

## Research Article

# Strengthening Riau Province's Oil Palm Policy Based on Strengthening Local Institutions in Riau Province Bengkalis

Almasdi Syahza\*, Geovani Meiwanda, Dahlan Tampubolon

Universitas Riau, Indonesia

**ORCID**

Almasdi Syahza: <https://orcid.org/0000-0001-8307-9452>

**Abstract.**

Improving sustainable management of oil palm plantations, providing legal certainty, maintaining and protecting environmental sustainability, including reducing greenhouse gas emissions, and increasing the development of oil palm farmers as well as the productivity of oil palm plantations. The policy aspect of considering sustainable development is something that cannot be missed, it must be discussed in an academic text on an oil palm plantation policy. So we need a model that minimizes the complexity and contestation that often appears in the area of oil palm plantation policy. After the research is carried out, it is expected to be able to formulate policies. These findings are useful for the government as part of the implementation of oil palm plantation policies, while still prioritizing the sustainable development aspect. This policy model can later be developed with the birth of strategies and activities that are interconnected in the development of oil palm plantations in Riau Province because it needs support from many stakeholders. So far, the existing policy pattern is top-down, and the dynamics between implementor actors and target groups in the field sometimes differ from the main objectives of the public policies that have been formulated so far. This research will provide new insights into a constructive policy model with a microscope because it is about public and private goods, which provide benefits for the government and welfare for smallholder plantations to oil palm farmers.

**Keywords:** palm oil policy, smallholder plantation, sustainable development

## 1. Introduction

The development of smallholder oil palm plantations in Indonesia began with the plasma nucleus organization in the plan of the People's Organization (PIR) in 1979. Promising oil palm, communities around large plantations began to look for ways to develop oil palm freely from year to year so that the plantation area oil palm is growing. Data from

Corresponding Author: Almasdi Syahza; email: [almasdo.syahza@lecturer.unri.ac.id](mailto:almasdo.syahza@lecturer.unri.ac.id)

Published 6 March 2023

Publishing services provided by Knowledge E

© Almasdi Syahza et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the IAPA 2022 Conference Committee.

 OPEN ACCESS

the Directorate General of Plantations, Department of Agriculture of the Republic of Indonesia, Riau Region is the largest major producer of palm oil in Indonesia which is recorded to have an area of palm oil plantations of approximately 2.5 million hectares with development of 7.4 million tons in 2019. Riau Province has The plantation area in 2019 was 2,537,375.00 Ha which was dominated by the existence of People's plantations covering an area of 1,444,594 Ha in 2019.

The development of the agricultural sector in Riau Province is still an important sector in encouraging the acceleration of regional development. In efforts to increase the productivity and quality of fresh fruit bunches produced and reduce the risk of illegal land clearing in Indonesia, the government has created a national program which is called the People's Palm Rejuvenation Program (PSR). Oil palm rejuvenation is the process of replacing unproductive oil palm plants with new plants with the application of Good Agriculture Practices (GAP). The development of oil palm plantations cannot just happen, two main challenges must be considered, namely:

1. How to increase productivity (currently low productivity, an age that has reached 25 years, unclear seedling problems, and others).
2. Implementation of sustainable palm oil programs such as certification of Indonesian Sustainable Palm Oil (ISPO), Roundtable on Sustainable Palm Oil (RSPO), land legality, business legality, and access to certification are still low. Smallholder palm oil rejuvenation is also a very crucial activity because as a strategic program Nationally during the tenure of President Joko Widodo and Vice President Jusuf Kalla to improve oil palm productivity and also improve the economy of farmers in Indonesia.

The people's Palm Oil Replanting Program (PSR) and known as replanting is an effort to develop smallholder oil palm plantations by replacing old plants with new certified plants. This program of People's Palm Oil Replanting activities has been regulated in the Regulation of the Minister of Agriculture of the Republic of Indonesia Number: 7 of 2019 concerning Human Resource Development, Research and Development, Rejuvenation, and Facilities and Infrastructure for Oil Palm Plantations. Oil Palm Plantation Rejuvenation. In this smallholder palm oil rejuvenation program, the role of the government through the Palm Oil Plantation Fund Management Agency (BPDPKS) is to allocate a rejuvenation fund of Rp. 30,000,000/-/ha with a maximum area of 4 hectares/planter, for those who fulfill administrative aspects consisting of the productive age of the planters, the size of the planter's land, the legality of the planter's land, and the address/place of residence of the planter (1).

The development of the agricultural sector to date is quite rapid in Indonesia, especially the plantation sub-sector which has been developed in Sumatra and Kalimantan. Especially in Riau Province, oil palm is a prima donna commodity that is widely cultivated by the community and business entities. The results of the 2020 Sumatra Ecoregion Development Control Center study show that the actual area of oil palm plantations in Riau Province is  $\pm 4,170,482$  ha or about 46% of the total land area of Riau Province. The proportion of large plantations is 795,485 ha (19.1%) and people's plantations are 3,374,996 ha (80.9%). Farmers prefer oil palm because it is more profitable than other plantation crops (2). This creates a very high public interest in participating in oil palm farming.

The development of oil palm plantations in the Riau Region has contributed to the economy both regionally and nationally since the 1980s. The age of oil palm plantations in Riau Province in general has reached 25-30 years, while the optimal age of oil palm is only 25 years. The government and the private sector should make efforts to rejuvenate oil palm, which is the time for rejuvenation (3). Based on data from the Riau Province Plantation Service, the area of oil palm plantations based on the year of planting and the potential for rejuvenation during the period 2021-2030 is 687,562 ha with the assumption that the optimal age of oil palm is 25 years, prioritizing smallholder oil palm plantations. The gardens that will be rejuvenated are spread over 10 districts/cities in Riau Province.

The Riau region has the largest oil palm plantation in Indonesia, which in 2021 was recorded at 4,170,482 ha with a total palm oil production of 8.72 tons or contributed 24.66% to the total production of palm oil in Indonesia. In connection with the resources owned by Riau Province, the Center of Excellence at the University of Riau has one focus on food and natural resource self-sufficiency with the sub-focus being plantation development and increasing food security. The development of oil palm in Riau has entered the second cycle, meaning that in the next 25-30 years, plans for its rejuvenation and development must take into account sustainable development (4).

The development of oil palm plantations, which began in the 1980s, continues to grow today. Statistically, the cumulative area of oil palm plantations is 4,170,482 ha. However, there are still small-scale plantations that have not been identified, especially ownership of less than 10 ha. In accordance with the age of oil palm plantations ranging from 25-30 years, the potential for rejuvenation in the future will require a fairly high investment.

## 2. Theoretical framework

### 2.1. Local Institutional

The participation of farmers in groups or institutions of oil palm farmers, more or less helps farmers identify problems that will occur and try to prevent or overcome them so that activities can run as desired. Participation in institutions also determines technical and management skills or abilities in managing a business. The longer he joins the farmer's institution, the more experience he receives. Therefore, participation in institutions will help farmers to prevent things that can cause business losses (risks).

In rejuvenating and maintaining oil palm, farmers need production facilities such as oil palm seeds, fertilizers, and pesticides. The obstacle faced by farmers is often the problem of availability of superior seeds which are quite difficult to obtain (1). Even if it is quite available and easy to obtain, the price is relatively high. This is in accordance with the opinion of who stated that the difficulty of obtaining subsidized seeds, fertilizers, and medicines was felt and disturbed the farmers. Thus this affects the decision-making of farmers in making plans. With sufficient availability and ease of obtaining inputs for production, farmers can easily and smoothly participate in discussion forums and make plans for the expected oil palm rejuvenation (2). This is in line with my opinion. The behavior of farmers in setting new ideas is influenced by the availability of production facilities and the various obstacles faced by farmers make it difficult for farmers to manage their farming.

Based on the results of interviews in the field, the stages of rejuvenation activities carried out include felling, cultivating the tree, census, planting point planting, making planting holes and planting oil palm. From these activities, the most important inputs needed are oil palm seeds. If oil palm seeds are not available and difficult to obtain, replanting cannot be done (3). Suggested that oil palm rejuvenation is an activity to replace old oil palm plants that are no longer economical with new oil palm plants. It cannot be called rejuvenation if the old plants are not replaced with new plants or even nothing is planted so that the farmer's garden will look barren. So, if the inputs needed are available and easily available, oil palm rejuvenation can be carried out properly. Without oil palm seeds, farmers also cannot do embroidery after replanting activities are carried out (4).

In carrying out maintenance, farmers need production facilities to support maintenance activities to be more optimal. The availability and ease of finding the production facilities needed at the nearest kiosk or cooperative have made it easier for farmers

to carry out maintenance (5). If the required production facilities are not available and it is difficult to obtain them, it will be troubling for farmers because the maintenance of farmers cannot be carried out properly. the availability of adequate facilities and infrastructure can assist farmers in applying technology related to fertilizers, pesticides, and seeds obtained from training or courses (6). Thus, the availability of production facilities is related to the participation of farmers in the implementation of the People's Palm Oil Rejuvenation (PSR) program.

Farmers play an important role in rejuvenating oil palm plantations. The success of innovation and adoption of plantation management technology that continues to grow through the changing flow of information technology. Human resources who have adequate knowledge and skills will respond quickly to technological innovations that lead to increased crop productivity and production quality (7). Farmers' access to working capital is guaranteed by formal financial institutions such as state banks or national private banks. The problem is that the distribution of working capital must be supported by government policies in order to achieve efficient conditions in the distribution of working capital and provide maximum benefits. The high contribution of funding from financial institutions was one of the key success factors in the development of oil palm plantations in the past. One of the government's policies in providing capital for oil palm farmers is the provision of credit with interest subsidies for plantation revitalization (8)

The behavior of farmers in managing oil palm plantations is very decisive in achieving sustainable conditions. Government policies must be able to encourage farmers in managing their gardens so that land productivity is maintained. The government's policy package in the procurement and distribution of production facilities, plantation extension, and adoption of recommended technology should be packaged in a simple and pro-farmer formulation. Local governments are increasingly playing an important role in community empowerment, development, and management of natural resources, including oil palm plantations or other activities. There are at least 3 aspects of rural institutional development including Gapoktan that need to be considered, namely (1) the context of regional autonomy, (2) institutional development as a form of empowerment, and (3) institutions as a way to achieve local independence.

### 3. Method

The research was conducted through a survey with the developmental method (Developmental Research). The purpose of developmental research is to investigate the

pattern and sequence of growth or change as a result of development policies. To obtain accurate information, the RRA method or rapid rural appraisal by Alam et al and McCracken et al, which is a participatory approach to obtain general information and assessment in the field in a limited time.

In this RRA method, the information collected is limited to the information needed in accordance with the research objectives. To reduce deviations caused by the subjective element of the researcher, every time after conducting interviews with respondents, a preliminary analysis is carried out. If a data error is found more than expected because it is caused by erroneous information or misinterpretation, confirmation of the source of information is carried out or additional information is sought so that more complete information is obtained.

## 4. Result and Discussion

Indonesia's palm oil prospects will improve because production is no longer primarily intended for export after the needs of domestic industries (especially cooking oil) are met. The bio-diesel policy that continuously increases the proportion of vegetable oil (palm) from 20%, 30%, 40%, and 70% will increase domestic demand for CPO to be processed into fuel oil (BBM). This will result in CPO prices and subsequently, FFB prices will be relatively more stable because they do not depend entirely on fluctuations in world prices.

To finance the rejuvenation of people's palm oil, through Presidential Decree no. 61 of 2015, Indonesia established the Plantation Fund Management Agency (BPDP) for the Head of Palm Oil which was collected from CPO exports (4). Thus, the funds managed by BPDP do not come from the state budget but are the result of the oil palm community self-help. So far, 35 trillion rupiahs have been collected, but only 10% of the funds have been disbursed, which is mainly for the rejuvenation of people's palm oil. The use of BPDB funds includes; stability and development of the oil palm market, rejuvenation of plants, facilities, and infrastructure, development of human resources (HR) and education, research and development, promotion, and advocacy. The main program is the rejuvenation of smallholders' plantations and the construction of facilities and infrastructure for the empowerment of small farmers (9). To take advantage of the Palm Oil BPDP grant, planters must form a farmer group forum or oil palm cooperative (institutional requirements) and the legality of the farmers' land.

The high potential for oil palm rejuvenation in several areas, especially in Riau Province, requires efforts to increase the production and quality of fresh fruit bunches (FFB) (10). The existence of farmer groups can be a good forum for farmers to be able to assist them in increasing the amount of production and quality of palm fruit produced by the community, thus the role of the government is needed to form these farmer groups (11).

Farmers have high motivation to participate in the implementation of the People's Palm Oil Rejuvenation (PSR) program for many reasons, including to increase the sense of solidarity among fellow farmers, the awareness among farmers that rejuvenation needs to be done and it is time for their oil palm plants to be rejuvenated, then there is capital assistance provided by the government as a solution to ease the burden on farmers who face capital problems. Stated that most farmers have a strong motivation to do replanting because farmers realize the importance of replanting so as not to lose their livelihood. Another motivation for farmers is the existence of grants (grants) for pilot demonstration plots from the government. Other farmers who have seen the pilot demonstration plot and also saw firsthand the implementation process and the results obtained made farmers want to participate in carrying out replanting (12).

In addition, farmers have high motivation because they feel that they get the ease of work in the technical implementation of oil palm rejuvenation with the availability of heavy equipment used in oil palm rejuvenation techniques (13). So farmers also realize the importance of monitoring and evaluating the implementation of oil palm rejuvenation activities carried out. Farmers also think that by participating in oil palm rejuvenation activities, they can increase the value of their farming business by increasing their productivity and income. For farmers, participating in the implementation of the People's Palm Oil Rejuvenation (PSR) program is considered very beneficial to improve their welfare (14).

Oil palm replanting is a new innovation for farmers, but farmers also have their own concerns about losing their source of income while their oil palm plantations are rejuvenated (15). Based on the conditions in the field, farmers carry out oil palm rejuvenation and are willing to take risks because they realize the importance of replanting(16). Thus, farmers are not reluctant to spend energy and money as well as time and thoughts that are willing to be spent in planning, implementing, monitoring, and evaluating the rejuvenation and maintenance of oil palm plantations (17).

For the Bagan Batu area, Rokan Hilir Regency, Riau Province, the first to receive this replanting assistance were Pelita and Sukamaju Villages which were carried out

by KUD Subur Makmur. KUD Subur consists of 200 people, with a land area of 400 ha. After the age of the oil palm reaches the age of 31 years with production that is no longer productive, the KUD Subur Makmur management proposes replanting or the People's Palm Oil Replanting Program (PSR) in 2018 through BPDPKS (Palm Oil Palm Plantation Fund Management Agency) funds. The proposed land area of 328 Ha, which was realized was 266 Ha.

Smallholders are aware of their obligation to monitor and evaluate the implementation of oil palm rejuvenation in order to find out what are the shortcomings and improvements for the future. farmers make improvements to mistakes that have been made before and will be more careful in acting to increase income. The longer a farmer cultivates his business, it can be said he has a lot of experience. This experience will help him to prevent things that cause business losses (18).

The participation of farmers in groups or institutions of oil palm farmers, more or less helps farmers identify problems that will occur and try to prevent or overcome them so that activities can run as desired. Participation in institutions also determines technical and management skills or abilities in managing a business. The longer he joins the farmer's institution, the more experience he receives. Therefore, participation in institutions will help farmers to prevent things that can cause business losses (risks).

In rejuvenating and maintaining oil palm, farmers need production facilities such as oil palm seeds, fertilizers, and pesticides. The obstacle faced by farmers is often the problem of availability of superior seeds which are quite difficult to obtain (19). Even if it is quite available and easy to obtain, the price is relatively high. This is in accordance with the opinion of who stated that the difficulty of obtaining subsidized seeds, fertilizers, and medicines was felt and disturbed the farmers. Thus this affects the decision-making of farmers in making plans. With sufficient availability and ease of obtaining inputs for production, farmers can easily and smoothly participate in discussion forums and make plans for the expected oil palm rejuvenation (20). This is in line with my opinion. The behavior of farmers in setting new ideas is influenced by the availability of production facilities and the various obstacles faced by farmers make it difficult for farmers to manage their farming.

Based on the results of interviews in the field, the stages of rejuvenation activities carried out include felling, cultivating the tree, census, planting point planting, making planting holes and planting oil palm. From these activities, the most important inputs needed are oil palm seeds. If oil palm seeds are not available and difficult to obtain, replanting cannot be done (21). Suggested that oil palm rejuvenation is an activity to



replace old oil palm plants that are no longer economical with new oil palm plants. It cannot be called rejuvenation if the old plants are not replaced with new plants or even nothing is planted so that the farmer's garden will look barren. So, if the inputs needed are available and easily available, oil palm rejuvenation can be carried out properly. Without oil palm seeds, farmers also cannot do embroidery after replanting activities are carried out (22).

In carrying out maintenance, farmers need production facilities to support maintenance activities to be more optimal. The availability and ease of finding the production facilities needed at the nearest kiosk or cooperative have made it easier for farmers to carry out maintenance (23). If the required production facilities are not available and it is difficult to obtain them, it will be troubling for farmers because the maintenance of farmers cannot be carried out properly. The availability of adequate facilities and infrastructure can assist farmers in applying technology related to fertilizers, pesticides, and seeds obtained from training or courses (24). Thus, the availability of production facilities is related to the participation of farmers in the implementation of the People's Palm Oil Rejuvenation (PSR) program.

Farmers play an important role in rejuvenating oil palm plantations. The success of innovation and adoption of plantation management technology that continues to grow through the changing flow of information technology. Human resources who have adequate knowledge and skills will respond quickly to technological innovations that lead to increased crop productivity and production quality (25). Farmers' access to working capital is guaranteed by formal financial institutions such as state banks or national private banks. The problem is that the distribution of working capital must be supported by government policies in order to achieve efficient conditions in the distribution of working capital and provide maximum benefits. The high contribution of funding from financial institutions was one of the key success factors in the development of oil palm plantations in the past. One of the government's policies in providing capital for oil palm farmers is the provision of credit with interest subsidies for plantation revitalization (26)

The behavior of farmers in managing oil palm plantations is very decisive in achieving sustainable conditions. Government policies must be able to encourage farmers in managing their gardens so that land productivity is maintained. The government's policy package in the procurement and distribution of production facilities, plantation extension, and adoption of recommended technology should be packaged in a simple and pro-farmer formulation. Local governments are increasingly playing an important

role in community empowerment, development, and management of natural resources, including oil palm plantations or other activities. There are at least 3 aspects of rural institutional development including Gapoktan that need to be considered, namely (1) the context of regional autonomy, (2) institutional development as a form of empowerment, and (3) institutions as a way to achieve local independence.

Farmers' associations make a fairly high contribution and exceed companies. Companies that have broad authority in managing natural resources, but are still constrained by the fact that the interests of farmers and local communities have not accumulated proportionally (27). With the increasing accumulation of interests of smallholders and local communities, it is hoped that social conflicts will decrease and local wisdom related to the management of oil palm plantations will be maintained. The status of own land tenure and marketing competition for smallholders' FFB is getting tighter between core and non-core PKS and farmers' skills are increasing in managing oil palm plantations, so the orientation of increasing farmers' income seems to be the main consideration to be fulfilled.

By taking into account the contribution of factors and actors as well as the objectives to be achieved, the most possible management alternative is plantation management by farmers who are members of the Association of Farmers Groups (Gapoktan). This is related to the conflict of interest of the company with the interests of farmers. From the economic side, what stands out is the FFB price determination which is dominated by companies, even though a FFB pricing team has been formed. The issue of FFB yield as a component that determines the price of FFB is monopolized by the company so that farmers receive a low price. This condition triggers farmers to change the management of oil palm plantations towards institutional strengthening through the formation of farmer groups associations (Gapoktan). Nationally, the government issued a policy to strengthen farmer institutions in rural areas, namely farmer group associations (Gapoktan) as contained in the Agricultural Revitalization Program. This strengthening is closely related to the role of Gapoktan not only related to increasing commodity production but is expected to be an agent of education for farmers to improve skills and knowledge in doing business and in society. In addition, this movement is also expected as a movement to build social capital which is very important to restore the nation's social cohesiveness.

These things give rise to the idea of finding a better solution for managing plasma oil palm plantations. The current paradigm of oil palm management is the development of local self-reliance in the form of empowering oil palm farmers through farmer groups.

Its characteristics are (a) development oriented to meeting the real needs of the local community (community-oriented), (b) development based on the condition of local community resources (community-based), (c) management of development by local communities (community-managed), and (d) development approach by empowering human resources (empower); justice (equity); productivity, and sustainability.

Business partners who are commercial companies must have several requirements so that they deserve to be given rights and obligations as well as responsibilities in partnership with oil palm smallholders. One of the responsibilities imposed on partners is as a guarantor or a valise of loans provided by the Implementing Bank. Several requirements that must be met by business partners include having 5 M, namely (a) money, having sufficient capital/assets, (b) Man, having reliable human resources, (c) method, having experience, and having various methodologies. which technically can be applied and accepted by participating farmers, (d) material, which has reliable software and hardware to carry out activities on the plantation, and (e) market, which has access to extensive FFB marketing both domestic and international marketing networks.

Farmers need to form oil palm farmer groups, in order to take advantage of better prices, as well as an institutional requirement to obtain assistance from the Oil Palm Plantation Fund Management Agency (BPDPKS). Farmers are entitled to assistance with oil palm rejuvenation costs of Rp. 30 million per ha. In the future, the BPDPKS program will shift from the community oil palm rejuvenation program (PSR) to a production facility, namely the provision of subsidized fertilizers for the development of smallholder oil palm farming. It is recommended for oil palm farmers form a farmer group because the procedure is easier (notary deed). In contrast to cooperatives, which, apart from a notarial deed, require approval from the Minister of Law and Human Rights.

Considering that oil palm farmers in general also manage other agricultural activities (especially food), involvement in farmer groups or agricultural cooperatives is highly recommended to be able to take advantage of coaching/extension programs and other programs run by the government through local revenue and expenditure budget funds. APBD) or the State Revenue and Expenditure Budget (APBN) from the food security budget post. Thus, it is better for oil palm farmer institutions to be separated from farmer institutions, even though the membership is almost identical.

Institutions are organizations or rules, both formal and informal, that regulate the behavior and actions of the community to achieve certain goals. Suardi et al (2016) mention that institutions play an important role in changing people's behavior and mindset, most of which comes from the norms adopted. Institutions are centered on

major social goals, values, or needs. Furthermore, it is said that the institution refers to a procedure, certainty, and guide to doing something.

Institutions are a whole set of ideal patterns, organizations, and activities centered around basic needs such as; family life, state, religion, and get food, clothing, enjoyment, and shelter (Anantanyu, 2011). Institutions also contain meanings, namely institutions and values/norms: an institution that contains values/norms. The values and norms that exist in this institution govern the running of the institution. Meanwhile, agribusiness is a business in the agricultural sector from upstream to downstream which includes all activities including production, storage, marketing, and processing of basic materials from farming, as well as supplying inputs and providing extension services, research, and policies.

Through farmer groups, the process of implementing activities can involve group members in various activities together. The formation and development of farmer groups need to be carried out continuously and directed at changing the mindset of farmers in implementing farming systems. The formation of farmer groups itself aims to create independent farmers who act as objects in agricultural development. Farmer institutions function as a forum for the learning process, a vehicle for cooperation, a unit providing production facilities and infrastructure, a production unit, a processing and marketing unit, and a supporting service unit.

There are about 2,124 hectares of oil palm plantations in Rokan Hilir (Rohil) Regency that can be replanted. As many as 25 farmer groups that oversee the plantations have also submitted an application through Surveyor Indonesia (SI) to get replanting money from BPDPKS. All farmer groups have already submitted applications. There are 12 farmer groups that have entered the verification stage from the Surveyor and the Director General of the Plantation. Those groups are; The Berkah Farmers Group covers an area of 97 hectares, the Maju Bersama Farmers Group 56 hectares, and the Noble Tuah Perkasa Farmers Group 51 hectares. Pujud Tua Sakti Farmers Group 49 hectares, Maju Bersama Farmers Group 77 hectares, Makmur Sari Farmers Group 112 hectares, Tunas Mandiri Jaya Farmers Group 96 hectares, Gapoktan Sejati 234 hectares and Poktan Maju Bersama Sejahtera 105 hectares. Jaya Mandiri Farmer Group 105 hectares, Pujud Barokah Mandiri Farmer Group II covering 57 hectares, Suka Mulya Sejahtera Farmer Group 87 hectares, and Sumber Tani Farmer Group 83 hectares.

There are still 13 other farmer groups left, so far they have not yet entered the verification stage from the Surveyor and the Director General of Plantation. The farmer groups are; The Balai Jaya Poktan covers 55 hectares, the Kemuning Farmers Group

62 hectares, the DTI Bhayangkara I Farmer Group 66 hectares, the Tunas Baru KUD 55 hectares and the Makmur Mandiri Karya Cooperative 78 hectares. New Taruna Farmers Group 58 hectares, Suka So Maju Farmers Group 44 hectares, Prosperous Together 137 hectares, Goma Tani Group 80 hectares, Jaya Makmur Farmers Group 68 hectares, Banyan Farmers Group 67 hectares and Tua Makmur Farmer Group 215 hectares.

Based on the Regulation of the Minister of Agriculture No. 67/Permentan/SM050/12/2016 concerning Farmer Institutional Development. In principle, farmer institutions can be developed from, by, and for farmers in order to strengthen and fight for the interests of farmers. The farmer institutions based on the Ministry of Agriculture consist of: Farmers Groups, Association of Farmers Groups, Association of Agricultural Commodities, and National Agricultural Commodities Council.

The role of farmer groups can be as a learning class to foster farmer motivation in developing smallholder oil palm farming. Through farmer groups, the process of implementing activities involves group members in various joint activities. The formation and development of farmer groups needs to be carried out continuously and directed at changing the mindset of farmers in implementing the agribusiness system. The formation of farmer groups itself aims to create independent farmers who act as objects in agricultural development.

Farmer groups as cooperative media institutions are a forum and a means of building relationships to meet the needs of farming activities run by their members. In addition, to carry out its role as a vehicle for cooperation for group members, group administrators must be able to strengthen, facilitate and at the same time encourage the realization of mutually beneficial cooperation, both between members and with other parties.

## 5. Conclusion

Oil palm rejuvenation institutions are institutions related to the oil palm business in which there are values and norms that regulate them. In oil palm farming, there are various institutions including production facilities, marketing institutions, and extension institutions. The role of farmer institutions in supporting the sustainability of oil palm rejuvenation is very necessary to provide input and consideration for development actors in the context of local economic development. In rejuvenating their oil palm, farmers have working relationships with supporting institutions, such as farmer groups, production input traders, agricultural product traders, extension workers, cooperatives, banks, and local governments. The role of the strength of the local government, which

is in line with the policies of the central government and supported by the current palm oil association, requires a mutually supportive relay so that the bottom-up institutions that are currently being carried out are sustainable.

## References

- [1] Al-Dajani H, Marlow S. Empowerment and entrepreneurship: A theoretical framework. *Int J Entrep Behav Res.* 2013;19(5):503–524.
- [2] Kmiecik R, Michna A, Meczynska A. Innovativeness, empowerment and IT capability: evidence from SMEs. *Ind Manage Data Syst.* 2012;112(5):707–728.
- [3] Salia S, Hussain J, Tingbani I, Kolade O. Is women empowerment a zerosum game? Unintended consequences of microfinance for women's empowerment in Ghana. *Int J Entrep Behav Res.* 2018;24(1):273–289.
- [4] Rusli Z. The implementation of palm oil plantation business licensing. *International Journal of Law and Management.* 2018;60(3):770–776.
- [5] Syahza A, Asmit B. Development of palm oil sector and future challenge in Riau Province, Indonesia. *J Sci Technol Pol Manag.* 2019;11(2):149–170.
- [6] Salia S, Hussain J, Tingbani I, Kolade O. Is women empowerment a zerosum game? Unintended consequences of microfinance for women's empowerment in Ghana. *Int J Entrep Behav Res.* 2018;24(1):273–289.
- [7] Syahza A, Rosnita R, Suwondo S, Nasrul B. Potential oil palm industry development in Riau. *Int Res J Bus Studies.* 2013;6(2):133–147.
- [8] Asmit B, Koesrindartoto DP. Identifying the entrepreneurship characteristics of the oil palm community plantation farmers in the Riau Area, *Gadjah Mada International. J Bus.* 2015 Sep-Dec;17(3):219–236.
- [9] Syahza A. The potential of environmental impact as a result of the development of palm oil plantation. *Manag Environ Qual.* 2019;30(5):1072–1094.
- [10] Syahza A, Bakce D, Irianti M, Asmit B, Nasrul B. Development of superior plantation commodities based on sustainable development. *Int J Sustain Dev Plan.* 2021;16(4):683–692.
- [11] Syahza A, Asmit B. Regional economic empowerment through oil palm economic institutional development. *Manag Environ Qual.* 2019;30(6):1256–1278.
- [12] Syahza A. 2013. Strategi Pengembangan Daerah Tertinggal dalam Upaya Percepatan Pembangunan Ekonomi Pedesaan, dalam *Jurnal Ekonomi Pembangunan*, (Vol 14 No 1), Juni 2013, Fakultas Ekonomi Universitas Muhammadiyah Surakarta.

- [13] Syahza A. 2012. The Institutional Arrangements in the Palm Oil Sector: Effort to Spur Economic Growth in Rural Areas, *dalam International Research Journal of Business Studies*, (Volume 4 No 3). Prasetiya Mulya Business School, Jakarta; 2012 March.
- [14] Syahza A, Backe D, Asmit B. Natural rubber institutional arrangement in efforts to accelerate rural economic development in the province of Riau. *Int J Law Manag.* 2018;60(6):1509–1521.
- [15] Widiati W, Mulyadi A, Syahza A, Mubarak M. Analysis of plantation management achievement based on sustainable development, *International Journal of Sustainable Development and Planning*, Volume 15. *Int J Sustain Dev Plan.* 2020;4(4):575–584.
- [16] Mwanri L, Hiruy K, Masika J. Empowerment as a tool for a healthy resettlement: A case of new African settlers in South Australia. *Int J Migr Health Soc Care.* 2012;8(2):86–97.
- [17] Kmiecik R, Michna A, Meczynska A. Innovativeness, empowerment and IT capability: Evidence from SMEs. *Ind Manage Data Syst.* 2012;112(5):707–728.
- [18] Rokhim R, Wahyuni S, Wulandari P, Pinagara FA. Analyzing key success factors of local economic development in several remote areas in Indonesia. *Journal of Enterprising Communities: People and Places in the Global Economy.* 2017;11(4):438–455.
- [19] Salia S, Hussain J, Tingbani I, Kolade O. Is women empowerment a zerosum game? Unintended consequences of microfinance for women's empowerment in Ghana. *Int J Entrep Behav Res.* 2018;24(1):273–289.
- [20] Conteh C. Public management in an age of complexity: Regional economic development in Canada. *Int J Public Sector Manag.* 2012;25(6/7):464–472.
- [21] Rahman MM, Khanam R, Nghiem S. The effects of microfinance on women's empowerment: new evidence from Bangladesh. *Int J Soc Econ.* 2017;44(12):1745–1757.
- [22] Rosenberg J. Social housing, community empowerment and well-being: Part two—measuring the benefits of empowerment through community ownership, *Housing. Care and Support.* 2012;15(1):24–33.
- [23] Bayulgen O. Microcredit and political empowerment in Azerbaijan and Kazakhstan. *Int J Dev Issues.* 2015;14(2):130–148.
- [24] Lam NM. Business-government relationship in economic development. *Asian Education and Development Studies.* 2016;5(4):362–370.
- [25] Otache, I. Agripreneurship development: a strategy for revamping Nigeria's economy from recession. *Afr J Econ Manag Studies.* 2017;8(4):474-483. <https://doi.org/>

- [26] Scale plantation holders: Indigenous communities in Peninsular Malaysia. *Int J Soc Econ.* 45(2):230-245. <https://doi.org/https://doi.org/10.1108/IJSE-10-2016-0296>