

BIBLIOGRAPHY

CALIAG, ESTER JANE A. APRIL 2011. Production and Marketing Practices of Cauliflower Growers in Gusaran, Kabayan, Benguet. Benguet State University, La Trinidad, Benguet.

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ABSTRACT

The study was conducted to determine the socio-economic profile of the respondents in Gusaran, Kabayan, Benguet. The production and marketing practices, and the problems encountered by the respondents.

There were fifty farmer-respondents of the study who are engaged in farming. The study was conducted in December 2010. The data were tabulated, consolidated, analyzed and interpreted using descriptive statistics such as percentages.

Findings showed that majority of the respondents were middle aged; mostly males; married; had formal education; and cultivated an area of 400 to 600 square meters which they owned the land.

The white flash variety was the most common variety cultivated by the respondents. They transplanted the seedlings after 28 to 30 days from sowing. Most of them applied organic and inorganic fertilizers and irrigated their crops through the overhead sprinkler.

Most of the farmers sold their products to wholesalers at La Trinidad Trading Post on cash basis. They used sacks to pack their product which was transported using public utility jeepneys.

The problems encountered by the respondents in cauliflower production were: lack of capital, high cost of inputs, prevalence of pest and diseases, poor quality of planting materials and lack of irrigation. Regarding marketing problems, they identified low market price, price competition, and high transportation of cost, poor transportation facilities, lack of handling practices and delayed of payments from buyers.



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INTRODUCTION

Rationale

Cauliflower (*Brassica oleracea* L. var. Botrytis) is one of the major vegetables in Benguet. It is grown for its unopened flower clusters known as curd, which is the edible part of the plant. The edible part consist of a compact terminal mass of greatly thickened and modified flower structures which substending fleshy stalks. The curd forms at the top of the plant stem which broad and elongated leaves that extended far above the curd. It is commonly eaten either cooked or pickled (Panas, 1995). Knott 1988 as cited by Panas (1995) stated that cauliflower belongs to the mustard or crucifarae family. It grows best in a mild cold weather in a fertile well-watered soil. Cauliflower cannot with stand tool low or too high temperature for its growth.

In the highlands, most of the farmers depend on vegetable farming as a source of income. They grow various vegetable crops. One of which is cauliflower but production is much lower in comparison to their counterparts in other countries. This is one of the common crops commercially grown by the farmers in Benguet most especially in Kabayan during the month of March to November. However, yields obtained are usually low. The reason is due to the inadaptability of variety grown. Farmers usually plant available varieties without considering their adaptability to the existing highland environment. To solve this problem, varietal trial must be done to seek the best adapted variety to ensure productivity.

Statement of the Problem

The study deal with the production and marketing practices of cauliflower growers in Barangay Gusaran, Kabayan, Benguet. Specifically, it attempted to answer the following



questions:

1. What are the socio-economic profile of cauliflower growers in Gusaran, Kabayan, Benguet?
2. What are the production and marketing practices of cauliflower growers in Gusaran, Kabayan, Benguet?
3. What are the problems encountered by the cauliflower growers regarding the production and marketing of cauliflower?

Objectives of the Study

1. To determine the socio-economic profile of the respondents;
2. To determine the production and marketing practices of cauliflower growers; and
3. To identify the problems encountered by the cauliflower growers regarding their production and marketing practices of cauliflower.

Importance of the Study

The study was on the production and marketing practices of cauliflower growers. Appraising them would provide an understanding of the present situation of cauliflower growers. This was done to find out ways of improving the cauliflower industry to increase their income so that their socio-economic status can be improved.

The result of this study would serve as a guide for further researches. People involved in extension programs could also make use of the data gathered in this study particularly in the accumulation of information regarding production and marketing practices of cauliflower.



Scope and Limitation

Geographically the scope of the study was the Barangay Gusaran, Kabayan, Benguet. The study was limited to the socio-economic profile of the cauliflower growers in Gusaran, Kabayan, Benguet their production and marketing practices, and the problems they encountered in production.



REVIEW OF LITERATURE

Socio-economic Profile

In 1997, NEDA reported as cited by Guiagui (1993) that the problems that hamper the socio-economic problems of the community are large family, size, low income, unemployment, financial in capability to start a chosen career and tenancy system of farming. Most of the rural poor are farmers, farm laborers, fishermen and loggers. According to Pasad (1989) as cited by Anton (1995), farmers always play a dominant role in the acceptance of innovations. He said that farming means the production of high yields through skillful management. The change agent is a source and other rural development ideas on information. Through the various extension activities, he introduces new knowledge and innovations to increase income and consequently their levels of living.

Castillo (1969) as cited by Guiagui (1993) emphasized that farmers who are fully employed and have stable jobs are likely to have higher income and have better living conditions while those unemployed have low income. Agricultural growth is not the primarily concern of the people, instead, the quality of life they can enjoy.

Production

Robertson (1989) as cited by Pacalso (2001) emphasized that the physical features of a farm have a greater influence on types and systems of farming, especially on the soil texture, slope, fertility, acidity, and susceptibility to erosion as compared to some caused by variation in types of farming like climate, labor, market and customs of farmers.

Bautista *et al* (1983) as cited by Ignacio (2006) stated by that the soil for vegetable production should be rich in organic matter. To achieve this condition, there is need to sustain



application of compost. Composting weeds, manure and other farm wastes as soil amendments can improve soil structure making it ideal for vegetative crop production.

Cox and Jackson (1993) stressed that farmers of today and tomorrow must become experts not only in the efficient production of maximum crop yield per acre but also in protecting their soil from erosion by water and by wind and in maintaining and building up the elements of fertilizers by crop and livestock.

Villareal (1980) revealed that successful production is assured in areas that have good irrigation and planting of seeds that are properly handled and stored.

Marketing

This marketing activities and strategies was further defined by Mortenso as cited by Bangsoyao (1999) when he reported that marketing services are performed by middlemen from the time the products leave the farm until they are finally purchased by consumers. Some of the importances of these services of functions are: assembly, transporting, processing, grading, storing, financial, and packaging. These are the services which add value of which consumers are willing to pay. They are being paid for by the increase which occurs in the market price as the commodity goes closer to the consumer. The producers choose buyers or outlets for their products because of convenience and good price, but major reason of choosing buyer is the price. One of the factors affecting the price is the volume and the quantity of the products. Furthermore, Jucar (1991) stressed that market information helps producers come up with a reasonable pricing of their products. There is a need, however, for the government to support the system particular relating to financial assistance for the products.

Production and Marketing Problems



The problem so far encountered by the farmers is the marketing of their products because of the proliferation of channels, reserve interagency flow and the intervention of middlemen who also are the source of price for the products. Poor and inadequate road network makes farm inputs costly and produce low price. Costly transport units and their space further increase cost while bad roads and lack of vehicles lead to high postharvest losses. Transport infrastructure has been developed to address the need to link provinces and towns.

Pacalso (2001) said that farmers cannot profit much because of the limited factors of production such as tillable lands, farm equipments, financial requirements and the limited technologies. Farming entails great pressing problems. One of which is natural calamities such as flood, typhoons, drought, and prevalence of insects and diseases in which other occupations are not exposed to. Unless solutions to these problems and needs of farmers are looked into by the agricultural agencies concerned in educating these farmers with the complete package of technologies that they would attain increase production and develop progressive farming.

Inadequate market information is one of the problems in marketing. This flow of information is stalled due to poor transport and telecommunications network. This result in producers having little knowledge of the dynamics of the market and prices for both new products and inputs (Cox and Jackson, 1993).

Improvement of existing road and construction of new road can justify and lower transportation rates. These would result to lesser losses which are due to high percentage of damaged products before reaching the point of sale. One thing more, market information must be widely dissemination for farmers and middlemen to know the prevailing the various crops at a particular period of time. At the same time, the vegetative producers should attend to more



seminars on vegetative production in order to have more information on the correct practices of growing crops and to improve production level (Pacalso, 2001) as cited by Ignacio (2006).



METHODOLOGY

Locale and Time of the Study

The study was conducted in Gusaran, Kabayan, Benguet. Kabayan is one of the municipalities of Benguet consisting of 13 barangays, which is located between the municipalities of Bokod and Buguias. There are varied crops raised in the locality such as carrots, onions, cabbage and broccoli but the common production in Kabayan is cauliflower.

This study was conducted in December 2010.

Respondents of the Study

The respondents of the study were the farmers engaged in cauliflower production. Fifty were considered as respondents of the study.

Data Collection

Data collection was done through the used of a prepared questionnaire, personal interview and observation. The data are collected from December 2010 to January 2011.

Data Gathered

The data gathered were focused on Cauliflower production and marketing practices in Barangay Gusaran, Kabayan, Benguet.

Data Analysis

The data collected were categorized, tabulated, summarized, and analyzed using percentage.





Figure 1. Map of the study



RESULTS AND DISCUSSION

Socio-economic Profile of the Respondent

This section presents the results of the study.

Table 1 shows the socio-economic profile of the respondents as to age, civil status, sex, educational attainment, annual income, land ownership and area planted.

Age. As shown in Table 1, 28% of the respondents belonged to age ranged from 31 to 40 years old and 41 to 50 years old; 22%, from 51 to 60 years old; 20% from 20 to 30 years old; and 2% 60 years old and above. The finding indicates that most of the respondents were at their middle aged, while others were relatively young.

Civil status. Majority of the respondents were married and 28% were single. It implies that married couples are more concerned with farm activities than the single one.

Sex. With regard to sex, 80% of the respondents were males while, the remaining 20 % were females. This finding shows that more men are involved in farming although some women also helped in farm activities.

Educational attainment. All of the respondents had undergone formal schooling with a total of 46% who reached high school level; 42% elementary education; 10% were college level and 2% finished vocational courses. The result shows that all of the respondents were literate.

Annual income. Majority of the respondents had annual income of P5,000 to P10,000; 18%, from P11,000 to P15,000 and P16,000 to P20,000; 8%, from P26,000 to P30,000 and 4% from P21,000 to P25,000. Findings show that the respondents had



Table 1. Socio-economic profile of the respondents

PARTICULAR	NO. OF RESPONDENTS	PERCENTAGE (%)
Age		
20 to 30 years old	10	20
31 to 40 years old	14	28
41 to 50 years old	14	28
51 to 60 years old	11	22
60 years old and above	1	2
TOTAL	50	100
Civil Status		
Single	36	72
Married	14	28
TOTAL	50	100
Sex		
Female	10	20
Male	40	80
TOTAL	50	100
Educational attainment		
Elementary	21	42
High School	23	46
College	5	10
Vocational	1	2
TOTAL	50	100
Annual Income		
5,000 – 10,000	26	52
11,000 – 15,000	9	18
16,000 – 20,000	9	18
21,000 – 25,000	2	4
26,000 – 30,000	4	8
TOTAL	50	100
Land Ownership		
Owned operated	30	60
Tenant	20	40
TOTAL	50	100
Area Planted		
100 – 300 sq.m.	13	26
400 – 600 sq.m.	24	48
700-1000 sq.m.	13	26
TOTAL	50	100



low annual income. Hence, rural families are considered comparatively poor and are engage in small gardening. However, this income was derived from cauliflower production only.

Land ownership. The table shows that 80% of the respondents owned the land they were cultivating and 20% were renting. This confirms the fact that many rural families owned the area they cultivated and few often had it rendered to friend or relatives.

Area planted. Majority of the respondents, 48% had 400 - 600 sq.m.; 26% from 100 - 300 sq.m. and 700 - 1000 sq.m. Based on the interview with the farmers, they said that they could not determine the exact total area of the field they cultivated because their farms were located in different areas.

Production Practices of the Respondents

The production practices of the respondents from the selection of seeds, varieties of cauliflower they planted, the reasons for choosing the variety, land preparation practices, transplanting cauliflower seedlings, type of fertilizer used, fertilizer application, method of fertilizer application, control of insect pest and diseases, method of irrigation and time of fertilizer application are shown in Tables 2 to 12.

Selection of seeds. Table 2 shows that the most of the respondents (98%) bought their seeds from accredited farm supply; and only 2% produced their own seeds.

Variety of cauliflower. Table 3 shows that among the fifty respondents interviewed, 78% cultivated the white flash variety; and 22%, Milky Way. This information shows that almost all the respondents preferred the white flash variety.

Table 2. Selection of seeds by the respondents

SELECTION OF SEEDS	NO. OF RESPONDENTS	PERCENTAGE
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		(%)
Buy seeds in accredited farm supply	49	98
Produced own seeds	1	2
TOTAL	50	100

Table 3. Varieties of cauliflower planted by the respondents

VARIETIES	NO. OF RESPONDENTS	PERCENTAGE (%)
White flash	39	78
Milky way	11	22
TOTAL	50	100

Reasons for choosing the variety. Table 4 shows that most of the respondents (98%) said that white flash variety had good quality; (12%) said it was available; and 6% said its resistance to diseases. This was based on experiences of farmers who were in the business for quite some time. Hence, variety of cauliflower is one of the factors to consider in producing good yields.

Land preparation practices. Table 5 shows that most of the respondents (98%) cleared the field and 18% harrowed the field. The respondents made sure that the farm field must be thoroughly prepared before planting the seedlings to ensure good yield.

Table 4. Reasons for the respondents in choosing the variety

	NO. OF RESPONDENTS	PERCENTAGE
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REASONS		(%)
Good quality	49	98
It is available	6	12
Resistance to disease	3	6
TOTAL	50	100

*Multiple response

Table 5. Land preparation practices of the respondents

LAND PREPARATION PRACTICES	NO. OF RESPONDENTS	PERCENTAGE (%)
Field clearing	49	98
Harrowing	9	18

*Multiple response

Time of transplanting seedlings. Table 6 shows that 58% of the respondents transplanted their seedlings after 28 to 30 days; 32% after 31 days and above; and 12% transplanted within 25-27 days. This finding clearly indicates that cauliflower seedlings were usually transplanted between 28 and 30 days old which was the recommended time by experts.

Fertilizer used. Table 7 shows that majority of the respondents used 14-14-14 and only 16% used 21-0-0. Organic fertilizer, 96% of the respondents used chicken manure while 26% used ashes and 2% compost. It was noted that the respondents used a combination of organic and inorganic fertilizers.

Table 6. Time of transplanting seedling of the respondents

TRANSPLANTING CAULIFLOWER SEEDLINGS	NO. OF RESPONDENTS	PERCENTAGE (%)
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25-7 days	6	12
28-30 days	29	58
31 days and above	16	32

*Multiple response

Table 7. Type of fertilizer used by the respondents

FERTILIZERS USED	NO. OF RESPONDENTS	PERCENTAGE (%)
a. Inorganic		
14-14-14	50	100
2-0-0	8	16
b. Organic		
Chicken Manure	48	96
Compost	1	2
Ashes	13	26

*Multiple response

Method of fertilizer application. Table 8 shows that 42% applied organic fertilizers during land preparation and hilling up; 32% applied organic and inorganic fertilizers at the same time during land preparation; and 34% applied organic fertilizers as basal and inorganic, as side dress.

Fertilizer application. The Table 9 shows that 74% of the respondents practiced basal application; 36%, side dressing; and 4% broadcasting. This implies that the respondents followed a variety of methods in fertilizer application.

Table 8. Method of fertilizer application of the respondents

METHOD OF FERTILIZER APPLICATION	NO. OF RESPONDENTS	PERCENTAGE (%)
----------------------------------	--------------------	----------------



Organic fertilizers are applied during land preparation and hilling up	21	42
Organic fertilizers are used as basal and inorganic as side dress	17	34
Organic and inorganic fertilizers are used at the same time during land preparation	16	32

*Multiple response

Table 9. Fertilizer application of the respondents

FERTILIZER APPLICATION	NO. OF RESPONDENTS	PERCENTAGE (%)
Basal Application	37	74
Side dressing	18	36
Broadcasting	2	4

*Multiple response

Time of fertilizer application. As shown in Table 10 shows that 80% of the respondents applied fertilizers after transplanting; 64%, before transplanting. This implies that all the farmer-respondents followed methods on when to apply fertilizer. They applied fertilizer based on their experience and were based from co-farmers experiences or recommendations.

Method of irrigation. Table 11 shows that in irrigating their crops, most of the respondents (92%) used overhead sprinkler and 4% gravitational.

Table 10. Time of fertilizer application of the respondents

TIME OF FERTILIZER APPLICATION	NO. OF RESPONDENTS	PERCENTAGE (%)
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Before transplanting	32	64
After transplanting	40	80

*Multiple response

Table 11. Method of irrigation by the respondents

METHOD OF IRRIGATION	NO. OF RESPONDENTS	PERCENTAGE (%)
Gravitational	2	4
Overhead sprinkler	46	96
TOTAL	50	100

Table 12. Control of insect pest and disease used by the respondents

CONTROL OF INSECT PEST AND DISEASE	NO. OF RESPONDENTS	PERCENTAGE (%)
Chemical control	49	98
Mechanical control	1	2

*Multiple response

Control of pest and diseases. Table 12 shows that 98% of the respondents used chemical control for the control of pest and diseases while 2% used mechanical control.

Marketing Practices of the Respondents

Table 13 shows that all of the respondents sold their products in La Trinidad Trading Post and 42% sold their products at the Baguio City Market. Among the fifty respondents (58%) sold



their products to wholesalers; 46% sold to middlemen; and 8% to retailers. As regard to the mode of payment, majority of the respondents were paid cash on delivery, 20%, on credit basis; while 4%, contract basis. There were two packing materials used by the respondents such as sacks and baskets. Almost all of the respondents 96% used sacks for their produce and while only 14% used baskets. Regarding transportation, 92% of the respondents preferred public utility jeepneys (PUJs) in transporting their produced, 14% used their owned vehicles. Accordingly, Farmers preferred public utility jeepney because it is cheaper and if their produce is small.

Production and Marketing Problems of the Respondents

Production problems. Table 14 shows the problems encountered by the respondents which includes the lack of capital, high cost of inputs, prevalence of pests and disease, poor quality of planting materials and lack of irrigation. Normally, these problems affected practically all vegetable gardeners.

Marketing problems. As shown in Table 14, the problems encountered by the respondents in marketing their produced were low market price 84%; competition, 28%; high transportation cost, 24%; poor transportation facilities, 16%; 10%, proper handling the produce to the roadside. The result implies that the farmers had varied problems encountered in production and in marketing of cauliflower.



Table 13. Marketing practices of the respondents

MARKETING PRACTICES	NO. OF RESPONDENTS	PERCENTAGE (%)
Market outlets		
La Trinidad trading post	50	100
Baguio city market	21	42
*Multiple response		
TYPE OF BUYERS	NO. OF RESPONDENTS	PERCENTAGE (%)
Wholesaler	29	58
Middlemen	23	46
Retailer	4	8
*Multiple response		
MODE OF PAYMENT	NO. OF RESPONDENTS	PERCENTAGE (%)
Cash	50	100
Credit	10	20
Contract	2	4
*Multiple response		
Baskets	48	96
Sacks	6	12
*Multiple response		
TYPES OF TRANSPORTATION USED	NO. OF RESPONDENTS	PERCENTAGE (%)
Jeepneys	46	92
Owned cars	7	14
*Multiple response		



Table 14. Production and marketing problems of the respondents

PROBLEMS	NO. OF RESPONDENTS	PERCENTAGE (%)
Production		
Lack of capital	48	96
High cost of inputs	25	50
Prevalence of pest and disease	9	18
Poor quality of planting materials	7	14
Lack of irrigation	6	12
Marketing		
Low Market Price	42	84
Price competition	14	28
High transportation cost	12	24
Poor transportation facilities	8	16
Lack of handling the produce to the roadside	5	10
Delay of payment	4	8

*Multiple response



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study on the production and marketing practices of cauliflower growers in Gusaran, Kabayan, Benguet was conducted to determine the socio-economic profile of the respondents, the production and marketing practices and the problems encountered by the respondents.

Fifty farmers were randomly chosen and interviewed using a structured survey questionnaire and personal interview. The data gathered were analyzed using simple statistical tools such as percentage.

Findings show that majority of the respondents were at their middle aged, mostly married, males and had formal education. Most of them owned the land area of 400 to 600 square meters.

For the production practices based on the results of the study, most of the respondents preferred white flash variety. As to their land preparation, majority did field clearing. The respondents transplanted the seedlings after 28-30 days from sowing.

With regard to fertilizer application, most of the respondents used inorganic fertilizers like 14-14-14 while others combined organic and inorganic fertilizers. The farmers irrigated their crops through overhead sprinkler.

Most of the farmers sold their products to wholesalers at La Trinidad Trading Post on cash basis. Most of the respondents used sacks for their products and they transported their cauliflower using public utility jeepneys.

The problems encountered by the respondents in cauliflower production were lacked of capital, high cost of inputs, prevalence of pest and diseases, poor quality of planting materials and lacked of irrigation. Regarding marketing problems were low market price, price



competition, high transportation cost, poor transportation facilities, lacked of handling the produce to the roadside and delayed of payments from buyers.

Conclusions

Based on the findings, the following conclusions were derived:

1. The respondents of the study were mostly males, married and at their middle aged. All of them had formal education and owned the land they cultivated with an area of 400 to 600 square meters.

2. White flash was the common variety cultivated by the respondents. The farmers transplanted the cauliflower seedlings 28-30 days after sowing the seeds. Most of the farmers marketed their produced at the La Trinidad Trading Post to wholesalers and on cash basis.

3. The common production problems were lack of capital, high cost of inputs, prevalence of pest and diseases, poor quality of planting materials and lack of irrigation. The marketing problems were low market price, price competition, high transportation cost, poor transportation facilities, lacked of handling the produce to the roadside and delayed of payments from buyers.

Recommendations

Based on the conclusions, the following recommendations are the following:

1. Establishment of farmer's multipurpose cooperative, to provide members their needs in cauliflower production such as supply of goods varieties and financial assistance for those who lack capital.

2. Members could avail of better price if the cooperative will handle the wholesale of their produce.



3. The cooperative could also provide specialized services to members like packaging and transportation in order to minimize high transportation cost of the product.



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APPENDICES**APPENDIX A****Letter to Respondents**

**BENGUET STATE UNIVERSITY
COLLEGE OF AGRICULTURE
La Trinidad, Benguet**

Dear Respondents:

I am Ester Jane A. Caliag, a fourth year students of Benguet State University who is conducting a study entitled “Production and Marketing Practices of Cauliflower in Barangay Gusaran, Kabayan, Benguet.” This is a major course requirement of Science of Agriculture major in Extension Education.

This questionnaire given to you will be used to fulfill the academic requirement needed in this research.

The success of this study relies on you, on how you honestly answer the questions. Your valued cooperation and kind consideration is highly appreciated

Thank you very much and God Speed!

Very truly yours,

ESTERJANE CALIAG
Researcher



APPENDIX B

Survey Questionnaire

I. Socio- economic

Name: (optional) _____

Age: _____ Civil Status: _____ Sex: _____

Educational Background _____ Elementary _____ College
_____ High School _____ VocationalAnnual Income _____ 5,000-10,000
_____ 11,000-15,000
_____ 16,000-20,000
_____ 21,000-25,000
_____ 26,000-30,000Land Ownership _____ Owned Operated
_____ Tenant
_____ Share Tenant
_____ LeaseholdArea Planted _____ 100-300 sq.m.
_____ 400-600 sq.m.
_____ 700-1,000 sq.m.

II. Production Practices

1. Selection of seeds.

- _____ a. produced own seed
 _____ b. buy from accredited farm supply
 _____ c. buy from trusted relatives or friends
 _____ e. Others (pls. specify)

2. Variety of Cauliflower Cultivated

- _____ a. Milky Way
 _____ b. Snow Crow
 _____ c. White flash
 _____ d. Others (pls. specify) _____



3. What is the reason for choosing the variety?
 _____ a. It is available
 _____ b. Good Quality
 _____ c. High Price
 _____ d. Resistance to Disease
 _____ e. Others (pls. specify) _____
4. Land Preparation Practices
 _____ a. Field Clearing
 _____ b. Harrowing
 _____ c. Others (pls. specify)
5. When do you transplant your cauliflower seedlings?
 _____ a. 25-27 days
 _____ b. 28-30 days
 _____ c. 31 days and above
6. What types of fertilizer do you use?
- a.) Inorganic
 _____ 14-14-14
 _____ 21-0-0
 _____ others (pls. specify) _____
- b.) Organic
 _____ Chicken Manure
 _____ Compost
 _____ Animal Manure
 _____ Ashes
 _____ Others (pls. specify) _____
7. How do you apply fertilizer in your plants?
 _____ a. Organic and inorganic fertilizers are used at the same time during land preparation.
 _____ b. Organic fertilizers are used as basal and inorganic as sidedress.
 _____ c. Inorganic fertilizers are applied during land preparation and hilling up.
8. When do you apply fertilizer?
 _____ a. Before transplanting
 _____ b. During transplanting
 _____ c. After transplanting
9. Method of Fertilizer Application
 _____ a. Basal Application
 _____ b. Side dressing



- _____c. Broadcasting
 _____d. Others (pls. specify) _____

10. Control of Insect Pest and Diseases

- _____a. Chemical Control
 _____b. Mechanical Control

11. Method of Irrigation

- _____a. Gravitational
 _____b. Overhead

III. Marketing Practices

A. Market Outlet

- _____a. Baguio City
 _____b. La Trinidad Trading Post
 _____c. Others (pls. specify) _____

B. Marketing Outlet

- _____a. Wholesaler
 _____b. Retailer
 _____c. Middlemen
 _____d. Contract

C. Method of Payment of Product

- _____a. Cash
 _____b. Credit
 _____c. Contract
 _____d. Others (pls. specify) _____

D. Packing Materials Used

- _____a. Sacks
 _____b. Baskets
 _____c. Others (pls. specify) _____

E. Type of transportation do you use in transporting your produce?

- _____a. Jeepneys
 _____b. Buses
 _____c. Owned cars
 _____d. Others (pls. specify) _____



1V. Production and Marketing Problems

A. What are the problems encountered in producing your product?

- _____ b. Lack of irrigation
- _____ c. Prevalence of pest and disease
- _____ d. Poor quality of planting materials
- _____ e. High cost of inputs
- _____ f. Others (pls. specify) _____

B. What are the problems encountered in marketing your produce?

- _____ a. Poor transportation facilities
- _____ b. Lack of grading
- _____ c. Lack of handling the produce to the road side
- _____ d. Low market price
- _____ e. Lack of minimize high transportation cost of products.

