Print ISSN: 2288-4637 / Online ISSN 2288-4645
doi:10.13106/jafeb.2021.vol8.no4.0529

Institutional Strategy of Palm Oil Independent Smallholders: A Case Study in Indonesia*

Khairul ANWAR[1], Dahlan TAMPUBOLON[2], Tito HANDOKO[3]

Received: November 30, 2020 Revised: February 20, 2021 Accepted: March 02, 2021

Abstract

This article aims to describe the institutional structuring strategy of independent smallholders in accelerating sustainable economic development, by taking the example of the cow-coconut integration system (SISKA) problem in Sialang Palas Village, Riau. The method used identified stakeholders related to SISKA; the stakeholder's goals and interests, farmers' social and institutional bases, and self-help farmer socio-economic networks. First, identification of various factors through strengths, weaknesses, opportunities, and threats (SWOT) analysis techniques. Second, through the Modern Political Economy analysis technique. Third, imparting knowledge and skills to the farmers and village officials through a collective learning process in utilizing natural resource waste and social resources. The results showed that the farmer management strategy in the reform era started by clustering the interests of farmers. The dynamics of structuring group relations between the chairman and members with farmers outside the group are the basis for strengthening the local ideology of independence in the future. This institutional structuring strategy that focuses on access to farm power in the village decision-making process encourages a more integrated work of farmer organizations. The analysis above shows that the independent smallholder institutional engineering through regulation, organization, and resources are determined by the farmer household economic factors and the application of the value of local wisdom.

Keywords: Strategy, Institutional Strategy, Independent Smallholder, Palm Oil Industries, Sustainable Resource

JEL Classification Code: Q01, Q15, Q24, Q56

1. Introduction

Palm oil industry plays an important role as a backbone to the economy of many country, especially in many developing countries (Zabid & Abidin, 2015). The supply of palm oil products is still a central issue in international trade. Due to the ever increasing requirement for edible oil and biofuels, currently there are over 30 countries that produce palm oil (Yuan, 2020). Indonesia and Malaysia are major suppliers, contributing around 85% of world palm oil (Arsyad, 2020). Indonesia, being the world leader in the production of crude palm oil, has been successful in serving the domestic and world market with palm products and palm derivatives (Sequiño & Magallon-Avenido, 2015). Energy is a vital ingredient to economic growth in these countries. Even energy production is a key determinant of economic growth (Long, 2020). There is a positive and statistically significant relationship between energy consumption and economic growth over a period of long time, which show that energy consumption contributes more to economic growth. Thus, the efficient use of energy is as important as energy consumption, which is regarded as an important indicator of economic development. US dollar happened to be the main currency for the pricing of crude oil in the international markets (Alam, 2020). Palm oil (*Elaeis guineensis*) is one

***Acknowledgements:**
We would like to thank the Directorate of Research and Community Service (DRPM) for funding this research. Our gratitude also goes to the Rector of the University of Riau, the Chairperson of the LPPM and the parties.

[1]First Author and Corresponding Author. Lecturer, Department of Government Studies, Faculty of Social and Political Science, Universitas Riau, Indonesia [Postal Address: Taman Arengka Indah, Sidomulyo Barat, Tampan, 28293, Indonesia]
Email: khairul.anwar@lecturer.unri.ac.id
[2]Lecturer, Department of Developmental Economy, Universitas Riau, Riau, Indonesia
[3]Lecturer, Department of Government Studies, Universitas Riau, Riau, Indonesia. Email: tito.handoko@lecturer.unri.ac.id

of the most important plants in the world because of its high productivity, and the oil produced has excellent functional properties (Nguyen & Do, 2020; Purnama et al., 2020).

Oil palm plantation policies in Riau, especially in the era of democratization and regional autonomy (OTDA), have been carried out massively and have significant implications for optimizing productivity, input markets, outputs, and institutionalizing social conflict management. Riau is an area that has the largest oil palm plantation in Indonesia. Data from various sources reveal that there are 2.7 million hectares of registered and 4,7 million hectare record land area for oil palm in Riau as of 2015. April 14, 2016 President instructed to put a moratorium on permits on lands for growing palm oil. In fact, the value product is only in fresh fruit bunches (FFB), while the optimization of land and by-products as grass, weeds, and waste have not been utilized. Meanwhile, social conflicts, land-use change, and peat forest fires have ebbed and flowed in Riau. This socio-political stability impacts the economy and empowerment of local, regional, and international communities. Some research explain that institutional conflicts of interest between farmers, business people, and the government (local) still occurs even though the intensity decreases in coloring the dynamics of farmer empowerment (Almasdi, 2013; Khairul, 2019; Chearyi & Jose, 2016; Gilbert, 2013; O'Hara & Clement, 2018). In Indonesia, under these conditions, a discourse has emerged from the Government to fulfill 90% of food from livestock through the SISKA program and the plantation replanting program.

As far as it can be seen, efforts to increase the productivity of sustainable palm oil and the management of stakeholders conflicts of interest are related to the public policy process. Therefore, this study aims to specifically apply and assess breakthrough models and institutional structuring and empowerment strategies focusing on farmer groups. This model emphasizes cooperation between various parties, namely farmers, academics, local governments, and corporations. Cooperation between stakeholder through technical guidance and implementation of business management based on the ideology of community independence. This strategy is an answer to the challenges of poverty and increasing farming through institutional arrangements and empowerment of independent smallholders. This strategy is expected to impact farmers and society both academically and socially to accelerate the economic development of farmer households and the nation in the future. To examine this institutional system, implementing the SISKA program policy which is applied in the Sialang Palas self-help plantation, Riau, and the utilization of palm oil waste, cattle, and alternative livelihoods.

This farmer institutional issue has raised a local political-economic phenomenon that is interesting to observe more deeply, and this encourages researchers to study farmer institutional strategies in accelerating economic development in Sialang Palas Village, Riau. With the guidance of the literature and political economy journal Jeffry A. Frieden, the researcher tries to identify institutions, interests, stakeholder preferences, empowerment, and stakeholder interactions with other informal institutions.

2. Literature Review

Sayagyo's (2005) research has become a classic work on institutions in rural areas in Indonesia. According to scientist Sayagyo in Soesatro (2005) states that participation is both a condition and a target in development. In line with Sayagyo's work on Bates (1981), it is another classic work on community institutions in rural areas that was appointed to sharpen this research. This research examines the link between the policy process and the agricultural crisis in Africa. To explain this, Bates (1981) analyzes decision-makers with the assumption that public policies result from political struggles between institutional stakeholders. Bates (1981) points out the relationship between agricultural policies made by governments in Africa and the dynamics of relationships between institutions and interest groups in the political arena. The consumer and producer institutions in the city have a lot of influence over the political system. Meanwhile, groups that live in rural areas, especially small farmers, do not influence politics because they cannot organize themselves to take collective action. Bates' (1981) study shows that agricultural policies result from political interactions between government and urban producers. However, what Sayagyo and Bates stated above can be understood through institutional conceptualization efforts.

Syahyuti (2012) conceptualized the notion of institutions and offered a new institutional approach. This researcher did a reconceptualization related to the concepts of "Institutional", "Institution", and "Organization". According to Syahyuti (2012) mistakes often occur, namely equating the three concepts. According to Syahyuti (2012), before being recognized as formal organizations, farmers (planters) have organized themselves (self-organizing) in such a way as to be based on patron-client relations, kinship sentiment, territorial sentiment bases, or personal-based organizing. Syahyuti (2012) further explained that in running their agricultural business, farmers face an institutional framework that provides both limits and guidelines both in their position as an individual and in an organizational form. The main framework facing these farmers is government regulation and economic norms of the market.

For the Indonesian context, MacIntyre's (1991) work deserves to be put forward to sharpen this institutional

description. MacIntyre's (1991) study basically rests on the explanation of "interest-group politics". MacIntyre (1991) examines the politics of competition between institutions in Indonesia during the New Order Government (according to the author, it is still relevant to describe the post-ORBA SISKA pattern) which emphasizes institutional interactions in the policy process. Casson (2000) shows that oil palm is one of the most dynamic agricultural subsectors in Indonesia. The area of oil palm plantations increased from 106,000 hectare in the late 1960s to 2.7 million hectare in 1997. This rapid growth of oil palm was driven by the economic policies of the pro-private Soeharto government from 1986 to 1996 through low-interest loans in plantation development. Riau is seen as a "new" area for oil palm plantations with the fastest development in Indonesia.

Other references to Awang (2003) reinforce the above studies. According to Awang (2003), many people argue that failing to carry out development activities, especially development oriented towards community development, is because of weak institutions in the development process. Technically and financially, these development activities have almost no problems, but the achievement of success is still low. Awang (2003), Elizabeth (2007) researched strengthening and empowering farmer institutions to support the development of soybean agribusiness. According to Elizabeth (2007), institutions in rural areas were born to meet the social needs of their communities, They are not linear but there are individual needs of their community members, such as as physical needs, which needs a sense of security (safe), the need for social relationships (social affiliation), recognition (esteem), and development of recognition (self-actualization). The main benefit of an institution is to accommodate the needs of one side of the social life of the community, and as social control, so that everyone can regulate their behavior according to the will of the community.

Furthermore, a study conducted by Gunawan (2004) in evaluating the SISKA integration system development model in Bengkulu showed that livestock productivity, oil palm plantations, and farmers' income in nucleus estates were higher than plasma plantations. Therefore, the SISKA model can be developed in oil palm plantations throughout Indonesia. Besides, the development of SISKA impacts improving the management of oil palm plantations and effective cattle management for increasing productivity.

Eko (2013) examines development and welfare in rural areas. According to Eko (2013), regional inclusiveness is largely determined by institutionalizing and empowering rural communities. Likewise & Tohari (2013) shows that the traps of popular and liberal democracy do not think about welfare issues. Therefore, we must get out of the trap of minimalist democracy and carry out empowerment. The empirical basis of Argraris society lies inland control, and it turns out that land tenure conflicts have a close relationship with democratic institutions.

The various studies above in principle summarize the issue of agricultural economic development. This research focuses on the institutional engineering strategy of farmers at the local level that uses the issue of SISKA policy in independent plantations as an entry point.

3. Research Methods

This research uses the following methods: First, identification of various factors, the determining elements of implementing institutional models and empowerment strategies based on regional data and plantation institutions in Sialang Palas, Riau through strengths, weaknesses, opportunities, and threats SWOT) analysis techniques. Second, through the Modern Political Economy analysis technique, determining an empowerment strategy based on identification data: (1) The objectives and preferences of stakeholders related to implementing SISKA; (2) The socio-resource characteristics of farmer groups in Riau; (3) Facilities and infrastructure for the SISKA farmer groups; (4) The basis for institutions and policies related to the SISKA program. Third, imparting knowledge and skills to the farmers and village officials through a collective learning process in utilizing natural resource waste and social resources.

3.1. Data Collection Technique

For the needs of data analysis collected as secondary data, sourced from research reports, scientific journals, books, laws and regulations, the Riau POS newspaper, Riau Tribune, Kompas, location maps, brochures, leaflets, minutes of meetings related to SISKA, and internet website materials. Primary data sourced from this is focused on the results of in-depth interviews, Focus Group Discussions (FGD), observation, and documentation concerning the application of the model FGD. Observations were made by holding a SISKA program group meeting. These observations include cooperatives, farmer groups, farmer households, visits to plantation sites. This observation disseminates the values of cooperation, motivation, perception, and contains institutional characteristics and farmer empowerment. In this observation, the data were obtained as photos, field notes, meetings, and banner messages.

Furthermore, data was collected through interviews with interviewees at the village level who were aware of the relationship between the oil palm policy and the SISKA program. These interviewees are in three hamlets. The objectives of the interview were: first, to dig deeper into the empirical basis regarding the institutionalization and

empowerment of SISKA pattern farmers in Sialang Palas; second, to collect more complete data regarding the condition and situation of the internal and external determinants of the potential of oil palm plantations and SISKA; and third, to gain an understanding of how farmers and institutions organize themselves and collaborate with social and financial institutions.

Before selecting interviewees, it is necessary to prepare a temporary map of the SISKA program area and farmer groups. This research divides two categories of local institutions, namely government and non-government stakeholders. Government stakeholders at the district level such as Bappeda, Head of the Plantation Office. Non-government stakeholders, for example, the sub-district head, cooperatives, non-governmental organizations (NGOs), plantation companies, SISKA farmer groups, nucleus farmers, independent or plasma SISKA. These interviewees were selected based on their position or reputation at the local level as plantation business stakeholders.

3.2. Data Analysis Techniques

The data collected is then analyzed using the Modern Political Economy approach which contains four steps as described by Frieden (1991). First, identifying the stakeholders and farmers in implementing the SISKA pattern policy in Riau regarding their goals and interests. Second, describe the preferences of each stakeholder regarding the oil palm plantation policies and SISKA which are applied in Riau. As it is known that people's plantations have three main issues, namely; land, productivity, and the environment. In determining options for dealing with these issues, the stakeholders are portrayed as preferring a pattern that maximizes its benefits.

Third, directing how stakeholders work together in organizing themselves to achieve collective business. Knowledge of business management is disseminated through farmer-breeder schools (such as the SPR which was started by Prof. Muladno-Faculty of Animal Husbandry IPB) to strengthen bargaining power against local governments in the framework of formulating the SISKA pattern policy in self-help gardens. Within the agreed time, the farmer-breeders were presented with several materials related to business management and technical skills. This step aims to instill group cooperation and support in strengthening coalitions. Fourth, analyzing the factors that influence the efforts to realize the collective business of farmer-cattle breeders related to the SISKA program in interacting with other social institutions, group organizers, district, and provincial government agriculture-livestock programs. The learning material was delivered by PSN Institutional researchers, Penghulu, PPL, and community leaders.

4. Results and Discussion

Palm oil farmers have a variety of interests and also diverse educational backgrounds. Before the reformation, the diversity of farmers' social backgrounds was hidden from the surface. After the Reformation, this condition was revealed by farmers to be more open and dynamic. So that the government (local) must respond to consider these aspirations in the policy process. The potential for this diversity of social bases, if not organized within certain boundaries, can become a source of social tension. Therefore, efforts to democratize local politics are a shared imperative in local democratic schools.

Farmers are rational parties, these stakeholders seek to maximize their interests in various interests. To achieve these goals, farmers compete to invest their influence in the process of everyday social life. Success in achieving these goals is determined by the resource it has, for example, the level of education, experience in farming, land, production facilities, family consumption, and marketing. This primary condition impacts the high and low awareness of farmers in supporting oil palm development policies. Take the following examples of the education level and age of the farmers in Sialang Palas Village:

From the data above, the average level of education of farmers in Sialang Palas village is that they have graduated from elementary school and the average age is 15–55 years. The social conditions of these farmers are relative in influencing the behavior of farmers. However, when viewed from the time they have been farming, general farmers are relatively new, namely < 3 years. This explains why farmers are structurally adaptive because farmers recognize the benefits and support of social and customary institutions. As far as it is observed, the problem of returning the farmers is not just a matter of the farmer's household economy. It is a matter of how these local values such as honesty, trust can be more implemented in behavior.

Trust and honesty are the main values in social relations. Social relationships based on mutual trust will ultimately result in the welfare of a person and group. Given the Malay community, the value of honesty will generate trust and bring justice and prosperity to individuals and groups. The problem is how local wisdom and social capital are structured in such a way, value revitalization as a basis for empowerment, especially for smallholders in facing the challenges and opportunities of the fourth generation industrial revolution, including the implementation of future government development programs. Figure data 3 and 4 show the possibility of a means of applying local wisdom values that impact the welfare of smallholder oil palm farmers.

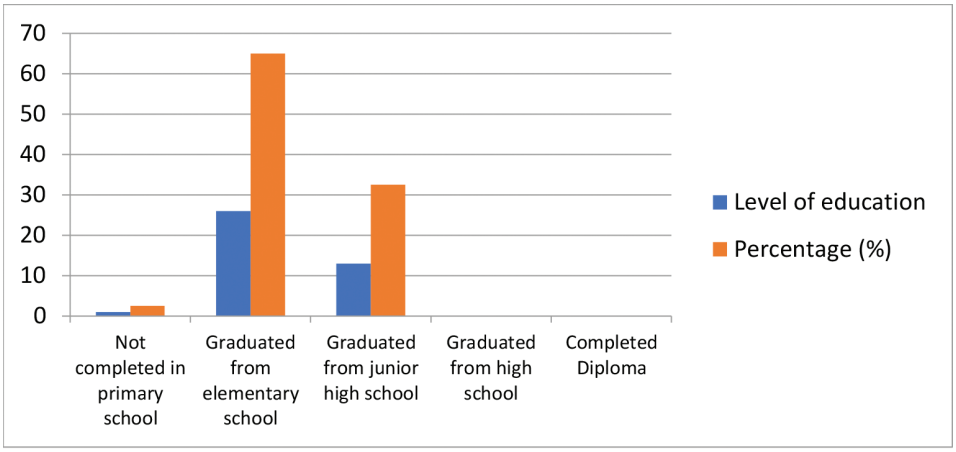

Figure 1: Education Level of Sialang Palas Smallholder Oil Palm Farmers

Source: Research Data, 2019

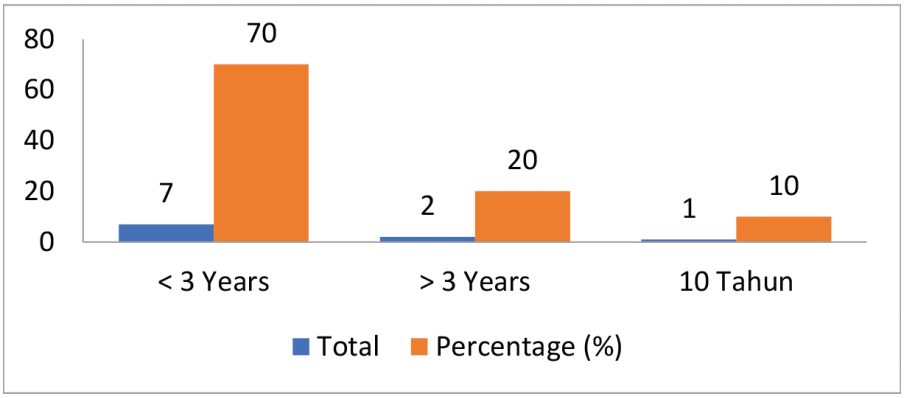

Figure 2: Long Time Farmers Trying

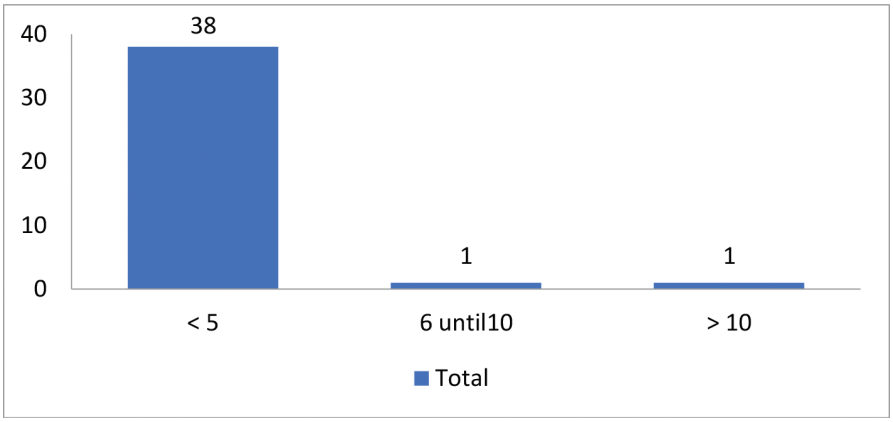

Figure 3: Number of Family Dependents

The next question is why do the farmers to some extent persist in being supportive of the oil palm development program, even though the level of education and skills, and experience in joining a farmer group is limited. This happened because the interviewees considered that other than production facilities, such as seeds, animal feed, and plantation land were still available. The collective village tradition on big days, for example facing holidays, new years and eating together often opens up a market for increasing needs. It's just that, in deciding to meet the consumption market, the smallholders have not been institutionalized. To optimize collective work of farmers, it can be supported by the understanding and application of local values that are inherent in the community (Suardi, 1991:198). This expression shows that the principles of kinship and cooperation in the social system in Riau have long been rooted and can be used as a capitalization for smallholder oil palm farmer groups to maximize their interests in developing the local oil palm agro-industry.

The economic reasons for the farmer's household, the number of family members of smallholder oil palm farmers borne by the farmers turned out to be a rational reason as answered by respondents in the interview. According to interviewees (whether or not they are members of a farmer group) that in meeting the needs of their close family, farmers often send their existing livestock production to this. This is possible because of the support of open marketing access.

Institutionally, as long as it can be observed that the analysis of support for the oil palm plantation policy above will survive if the social conditions of these farmers are balanced by the strengthening of implementing local values and government intervention (regional) as institutional guidance. This means that there is regulatory support (not only managing budgets), division of labor, and coordination between related institutions, and a focus of activities on empowering farmers in the program's context. Until 2019, the coaching program had relatively been running but was only carried out by training college student with a frequency of 2 times a year through the farmer group approach. Based on data from farmer groups regarding the implementation of the guidance program by agricultural PPL, it can be seen from the following table:

Still, according to respondents, the pattern of utilization of agricultural waste and oil palm plantations has been running according to the existing potential. Agricultural waste is used to meet animal feed. The agricultural waste used by farmers, especially those who are members of farmer groups, are rice straw, corn straw and sweet potato straw.

For example, take the cattle feed system by grazing on oil palm plantations. Independent farmers make use of oil palm leaves, grass, weeds available on oil palm plantations. Farmers release their cattle during the day, and at night the cattle are in pens. From the information of respondents in this research, the livestock-oil palm integration policy has been running by utilizing feed available on oil palm plantations. However, this research fact has not explained the respondent's answer to the use of technology in using waste for animal feed. According to respondents, the pattern of utilization of agricultural waste above have not taken advantage of technology. Therefore, the power and utilization of agricultural waste are not yet optimal. This condition explains why the development and implementation of policies by the government, (Regional) can be said to be not optimal. The optimization of coaching is very much determined by collective work between various parties, and the collective learning model is the institutional model and strategy use in the cattle's implementation- oil palm integration system. The acceleration of local economic development is determined by the institutional system and strategies for empowering independent smallholders in the cow-oil palm integration pattern. In more detail, the pattern of utilization of agricultural waste for cattle feed can be seen in the following table:

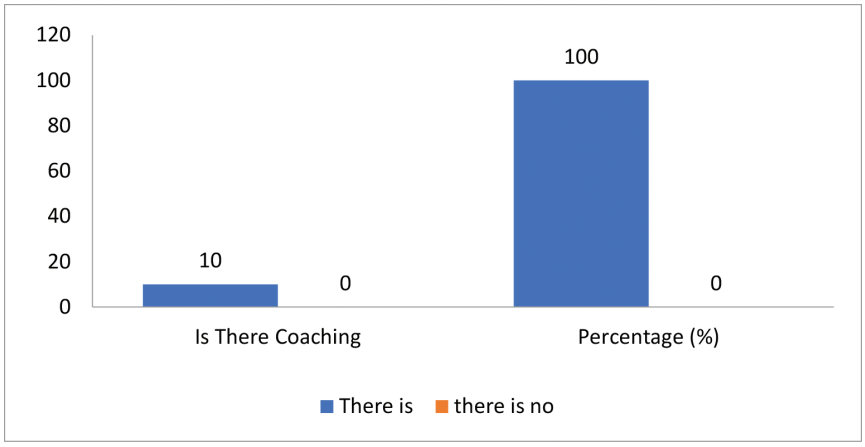

Figure 4: Is There Coaching

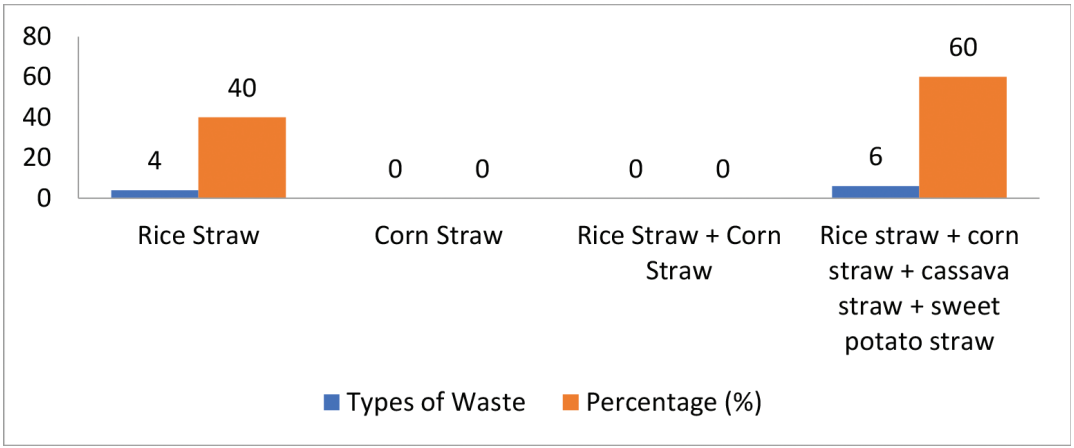

Figure 5: Types of Waste

Table 1: Players/stakeholder, Interests, and Regency Government Regulations, Siak 2017

No	Stakeholder	Interest	Regulation
1	District government	Farmer Welfare	Regent Regulations and Kadis Regulations
2	DPRD	Budget's utilization	Budget Supervision
3	Farmers	Additional Member's Income	Empowerment
4	Petani Farmer	Cow Seeds, Additional income, feed, Marketing and extension	Caring for Livestock

4.1. Interest of Local Stakeholders

In the context of structuring the institutional social structure of oil palm farmers in Sialang Palas village, the local wisdom democracy school, is actually nothing but imagined as a real effort to answer the challenges of social realities, especially smallholder oil palm farmers in the future. So that the effort to identify the interests of stakeholders with an interest becomes a mutual imperative. The interests of the parties in formulating a democratic school of local wisdom can be grouped the elites who are supportive, rejecting, and accepting on policy terms. The identification of these stakeholders is: *First*, a support group represented by the Regent, the Livestock Service Office, the Regional Development Planning Agency (Bappeda), the District Government, the Village Government, and Field Agricultural Extension (PPL). The stakeholders during this reform period, fighting for control over oil palm policy and individually or in an institutional manner, for example, relied not only on the assumption of pursuing foreign exchange but were also motivated to pursue the prosperity of the peasant community after the economic crisis, as revealed by one interviewees.

According to the district government, oil palm plantations are a potential area that must be managed. However, the potential of this oil palm plantation has not been fully optimized by both the community and the government itself. So far, the only products that have value are fruit bunches, while the grass, fronds, and leaves are still wasted. Therefore, the District Government has implemented various regulations to optimize the potential of oil palm plantations in Riau. To support the district head's policy, the local wisdom-based democratic school model.

According to the interviewees, various programs and activities related to oil palm plantations in Sialang Palas village were always well received by the community. The social capital of oil palm plantation policy in oil palm plantations is managed so that by-products, especially fronds, can be available throughout the day for cow feed which controls grass/weeds around oil palm plantations, transporting oil palm fruit, and producing manure as organic fertilizer and biogas. For the district government, the SISKA program is one effort to accelerate beef self-sufficiency besides increasing local revenue (PAD). Efforts for the welfare of the community are the focus of the government, which utilizes local potential.

Second, the group accepted on the condition that it was represented by the Rohul Regional People's Representative Council (DPRD). DPRD actually has enormous political power as a representation of all the people chosen through the Legislative General Election (Pemilu). The sovereignty of the local community was strengthened after implementing decentralization. For stakeholders who accept the condition that the palm oil policy believes that implementing this program, supervision is needed by the DPRD. According to this volunteer/advisor, the DPRD carries out supervision at the budgeting and distribution stages, while redistribution carried out by the government is no longer the domain of DPRD. Therefore, oil palm plantation programs and activities are sustainable or relay in nature, it is better if the Fisheries and Animal Husbandry Office add a field supervisor team to monitor livestock at the lowest level so that later distributed livestock are not misused.

Third, the contra group is represented by local figures. After the reformation, the local elites were increasingly critical, open, and firm in voicing their demands for the public. The leaders before the reform could not convey their inspiration. After Reformation, these elites became open and loud to convey their demands. The direct interests of these local figures are not as clear as one volunteer/advisor put it. Meanwhile, the indirect interest is only normative, namely forming a public opinion regarding the rights of local communities that have been inherited from generation to generation. Groups that reject the cow-oil palm integration policy have a very high commitment to the region, for example, fighting for the customary rights of local communities not to be violated in opening plantations.

The number of stakeholders who exert influence in the palm oil policy process in Sialang Palas differs on the institutional basis, interests, and political resources of each group. Each group of stakeholders strive to achieve their political goals and preferences. Therefore, competition between stakeholders occurs not only between groups, for example, groups that support and reject but also occur in groups that both support or reject the oil palm plantation policy. This figure has followed closely every issue of plantation development since it was opened until today.

4.2. Preferences of Stakeholders

In applying the palm oil policy, the self-help pattern, local stakeholders have several economic and political considerations. According to interviewees, the consideration of bureaucrats, in this case, was ambiguous, especially after implementing the decentralization policy and the Otda policy. Institutionally, during the new order government era, they pursued more foreign exchange and productivity. In the reformation era, aside from foreign exchange and productivity, it also seeks to catch up on how government (regional) programs can improve the welfare of the community, especially independent pattern farmers. According to bureaucratic volunteer/advisors, government programs (Dearah) is one effort to accelerate self-sufficiency programs. Regional Original Income (PAD). Efforts to improve the welfare of the community are the focus of the government, which utilizes local potential and organizes institutions and empowers farmers, especially self-help patterns.

Besides, independent smallholders have interests in the "input-market" and "the consumption market", while the "output market" is already very open. Farmers' input market is cow seed and plantation land. Because through livestock breeds and area of land, it is hoped that it can increase the income of the farmer's family, whether they are members of the farmer group. According to the farmers, the oil palm program has increased the income of the farmer family, although to a certain extent it is still not optimal. As an example, an illustration of the contribution of the cow-oil palm integration program to the average household income of farmers is IDR 20,000,000/year. Before implementing this program, only an average of IDR 10,000,000/year. The contribution to the amount of income is of course determined by the number of cattle and the prevailing price (Anwar, 2017). Besides, the idea of a democratic school based on Pancasila values and local wisdom must continue to be socialized until an adult.

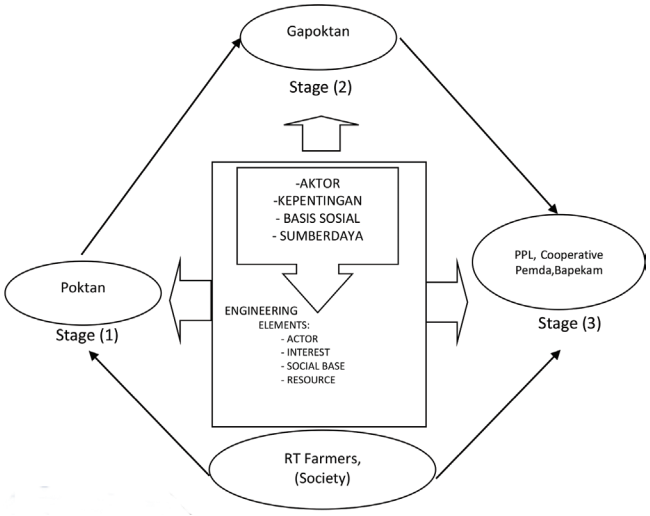

Figure 6: Farmers' Institutional Engineering Strategy

Source: Anwar, (2019, 2020)

5. Conclusion

By referring to the questions planned in the introduction as a guide, the authors can draw the following conclusions from this study: The analysis above shows that the questions of independent smallholder institutional engineering through regulation, organization, and resources are determined by the farmer household economic factors and the application of the value of local wisdom. What's interesting about this study is that the economic factor of smallholder oil palm farmers is not the only factor in determining farmers' attitudes in making individual and group decisions. The values of local wisdom that have long existed in the social system in Riau can be a breakthrough in leveraging the welfare of farmers in the future. Pancasila democratic values and local wisdom are the future of smallholder oil palm farmers. What is described in this article is not final, so futher research is highly recommended.

References

Alam, M. S., Uddin, M. A., & Jamil, S. A. (2020). Dynamics of Crude Oil And Real Exchange Rate In India. *The Journal of Asian Finance, Economics, and Business*, *7*(12), 123–129. https://doi.org/10.13106/jafeb.2020.vol7.no12.123

Anwar, K. (2019). The Pattern of Interaction Political Actors on Situation of Tenurial Conflict in Watershed: Case of Palm Oil in Kampung Dosan. *Journal of Science and Technology Policy Management*, *10*(5), 1098–1120. https://doi.org/10.1108/JSTPM-02-2018-001

Anwar, K. (2019). Community Empowerment through Structuring and Fostering PKK Organizations in Utilizing Palm Oil Waste in Sialang Palas-Siak Village, Riau. In: Mulyadi, A., Syahza, A., Elvyra, R., Firdaus, E. (Eds.), *Unri Conference Series:* National Seminar on Community Empowerment, Riau University, Riau, pp. 442–447. https://doi.org/10.31258/unricsce.1.442-448

Anwar, K. (2017). Politics of empowerment of farmers in Rambah Muda Village, Riau. *Journal of Governmental Science.*

Anwar K. (2015). Political Model of Conflic Based on palm Plantation near to Riverside area: Dosan Siak case, 2009–2014. *The 8th Inter-Nation Seminar on Human Ecology and Environmental Change*, Langkawi, Malaysia, pp. 339–345.

Anwar, K. (2014). Synergistic Environment Policy Formulation Model: Palm Oil Case K2I In Riau. *Indonesian Journal of Environment Science and Technology*, *1*(1).

Arsyad, M., Amiruddin, A., Suharno, S., & Jahroh, S. (2020). Competitiveness of Palm Oil Products In International Trade: An Analysis between Indonesia and Malaysia. *Caraka Tani: Journal of Sustainable Agriculture*, *35*(2), 157. https://doi.org/10.20961/carakatani.v35i2.41091

Casson, A. (2000). The hesitant boom: Indonesia's oil palm subsector in an era of economic crisis and political change. CIFOR: *Occasional Paper*, *1*(29), 1–50.

Chearyi, S., Jose, J.P. (2016). Empowerment and social inclusion of Muslim women: Towards a new conceptual model. *Journal of Rural Studies*, *45, 243*–251. https://doi.org/10.1016/j.jrurstud.2016.04.003

Dinas Perkebunan Provinsi Riau. (2011). *Riau Province Plantation Statistics 2010*. Dinas Perkebunan, Pekanbaru, Indonesia

Frieden, J. A. (2000). *The Method of Analysis: Modern Political Economy In Modern Political Economy Theory And Latin And American Policy.* Princeton University Press. https://doi.org/10.4324/9780429498893-8

Gilbert, D. (2013). Oil Palm And Palm Oil Industry in Ghana: A Brief History. *International Research Journal of Plant Science*, *4*(6), 158–167. https://doi.org/ 10.12691/jfs-4-5-2

Indra, K., Nanang. (2012). Discourse On Environment And Sustainable Development In Non-Governmental Organizations In Indonesia. *Journal of Social and Political Science, 16*(1), 1–15.

Jikalahari: Riau Forest Rescue Network. (2016). *Pause in Logging in Riau Province, Riau Forest Rescue Network, Indonesia*. http://jikalahari.or.id/wpcontent/uploads/2016/03/KERTASPOSISI

Lawson, B.P., Muriel, L., & Sanders, P.R. (2017). A Survey On Firms' Implementation of COSO's 2013 internal control-integrated network. *Journal Research in Accounting Regulation*, *29,* 30–43. https://doi.org/10.1016/j.racreg.2017.04.004

Laila, R., Alfy, Supronoto, B. (2015). The Role of the Pasuruan Regency Government in Controlling Industrial Waste in PT Cheil Jedang Indonesia. *Journal of State Administration Science*, *1*(1), 1–9.

Leudis, O. V. D. L. C., & Yosvani, O. L. L. (2017). "Proposal of a coefficient to evaluate the management of the internal control". *Conntaduria y Administracion, 62*(2), 699–714.

Long, N. T. (2020). Do Foreign Direct Investment, Energy Consumption And Urbanization Enhance Economic Growth In Six ASEAN Countries? *The Journal of Asian Finance, Economics and Business*, *7*(12), 33–42. https://doi.org/10.13106/jafeb.2020.vol7.no12.033

Mubekti, M. (2011). Zoning Study for Sustainable Peatland Management in Riau Province. *Indonesian Journal of Science and Technology*, *13*(2), 88–94. https://doi.org/10.29122/jsti.v13i2.883

Nguyen, V. C., & Do, T. T. (2020). Impact of exchange rate shocks, inward FDI and import on export performance: A cointegration analysis. *Journal of Asian Finance, Economics and Business*, *7*(4), 163–171. https://doi.org/10.13106/jafeb.2020.vol7.no4.163

Hicks, C. C., Graham, N. A. J., & Cinner, J. E. (2013). Synergies and tradeoffs in how managers, scientists, and fisher value coral reef ecosystem services. *Journal Global Environmental Change, 23*(6), 1444–1453. https://doi.org/10.1016/j.gloenvcha.2013.07.02

O'Hara, C., Clement, F. (2018). Power as agency: A Critical Reflection On The Measurement Of Women's Empowerment In The Development Sector. *World Development*, *106*, 111–123. https://doi.org/10.1016/j.worlddev.2018.02.002

Purnama, K. O., Setyaningsih, D., Hambali, E., & Taniwiryono, D. (2020). Processing, Characteristics, And Potential Application Of Red Palm Oil – A Review. *3*(2), 40–55.

Rai, P., Smucker, T. A. (2016). Empowering Through Entitlement? The Micro-Politics Of Food Access In Rural Maharashtra, India. *Journal of Rural Studies*, *45,* 260–269. https://doi.org/10.1016/j.jrurstud.2016.04.002

Sequiño, A. C., & Magallon-Avenido, J. (2015). The World's Leader In The Palm Oil Industry: Indonesia. *IAMURE International Journal of Ecology and Conservation*, *13*(1). https://doi.org/10.7718/ijec.v13i1.1074

Syahyuti, S. (2012). *Self-Organization Of Farmers In Running Agribusiness In The Countryside: A Study of Farmer Institutions And Organizations In The Influence of The State And The Market*. Depok, Indonesia: University of Indonesia, Faculty of Social and Political Sciences.

Sayer, J., Ghazoul, J., Nelson, P., & Boredhihartono, A. K. (2012). Oil Palm Expansion Transforms Tropical Lanscapes And Livelihoods. *Global food Security*, *1*(2), 114–119. https://doi.org/10.1016/j.gfs.2012.10.003

Sumarti, T., Rokhani., & Falatehan, S. F. (2017). Strategies For Empowering Young Entrepreneurial Coffee Farmers In Simalungun District. *Jurnal Penyuluhan*, *13*(1), 31–49. https://doi.org/10.25015/penyuluhan.v13i1.15165

Strzelecka, M., Boley, B. B., & Woosnam, K. M. (2017). Place Attachment And Empowerment: Do Residents Need To Be Attached To Be Empowered. *Annals of Tourism Research*, *66,* 61–73. https://doi.org/10.1016/j.annals.2017.06.002

Syahza, A., Rosnita, R., Suwondo, S., Nasrul, B. (2013). Potential Oil Palm Industry Development in Riau. *International Research Journal of Business Studies*, *6*(2), 133–147. https://doi.org/10.21632/irjbs.6.2.133-147

Varkkey, H. (2012). The Growth and Prospects for the Oil Palm Plantation Industri in Indonesia. *Oil Plam Undustry Economic Journal*, *12*(2), 1–13.

Wang, J., Brown, D. G., & Agrawal, A. (2013). *Climate Adaptation, Local Institutions, And Rural Livelihoods: A Comparative Study Of Herder Communities In Mongolia And Inner Mongolia, China, Global Environmental Change, 23*, 1673–1683. https://doi.org/10.1016/j.gloenvcha.2013.08.014

Wibowo, A., Giessen, L. (2015). Actor Positions on Primary and Secondary International Forest-Related Issues Relevant in Indonesia. *Journal of Sustainable Development*, *8*(3), 10–27. http://dx.doi.org/10.5539/jsd.v8n3p10

Yue, G. H., Ye, B. Q., & Suwanto, A. (2020). The unavoidable palm oil can be sustainable. *International Journal of Palmoil*, *3*(2), 1–11.

Zabid, M. F. M., & Abidin, N. Z. (2015). Palm oil industry: A review of the literature on the modelling approaches and potential solution. *AIP Conference Proceedings*, *1691*. https://doi.org/10.1063/1.4937023