

# INCENTIVE PROGRAM TOWARDS SUSTAINABILITY OF ORGANIC RICE CERTIFICATION IN *LIMAPULUH KOTA* REGENCY, WEST SUMATRA, INDONESIA

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**Abstract.** The government of Indonesia has committed to encourage the development of organic agriculture in Indonesia by establishing regulation on Organic Agriculture Systems in 2013. West Sumatra is one of the provinces in Indonesia which is very committed to developing organic agriculture. Before the decree was established, The Department of Agriculture of West Sumatra has allocated on Regional Budget year 2011 to improve the Organic Food Product Incentive by giving incentive for 250 IDR per kilogram of organic rice. It was expected that it can influence farmers' decision to recertify their organic products. Unfortunately, the incentive program was not continued in 2015. This research aimed to analyze the effect of the organic agriculture incentive program on the sustainability of organic rice certification. The research was conducted in Limapuluh Kota Regency using survey methods. 65 organic rice farmers were interviewed. The research result showed that 80% of respondents agree that organic certification is a benefit for them. 20% of respondents do not think that organic certification is a benefit for their organic rice. As a result, they do not use the incentives for the benefit of organic rice production and organic recertification. 60% of them use it for household needs. Although the incentive program is not continued, 70% of farmers recertify their organic rice with the main reason is that it was the group's decision. It is suggested that farmer's motivation to re-certify organic rice should be become a consideration by the government for the development of organic rice farming programs.

**Keyword:** *Certification, incentive program, organic rice*

## I. Introduction

Negative effect on the environment by using high inputs in agriculture has lead the term of sustainable agriculture promoted all over the world. It was stated in The Agenda 21 held in Rio de Janeiro in 1992 which was known as Rio declaration on Environment and Development that "every nation have to sustain their agricultural development policy on sustainable agriculture principle" [1]. Organic farming is one way to reach the sustainable agriculture. From Ecological perspective, organic farming can improve the quality of soil for the next planting seasons [2]. From economics perspective, the cost of production is less because farmers do not have to buy chemical pesticides and fertilizers which are very costly [3]. In terms of productivity, it is found that the organic farming can improve rice productivity in Indonesia [4].

Organic farming is a system of creating sustainable productivity. IFOAM (International Federation of Organic Agriculture Movements) defines organic agriculture is 'a *production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic Agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved*' [5].

The development of organic farming is also followed by the lifestyle of people who care about their health. Agricultural products that are labeled organic will naturally be healthier than those that are not labeled organic and have potential market [6]. However, not all organic producers decided to label their product with organic certification due to several reasons [7]. Even though Indonesia as an agrarian country that has vast agricultural land certainly has enormous potential to be developed into an international scale organic producer. This condition can be interpreted as a signal from the market that organic products already have a clear market. The fact that Indonesian organic producers who already have national and world organic standards are still relatively few, but The Directorate General of ministry of agriculture [8] stated there is an increase on organic rice export. In 2016 it was only 81 ton organic rice exported and in 2018 it was 143 ton of organic rice exported. In June 2019, it was 252 ton organic rice had been recommended to be exported.

West Sumatra is one of the provinces in Indonesia which is very committed in developing organic agriculture. During 2010, around 1,276.93 tons of organic products were produced including organic vegetables, organic fruits and organic rice. For this reason, the West Sumatra Food Crop Agriculture Office through the 2011 Regional Budget provided incentives for 1,500 tons of organic agricultural products through activities to improve the Organic Food Product Incentive and Disincentives System. It was expected there would be an increase in the area of organic agriculture and an increase in the number of organic operators. The incentive is that organic rice farmers receive an incentive of IDR 250 per kilogram of rice production. The incentive itself is an award in the form of money given by the leaders of the organization to employees so that they work with high motivation to achieve organizational goals. In this case, agricultural incentives can be interpreted as a way for the government to increase the motivation of farmers in implementing organic farming. Incentives in agriculture are not only in the form of money. Other forms of incentives can be in the form of subsidies for organic certification costs and prices to organic farmer groups, the application of organic demonstration plots in pilot villages, training for extension workers and farmer groups and so on. In addition it facilitates access to guarantees / certifications for organic farmer groups.

It is not only the government of West Sumatra has given organic farming incentive to agricultural organic products in Indonesia, but also has been implemented in several provinces. One example is in the Province of Bali, Jembrana Regency which conducts the development of organic agriculture and is regulated directly by the regent of Jembrana Regency. The incentives given to the Organic Farmers Group in Jembrana Regency are in the form of agricultural production facilities and infrastructure assistance, organic fertilizer subsidy assistance, and the provision of facilities to access information and technology [9].

Unfortunately, the incentive program provided by West Sumatra Food Crop Agriculture Office was not continued in 2015. According to Organic certification body of West Sumatra [10], some farmer groups keep doing re-certifying their organic rice while other farmers groups do not continue re-certifying their product. For farmers groups that continue to re-certification of organic rice even though the incentive program is no longer valid, the initial assumption is that farmers feel the need to have organic certification to gain consumer trust. While for farmers groups that do not extend their organic rice certification due to the incentives that were previously obtained have been terminated. Both of these conditions indicate that it is important to carry out this research to see how the influence of the organic rice farming incentive program on re-certification of organic rice. This research aims to analyze the incentive program towards sustainability of organic rice certification.

## **II. Research method**

The study was conducted in Limapuluh Kota Regency of West Sumatra Province from September to November 2019. The research sites in the Limapuluh Kota Regency was chosen is because this district has a farmer group that matches the specified criteria. The method used in this study is a survey method. The population in this study was organic rice farmers in Limapuluh Kota Regency. The farmer groups were grouped into two. First, three farmer groups that have organic certificates in 2015 and re-certify its organic rice in 2019. Second, two farmer groups were have organic certification in 2015 and their certification validation period expires in 2019 as shown in Table 1. Total of 65 organic rice farmers were interviewed. They were selected purposively from 5

farmer groups. This research was conducted using descriptive analysis. Descriptive analysis is the most basic analysis to describe the state of data in general.

Table 1. Organic Rice Certification status of Farmers Group in Limapuluh Kota Regency, West Sumatra

No	Name of Farmers Group	Years of Certification									
		2010	2011	2012	2013	2014	2015	2016	2017	2018	
1	Aie Malanteh Batu										
2	Simun I										
3	Kampung Duo Sakato (KDS)										
4	Sehati										
5	Tigo Alua Saiyo										
6	Serba Usaha										
8	Sei Lokam										
9	Tuah Sakato										

Source: Organic certification body of West Sumatra, 2019

### III. Result and Discussion

#### Research area

As can be seen from Figure 1, Limapuluhkota Regency is located between 0025'28.71 North Latitude and 0022'14.52 "South Latitude and between 100015'44.10" - 100050'47.80 "East BT. The area is 3,354.30 Km2 or is 7.94% of the total area of West Sumatra Province. This regency is flanked by 4 districts (Agam; Tanah Datar; Sawahlunto / Sijunjung and Pasaman) and 1 province (Riau). Limapuluh Regency is a tropical climate affected by monsoon winds with average rainfall ranging from 2200 mm to 3750 mm / year Meanwhile the average temperature ranges between 20°C -25° C [11].

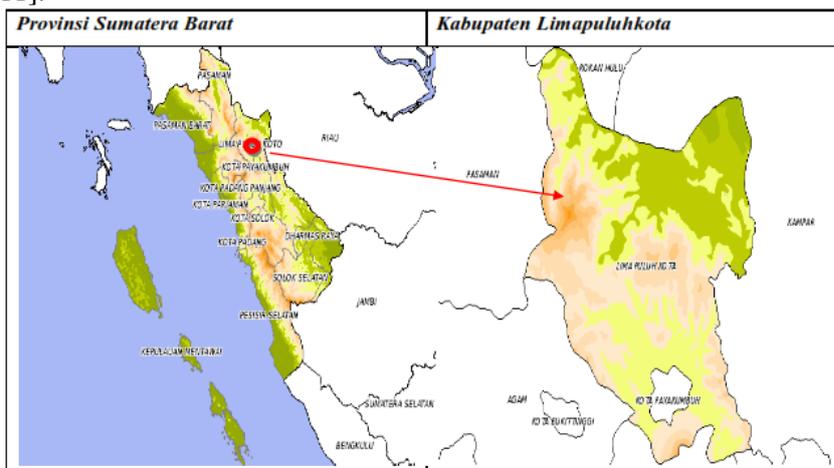


Figure 1. Research area of Limapuluh Kota Regency, West Sumatra, Indonesia  
 Source : <http://regionalinvestment.bkpm.go.id/newsipid/area.php?ia>

## Respondents Profile

The percentage of the sample with age range  $\geq 40$  to  $<50$  years is 51.92% of the total number of respondents. This age is still considered productive age for farmers. As for sex, female farmers are the dominance of the entire study sample. More than 30% of farmers have education up to junior high school and 3% of the total sample are college graduates. In this study, the main occupation of the respondents was mostly paddy rice farmers amounting to 94.23%, and as traders amounting to 3.85% of the total respondents. Besides that, the other occupations of the respondent farmers were 1.92%, namely as cattle ranchers, chicken breeders, traditional dress designer. The experience of sample in paddy farming is quite long, which is more than 30 years (27%). As for organic farming, the average farmer experience is 5-10 years. The highest number of respondents is 25 people who have cultivate organic rice farming at  $\geq 5$  to  $<10$  years.

Organic Agriculture in Limapuluh Kota District began in 2005. However, the implementation of Organic Agriculture has increased in 2008. The results of this study illustrate that the incentive program is not the main reason for farmers to do organic farming systems, the main reasons farmers do organic farming systems are factors health and the environment. Followed by the reason that the organic farming system has economic benefits, then followed by the reason for the incentive program.

Farmers did organic rice farming initially because of the scarcity of chemical fertilizers in the study area, so many farmers sought a solution to the problem, then farmers began using manure to replace chemical fertilizers. Initially the farmers did not really know about organic farming as a whole, with the practice of farmers using manure, the government also encouraged by introducing organic farming to farmers and introducing a certification system and incentive program to farmers. This is also supported by the large number of chicken farms in Limapuluh Kota Regency, which could also be a source of manure by farmers at first.

Organic culture that has long been practicing in 50 Regency of the district then became a habit and now farmers are becoming aware of the benefits of organic farming which is more environmentally friendly and good for health, so these two things become the biggest factor of farmers doing organic farming systems. For economic factors, farmers do not really feel the economic benefits in organic farming. The reason is, farmers complain that organic farming does not have a clear market. So that many farmers sell organic rice and rice to collectors whose prices are not much different from the results of conventional grain and rice systems.

In pursuing organic farming, farmers get a lot of assistance from agricultural extension officer and organic farming task force. This is where farmers learn how to cultivate their organic rice. In developing the organic rice business in Limapuluh Kota Regency, farmers also received assistance in the form of Agricultural Production Equipment Facilities, Incentives and others. Based on the results of a survey conducted, the greatest benefit from assistance received by farmers is derived from Agricultural Extension Workers. This is because the transfer of knowledge in organic rice cultivation is felt to be very beneficial for farmers.

Unlike some farmer groups that have members and management who are active in finding market information such as the Sehati farmer group. The Sehati farmer group already has a market in marketing their organic products. This group has consumers even from Riau and surrounding areas. Some consumers also buy rice directly from farmers, and this benefits farmers economically. Besides that, this farmer group is also active in processing manure and vegetable pesticides. This is supported by the success of the group in breeding aid cows from the government to reach 72 head of cattle, and can produce tons of manure every month. This advantage is also one of the sources of farmers' income, resulting in additional income for farmers. Thus the members of the Sehati farmer group persist in carrying out the organic rice farming system even though there is no incentive from the government anymore.

Farmers in Limapuluh Kota Regency started organic certification in 2010. The number of farmers groups that received organic certification increased in 2015. In the process of registering organic rice certification, there were several obstacles for farmers. The main obstacle is the process of recording organic rice cultivation activities. One of the weaknesses of farmers is the absence of

accounting activities or financials from cultivating their plants. Making it difficult for farmers to record their organic rice cultivation activities.

In terms of the benefits of organic rice certification, there are some reason for that. One of the benefits obtained by farmers is their own pride if they got organic certification. Farmers feel the existence of their agriculture has been recognized by many people. The second biggest benefit is an increase in the income of organic rice farmers. With organic certification, their organic rice sales are increasing and also their selling price is biased above the selling price of ordinary rice. However, some farmers feel that this organic certification has no benefit at all. Nearly 20% of the sample considered organic rice certification to be of no benefit to farmers.

A total of 31 farmers claimed to experience obstacles in carrying out organic certification, and most were due to the complicated process of recording organic rice and had to be done every day during the planting period. In addition, obstacles also occur when submitting organic certification, documents submitted to LSO are often wrong and / or judged to be inappropriate by LSO and returned to farmers, which causes farmers to revise these documents, and then return to LSO for inspection again. This document error often occurs which causes farmers to become unenthusiastic, draining energy and costs for transportation from Limapuluh Kota Regency to LSO located in Padang City. The validity period for organic rice certification is 2 years. After 2 years, farmers must re-register to get organic certification. Nearly 80% of farmers in Limapuluh Kota Regency continue their organic certification.

The government developed an incentive program, where farmers will receive Rp. 250 per kilogram of rice produced by farmers. The incentive itself is an award in the form of money given by the leaders of the organization to employees so that they work with high motivation and achievement in achieving organizational goals. In Lima Puluh Kota District, almost 60% of farmers get organic incentives. Utilization of organic incentives is almost entirely used for household needs of farmers. Only some farmers are able to use it as an organic farming requirement. This also caused failure in providing organic incentives to develop organic agriculture in Lima Puluh Regency City.

In general, organic farmers are found to continue to carry out organic farming activities even though there is no incentive program. If there is another incentive program, farmers do not reject and still want to do an organic rice farming system. However, not all farmers are pro to incentive programs from the government, there is one resource person who is counter to the program. The con is, with an incentive program it can cause social jealousy between group members and between one group and other farmer groups. In addition, there are group members who are willing to increase the amount of harvest from what is actually in the report, in order to receive more incentives. From the results of research conducted, more than 20 percent of farmers do not re-certification. There are two reasons for farmers not to re-certify, which are group decisions (no economic benefit) and the difficulty of certification procedures.

#### **IV. Conclusion**

Organic rice farming in Lima Puluh Kota Regency began in 2005 and Organic Certification began in 2010. Knowledge in organic rice cultivation is obtained by farmers from counseling. Assistance provided by the government for the development of organic agriculture such as cattle, production input, organic incentives and others. The most beneficial assistance for farmers is organic rice extension assistance. While organic incentives are not used by farmers for the benefit of organic rice production and organic certification.

As many as 80 percent of farmers re-certify their organic rice with the main reason is the group's decision and the will of the farmers themselves. While incentives do not include the motivation of farmers in conducting certification. Therefore, it is suggested that the importance of understanding for organic product certification must be conveyed to farmers through agricultural extension and farmer's motivation to re-certify can be one of the considerations for the government for organic rice farming development programs.

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