Indonesian Organic Farmers: The Long Journey of Farmers' Groups Towards Organic Farming Sustainability (A Case Study in Rukun Farmers Group, Yogyakarta)

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Abstract. The Rukun farmer group is the first organic farmer group formed in the Yogyakarta region. The Rukun farmer group started organic cultivation through local varieties of rice cultivation in 2006 and received organic certification in 2011 and 2015. The Rukun farmer group became a representative farmer group as a sample in this study in order to identify the issues of organic farming. The challenge faced by organic farmer groups at the moment was the limited support of both funding and managerial parties. This study aim was as one of the preliminary studies to further formulate policies and steps that must be taken to achieve the sustainability of organic farming in the future. The results of the research show that the main managerial aspects of recording were problems that need to be resolved. Farm records based on a web application was expected to be one of the solutions to the problem of managerial aspects. The research was essential as a baseline study to formulate strategic advice to create sustainable organic agriculture in Yogyakarta.

1. Introduction

In the beginning, the organic farming movement was considered controversial by the government since it was contradictory to the government program known as "Supra Insus". Some of the reasons, according to the farmers (at least the group leaders), an "organic" way was chosen because awareness of “some” farmers on land degradation due to high input use, the success of IPM Farmers Field School, fostered by economic crises, the high price of inputs, role of the Catholic church, NGO movement, product price incentive, some Individuals concern on the organic movement. Two types of "organic" rice farming were applied in Yogyakarta and elsewhere. The first one was “Organic” rice farming meant by non-pesticide rice farming (use fewer chemical fertilizers plus manure/compost). This type was usually called semi-organic farming. The second type was pure organic rice farming (use only manure/compost and other natural inputs). The concept of organic agriculture, according to the organic farmers group, were based on the following principles:

a) The freedom of farmers to manage their farm, particularly in choosing a variety to be planted, and fertilizers to be applied.

b) Empowerment of the farmers from being exploited by global capitalism (e.g., fertilizer and pesticide industries).
c) Using inputs that the farmers can make by themselves
d) Farmers can market their products on their own to increase their "bargaining power" and income.

The farmers were now starting wondering of their operation for several reasons as follows:
a) Fast-growing of organic fertilizer industries The organic fertilizer industry exists since 1997 as a new business opportunity. In 1997 it was estimated around 87 brands of organic fertilizers circulated in Yogyakarta. In 2002 about 412 organic fertilizer brands were sold in Yogyakarta. According to the organic farmer group, this situation will threaten the farmers as they will be again highly dependent upon the fertilizer industry. The fact shows that the price of organic fertilizer is higher than the nonorganic one.
b) The role of "some" extension workers from formerly became a personal "agent" of pesticide companies is now changed to be the "agent" of organic fertilizer company. Some organic fertilizer industries also start to invest their business in Indonesia (Yogyakarta), including CNI, a multi-level marketing business that also offers organic fertilizer.
c) Sahani, as a sort of "social business" agent of the organic farmers, should severely compete with new "pure business" agents that start to influence the organic market strongly in Yogyakarta.
d) There are still some farmers who operate organic farming, but they sell the product with the price equivalent to the current rice price.

To guarantee the sustainability of the "organic" movement requires some conditions that should be fulfilled such as
a) The farm operation is more manageable to be in the group (e.g., provision of manure or compost, labor exchange, information sharing)
b) Operated in a specific huge area or blocks where the farmers grow in the "organic" way and preferably isolated from those nonorganic farmers.
c) Irrigation and drainage system should also be managed under a group control system
d) Up to this time group selling system is still required to ensure the farmers of getting a "reasonable" price or "fair trade" system
e) Certification system is needed to ensure the originality of the “organic” product claim
f) Champaign to the consumers especially the middle and upper classes is essential. Two districts in Yogyakarta, namely Bantul and Sleman Districts, have grown more rapidly compared to the other regions.

The rapid growth can be seen from the number of organic groups exist, and the number of farmers joins organic farming. Selling channels and potential buyers are Organic shops, Door-to-door selling (individuals), Supermarket, Farmers group, Hotels, and restaurants [1]. The government has tried to support the development of organic agriculture by launching the Go Organic 2010 Program in 2001 [2][3]. The mission of this program is to develop eco-agribusiness and to increase food security and social welfare. However, the 2010 Go Organic Program has failed, indicated by the small number of farmers adopting organic farming [3]. The organic farming system is relatively new. On the other side, farmers have, for decades, been accustomed to conventional agriculture, which is very agrochemical minded as a consequence of the adoption of the green revolution in the early 70s. Most of Indonesian organic farming is dominated by small-scale farms [4][5].

2. Materials and Methods
This research was conducted at the Rukun Organic Farmers Group and the Agriculture Service Office of Sleman Regency, Special Region of Yogyakarta. Respondents of this study were selected by the census, namely 19 members of the Rukun Organic Farmers Group and four employees of the Sleman
District Agriculture Office handling organic farming. The questionnaire was used as an interview guide with respondents. Furthermore, in-depth interviews were conducted together with the Rukun farmer group management and the Sleman District Agriculture Office. Data were analyzed descriptively and presented in tabular form.

3. Results and Discussion

3.1. About Farmers Group
Rukun farmer groups are in Pakem District, Sleman Regency, Yogyakarta. In its development, this group received intervention from outsiders, including Joglo Tani, a non-government organization, and the Yogyakarta provincial agriculture office. The microclimate climate in Pakem District strongly supports rice farming, including the availability of sufficient water sources throughout the year. The journey of the Rukun farmer group is explained in the following milestone.

a. 2001
2001 was the year of the establishment of the Rukun farmer group. Rukun farmer group members cultivate rice conventionally with local varieties and hybrid varieties.

b. 2006
External party interventions starting this year were marked by the involvement of the Joglo Tani NGO. Joglo Tani provided knowledge about the SRI (System of Rice Intensification) rice farming method. According to the Sampoerna Entrepreneurship Training Center, the main principles in SRI are i) Planting young seedlings less than 12 days after seedling when the seeds are still leafy two strands. ii) Plant one seedling with a spacing of 30x30 cm wide, 35x35 cm, or even rarer. iii) Transplanting should be as fast as possible (less than 30 minutes), and care must be taken that the roots do not break and are planted shallow. iv. The provision of water a maximum of 2 cm (mulititation) and a certain period is dried until it breaks (intermittent irrigation is interrupted). v. Weeding since the beginning around the age of 10 days and repeated 2-3 times at intervals of 10 days. Wherever possible, use organic fertilizers and organic pesticides [6]. In the practice of dissemination, one farmer land used as a demonstration plot of rice planting with the SRI method.

c. 2008-2011
In 2008, BPPT (Food Crop Research Institute) Yogyakarta Provincial Agriculture Office intervened by bringing the issue of environmentally friendly agriculture. Black Cempo, Mentik, and Red Cempo varieties are the focus of this agricultural development. The Rukun farmer group became a pilot project and was given training in the Integrated Pest Management Field School (SLPHT). The Sleman District Agriculture Office intervened on a mandatory from the provincial Agriculture Office. Furthermore, the Sleman District Agriculture Office encouraged the Rukun farmer groups to take part in organic certification. In 2008-2011, the Rukun farmers’ group received assistance in the conversion process from conventional farming to organic farming. As one of the requirements in applying for organic certification, farmers do manual recording of farming activities. Records are recorded in a book and collected at the group level as one of the certification requirements fulfillment.

d. 2011
The Rukun farmer group received an organic certificate from the Persada Organic Certification Institute (LSO) for the first time. The Sleman Regency Agriculture Office began to be involved in the process of organic farming, but according to farmers, it was not yet too intensive.

e. 2015
Rukun farmer groups apply for organic recertification from the Organic Certification Institute (LSO) Persada. The organic certificate for the second 5 years will expire in 2020.

f. 2018
The number of organic farmers group members who are members of the Five Pillars farmers group is 17 people. The Rukun farmer group faces constraints in the form of a lack of funding to submit recertification, which will expire in 2020.

3. The number of members of the Rukun farmer group still surviving using organic farming methods is only 6. The validity period of the certificate, which will expire in 2020, is not a top priority for farmers.

The results of in-depth interviews show that farmers are very dependent on government funding assistance. When the government does not provide funding, farmers do not feel the need to extend the validity of the certificate. Rukun farmer group members feel the economic benefits from the price of organic rice, which is higher than the price of non-organic rice. On the other hand, the lack of farmer managerial skills and unfortunate institutional governance cause farmers difficulties in funding for organic recertification needs. The institutional independence of the farmer groups is currently not well-formed, so that farmer groups are still very dependent on external funding sources.

3.2. Sustainability
Organic groups are experiencing a setback in the organic farming institutions that have been formed, namely, the absence of guidance and ongoing assistance [7][8]. The lack of guidance affects the motivation of the actors and stagnation in the quality of human resources of farmers [8]. To build a form of sustainable organic institutions, aspects needed include internal factors and external factors. The conflict between the two causes an institution is not sustainable. The internal factors in question are unwritten rules, written rules, member education, leadership, institutional measures, budget sufficiency, and the process of institutional education [9].

3.2.1 Internal Factors
Members of the Rukun Tani group in 2018 numbered 19 people, and in 2019 there were 17 people. The age distribution of farmer group members ranges between the ages of 28-69 years and the average age of 55 years. The farmer's age is categorized as a productive age. Farmers are responsible for innovations. Contrary, in this study, the results show that the age of farmers does not affect the level of adoption and innovation. The majority of organic farmer education is a high school, so that it is considered capable of absorbing innovations. In general, in terms of the characteristics of farmers, members of the Rukun farmer group are classified as being able to adopt organic farming technology [10][11].

| Parameter                        | Max | Min | Average |
|----------------------------------|-----|-----|---------|
| Age (years)                      | 69  | 28  | 55      |
| Farming experiences (years)      | 55  | 1   | 18,7    |
| Organic farming experiences (years) | 14  | 1   | 6,3     |
| Level of education               | S1  | -   | SMA     |
| Years of stay in Pakem (years)   | 69  | 15  | 45      |
| Cultivation area (m2)            | 13,000 | 500 | 2,597   |

(Source: Primary data analysis, 2019)

Based on the main types of work, it is known that only a small proportion of farmers make organic rice farming their main livelihood. With the same percentage, farmers make food and horticultural farming as a source of livelihood. According to Diniyati's and Achmad's research, which was held in 2017, respondents said that being a farmer is considered as the main occupation. Farming provides a steady income and gives a sense of security. The large proportion of the farmer's workforce is devoted
to the agriculture sector, both rice fields and forests [12]. Thus, a job is said to be the main job if it gets the majority of the outpouring of labor and can provide a sustainable income.

Table 2. Percentage of Households with Agriculture as a primary occupation.

| Criteria                               | Percentage (%) |
|----------------------------------------|----------------|
| Rice farmers as the main occupation    | 31.6           |
| Rice farmers as a side job             | 21.1           |

(Source: Primary data analysis, 2019).

An outpouring of labor in the agricultural sector will increasingly decline in farmers whose land tenure tends to be narrow. Farmers with moderate to full land tenure (above 0.5 hectares) tend to allocate more labor in the agricultural sector than other side jobs. Farmers assume that with land tenure above 0.5 hectares, the needs of farm households will be more fulfilled so that the labor flow on side jobs will be less [13]. Based on the Table, it is known that the average tenure of members of the Rukun farmer group is only 2,597 m², which means that the mandate of farmers tends to be narrow. Thus, supported by Table 2, respondents did not mention organic rice farming as their primary occupation. The reason hypothesized as land tenure tends to be below the 0.5 hectares. Farmers need other side jobs, for example, to become horticultural farmers or to become traders to meet household needs. The challenge also faced by farmers is related to climate change. According to farmers, the weather factor that is felt is the uncertain prey infrastructure. Unpredictable weather makes it difficult for farmers to determine the growing season. Besides, farmers also feel an increase in pest attacks, although according to farmers, these pest attacks have not reached the stage of harm.

3.2.2. External Factors
In the development of organic agriculture in general, several things are suspected as external factors that influence the dynamics of the intensity of implementation. External factors referred to this research are various aspects that exist outside of the farmers or farmer groups. Both forms of things have a positive or negative impact on the sustainability of organic agriculture. Based on interviews with farmers and local governments in Sleman Regency, the following explanation will explain how the component of external factors plays a role in the sustainability of organic farming activities.

a. External Factors-Positive Impact

Village Government Support: Village Funds for Organic Certification
The cost of organic certification, which usually reaches forty million, is not small for an organic farmer group. The charge is considered very expensive for farmers groups so that it can affect the sustainability of the organic farming business. In Sleman, the government provides Dana Desa to support organic certification for supporting organic farmer's groups. The village government realizes that organic farmer groups are valuable assets for their villages and can improve the welfare of local farmers. Village government support in this case study shows that as an external factor, it has had a positive influence on the sustainability of farmer groups.

Support from NGOs: Training and Assistance
The involvement of NGOs was stated in 1997 following the reformation movement, but they were formerly with no concept about organic farming. In Yogyakarta, there are many NGOs who are involved in the organic farming movement are Mitra Tani, Cindelaras, etc. The role of NGOs became so intensive following the financial support of some international NGOs such as Oxfam during 1998-2001. By their support, then a consortium selling shop for organic rice named "SAHANI" was founded. "Sahani" is one of the few shops selling organic products in Yogyakarta. It was set up in July 1997 by the Consortium of "Fair Trade Community," funded by Oxfam, an NGO that is promoting fair trade based in England. The shop is formed as cooperative, which is supported by around twelve organic farmers.
The supporters are the group from East Java (Ngawi), nine groups from Central Java (Srangen, Boyolali, Klaten, Magelang, Muntilan), and three groups from Yogyakarta (Bantul) with a total member around 500 farmers.

The shop is specializing in selling non-pesticide and "organic" rice produced by "organic" farmers. In each month, Sahani has a different stock of rice for a diverse variety. The selling target is 10 tons per month. Strong relation with the organic farmers' groups (as the partners) is always maintained through a written agreement on cooperation. The deal comprises of (1) quality of rice to produce for each season, (2) price of rice at the farmers level, (3) marketing cost for Sahani (Rp 450/kg), (4) order, delivery, and selling, (5) profit sharing, (6) loss sharing, and (7) reporting, (8) capital sharing. Providing updated information about the price change, consumer preference change, and type of variety is another effort to maintain a good relationship with the group members. Sometimes Sahani initiates a gathering between the groups with the consumers or encourages the groups to involve in the food exhibition actively. On the other hand, Sahani needs the latest information from the groups such as planting schedule, amount of rice that can afford, type of rice, and the price at the farm level.

The above description illustrates that organic farming as a piece of new agricultural knowledge and practice cannot necessarily be given and abandoned to farmers without being followed up with a follow-up. The presence of NGOs as an external factor also provides facilitation so that products can be marketed to consumers. Farmers cannot be released just like that; after receiving training, farmers still need to be guided and accompanied until the product can be produced and distributed to consumers.

Influence of other farmer groups: Success imitates The desire to imitate other activities that are considered successful is one way to accelerate changes in someone's behavior. Likewise, also with the progress of the Farmer Group, from the beginning, not decided organic then followed in the footsteps of other farmers to do organic farming.

Initially, the dissemination of organic rice farming was limited to the members of the group since not all the members applied the organic way. After then, more organic "followers" join the group as well as grow in "organic way" along with the growth of the "Circle of Friends." According to the leader of STPN-HPS, the majority of the farmers who apply organic farming are old farmers. This is mainly because most of them can feel the difference and compare the farming operations before the "green revolution," and after the green revolution. Up to the year 2003, 27 Sustainable Farmers' Groups (Sustainable Farmers' Groups) have been formed and are distributed in eight sub-districts: Bambanglipuro, Pundong, Pandak, Kretak, Sedayu, Bantul, Jetis, and Sanden.

Other examples, in Sleman, The "embryo" of organic farming activities in Sleman was initiated in 1995 through farmers learning forums known as "Farmers Learning Containers" (WBP). This forum was established in response to the Second World Food Day Commemoration held in Wates sub-district, the district of Kulonprogo, in 1991. The groups of organic farmers have not yet been well recorded. Nevertheless, roughly there is about ten organic farmers group in Sleman. One of the active groups is namely"GAPOKTAN" (Association of Farmers Groups). According to the leader of this group, the organic rice farmers in Sleman are pioneered and dominated by IPM-FFS farmers (about 70%).

The planting area of the organic farmers' groups is estimated at 35 hectares. The existence of organic farming in Sleman could not be separated from the IPM-FFS Program. The organic farming concept was born from the FFS alumni under the Farmers Learning Forum ("WBP"). So the main contributors to organic farming came from the FFS farmers and purely initiated by the FFS farmers. Along with the development of the organic movement, the group of FFS farmers was also developed. In July 1999, the Indonesian Association of FFS Farmers Group, known as IPPHTI (Integrated Pest Control Farmers' Association), was established. A similar association was also found at the provincial level. This time the IPPHTI exists in 12 provinces in Indonesia.

The organic farming movement is getting popular in Sleman District for some reason. The reason is that organic farming is an actual problem in Sleman Regency. This action was strongly supported by the
District Agriculture Officer, and collaboration between the distribution of fertilizers between organic plants (Dua Alam Rahayu, SupraNus, Kleco Group, CNI). It is interesting that based on their experiments and experiences, the organic farmers' group (GAPOKTAN) has made some "analytical" estimations of the "organic" rice yields. According to the leader of the group, to reach a stable and fully organic production, it takes at least about five years. In this case, the testimony of success becomes a powerful tool for introducing new ideas to other farmers.

**Personal Contribution: Mentoring by PPL after SLPHT**

The extension agents play an essential role in innovation's dissemination. Meeting the farmers is such an excellent way to influence farmer's behavior. Farmer group members feel a change in their farming by the presence of extension workers who are always present and present in community activities, both directly and indirectly. The extension workers continuously promote technology to the community. Technology transfer is carried out by an instructor with various approaches both through meetings to groups, visits to the homes of group members and group administrators, and direct visits to farmers' planting sites.

**b. External Factors-Negative Impact**

**Government Intervention: Dissemination and Training without assistance**

Socialization organic agriculture's benefit has been carried out by the government, through the Ministry of Agriculture and local governments at both the provincial and district levels. Even organic farming training has also been carried out in selected farmer groups. However, whether any socialization and training can guarantee that the 'new' knowledge gained can initiate and change farmers' behavior. The Organic Agriculture Program has officially started since 2014, which is a follow-up to the "1000 Organic Villages" Ministry of Agriculture Program. The case study in Sleman provided an exciting finding that the idea of developing organic agriculture began to be developed after seeing farmers' willingness and ability. Farmer's ability was the outcome of SLPHT, such as the concept of healthy agriculture, knowledge of pests, and diseases. The organic agriculture program was not yet an official program from the Dinas at the time. It was a personal initiative from the agricultural service staff to help the Farmer Group by regularly holding meetings with the KT on the sidelines of the time he worked.

The following experience in Sleman illustrates how the effectiveness of Sleman Regency began training in organic farming through the Organic SL Program in 2017. This experience in Sleman can be a lesson learned that the government, as an external factor in the sustainability of organic farming, has not fully supported it. Changes in farmers' knowledge through media outreach and training activities do not guarantee that behavior will change. Therefore, the government should plan training activities to be accompanied by ongoing actions and designed together with farmers as the target group.

**3.2.3 Conflict**

One of the challenges of the sustainability of organic farming is the ability of farmers to be able to provide organic guarantees for products produced through organic certification. There are several problems in obtaining an organic certificate. The restrictions are including recording and implementing organic principles, organizational management, certification financing.

*a. The application of organic cultivation’s principles and farming was recorded.*

Organic rice farmers generally define organic farming with various answers. Some farmers said that chemical pesticides are not allowed in organic agriculture. Other farmers represent that organic chemical fertilizers are not authorized, but most of them understand that organic farming does not use both of them. This situation shows that there are still many farmers running organic farming using chemical inputs in the form of fertilizer as a starter at the beginning of the farming business process. The chemical input is in a tiny amount.
Table 3. Percentage of Farmers based on components.

| Components         | Aspect                          | Percentage (%) |
|--------------------|---------------------------------|----------------|
| Organic Definition | Without chemical pesticide (%)  | 11             |
|                    | Without chemical fertilizer (%) | 11             |
|                    | Without both of them (%)        | 78             |
| Organic status     | On process (%)                  | 0              |
|                    | Organic (%)                     | 100            |
| Chemical Input     | Without chemical input (%)      | 68             |
|                    | With chemical input (%)         | 32             |
| Certified organic seeds | Yes (%)                  | 26             |
|                    | No (%)                          | 58             |
| Contaminant free water source | Unknown (%) | 11             |
|                    | Yes (%)                         | 53             |
|                    | No (%)                          | 21             |
| Farm Recording     | Unknown (%)                     | 21             |
|                    | Yes (%)                         | 32             |
|                    | No (%)                          | 68             |

(Source: Primary data analysis, 2019)

Organic certificates that can be received by farmers can be obtained when their rice farming business processes are entirely organic. Farmers included in the organic process category are farmers who are still working on the condition of the land and the system of cultivation towards organic. The farmers treat the soil by providing barriers to others, applying a water filter system, and restoring soil nutrients and nutrients through various natural inputs.

Some farmers still use synthetic fertilizer inputs but in minimal doses. Synthetic fertilizers such as urea and NPK are intended as a starter in the early stages of growth. The maximum dose of urea must be five kilograms per 1,000 m². In principle, the Organic Certification Institute (LSO) does not apply SNI to the Organic Agriculture System 100% in the assessment to issue organic certificates. This evidence is by the relaxed use of inputs in the form of synthetic fertilizers that are regulated at a reasonably low dose. Most farmers (26%) have used certified organic seed. The use of non-organic seeds is still allowed as long as they do not use GMO seeds. The application of the principle of organic farming has some leeway. It can be compensated with improvements to the cultural process when the shortage is minor to be able to get an organic certificate.

The absolute requirement must be met by the group, in this case, farmers, administratively is the ability of farmers to be able to show records of farming for at least three years in an orderly manner. This record contains all the activities carried out by farmers for three years in applying the principles of organic farming on their respective lands. Proven after getting the first organic certificate, currently, there are only 32% of farmers who still do the recording of their farming. The rest is equal to 68%, no more extended records farming. Farming records function for supporting documents in making decisions and controlling the cultivation, as well as materials required to get organic certificates.

b. Organization Management and Certification Financing

Organic farmer groups need to have a transparent organizing system and be able to carry out their functions properly. Rukun Organic Farmers Group has a management system problem, especially the marketing division, which is separate from the organizational structure. The farmer group only has the task of ensuring the application of the principles of organic farming carried out by the farmers below. Farmers sell harvested crops to 2 people who are tasked with finding markets with the purchase of more expensive organic grain (MPD), which is the average price of IDR 6,000/kg (Primary Data, 2018) than conventional with an average of IDR 4,800, /kg (BPS Sleman Regency, 2017). The flow of money that
goes to all farmers in the form of profits from farming in one year from the sale of organic rice is IDR 115,995,000 per year (Primary data, 2018). Funding for organic certification is IDR 40,000,000 valid for five years (Persada, 2015). With a simple assumption if each farm sale is subject to 10% Profit Sharing by the farmer group, then a fund of IDR 57,997,500 will be obtained for five years. This fund is actually enough to finance certification independently. However, these economic benefits only flow mainly to two streams, namely to farmers and to marketers who are not, in fact, the Farmers Group itself. In the end, this group always does not have special cash prepared for future recertification funding.

3.2.4 Alternative Solutions
Based on the problems that have been described, related to efforts to establish a sustainable organic farming institution, alternative solutions are needed. The fact of farmer groups experience issues related to the limitation in managerial skills is especially those associated with the application of the principles of cultivation and recording, and the solution is to record the farming. Farm notes are important because:

a. The farmers can get information that is the basis for making decisions [14]
b. Concerning certification and recertification of organic agriculture, the farm record is useful as a track record used to determine what inputs are used by farmers. Thus, the control function can be run through the farm record.

As one step to facilitate recording is through the farm record application. Farm records can function as a source of information in conducting farming activities to assist farmers in making managerial decisions — database of farming activities that can be used by various parties as a basis for policymaking. External stakeholders (Dinas) need to pay attention to the rules of the stages of community empowerment [15][16]. These rules are (a) Stage of awareness and formation of behavior towards conscious and caring practice. (b) Capability transformation stage in the form of knowledge insight, skills to be clear insight, and provide necessary skills. (c) The step of increasing intellectual abilities and skills, so that innovative initiatives and abilities are formed to deliver independence [15]. The independence stage of the institution is characterized by the agency’s ability to carry out managerial activities. At this stage of independence, it is hoped that farmers will no longer depend on external funding sources.

4. Conclusion
In order to create sustainable institutional farmer groups, awareness, and initiative of the farmer groups themselves to realize organic-based agriculture. The increased managerial capacity of farmers is needed to manage their farms and farmer group institutions, so that independent farmer groups are formed. The Office as an external stakeholder should apply the principles of awareness, development, to the stage of group independence to realize sustainable organic farming institutions.

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