <p>2 - High cost of inputs</p> <p style="padding-left: 20px;">1 - Seeds</p> <p style="padding-left: 20px;">2 - Fertilizer</p> <p style="padding-left: 20px;">3 - Others (specify): _____</p> <p>3 - Bad weather / natural calamities</p> <p>4 - Lack of capital</p> <p>5 - Poor road condition</p> <p>6 - Inadequate transport facilities</p> <p>7 - Lack of water / Problems on irrigation system</p> <p>8 - Poor soil condition</p> <p>9 - Low quality of seeds</p> <p>10 - Unavailability of seeds</p> <p>11 - Others (specify): _____</p> <hr/> <p>2. Marketing related problems: (Encircle code/s)</p> <p>1 - Limited buyer / market outlet</p> <p>2 - Competition with imported supply in the market</p> <p>3 - Unstable price</p> <p>4 - Low price</p> <p>5 - Others: 1) _____</p> <p style="padding-left: 100px;">2) _____</p> <p style="padding-left: 100px;">3) _____</p>																
<p><b>K. ACCESS TO CREDIT</b></p> <p>1. Have you availed of any loan for crop production? (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. How much was the interest rate per annum? _____ . ____%</p> <p>4. What percentage of loan was actually used for onion production?</p> <p>_____ . ____%</p> <p>5. Who / What was your source of loan? (Encircle code)</p> <p>1 - Cooperative</p> <p>2 - Bank</p> <p>3 - Private individual</p> <p>4 - Other lending institution (specify): _____</p>	<p><b>L. OTHER INFORMATION</b></p> <p>1. Is the operator a member of onion related association? (Encircle code)</p> <p style="padding-left: 40px;">1 - Yes                    2 - No</p> <p>If Yes, identify _____ Benefits derived _____</p> <p>2. Does the operator consult / use advice of: (Encircle code)</p> <p>2.1 Government extension agents?                    1 - Yes                    2 - No</p> <p>2.2 Private extension agents?                            1 - Yes                    2 - No</p> <p>3. What are your future plans regarding onion farm operation? (Encircle code)</p> <p>1 - Maintain current operation                            3 - Others: 1.) _____</p> <p style="padding-left: 100px;">2.) _____</p> <p>2 - Expand</p> <p>4. What will you suggest to the government for the improvement of onion industry?</p> <p>_____</p> <p>_____</p>																
<p><b>M. INTERVIEW / SURVEY PARTICULARS</b></p> <table style="width:100%; border: none;"> <tr> <td style="width:33%;"></td> <td style="width:33%; text-align: center;">Data Collector</td> <td style="width:33%; text-align: center;">Field Supervisor/Editor</td> <td style="width:33%; text-align: center;">PASO</td> </tr> <tr> <td>Name:</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Signature:</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> <tr> <td>Date Accomplished:</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>			Data Collector	Field Supervisor/Editor	PASO	Name:	_____	_____	_____	Signature:	_____	_____	_____	Date Accomplished:	_____	_____	_____
	Data Collector	Field Supervisor/Editor	PASO														
Name:	_____	_____	_____														
Signature:	_____	_____	_____														
Date Accomplished:	_____	_____	_____														



Department of Agriculture

**BUREAU OF AGRICULTURAL STATISTICS**

Agricultural Accounts and Statistical Indicators Division (AASID)

**Socio-Economic Statistics Section (SESS)**

Ben-Lor Bldg., 1184 Quezon Avenue, Quezon City