



EVALUATION OF ORGANIC RICE AGRICULTURE SYSTEM (ORAS) IN THE SEMARANG DISTRICT

Dwi Erlina Estuningtyas⁽¹⁾, Muniffatul Izzati^{(1),(2)}, dan Hartuti Purnaweni^{(1),(3)}

⁽¹⁾Magister Ilmu Lingkungan, Program Pascasarjana Universitas Diponegoro Semarang

⁽²⁾Jurusan Biologi Fakultas Sains dan Matematika Universitas Diponegoro Semarang

⁽³⁾Fakultas Ilmu Sosial dan Ilmu Politik Universitas Diponegoro Semarang

Abstract - Along with the increasing public awareness of environmental issues, health, and food safety and quality and make awareness of the importance of organic farming in several countries around the world, including in Indonesia is increasing rapidly. This study aims to analyze the program and implementation of organic rice farming system in the District of Semarang. The research was conducted in the District of Semarang District Susukan starting from April 2013 until August 2013. Secondary data used for the analysis and evaluation of organic rice farming program from the data of 5 (five) years. Secondary data were obtained from farmer groups and related agencies such as the Department of Agriculture, Plantation and Forestry, Bappeda, as well as the Agricultural Extension Center. Primary data obtained from direct observations in the field using the questionnaire in the sample set. Primary data from observational observations made in the current year at the sites. Variable / fenomena observed include compatibility between the implementation of organic rice farming in the community with the criteria of organic farming. The results showed that farmers have carried out SPPO with a percentage of 83.3 percent and 16.7 percent SPK. Basically, organic rice cultivation activities in Semarang district actually can not be said to be fully as organic rice farming, or more accurately described as semi-organic farming systems.

[Keywords: SPPO; organic agriculture; evaluation; Semarang District; program analysis]

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INTRODUCTION

Entering the 21st century, a healthier lifestyle with the slogan: Back to Nature has become a new trend in the world community. People are increasingly aware that the use of materials of non-natural chemicals, such as fertilizers and synthetic chemical pesticides in agricultural production had a negative impact on human health and the environment. Lifestyle so this has been institutionalized internationally realized through regulation of global trade, which requires assurance that the agricultural products must have the attribute is safe to eat (food safety attributes), has a high nutrient content (nutritional attributes) and environmentally friendly (eco-labeling attributes) (Prihandarini 2009; Sulaiman, 2008).

Organic farming is one way to answer the challenges of society in the world today in an effort to meet the need for food quality. How organic farming as well as generate a dynamic interaction between the soil, plants, animals, humans, ecosystems and the environment. In addition, organic farming is one option that can be done by small farmers to obtain sufficient food at the household level while improving soil quality, improve biodiversity and provide quality food to the small communities in the vicinity (Sutanto, 2002; Prihandarini, 2009). Along with

the increasing public awareness of environmental issues, health, and food safety and quality and make awareness of the importance of organic farming in several countries around the world, including in Indonesia is increasing rapidly.

The Government of the Republic of Indonesia through the Ministry of Agriculture has launched a program to Go Organic in order to accelerate the development of organic farming in Indonesia (Organic Trust in 2006). Ministry of Agriculture has allocated Rp. 30 billion for the development of organic farming and the environment for the fiscal year 2007. In addition, in an attempt to penetrate the world market in organic products, the Government has established an organic product certification body through the Institute of Organic Food Certification (IOFC). However, so, the task of this institution is becoming less effective due to the existing constraints on farmers is that farmers do not do organic farming properly so often do not meet the standards of organic products. Some of the obstacles in the application of technology of organic farming in the countryside among others (a). lack of knowledge of farmers on organic farming; (B). low public awareness of the environment, and (c). some people considered that the application of organic farming

is not practical and is still considered a low-cost (Husnain and Syahbuddin, 2011). Therefore, in an effort to spur the development of organic farming in Indonesia, dissemination and evaluation of the program on an ongoing basis is necessary to do.

Some researchers have conducted research related to organic farming, among others Djamhari (2003), Agus et al (2006), Hafid (2006), Mulyati, et al (2006), Soemitro (2008), Suwanto (2008), and Pradopo (2010) , The research result shows some of the results include: (1) the pattern of farming that applied to rice farmers are less in accordance with sustainable agricultural systems (Pradopo, 2010), (2) the majority of farmers do not implement organic farming systems correctly (Soemitro, 2008), whereas farming profitable organic rice, so it is worth the effort (Agus et al, 2006). From the study of the existing literature, research on the evaluation of the application of organic farming systems in Semarang district has not been done. This study aimed to evaluate the implementation of organic rice farming system in the District of Semarang.

MATERIALS AND METHODS

This research is descriptive research that aims to provide an overview of the implementation of the organic farming program in the District of Semarang. From the evaluation would also obtained information to various constraints faced by farmers both technically and managerially and follow the advice that can be given both for the farmers, the Department of Agriculture, and the Government of the District of Semarang.

The research was conducted in the District Susukan Semarang District. These areas have been selected for this area is the center of the development of organic rice farming system in the District of Semarang. The research was conducted from April 2012 to August, 2012. Research conducted using primary and secondary data. Secondary data used for the analysis and evaluation of organic rice farming program from the data of 5 (five) years. Secondary data were obtained from farmer groups and related agencies such as the Department of Agriculture, Plantation and Forestry, Bappeda, as well as the Agricultural Extension Center. Primary data obtained from direct observations in the field using the questionnaire in the sample set. Primary data from observational observations made in the current year at the sites.

RESULTS AND DISCUSSION

The evaluation results on this research can be used to improve future programs and provide suggestions to the public acts and Semarang district government. From interviews with all relevant stakeholders in general showed that organic farming systems to be appropriate in terms of the economy. It is encouraging for the development of organic farming systems in times to come. This is because organic farming systems can not be separated from the economic dimension, in addition to the environmental dimension and the social dimension (www.biocert.or.id/infoguide-info.php?menu=info&id=73).

The economic aspects can be sustainable when agricultural production is able to meet the needs and provide sufficient income for livelihood sustainability pelaksanaan. However, economic motivation is often the main control direction of development of organic farming. On the one hand, to encourage the development of organic farming, but on the other hand can backfire that could undermine the foundation of the organic agriculture movement that is being built. According to Mustafa (2013) which is supported by posts on the site <http://boyan9.wordpress.com/2012/02/17/beras-organik-albarokah/> organic rice products have advantages such as:

1. Has a lot of good nutrient content
2. Safe from toxic pesticide residues that are harmful to health because it has been tested.
3. The post-harvest handling professionally centered on Al-Barokah to maintain the quality (keorganikan) rice.
4. Organically Grown without the use of toxic pesticides and synthetic chemical fertilizers that have proven detrimental to health.
5. Based on the results of laboratory tests of Balitbio No. 029 / LB / III / 03 has shown that out of five (5) active substance tested was detected only 2 (two) of active ingredient in the very low level and far from maximum residue limits set by the Ministry of Health and Ministry of Agriculture, so that it can be said that Al-Barokah rice product is safe for health and proper for consumption
6. In terms of taste more delicious, fluffier, durable and not perishable, because their moisture content test control
7. Grown and produced by members of the Al-Barokah farmers that make it easier for consumers to take control and checks in the field. Organic rice products are also believed by farmers provide positive benefits for the customer and the environment. Benefits to consumers among others:
 1. Obtain direct benefits in the form of the nutrient content is very better demonstrated by the high protein content.
 2. The high protein content is very useful especially for the growth of children, because the function of the protein to form new tissue and tissue repair worn, damaged and dead, as well as providing the necessary amino acids to form digestive enzymes and metabolism as well as antibodies.
 3. It is safe to consume for a healthy body, because protected from harmful synthetic chemical ingredients that harm life.
 4. In mashed rice, the high fiber content so it is useful to accelerate metabolism, making the body will be healthy and avoid illness

As for those who take advantage of organic rice will also have a stake and environmental sustainability, among others

1. Restoring and improving the quality of soil, water and ecosystems.
2. Protect the environment from toxic pesticides and synthetic chemical fertilizers (already in the soil test soil research centers Bogor)

3. Maintain life balance of natural ecosystems, biodiversity, and contribute to the food security and sovereignty.

Behind the various benefits of organic rice farming on top, the next issue is whether the use of organic fertilizer lead to higher land productivity and the production process is more efficient than using chemical fertilizers. Valid data and quantitatively difficult to obtain given the farmers generally do not have a record over time. However, from the interviews show that in general the respondents think organic rice farming are well known and need to be developed. This reflects the positive attitude of society towards organic farming. Of the 30 respondents, 28 people (90%) stated that the community had grown organic rice farming. People are already familiar with organic rice and organic rice farming states that need to be developed (100%). According Sugiyanto et al. (2006) and (2010), experience has shown that in the early stages of a change of use of chemical fertilizers into organic fertilizer lead to decreased land productivity. After 2-3 years, rice production back to their previous level and even more.

Based on information from farmers in the field, after a transitional period passed, agricultural yields have increased as organic rice can even exceed the original amount. So, when the process of transition from conventional to organic farming is complete, yields obtained are very positive because it does not degrade. In addition, after the transition period is over, the land of the land has been 'recovered' and biodiversity in the area has undergone a balance, contributing to a decrease in production costs such as fees prior to the change or may be lower, given the time that the land does not require chemical input agriculture (agro chemicals) were very expensive because they simply take advantage of the resources that exist in the land itself. When viewed from the grain yield obtained, the fields of organic farming has been formed (over 3 years) are able to produce grain + 7.0 tons, whereas conventional rice fields produce grain + 4 tons / ha. When the price of organic and conventional grain valued at Rp. 2.500, - per kilo gram, then the organic farmers would benefit compared to conventional farming Rp. 7.500.000, - per hectare. From these discussions can be concluded that organic rice farming more profitable both in terms of economic and environmental sustainability. Nevertheless, necessary to study economic aspects in more depth about rice farming organically by using various economic parameters include BEP (break even point), radio B / C (benefit cost), and ROI (return on investment) by comparing the price of organic rice and non-organic at this time.

CONCLUSIONS

In general the people in the district of Semarang already familiar with organic rice farming. In the farming community has been growing organic rice and still need to be developed. The government has a policy of development of organic rice farming, among others in the form of socialization in the development of organic rice farming and technical guidance in the development of

organic rice farming. Basically, organic rice cultivation activities in Semarang district actually can not be said to be fully as organic rice farming, or more accurately described as semi-organic farming systems. Organic rice farming more profitable both in terms of economic and environmental sustainability.

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