

BIBLIOGRAPHY

SIMON, JANET T. October 2010. Factors Affecting Vegetable Production in Madaymen, Kibungan, Benguet. Benguet State University, La Trinidad, Benguet.

Adviser: Hilario C. Perez, MSc.

ABSTRACT

The study aimed to find out the socio-demographic profile of the respondents; the social, economic, and physical factors affecting vegetable production; and the problems encountered by the respondents as well as their suggestions to improve the vegetable industry in barangay Madaymen, Kibungan, Benguet.

Survey questionnaires were used to gather data and personal interview were done to get additional information from the one-hundred respondents in the study area.

Findings showed that the respondents were at their middle age, married and had attended formal education. Majority owned the land that they were tilling. Most of them cultivated an area ranging from less than 10,000 sq. m. to 15,000 sq. m. Their main crops grown were cabbage, potato, carrots and radish.

The social, economic and marketing factors affecting vegetable productivity were the lack of training, lack of financial resources and low market prices of vegetables, and the occurrences of pest and diseases and natural calamities.

The major problems of the respondents were lack of water resources, typhoons, infestation of pest and diseases, lack of financial resources, high cost of labor and input materials.

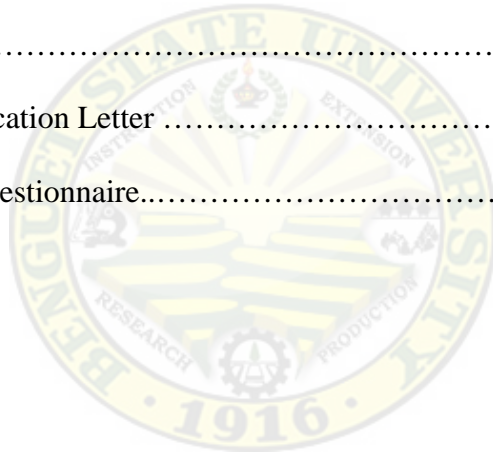
Solutions to the problems were to organized an organization regarding credit facilities to help those farmers that are in need of financial resources to manage their farm to increase their production, conduct seminars on how to control pests and diseases of vegetable crops to improve yield, associate with each other to improve methods in increasing the production of vegetable in the study area.



TABLE OF CONTENTS

	Page
Bibliography.....	i
Abstract.....	i
Table of Contents.....	iii
INTRODUCTION.....	1
Rationale.....	1
Statement of the Problem.....	2
Objectives of the Study.....	2
Importance of the Study.....	2
Scope and Limitation.....	3
REVIEW OF LITERATURE.....	4
METHODOLOGY.....	7
Locale and Time of the Study.....	7
Respondents of the Study.....	7
Data Collection	7
Data Gathered.....	10
Data Analysis	10
RESULTS AND DISCUSSION.....	11
Socio- Demographic Profile of the Respondents.....	11
Farming Background of the Respondents.....	13
Factors Affecting Vegetable Production	15

Problems Encountered with Agricultural Technicians.....	17
Respondents Suggestions to Improve Vegetable Industry.....	18
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	20
Summary.....	20
Conclusions.....	21
Recommendations	22
LITERATURE CITED.....	23
APPENDIX.....	24
A. Communication Letter	24
B. Survey Questionnaire.....	25



INTRODUCTION

Rationale

Vegetables are a complex group of a wide variety of different types of plants. Some species grow from year to year; others grow within one or two years. They have diverse forms of propagation, by seeds or vegetative parts. They may be herbaceous, viny, shrubby, or tree in growth habit. This vegetable is an edible usually a succulent plant or a portion of it is eaten as supplementary food cooked or raw form (AVRDC, 1990).

The cool climate conditions conducive to production of semi-temperate vegetables thus became the main economic activity of the locale populace. Marketing of agricultural products specially vegetables in the highland varies widely compared to the marketing of industrial products (Anonymous, 1998).

Vegetables are important part of a healthy diet. They are an excellent source of vitamins especially Niacin, Riboflavin, Thiamine and Vitamin A and C. Vegetables also supply minerals, calcium and iron. Most vegetables do not have many calories (The Grolier Encyclopedia, 1991).

Madaymen is mountainous and coldest place among the seven (7) barangays of Municipality of Kibungan. It is where vegetables vigorously grow and one of the major producers of vegetables in the Province of Benguet. Vegetable production is the main source of income and livelihood among the local farmers to sustain their basic needs. Farmers cultivate variety of vegetable crops throughout the year. The soil and climate condition allows the widespread cultivation of these vegetables which are cabbage, potato, carrot and radish.



Statement of the Problem

The ultimate concern of this study was to determine the factors affecting the vegetable production of farmers in Madaymen, Kibungan, Benguet in order to explain this problem and look into possible solutions.

Specifically, this will be conducted to answer the following questions:

1. What are the socio-demographic profiles of vegetable farmers in Madaymen, Kibungan, Benguet?
2. What are the social, economic and physical factors affecting vegetable production in Barangay Madaymen, Kibungan, Benguet?
3. What are the problems encountered with agricultural technicians?
4. What are the respondent's suggestions to improve the vegetable industry?

Objectives of the Study

Specifically, this research study will mainly attempt to do the following:

1. To identify the socio-demographic profile of vegetable farmers;
2. To determine the social, economic, and physical factors affecting vegetable production of Barangay Madaymen, Kibungan, Benguet.
3. To determine the problems encountered with the agricultural technicians.
4. To determine the respondent's suggestions to improve the vegetable industry.

Importance of the Study

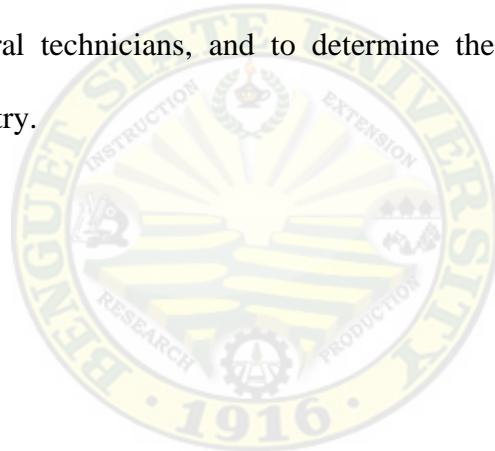
The results of this study would provide a comprehensive as a guide for farmers involved in vegetable production and to the policy makers. It would serve as a basis for further researches on



the factors affecting production, marketing practices and serve as benchmark information to researchers, extension workers and government planners for the improvement of the vegetable industry in Benguet.

Scope and Limitation

The study was conducted to determine the factors affecting vegetable production of farmers in Madaymen, Kibungan, Benguet and it is limited only to answer the following: identify socio-demographic profile of vegetable farmers, determine the social, economic and physical factors affecting vegetable production in Barangay Madaymen, determine the problems encountered with agricultural technicians, and to determine the respondent's suggestions to improve the vegetable industry.



REVIEW OF LITERATURE

The vegetable industry in Northern Luzon is anchored in Benguet where most of the production is done. The cool climate condition is conducive in the production of semi-temperate vegetables thus vegetable farming becomes the economic activity of the populace. In fact, the province of least 75 percent of the country's vegetable requirements (Anonymous, 1998).

The most common practice in handling vegetables affecting marketing quality from the farm to the point of sale is the bulk transport. It is where the spoilage and wastage often result due to bruising caused by poor road conditions, inadequate transportation facilities, several handling operations and the use of improper packaging material. Without available packaging materials, the producers would be forced to bring their products in the market soon after harvest regardless of the price, which causes market glutting and stagnation of market supplies resulting in great losses to producers (Challoy, 1997).

According to Tiway (1997), the vegetable industry in Bauko, Mountain Province is affected by some problems such as non availability of high yielding varieties; poor quality seeds problems on pest, disease management especially during the rainy season and problems on soil acidity. He further stated that it is affected with limited transfer of technology from the experiment/ research to the farmers, limited knowledge on pest harvest handling, and poor marketing systems to limited credit facilities.

The farm management practices are component of sustainable agriculture production. In relation to available resources, the Philippine population is increasing, and thus, the land for agricultural production becomes limited. However, SADC further stated that there was no big problem in some localities. Instead, their problem was on poor management (shifting,



cultivation), which has evolved over many centuries. Traditional shifting cultivation practices must follow the old traditional farming to restore soil fertility (SADC, 1992).

The farmers of today and tomorrow must become experts not only in the efficient production of maximum crop yield but also protecting their soil from erosion by water and by wind and in maintaining the building up the elements of fertility by crops and livestock (Cox, 1993).

The production strategies in areas with mild winter climate are more concerned with the biological aspects of cultivations than sophisticated shelters. Varieties are those resistant to cold, pest and diseases and appropriate cropping cycles and cultivations. Systems are biological tool normally used to support the production process (Cida, 1993).

The quality is the degree of excellence of superiority and is a combination of attributes, properties of characteristics that give each commodity and its intended use in various ways among producers, a given commodity must have a high yield and good appearances must be easy to harvest and must with stand long distance shipping to market. Appearance, firmness and shelf life are important parameters from the point of review of wholesale (Kader, 1995).

The middlemen perform different functions in moving the product from the point of production to the point of consumption such as: assembling, transporting, processing, grading, storing, financing and packaging. These are being paid for by the increase, which occur in the market price as the commodity goes to the consumer (Bangsoya, 1995).

The farmers can not profit much because of the limited factors to 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 floods, typhoons, droughts 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 increased production and developed progressive farming (Pacalso, 2001).

The factors that influenced farmer's decision to adopt technology are materials and man made calamities including beliefs. The problems encountered in the adoption of technology are related to lack of capital, lack of training and extension support and road conditions (Estolas, 1996).

Bokilis (1997) stated that credit is a significant factor in that farm decision to adopt recommended technology is affected by the availability of credit. The provision of available support system by or from the government is very important component factors that help promote agricultural development in the third world countries. The system is related to suitable size of land efficient rural labor. Appropriate agricultural technology, sufficient and timely credit support and assured market to farm products. He also added that experience affects farmers learning, farmers who have lot of experience in farming resulted in solving the farmer's problem.



METHODOLOGY

Locale and Time of the Study

The study was conducted in Madaymen, Kibungan, Benguet. The residents in this Barangay are engaged in vegetable production as their main source of living. Its location and other factors are favorable to vegetable production and thus farmers practice intensive cultivation throughout the cropping season. It is characterized by mountainous terrain of valley vegetable terraces (Figures 1 and 2).

The major ethnic group in this barangay is the Kankanaey of Benguet. It is approximately 72 kilometers away from Baguio City which is the center of trade information of the province.

The study was conducted from March, 2010.

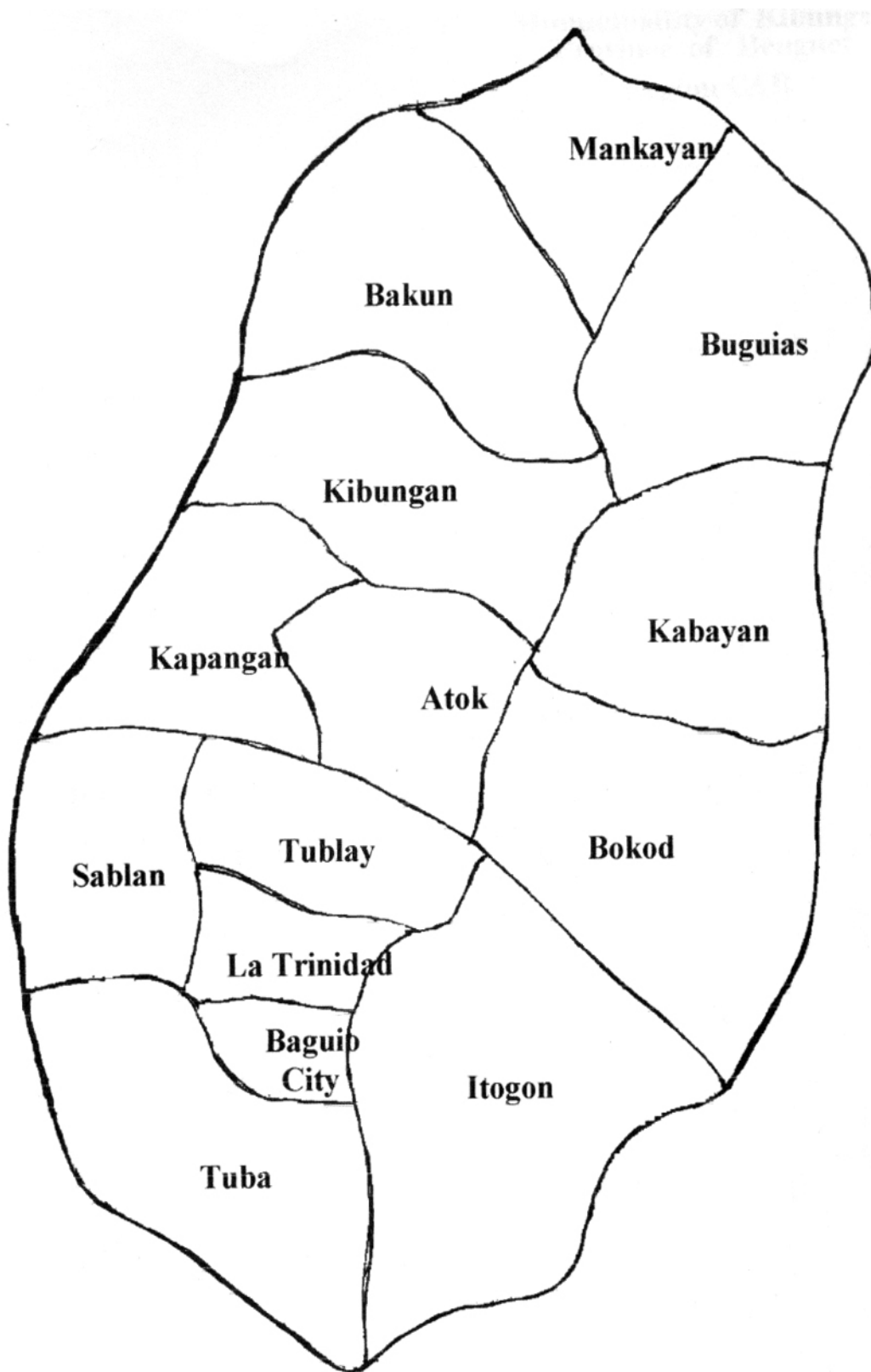
Respondents of the Study

The study considered one hundred (100) farmer respondents with at least five (5) years experience in vegetable production. The respondents were residents of Barangay Madaymen, Kibungan, Benguet.

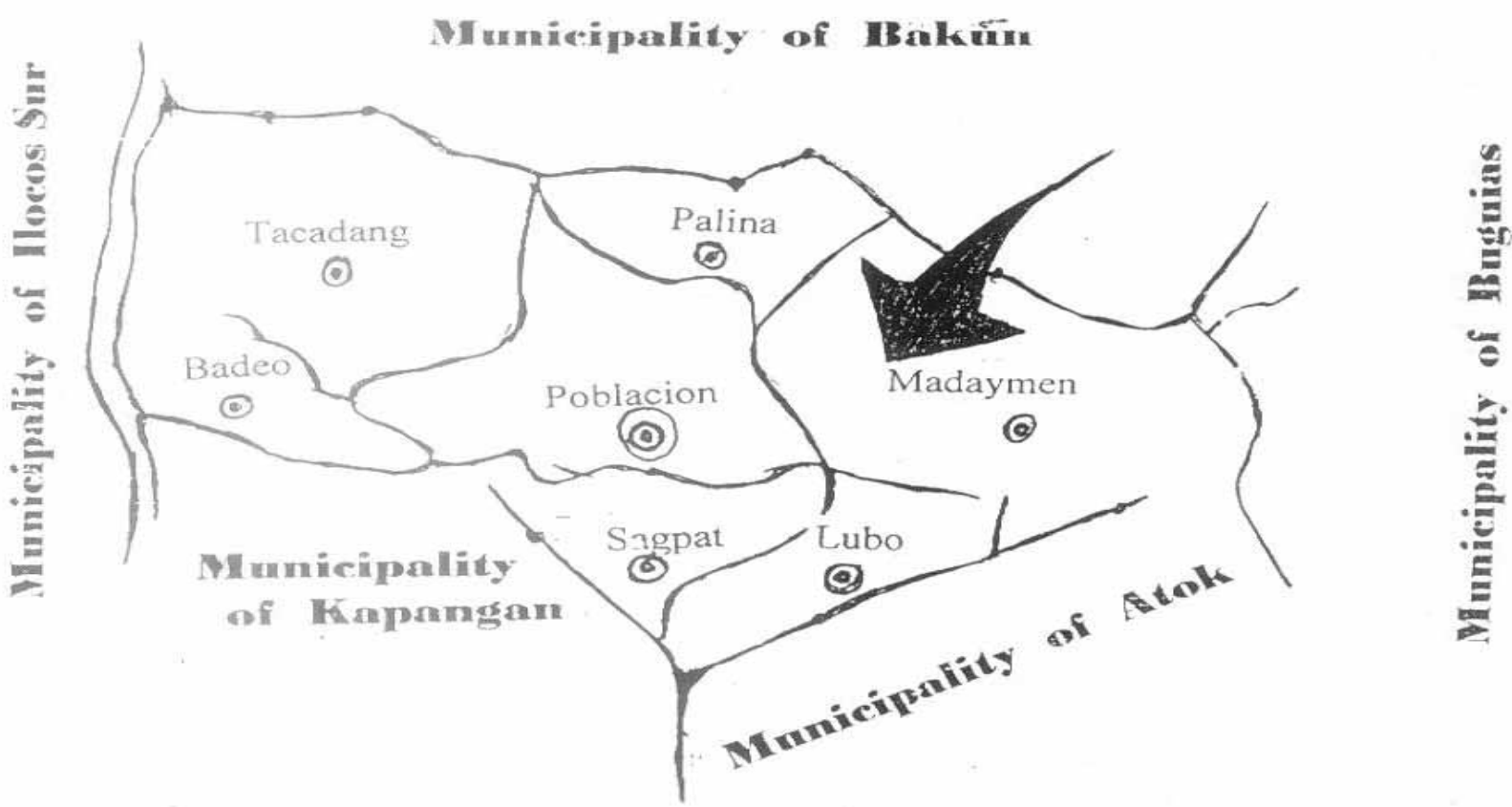
Data Collection

The respondents were interviewed personally by the researcher using the structured survey questionnaire as a guide to gather data and other relevant information needed for the study and clarification of the answers. The researcher will translated the English version of the questionnaire to the native dialect of the respondents for clearer understanding.





**Municipality of Kibungan
Province of Benguet
Region CAR**



Data Gathered

The data gathered in this study included the socio-demographic profile of vegetable farmers, the social, economic and physical factors affecting vegetable production in barangay Madaymen, Kibungan, Benguet, determine the problems encountered with the agricultural technicians, and to determine the respondent's suggestions to improve the vegetable industry.

Data Analysis

The data and information which were collected from the respondents will be consolidated, tabulated and analyzed using frequency counts, average and percentage.



RESULTS AND DISCUSSION

Socio-Demographic of the Respondents

Presented in Table I are the socio-demographic profiles of the respondents, which include age, sex, civil status, educational attainment.

Age. Table I presents the age distribution of the respondents. Majority of the respondents (31%) belonged to the age bracket of 29-37 years old; 25% belonged to the youngest bracket from 20-28 years old; 19% belonged to 38-46 years old, and 9% belonged to old age. The result implies that majority of the respondents are at their middle age.

Sex. Majority of the respondents were male which has 72% while 28% are females. The result indicates that more males are involved in farming than females, although some women also helped in farm activities.

Civil Status. Majority of the respondents 86% were married, 12% were single; and 2% widowed. It implies that married couples were great concerned with farm activities than single ones.

Educational Attainment. Table I showed that all of the one hundred (100) respondents have attended to formal education, 53% reached high school level; 31% were elementary education; 16% were able to reached college and 5% achieved vocational course. Findings show that most of the respondents were highly-literate to understand and accept innovations.



Table I. Socio-demographic profile of the respondents

PARTICULARS	NUMBER OF RESPONDENTS	PERCENTAGE (5)
Age		
20-28	25	25
29-37	31	31
38-46	19	19
47-55	16	16
56-64	9	9
TOTAL	100	100
Sex		
Male	72	72
Female	28	28
TOTAL	100	100
Civil Status		
Single	12	12
Married	86	86
Widowed	2	2
TOTAL	100	100
Educational Attainment		
Elementary	31	31
High School	53	53
College	11	11
Vocational Course	5	5
TOTAL	100	100

Farm Background of the Respondents



Area cultivated. The table 2 shows that 16% farmed an area of less than 1000 sq.m; and 84% farmed an area of 1000-5000 square meters. The findings indicated that there are more farmers cultivating an area of almost more than one-2 hectares.

Number of years in farming. As to the number of years in farming, 28% of the respondents had farmed 5-9 years, 24% farmed 10-15 years and 48% farmed 15 years and above. The result shows that majority of the respondents have great experience in vegetable production and have the knowledge by their own experiences to produce vegetables.

Tenural status. Majority of the respondents (77%) owned the land they cultivated or tilled, while 23% are tenants. The findings shows that most of the farmer-respondents were cultivating their own land, a situation which assists them to earn more profit to support the needs of their families.

Source of Irrigation. Majority of the respondents (41%) claimed that they were dependent on watershed and rain to irrigate their farm; 34% dependent on the rain only; 20% dependent on rain and pump from springs by the use of water pump and 5% are dependent on watershed to irrigate their farm for the survival of their crops.

Topography of land. Majority of the respondents (90%) claimed that terraced steps are usually they grown their crops, while 10% in plain loop of land. Results show that growing vegetable on terraced steps were more preferred in highland areas.

Soil type. Majority of the respondents (63%) were cultivating sandy loam soil; 20% loamy; 15% clay loam and 2% sandy. It can be noticed that the respondents were cultivating different types of soil.

Table 2. Farm background of the respondents



CHARACTERISTICS	NUMBER OF RESPONDENTS	PERCENTAGE (%)
Area cultivated (sq.m)		
Less than 10,000 sq.m	16	16
10,000 sq.m-15000sq.m	84	84
TOTAL	100	100
Number of years		
5-9 years	28	28
10-15 years	24	24
15 years and above	48	48
TOTAL	100	100
Tenural status		
Owned	77	77
Tenant	23	23
TOTAL	100	100
Source of Water Supply		
Watershed	5	5
Rain	34	34
Watershed and Rain	41	41
Rain and Pump	20	20
TOTAL	100	100
Topography land		
Plain	10	10
Terraced	90	90
TOTAL	100	100
Soil Type		
Loamy	20	20
Sandy loam	63	63
Clay loam	15	15
Sandy	2	2
TOTAL	100	100

Factors Affecting Vegetable Production

Presented in Table 3 were the factors affecting the production of vegetable.



Social factors. Thirty four (34%) of the respondents claimed that they are lacked of seminars; 32% was lack of knowledge/ 20% were affected by traditional cultural practices and 14% were affected also by lack of assistance from LGU. This finding implies that despite their experience in farming they still lacked adequate knowledge in farming and that they need technical assistance in the form of seminars.

Economic factor. The economic factors included the kind of crops grown, financial factors, and market factors. For the crops grown, most of the respondents (91%) cultivated cabbage; followed by potatoes (88%), radish (71%), Chinese cabbage (8%) and the least was sweet pea (1%). The kind of crop they produce has an economic bearing on their economic situation because if all of them produce the one crop, like cabbage, at the same time each farmer would be competing each other in the market. The price that each received would be lower because there was over supply of the product.

For the financial factors, majority of the respondents (83%) pointed out that they lack of financial resources or cash capital, 14% identified the high cost labor, and 3% lack of fertilizer. The finding implies that majority of the respondents lack of financial resources for the labor, and to buy the needed inputs that are expensive.

For the marketing factors, majority of the respondents (59%) claimed that market prices of vegetable were low so farmers gain less profit. As stated earlier, farmers

Table 3. Factors affecting vegetable production

FACTORS	NUMBER OF RESPONDENTS	PERCENTAGE (%)
Social factors		



Lack of knowledge	32	32
Lack of assistance from LGU	14	14
Cultural practices/traditional	20	20
Lack of seminars	34	34
TOTAL	100	100
Economic factors		
1. Crops		
Cabbage	91	91
Potato	88	88
Chinese cabbage	8	8
Radish	71	71
Carrots	30	30
Sweet peas	1	1
*Multiple response		
2. Vegetable production factors		
Lack of financial resources	83	83
Lack of fertilizer	3	3
High cost labor	14	14
3. Marketing factors		
Lack of transportation facilities	8	8
Far from marketing center	25	25
Unstable buying price vegetable	59	59
Problems in stocking and packing vegetables	3	3
Poor road conditions	5	5
*Multiple responses		
Table 3. Continued...		
Physical factors		
Infestation of pests	62	62
Diseases	56	56
Weed competing pests	6	6
Typhoon	62	62
Drought	76	76



*Multiple response

produce the same crops they compete for the price. Twenty five percent mentioned they are far from the market center, 8% for the lack of transportation facilities, 5% for poor road conditions and 3% for lack of storage facilities and appropriate packaging materials for vegetables. These lead to bankruptcy among farmers.

Physical factors. Most of the respondents suffered multiple problems on physical factors, 76% the lack of irrigation, 63% each pointed out infestation of pests and typhoons, 56% diseases and 6% weeds that harbor pests. This results implies that majority of the farmers are affected by physical factors.

Problems Encountered with Agricultural Technicians

Table 4 shows the problems of the respondents with agricultural technicians assigned in their area. Sixty three percent said that the farm technician's visits were irregular. The same number of respondents mentioned that field demonstration is inadequate, 28% said no agricultural technicians is assigned in their Barangay, 21% said conduct of seminars and workshops are not effective and 14% mentioned that agricultural technicians are only confined in the Barangay Office.

Table 4. Problems encountered with agricultural technicians

PROBLEMS	NUMBER OF RESPONDENTS	PERCENTAGE (%)
No agricultural technicians assigned in the Barangay	28	28%
Farm visit is irregular	63	63%



Technologist confine them in the Brgy. Office	14	14%
Field demonstration is inadequate	63	63%
Conduct of seminars in workshops are not effective	21	21%

*Multiple response

The result implies that farm technicians assigned in the study area was not effective.

Respondents' Suggestions to Improve the Vegetable Industry

Table 5 shows the respondents suggestions to improve the vegetable industry in the study area.

As shown in the table, all the respondents (100) suggested that their price of vegetables should be stabilized at a level that could give them profit. All of them also suggested that the remaining watershed areas should be preserved to provide sufficient water supply especially during the dry seasons and for a well-balanced ecosystem; Thirty four percent suggested the conduct of seminars on integrated pest management (IPM) for farmers to adopt so that the use of pesticides would be minimized; 28% suggested the use

Table 5. Respondents' suggestions to improve the vegetable industry

SUGGESTIONS	NUMBER OF RESPONDENTS	PERCENTAGE (100%)
Unstable buying price must be maximize at the very low price	100	100%
Preserved the watershed areas	100	100%
Conducting seminars on integrated pest management	34	34%



Promote traditional way of farming in order to improve the vegetable production	28	28%
Encouraging the use of alternating farm management to farmers	25	25%

*Multiple response

of the traditional way of production to prevent environmental problems, and 25% said that farmers should practice crop rotation to minimized the occurrence of pest and diseases.



SUMMARY, CONCLUSION, RECOMMENDATION

Summary

The study was conducted to determine the socio-demographic profile of vegetable farmers and to determine the social, economic and physical factors affecting vegetable production and the problems encountered by the respondents as well as their suggestions to improve the vegetable industry in the barangay Madaymen, Kibungan, Benguet.

An interview schedule was used to gather information from the 100 respondents. Findings showed that majority of the respondents are middle aged, married and have attended formal education.

Majority of the farmers were cultivating their own land ranging from more than 10,000 sq.m. to 15,000 sq.m. and depended on watershed, rain and springs/rivers to irrigate their farms.. Generally, most farmers have difficulty in farming due to the lack of water supply to irrigate their crops and to the high elevation of the farm lands. Majority of the farms are terraced because of the mountainous terrain of the area. Most farm in the study area are sandy and loam. Their main crops in the study area are cabbage, potato, radish and carrots.

The factors affecting vegetable production were; lack of knowledge, lack of assistance from LGU, traditional cultural practices and lack of seminars. For the economic factors, they were subdivided into kinds of crops produce, finance, and market factors. For the kinds of crops grown, almost all of them produced cabbage so when they all harvest at the same time the price is affected. Under the finance factors, the leading problem was lack of capital to buy the needed farm inputs and to use for the payment of high cost labor. Under marketing factors, the leading problem claimed was low market price/unstable buying price of products.



In terms of physical factors under the environmental factors affecting vegetable production, the leading problems claimed were drought, infestation of pest, typhoon, diseases and presence of weeds harboring pests.

Their problems with agricultural technicians were: farm visit is irregular, field demonstration is inadequate, no agricultural technicians assigned in the Barangay, conduct of seminars and workshops are not effective and technicians were confined in the Barangay office.

The suggested alternative solutions employed by the respondents to improved vegetable industry were unstable buying price must be stabilized at a higher price, preserved the watershed areas, conduct seminars on integrated pest management, promote traditional way of farming in order to improve the vegetable production and encouraging the use of crop rotation by the farmers.

Conclusions

Based on the findings, the following conclusions were made:

1. The farmer-respondents were middle age, heads of their family; literate and tilling their own farms.
2. The respondents claimed that they cannot profit much because of the problems brought about by environmental, destruction, lack of water supply, lack of financial resources, and unstable buying price in the market; hence farmers still keep improving their production on vegetable to gain more profit for needed materials used in their daily lives.
3. Suggested solutions employed by the respondents were to minimize the unstable buying price in the market at a very low price, preserved watershed areas, conducting seminars on integrated pest management, promote traditional way of farming



in order to improve the vegetable production and encouraging the use of alternating farm management to farmers.

Recommendations

Based on the findings the following recommendations were given:

1. The farmers should associate a proper trainings on processing of vegetables.
2. The farmers should be trained to make a farm plan before they engage in production.

They should practice crop zonification. In this way their cost of production would be stabilized at a higher level.

3. Most training should be conducted among the farmers in order to improve their skills in scientific farming so that they would not stick to the traditional method of farming. Furthermore, the use of IPM should be introduced to the farmers in order to lessen the amount of pesticides they are applying. In this way their cost of production would also decrease and their profit would increase.

4. The agricultural technicians assigned in the area conduct field visits in order to assist the farmers.

5. The farmers and the leaders of the community should organize a cooperative where credit facilities could be channeled to help those farmers who are in need of financial resources. With readily available financial resources that are affordable by the farmers, more productive resources would be put into vegetable thus more vegetables could be produced.



LITERATURE CITED

- ANONYMOUS 1998. A Publication of the Foundation for the Resources Linkage and Development. FRDL and PCCI – FAT.
- AVRDC, 1990. Vegetable Production Training Manual. Asian Vegetable Research and Development Center, Shannisa, Tainan, Pp. 22 – 24.
- BANGSOYA, S.B. 1995. Marketing activities and strategies of vegetables wholesaler farmer in La Trinidad, Benguet. B.S Thesis. Benguet State University, La Trinidad, Benguet. P.7.
- BOKILIS, J. 1997. Role performance of agriculture technologists in the dissemination of farm technology in Benguet. MS Thesis. Benguet State University, La Trinidad, Benguet.
- CHALLOY, J.E. 1997. Types of packaging materials preferred by middlemen at La Trinidad Trading Post and Baguio City Public Market. B.S. Thesis, Benguet State University, La Trinidad, Benguet. P.7.
- CIDA, N.C. 1993, Vegetable Production Under Simple Structures in Southern Europe Apartado 2027. Isoso Granada Spain. P.12.
- COX, J. E. JACKSON. 1993. Crop Production and Management. New York United Armed Forces. Institute. Pp. 15-17.
- ESTOLAS, W.R. 1996. Extent of utilization of farming technologies recommended by Benguet State University. MS Thesis. Benguet State University, La Trinidad, Benguet.
- GROLIER ENCYCLOPEDIA. 1991. Vegetable Production. Grolier Copyrights incorporated 17. 1933. pp 67 – 98
- KADER, A.A. 1995. Quality Factors for Horticultural Crops U.S.A. Department of Promology. University of California. P.23.
- PACALSO, D. S. 2001. Farming systems adopted by vegetable farmers in Mankayan, Benguet State University. La Trinidad, La Trinidad, Benguet.
- SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC). 1992. Environment of land Management Sector. Newsletter 9(2): Pp. 1-3.
- TIWAY, M.B. 1997. Farm management and practices of vegetable producers in Bauko, Mountain, Province. BS. Thesis. Benguet State University, La Trinidad, Benguet. P.4



APPENDICES**Appendix A
Letter to Respondents**

Republic of the Philippines
Benguet State University
College of Agriculture
La Trinidad, Benguet

Dear Respondents:

Greetings!

I am Janet T. Simon a fourth year student of Benguet State University who is conducting a study entitled “FACTORS AFFECTING VEGETABLE PRODUCTION IN MADAYMEN, KIBUNGAN, BENGUET.” This is a major requirement of Bachelor of Science in Agriculture major in Extension Education.

In this regard, may I request a portion of your precious time to answer the attach questionnaire to complete the research. Rest assured that all information you provide will be treated utmost confidentiality.

Thank you very much for your cooperation. More power and may the lord bless you more.

Respectfully yours,

Janet T. Simon
Researcher



Appendix B

Survey Questionnaire

Direction: Please fill-up and check the needed information honestly.

I. Socio- demographic Profile

1. Farm Respondents

- a. Name: _____
- b. Age: _____
- c. Civil Status: _____
- d. Sex: _____ Male _____ Female
- e. Highest Educational Attainment
 _____ Elementary
 _____ High School
 _____ College
 _____ others (pls. specify) _____
- f. Number of years in farming
 _____ 5 to 9years
 _____ 10 to 15 years
 _____ 15 and above years

2. Farm Resources

- a. Area Cultivated:
 _____ less than 10,000sq.m
 _____ 10,000 sq.m. to 15,000 sq.m.
 _____ 16,000 sq.m. to 20,000 sq.m.
 _____ others (pls. specify) _____
- b. Tenurial Status
 _____ owner
 _____ tenant
 _____ others (pls. specify) _____
- c. Source of Irrigation
 _____ watershed
 _____ rain
 _____ pump
 _____ others (pls. specify) _____
- d. Terrain/ Topography
 _____ plain
 _____ terraces
 _____ others (pls. specify) _____



e. Soil type

- Sandy clay loam
 loamy clayey
 sandy loam others (pls. specify) _____

II. Factors Affecting Vegetable

A. Social

1. What are the social aspects that affect vegetable production?

- a. lack of knowledge
 b. lack of assistance from LGU
 c. cultural practices / traditional
 d. lack of seminars
 e. others (pls. specify) _____

B. Economic

1. What do you cultivate?

- a. cabbage
 b. potato
 c. Chinese cabbage
 d. Carrots
 e. Radish
 f. others (pls. specify) _____

2. What are the factors affecting vegetable production?

- a. lack of financial resources
 b. lack of fertilizer
 c. high cost labor
 d. others (pls. specify) _____

3. What factors affect marketing?

- a. lack of transportation facilities
 b. far from marketing center
 c. unstable buying price vegetable
 d. problems in stocking and packing vegetables
 e. poor road conditions
 f. others (pls. specify) _____

C. Physical

1. What are the environmental factors affecting vegetable production?

- a. infestation of pests
 b. diseases
 c. weeds competing pests
 d. typhoon
 e. drought
 f. others (pls. specify) _____

D. What are the problems encountered with agricultural technicians?

- a. No agricultural technicians assigned in the Barangay



- _____ b. farm visit is irregular
- _____ c. Technologist confine them in the Barangay office
- _____ d. Field demonstration is inadequate
- _____ e. Conduct of seminars in workshops are not effective
- _____ f. Others (pls. specify) _____

E. What are the alternative solutions you employed?

