

Sustainable Organic Farming For Environmental Health: A Social Development Model

Ijun Rijwan Susanto

ABSTRACT: In this study, the researcher attempted : 1) to understand the basic features of organic farming in The Paguyuban Pasundan's Cianjur ; 2) to describe and understand how the stakeholders were able to internalize the challenges of organic farming on their "lived experiences" in the community; 3) to describe and understand how the stakeholders were able to internalize and applied the values of benefits of organic farming in support of environmental health on their lived experiences in the community; 4) The purpose was to describe and understand how the stakeholders who are able to articulate their ideas regarding the model of sustainable organic farming; 5) The Policy Recommendation for Organic Farming. The researcher employed triangulation thorough finding that provides breadth and depth to an investigation, offering researchers a more accurate picture of the phenomenon. In the implementation of triangulation, researchers conducted several interviews to get saturation. After completion of the interview results are written, compiled and shown to the participants to check every statement by every participant. In addition, researchers also checked the relevant documents and direct observation in the field The participants of this study were the stakeholders, namely : 1) The leader of Paguyuban Pasundan's Organic Farmer Cianjur (PPOFC), 2) Members of Paguyuban Pasundan's Organic FarmersCianjur, 3) Leader of NGO, 4) Government officials of agriculture, 5) Business of organic food, 6) and Consumer of organic food. Generally, the findings of the study revealed the following : 1) PPOFC began to see the reality as the impact of modern agriculture showed in fertility problems due to contaminated soil by residues of agricultural chemicals such as chemical fertilizers and chemical pesticides. So he wants to restore the soil fertility through environmentally friendly of farming practices; 2) the challenges of organic farming on their "lived experiences" in the community : farmers did not consider the loss that may be experienced by others as the principles for profit has become very prominent. As a result, the development of organic agriculture simply stuck into a commercial activity which would be a criticism of the founders, One of the factors that led to the involvement of the government regulated organic farming is because of the bickering about what is called organic agricultural products and because many nonorganic products sold as organic products, Organic farmers have difficulty in finding locally based seed for organic farming, certification of organic farming has changed, it is not just the assurance processes into a tradable commodity; 3) The Benefits of Organic Farming in Support for Environmental Health, organic farming gives a positive impact on public health, because it does not cause environmental pollution (water, air, soil) by the residues of chemical fertilizers and synthetic chemical pesticides. Besides organic farming also healthy communities through the provision of agricultural products that are free of pesticides and chemical fertilizer residues; 4) The Social Development Model of Sustainable Organic Farming : Sustainable agriculture (organic farming) seeks acre balance of three long-term goals, namely : a) Social-cultural: to create quality of life (to satisfy personal and community needs for health, food safety, and happiness), b) Environment: to Enhance utilization of soil, water, air, and other resources limited, c) Economics: to be profitable, market forces. These objectives can be achieved if supported by organizational-oriented good governance principles of sustainable agriculture. Sustainable agriculture is the implementation of the principles of sustainable development. Sustainable development will be achieved if conducted prior social development within the broad scope of stakeholders; 5) The Policy Recommendation for Organic Farming : a) National Strategic Agenda : The Program "Go Organic" must be forwarded with the 2010 program "Go Organic 2020" where the formulation of the vision, mission, and activities that will be undertaken are arranged with a broader circle of involved, including organic farmers, organic entrepreneurs, non-governmental organizations, as well as colleges; b) Regional (ASEAN integration 2015) and International Agenda, at the regional (ASEAN) and the international level, in addition to doing the lobbying, marketing also need to do the work of advocacy. Purpose is to make the existing policy, it could benefit small farmers, not otherwise become barriers to global trade as well as new bilateral.

Introduction

Nearly two decades this concept of ecological sustainability has become one of the most important principles in global ecology movement is introduced by Lester Brown (1981) as a challenge of how to meet the needs of the present generation without having to lower the chance of future generations. This concept was later combined with the report of the United Nations through the World Commission on Environment and Development. Within a few years later, the idea of sustainability is increasingly recognized, on an ongoing basis and in 1992 to the attention of millions of people during The UN Conference on Environment and Development in Rio de Janeiro", which is popularly known as the "Earth Summit". This Conference is a continuation of The UN Conference on the Human Environment held in Stockholm twenty years earlier, which agreed on making the environment as an issue on the international political agenda. At the beginning of the 21st century, concern for the environment has become a major interest. The continuity of human life and the planet is at stake. Concern for the environment is no longer being one of the many single issues. This is the context of the concern of all of our lives, our businesses, and our politics. The issue of Global environmental degradation have dimensions of time and space. The impact of environmental degradation is not only felt by people in a certain place and at that time only. Environmental damage will be felt by many people and is

global. That's not all; environmental damage can be felt in the future or future generations. Therefore, the management of natural resources should be carefully and responsible so as not to give an impact on somebody else, for now and for the foreseeable future. At present we are faced with a series of global problems that threaten the biosphere and human life in some alarming conditions, so that at one time could be up on a condition that is not recovered again. The current problems which became one of the hot issues in the 21st century, namely the impact of modern agribusiness technologies (farms depend on pesticides), One of the negative effects of modern agricultural technology is the occurrence of the damage in the quality of the environment globally caused by industrial waste that pollutes the environment (Arseno and Arseno, 2010). The modern technology agribusiness (chemical fertilizers, pesticides) was built to support the success of the great revolution in agriculture. This revolution is referred to as the green revolution, a term which was first mentioned by William Gaud, Director of United States Agency for International Development (USAID) in 1943. Within the last 30 years, the industrialized countries began to argue that the agricultural Green Revolution packages that provide high yields are apparently giving effect to decrease the quality of the environment. Decrease in the quality of the environment globally impacting not only to a project or people doing activities that damage the environment, but

also to the general public. Examples of cases of destruction of the environment that the impact was felt globally, among others, are global warming, acid rain and the ozone hole. According to FAO (2000) cited by Saragih (2002), green revolution contributed to more than 20% of global greenhouse emissions. The quality of environmental health has been declining due to excessive use of pesticides in the activities of the green revolution. Pesticides are all chemicals or other materials as well as the remains miniscule and viruses used to eradicate or prevent pests and diseases that damage the plant. The emergence of the pesticide cannot be released from human history. Cooperation between the military and the agro-chemical industry in times of war the world has made these companies produce several types of pesticides for the sake of the war. At the time of World War I, Germany produced nitrates that are used as explosives. In addition it also produced an organophosphate used as poison gas. This history is repeating itself when World War II broke out, in which DDT was used to eradicate mosquitoes and leeches affecting the lives of soldiers on the battlefield. After the colonial rule, modern agricultural was introduced (Green Revolution) which aims to meet the food needs of agricultural technological packages. This is where the history of pesticides changed for agricultural purposes. Carson in her book "Silent Spring", revealed that pesticide and chemicals as toxic to other organisms is not on to the plant. Since that time the risk of the use of agricultural chemicals began getting attention from environmentalists. Pesticides are beneficial for increasing agricultural output, but it also produces bad effects both for human health and environmental health. More than 98% of insecticides and 95% of herbicides reach placee other than the target, including non-target species, air, water, food, and sediments. Pesticides can be inhaled by humans and animals. In addition, droplets of pesticides that are not soluble or not dissolved by water can move as dust. In Indonesia, the case of pollution due to pesticides has been incurring losses. In Lembang and surrounding agricultural land, Pangalengan garden carrots, tomatoes, cabbage and beans are contaminated by organoklorin. The river Cimanuk in Indonesia also contaminated due to agricultural products of the pesticide. The above explanation was clear that the green revolution brought negative impact on the health of the environment; therefore the sustainability of life is very worrying.

Statement of the Problem

This study aims to (1) describe the organic farming in the Paguyuban Pasundan's Organic Farmer Cianjur, (2) develop a model that promotes the sustainability of organic farming in support of environmental health. Specifically, it sought to answer the following questions:

1. What are the basic features of organic farming in The Paguyuban Pasundan's Cianjur in terms of:
 - 1.1. The Farm Association: geographic location, history, leadership & governance, farming program and activities; and
 - 1.2. The challenges of organic farming?
2. What are the benefits of organic farming in support for environmental health?
3. What model can be developed for organic farming toward its sustainability?

4. What is the policy issue can be recommended for organic farming?

Significance of the Study

Results from this study will specifically benefit the following:

Organic Farmers this study is expected to provide additional information and knowledge relevant to the organic farmers for developing organic farming activity.

Government can give input regarding the various obstacles faced by organic farmers in developing organic agriculture and give input to plan the development of organic farming.

Business this study may provide additional information for the corporate world who expound on the results of organic farming, for example eating healthy home-specific business results organic farming or any other business related to organic farming, i.e. organic farming certification agencies, the sale of organic fertilizer. It could increase people's income so that it can increase the purchasing power of the community.

Civil Society (NGO) this study can to encourage NGO's to do the mentoring activities at the farmers in developing organic farming.

Religious Practices in Islam, Allah SWT berfirman in surat Al-Baqarah verses 173 meaning " ...eat from the (foods) *halal and good (safety and healthy) on Earth*". Organic farming results include good (safety and healthy) food category because it is not polluted by toxic insect exterminator (pesticides).

Global Contribution give input on all over the world who are interested in the development of organic farming with a social development approach that could push the growth of organic agriculture movements worldwide.

Scope and Limitation of the Study

This study is limited to a case study on the experience of organic farming for environmental health by the Association of Pasundan Cianjur Organic Farmers.

1. LITERATURE REVIEW

Selected related literature and relevant studies were reviewed and discussed in this chapter in order to shed light to the subject being researched.

IMPACT OF GREEN REVOLUTION FOR ENVIRONMENTAL HEALTH

Green Revolution is the application of science to increase agricultural productivity, including the breeding of high-yield varieties of grains, the effective use of pesticides, and improved fertilization, irrigation, mechanization, and soil conservation techniques (Andyana, 2005). The success of the green revolution in food produce for the world turns on the other hand produce a result in large and complex side, the green revolution brought environmental health impact. According to Wahono (1999) cited in Saragih (2010) some study prove that the revolution called the green revolution raises many issues, among others, "... *negative impact for environmental health...*". According to Arias-Estévez;

López-Periago; Martínez; Carballo-Simal-Gándara; Mejuto; García-Río, 2008 if the use of pesticides is not controlled properly, it could bring impact on environmental health. Pesticides contribute to pollution of air, land, and water. Pollution occurrence process, as follows :

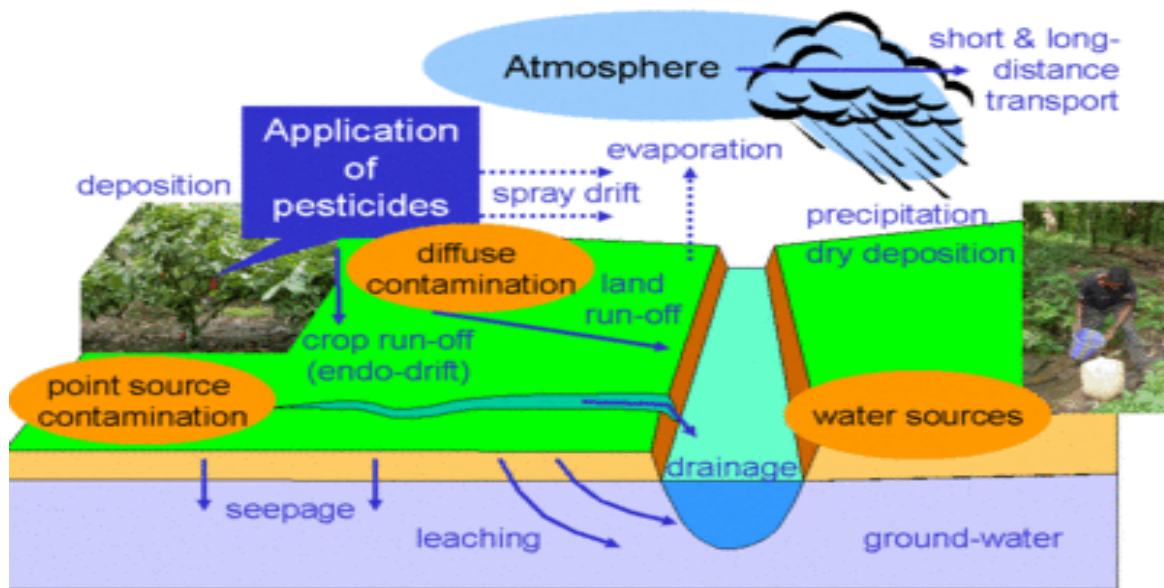
Distribution in the air

Pesticides contribute to air pollution when it is sprayed through the aircraft. Pesticides can be suspended in the air as the particulates are carried by the wind. Pesticides are applied to crops can evaporate and be blown by the wind so as to endanger the ecosystems outside of agricultural areas. Weather conditions such as temperature and humidity also became the defining quality of pesticide due to deployment as well as a volatile, fluid evaporation of pesticides is determined by weather conditions. The low humidity and high temperatures facilitate evaporation.

Pesticides evaporate can be inhaled by humans and animals around. In addition, droplets of pesticides that are not soluble or not dissolved by water can move as the dust that can affect the weather conditions and the quality of precipitation.

Distribution in the waters

There are four of the main routes for pesticides to reach waters: fly to areas outside of the sprayed, via percolation towards the ground, carried by the flow of surface water, or shed, intentionally or not. Pesticides are also moving in waters along with soil erosion. Factors affecting the ability of pesticides contaminate waterways include the degree of solubility, the distance from the water agency pesticide deployment, weather, soil type, presence of plants around, and methods used in applying it.



Source: <https://www.wikipedia.org>

Figure 1: The Movement of Pesticides

Distribution in the soil

A variety of chemical compounds used as pesticides are persistent soil contaminants, which can persist for decades. The use of pesticides reduces biodiversity in General on the ground. Soil that is not sprayed pesticides known to have better quality, and contain higher levels of organic, thus increasing the ability of the soil to retain water. The binding and degradation rate is a factor that affects the degree of persistence of pesticides in soil. Depending on the chemical properties of pesticides, the processes controlling the movement of pesticides from soil to water directly, this then moved to other places including air and foodstuffs. Approximately only 20 per cent of pesticides on target while the other 80 percent fall to the ground (WHO, 2006). Environmental pollution (air, land, and water) caused by the activities of the green revolution then impact the occurrence of:

Global Warming and Climate Change

Global Warming is increasing the Earth's temperature, which results in the melting of ice at the North Pole, the

rising sea and global climate change which the impacts global warming. Global warming is the effect of increasing the amount of greenhouse gases (GRK) on the surface of the Earth. GRK itself consists of gas methane (NH₄), carbon dioxide (CO₂), water vapour (H₂O), Nitrogen oxides (NO_x, N_xO). Increase in greenhouse gases caused by human activities in producing the GRK is larger than the capacity of the environment in improving himself. According to Mercado (2009) The sources of greenhouse gases and their estimated contribution to global warming are roughly: Industrial production 57%, Transportation 21%, Deforestation 20%, Agriculture 15%. According to FAO (2000) cited in Saragih (2002) green revolution contributed to more than 20% of global greenhouse emissions. Approximately 200 thousand people have died due to the accumulation of these pesticide residues resulting in pollution of agricultural land. When entering into the food chain, the nature of the toxic pesticide ingredients can cause a variety of ailments such as cancer, birth defects, mutations, CAIDS (Chemically Acquired Immune Deficiency Syndrome) etc. (Sofia, 2004).

Endanger Human Health

The green revolution turns out to have a negative impact not only on the environment but also on the health of the actors and consumers of agricultural products. The WHO (World Health Organization) reports that each year about 3 million people are poisoned with pesticides. Approximately 200 thousand people later died. Synthetic chemicals used in agricultural activities are also believed to be the main factors that lead to the development of diseases that plague the metabolism such as kidney, lung, liver and so on, (Saragih, 2003). These conditions are compounded by the use of pesticides. The accumulation of these pesticide residues result in pollution of agricultural land. When entering into the food chain, the nature of the toxic pesticide ingredients can cause a variety of ailments such as cancer, birth defects, mutations, CAIDS (Chemically Acquired Immune Deficiency Syndrome) etc. (Sofia, 2004). According to Arseno and Arseno, (2010) pesticides also damage human health and can cause incurable ailments such as cancer and autism. A study of the US National Cancer Institute found that farmers who handle herbicides are six times more likely to develop non-Hodgkin's lymphoma.

ORGANIC FARMING IN SUPPORT FOR ENVIRONMENTAL HEALTH

The Aim of Organic Agriculture

According to Sutanto (2001) the term organic farming brought together the whole imagination of farmers and consumers in a serious and responsible avoid chemicals and fertilizers which are poisoning the environment with the aim to gain healthy environmental conditions. They produce a sustainable crop production by way of improving soil fertility using natural resources such as agricultural waste recycling. Thus organic farming is a movement "back to nature".

Benefit of Organic Farming For Environmental Health

According to Rockets (2007) organic farming a lot of benefit to the environmental health, namely:

Quality of Soil

Keeping the nature of the physical, chemical and biological good soil is important in organic farming.

Quality of Air

Organic farming proves to be capable of minimizing global climate change due to greenhouse gas emissions in organic farming this emission is lower than conventional agriculture. Organic farming does not use synthetic nitrogen fertilizer so there is no nitrogen oxides emission from artificial fertilizers. The use of petroleum is low thus lowering emissions of carbon dioxide gas. More importantly, organic farming provides shelter (sink) for carbon dioxide through increased content of organic matter in soil and the closure of the ground surface with plants covering the ground.

Waste Management

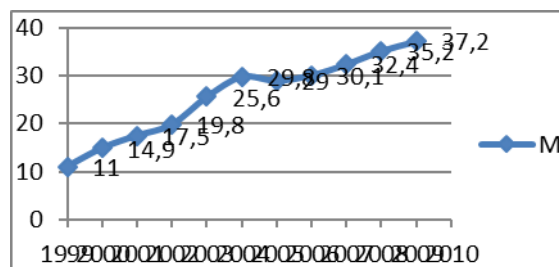
Organic farming practices reduce the amount of waste through recycling waste into organic fertilizer. Livestock manure, straw and other agricultural waste as long as it is considered waste, thus being a material that has a value as a source of nutrients and organic substances for organic farming.

The Reduction of Toxic Substances in the Environment

Currently, 99.5 percent of the acres in the United States devoted to farming use non-organic methods. Approximately 382 million acres of land in the U.S. is used for crop production, and an estimated 525 million acres is used for livestock. Add this up and you get over 900 million acres of land subjected to chemicals for fertilizer and pesticides, as well as other substances used in livestock farming. Any reduction of this number would have a benefit to the environment around us.

Development of Organic Farming in the World

The main goal of organic agriculture is to provide agricultural products, especially food that is safe for the health of producers and consumers and does not damage the environment. A healthy lifestyle requires assurance that agricultural products should be consumed is safe, of high nutritional and environmentally friendly. This kind of consumer preference and economic development leads to the increase in the world of organic agriculture product demand.



Source: Willer Monday (2010) cited (Mayrowani, 2012)

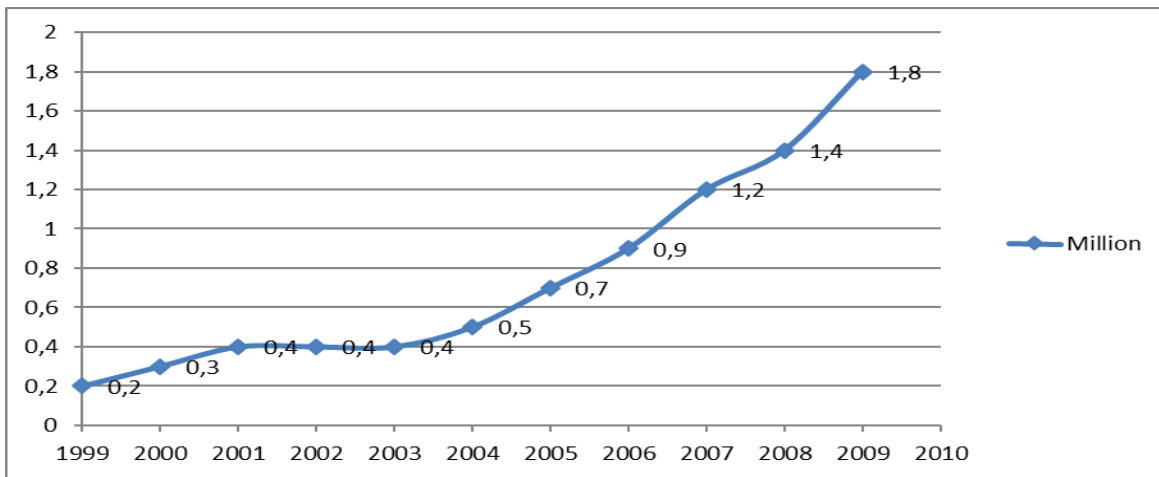
Figure 2: The Development of Organic Farming

Over the past 10 years (1999-2009) a fairly rapid increase of organic farmland expansion as well as the principals of organic agriculture took place. Figure 1 shows an increase in organic farming land area in the world. In 1999, extensive agricultural land organically just 11 million ha, and increased approximately three fold during the past 10 years been 37.2 million ha. Organic farming land area shows rapid growth in most countries, there is even a fairly high growth increased for some commodities of organic farming in the world. Although the development of organic farming is fast-growing, the percentage of the world's organic agricultural land area to the total area of agricultural land is still low: 0.9% (table 1).

Table 1
Percentage of Land Area to the Total Organic Farming Organic Farm in the World, 2009

Region	Agricultural Land (ha)	Agricultural Land (%)
Afrika	1.026.632	0.1
Asia	3.581.918	0.3
Eropa	9.259.934	1.9
Uni Eropa	8.346.372	4.7
Amerika Latin	8.558.910	1.4
Oceania	12.152.108	2.8
Amerika Utara	2.652.624	0.7
Jumlah	37.232.127	0.9

Source: Willer Monday (2010) cited (Mayrowani, 2012)

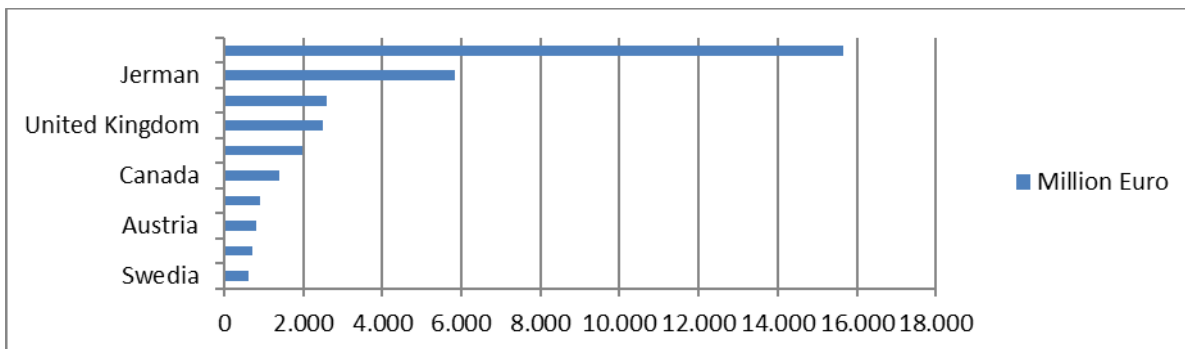


Source: Willer Monday (2010) cited (Mayrowani, 2012)

Figure 3: Development of the Number of Organic Agriculture

In India the number of principals of organic agriculture increased almost two-fold. Also more than three quarters of organic farming comes from Asia, Africa and Latin America. Organic products world trade is expected to reach USD \$46.1 billion (36.2 billion Euros) in 2007 (IFOAM, 2009). The largest organic food products trade in the United States, amounted to 15.65 billion Euro in 2008 (Figure 3). This is possible because Indonesia has natural resources

and human resources, there is a tendency that the Government is more concerned on the development of organic agriculture because the Government wants to revitalize the agricultural sector as the backbone of economic development in Indonesia (Lesmana and Hidayat, 2008), and production costs will be much lower compared to other countries, especially developed countries.



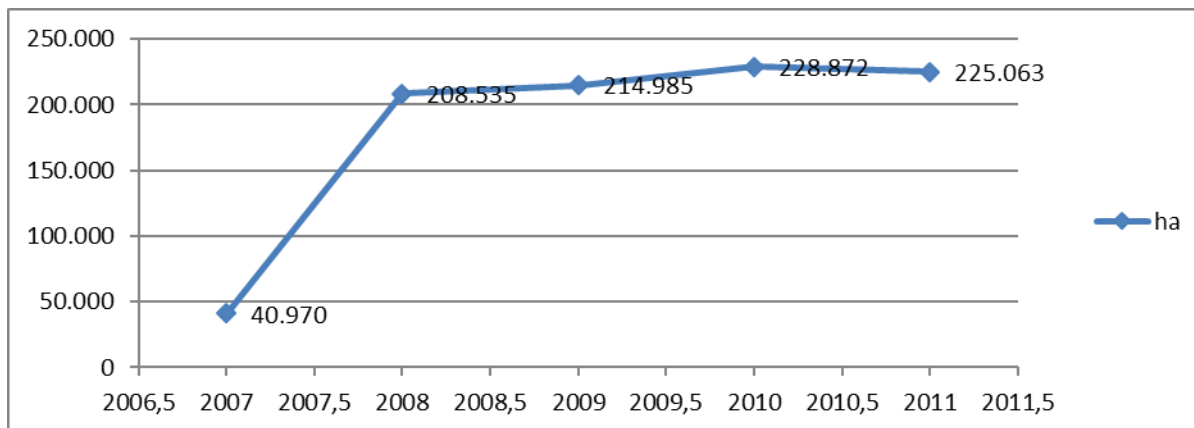
Source: Willer Monday (2010) cited (Mayrowani, 2012)

Figure 4: Countries with Organic Food Market Largest in the World 2008.

Development of Organic Farming in Indonesia

Modern organic farming in Indonesia was introduced by Bina Sarana Charity Foundation (BSB), by developing organic vegetable farmer in Bogor, West Java in 1984 (Prawoto and Surono, 2005; Chinese Indonesian surname

2002). In 2006, there were 23.605 organic farmers in Indonesia with an area of 41.431 ha, 0.09 per cent of the total agricultural land in Indonesia (IFOAM, 2008). The development of vast acreage of organic farming in Indonesia from 2007-2011 is shown in Figure 4.



Source: Willer Monday (2010) cited (Mayrowani, 2012)

Figure 5: The Development of Organic Farming Area in Indonesia 2007-2011

In 2007 the vast acreage of organic farming in Indonesia is 40.970 ha, in 2008 increased by sharp of 409 percent to 208.535 ha. Widespread organic agriculture growth from 2008 to 2009 was not very significant and only 3 percent. Organic farming area Indonesia in 2010 was 238.872.24 ha, an increase of 10 percent from the previous year (2009). However in 2011 5.77 percent decline from the previous year to 225.062.65 ha. Decrease due to decrease in vast average of organic farming certified by as much as 13 percent. This is because the numbers of factors (forest honey farmers) are no longer continuing its product certification in 2011. The extent of organic agriculture, is expected to benefit the wider community will demand in fulfillment of a healthy and sustainable food. The current organic farming has grown extensively, both in the cultivation, means of production, type of product, marketing, consumer knowledge and organization/institution community interest in organic farming. Area without a 134.717 certification, 66 hectares and area in the process of certification of 3.80 hectares. According to Inawati (2011), the development of organic commodities producers and due to the influence of the society's lifestyle as consumers are starting to pay attention to the importance of health and of the environment by using organic products that do not use synthetic chemicals. In addition it is also due to begin growing organic produce business. In addition to continuing to increase the land area used for organic farming, Organic Alliance Indonesia (AOI) also noted the increasing number of organic commodities producers, as well as a range of organic commodities were cultivated, organic trademark, and suppliers to retailers such as super market and a large restaurant. Results of the study of Organic Alliance Indonesia in 2010 shows the increasing number of organic products manufacturer with diverse commodities, such as rice, eggs, vegetables and a variety of crops such as coffee, tea gardens, forest honey and spices. In organic farming Statistics Indonesia (SPOI) 2010 it appears that certified organic producers reach 9.805. This

amount is higher than that has not been certified only 3.817. Meanwhile coffee products are mostly organic certification already received nearly 35 thousand hectares. Forest honey then followed with a certified land area of 15 thousand hectares, Palm sugar and kacang certified 10 thousand hectares of cashew, spices almost 10 acres of certified organic rice about 3 thousand hectares, and then followed by cocoa and tea. In 2011 the organic coffee is still the key commodity in Indonesia. Almost all coffee products aim to export. Coffee commodities with the widest area (41.651.73 ha) followed by cashew (11.394.7 ha) and acres of forest honey, 007.9.2 ha (SPOI, 2011).

Participation all men and women, inclusive of the physically challenged, should have a voice in decision-making, either directly or through legitimate intermediate institutions that represent their interests. Such broad participation is built on freedom of association and speech, as well as capabilities to participate constructively. Participation is a process whereby policy-making, prioritizing issues, accessibility to public goods and services and also allocating resources is influenced by key stakeholders.

Social Change Theory

Change occurs everywhere. This is a phenomenon that characterizes the world in which we live. All of us are, therefore, a part of an ever changing world. Some of these many aspects of change in our social world are changes in our institutions, changes in material culture, cultural diffusion, and changes in our population. Everyone faces the regular seasonal and annual cycles as well as the cycles of birth, infancy, childhood, adulthood, marriage, child bearing, old age, and death. Change has been regarded in many ways, as a means, as an end, as process, as a social movement, as a state of affairs, as involving a program, a principle, an ideology, a doctrine, or even a problem. Social change has been defined as the

alteration of patterns of social organizations, structure, institutions, and intergroup or intragroup behaviours over time. It is pervasive in all societies and affects all individuals, in one way or another. Change is pervasive in culture, society, and personality. Changes in culture bring about changes in society and human beings. Likewise, changes in society and in human beings bring about change in culture. Culture change refers to all alterations affecting new traits or trait complexes and to changes in a culture content and structure. Culture change involves the following elements: (a) development of oral and written language and other means of communication, (b) modification of technology, (c) shifts in economic principles, (d) historical evolution of religious thought and political ideology, (e) variations in musical styles and in art forms, (f) transition in scientific theory, (g) alterations in the forms and rules of social interactions. There are a number of possible sources of social change:

Innovations one great thing that can happen in any society is when people acquire new ideas and change the way they do something. These are called innovations; and these may take the following forms:

New technology this is a major source of social change. However, it is important to note that new technology does not change society by itself. It is the people's response to the technology that causes change.

New culture not only machines and material inventions change the world. Beliefs and values can also produce dramatic social change. In Western society, rapid technological changes were stimulated by acceptance of the ideals of progress. To a considerable extent, Europe made progress because it believed in progress and underwent rapid social change because Europeans wanted change.

New social structures new forms of social structures can also be the result of invention. Since roles are a very basic social structure, changes in roles and the creation of new roles often cause other social changes. For instance, changes in sex roles stimulate many changes. The presence of working mothers certainly causes new social structures.

Sustainable Agriculture Concept

Sustainable agriculture provides many economic and non-economic benefits, such as contributing to local quality of life, providing fresh, wholesome foods and conserving the environment to allow for future productivity. It embraces independent small farmers who contribute to the social fabric and economic health of rural communities. According to Sihotang (2009), sustainable agricultural systems must be evaluated based on consideration of several criteria, among others:

Safe by environmental insight, meaning the quality of natural resources and the overall vitality of agro ecosystems maintained / start of human life, plants and animals to soil organisms can be improved. This can be achieved if well-managed land, soil and plant health improved, as well as human and animal life is enhanced

through biological processes. Local resource utilized in such a way so as to reduce the possibility of loss of nutrients, biomass and energy, and prevent pollution. Focuses on the utilization of renewable resources.

Favourable economic, means farmers can produce something that is sufficient to meet their own needs / income, and earn enough to pay for labour and other production costs. Advantage by not only the size of the economy measured directly based on their farm, but also based on resource conservation function and suppress the possible risks to the environment occurs. Fair by social considerations, means and personnel resources are spread so that the basic needs of all members of the community are met, as well as every farmer has an equal opportunity to use the land, obtaining sufficient capital, technical assistance and market outcomes. All people have an equal opportunity to participate in determining the development policy, both in the field and within the community itself.

Sustainability of Organic Farming Concept

Sustainable agriculture with low technological input is limiting dependence on organic fertilizers and other agricultural chemicals. Disease and plant pests are managed through crop rotation, organic insecticides bio herbicidal, combined with a good crop management. Cattle, livestock, poultry, fisheries must be returned by the integrated so that is part of the "organic farming". Through the management of good soil plant nutrient requirements can be found as well as environmental and ecological conditions can be improved and protected without having to depend on chemical fertilizers and pesticides. Thus the concept of organic farming can be tested from the safety of humans, animals, flora and fauna. Increase the diversity of all life but remains in harmony with nature, without having to do the exploitation of natural resources.

Organic farming's principles:

The principle of health, organic agriculture must preserve and enhance the health of soil, plant, animal, human and the Earth as one unified and inseparable. This principle suggests that the health of individuals and communities cannot be separated from the health of the ecosystem; a healthy soil will produce healthy plants that can support the health of animals and humans. Health is an integral part of the system of life.

The Principle of Ecology, organic agriculture should be based on ecological systems and cycles of life. Work, imitating and trying to maintain ecological systems and cycles of life. The principle of ecology organic agriculture put in systems ecology of life. This principle States that the production is based on the process and recycled ecologically. Welfare and food obtained through an ecological production environment is special; for example, plants need fertile soil, animals need the farm ecosystem, fish and marine organisms need aquatic environment.

The principle of justice, organic agriculture should build on relationships that are able to guarantee fairness is related to the environment and the opportunity to live together. Justice is characterized by equality, mutual

respect, justice and stewardship of the world together, both between human beings and in connection with other living things. This principle emphasizes that those involved in organic agriculture should build on relationships the inhumane to ensure there is justice for all parties at all levels; like farmers, workers, processor, Distributor, merchants and consumers. Organic agriculture should provide a good quality of life for everyone involved; donate to food sovereignty and the reduction of poverty. Organic agriculture aims to produce the adequacy and availability of food or other products with a good quality.

The principle of protection, organic agriculture should be managed carefully and responsibly to protect the health and well-being of present and future generations and the environment. Organic farming is a living and dynamic systems that respond to the demands and conditions that is internal or external. The principals of organic agriculture encouraged increased efficiency and productivity, but must not endanger health.

Environmental Health Concept

According to Slamet (2011) environmental health is the study of the interaction between the environment and human health, plants, and animals with the aim of improving environmental factors are favourable (eugenic) and control the adverse factors (disgenic), such that the risk of impaired health and safety so restrained. According to the Decree of the Head of Environmental Impact Management Agency Ministry of Environment of the Republic of Indonesia, number Kep-124/12/1997 dated December 29, 1997, quoted Slamet (2011) environmental health is a state of the various environmental media (air, water, soil, foods, human, disease vectors, material) which is reflected in the physical, biological, and chemical parameters of the quality of the environment that affect public health. Land is the portion of the earth's surface consisting of mineral and organic materials instead. Soil are important for all life on earth, his deep soil capable of supporting plant life in which plants provide food and oxygen then absorb carbon dioxide and nitrogen. Different soil composition at one location to another. (Slamet, 2011). Air refers to the mixture of gases present in the earth's surface. Air dry earth contains 78% nitrogen, 21% oxygen, and 1% water vapor, carbon dioxide, and other gases. Organic farming benefits to air safety and quality as an important environmental media (Slamet, 2011). Environmental health efforts is to create conditions for all elements of the environment (water, air, soil, food, biodiversity, and human beings and their behavior) to healthier, so it does not cause the onset of the disease, either on humans, animals, or plants. Environmental health efforts is one of the basic public health efforts.

2. METHODOLOGY

This chapter presents discussion on the research design, the data gathering instruments & technique, the triangulation, the participants of the study, the data gathering procedure, the analysis, and the ethical consideration.

Research Design

In this study, the researcher used the qualitative method by using case study approach in the analysis and interpretation of data that were gathered. According to Stake (1995) cited in Creswell (2013) in a case study design researchers investigate a program, event, activity, process, or a group of individuals carefully. Cases is limited by the time and activity, and researchers gather information in full using a variety of procedures of data collection based on the specified time.

4.Result

Leadership and governance

In the implementation of leadership and governance associations, at least they held a regular meeting of the board every month. At the meeting they discussed the development of activities and evaluated each program implementation, and also discussed found solutions to the problems. Regarding the decision-making process carried out by deliberation and consensus among administrators association, they agreed that in emergency situations leaders make decisions independently without prior consultation with the other members of the board, but he was accountable for his decision was the monthly meeting of the association board. In terms of communication with external parties, conducted by the head of the public relation conducted leadership and governance.

The vision of the association

The vision of association, are as follows: "Becoming an independent organic farmers associations have requested that can prosper society and preserve the environment through the development of organic farming in Cianjur"

The motto of the association

The motto of the association is as follows: "Organic farming as its driving force of sustainable agricultural development"

The farming program and activities

To achieve the goals set, every year the work program and activities were created. Shown in the following table as the farming programs and activities.

The challenges of organic farming

Market development, land, and regulations on organic farming be an indication that organic farming is growing rapidly. The initial goal of organic farming movement is building a relationship of harmony between man and man and between man and nature. Increased public awareness of the dangers of synthetic chemicals to health, the risk of environmental damage to the livelihood of the future, and injustice with such issues have prompted increased demand for organic agricultural products. According to Saragih (2010) at least, there is some concern interrelated with each other when looking at the development of organic farming today, namely: (1) whether the organic farming movement could develop in accordance with the principles and values when the initial organic farming schema into the government policy, (2) whether the increasing market demand means it does not encourage the industrialization of organic agriculture production and commercialization of organic agricultural products, (3) whether the inequality

relations between developed countries with poor and developing countries occurred because of the liberalization of the sector agriculture will not be repeated in the international trade of organic agricultural products, and (4) does not encourage the development of organic farming because of the environmental damage led to the extension of organic farming in the fertile lands. Particularly tropical forests? This segment of the study, answered the question: "What are the challenges of organic farming"? The aims were to describe and understand how the stakeholders were able to internalize the challenges of organic farming on their "lived experiences" in the community. From interviews with the participant's it was found some of the challenges of organic farming are grouped into several themes. To group this theme, researchers used opinion from Saragih (2010) about the challenges of organic farming, as follows:

From harmony into commercialization

Organic farming is promoted by its founders as a movement to build a harmonious life in nature so that continuity can be assured livelihood (David, 2002). Participant of consumers and traders of organic agricultural products said the following: "Produsen selalu menjual mahal hasil produk pertanian organiknya dengan alasan produk sehat itu mahal, mereka sangat memanfaatkan kesempatan ini untuk mendapatkan untung yang sebesar-besarnya". (B) "Producers are always selling expensive organic agricultural products for the reason that healthy products are expensive, they really take advantage of this opportunity to get the maximum profit". (B, Personal communication, 10/23/2013) "Para pedagang menjual produk organik semakin mahal, karena banyak konsumen yang beralih ke produk organik mengikuti trend " back to nature " sementara produk organik masih terbatas maka harganya mahal". (C) "The traders sell organic products more expensive, as many consumers are switching to organic products follow the trend of "back to nature" while organic products is still limited, the price is expensive". (C, Personal communication, 10/23/2013) In the context of the relationship between consumers and producers, there is also a dependency relationship. Farmers obviously can not meet all their needs. As well if sick, farmers need health experts to handle, etc. That is, there is a dependency between humans because humans can not meet all its needs alone. Therefore, the demand for organic products is increasing, while the organic agricultural products is limited to the available organic products into goods that it refers only to the rules of the economy, namely the search for profit maximization. In this case, the producer seeks maximum profit by selling its products at a great price. Instead, consumers are trying to bargain to get the lowest possible price. Farmers did not consider the loss that may be experienced by others as the principles for profit has become very prominent. As a result, the development of organic agriculture simply stuck into a commercial activity which would be a criticism of the founders (Saragih, 2010).

From opposition into government mainstream

Organic farming movement was born as a critique of the industrialization of agriculture or the use of chemicals in agriculture is globally promoted by the government. Over the decades, the organic farming movement into opposition

to what the government promoted (David, 2002). Participant of government, NGOs, and farmers, explained: "Saat ini petani organik mempunyai tantangan yang cukup berat dengan adanya regulasi pemerintah yang mengatur pertanian organik, terutama bagi para petani kecil di pedesaan". (NGO) "Currently, organic farmers have a tough challenge with the government regulations governing organic farming, especially for small farmers in rural areas". (NGO, Personal communication, 10/20/2013) "Pemerintah harus mengatur pertanian organik dengan regulasi pertanian organik, karena banyak pertengkar apa yang disebut organik dan untuk melindungi konsumen karena banyaknya produk nonorganik dijual sebagai produk organik". (GO) "The government should regulate organic farming with organic farming regulation, because many so-called organic quarrel and to protect consumers because of the many non-organic products sold as a organic products". (GO, Personal communication, 10/20/2013) "Dirasakan semakin berat saat ini untuk menjalankan pertanian organik karena diatur oleh peraturan pemerintah yang memakai standar tinggi, seperti sertifikasi dan lain-lain". (LF) "Felt more severe this time to run an organic farm as regulated by government regulations that put a high standard, such as certification and others". (LF, Personal communication, 10/20/2013) "Banyak persyaratan yang harus dipenuhi oleh para petani". (F1 to F4) "Many requirements that must be met by the farmers". (F1 to F4, Personal communication, 10/20/2013) In many countries and regions, as organic farming are well developed and accepted by many in the government to intervene and set it up (Saragih, 2010). One of the factors that led to the involvement of the government regulated organic farming is because of the bickering about what is called organic agricultural products and because many nonorganic products sold as organic products. In Indonesia Agriculture Organic governed by the Regulation of the Minister of Agriculture no. 64/OT. 140/5/2013 About Organic Farming System.

From the production industrialization conventional into organic production facility industrialization

Technology development in the conventional agricultural system (the green revolution) is not based on local resources. Farmers only become users. After a struggle for generations of farmers to develop farming planting the seed of the process, the seeds in the revolutionary brain-tweaking by the supporters of the green revolution that was born of hybrid seeds and the seeds are genetically modified. Participant NGO's and farmers, explains: "Tantangan pengembangan pertanian organik saat ini adalah industrialisasi sarana produksi pertanian organik yang tidak berbasis sumber daya local, baik sumber daya manusia, sumber daya alam, sumber daya social, sumber daya keuangan, maupun sumber daya infrastruktur yang dimiliki petani. Perusahaan-perusahaan besar mulai masuk ke pengembangan sarana produk pertanian organik dengan yang mereka sebut sebagai "bioteknologi". (NGO) "The challenge of development today is organic agriculture industrialization of organic agricultural in puts that are not based on local resources, both human resources, natural resources, social resources, financial resources, and infrastructure resources owned by farmers. Large companies began to enter into the development of organic agricultural products by means of which they refer to as

'biotechnology'. (NGO, Personal communication, 10/20/2013) "Kami kesulitan mendapatkan benih lokal. Hampir semua benih harus membeli dari perusahaan". (F-1 to F 4) "We had trouble getting local seeds. Almost all seeds must be bought from the company". (F-1 to F4, Personal communication, 10/20/2013) Organic farmers have difficulty in finding locally based seed for organic farming. The seeds on the market should not be and can not be reproduced by farmers because it is protected by a set of laws governing patents. The patent ignoring altogether the rights of farmers who already provide broodstock for the mecha-tweaking the authenticity seed (Saragih, 2010). The development of biotechnology is of course the claim as a nature preserve. Yet still developing standards for patent law so that propagation should not be done by the farmers. Furthermore, the risk of disaster caused by "biotechnology" is often never properly conveyed to the public. Competition era of globalization According to Saragih (2010) Trade Liberalization is theoretically a regulation that impedes the process of elimination of products from one country to enter another country. It started with the implementation of trade liberalization around 60 binding states were listed that are members of the World Trade Organization (WTO). The purpose of liberalization in the agricultural sector of agriculture of the agreement called Agreement on Agriculture (AOA) is that each state would remove trade tariffs (market access) and agricultural subsidies (domestic subsidies and export subsidies). Participants stated their views: "Era perdagangan bebas jadi ancaman bagi para petani organik kecil di dalam negeri. (NGO) "Era of free trade is a threat to small organic farmers domestic". (NGO, Personal communication, 10/20/2013) "Jika produk pertanian organik dari luar negeri masuk ke pasar dalam negeri, petani organik kecil dalam negeri bisa kalah bersaing, biasanya produk pertanian luar negeri lebih bagus kualitasnya dan lebih murah harganya". (B) "If organic agricultural products from foreign countries enter into domestic market, domestic small organic farmers can not compete against foreign agricultural products which usually better quality and cheaper price". (B, Personal communication, 10/21/2013) Liberalization is a process of coercion to comply with trade regulations are made for the sake of developed countries (Bowe, 2005). Poor and developing countries are forced to open their markets, while developed countries to tighten regulation of its trade. Poor and developing countries are not able to provide subsidies to their farmers, while developed countries continue subsidizing their farmers and sell these products to the international market or sell it to poor and developing countries at a price much cheaper than the price of production. This resulted in the death of the production process of organic farming in poor and growing countries.

From assurance into certification business

When the originator of the idea of organic farming began making organic agriculture as an alternative to chemical-based agriculture perhaps it never occurred to them that there is a shadow system of legislation that is complicated when organic agricultural products are traded. At first, the certification is more as a guarantee that certain products are produced according to certain values. The collateral is the farmers. Therefore, it is not surprising that guarantee institutions initially comprised of farmers and consumers.

Activities of these institutions not only provide a label for the product, but also organize meetings between farmers and producers, marketing, lobbying, and conduct capacity building activities for its members. In development is not the case, regulation in many countries including ISO 65 prohibits the producer to become the owner of the ISO certification. It is more emphasized aspects of independence which means that the manufacturer is the party that must have this certification. While the U.S. government regulations prohibit producers to take an active role in the certification institution. As a result, many certification bodies established only by a few persons and legal entities permit oriented companies or businesses. (Huber, 2007) Participant said: "Tantangan baru bagi kami sebagai petani organik adalah sertifikasi pertanian organik, untuk mendapatkan sertifikat sangat mahal dan persyaratannya rumit". (LF) "New challenges for us as organic farmers was certification of organic farming. To obtain a certificate is very expensive and complicated requirements". (LF, Personal communication, 10/20/2013) "Pertanian organik dihadapkan pada urusan sertifikasi, kalo tidak tersertifikat organik maka produknya tidak diakui sebagai produk organik. Untuk mendapatkan sertifikat ini biayanya mahal dan persyaratannya tidak mudah.". (NGO) "Organic agriculture is faced also in matters of certification, if not certified organic products are not recognized as the organic product. To get this certificate requirement is expensive and not easy". (NGO, Personal communication, 10/20/2013) According to Keith (2010) certification has changed. It is not just the assurance processes into a tradable commodity. If at first the only certification is a voluntary process so now it is a mandatory process. Therefore a mandatory process, along with the growing demand of many certification bodies then developed into a lucrative business. According to Rundgren (2005), the average amount spent by a producer to be certified is approximately 1 - 2% of the total selling price of the product, although even in some cases can reach 10%.

The Benefits of Organic Farming in Support for Environmental Health

According to the Decree of the Head of Environmental Impact Management Agency Ministry of Environment of the Republic of Indonesia, number Kep-124/12/1997 dated December 29, 1997, quoted Slamet (2011). Environmental health is a state of the various environmental media (air, water, soil, foods, human, disease vectors, and material) which is reflected in the physical, biological, and chemical parameters of the quality of the environment that affect public health. This segment of the study, answered the question: "What are the benefits of organic farming in support of environmental health". In this segment the goal is to describe and understand how the stakeholders were able to internalize and applied the values of benefits of organic farming in support of environmental health on their lived experiences in the community. According to the American Public Health Association (AHA), (Slamet, 2011). Environmental health is "The Basic Six" on the basis of public health efforts. According to Slamet (2011) environmental health can be defined as the study of the interaction between the environment and human health, plants, and animals with the aim to improve the favorable environmental factors (eugenic) and control the adverse

factors (dysgenic), such that the risk of impaired health and safety so restrained. Activities eco-friendly organic farming is a factor that affects the environment is favorable (eugenic).

The benefit organic farming on soil

Land is the portion of the earth's surface consisting of mineral and organic materials instead. Soil are important for all life on earth, his deep soil capable of supporting plant life in which plants provide food and oxygen then absorb carbon dioxide and nitrogen. Different soil composition at one location to another (Slamet, 2011). Organic farming brings many benefits to soil fertility. The farmer participants and NGOs, attested, saying: "Tanah menjadi terbebas dari racun kimia pertanian dan sisa pupuk kimia, inilah manfaat pertanian organik". (F1) "The land be free of toxic chemicals and residual agricultural chemical fertilizer, this is the benefit of organic farming". (F1, Personal communication, 10/20/2013) "Kesuburan tanah akan terjaga secara alami karena dipupuk oleh pupuk alami yang ramah lingkungan seperti kotoran ternak." (F2) "Soil fertility will be maintained naturally as fostered by environmentally friendly natural fertilizers like manure." (F2, Personal communication, 10/20/2013) "Kegiatan pertanian organik memakai pupuk alami dan pestisida alami, tidak lagi meracuni tanah." (F3) "Organic farming activity taking natural fertilizers and natural pesticides, no longer poison the ground." (F3, Personal communication, 10/20/2013) "Dengan memakai pupuk organik, tanah tidak mudah terkena erosi, hara tanah jadi subur secara alami". (F4) "By using organic fertilizers, soil less susceptible to erosion, nutrient soil so fertile naturally". (F4, Personal communication, 10/20/2013) "Pertanian organik sangat bermanfaat bagi kesehatan tanah karena pertanian organik menggunakan kompos sebagai bahan utama penyubur tanaman dan kompos ini menyediakan unsur hara makro, mikro serta mineral yang sangat lengkap sehingga bisa membuat tanah menjadi subur secara alami dan dapat mencegah terjadinya erosi pada tanah". (LF) "Organic farming is very beneficial to the health of the soil as organic farming using compost as the main ingredient plant fertilizer and compost provides nutrients macro, micro and minerals that are complete so that it can make the soil become fertile naturally and can prevent soil erosion". (LF, Personal communication, 10/20/2013). According to Djayawarman Alamprabu, (2013) on the use of modern agricultura lchemical fertilizer with high concentration and high doses over along period leads to deterioration of soil fertility due to an imbalance of nutrients or other nutrient deficiencies, and the decline in soil organic matter content. According to Sabastian (2010) soil building practices such as organic fertilizers and minimum tillage are central to organic practices. These encourage soil fauna and flora, improving soil formation and structure and creating more stable systems. In turn, nutrient and energy cycling is increased and the retentive abilities of the soil for nutrients and water are enhanced, compensating for the non-use of mineral fertilizers. Such management techniques also play an important role in soil erosion control. The length of time that the soil is exposed to erosive forces is decreased, soil biodiversity is increased, and nutrient losses are reduced, helping to maintain and enhance soil productivity

The benefit of organic farming on water

Water is a compound that is vital for all known forms of life on earth. Water covers nearly 71% of earth's surface. Clean water is essential for human life (Slamet, 2011). Agriculture provides benefits to water. Water as a media environment is very important for the sustainability of life on earth, therefore, should be maintained and the quality of existence. The farmer participants attested that: "Pertanian oganik menyehatkan air karena tidak tercemar oleh pupuk kimia, jika menyerap ke tanah dan masuk ke sumur penduduk di sekitar sawahpun tidak berbahaya. Kegiatan pertanian organik membuat air di sawah menjadi sehat lagi seperti jaman dulu." (F1) "Agriculture oganic healthy water because it is not polluted by chemical fertilizers, if absorbed into the soil and into the well population harmless. Organic farming activities in the fields of water be made healthy again like earlier times ." (F1, Personal communication, 10/20/2013) "Air menjadi terbebas dari racun pestisida kimia dan sisa pupuk kimia, inilah manfaat pertanian organik air di sawah jadi sehat dan amana dipakai." (F2) "The water be free of toxic chemical pesticides and chemical fertilizers the rest, here's the benefits of organic farming in the fields of water to be healthy and safe to use." (F2, Personal communication, 10/20/2013) "Kegiatan pertanian organik memakai pupuk alami dan pestisida alami, tidak lagi meracuni air tanah." (F) "Organic farming activity takes in natural fertilizers and natural pesticides, no longer poison the ground water." (F3, Personal communication, 10/20/2013) "Pupuk kompos yg dipakai dalam kegiatan pertanian organik mampu menyimpan air tanah, jadi air tidak akan mudah hilang dari tanah walau musim kemarau lama". (F4) "That compost used in organic farming soil is capable of storing water, so water will not be easily lost from the soil with the long dry season." (F4, Personal communication, 10/20/2013) According Arsenio and Arsenio (2010), consequence of agribusiness is the extraordinary increase in soil erosion. Poor land management, overgrazing, chemical agriculture have caused soil erosion and desertification. Topsoil is so precious that without it, the soil loses nutrients and cannot retain water. In many agriculture areas, pollution of groundwater courses with synthetic fertilizers and pesticides is a major problem. As the use of these is prohibited in organic agriculture, they are replaced by organic fertilizers (e.g. compost, animal manure, green manure) and through the use of greater biodiversity (in terms of species cultivated and permanent vegetation), enhancing soil structure and water infiltration. Well managed organic systems with better nutrient retentive abilities, greatly reduce the risk of groundwater pollution. In some areas where pollution is a real problem, conversion to organic agriculture is highly encouraged as a restorative measure, (Saragih, 2010).

The benefit organic farming on air

Air refers to the mixture of gases present in the earth's surface. Air dry earth contains 78% nitrogen, 21% oxygen, and 1% water vapor, carbon dioxide, and other gases (Otto S, 2004). Organic farming benefits to air safety and quality as an important environmental media (Slamet, 2011). The farmer participants attested, saying that: "Dalam aktivitas pertanian organik tidak lagi membakar sisa-sita tanaman karena dapat dijadikan pupuk, jadi udara bresih tidak

tercemar asap hasil pembakaran sisa tanaman." (F1) "An organic farming activity is no longer burning plant residues because it can be used as fertilizer, so clean air is not polluted by smoke of burning crop residues." (F1, Personal communication, 10/20/2013) "Tanaman organik tidak disemprot memakai pestisida kimia lagi jadi tidak ada pencemaran udara oleh racun pestisida, udara jadi aman." (F2) "Organic crops are not sprayed with chemical pesticides, so the air is so safe." (F2, Personal communication, 10/20/2013) "Pertanian organik untuk mengendalikan hama tanamannya memakai pestisida organik, pestisida organik tidak mencemari udara, udara jadi sehat." (F3, F4) "Organic agriculture for pest control using pesticides organic crops, organic pesticides do not pollute the air. The air is so healthy." (F3, F4, Personal communication, 10/20/2013) Organic agriculture reduces non-renewable energy use by decreasing agrochemical needs. Organic agriculture contributes to mitigating the greenhouse effect and global warming through its ability to sequester carbon in the soil. Many management practices used by organic agriculture (e.g. returning crop residues to the soil, the use of cover crops and rotations), increase the return of carbon to the soil, raising productivity and favouring carbon storage. A number of studies revealed that soil organic carbon contents under organic farming are considerably higher. The more organic carbon is retained in the soil, the more the mitigation potential of agriculture against climate change in higher, (Sabastian, 2012)

The benefit of organic farming on foods

Food is a substance, usually derived from animals or plants, eaten by living things to provide energy and nutrients. Food is usually made for human needs through farming or gardening that includes animal and plant sources, (Soemarwoto, 2004). An organic agriculture is providing healthy foods without synthetic chemical pesticide residues. The farmer participants, trader, consumers, attested, saying that: "Permintaan konsumen terhadap produk organik seperti sayuran dan beras terus meningkat". (B) "Consumer demand for organic products like vegetables and rice continue to increase". (B, Personal communication, 10/20/2013) "Produk pertanian organik tanpa zat kimia sintetik, saya sudah lama beralih ke produk organik karena saya ingin makanan yang sehat dan aman". (C) "Organic farming products without synthetic chemicals, I have long switched to organic products because I want a healthy and safe food". (C, Personal communication, 10/20/013) "Kesehatan masyarakat akan semakin baik dengan adanya makanan organik yang bebas residu pestisida". (Gov) "Public health will be better with presence of organic foods that are free of pesticide residues". (Gov, Personal communication, 10/20/2013) "Sayuran, beras jadi sehat karena tanpa terkena racun pestisida, menurut keyakinan saya jika terkena racun, haram hukumnya (dilarang oleh Tuhan) untuk dimakan". (F3) "Vegetables, rice are healthy because they are not exposed to toxic pesticides. According to my belief if exposed to poisons, haram (forbidden by God) to be eaten". (F3, Personal communication, 10/20/2013) Many factors contribute to this development, one of the driving factors is the insistence on the domestic market, national market and international markets which want products that are free of synthetic, chemical residues (Sabastian SA, 2010). "Pertanian organik

tidak mengizinkan genetically modified organisms jadi makanan hasil pertanian organik terbebas dari GMO's". (GO's) "Organic farming does not allow genetically modified organisms so organic food crops free of GMO's". (GO's, Personal communication, 10/20/2013) The use of Genetically modified organisms. (GMO's) within organic systems is not permitted during any stage of organic food production, processing or handling. As the potential impact of GMO's to both the environment and health is not entirely understood, organic agriculture is taking the precautionary approach and choosing to encourage natural biodiversity. The organic label therefore provides an assurance that GMOs have not been used intentionally in the production and processing of the organic products, (Saragih, 2012).

Benefit organic farming for waste management

Organic farming practices reduce the amount of waste through recycling waste into organic fertilizer. Livestock manure, straw and other agricultural waste can also be considered waste. So that it becomes a material that has value as a source of nutrients and organic matter to organic farming. The farmer participants have these to say: "Limbah organik yang berasal dari pabrik makanan, dari restoran, dari pemukiman penduduk, and dari tempat-tempat umum dapat digunakan sebagai pupuk organik, sekaligus juga membantu program pemerintah tentang kebersihan lingkungan". (LF) "Organic waste from food factories, from the restaurant, from the settlement, and from public places can be used as organic fertilizer, while also helping the government program of environmental cleanliness". (LF, Personal communication, 10/20/2013) "Sampah organik dari rumah-rumah penduduk, dari pasar bisa dibuat untuk pupuk, sehingga membantu membersihkan lingkungan dari limbah". (F2) "Organic waste from people's homes, from market can be made for fertilizer, thus helping to clean up the environment from waste". (F2, Personal communication, 10/20/2013) "Kotoran ternak dan limbah dari pemukiman penduduk dapat digunakan untuk pupuk organik. jadi memberi manfaat juga pada kebersihan lingkungan". (F3) "Manure and sewage from residential areas can be used for organic fertilizer, so also benefit the environment clean". (F3, Personal communication, 10/20/2013) "Selain itu, sampah, kotoran ternak juga dapat digunakan sebagai pupuk. pupuk, sehingga lingkungan juga jadi bersih dan sehat, bebas sampah". (F4) "Besides, garbage, livestock manure can also be used as fertilizer. So the environment is also so clean and healthy, waste-free (F4, Personal communication, 10/22/2013) "Program kebersihan lingkungan di sebuah wilayah, bisa dipadukan dengan program pembuatan pupuk organik". (NGO's) "Environmental hygiene program in a region can be combined with organic fertilizer program". (NGO, Personal communication, 10/20/2013) Organic fertilizer from waste can be combined with a program of environmental hygiene areas. So organic farming can benefit the health of the environment through waste management in the region, both in rural and urban. Organic farming practices reduce the amount of waste through recycling waste into organic fertilizer. Livestock manure, straw and other agricultural waste as long as it is considered waste, so that it becomes a material that has value as a source of nutrients and organic matter to organic farming. According to Sutanto (2002), environmental hygiene program can be combined

with composting programs derived from the settlement and urban garbage. In many countries organic agriculture development programs in close urban environments is always associated with cleanliness, either through the process of composting in residential areas or landfill.

The Social Development Model of Sustainable Organic Farming

According to the United Nations (2010), sustainable development has been discussed and performed by the world community as a method to create a balance. Balance is obtained on the social, economic, and environmental. Sustainable development can be applied in many aspects of life, including in agricultural development. The advent of sustainable development, in 1970's there was widespread environmental problems. Sustainable development is characterized by the conventional paradigm of economic development in the pursuit of economic growth. Therefore, the development of environmentally sustainable becomes important to be studied (www.academia.edu). Universal principles of sustainable development should be the principle of balanced development, which is included in the following concepts: Environmental Protection (Environmental Protection), in decision making and implementation of activities related to public interests, especially the interests of the poor, should be encouraged to decision and implementation of the activities oriented towards the protection / preservation of the environment both natural and artificial environments; Community Development (Social Development); each step should always be oriented activities in an effort to build social solidarity and self-reliance of society so as to create an effective community socially as a solid foundation in the effort to reduce poverty and sustained independently. Community development also means an attempt to enhance the potential of all elements of society, especially vulnerable and marginal groups that have not had the opportunity / access to programs / local activities; Development Economic; welfare is an effort to harmonize the material, then the efforts towards improving the capacity and skills of the poor and unemployed to get a portion or specifically, including efforts to develop business opportunities and access to key resources for income generation, with due regard to the impact of the physical environment and social; Universal principles of sustainable development is essentially an integrated through empowerment. Empowerment of the whole man to be able to generate power that has been integrated. These are the construction of the power to create a society that is concerned with the development -oriented environmental sustainability; social power that create effective community social; and economic power to create economically productive society. Sustainable development is universal principles that can be applied also in agricultural development. In the development of modern agriculture in the so-called "green revolution" has been proven to have a negative impact on the sustainability of life. The green revolution is not only threatening because of the environmental damage arising directly, but also because of the damage to the social and economic aspects. As the green revolution develops sustainable agricultural development showed also organic farming. This segment of the study, answered the question: "What model can be

developed on organic farming towards its sustainability"? The purpose was to describe and understand how the stakeholders who are able to articulate their ideas regarding the model of sustainable organic farming. Farmer participants said something. They essentially said: "Kami memerlukan pengetahuan dan keterampilan tentang pertanian organik". "We need the knowledge and skills about organic farming". The farmers do change from conventional farming practices to organic farming practices carried out spontaneously and in a planned. They added: "Pada awalnya saya beralih ke pertanian organik seponatan saja karena diajak teman saya". (F1 dan F3) "I moved to organic farming from conventional farming, because my friend invited". (F1 and F3, Personal communication, 10/21/2013) "Saya merencanakan dengan kesadaran saya sendiri untuk melakukan perubahan dari praktek pertanian konvensional ke pertanian organik". (LF) "I planned with my own consciousness to make a change from conventional farming practices to organic farming". (LF, Personal communication, 10/20/2013) According to Soetomo (2012), change is an expected direction towards a more mature was, which increasingly has the capability to respond to the ever-increasing demands, responding to the opportunities that open and respond to the potential that exists, besides no less important to anticipate challenges and problems that arise in line with the ongoing process of change. Seen from the planned change process to build aspects of human action include interactions in society, instead of building objects. Therefore, it is not wrong if it is contained in the meaning of community capacity building of human capacity development as the actors that make up the community, (Soetomo, 2012). In its formulation, process development, sustainable agriculture (organic farming), human capacity development may include the development of insight and knowledge level, an increased ability to respond to the dynamics of the environment, improvement of skills, increased access to information, improving access to the decision-making process relating to the development sustainable agriculture (organic farming). As changes are planned, who planned is how to provide stimulation and encouragement so that people wake up and growing capacity. Participants of the NGO said: "Perlu dibangun sebuah sistem atau wadah untuk mengembangkan kapasitas para petani organik, misalnya melalui kelompok tani organik". (NGO) "Necessary to build a system for capacity development of organic farmers, for example through organic farmer groups". (NGO, Personal communication, 10/20/2013) Given that changes in society can also bring up a new social issue then the social systems needs a system that can deal with social problems, both old and new which are attached to a mechanism within the system itself. According to Jacob (2003) that the system has the capacity as it is a social system that is able to process feedback. Thus, if the product is not expected system conditions should be independently seen as a feedback that can be used to discriminate improvements and changes are attached. Attention to variety of the above description, it can be said that the process of change and development of the society is determined by various factors. All of these factors synergistically affect the intensity and speed of the changes, the factors become determinants to community development through social learning process are. These are aspirations of the people,

social energy, institutionalized collective action, science and technology, as well as external stimulation (Soetomo, 2012). For the sustainability of organic farming, the factors become determinate proficiency level should be strengthened.

Role of Government

In the concept of sustainable development, the most important thing is to give directives to the utilization of natural resources which is done in a planned, rational, responsible and in accordance with the carrying capacity function that prioritizes sustainability and environmental balance. Participant from NGO and LF saying: "Untuk menjamin pelaksanaan pembangunan pertanian berkelanjutan, maka perlu didukung oleh kebijakan pemerintah dan tata kelola yang baik". (NGO) "To guarantee implementation of sustainable agricultural development, it needs to be supported by government

policies and good governance". (NGO, LF, Personal Communication, 10/20/2013). Therefore, in the context of sustainable agricultural development, the government is obliged to:

1. Realize, grow, develop and improve the awareness and responsibility of decision makers in sustainable agricultural development.
2. Realizing, grow, develop and raise awareness of the rights and responsibilities of people in sustainable agriculture
3. development.
4. Realizing, grow, develop and raise awareness among the community, business and government in the conservation of sustainable agricultural development.
5. Develop and implement a national policy of sustainable agricultural development.

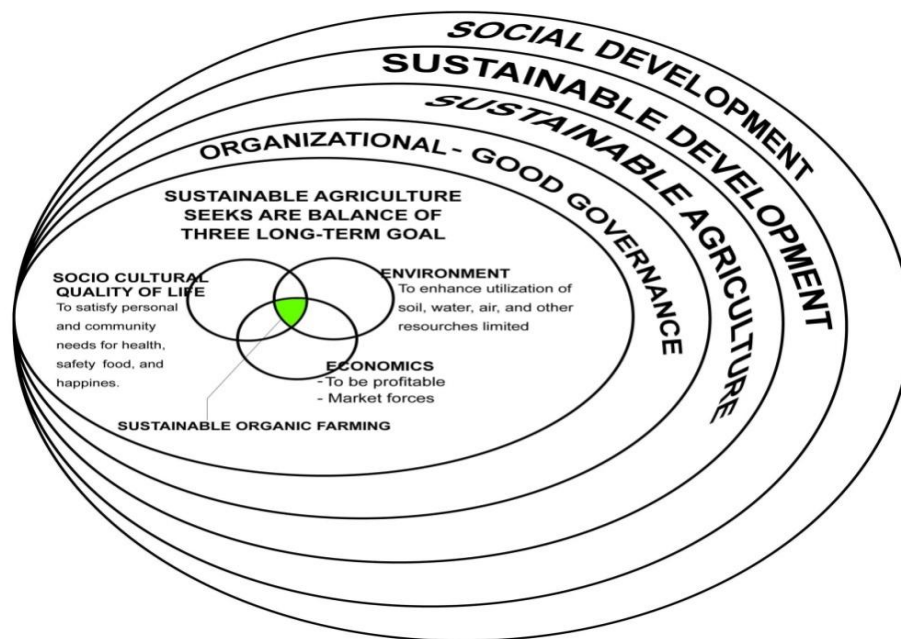


Figure 11: Social Development Model of Sustainable Organic Farming

Conceptual Framework

Organic farming is a form of social change movements concerned with the sustainability of agriculture. As a movement for change, naturally undergo several stages. To support this change movement, it first requires a change in consciousness will change itself and the construction of knowledge societies through social development. Social development is basically done to improve human life through efforts to lift mankind from under development toward prosperity. Social development aims to increase the capacity of individuals and their institutions, mobilize and manage resources in order to generate sustained and equitable improvement in the quality of life in accordance with their own aspirations in order to achieve better results and achieve social justice. In human life, there are several dimensions, which are dimensions of the needs. The needs of human life compiled from the start of the most basic needs are physiological needs to the needs of the most high is self-actualization. One of the needs of human physiology is the need of food. The problems that occur as

a result of the green revolution should be terminated because of the harm to the sustainability of human life on the present and the future. To retire this issue then agricultural business activities should be put on a sustainable development principle and sustainable consumption and production, the solution is an environmentally friendly agriculture and securely create human health i.e. Organic Agriculture (Organic Farming). Organic farming brings many benefits to sustainability on planet Earth because of pollution-free, good health for the health of the farmers (producers) as well as for the consumer because it does not use artificial chemicals for fertilizer plants and did not use pesticides to kill plant pests (Gunawan, 2007) Organic farming today has evolved extensively, both in the cultivation, means of production, type of product, marketing, consumer knowledge and organization/institution community interest (concern) in organic farming. These developments are not organized and efficiently run. However when it was noted there is commonality purpose to be achieved by the principals of

organic farming, namely: providing products that are healthy, safe and friendly environment to promote organic farming, needed a good planning and implementation simultaneously. Planning and implementation are also carried out jointly between the civil society, government, and businessmen. Social change involves targets of change, change agents, and change goals. Changes can occur on various levels of social organization-individual, small groups, organizational, or societal (Palispis, 2007). The process of changing the culture of an organic agriculture to organic farming culture can be started from small groups in the community. The process of social change is indispensable in advancing organic agriculture because it required the existence of a new paradigm shift in agriculture in the midst of the community. Public awareness of the dangers posed by the way – the way modern farming (inorganic farming) should continue to be built. Currently in the midst of society has grown awarnes of about go organic; this is a driving factor towards the development of organic farming (Suwanto, 2008). This momentum must continue to be maintained and development in a process of social change. This case study will focus on all involved in the activities on the organic farmers of Paguyuban Pasundan of Cianjur Regency of West Java of The Republic Indonesia.

CONCLUSIONS

Pasundan's Organic Farming associations Cianjur as associated organic farmers. They have got a spirit that was drawn from the vision, mission, goals, and programs, as well as its activities. The challenges faced by the organic farming movement in general, namely: (a) from harmony into commercialization, (b) from opposition of government into mainstream of government, (c) from of production industrialization conventional into organic production facility industrialization, (d) competition era of globalization, (e) from assurance into certification business. with the above challenges new concerns have been exploited in organic farming. The benefits of organic farming for supporting of environment health, namely: (a) for quality of soil, (b) for quality of water, (c) quality of air, (d) for quality of foods, and (e) for waste management. Stakeholder's interviews gave an overview of the construction of a model for sustainable organic farming. There are several factors as determinant of sustainable organic farming should be conducted prior to the transformation efforts of all stakeholders, which is about the concept of social development, concept of sustainable development, sustainable agriculture concept, good government, concept of organic farming and sustainability.

RECOMMENDATION

On Pasundan's associations were Organic Farmers Cianjur

The results of this study are expected to provide additional information and knowledge relevant to the organic farmers are useful for developing organic farming activity:

- a. Tighten the existence of the Organization, in order to be a force in defining the standards and certification system of organic agricultural products and the development of organic farming which ensures the sustainability of livelihoods.

- b. Develop a strategic partnership with the Government, entrepreneurs and organic, non-governmental organizations for the sustainability of organic farming.
- c. Follow organic exhibitions of local, regional, and international.
- d. Revive local cultural wisdom about engineering techniques which have been known to farm the farmer hereditary which essentially are components of organic farming. Examples of engineering techniques are commonly executed farmers are: the main waste recycling, the utilization of green manure, use of a combination of manure and green manure, and compost.
- e. In areas which are central to beef or chicken farms, the use of manure can be combined with a regular fertilization program is done.
- f. In an area close to the Centre of agro-industries like sugar cane factory, the factory know, alcohol factory, factory seasoning Cook, then reports can be used as a source of organic fertilizer.
- g. Environmental hygiene Program can be combined with the composting program that comes from residential and urban waste.

On Business

Results of the study may provide additional information for the corporate world that expands on the results of organic farming:

- a) Domestic product marketing opportunities for organic crop includes vegetables, fruits, and estates need to be identified.
- a. b. Established interaction and mutually beneficial working network between consumers and producers to ensure the marketing of organic products on an ongoing basis.
- b. Avoid the commercialization of the trade of organic products, prioritizing their harmonious relationships between producers, consumers, and businesses.
- c. follow the exhibitions international and local organic produce.

On Government

The Program "Go Organic 2010" must be forwarded with the program "Go Organic 2020" where the formulation of the vision, mission, and activities that will be undertaken are arranged with a broader circle of involved, including organic farmers, organic entrepreneurs, non-governmental organizations, as well as colleges that are entirely commanded by the government to fulfill the people's mandate ensures the sustainability of the livelihood of the people.

On Civil Society (NGO's)

The results of this study are expected to encourage NGO's to do the mentoring activities at the farmers in developing organic farming:

- a) Perform accompaniment on the organic farmers in enriching insights about the organic activity
- b) Provide consulting services to organic farmers in the face of legal and advocacy issues related to their activities as organic farmers,
- c) A bridge connector between organic farmers, traders, government and other stakeholders in an effort to

build networks of cooperation of mutual benefit for all concerned.

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