

Sustainability of Organic Certification in Organic Farming Groups in Padang Pariaman Regency, West Sumatra, Indonesia

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Abstract – This research aims to describe the sustainability of organic certification by organic farmers in Padang Pariaman Regency. A qualitative approach was employed in this research, located in Pariaman Regency, West Sumatra Province from July to October 2023. The research respondents were the group administrators from 8 farmer groups who had received an organic certificate from the West Sumatra Organic Certification Institute in the period of 2015 to 2022. The key informants were agricultural extension workers, administrators of the West Sumatra Organic Certification Institute, Padang Pariaman Regency Agriculture Service staff, and members of the West Sumatra Organic Task Force. The data collected consists of primary data and secondary data. Data were descriptively and qualitatively analyzed in percentages. The results of the research show that there are three categories of farmer group behavior in responding to organic certification: (a) Certification for a period then stopping, (b) certification, extending and stopping, (c) certification, extending and continuing the certification. One organic certification period last for three years, the farmer group has to reapply the administration to extend the certificate. The number of farmer groups that continue to extend certification is also lower than the farmer groups that do not continue certification, around 30%. The research results show that the number of farmer groups that have received organic certification in Padang Pariaman Regency tends to decrease. This decrease in number was also accompanied by a decrease in the number of farmers implementing organic farming in farmer groups that extended their certification for the second period. Several factors identified that caused the low sustainability of organic certification in organic farmer groups were lack of assistance from extension workers, lack of government support, and the complexity in the implementation of organic farming and product markets organic farming and the process certification documents.

Keywords – Organic Farming, Certification, Farmer Groups.

I. INTRODUCTION

An organic farming system is a holistic production management system to improve and develop the health of agroecosystems, including biodiversity, biological cycles and soil biological activity. Organic farming emphasizes the application of management practices that prioritize the use of inputs from waste from land cultivation activities, taking into account adaptability to local circumstances/conditions. If possible, this can be achieved by using culture, biological and mechanical methods, which do not rely on synthetic materials [1]. Organic farming is based on minimal use of external input materials and the avoidance of synthetic fertilizers and pesticides. Organic farming practices cannot guarantee that the products produced are completely free from residue due to general environmental pollution such as air, soil and water pollution, however numerous methods to reduce environmental pollution can be applied [1].

The benefits of organic farming can be categorized into three categories, economic, ecological and social. Economic benefits include minimal costs that can increase farmers' income, ecological benefits such as maintaining and preserving biodiversity, and environmental benefits such as restoring the condition of land that has been damaged due to the use of chemicals (Basuni, 2012) in [2]. According to Mayrowani (2012), in [3] awareness about the dangers posed by the use of synthetic chemicals in agriculture

makes organic farming or sustainable agriculture attract the attention of both producers and consumers. Consumers who are aware of the impact of synthetic chemicals on health will choose food that is safe for health and environmentally friendly, thus encouraging increased demand for organic products.

Indonesia has the potential to become an important player in organic agriculture due to various comparative advantages. Indonesia has quite extensive land for organic farming. There are 11.1 million hectares of abandoned land, most of which can be used for organic farming. Apart from that, technology to support organic farming is quite available, such as making compost, planting without tillage, biological pesticides, and other practices (Khudori, 2014) in [4]

Based on the organic farming system [1] business units that produce, process, import organic products for marketing purposes or market organic products must comply with the implementation of an organic farming system that has been established and proven by an organic certificate. Organic product certification is a guarantee that a product is an organic product. Organically certified products will be easier to trade both locally and internationally [5]. Certification of organic agricultural products is needed to guarantee that the products are actually organically processed and in compliance with established standards. Organic certification is one of the most essential qualities or attributes for consumers when purchasing organic products [6].

Certification is absolutely mandatory for organic farmers to reach a wider market, especially if farmers aim to market organic agricultural products on a global scale. Certification raises the value of Indonesian farmers' products and makes them more appreciated and eventually can impact the selling value of the product. However, the importance of organic certification has not been supported by an increase in the number of certified organic producers [4]. [6] stated that the problem with organic product certification is that the process is lengthy and expensive. Cost is determined by the amount of land and the type of commodity. The organic certificate will be valid for three years, thus growers will need to renew it and pay additional expenditures [6]

The Organic Certification Institute (LSO) is the institution in charge of certifying/verifying that products sold or labeled as "organic" have been produced, processed, prepared, handled and imported in compliance with Indonesian National Certification Agency. In West Sumatra, an LSO provides organic certificates to organic farmers in the West Sumatra, Palembang and Riau regions. Especially for farmers applying for organic certification from West Sumatra, no fee is charged. Despite the fact that farmers can receive organic certification for free of charge, the development of organic farmer groups and those with organic certificates in West Sumatra Province is still insignificant.

According to LSO West Sumatra data, 83 organic certificates were issued by farmers in West Sumatra between 2010 and 2022, with 26 certificates remaining current in 2022. This indicates a reduction in the number of farmer groups with organic certification. Farmer groups with organic farming certificates are dispersed across numerous locations in West Sumatra Province, with Padang Pariaman Regency having the most certified farmer groups since 2010. The purpose of this study is to describe the long-term viability of organic certification among farmer groups in the Padang Pariaman Regency, Province of West Sumatra.

II. RESEARCH METHODS

This study was designed with a qualitative approach, with a case study method. This research was conducted on groups of farmers who had received organic certification in Padang Pariaman district. Data was collected through literature studies and surveys on organic farmer groups receiving organic certificates for the period 2015 to 2022. There are 10 farmer groups receiving organic certificates in Padang Pariaman regency, and 8 out of 10 farmer groups who took part in the study were purposefully selected.

The data collected includes both primary data and secondary data. Primary data was gathered using in-depth interview techniques with respondents, consisting of farmer group administrators and key informants. Data collection uses an interview guide. Secondary data was collected through literature studies, data documentation from the West Sumatra Organic Certification Institute, and the Central Statistics Agency.

Supporting data to strengthen the research results was also obtained from key informants consisting of agricultural instructors at the agricultural extension center in Batang Anai sub-Regency, BPP 2x11 Kayu Tanam sub-Regency, BPP Nan Sabaris sub-Regency and BPP Ulakan Tapakis sub-Regency, Padang Pariaman Regency. Data analysis was carried out using qualitative descriptive methods and percentages to explain the sustainability of organic certification by farmer groups.

III. RESEARCH RESULT AND DISCUSSION

There are 10 farmer groups who have received organic certification from the West Sumatra Organic Certification Institute (LSO Sumbar) in Padang Pariaman Regency since 2010. These groups are distributed across several sub-Regencys, namely Batang Anai sub-Regency, 2X11 Kayu Planting sub-Regency, Nan sub-Regency Sabaris, Ulakan Tapakis sub-Regency, and Sintuak Toboh Gadang sub-Regency. The types of organically certified commodities are dominated by rice commodities, and several vegetable and fruit commodities. This certified rice varieties include white rice and red rice from various varieties, such as Sokan, IR 42, and Anak Daro. The types of vegetables that are certified are also varied, such as cucumber, snake/long beans, spinach and kale.

Because there are no land area criteria for certification, the area of land cultivated utilizing an organic farming system varies between farmers in farmer groups and between farmer groups. There are other farmers who just plant some of their land utilizing an organic farming approach while the rest is grown conventionally or non-organically. The number and name initials of farmer groups receiving organic certificates from 2010 to 2022 in Padang Pariaman Regency are presented in Table 1.

Table 1. Number of farmer groups that received organic certificates for 2010-2022 in Padang Pariaman Regency

No	Year	Number of Farmer Groups	Types of Commodity	Name Initials of Farmer groups.
1	2010	1	Vegetables	KOAH
2	2011	0	-	-
3	2012	1	Rice	SSS
4	2013	0	-	-
5	2014	2	Rice and Vegetables	STO, Aks
6	2015	4	Rice, Banana	BS, PG, TS, Hyh
7	2016	1	Rice	IS 1
8	2017	2	Ricea and Vegetables	STO, ST
9	2018	4	Rice	PG, Aks, Hyh, BS
10	2019	1	Rice	IS 1
11	2020	1	Rice	ST
12	2021	1	Rice	PG
13	2022	2	Rice, and compost	Aks, IS 1

Table 1. shows that the number of farmer groups that have received organic certificates from LSO has decreased and there have been no additional groups applying for organic certificates since 2016. This means that the organizations who have acquired certificates from 2017 to 2022 are farmer groups that have extended their organic certificates, not groups that have applied for certificates for the first time.

From 2010 to 2022, there were only 10 (ten) farmer organizations who have received organic certification. Meanwhile, according to 2020 extension statistics, there are 1,308 farmer groups in the regency of Padang Pariaman. This means that only 0.76% of Padang Pariaman's farmer groups have earned organic certification. This data demonstrates the small number of farmers who practice organic farming.

The research results show that in several groups, the percentage of farmers who implement organic farming in one group is fairly low, ranging from 20% to 60%. The number of members of farmer groups who carry out sustainable organic farming systems in farmer groups that have obtained certificates also continues to decline. Hyh farmer group is one of the farmer groups who claims

that the number of group members who implement organic farming is decreasing. This farmer group acquired for the first time in 2015 with 16 organic participants, then in 2018 the certificate was extended again with 10 participants, and there will be no more members of the Hyh farmer group implementing organic farming in 2021 once the certificate expires. The STO farmer organization experienced the same situation, with a decline in the number of certified members in the second term.

Apart from the change the number of members, the scope of commodities being certified has also changed. Based on data from LSO West Sumatra, the Aks farmer group was one of the groups that received organic certification for the first time in 2014 with the scope of the rice commodity, and this was extended from 2018 to 2021 with the organic rice commodity. In 2022, the scope of the commodity type is recorded as production input (compost fertilizer), whereas the rice commodity is removed from the certification list once its validity period expires in 2021. The results of the research show that there is a tendency to decrease the area of land certified as organic by farmer groups that have previously extended their certification. Field data shows that there were 7 farmer groups that extended their certificates, and 57% of these farmer groups experienced a decrease in the area of land certified.

Based from the results of the research, the farmer groups that have received organic certificates in the Padang Pariaman Regency since 2010 can be divided into three categories of organic certification sustainability, namely: (a) farmer groups that have organic certification once and do not renew it again; (b) farmer groups whose certification lasts for two periods and does not extend it any longer; and (c) farmer groups that always extend their organic certification. The number of farmer groups based on sustainability certification is presented in Table 2.

Table 2. Distribution of farmer groups based on sustainability of organic certification

No	Group Category	Total Number	Percentage
1	Once certification only	3	30%
2	Certification -Extension – Stop	4	40%
3	Certification- Extension- Certification	3	30%

Table 2 shows that 70 percent of farmer groups that previously had organic certification no longer have an organic certificate. A farmer organization that earns an organic accreditation demonstrates that its members practice agricultural cultivation in accordance with organic farming standards. This illustrates that 70% of farmer groups that previously had organic certification, currently have group members no longer practicing organic farming.

The results of field research show that there are several reasons why farmer groups do not renew or extend their organic certification. The main reason the group did not take care of organic certification was because the group members no longer implemented organic farming. Identification in the field showed that the reasons why farmers stopped implementing organic farming after receiving the certificate were: (a) there was no longer any assistance from extension workers and pest observer officers, (b) The application of an organic farming system to large areas of land is considered to be complicated by farmers, (c) the market for organic products is the same as non-organic (conventional) products, (d) farmers consider the supporting facilities for organic farming to be inadequate, (e) attention from the Institute The government's interest in the development of organic agriculture is starting to decrease.

The next reason why farmer groups do not renew certification is that processing certification documents is quite complicated for farmers and the high cost of certification [9]. This is in line with the AOI statement in [7] which states that the high cost of certification is a challenge to the sustainability of organic farming, especially for farmer groups. And it is reinforced in the research results [8] that the certification process discourages certification.

The results of field observations show that the STO farmer group whose certificate has expired but has not yet extended, is still practicing the organic farming. The Covid pandemic and the absence of information from the organic certification body are the main reasons for this condition. This shows that farmers still need assistance and facilitation from assistants, extension workers and organic institutions to carry out certification. This is in line with the opinion of Mandala et al (2018) who stated that although

farmers' attitudes are in the category of agreeing with organic farming, government infrastructure and assistance are needed in order for the implementation of organic farming systems to be sustainable.

IV. CONCLUSION

Based on research conducted on organic farmer groups in Padang Pariaman Regency, it can be concluded that the sustainability of organic certification by farmer groups is quite low. This is evidenced by the fact that there has been no addition in the number of new farmer groups that have received organic certificates in the last three years, only old farmer groups have extended their certificates, there is a decline in the number of farmer groups that have organic certificates, and the majority of farmer groups that have received organic certificates have not extended their certification. Again. Government attention, assistance from extension workers and the availability of supporting infrastructure for organic farming systems can be used as driving elements and encouragement for the sustainability of organic certification by farmer groups.

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