

BIBLIOGRAPHY

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ABSTRACT

This study was conducted for the following objectives: to determine the farmers’ awareness on organic farming in the place; to determine whether organic farming is acceptable in the place; to identify the reasons of farmers of practicing organic farming; and, to identify the reasons of farmers of not practicing organic farming in the area.

One hundred twenty (120) respondents were interviewed randomly using a questionnaire and through personal interview. Data gathered were organized and subjected to statistical computation using frequency and percentage.

As to the awareness of farmers in Sablan about organic farming almost all of the respondents were aware of organic farming and the source of their information was through the radio. Organic farming was also acceptable to the farmers of Sablan but with different levels of acceptability, seventeen (17) claimed that organic farming was strongly acceptable to them; ninety six respondents (96) acceptable and only seven respondents (7) claimed that organic farming is not acceptable to them. Although organic farming was acceptable to the farmers of Sablan, most of them were not practicing. The reasons of some farmers for practicing organic farming were: beneficial to health, lesser capital, higher price, better quality, successful experiment, and good effects to the environment. As to the



reasons for not practicing or not adapting organic farming, they mentioned the following: have inadequate knowledge, limited market outlet, and it takes time to revive the fertility of the soil.

From the result of this study, it is recommended that since organic farming is acceptable to the farmers of Sablan, government and other concerned agencies must provide all of their needs especially seminars and trainings to be conducted in their locality. Furthermore, affordable credit should also be provided and more market outlets for the organic vegetable products.



INTRODUCTION

Rationale

Vegetable production has remained as the major source of income of highland farmers, particularly in the province of Benguet and Mountain Province. In the Philippines, the early rice and vegetable farmers were basically organic farmers. Indigenous methods were adapted as well as cultural tradition such as thanksgiving harvest and “bayanihan” and other farming activities were strongly linked with religious and indigenous practices of the rural folks. With the emergence of the Green Revolution, farmers turned their back to organic farming in exchange for higher productivity (Pablo, 2004).

To be a successful organic farmer, the farmer must not see every insect as a pest, every plant out of place as a weed and the solution to every problem in an artificial chemical spray. The aim is not to eradicate all pest and weeds, but to keep down to an acceptable level and make the most from the benefits that they may provide (Rodale, 1971).

Organic production takes into account the minimum reliance on artificial inputs, feeding of soil and not the plants, food safety practices, non-use of hazardous chemicals, non-use of artificial growth applied in vegetable and non-use of genetically modified organisms. It also promotes biodiversity if the use pesticide and chemicals fertilizer are minimized if not avoided (Adonis *et al.*, 2005).

Benefits of eating organically grown vegetables are evident. Their greatest strength lies in minerals and vitamin content though many have appropriate percentage of dietary fiber, and practically have high water content. The nutritional values of organic vegetables are also good source of protein and minerals. It contain C, K, P (Pro-vitamin A) as well as



B vitamins. In the case of organic vegetables grown in the Cordillera Region, it was found out that the produced are not only tastier but have nutritional value higher than conventionally grown vegetables (Almonte, 2006).

Sablan is a 5th class municipality in the province of Benguet. Situated on the Midwestern side of Benguet Province, it is bounded on the north by the Municipality of Burgos, La Union and Municipality of Kapangan, Benguet; on the east by the Municipalities of La Trinidad and Tublay, Benguet; on the south by the City of Baguio and the Municipality of Tuba, Benguet; on the west.

The area of Sablan is estimated at 91.68 sq.km or roughly 9,168 hectares with a population of 9,652 people in 1,873 households according to the 2000 census. The area of Sablan roughly constitutes 3.45 percent of the land area of the Province of Benguet.

The name "Sablan" got its name from a tree called "SABDANG" that grew abundantly along and around the Sablan River which was found by early settlers who migrated to the place. The Sabdang tree blooms with its beautiful red bright colored flowers during the summer season. The tree grows up to fifty feet tall with many branches. During the Month of February, it bears fiery red flowers, buds open and the leaves start to fall. When the trees are in full bloom, it appears as though it has no leaves but all flowers which make it even more distinctively beautiful among all trees.

There are no original settlers in this municipality besides the immigrants from Bantay Dose (now called San Pascual in Tuba, Benguet) Kabayan, Bokod, La Trinidad, Atok, and other neighboring towns, mostly Ibalois. Only in the latter part of 1970's that Ilocanos and other lowlanders migrated to Sablan.

Sablan is politically subdivided into 8 barangays.



How to get here:

The municipality can be reached thru the national road which connects it to the Province of La Union and Benguet and the City of Baguio making it accessible to all kinds of vehicle except for the two barangays of Bagong and Balluay, which are accessible only by foot.

Sablan serves as the watershed of major river systems in Luzon where one-mini-hydro is located.

The climate of Sablan is comparable to the climate of Benguet which is classified under two pronounce seasons. The dry season is from December to April while the rainy season is from May to November. The average rainfall of Benguet is 176.73 inches. The driest month is February and the wettest month is August followed by the month of July.

The climate of the place as well as the tourist attraction has been contributing to the economic development of the place. Established organic farms in Baguio and other places has now become a part of agrotourism. An assessment of the acceptability of organic farming in Sablan would provide basis for policies that would encourage farmers to go into organic farming.

Statement of the Problem

This study on Assessment on the Acceptability of Organic Farming in Sablan, Benguet aimed to seek the answers to the following questions:

1. Are the farmers of the selected Barangays of Sablan aware of organic farming?
2. Is organic farming acceptable in the place?
3. What are the reasons for adopting organic farming?



4. What are the reasons why farmers don't practice organic farming?

Objectives of the Study

The following were the objectives of the study:

1. to determine the farmers' awareness on organic farming in that place;
2. to determine whether organic farming is acceptable in the place;
3. to identify the reasons of farmers of practicing organic farming in the area; and,
4. to find out the reasons of farmers of not practicing organic farming in the area.

Importance of the Study

The study would provide the needed information to determine the acceptability of organic farming in Sablan, Benguet.

The study would serve as a way for students to understand more about organic farming. Furthermore, the study would serve as reference for students who would conduct similar studies in the future.

The study would also be helpful to researchers. This would serve as a source of information for the researchers who are engage in the same study.

Study would help the policy makers to determine if organic farming is acceptable in the said area. In addition, this would help the farmers to know the importance of organic farming.



Scope and Limitation of the Study

The study was conducted in the selected barangays of Sablan, Benguet. The study focused on the awareness and acceptability of organic farming in the area.



REVIEW OF LITERATURE

History of Organic Farming

Organic farming is not a new practice in agriculture as it was being practiced since ages. Before the advent of chemical fertilizer and pesticides whatever was being grown can be called as an organic. However the official credit of fathering Indian organic farming goes to Albert Howard, an agronomist stationed at Indore in 1931 along with Yashwant Bal.

Classic organic production research during the 1960's and 1970's at America's land grant colleges revealed the importance of philosophy. The Ph. D's took test plots that for decades had been subjected to all sort range of compound, including DDT and planted corn. On some, they added chemical fertilizers, pesticides and etc. those they called the conventional chemically fertilized plots. At the end of the season, they measured the production from two plots and found that the organic one's did not do well. These conclusions were replicated and promulgated all around the world to prove the unacceptability of organic farming (Deshmukh, 2010).

The organic movement began in the 1930's and 1940's as a reaction to agriculture's growing reliance on synthetic. Artificial fertilizers had been created during the 18th century, initially with super phosphates and then ammonia derived fertilizers mass produced using the Haber-Bosch process developed during World War I. These early fertilizers were cheap, powerful, and easy to transport in bulk. The 1940's has been referred to as the pesticide era. Sir Albert Howard is widely considered to be the father of organic farming.



Rudolf Steiner, an Australian philosopher, made important strides in the earliest organic theory with his biodynamic agriculture.

Organic farming techniques were pioneered in the early twentieth century by small groups of farmers concerned about the effects of mechanization, fertilizer use and other forms of intensification on the biological health of the soil (Halpin *et. al.*, 2006).

Farming

Farming is a man's skill, in which players grow crops using seeds and harvest useful items from them, or more commonly harvest the plant itself. The crops grown range from the standard staples of vegetables, fruits and fruit trees, herbs, to more exotic and usual crops such as wood bearing trees, cacti, and mushrooms. The harvested items have wide range of uses, but are mostly used to train herb lure or cooking, or simply eaten as food. Many players sell their harvest for a significant profit(Briggs, 2008).

Organic Farms

The term organic is best thought of as referring not to the type of inputs used, but to the concept of the farm as an organism, in which all the components such as soil minerals, organic matter, microorganisms, insect, plants and humans interact to create a coherent self-regulating and stable whole. Reliance on external inputs, whether chemical or organic, is reduced as far as possible (Anonymous, 2005).

As cited by Pablo (2004), organic is not new in the country and a number of technologies and strategies have been well studied and adopted in some areas of Benguet already. In fact, a number of specialized farms have been stabilized and profitably growing organic



vegetables and other crops and livestock. However there is no package of technology in organic farming for farmers to use or to refer to.

Organic Farming

Organic farming is a system devoid of the use of any chemical or genetically modified inputs, in which the biological potential of the soil, organic sources and underground water resources are conserved and protected by adopting suitable, cropping pattern including agro-forestry and methods of organic replenishment.

The US Department of Agriculture defines organic farming as a system that is designed to produce agricultural products by the use of method and substances that maintain the integrity of organic agricultural products until they reach the consumer. Organic farming is a method of crop and livestock production that involves much more than choosing not to use pesticides. Fertilizers, genetically modified organisms, antibiotics, and growth hormones that are not permitted by organic standards.

Organic farming literary means raising of crops with organic manure without the use of synthetic chemicals. USDA has defined organic farming as a production system, which avoids or largely excludes the use of synthetically compounded fertilizers, pesticides, growth regulators and livestock feed additives. Food and Agriculture organization's Codex definition (Nanda *et al.*, 2003 as cited by Deshmukh, 2010) organic agriculture is holistic agro-ecosystem health, includes biodiversity, biological cycle and soil biological activity.



Bhattacharya (2004) as cited by Deshmukh (2010), mentioned that organic farming relies on crop rotation, crop residues, animal manure, legumes, and green manure, off farming, organic waste and aspects of biological control.

Organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health including biodiversity, biological cycles and soil biological activity. It emphasises the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using, where possible, agronomic, biological, and mechanical methods, as opposed to using synthetic materials, to fulfil any specific functions with the system (Kristiansen, 2006).

Organic farming does not mean going back to traditional methods. Many of the farming methods used in the past are still useful today. Organic farming takes the best of this and combines them with modern scientific knowledge. Organic farmers do not leave their farms to be taken over by nature; they use all the knowledge, techniques and materials available to work with nature. In this way, the farmer creates a healthy balance between nature and farming, where crops and animals can grow and thrive (Rodale, 1971).

Difference Between Conventional and Organic Production

Kim (2006) cited differences between organic and conventional methods of farming. Conventional farming makes use of commercially produced fertilizers and other synthetic chemicals while organic farming makes use of limited thermal, biological, and chemical intervention. Because of this, long-term fertility of soil is more protected in organic farming than in conventional farming. Moreover, Kim pointed out that organic



farming practitioners gain more profit than conventional farmers because of lower cost of farm inputs.

Significance of Producing Organic Vegetable

According to De La Cruz (2004), crops that were applied with organic fertilizer performed better compared to those crops that were grown with commercial fertilizer. The slow release of nutrients from animal manure minimizes the nutrient losses in the soil resulting to the efficient nutrient uptake of crops that leads to higher yields. Organic farming also serves as a valuable conditioner of soil retaining humidity and improving, structure and internal drainage. Organic farming system replenishes and maintains soil fertility, eliminate the use of toxic and persistent pesticides and fertilizers, and build biologically diverse agriculture.

Advantages of Organic Farming

The most important of the advantages of organic farming is that it maintains the life of the soil, not only for the current generation, but also for the future generation. Water pollution is reduced with organic farming. Most of the times after rains, the water from the fields, which contains chemical, get drained into the rivers. This pollutes the water bodies. In organic farming, since no chemicals or synthetics are used, water pollution reduces as well.

Organic farming helps in building richer soils. Rich soil is obtained by the intelligently rotating crops. The rich soil helps in plant growth. The rate of soil erosion is reduced drastically. A French study has revealed that the nutritional quality and micro-



nutrients are present in higher quantities in organically produced crops. The micro-nutrients promote health.

Organically grown food tastes better too. The overall cost of cultivating the crops reduces as the farmers use green manure or worm farming to replenish the lost nutrients of the soil. The other option that the farmers use is to grow legumes in rotation with other crops.

Disadvantages of Organic Farming

Along with the pros of organic farming, there are certain cons too. One disadvantage is that it has low productivity. With the highly developed chemicals and machinery, the farmer is able to multiply his harvest manifold times. The organic farmers use the cultivation method as opposed to drilling method used by the traditional farmers. The cultivated soil is prone to wind and water erosion. The traditional farmers don't know that direct drilling does not cause any disharmony in soil structure. The organically produced food is also expensive. The cost is very often 50-100% more than the traditional food and lastly, organic food is not always available in the market (Anonymous 2005).

Benefits of Organic Foods

Organic farming emphasizes the use of renewable resources. One of the common benefits proclaimed about organic food is that it taste better, but there are many other benefits to incorporating organic foods into diet (Anonymous, 2003).

Health benefits. Organic foods prevent people from ingesting regular amounts of pesticide commonly found in commercial products. Animals are not routinely given



antibiotics and other medications which enter the food supply to human. Some research suggests that this excessive use of chemical in food can be linked to increased health problems and with the healthy development of the children. Organic food significantly lowers the organic phosphorous pesticides.

Environmental benefits. Organic food also protects the planet. It ensures that the biodiversity remains available in the food we eat and the wildlife that live on the farms. Fruits and vegetables are naturally available in hundreds of varieties. Organic farms grow a mix of crops and promote a balanced ecosystem including parasites and predators that protect crops from pest and worms and other microorganisms which enrich the soil.

Human and animal benefits. Organic food products reduce exposure to pesticides. Organic farming is considered sustainable farming. The workers and the animals are not as exposed to dangerous toxins or working and living conditions. This enables people to continue growing healthy foods for the rest of society without reliance on huge machinery and chemicals. The animals raised on organic farm are not subject to the terrible living conditions imposed on commercially reared animals that often live in exceedingly small spaces without a freedom of movement. These unhealthy conditions lead to a spreading of illness which is combated with regular doses of antibiotics.

Organic sustainable farming protects humans, animals and the environment. Increasing the demand for organic farming and ensure that the food supply available to the children is a healthy one.

Nutritional Value and Taste



According to the UK's Food Standards Agency, "Consumers may choose to buy organic fruit, vegetables and meat because they believe them to be more nutritious than other food. However, the balance of current scientific evidence does not support this view. A 12-month systematic review commissioned by the FSA in 2009 and conducted at the London School of Hygiene & Tropical Medicine based on 50 years' worth of collected evidence concluded that "there is no good evidence that consumption of organic food is beneficial to health in relation to nutrient content. Other studies have found no proof that organic food offers greater nutritional values, more consumer safety or any distinguishable difference in taste. A review of nutrition claims showed that organic food proponents are unreliable information sources which harm consumers, and that consumers are wasting their money if they buy organic food believing that it contains better nutrients. Minor differences in ascorbic acid, protein concentration and several micronutrients have been identified between organic and conventional foods, but it doesn't appear that these have any impact on human health.

Implications of Organic Farming

Principles outlined by IFOAM for organic farming plead for maintenance of environment and avoidance of all those practices that spread any kind of pollution. Production standards and economic feasibilities are also included as key issues so that it is accepted by farmers.

Soil health. Organic farming cares more for soil than crop. Addition of manures to soil is scheduled according soil needs. Build up soil organic matter increases, bringing stability in soil pH and enhancement in organic carbon which is essential for good soil and biological environment (Clark *et al.*, 1998 as cited by Deshmukh, 2010).Nutrient



transformation processes are accelerated upon addition of organic manures (Stockdale *et al.*, 2001 as cited by Deshmukh, 2010). Physical properties of soil were enhanced in terms of porosity aggregation stability, soil aeration, nutrient retention and water holding capacity.

Water pollution. Prohibition of synthetic pesticides in organic farming eliminates risk of contaminating water compared to intensive/conventional agriculture. In livestock production use of antibiotics, feed additives are not permitted which reduced risk factor over conventional livestock system.

Air pollution. The following observations reveal superiority of organic farming over conventional are in case of air pollution. a.) Carbon dioxide emissions are generally lower in organic farming systems. It is due to prevention of chemical use. b.) Nitrogen surplus are low in organic system and indicate lower potential for gaseous nitrogen emissions. c.) Organic farming helps in reducing air pollution as it permits use of many off farm waste which otherwise may result in air, and water and pollution.

Biodiversity Conservation

Influence of organic farming is especially favourable for weeds, insects, birds, wildlife, soil flora as well as fauna. Eco-friendly weed control measures provide livelihood rights too many untargeted plants. Bird numbers and species show more diversity on organic farm.



Economics of Organic Farming

The economics of organic farming, a subfield of organic agriculture economics encompasses the entire process and effect of organic farming in terms of human society including social cost, opportunity cost, unintended consequences, information asymmetries, and economics of scale. Although the scope of economics is broad, agricultural economics tend to focus on maximizing yields and efficiency at the farm level. Economics takes an anthropocentric approach to the value of the natural world; biodiversity, for example is considered beneficially only to the extent that is valued by people and increase profits. Some entities such as the European Union subsidize organic farming in large part because these countries want to account for the externalities of reduced water use, reduced water contamination, reduced soil erosion, reduced carbon emission, increase biodiversity, and assorted other benefits that result of organic farming. Traditional organic farming is labor and knowledge intensive whereas conventional farming is capital intensive, requiring more energy and manufactured inputs.

Growth. As of 2001 the estimated total market value of certified organic products was estimated to be \$20 billion. By 2002 this was \$23 billion and by 2005 \$33 billion with organic monitor projecting sales of \$40 billion in 2006 (Anonymous, 2003). The change from to 2005 represents a compound growth of 10.6%.

In recent years both Europe and North America have experience strong growth in organic farmland. Each added half a million hectares from 2004 to 2007 for the US this is 29% change . However, this growth has occurred under different conditions. While the European Union has shifted agricultural subsidies to organic farmers in recognition of its environment benefits, the United States has taken a free market approach. As a result, as



of 2001 3% of European farmland was organically managed compared to just .3% of United States farmland. By 2005 Europe's organic land was 3.9% while the United States had risen up to 0.6% (Anonymous, 2003).

IFOAM's most recent edition of *The World of Organic Agriculture; Statistics and Emerging Trends 2009* list the countries which had the most hectares in 2007. The country with most organic land is Australia with more than 12 million hectares, followed by Argentina, Brazil, and the US. In the total 32.2 million hectares were under organic management in 2007. For 1999, 11 million hectares of organically managed land were reported.

As organic farming becomes a major force in agriculture, it is likely to gain increasing impact on national agriculture policies and confront some of the scaling challenges faced by agriculture.

Standards for Organic Farming

Organic farming is distinguished by formal standards regulating production methods and in some cases, final output. Standards may be voluntary or legislative. As early as the 1970's, private associations created standards against which organic procedures could voluntarily have themselves certified. In the 1980's, governments began to produce organic production guidelines. Beginning in the 1990's, a trend toward legislation of standards began, most notably the Eco-regulation developed in the European Union. As of 2007 over 60 countries have regulations on organic farming. Organic agriculture also is the only government enforced humane laws, such as limited to de-



breaking on chickens; guarantee to pasture time to cows and more humane ways to deal with bees.

Productivity and Profitability

Lotter (2003) reports that repeated studies have found that organic farms withstand severe weather conditions better than conventional farms sometimes yielding 70-90% more than conventional farms during droughts. A 22 year trial study by Cornell University published in 2005 concluded that organic farming produces the same corn and soybean yields as conventional methods over the long term averages, but consumed less energy and zero pesticides. The results were attributed to lower yields in general but higher yields during drought years. A study of 1804 organic farms in Central America hit by Hurricane Mitch in 1998 found that the organic farms sustained the damage much better, retaining 20 to 40% more topsoil and smaller economic losses at highly significant levels than their neighbors.

A long term study by US Department of Agriculture Agricultural Research Service (ARS) scientist concluded that contrary to widespread beliefs, organic farming can build up soil organic matter better than conventional no-till farming, which suggests long term yield benefits from organic farming (Anonymous, 2005).



METHODOLOGY

Locale and Time of the Study

The study was conducted in the selected barangays of Sablan, Benguet namely barangay Poblacion, barangay Kamog, barangay Bayabas, barangay Banangan on December to January 2013.

Respondents of the Study

The respondents of the study were 120 farmers, 30 from barangay Poblacion , 30 from barangay Kamog, 30 from barangay Bayabas, and 30 from barangay Banangan, in Sablan, Benguet.

Data Gathering Procedure

The data of the study were gathered with the use of questionnaires containing the necessary questions to the objective of the study through personal interview.

Data Gathered

The data gathered included the demographic profile, awareness on organic farming, level of knowledge, level of acceptability on organic farming, reasons why farmers practice or do not practice organic farming and supports needed by the farmers to adopt organic farming.



Data Analysis

The data gathered were evaluated and interpreted by the researcher according to the objective of the study.



RESULTS AND DISCUSSION

Demographic Profile of Respondents

Table 1 shows the demographic profile of the respondents according to their age, gender, civil status, educational attainment, occupation, source of income, type of farming engaged in, and number of years in farming.

Age. The respondents' ages ranged from 20 to 70 years old wherein 24% were 20-30 years old, 31.61% 31-40 years old, 20.83% belonged to the 41 to 50 age bracket, 19.17% to the 51 – 60 years old, and only 4.17% 61 – 75 were years old. The finding shows that the respondents were more or less distributed almost equally to the different age bracket.

Gender and civil status. There were more male respondents with 71.62% than the female with only 28.33%. Majority (57.5%) were married, 30.83% single and 11.67% were widow/ widower.

Educational attainment. The respondents vary in their educational attainment. There were 19.17% elementary, 30% high school, 39.17% college, and 11.17% finished vocational course.

Occupation. As expected, the most dominant occupation of the respondents was farming (94.17%) followed by self-employed/labourer (2.5%) and government employees (3.33%). The data shows that some of the respondents are government employees but at the same time are into farming.



Source of income. As to the source of income, results show that farming is the common source of income with 79.17%, wages with 17.5%, business with 13.33%, and salary with 9.17%.

Number of years engaged in farming. The respondents vary according to the number of years engaged in farming. Finding shows that some of the farmers had been farming for quite a long time but many have started farming less than ten years ago. The distribution of the respondents according to number of years in farming was as follows: 18.33% have been farming for less than five years, 32.5% 5- 15 years, 27.5% 11-20 years, 10.83% 21- 30, 6.67% 31- 40 years and 4.17% for 41-50 years.

Type of farming. Majority (60.83%) of the respondents were practicing conventional farming while those into organic farming were only 15%, and 24.17% were practicing both organic farming and conventional farming. The data implies that conventional farming is more dominant in the municipality of Sablan.

Table 1. Demographic profile of the respondents

PARTICULAR	FREQUENCY	PERCENTAGE
Age		
20- 30	29	24.16
31-40	38	31.67
41-50	25	20.83
51-60	23	19.17
61- 75	5	4.17
TOTAL	120	100.00
Gender		
Male	86	71.67
Female	34	28.33
TOTAL	120	100.00



Table 1. Continued. . .

PARTICULAR	FREQUENCY	PERCENTAGE
Civil status		
Single	37	30.83
Married	69	57.50
Widow/Widower	14	11.67
TOTAL	120	100.00
Educational attainment		
Elementary	23	19.17
High School	36	30.00
College	47	39.17
Vocational	14	11.17
TOTAL	120	100.00
Sources on income*		
Farming	113	94.17
Government employee	4	3.33
Self-employed	3	2.50
TOTAL	120	100.00
Sources on income*		
Farming	95	79.17
Farm wages	21	17.50
Salary from employment	11	9.17
Business	16	13.33
Number of years in farming		
Less than 5 years	22	18.33
5 – 10	39	32.50
11 – 20	33	27.50
21 - 30	13	10.83
31 – 40	8	6.67
41 – 50	5	4.17
TOTAL	120	100.00
Type of farming*		
Conventional	73	60.83
Organic	18	15.00
Both conventional and organic	29	24.17
TOTAL	120	100.00

*Multiple response



Awareness on Organic Farming and Sources of Information About Organic Farming

Table 2 shows the respondents awareness of organic farming. Almost all the respondents (93.33%) were aware about organic farming. There were few(6.67%) that is not aware on organic farming. The data implies that most of the farmers of the municipality of Sablan are aware of organic farming. The result showed that most of the respondents (75.89%) have heard about organic farming from radio. There were (47.32%) who heard about organic farming from their relatives and neighbors, (33.03%) from DA technicians, (18.75%) read about it from newspaper, (10.75%) read about it from brochures, pamphlets, posters and (8.04%) learned organic farming from Farmer’s Cooperative Association.

Table 2. Awareness on organic farming and sources of information about organic farming

PARTICULAR	FREQUENCY	PERCENTAGE
Awareness on organic farming		
Aware	112	93.33
Not aware	8	6.67
TOTAL	120	100.00
Sources of information*		
DA technicians	37	33.03
TV/Radlio	85	75.89
Newspaper	21	18.75
Neighbors/ relaltives	53	47.32
Brochures, pamphlets, posters	12	10.71
Farmers’ cooperative association	9	8.04
All of the above	2	1.79
A combination of the above	5	4.46

*Multiple response

Components of Organic Farming the Respondents Know



With the 112 respondents that is aware of organic farming, Table 3 shows that 69.64% of them were aware of crop rotation, 40.18% of green manuring, 63.39% of composting, 6.25% of biological pest control, 12.5% of traditional varieties and practices, 15.18% of liquid fertilizers and only 4.17% claimed that they are aware on all of the components of organic farming. The finding shows that the respondents differ in knowledge about organic farming.

Table 3. Components of organic farming the respondents knew

COMPONENTS	FREQUENCY	PERCENTAGE
Crop rotation	62	55.36
Green manuring	45	40.18
Composting	78	69.64
Biological pest control	7	6.25
Use of traditional varieties an practices	14	12.50
Liquid fertilizers	17	15.18
All of the above	5	4.17

- Multiple response

Number of Organic Producers and Crops Produced

Of the 120 respondents, 31.67% were already practicing producing organic farming but majority (68.33%) were still practicing conventional farming (Table 4). This finding reveals that even those who are practicing conventional farming are aware of organic farming.

Table 4. Type of producers and crops produced.



PARTICULARS	FREQUENCY	PERCENTAGE
Type of producer		
Organic producer	38	31.67
Conventional producer	82	68.33
TOTAL	120	100
Crops produced organically		
Beans	25	65.79
Camote	17	44.74
Banana	28	73.68
Pineapple	12	31.58
Rice	35	92.10
Combination of crops	22	57.89

*Multiple response

The types of organic crops produced by 31.67% were beans, camote, banana, pineapple, and rice. Most of the organic growers produced rice (92.10%) followed by banana with 73.68% then beans with 65.79%, camote with 44.74%, and pineapple with 31.58%. There were 57.89% who produced a combination of crops which include eggplant, pepper, pechay, and garden peas.

Market Outlets of Organically Produced Crops

Table 5 shows that organic producers sell their products to other farmers (18.42%), neighbors/relatives (23.68%), restaurants or hotels (10.53%), and stores within

Table 5. Outlets of organic produce



OUTLETS	FREQUENCY	PERCENTAGE
Other farmers	7	18.42
Neighbors/ relatives	9	23.68
Trade faire / festival	11	28.95
Restaurants/ hotels	4	10.53
Stores within the area	27	71.05
Household consumption	15	39.47

*Multiple response

the community (71.5%). There 15% who produced organic crops specially rice for home consumption while 28.95% sold their crops in trade fairs/festivals.

Organic Materials Used and Sources

Table 6 shows the type of organic materials used by organic producers and the sources of the materials. Results show that compost weeds, alnus and sunflower is the commonly used materials by 73.68% of the organic growers. These materials are sourced out within the area of the farm. Organic seeds are used by 31.58% which they buy from farm supplies outlet. The other materials used by the organic growers were chicken dung by 55.26% which they buy from Shilan, and mokosako by 42.11% which they bought from BSU and other farm supplies and animal manures by 36.84%.

Table 6. Organic materials used



PARTICULARS	FREQUENCY	PERCENTAGE
Organic material used*		
Compost weeds, alnus and sunflower	28	73.68
Seeds	12	31.58
Chicken dung	21	55.26
Mokosako	16	42.11
Animal manure	14	36.84
Sources*		
Within the farm	24	63.15
Farm supply store	27	71.05
DA assistant	3	7.89
Loan from LATOP	2	5.26
Other sources	13	34.21

*Multiple response

Level of Knowledge on Organic Farming

Table 7 shows the level of knowledge of the respondents as to the components of organic farming. The result shows that the respondents have moderate knowledge about crop rotation and green manuring. The result also shows that most of the respondents are knowledgeable about composting as indicated by the weighted mean of 3.98 which means that the level of knowledge of farmers about composting is knowledgeable. The respondents have low knowledge on the use of traditional varieties and practices, use of liquid ferlizer and biological pest control as components of organic farming.

Table 7. Level of knowledge on the different components of organic farming



COMPONENTS	5	4	3	2	1	WM	VD
Crop rotation	16	50	42	3	1	3.44	K
Green manuring	8	29	54	10	12	2.92	M
Composting	61	28	13	8	2	3.98	K
Biological pest control	3	11	31	47	20	2.05	L
Use of traditional varieties and practices	2	8	24	32	46	1.87	L
Liquid fertilizers	2	6	34	61	8	2.4	L

Legend; 5- Very knowledgeable 4- Knowledgeable 3-Moderately knowledgeable
2- Low knowledgeable 1- No knowledge

Scale; 5- 4.5= very knowledgeable (V)
4.4-3.6= knowledgeable (K)
3.5- 2.7=moderately knowledgeable (M)
2.6- 1.8= low knowledgeable (L)
1.7- 1.0= no knowledge (N)

Acceptability of Organic Farming

Table 8 presents the acceptability of organic farming by the respondents. Results show that organic farming is acceptable to the majority of the respondents. As to the level of acceptability of organic farming, it is strongly acceptable to only 14.7% but acceptable to 80%. Only a few mentioned that organic farming is not acceptable to them. Majority of the respondents accept organic farming but some do not practice it. This finding implies that most of the farmers in Sablan perceived that organic farming is acceptable.



Table 8. Acceptability of organic farming to the respondents

ACCEPTABILITY	FREQUENCY	PERCENTAGE
Strongly acceptable	17	14.17
Acceptable	96	80.00
Not acceptable	7	5.83
TOTAL	120	100.00

Factors / Reasons for Adopting Organic Farming

Table 9 presents the reasons of those practicing organic farming in adopting this technology. Sixteen said that organic products are beneficial to health. Organic farming requires lesser capital because they do not buy fertilizer and pesticides was given by 31.58%, 23.68% organic products are priced higher, 18.42% each for better quality product and successful experiment, 36.84% said organic farming has good effect to the environment and 13.16% reasoned that organic farming improve the soil fertility. Most of the respondents (65.79%) gave all the factors enumerated above as their reason for adopting organic farming.

Table 9. Reasons for adopting organic farming

REASONS	FREQUENCY	PERCENTAGE
Beneficial to health	16	42.11
Lesser capital needed	12	31.58
Higher price	9	23.68
Better quality	7	18.42
Successful experiment	6	15.79
Good effects to the environment	14	36.84
All of the above	25	65.79
Improve soil quality	5	13.16

*Multiple response



Internal Factors/Reasons of not Adopting Organic Farming

Table 10 shows the internal factors that affect the respondents of not adopting organic farming. Of the 82 respondents practicing conventional farming 95% claimed that inadequate knowledge is the foremost factor for not adopting organic farming, 87.80% said they are already expert on conventional farming, 79.27% have no time to attend seminars, and 50% said that organic farming is laborious. Furthermore, 30.49 said it has low yield, 20.73% had the notion that organic products are of poor quality, 18.29% perceived that they get low income in organic farming because of the low yield and 13.41% said they have no money to pay accreditation fees.

This finding reveals that there are many internal factors that deter farmers to go into organic farming. They have the fear that organic farming will not give them better income.

Table 10. Internal factors affecting non- adoption of organic farming

REASONS	FREQUENCY	PERCENTAGE
Poor quality of crops	17	20.73
Inadequate knowledge	78	95.12
Low yield	25	30.49
Laborious	41	50
Low income	15	18.29
No time to attend seminars	65	79.27
No money to pay accreditation fees	11	13.41
Expert on conventional farming	72	87.80

*Multiple response

External Factors Affecting Non-adoption of Organic Farming



Table 11 shows the external factors affecting farmers not to adopt organic farming. There were seventy nine point twenty six per cent of the respondents who claimed that it takes long time to revive the fertility of the soil thus organic farming will have low yield as long as the soil fertility is not revived yet. Limited market is another factor mentioned by 95.12%. Other external factors mentioned were limited researches to prove organic farming is productive by 15.85%, no support from the government in case organic farming failed by 52.44%, certification is very costly by 6.09%, and 13.41% said that there are no sustained technical supports from those advocating organic farming. The finding implies that farmers would not easily go into organic farming because it takes time to revive the fertility of the soil. Limited markets or outlets of organically produced vegetable are also another problem of farmers why they do not engage in organic farming.

Table 11. External factors affecting non- adoption of organic farming

EXTERNAL FACTORS	FREQUENCY	PERCENTAGE
No support from the government	43	52.44
Limited researches	13	15.85
Limited market outlets	78	95.12
No sustained technical support	11	13.41
Certification is very costly	5	6.09
Takes long time to revive soil fertility	65	79.26

*Multiple response

Supports Needed to Engage in Organic Farming



Table 12 shows the needed supports namely technical, financial, material/ input, and marketing support in order for the respondents to adopt organic farming. Technical supports are trainings and seminars to be conducted in their locality to for them to attend. Financial supports are the cash or loans needed by the farmers to implement organic farming. Since incomes of farmers are low and initial investment on organic farming is high they need loans with low interest and payment terms is based on the paying capacity of farmers. Material or input supports are the materials the farmers will use like organic fertilizers. This support is needed because they cannot produce the required inputs by their own selves in a short period of time. If the respondents could immediately buy these inputs, they will not take a long time in producing fertilizers like compost. And lastly, the marketing support. Marketing supports are the supports needed by the respondents to market or sell their products. The respondents claimed that some of their products are being returned by the market outlet where they sell their products because the demands for these products are low. Some respondents also said that they would like to go on organic farming but they are afraid of bankruptcy.

Table 12. Supports needed for the adoption of organic farming

SUPPORTS	FREQUENCY	PERCENTAGE
Technical support	120	100
Financial support	120	100
Material/ input support	120	100
Marketing support	120	100

*Multiple response



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study was conducted last January 2013 to February 2013 in selected barangays of Sablan namely, Barangay Poblacion, Kamog, Bayabas and Banangan. It was conducted with the following objectives to be proved: 1.)to determine if organic farming is acceptable in the place; 2) to determine the farmers awareness on organic farming in the place; 3) to identify the reasons of farmers for practicing organic farming; 4) to identify the reasons of farmers for not practicing organic farming in the area.

One hundred twenty respondents were interviewed and were given questionnaires to be answered. As the result of the data gathered 94.17% of the respondents mentioned that if all the needed support would be provided they are willing to adopt organic farming while 5.83% of them are do not accept organic farming. For the respondents awareness, 93.33% of them are aware of organic farming while only 6.67% are not aware of it. As for the reasons of not adopting organic farming in Sablan, the main external factor for non-adoption of organic farming is limited market outlets 95.12% and takes long time to revive the fertility of the soil 79.26%. The main internal reason or factor for non-adoption of the respondents on organic farming was inadequate knowledge 95.12% and expert on organic farming (87.80%). The factors or reasons for practicing of the respondents on organic farming are the following: beneficial to health, good effects to the environment, lesser capital needed, higher price, better quality, successful experiment and lastly it improves soil quality.



Conclusions

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

1. Farmers in Sablan, Benguet are generally aware of organic farming and that the component of organic farming that they are very familiar with is composting; and,
2. Organic farming is acceptable to almost all the farmers in Sablan and they are willing to engage in organic farming as long as technical, financial, material inputs, and marketing supports would be provided to them since majority of those not adapting organic farming is due to limited market outlet and their problem on reviving soil the soil fertility of their land.

Recommendations

Since farmers of Sablan are willing to shift and some were already practicing organic farming, government and other concerned agencies must provide all the needed assistance of the farmers specially seminars and trainings to be conducted in their place so that they could attend the seminars. This will enable them to understand more about organic farming. More market outlet for organic products should be established so that farmers would not be discouraged to engage in organic farming.



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