

# OIL PALM ADAPTIVE LANDSCAPES

## Project Working Paper Series OPAL



*Project Working Paper Series OPAL No. 02/2016*

### AGRARIAN STRUCTURE AND OIL PALM PLANTATION AGROECOSYSTEM IN KUTAI KARTANEGARA DISTRICT

By:

Arya Hadi Dharmawan

Bayu Eka Yulian

Faris Rahmadian



*Project Working Paper Series OPAL No. 02/2016*

## **AGRARIAN STRUCTURE AND OIL PALM PLANTATION AGROECOSYSTEM IN KUTAI KARTANEGARA DISTRICT**

**By:**

Arya Hadi Dharmawan

Bayu Eka Yulian

Faris Rahmadian

**CENTER FOR AGRICULTURAL AND RURAL DEVELOPMENT STUDIES  
Research Institutions and Community Service  
BOGOR AGRICULTURAL UNIVERSITY**

# **AGRARIAN STRUCTURE AND OIL PALM PLANTATION AGROECOSYSTEM IN KUTAI KARTANEGARA DISTRICT**

By:

Arya Hadi Dharmawan

Bayu Eka Yulian

Faris Rahmadian

First published in

May 2016

By:

**Center for Agricultural and Rural Development Studies- Bogor Agricultural University**

IPB Baranangsiang Campus, Main Building, South Wing

Jl. Raya Pajajaran, Bogor, Jawa Barat, Indonesia – 16144.

Telp.: +62-0251-8345 724; Fax.: +62-0251-8344 113;

Website: <http://www.psp3.ipb.ac.id>;

E-mail: [psp3@ipb.ac.id](mailto:psp3@ipb.ac.id)

In the framework of research

## **Oil Palm Adaptive Landscapes (OPAL)**

multiparty partnership that consists of: ETH Zurich, Luc Hoffmann Institute, EPF Lausanne (Switzerland), PSP3-LPPM IPB, CIFOR Indonesia (Indonesia), CIFOR Kamerun, WWF Kamerun (Kamerun), University of Javeriana, WWF Colombia, and NES (Colombia) and funding of Swiss National Science Foundations (SNSF)

Bogor, 2016

Copyright is protected by law

Allowed to quote with attribution

ISBN : 978-979-8637-93-3

## PREFACE

The expansion of oil palm plantations is something that is unstoppable, especially with the opening of a vast market for this commodity. For tropical countries that are suitable for oil palm plants, including Indonesia, oil palm has become one of the main alternatives for economic driver in addition to the oil and gas sector. However, the expansion of oil palm plantation is also getting controversy as a cause of deforestation and degradation of environment including various agrarian conflicts and social change in the rural area. This Project of Oil Palm Adaptive Landscape (OPAL) is generally done to address these issues. This project is trying to improve the management of oil palm landscape across Asia, Africa and Latin America by involving relevant stakeholders and partners at regional, national, and local level through a plausible scenario. Those scenarios are developed through an integrated platform that combines social drivers, economic, and ecological drivers thus shaping the development of palm oil, and assess the implications for biodiversity and ecosystems.

In Indonesia, OPAL activities that are led by the Center for Agriculture and Rural Development Studies (CARDS-IPB) and CIFOR Indonesia focus on research project in three areas related to the development of oil palm plantations in Indonesia, those are: (1) changes in the agrarian and rural transformation system of livelihoods in the rural area; (2) changes in landscape of ecology in the area of oil palm plantations, and (3) the development of oil palm plantations and its impact on the regional economy. Research conducted in the long run using a variety of qualitative and quantitative approaches, including introducing Companion Modeling (ComMod) method. Kutai Kartanegara District of East Kalimantan Province has been selected as the location of case study to obtain primary data and information at the site level.

This working paper is one part of the efforts to publish the results of the Indonesian OPAL activities containing academic values and findings in other fields conducted during the project took place. This Working Paper was published serially over the activities carried out (2015-2021). In this project, the OPAL CARDS-IPB team involved various government agencies, non-governmental organizations, private companies and community during it took place. On this occasion we would like to thank especially the Swiss National Science Foundation (SNSF), ETH Zurich, CIFOR Indonesia and the District Government of of Kutai Kartanegara which have provided their support making this project can be realized.

Finally, I hope that the Working Paper Project in OPAL serial No.02/2016 can add insight to readers, especially regarding the relationship of expansion on oil palm plantations with changes in the rural area of Indonesia. Constructive criticisms and suggestions are are expected to the progress this OPAL project.

Sincerely Yours,

Author Team

## CONTENTS

Preface .....	ii
Contents .....	iii
1 The Dynamics of Agrarian Structure in Kutai Kartanegara .....	1
2 Natural Resources and Economic Extractive Implication .....	5
3 Closing .....	8
Acknowledgement .....	9
References .....	10

# 1 THE DYNAMICS OF AGRARIAN STRUCTURE IN KUTAI KARTANEGARA

Agrarian structure in Kutai Kartanegara cannot be separated from the style of change in natural resources (SDA) control regime. Therefore, an agrarian history aspect becomes vital to use as an analysis of changes in the agrarian structure by jumping into the past to examine the tenurial narration why the present as is. Agrarian structure is the system of ownership, tenure, and utilization of land in a certain area (Wiradi 2008; Tjondronegoro, 2005). Agrarian structure is strongly associated with the regime of power to the natural resources in the specific era and period.

In a brief outline, this chapter presents a style of agrarian history in Kutai Kartanegara from time to time. First, in the kingdom of the 17th century, where the regime of power was the government of the Sultanate of Kutai Ing Martadipura<sup>1</sup> using the Book of Brajaniti and the Law of Panji Selaten. Second, in 1825 with the agreement made between the Sultanate and the Netherlands. Amin (1975) quotes Mess dissertation (1935) that in 1825 Sultan Aji Muhammad Salehuddin entered into an agreement with G. Muller, a representative of the Government of the Netherlands East Indies. Since this period the Sultanate Kutai Ing Martadipura was under the control of the Dutch colonial government. The principle of *Domein Verklaring*<sup>2</sup> was applied in relation to the control of natural resources by the Colonial Government.

Third, at the time of independence in 1945, in which the natural resources were controlled by the Republic of Indonesia. In the context of Indonesia as a *nation state*, it is expressly stated that the earth, water, and natural resources contained therein shall be controlled by the state, but with the objective of the greatest prosperity for people (see Article 33 Paragraph 3 of the 1945 Constitution amendment). Even after Indonesia's independence the government of the republic replaced *Agrarische Wet 1870* with the Law Number 5 of 1960 concerning Agrarian Law (UUPA 1960). However, there are unique things in East Kalimantan, the proclamation of independence in 1945 does not mean necessarily integrates all existing kingdoms in East Kalimantan into the lap of the republic. After Japan's defeat against allied forces, the Netherlands utilized "transitional period of independence" in 1947 to re-enter Indonesia (riding allies). Rickfels (2001) explains that the Netherlands in 1947 approached some king/sultan (self-government) to defend the self-government. The effort received a positive response from some king/sultan who still wished to maintain their

---

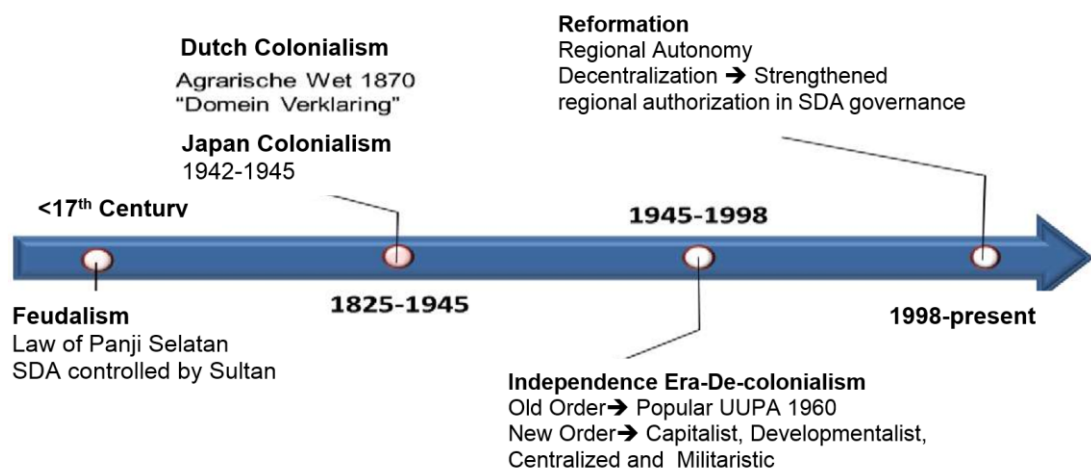
<sup>1</sup> Formerly the earth of *Koetai*, was composed of two kingdoms i.e. Kingdom of Kutai Martadipura at Muara Kaman (as the oldest Hindu Kingdom in the Archipelago) and the Kingdom of Kutai Kartanegara (Islamic kingdom), at Tangga Arung (Tenggarong) Coast. In 1635 Aji Pangeran Sinum Panji Mendapa successfully conquered the Kingdom of Kutai Martadipura (also known as the Kingdom of Mulawarman) at Muara Kaman that at the time was ruled by Maharaja Dharma Setia (the last king of the Kingdom of Kutai Martadipura). This conquest effort is also as a form of effort to spread Islam at Mahakam River upstream that was previously dominated by Hindu.

<sup>2</sup> In *Agrarische Wet 1870* (the Agrarian Law of the Dutch East Indies) *Domein Verklaring* was a tool of the colonial government to control the land, where the lands that could not be legally proven from the ownership then those were controlled by the State (Government of the Dutch East Indies).



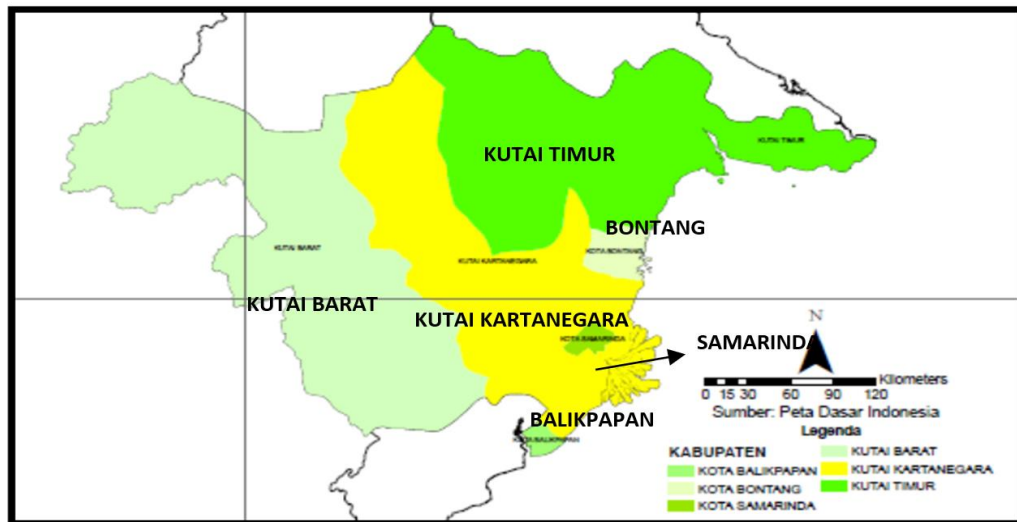
power. Furthermore, the former kingdoms/sultanates formed the Federation of East Kalimantan, consisting of a combination of the Sultan Kutai, Bulungan, Gunung Tabur, Sambaliung, and Neo Swapraja Pasir. This Federation of East Kalimantan is then collapsed in 1950 in line of a *republikan* nationalism strengthening in East Kalimantan and then some former regions of self-government merged into the lap of the Republic of Indonesia (Amin, 1975).

And the last, after the Indonesian independence, it then passes through three regimes of power that the old order (the period of President Soekarno 1945-1967), the new order (the period of President Soeharto 1967-1998), and reforms order (1998-present). Transition of the government regimes of the old order to new order is characterized by the strengthening of the agrarian structure of capitalism (from the previous populist), in which the UUPA 1960 "was shelved", and the start of a new round with the birth of the Law concerning forestry, mining, plantation sector and even foreign investment. Government system is executed under centralized regime even by militaristic hand in the name of national stability. The end of the New Order regime, was marked by rolling of the reform era in 1998. Regional autonomy (under Law No.22 / 1999, as amended by Law No.32 / 2004, and then last updated by Law No.23 of 2014 concerning Regional Government) had restored the power of natural resources development and management into the hand of Local Government (provinces and districts).



**Figure 1.** Regime of Natural Resources Power in Kutai Kartanegara, 17th Age to the Decade in 2010

In addition to affect the agrarian structure, SDA power regime also affects the agro- ecosystem conditions of Kutai Kartanegara. The conditions of agro-ecosystem are strongly influenced by regional borders and span of the regional landscape of a power territory. Prior to become Kutai Kartanegara District, formerly, this district was a power territory of the Sultanate Kutai Kartanegara ing Martadipura, which since 1950 became the Second Level Region (DATI II) of Kutai. If looking at the context of the district and municipality from now (post-reform), then actually the territory of Sultanate of Kutai Kartanegara covers six administrative territory of district/municipality, those are Kutai Barat District, Kutai Kartanegara District, Kutai Timur District, Bontang Municipality, Samarinda Municipality and Balikpapan Municipality (See Figure 2).



**Figure 2.** Territory of the Sultanate Kutai Kartanegara ing Martadipura

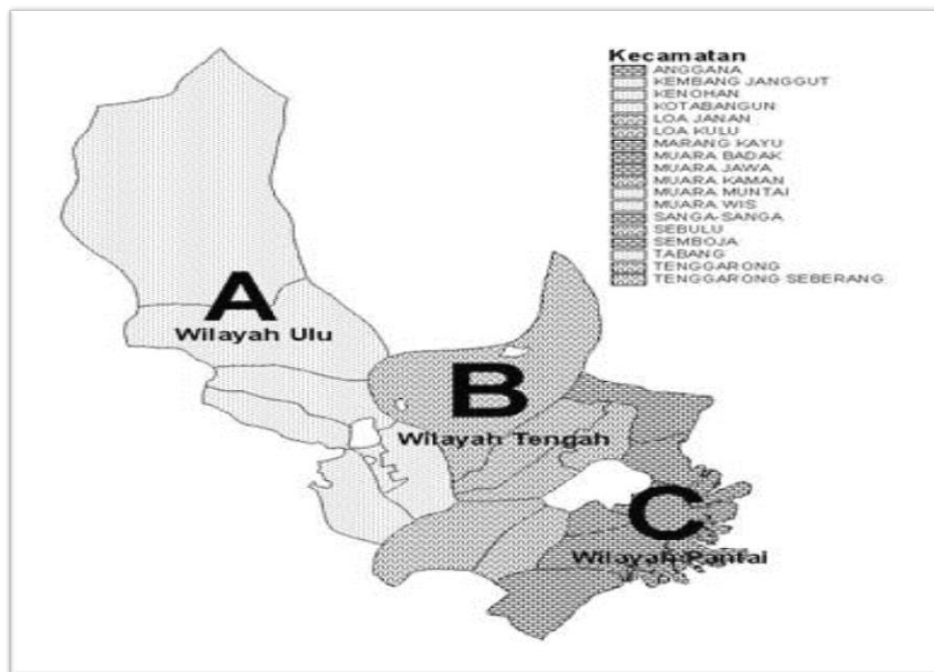
In short, post-reform, through the Law Number Number 47 of 1999 concerning the Establishment Nunukan District, Malinau District, Kutai Barat District, Kutai Timur District, and Bontang Municipality. the Second Level Region of Kutai was split into Kutai Barat District, Kutai Timur District, and Bontang Municipality. While, the Kutai District itself further became the Kutai District. Through Government Regulation (PP) Number 8 of 2002 concerning Change in Name of Kutai District into Kutai Kartanegara District (see Figure 3).



**Figure 3.** Administrative territories of Kutai Kartanegara District, 2015.



Based on the sociographic and agro-ecosystem conditions, Kutai Kartanegara can be divided into three regional categories (see Figure 4), those are (A) Upstream Kutai consists of the Sub-Districts of Tabang, Kembang Janggut, Kenohan, Muara Muntai, Muara Wis, and Kota Bangun; (B) Central Kutai, consists of the Sub-Districts of Muara Kaman, Sebulu, Loa Kulu, Loa Janan, Tenggarong and Tenggarong Seberang; and (C) Downstream Kutai/Coastal Kutai consists of the Sub-Districts of Muara Badak, Muara Jawa, Marang Kayu, Sanga-Sanga, Anggana, and Samboja. The farther downstream, the higher heterogeneity of human population, the influence of Islam and Malay culture is getting stronger, urban livelihood (farming agriculture, industry and services), and the form of lowland, coastal areas and beaches. Conversely, the more upstream, the smaller heterogeneity of the population, is generally dominated by the Dayak and Kutai tribes, the influence of Islam is small, rural livelihood (*behuma* and *bejukut*<sup>3</sup>), in the form of highland, tidal swamp, and the Mahakam river upstream. While the central region, is an region between the binary opposition of upstream-downstream.



**Figure 4.** Kutai Kartanegara by Sociograph and Agro-ecosystem

At present, the condition of the forest in Kutai Kartanegara region can only be found in the area of Upstream Kutai i.e. Tabang and a small part of Kembang Janggut. Almost in all regions of Kutai Kartanegara the exploitation of natural resources occurs through mining operations (especially oil and coal) and plantations (mainly palm oil). Changes in the agrarian structure is characterized by changes in ecological landscape, have an impact on the change on livelihood system of surrounding communities. The change from forest to mining areas or estates results in the consequence on the community integration of enterprise system. The change of ecological landscape then causes to the change in local agrarian structure and system of household income patterns in the local community.

<sup>3</sup> Behuma is a local term that means farming (farm clearing), while Bejukut is an activity for fishing in the River Mahakam, a tributary, or peat swamp (extractive / non-cultivation)

## 2 NATURAL RESOURCES AND ECONOMIC EXTRACTIVE IMPLICATION

Post-independence of Indonesia, the wealth of topography and agro-ecosystem in Kutai Kartanegara brings two new propositions, those are "as benefit carrier" or "as disastrous carrier". In the pre-independence era, the proposition does not seem so binary, it is because the extractive utilization of natural resources is still limited in scope and also with the limited tools and technologies. Although, in fact the mining activities carried out in the early 19th century in Kutai Kartanegara is also carried out by a variety of heavy equipment from the Netherlands, but its activities have not been carried out massively and so expansive. As mentioned by Goldblatt (2015), in the pre-20th century era, the extractive economic activities have not fully approached the phase "of capitalism - the industry" that is so destructive and implicative as is carried out in the 21st Century. Terms of risk society or the public at risk mentioned by Beck (in Goldblatt 2015) also seems not too relevant if it is associated in pre or early 20th century in Kutai Kartanegara. Furthermore, Beck (in Goldblatt 2015) states that the biggest "risk" in society arising due to the existence of the technology, because using technology it is able to perform the extraction on an unlimited manner (particularly related to manpower constraint and limitation of conventional tools). The problem is the "risk" is not just linear with respect to nature or ecosystems, but rather extensive and dynamic. The implication even touches up to the social relations to economic aspects, several studies related to mining operations indicated that the extractive economic activity was holistic, it touched many aspects and layers of issues.

Kutai Kartanegara in post-independence had also been very familiar with the mining operations. The development orientation of government in that era also looks tendentious, when being assessed from the aspect of any policy the "exploitative" orientation is still clearly visible (Sinaga 2010). The orientation tends to look from various Mining Authorization or *Kuasa Pertambangan* (KP) permits, which often overlaps, not to mention if it is associated with the minimum reclamation activities.



**Figure 5.** Extractive Economic Activities of Coal in Kutai Kartanegara District, 2015

Regional autonomy law also seems to be a "weapon" for the part of government to perform the opening licensing tap for exploitative operations, rationality put forward is industrial economic development (nature based) expected is straight proportional with the welfare of society. However, of the the new order reign period until 2010, those extractive economic operations or specifically, the mining actually gave rise to many problems in social, ecology to complex economy sectors (Sinaga, 2010). This condition is aggravated by the entry of oil palm plantation in Kutai Kartanegara District in the early 1990s<sup>4</sup>. The imbalance of nature and human has more increased as a result of extractive economic activities that is increasingly expansive, not only in Central Kutai region, but also the area of Upstream Kutai and Downstream Kutai / Cpasta; Kutai, all of those areas are not spared from the chain of extractive economic activities in mining to plantations As most expansive commodity of plantations , the implication of oil palm plantations is no less great with the "predecessor". The condition raises the irony in areas that are rich in biodiversity, because as mentioned by Rudel et al. (2005) and Cramb (2013) and Castiblanco et al. (2015) and Wicke et al. (2010) that forests that are converted in function into a variety of other designation will automatically bring up various threats of biodiversity (biodiversity loss) until the livelihood of the people (livelihood loss).



**Figure 6.** Newly Planted land of Oil Palm Plantation Land in Kutai Kartanegara, 2015.

Brad et al. 2012; Obidzinski 2013 further states that the issue of oil palm plantations is a systemic one that extends from upstream to downstream. The process cannot be understood partially, likewise to the case in Kutai Kartanegara.. If pulled towards the upstream, it is known that expansive oil palm plantations indeed "desired" by the government. Or in other words, the political space of licensing should be further studied before justifying which actor is the most "responsible" for the consequences and damages caused by oil palm plantations. In the district government perspective, the oil palm has become a "primadonna" of regional economic development in addition to mining. This is

---

<sup>4</sup> Between 1962 and 2012, the expanded area of oil palm plantations is estimated at least 13 million ha (Mega Hectares: Mha), it ultimately makes oil palm as a commodity (monoculture) that is growing very rapid in the world (Brad et al. 2015)

reinforced by the district government of Kutai Kartanegara (in Oil Palm... 2010) stating that the potential oil palm plantations in Kutai Kartanegara should be optimized. Furthermore, even mentioned, that "business opportunity" of plantation to oil palm processing including crude palm oil) can continue to be developed in Kutai Kartanegara with government support. If it is associated with an explanation in Chapter I, essentially in the private perspective (or maybe the government), on an agro-ecosystem basis, oil palm plantations indeed are "ideal" to develop in Kutai Kartanegara, apart from the richness of the forest areas, water supply in the region of Kutai Kartanegara also almost never knows the word of crisis. It can be seen as in Table 1, the data show the figures plantation commodities production that continuously increase, and one of the main contributors to the increase is from oil palm:

**Figure 1.** Area, Production & Employment Based on Primary Commodity of Plantation in Kutai Kartanegara District, 2014

No.	Primary Commodities	TM Area (Ha)	Total Area (Ha)	Production (Ton)	Plantation Workforces
1	Rubber	13,650	24,472	9,722	10,825
2	Inside Coconut	8,122	11,344	5,565	6,113
3	Oil Palm	74,504	180,210	1,231,387	23,109
4	Cacao	69	189	28	45
5	Pepper	3,783	5,733	4,574	3,394
6	Coffee	263	1,287	136	1,068
7	Hazelnut	76	212	26	270
8	Sugar Palm	115	206	33	310
<b>Total 2014</b>		100,582	223,653	1,251,471	45,134
	2013	115	206	33	310
	2012	115	206	33	310
	2011	115	206	33	310

In view of the other side, in particular civil society, those conditions are not "ideal". In fact, the expansion of oil palm plantations in Kutai Kartanegara violates the rules, it relates to the forest area carving up conducted in one way, by disregarding indigenous rights and interests of local communities around the concession area. Several studies related to local communities (or indigenous) and its relation to the expansion of "monoculture" have shown similar indications, that the expansion ultimately causes the problem of access closed for local communities' livelihood (tragedy of enclosure). The forest area which is originally to be the source of their livelihood gradually reduced and even continues to be threatened by extractive economic activities.

### 3 CLOSING

Large In the end the issue of oil palm in Kutai Kartanegara shows the interconnected complexity and cannot be understood partially. If related to the context of the agrarian structure, Kutai Kartanegara at least has gone through three phases: (1) In the kingdom era of the 17th century, where the regime of power was the government of the Sultanate of Kutai Ing Martadipura using the Book of Brajaniti and the Law of Panji Selatan; (2) In 1825 with the agreement made between the Sultanate and the Netherlands. Since this period the Sultanate Kutai ing Martadipura was under the control of the Dutch colonial government; (3) In the 1945 independence era, where natural resources were controlled by the Republic of Indonesia. The historical context is closely related to the space of extractive economic activities undertaken to date. Because long ago, a wealth of natural resources to be the primadonna and excellence of Kutai Kartanegara, which often brings disastrous of "colonization" to dependence. Given that under the sociographic and agro-ecosystem condition, Kutai Kartanegara alone at least can be divided into three regional categories: (A) Upstream Kutai consists of the Sub-Districts of Tabang, Kembang Janggut, Kenohan, Muara Muntai, Muara Wis, and Kota Bangun; (B) Central Kutai, consists of the Sub-Districts of Muara Kaman, Sebulu, Loa Kulu, Loa Janan, Tenggarong and Tenggarong Seberang; and (C) Downstream Kutai/Coastal Kutai consists of the Sub-Districts of Muara Badak, Muara Jawa, Marang Kayu, Sanga-Sanga, Anggana, and Samboja. The farther downstream, the higher heterogeneity of human population, the influence of Islam and Malay culture is getting stronger, urban livelihood (farming agriculture, industry and services), and the form of lowland, coastal areas and beaches, likewise, vice versa.

Oil palm plantations in Kutai Kartanegara should also be understood as an integral part of acceptances and political consequences of natural resources. If pulled towards the upstream, it is known that expansive oil palm plantations indeed "desired" by the government. Or in other words, the political space of licensing should be further studied before justifying which actor is the most "responsible" for the consequences and damages caused by oil palm plantations. In the district government perspective, the oil palm actually has become a "primadonna" of regional economic development in addition to mining. Goldblatt (2015) states that, indeed the government often creates "pragmatic" decisions in case of being associated with an increase in regional economies. However, it is undeniable, too, that the decision ultimately leads to various consequences of social, ecology to the complex and holistic economy. If done simplification, at least based on the above translation there are some implications that can be understood as the consequences for the existence and expansion of oil palm plantations, which are: (1) The loss of Local Livelihood System (livelihood loss); as mentioned in Chapter 1, that local communities (Dayak, Malay, etc.) are people whose livelihoods based on natural resources (non-timber forest product), where "monoculture" system means the same as removing the source of their livelihood in the forest; (2) The Loss of Natural Biodiversity (biodiversity loss); a wealth of natural resources and the unique topography of Kutai Kartanegara should continue to be reduced and threatened by the massive land conversion for monoculture plantations.



## ACKNOWLEDGEMENT

This research is part of Project Oil Palm Adaptive Landscape (OPAL) funded by SNSF (Swiss National Science Foundation). We are pleased to extend our heartfelt thanks to:

1. Ir. H.Marli, M.Si (Head of Plantation and Forestry Department, Kutai Kartanegara District)
2. Drs. Halilintar (Head of Agribusiness Division, Department of Plantation and Forestry, Kutai Kartanegara District)
3. Hamdani, SE (Head of Land Development Division, Department of Plantation and Forestry, Kutai Kartanegara District).
4. Joko Purwanto, SP (Head of Planning Program Division, Department of Plantation and Forestry, Kutai Kartanegara District).
5. Yudiarta, S.Hut (Head of Regulating, Mapping, and Forest Product Sub Division, Department of Plantation and Forestry, Kutai Kartanegara District).
6. Setianto N. Aji, SH (Head of Land Administration Division Kutai Kartanegara District)
7. Izhar Noor, SE (Head of Muara Kaman Sub Districts)
8. Wahyudi, S.Sos (Head of Muara Kaman Youth Organization/ NonGovernment Organization "*Barisan Oposisi Murni*", Muara Kaman Village)
9. Munir (Head of Dusun Sumber Agung, Muara Kaman Ilir Village)
10. Poy ("Big Man", Local Entrepreneur Fisherman and Independent Plasma Ownership)

## REFERENCES

- Amin, MA. 1975. Pertumbuhan Kerajaan Kutai Kartanegara Ing Martapura. Dalam A. Soetoen, dkk (Ed.). Dari Swapraja ke Kabupaten Kutai. Dewan Redaksi Kutai Masa Lampau, Kini dan Esok. Pemerintah Kabupaten Kutai, Kalimantan Timur.
- Brad A, Schaffartzik A, Pichler M, Plank C. 2015. Contested territorialization and biophysical expansion of oil palm plantations in Indonesia. *Geoforum*. Vol.64:Hal. 100–111. DOI: <http://dx.doi.org/10.1016/j.geoforum.2015.06.007>
- Castiblanco C, Etter A, Ramirez A. 2015. Impacts of oil palm expansion in Colombia: What do socioeconomic indicators show?. *Land Use Policy*. Vol. 44: Hal. 31–43. DOI: <http://dx.doi.org/10.1016/j.landusepol.2014.10.007>
- Cramb RA. 2012. Palmed Off: Incentive Problems with Joint-Venture Schemes for Oil Palm Development on Customary Land. *World Development*. Vol. 43: Hal. 84–99. DOI: <http://dx.doi.org/10.1016/j.worlddev.2012.10.015>
- [DISBUN] Dinas Perkebunan Pemerintah Provinsi Kalimantan Timur. 2015. Potensi Daerah Kutai Kartanegara.
- Goldblatt D. 2015. Analisa Ekologi Kritis. Yogyakarta (ID): Resist Book
- Kelapa Sawit Masih Potensial Dikembangkan. 2010. [internet]. Dapat diunduh dari: <http://www.kutaiartanegara.com/news.php?id=2841>
- Obidzinski K, Takahashi I, Dermawan A, Komarudin H, Andrianto A. 2013. Can large scale land acquisition for agro-development in Indonesia be managed sustainably?. *Land Use Policy*. Vol. 30: Hal. 952– 965. DOI: <http://dx.doi.org/10.1016/j.landusepol.2012.06.018>.
- Rickfels MC. 2001. A History of Modern Indonesia Since C.1200. Stanford (GB): Stanford University Press.
- Rudel TK, Coomes OT, Moran E, Achard F, Angelsen A, Xu Jianchu, Lambin E. 2015. Forest Transitions: Towards a Global Understanding of Land Use Change. *Global Environmental Change*. Vol. 15: Hal. 23–31. DOI: [doi:10.1016/j.gloenvcha.2004.11.001](http://dx.doi.org/10.1016/j.gloenvcha.2004.11.001)
- Sayer J, Ghazoul J, Nelson P, Boedhihartono AK. 2012. Oil Palm Expansion Transforms Tropical Landscapes and Livelihoods. *Global Food Security*. Vol. 1: Hal. 114–119. DOI: <http://dx.doi.org/10.1016/j.gfs.2012.10.003>
- Sinaga N. 2010. Disain Kebijakan dan Strategi Pengelolaan Kawasan Pasca Tambang Batubara Berkelanjutan (Studi Kasus Kabupaten Kutai Kartanegara). [disertasi]. Bogor (ID): Institut Pertanian Bogor.
- Sunito S, Kinseng RA, Yulian BE, Lenggono PS, Sihaoloho M. 2011. Studi Keberadaan Hak Ulayat Masyarakat Hukum Adat di Kabupaten Kutai Kartanegara. Kerjasama Divisi Program Kajian Agraria, Pusat Studi Pembangunan Pertanian dan Pedesaan.
- Tjondronegoro SMP. 2005. Sosiologi Agraria. Bandung (ID): Akatiga
- Wicke B, Sikkema R, Dornburg V, Faaij A. 2011. Exploring land use changes and the role of palm oil production in Indonesia and Malaysia. *Land Use Policy*. Vol. 28: Hal. 193–206. DOI: [doi:10.1016/j.landusepol.2010.06.001](http://dx.doi.org/10.1016/j.landusepol.2010.06.001)
- Wiradi G. 2008. Menuju Keadilan Agraria: 70 Tahun Gunawan Wiradi. Bandung (ID): Akatiga