

BIBLIOGRAPHY

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ABSTRACT

This study aimed to determine if organic is acceptable in the place, the farmers' awareness on organic farming in the place, and the reasons of farmers for not practicing organic farming in the area. There were 50 respondents that were interviewed.

The studies revealed that majority of the respondents were male, aged from 30 to 60 years old, married, and had attained a low level of formal education. It can be inferred also that all of the respondents were farmers and farming was the main source of their income for more than ten years.

From the available data, all of the respondents were practicing conventional farming. Majority of them heard about organic farming but there were still some of them that did not hear about organic farming because of some factors/reasons. The factors/reasons for their non-awareness on organic farming were because nobody was practicing organic farming in their community, there was no available information about organic farming, and organic farming was not the trending practice in the area. Most of them also did not try producing organic vegetables because of internal and external



factors/reasons. The internal reasons/factors for the non-adoption of organic farming were because of inadequate knowledge, not convenient to apply, low yield, and poor quality of crops produce while the external factors/reasons for the non-adoption of organic farming were because of the soil fertility in the area had already gone, there were no seminars and trainings about organic farming, and they were used to do with the easiest way (conventional farming).

It was found out that organic farming was sustainable that according to them, they can formulate their own fertilizers from the resources in the environment. It was more economical in terms of inputs used. It was also found out that it did not need higher level of education as long as there are agriculturists/facilitators to teach organic farming. Organic produce were nutritious to eat. Conventional farming was easier to adopt but it required specialized skill. In terms of appearance, conventional products were better.

Organic farming was acceptable in the place but for now, it is not suitable because the soil fertility in the area has already gone. Maybe it can be apply but the crops maturity takes longer time, in small sizes, and low yield. In the area, composting is the organic farming technology that they are aware of. Most of the respondents are willing to go into organic farming if there is support from the government especially technical support and with market support where concerned institution established stable market for organic vegetables.



INTRODUCTION

Rationale

Every Filipino knows that vegetables are one of the most important products of the Philippines. Its value could hardly be over-estimated because majority produce and eat it, for they are informed that vegetables are rich in vitamins.

Organic farming is now widely recognized by the public and as a valid alternative to conventional agriculture. It is because medical research linked cancer with the use of agricultural chemicals and fertilizers frequently applied by commercial farms.

Actually, pesticides are poisons. This was stressed by Dr. Lynn R. Panganiban of the National Poison Control and Information Service. She gave the definition of Pesticides as a chemical used for controlling, preventing, destroying, repelling or mitigating troublesome and destructive animals, mostly insects. These substances are inherently poisonous that can harm man and environment. Humans are affected when they are exposed to the poison through oral and inhalation (Marquez, 2004) as cited by Empiso (2010).

Empiso (2010) mentioned that organic farming can contribute meaningful socio-economic and ecologically sustainable development, especially in poor countries. And this could be achieved through applications of organic principles, which means efficient management of local resources like local seed varieties and manures. It is proven that most organic farms provide a means of agricultural sustainability by reducing the amount of human input such as pesticides and fertilizers. Farmers that produce vegetables through organic method reduce risk of poor yields.



It is a must that farmers should know that organic farming benefits them in many ways. It does not pollute environment. That means it does not contribute or aggravate illnesses or diseases related to environmental pollution. Moreover it does not only concern the health of human beings but also with animals. Soil is preserved and prevented also from quality degradation. This means that succeeding crops after every organic farming in a specific farm has the least chance against soil related problems like soil acidity for example. Doing all the right procedures of organic farming in producing edible organic vegetable is a truly time consuming, but, it is far cheaper in expenses, comparing it to conventional farming (Empiso, 2010).



REVIEW OF LITERATURE

Historical and Background of Organic Farming

The term organic farming according to Barker (2010) was introduced into common usage around 1940, following farming movements that had begun in the 1920s and 1930s promoting the concept of management of a farm as a living unit or whole system. During the period of the 1920s and 1930s, Albert Howard in the United Kingdom, and based on his work in India, laid out the social and practical groundwork for the organic gardening movement. Rudolph Steiner, through his lectures and teaching beginning in 1924, laid the foundation for biodynamic agriculture, which created the first organic-like certification and labeling system. However, biodynamic agriculture differs from organic agriculture in that the biodynamic system has spiritual, mystical, and astrological guidelines, Lord Northbourne, an agronomist in England, in reference to farming, introduced the term organic to the world in 1940 in his book *Look to the Land*. J.I. Rodale introduced the organic movement to United States about 70 years ago with publications that advocated for health through farming organically. During 1940s, the Rodale Institute (United States), the Soil Association (United Kingdom), and Soil and Health (New Zealand) were founded as associations devoted to study and promotion of organic farming. Similar organizations arose in Germany and Japan at about the same time or just following the establishment of the institutions in the United States, United Kingdom, and New Zealand.

Barker (2010) mentioned that at the time of the early development of the organic movements, however, use of chemical fertilizers and pesticides was very modest compared to current practices; hence, the development of organic farming was related not only to the



materials used for soil fertility and crop protection but also had a base of managing a farm as a system with integration of soils, crops, animals, and society. This concept of a systematic approach is fundamental in organic farming today and is expressed with opposition to production of genetically engineered crops and irradiation of foods, among other practices. The association of organic agriculture with environmental sustainability arose in the 1960s and 1970s and brought about changes in the politics and social elements of organic farming. The involvement of governmental agencies in organic farming increased markedly during the 1980s and later.

Until recently with the applications of legal restraints to organic farming, no universally accepted definition or identification of organic farming and gardening was developed. The difficulty of defining organic agriculture arose from multiple conceptions of the basic nature of the term of organic among biologists, chemists and practitioners. In some cases, terms such as naturally grown, wild, biologically grown, and ecologically grown were used to characterize organic production. Interpretation and application of these terms are often as difficult as defining organic. Some people say that organic farming is agriculture that is based on use of crop rotations, cover crops, composts, and nonchemical means of pest control and that excludes use of manufactured fertilizers or pesticides. That concept is limited in scope and does not cover the diverse practices and restrictions of organic farming (Barker, 2010).

According to Barker (2010), in the early years of organic farming, about 1940 to 1970, the practices essentially consisted of local operations with much contact between consumers and farmers or retailers. With the expansion of organic production and markets in the 1970s, this association become more remote, and consumers, growers, and marketers



needed means of proving that produce was organic. These needs led to the formation of certifying agencies that would vouch that the produce was grown organically and permit labeling of produce as being organically grown. By the 1980s, several private and state run certifying agencies were operating in the United States. These agencies had variable standards for certification and charge variable fees for services. Some agencies did not recognize certifications by other agencies. Many regions of the country did not have locally accessible certifying agencies. These differences created problems of lack of certification, lack of uniform standards, unreasonable fees, and even fraud. To address these problems, the organic community sought federal legislation to enact national standards for certification of organic farming. This action led to the Organic Foods Production Act of 1990 to the establishment of the National Organic Program (NOP) of the U.S. Department of Agriculture. The NOP sets regulations for certification. The NOP regulations are implemented through certifying agencies that are accredited by the NOP. Accreditation ensures that the certifying agencies understand and use the regulations of the NOP and conduct business properly. Certification applies to crops and crop products and to livestock, poultry, and products of their production. The certification practices referred to hundred governmental and nongovernmental organizations in the world offer certification systems. Governmental organizations have increased in prominence and importance as the volume and value of organic production has increased.

The regulations of the NOP establish transition periods for movement from conventional farming into organic agriculture. A transition period is generally 3 years following the ending of applications of nonorganic practices. Some agencies may aid growers in selection of crops to grow during the transition period. In practice growers may



certify part of a farm and leave the rest in conventional agriculture. In that case, buffer zones between the organic farm and the conventional farm operations must exist. Regulations specify what physical distance or barriers are needed to separate the organic areas from conventional areas. Produce from mixed systems must be segregated at harvest. The regulations of the NOP also establish materials that are permitted, restricted, or prohibited for use in organic agriculture. Permitted materials can be used regularly in organic farming. Items that are restricted can be used only within the limitations set by the NOP standards. For example, farm manures need to be composted or an amount of time between application of the manure to cropland and harvest of produce must lapse to meet the organic standard. Prohibited materials cannot be used in organic production. Prohibited materials may be naturally occurring or manufactured. Consequently, definitions of organic agriculture by the NOP include listings of allowable practices in fertilization of crops, control of pests, and use of adjuvant (materials that affect the activity of other agents but that have little effect when supplied alone). Restriction of activities to those allowed in the listings and following specified practices of crop and soil management may permit a grower or the grower's produce to be certified as organic. Certification is done mainly by private organizations that work with development and review of allowable practices for products that are labeled as "100% organic," "organic," "made with organic ingredients," or "products with less than 70% organic ingredients." The grower or handler certifier agrees on a production or handling system that is appropriate for each classification. The certifier provides growers with definitions, guidelines, practices, and lists of materials that may be used in organic farming. A national list (NOP) of allowed and prohibited substances



that can be used in organic farming is followed. This list includes natural and synthetic substances that are allowed or not allowed (Barker, 2010).

METHODOLOGY

Locale and Time of the Study

The study was conducted at Madaymen, Kibungan, Benguet to determine the potential of promoting organic farming in the area. Madaymen is one of the seven barangays of Kibungan. It was chosen as the study area because it is the coldest among the five barangays and where highland vegetable production thrives most.

Madaymen is located 70 kms from the La Trinidad, Vegetable Trading post and 75 km from Baguio City, the key major market areas for vegetable in the province. It is bounded north of Ampusongan and Palina, south of Atok and Lubo, east of Catubo, Atok, and west of Poblacion.

This research was conducted from December 2012 to January 2013.

Respondents of the Study

There were 50 vegetable farmers who served as respondents. Selection of respondents was through random sampling.

Data Collection

The needed data were collected with the aid of survey questionnaires that were floated to the 50 respondents.



Data Gathered

The data gathered were the socio-demographic characteristics of the respondents and their awareness and acceptability of organic farming.

Data Analysis

The data gathered were consolidated, tabulated and analyzed based on the objectives of the study using simple statistical analysis like frequency counts and percentage.



RESULTS AND DISCUSSIONS

Socio-Demographic Profile of Respondents

Table 1 presents the socio-demographic profile of the respondents. This information included their gender, age, civil status, educational attainment, occupation, main source of their income, and number of years in farming.

Gender. There were more male respondents (64%) while 36% of the respondents were females. The data shows that farming is managed mostly by the head of the family but then, women can also do.

Age. The ages of the respondents ranged from 20 years old to 75 years old. Most (44%) of the respondents belonged to the age brackets 34-47 years old followed by the age brackets 48-61 years old with 26%. This finding shows that the younger age was 20 years old and the older age was 75 years old.

Civil Status. The distribution of the respondents as to civil status is as follows: 88% were married, 8% were single and 4% were widow/widower. The data implies that the respondents whether married, single, or widow/widower were engaged to farming.

Educational Attainment. Majority of them (32%) were elementary graduate followed by 20% that reached elementary level and high school graduate. Five or 10% were college graduate and only 6% reached college level. Two or 4% gone through high school level and vocational, and only 2% did not have formal education.

Occupation. Of the fifty respondents, all of them (100%) were farmer.

Main source of income. All of the respondents (100%) was farming is their main source of income.



Numbers of years in farming. Majority of the respondents (44%) were farming for 14 to 27 years followed by 1 to 13 years in farming with 28%. Twenty six percent were farming for 28 to 41 years and only 2% were farming for 42 to 55 years. The data shows that all the respondents vary according to the number of years they were engaged in farming.

This finding implies that majority of the farmers were male, were between the age of 30 to 60 years old, married, and have attained a low level of formal education. It can be inferred also that all of the respondents were farmers and farming is the main source of their income. Majority of the farmers were farming for more than ten years.\

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Madaymen is one of the seven barangays of Kibungan. It is the coldest area among the seven barangays and where highland vegetable production thrives most. Madaymen is bounded north of Ampusongan and Palina, south of Atok and Lubo, east of Catubo, Atok, and west of Poblacion. It is located 70km from the la Trinidad, Trading post and 75km from Baguio City, the key major market areas for vegetable in the province. The place could be reached in three to four hours by land transportation. All of the population is engaged in vegetable farming. This is their major source of income. Majority of the respondents were farming for more than 10 years.

This study was conducted to find out if organic farming acceptable in the place, awareness of farmers on organic farming, and reasons of farmers for not practicing organic



farming. In order to get this information, 50 respondents were surveyed using a survey questionnaire.

From the available data, all of the respondents are practicing conventional farming in the area. Most of them heard about organic but did not practice it. There were reason for their non-awareness and non-adoption of organic farming. For the non-awareness of organic farming, most of the respondents mentioned that because nobody is practicing organic farming in the area. Internal reasons for non-adoption of organic farming, most of the respondents mentioned that because of inadequate knowledge and it is not convenient to apply in the area. External reasons for non-adoption of organic farming, most of the respondents mentioned that the soil fertility in the area has already gone and there are no seminars and trainings about organic farming. For their other reason, most of them stated that conventional farming is the practice they used to do.

Majority of the respondents mentioned that organic farming is sustainable. It is not much of expenses that they can formulate their own fertilizer from the resources in the environment. The easier to adopt for them is the conventional farming because the work is easy (i.e. they just only spray the weeds and insect pests) that it is the practice that they used to do until now. For them, organic is more economical in terms of inputs used. Conventional requires specialized skill because they should know the kinds of chemicals and their uses. They also need to read carefully the directions for the application of each chemical. Organic farming does not require higher level of education because if you have idea/information/seen from neighbors then you can apply it. For now, there are expert facilitators to conduct seminars and trainings and the presence of guides. They believe that



organically produced products are more nutritious than of the conventionally produced but conventional products has the better appearance.

Organic farming is acceptable to most of them. Composting is the most mentioned organic farming technologies that they like to practice because it is the organic farming technology that they are aware of and that was practiced by some of the farmers. The work is easy (composting of sunflower and weeds, degrading leaves of vegetables) if there is a machine for composting. The support that was most needed is the technical support. They specified materials (i.e. shredder to be used for composting), provide liquid fertilizers for spraying, providing of inputs (i.e. seeds) and conduction of seminars and trainings. Market support was also needed where government should established stable market to be sure that the organic vegetable will be sold out or accepted in the market because market of organic products is limited.

Conclusions

Based on the findings of the study the following conclusions were formulated:

1. Organic farming is acceptable in the place;
2. The farmers of Madaymen, Kibungan, Benguet were not aware of organic farming because of some reasons: nobody is practicing organic farming in our community, there is no available information about organic farming and organic farming is not the trending practice in the area; and,



3. Organic farming is acceptable to the farmers but there were reasons for the non-adoption of organic farming: inadequate knowledge, not convenient to apply, the soil fertility in the area has already gone, there are no seminars and trainings about organic farming and used to do with the easiest way (conventional farming).

Recommendations

From findings and conclusions the following recommendations were given:

1. Concerned agencies should provide assistance to farmers during conversion period because farmers in the area used to do the conventional farming;

2. More seminars and trainings on organic. Make lecture on how the farmers can adopt organic farming specially that the soil fertility in the area has already gone;

3. Concerned agencies should provide sustained technical supports, then this concerned agencies have a visit in the place to ensure that the farmers are practicing and using organic farming technologies that they provide. And also to monitor the other needed support of the farmers. Establish stable market for organic vegetables to be sure that the it will be sold out or accepted in the market because market of organic vegetables is limited; and,

4. To encourage a shift into organic farming, concerned institution must provide information, education, and training in the area. Input assistance is also recommended. Government should give assurance that they will support organic farmers.



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