
PALM OIL EXPANSION IN MUKOMUKO – BENGKULU:EXPANSION “FROM ABOVE” AND “FROM BELOW”

¹ANDI ISHAK, ²RILUS A. KINSENG, ²SATYAWAN SUNITO, ³DIDIN S. DAMANHURI

E-mail: ¹erhr94@yahoo.co.id

¹Doctorate program of Rural Sociology, Human Ecology Faculty, Bogor Agricultural University, Indonesia

²Doctor, Lecturer of Human Ecology Faculty, Bogor Agricultural University, Indonesia

³Professor, Lecturer of Economy and Management Faculty, Bogor Agricultural University, Indonesia

ABSTRACT

Palm oil is a rapidly expanding commodity in Indonesia in recent decades, especially in Sumatra, which makes it become the main export commodity. This study aims to analyze the pattern of palm oil plantation expansion in Mukomuko Regency that caused of agency – structure interaction and the structure that formed by palm oil expansion. Field data collection was conducted over 10 months from August 2016 to May 2017 with in-depth interviews, participant observation, and secondary data tracking. The interviews included 40 informants from government, companies, palm oil fresh fruit bunch (FFB) collectors, traditional/community figures, and farmers. Data were analyzed descriptively using interactive model with approach of Giddens' Structuration Theory. The results conclude that: (1) expansion of palm oil plantations in Mukomuko is due to the expansion from above by large private plantation companies due to the pull of the global market structure and the support of government policies, and the expansion from below by smallholders with various actors who take advantage of local FFB market opportunities; (2) the role of the state in the form of facilitation of government policy and infrastructure development is an enabling structure for the expansion from above, while the relatively wide availability of land and social interaction leads to the expansion from below; (3) The structures formed by palm oil expansion in Mukomuko were factual and virtual.

Keywords: *Expansion, Palm Oil, Agency, Structure, Social Practice.*

1. INTRODUCTION

Palm oil is the most widely cultivated agricultural commodity in Indonesia that has expanded very rapidly in the last few decades. The total area of agricultural land in Indonesia in 2016 is 36.76 million ha (Pusdatin, 2017), 32.40% of which is palm oil (Ditjenbun, 2016). In the period 1980-2016, the area of palm oil plantations has increased more than 40-fold, from only 294.5 thousand ha in 1980 to 11.9 million ha by 2016.

Palm oil plantations in Indonesia are cultivated by large state plantation companies, large private plantation companies, and smallholder plantations. In 1970-1980, palm oil plantations were still dominated by large state plantation companies. Large private plantation companies began to be dominant since 1989. The expansion of large private plantations was followed by the expansion of smallholders' estates, while the expansion of large estates was stagnant (Ditjenbun, 2016).

Palm oil expansion has a positive impact on the Indonesian economy. The development of palm oil plantations has spurred economic growth that has impacted on infrastructure development, labor supply, and new rural income sources. Hunt (2010) estimates that every dollar of net profit of palm oil plantation companies contributes 3 dollars to the Indonesian economy through direct and indirect spending on goods, services and labor. Ditjenbun (2016) noted that the number of workers absorbed by palm oil plantations in 2015 reached 5,482,929 households, consisting of smallholders of 2,115,434 households, large state plantations 376,647 households.

The expansion of palm oil plantations mainly occurred in Sumatra Island with the area of palm oil plantations in 2015 reached 7.03 million hectares or 62.46% of the total area of palm oil plantations in Indonesia (Ditjenbun, 2016). BPS (2016) notes that among 1,599 palm oil companies in Indonesia, 1,003 companies (62.73%) are in Sumatra.

Many areas in Sumatra rely their economies from palm oil, one of which is Mukomuko Regency located in the northern Bengkulu Province. Mukomuko Regency has the largest expanse of palm oil plantations in Bengkulu, which is 152,231 ha or 28.52% of palm oil plantation area. The expanse of the plantation accumulates 37.71% of the total area of the regency (BPS Provinsi Bengkulu, 2017). This study aims to analyze the pattern of palm oil plantation expansion in Mukomuko Regency that caused of agency – structure interaction and the structure that formed by palm oil expansion.

2. TEORITICAL APPROACH

Various social theories are used to analyze the causes of social change both macro and micro theories. Macrosociology sees changes caused by structures whereas microscopy is more likely to see the role of the actor. Both approaches are difficult to meet because each analyzes social phenomena from different perspectives. There is a dualism in this matter (Sanderson, 2010). Giddens (1984) with the theory of structuration attempts to reconcile the differences of viewpoints. According to him, social practice is the result of interaction between agency and structure that is duality in the dimension of space and time.

Giddens acknowledges coercion or restrictions on agents or actors, but because of the agent has the power to act, he can change the situation. Giddens calls this phenomenon as the dialectic of control in the social system. The social structure is not external to the agent, but is attached to the social practices of agents (Giddens, 1984).

The agency concept emphasizes the power of a person (actor/agent) to think, act and act independently, freely and autonomously, according to his own will (Kinseng, 2017). Sibeon (2004) argues that although agents are capable of acting autonomously, in an agency's social interaction it sees another agent (individual or social) as an agency-in-structure. Instead, the agent with all its thoughts, decisions, and actions, is little or much influenced by its which he called structure-in-agency.

Giddens argues that as agents, human beings have the ability to introspect and reflect (reflexive monitoring of conduct). This ability can lead to "derutinization of social practices". Derutinization concerning the phenomenon in which the schemata

that has been the rule and the resources of action and social practice, is no longer sufficient to be used as a principle of meaning and organizing various social practices that are underway. The old social practices became obsolete and abandoned. Changes in social practice will then lead to structural changes in accordance with new social practices (Priyono, 2002).

Although the concept of agents generally refers to the micro-level, many sociologists find that agents may include individuals, organized groups, organizations, and even nations (Ritzer and Goodman, 2003). Agencies can refer to collectivities that act, or on a social class. Kinseng (2017) rejects the notion of an organization or institution as an agent, because of those who have acting power are individuals as leaders of such organization or institution.

Giddens (1984) views structures as rules and resources that are virtual and timeless and spaceless, so that there are situations and conditions. The structures in Giddens' notions are constraining and enabling agents to allow for social practices. Structure is the medium of production and reproduction of social action as well as formed by the reproduction of social action.

In contrast to the conceptualization of the structure according to Giddens, Kinseng (2017) based on the results of various literature review concluded that the concept of structure affecting the actions of agents is divided into two parts, namely social structures and non-social (physical-material) structures. The two forms of structure are embodied in six structural forms: discourse, rules including norms and customs, other social actors, acts of social actors, stratification and social groups, as well as physical resources both natural and non-natural.

3. RESEARCH METHOD

This research is a qualitative research with case study strategy. Qualitative research emphasizes processes and meanings that are not strictly measured in terms of quantity, intensity, and frequency (Denzin and Lincoln, 2005). Meanwhile, case studies are undertaken to understand and explore a specific problem in detail from various sources of information (observations, interviews, archives, etc.) (Creswell, 2007), aiming to investigate a unique contemporary phenomenon (Yin, 2003).

The study was conducted in Mukomuko Regency (Figure 1) for 10 months from August 2016 to May 2017. Data collection was conducted through in-depth interviews involving 40 informants, participant observation, and confirmation of secondary data sources. Informants consist of elements of local government, private companies, collecting traders, customary/community leaders, and farmers. Data were analyzed descriptively using interactive model (Miles *et al.*, 2014). The collection and analysis of data and conclusions is an interactive cycle until the completion of the research.



Figure 1. Site Location Map.

4. RESULT AND DISCUSSION

Mukomuko Regency has the largest palm oil plantation in Bengkulu Province. The expansion of smallholder palm oil plantations grew 124%, while private plantations were 42% in the last decade (BPS of Bengkulu, 2017). This indicates that the expansion of palm oil plantations occurred quickly in Mukomuko.

4.1. Expansion “from Above”

The expansion “from above” is an expansion undertaken by a large palm oil plantation company. The expansion mainly occurred in Mukomuko Regency, Bengkulu Province. BPS (2016) notes that by 2015 there are 53 large private palm oil companies in Bengkulu, 21 of which are located in Mukomuko, consisting of 11 foreign investment companies and 10

domestic investment companies engaged in activities palm oil cultivation with an area of 60,217 ha. The development of large private estates was also followed by the establishment of a palm oil processing factory. Mukomuko Regency until 2015 has 13 units of factories operated by 11 companies. The expansion of a large private palm oil company in Mukomuko Regency in the last two decades has been massive. Company locations are located in 12 of 15 districts in Mukomuko (Figure 2).

Large palm oil plantation companies prefer Mukomuko compared to other regencies in Bengkulu province because of its proximity to the export port of Teluk Bayur, Padang - West Sumatra. Teluk Bayur can be reached from Mukomuko about 6 hours road trip along the western highway of Sumatra, is relatively flat so easy to pass the CPO transporter. Shipping via Teluk Bayur is cheaper compared to other export ports in Sumatra such as Panjang Port in Lampung, Plaju or Boom Baru in Palembang, Dumai in Riau, Belawan in Medan, and Batu Ampar and Sekupang in Riau (BPS, 2017) distant and more difficult to reach because of the highway through the hilly area of the Bukit Barisan Mountains.

From the agronomic side, palm oil can grow well in low wet climate area in the tropics, not inundated during rain and not dry during dry season (Hidayat, 2007). Palm oil has the potential to be planted in 16 provinces on 51.4 million ha of land in Indonesia including in Bengkulu (Mulyani and Las, 2008). Under normal conditions, palm oil can be harvested 15-30 tons of FFB per hectare per year (Sheil *et al.*, 2009), even in good management its production can reach 38 tons (Afriyanti *et al.*, 2016). Palm oil has an advantage in terms of productivity because it is able to produce oil 4-23 times more than other vegetable oil-producing plants (Sheil *et al.*, 2009).

Another domestic driving factor causing massive palm oil expansion is the support of a favorable political policy for palm oil investments. The increasing role of the private sector is inseparable from the pro-economic policies of the government. The owners of large capital easily get permit plantation in the form of cultivation right and plantation business permit so that there is concentration of land tenure for palm oil plantation until hundreds of thousands of hectare. This is rapidly happening in the era of regional autonomy due to decentralization of authority of plantation licenses to

regional heads (Pichler, 2015). Five palm oil conglomerates (Wilmar, Musim Mas, GAR, Cargill and Asian Agri) in 2014 controlled about 40 palm oil refineries sourced from 850 CPO factories and controlled 1,600 plantation sites in Indonesia (Pacheco *et al.*, 2017). In addition, the government encouraged the role of large private plantation

companies to establish a network of palm oil agribusiness with farmers and local communities through various plantation schemes since the 1980s (McCarthy *et al.*, 2012).

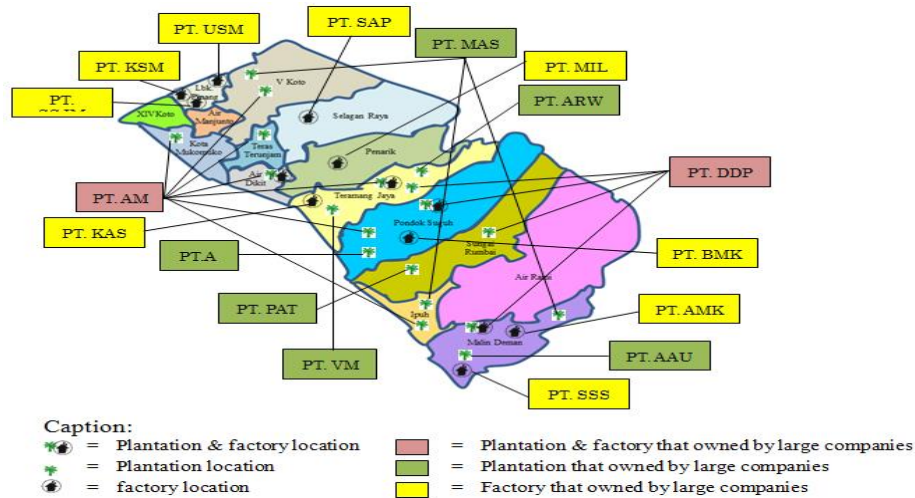


Figure 2. Location of Palm Oil Large Enterprises in Mukomuko.

The expansion of palm oil plantations is certainly inseparable from the global demand for palm oil. Palm oil is widely used in various food, energy and industrial products. The consumption of vegetable oil from palm oil is intended for food and non-food needs (GAPKI, 2014), including: (1) oleo-food, which is processing crude palm oil (CPO) into food products such as cooking oil and margarine, (2) oleochemical basis, ie, industries that process CPO and palm kernel oil (PKO) into fatty acids, fatty alcohols, glycerin and methyl esters, and (3) oleochemical derivatives, are industries that process the output of the basic oleochemical industry into intermediate products such as surfactants (fatty alcohol sulphate, methyl ester sulphonate, sorbitol, fatty acid ethoxilate) and the final product (detergent, biodiesel). Surfactant is a widely used material in industry especially for cleaning products, in addition to agrochemical industry, petroleum, paint, textile, leather, paper, polymerization, plastics, food, construction, and explosives. World palm oil consumption continues to grow from time to time. By 2014, palm oil has accounted for 41% of the world's vegetable oil demand (GAPKI, 2014), and has been the dominant vegetable oil shifting soybean oil since 2007 (Gaskell, 2015).

Sayer *et al.* (2012) estimates that palm oil expansion will continue to meet the world's vegetable oil consumption and is the most profitable expansion of agricultural commodities in the tropics. Global demand has caused world production of palm oil to double every ten year period since 1960 (Gaskell, 2015).

4.2. Expansion “from Below”

The expansion "from below" is the expansion of palm oil plantations conducted by the community. The expansion of smallholder palm oil plantations in Mukomuko Regency began to occur since the mid-1990s after the FFB market due to expansion from above. Unlike large private plantation companies, smallholder's palm oil plantations are made up of agents from various social groups. Social groups identified in the field are pioneer farmers who first opened of palm oil plantations, smallholders, civil servants, and capital owners from outside the village (Figure 3). Smallholder palm oil plantations are relatively narrow compared to large plantation companies, but when calculated on an aggregate basis it has a larger plantation area.

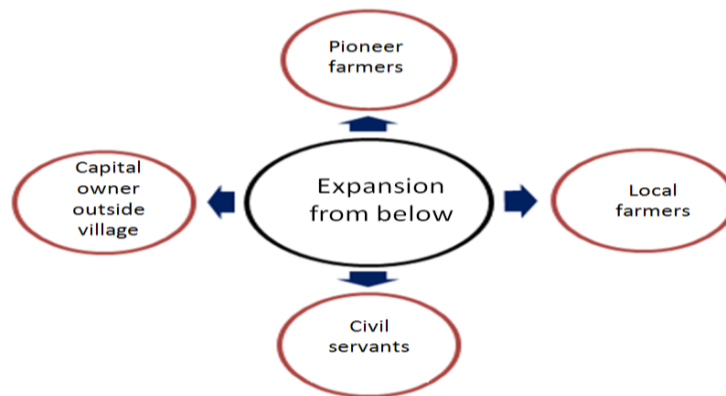


Figure 3. Social Groups Mapping of Smallholder Plantation in Mukomuko.

Agent (pioneer) who first opened the palm oil plantation is the Batak ethnic immigrants from the Province of North Sumatra. Locals call them "Batak people or Medan people". The number of pioneers is not much, but spread in Mukomuko. The pioneers have knowledge and skills to cultivate palm oil because of palm oil has been known for a long time by the people of North Sumatra. Pahan (2007) stated that palm oil was first commercially grown on the Liput River (Aceh) and Pulau Radja - Asahan (North Sumatra) in 1911. The Nucleus Estate and Smallholders (NES) pilot project of palm oil plantations was first conducted in 1980/1981 with the assistance of the World Bank placed in Labuhan Batu and Langkat regencies, North Sumatra (DMSI, 2010). Belawan port which is one of the largest export ports of palm oil in Indonesia also exist in North Sumatra. That is why the migrants from North Sumatra have already known palm oil because they have long interacted with this plant to have the experience of palm oil plantation experience.

North Sumatra migrants began to come and live in Mukomuko in the 1980s along with the opening of the Bengkulu - Padang highway, dam construction/irrigation, and transmigration settlements. They come in three waves. The first wave came as a workforce that opens forests for road infrastructure, dams, and transmigration projects. The second wave came as a clothing merchant and household appliance in newly opened areas. The last wave is the owners of capital that aims to build the plantation in Mukomuko by utilizing the network of kinship that has been formed previously. The opening of plantation was initiated by these settlers in Mukomuko since the early 1990s. The economic success of pioneer farmers from North Sumatra for palm oil plantations encourages local people to

participate in planting palm oil. Customary land ownership rights become the capital utilized by local people to open palm oil plantations. There are two influences due to the inclusion of palm oil plantations for local communities in Mukomuko. First, there is a tendency to increase the sale of land owned by local communities due to the increasingly expensive land prices. Secondly, there is a tendency to increase the land clearance of customary rights by local people to be the location of palm oil plantations. Land previously used only as agricultural land for subsistence needs, has turned into a resource of economic value since the expansion of palm oil plantations.

Sale of the land began to increase because of the immigrants who want to open the plantation in Mukomuko. At present, the price of palm oil plantation in Mukomuko is around 20-50 million rupiah per hectare, depending on the land position. In fact, when the migrants from North Sumatra came in the early 1990s, the price of land is only 3-5 million rupiah per hectare, an increase of about 10 times. The price of palm oil plantation that has been produced in Mukomuko reaches 100-150 million per hectare, depending on the land situation and crop conditions. In the plantation near the road and more flat, the price is more expensive because it is cheap cost of FFB harvesting. Smallholder palm oil plantation system is built on patron-client relationships within the asymmetrical structure of FFB market. The farmers is the lowest level of FFB market networking and CPO factory is the highest (Figure 4). Farmers sell FFB to the collecting merchants (*tauke*) or through FFB agents. The agent sells TBS to some *tauke* who are then sold to the factory through the DO (Demand Order) holder.

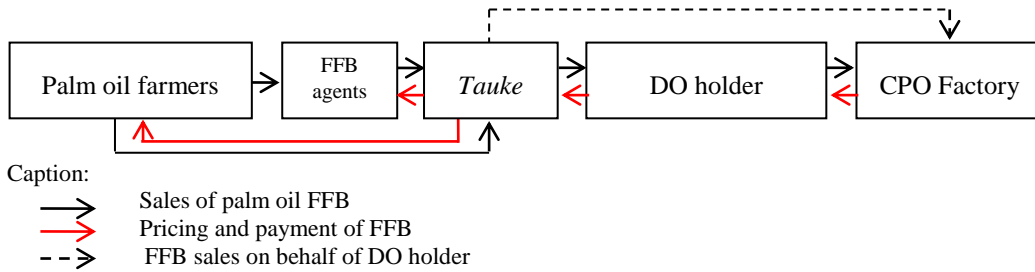


Figure 4. Market Network of Palm Oil FFB in Mukomuko.

4.3. Agency – Structure Interaction of Palm Oil Expansion

There is both similarity and difference patterns of expansion from above and from below which happened in Mukomuko (Figure 5). The similarities are both economically motivated and the dominant structure that influences them is the market. In addition to the similarities, there are some differences between agency and structure interactions in palm oil expansion in Mukomuko. First, the actor who expands from above is limited to a few owners of large private corporations who have the legitimacy of the government to open palm oil plantations on a wide scale. The structure formed by this actors is a systemically established economic institution (palm oil plantation companies). Meanwhile, the expansion from below is done by smallholders from various backgrounds. The migrants from North Sumatra are pioneer farmers, followed by other actors, local

farmers, civil servants, and capital owners from outside the village. This pattern of expansion is sporadic. Second, the role of the state in the form of facilitation of government policy and infrastructure development is an enabling structure for palm oil plantation expansion of large investors, while smallholder farmers make use of the relatively wide land availability and social interaction in expansion from below.

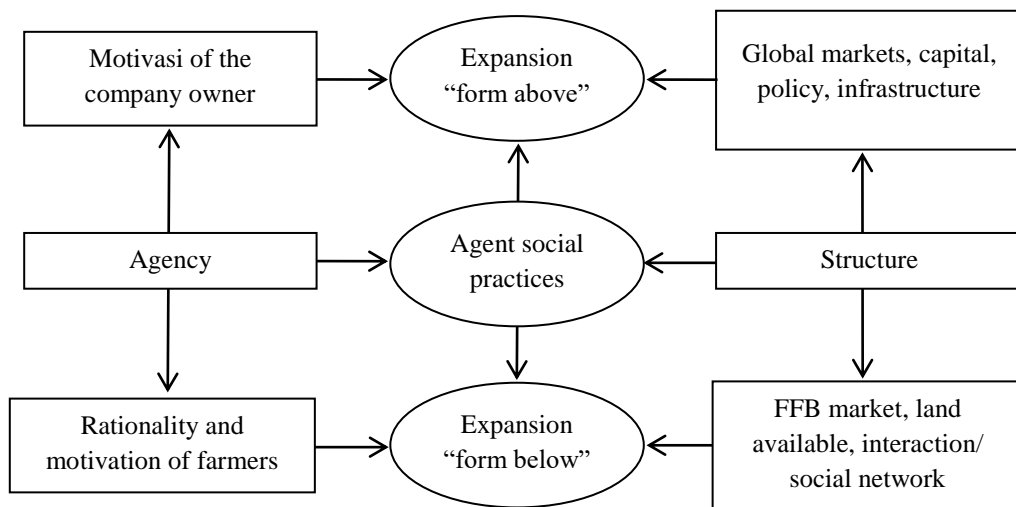


Figure 5. Dynamic of Agency – Structure Interaction of Palm Oil Expansion in Mukomuko.

4.4. Formation of Factual and Virtual Structures

The interaction between agencies - structures in the phenomenon of expansion from above creates an economic system in the form of large private plantation companies, while the interaction between agency - structure in the phenomenon of expansion from below also creates the economic structure of smallholder palm oil plantations. The structure of the two plantation systems is factual, its boundaries can be determined.

The inclusion of smallholders' palm oil plantation into the company's economic system through the interaction of the buying and selling of FFB causes the farmers bargaining power against the price of FFB is weak in the presence of the company due to the asymmetrical structure of the FFB market. The economic structure constructed by the asymmetric relationship is patron-client. Smallholder farmers build small-scale palm oil plantations and integrate with plantation companies is mediated by the local FFB market. The patron - client relationship is virtual. Large-scale plantation companies are integrated with global markets through the palm oil export trade chain. The global palm oil market is attracting palm oil expansion from above, and the local FFB market is attracting expansion from below, making it entirely integrated into a global capitalist market system. The structure of this global market is also virtual.

5. CONCLUSION

The expansion of palm oil plantations in Mukomuko is due to the synergy between large private plantation companies (expansion from above) and smallholder estates (expansion from below). The economic motive of the expansion agency and actors that support it is the cause of the rapid expansion of palm oil plantations in Mukomuko Regency over the past three decades.

There are similarities as well as differences in expansion patterns from above and below that occurred in Mukomuko. The similarities were expansion actors are both economically motivated and the dominant structure that influences actors is the market. While the differences actors were: (1) actors expanding from above are limited to a few owners of large private corporations with legality from government to open large scale palm oil plantations, while expansion from below was done by farmers

with diverse actors; (2) government policy support and infrastructure development is an enabling structure for palm oil expansion from above, while the relatively wide availability of land and social interaction leads to an expansion from below.

The structures formed by the expansion of palm oil plantations in Mukomuko are factual and virtual structures. Large-scale private palm oil plantation companies and small-scale plantations are factual structures, while local market networks of FFB and palm oil global market are virtual. Therefore, the structure is not always virtual as Giddens's opinion, but it can also manifest (factual).

BIBLIOGRAPHY

1. Afriyanti, D., Kroeze, C., & Saad, A. (2016). Indonesia palm oil production without deforestation and peat conversion by 2050. *Jour. Sci. of the Tot. Env.* 557-558:562-570.
2. BPS. (2016). *Direktori Perusahaan Perkebunan Kelapa Sawit 2015*. Jakarta: BPS.
3. BPS Provinsi Bengkulu. (2017). *Provinsi Bengkulu Dalam Angka 2017*. Bengkulu: BPS Provinsi Bengkulu.
4. Cresswell, J.W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. California: SAGE Publication.
5. Denzin, N.K., & Lincoln, Y.S. (2005). Introduction: the discipline and practice of qualitative research. In: N.K. Denzin, & Y.S. Lincoln, *The SAGE Handbook of Qualitative Research* (pp. 1-32). California: SAGE Publication. 1-32.
6. Ditjenbun. (2016). *Statistik Perkebunan Indonesia 2013-2015 – Kelapa Sawit*. Jakarta: Ditjenbun.
7. DMSI. (2010). *Fakta Kelapa Sawit*. Jakarta: DMSI.
8. GAPKI. (2014). *Industri Minyak Kelapa Sawit Indonesia menuju 100 tahun NKRI – Membangun Kemandirian Ekonomi, Energi dan Pangan secara Berkelanjutan*. Jakarta: GAPKI.
9. Gaskel, J.C. (2015). The role of markets, technology, and policy in generating palm-oil demand in Indonesia. *Bulletin of Indonesian Economic Studies*. 51(1):29-45.

-
10. Giddens, A. (1984). *The Constitution of Society – Outline of the Theory of Structuration*. Cambridge: Polity Press.
 11. Hidayat, A. (2007). Peta kesesuaian lahan dan peta arahan tata ruang pertanian. *Warta Sumberdaya Lahan*. 3(3):10-17.
 12. Hunt, C. (2010). The costs of reducing deforestation in Indonesia. *Bulletin of Indonesian Economic Studies*. 46(2):187-192.
 13. Kinseng, R.A. (2017). Struktugensi: sebuah teori tindakan. *Sodality*. 5(2):127-137.
 14. McCarthy, J.F., Gillespie, P., & Zen, Z. (2012). Swimming upstream: local Indonesian production networks in “globalized” palm oil production. *World Development*. 40(3):555-569.
 15. Miles, M.B., Huberman, A.M., & Saldana, J. (2014). *Qualitative Data Analysis: a Methods Sourcebook*. California: SAGE Publication.
 16. Mulyani, A., & Las, I. (2008). Potensi sumber daya lahan dan optimalisasi pengembangan komoditas penghasil bioenergi di Indonesia. *Jurnal Litbang Pertanian*. 27(1):31-41.
 17. Pacheco, P., Gnych, S., Dermawan, A., Komarudin, H., & Okarda, B. (2017). The palm oil global value chain – implication for economic growth and social and environmental sustainability. *Working Paper 220*. Bogor: CIFOR.
 18. Pahan, I. (2007). *Panduan Lengkap Kelapa Sawit – Manajemen Agribisnis dari Hulu Hingga Hilir*. Jakarta: Penebar Swadaya.
 19. Pichler, M. (2015). Legal dispossession: state strategies and selectivities in the expansion of Indonesian palm oil and agrofuel production. *Development and Change*. 46(3):508-533.
 20. Priyono, B.H. (2002). *Anthony Giddens: Suatu Pengantar*. Jakarta: KPG.
 21. Pusdatin. (2017). *Statistik Lahan Pertanian Tahun 2012-2016*. Jakarta: Pusdatin.
 22. Ritzer, G. & Goodman, D.J. (2003). *Teori Sosiologi Modern*. Jakarta: Kencana.
 23. Sanderson, S.K. (2010). *Makro Sosiologi – Sebuah Pendekatan terhadap Realitas Sosial*. Jakarta: Raja Grafindo Persada.
 24. Sayer, J., Ghazoul, J., Nelson, P., & Boedihartono, A.K. (2012). Oil palm expansion transforms tropical landscapes and livelihoods. *Global Food Security*. 1:114-119.
 25. Sheil, D., Casson, A., Meijaard, E., von Noordwijk, M., Gaskell, J., Sunderland-Groves, J., Wertz, K., & Kanninen, M. (2009). The impacts and opportunities of oil palm in Southeast Asia – what do We know and what do we need to know? *Occasional Paper No. 51*. Bogor: CIFOR.
 26. Sibeon, R. (2004). *Rethinking Social Theory*. California: SAGE Publication.
 27. Yin, R.K. (2003). *Case Study Research: Design and Methods*. California: SAGE Publications.