

Changes in the Livelihood System of the Kerang Dayo Village Community from Loggers to Oil Palm Farmers (2010-2020)

Perubahan Sistem Mata Pencaharian Masyarakat Desa Kerang Dayo Dari Penebang Kayu Hingga Petani Sawit (2010-2020)

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Abstract

This research aims to uncover and analyze changes in the livelihoods of the Kerang Dayo Village community in the period 2010-2020, focus on the transition from livelihoods as loggers to farmers palm oil. This research uses a historical methodology approach to understand the factors that influence this transformation. Primary data was obtained through interviews with residents of Kerang Dayo Village who work as palm oil farmers, while secondary data was obtained from the village fund budget, the village government agency, and the local government. statistical center, and related historical sources. The research results show that there are several factors that make the community in Kerang Dayo Village switched professions from loggers to palm oil farmers. In the past, wood was the source of main source of livelihood, but over time the supply of timber commodities in the forest has increased. restricted forest area. As a result of this, it encouraged logging workers looking for alternative jobs by becoming palm oil farmers. Interest people of Kerang Dayo Village become palm oil farmers because of the benefits that obtained is greater than being a woodchopper.

INTRODUCTION

Kalimantan Island has a large forest area. According to et al. (2017) almost all areas of Kalimantan produce logs. East Kalimantan is a province that has a large forest area on the island of Kalimantan. The vast forest area raises a variety of jobs that are utilized by the community, one of which is the work of loggers. The area of logging and log production in South Kalimantan Province from 2007-2010 has decreased, for more details can be seen in the following table.

Tabel 1. Data on Felling Area and Production of Logs in East Kalimantan Province in 2007-2010

Year	Felling Area (Ha)	Production (M ³)	
		Target	Realization
2007	83.499,26	3.004.092,00	1.984.648,84

Year	Felling Area (Ha)	Production (M ³)	
		Target	Realization
2008	81.175,83	2.894.947,00	1.800.426,47
2009	79.202,94	2.532.935,00	1.700.985,58
2010	64.863,38	2.087.082,00	673.032,72

Sumber : Dinas Kehutanan Provinsi Kalimantan Timur dalam BPS Provinsi Kalimantan Timur (2011)

Based on Table 1, it can be seen that the data on felling area, production target and realization of log production have decreased every year. Since 2007, the log production target has been higher than the realized log production. Forest areas that are logged need to be reforested and rehabilitated. The program aims to maintain the stability of forest functions and the sustainability of forest components in it. The following is data on reforestation and rehabilitation of forest land in East Kalimantan Province in 2012-2015.

Tabel 2. Data on Reforestation and Rehabilitation of Forest Land in East Kalimantan Province 2007-2010

Activities	Year			
	2007	2008	2009	2010
Cultivation and Enrichment	-	-	-	-
Industrial Forest Plantation	50.005,84	36.089,33	46.641,37	786,20
Reforestation	-	-	-	-
Greening	-	-	-	-
Total	50.005,84	36.089,33	46.641,37	786,20

Sumber : Dinas Kehutanan Provinsi Kalimantan Timur dalam BPS Provinsi Kalimantan Timur (2011)

Based on Table 2, it can be seen that in 2007-2010 the total data on reforestation and rehabilitation of forest land in East Kalimantan Province has decreased every year. Based on the data, it can also be seen that more activities produce logs than reforestation and rehabilitation on forest land. This creates a problem, namely the reduction of forest areas as a provider of wood supply which results in a reduction in the amount of income earned by logging workers. The era of logging has decreased since the 1990s, along with the reduction of forest areas (Yulian et al., 2017).

Employment as a logger is problematic due to the decline in timber production and the reduced availability of timber commodities in forest areas. In addition, the existence of strict government policies and laws, as well as strict sanctions in regulating logging activities, has made people think about finding other alternative jobs. This is because logging workers are experiencing an economic crisis caused by the decline in timber production. The economic crisis has led to a decrease in the income of logging workers and intense competition between fellow workers.

The entry of oil palm plantations into an area can provide new alternative jobs for the surrounding community (Herawati, 2018; Sulistia et al., 2023; Tapi & Setiawan, 2018). This is also felt by East Kalimantan Province, which is the place for the development of oil palm plantations. The following is data on the plantation area and total oil palm production in East Kalimantan Province in 2010-2020.

Tabel 3. Data on Plantation Area and Total Production of Oil Palm in East Kalimantan Province

In 2010-2020

Year	Plantation Area (Ha)				Production (Ton)
	PR	PBN	PBS	Jumlah	
2010	*112.762,00	*17.237,00	*433.562,00	*563.561,00	*2.961.069,00
2011	*143.251,00	*17.237,00	*555.812,00	*716.320,00	*4.081.782,00
2012	*200.638,00	*17.237,00	*616.538,00	*824.413,00	*5.221.016,00
2013	*209.010,00	*22.367,00	*713.449,00	*944.826,00	*6.901.602,00
2014	#236.952,00	#22.342,00	#761.119,00	#1.020.413,00	#9.628.072,00
2015	#255.976,00	#22.342,00	#811.788,00	#1.090.106,00	#10.812.893,00
2016	#277.034,00	#14.402,00	#858.642,00	#1.150.078,00	#11.418.110,00
2017	#284.532,00	#14.402,00	#893.417,00	#1.192.342,00	#13.164.310,00
2018	#286.058,00	#14.402,00	#898.947,00	#1.199.407,00	#13.398.363,00
2019	**255.446,00	**14.402,00	**957.817,00	**1.227.665,00	**18.343.852,00
2020	**256.019,00	**14.402,00	**957.817,00	**1.228.238,00	**16.717.254,00

Keterangan:

- PR = People's Plantation
- PBN = Large State Plantation
- PBS = Large Private Plantation

Sumber:

- * = BPS Provinsi Kalimantan Timur Tahun 2015
- ** = BPS Provinsi Kalimantan Timur Tahun 2020-2021
- # = Dinas Perkebunan Provinsi Kalimantan Timur Tahun (2014-2018)

Based on table 3, it can be seen that the production of oil palm plantations in East Kalimantan Province has increased from 2010-2019. Then in 2020 it decreased due to the drought that hit the East Kalimantan region in 2019. Anggoro Dwitjahyono (Head of BPS East Kalimantan) explained that the *el nino* phenomenon caused the low productivity of oil palm in East Kalimantan in 2020 because the drought in 2019 resulted in low palm oil prices and reduced fertilization by 40% (Samarinda Niaga Asia, 2020).

The oil palm plantation development program in East Kalimantan continues to be promoted from districts, sub-districts, to villages. Kerang Dayo Village is one of the villages where oil palm plantations are developed in East Kalimantan. The majority of the Kerang Dayo community work as oil palm farmers. Some people in Kerang Dayo Village also have multiple jobs (main job and side job). There are 346 people in Kerang Dayo Village who work as farmers, 292 of whom are men and 54 of whom are women. This data shows that the majority of people in Kerang Dayo Village work as oil palm farmers.

Subroto & Rochgiyanti (2018) said that the existence of oil palm plantations can provide new jobs for the community. The existence of oil palm plantations has made the people of Tabatan Baru Village switch professions as purun mat weavers, boat makers, and swallow house building businesses (Subroto & Rochgiyanti, 2018). Initially, the livelihoods of the Tabatan Baru community worked as forest product collectors, fishermen, rice farmers and housewives.

Opposition to the presence of oil palm plantations can lead to conflict with local communities. This is because the community loses the work they have been doing for a long time, as happened in Kuripan Sub-district. The rational reason for residents of Kuripan Sub-district to reject the existence of oil palm plantations is because oil palm plantations can eliminate the livelihoods that the community has been working on (Rochgiyanti, 2022). This shows that the presence of oil palm plantations can provide new jobs for the community and erode the jobs that have long been cultivated by the community.

The people of Kerang Dayo Village have changed their livelihoods from loggers to palm oil farmers. This change in livelihood cannot be prevented, because it will continue to occur in

accordance with the times. This research is important to do in order to provide insight and knowledge to be able to adapt and face challenges as changes occur, one of which is changes in livelihoods.

METODE

The method used in this research uses the historical method. The historical method is used as a guide in conducting research on historical events and problems (Effendi, 2020). The historical method is divided into four steps, namely heuristics, verification, interpretation, and historiography.

Heuristics in this research is done by collecting data. At this stage, researchers interviewed directly with relevant sources. The sources in question are people who have worked as loggers who have switched their livelihoods to palm oil farmers, the Head of Kerang Dayo Village (2004- 2019), and the Head of RT. 04. There is also supporting data in the form of ADD (Village Fund Budget) regarding the distribution of oil palm seedlings to the community and data on road/bridge construction for community plantation areas. Other data was obtained from BPS Batu Engau Sub- district to obtain the number of villages in Batu Engau Sub-district, as well as data from BPS Paser District and BPS East Kalimantan Province and the East Kalimantan Provincial Plantation Office on the area of logging, log production data, forest land rehabilitation data, oil palm plantation area, and oil palm fruit production.

Verification (criticism) at this stage is carried out by selecting sources or data which are divided into two, namely external and internal criticism. External criticism is carried out on sources by checking the background of life, such as place and date of birth, residential address, and type of work. Furthermore, internal criticism was carried out in order to obtain credible sources. The credibility of the source in question is the results of interviews from related sources obtained.

Interpretation at this stage is carried out by interpreting the data or sources that have been selected, then connected with the facts in the form of concepts compiled based on the analysis of historical sources obtained. The researcher in this case includes his views on the events studied based on data sources and facts that have been collected and verified.

Historiography at this stage is historical writing based on data or facts that are written systematically in the time sequence of events. Researchers at this stage write the results of research on historical events that occurred in the past, namely changes in livelihoods from logging workers to oil palm farmers that occurred in the Kerang Dayo Village community in 2010-2020.

RESULTS AND DISCUSSION

The process of changing livelihoods in Kerang Dayo Village went through a long series of processes. Based on interviews with relevant informants, the change in livelihoods from logging workers to oil palm farmers began in 2010 and grew over time. Before 2010, many of the people in Kerang Dayo Village worked as logging workers. From the data collected, it is known that even before the village expansion was carried out or was still included in the Kerang Village area, the people of Kerang Dayo Village had been working as loggers.

Oil palm cultivation was carried out starting in 2015-2016 with a harvest period of around 3-4 years from the planting period. In 2019-2020, oil palm trees can be harvested and from the harvest, oil palm farmers can get income. The amount of income earned as an oil palm farmer provides information that work as an oil palm farmer is considered greater than income when working as a logger.

From the data collected by researchers, the time and reasons for each community to stop working as logging workers and choose to work as oil palm farmers vary. The following describes the process of changing livelihoods from logging workers to oil palm farmers in the Kerang Dayo Village community in 2010-2020.

Existence of Private Oil Palm Plantation Companies

A large private plantation company engaged in oil palm cultivation is PT Saraswanti Sawit Makmur, which is part of the oil palm development program of Paser District. PT Saraswanti Sawit

Makmur has been in existence since 2003, but its operational activities only began in 2004 (Saraswanti, 2022). The company recruits casual laborers from the Kerang Dayo village community to nurture oil palm plants. Seeding and planting activities were carried out gradually over a long period of time until 2009 to plant oil palm plantations in the company.

In 2010 oil palm nursery and planting activities on plantation company land were completed. Oil palm planting activities were completed with an effective plantation area of 5,000 ha (Saraswanti, 2022). Oil palm nursery and planting activities provide income, experience and knowledge about oil palm management for the Kerang Dayo Village community.

In 2010, smallholder oil palm plantations began to appear in Kerang Dayo Village. This is because there are already places that sell oil palm seedlings from Sengayam Village or Kerang Village. The community also gained the skills to cultivate oil palm plants independently from their experience working as laborers for a palm oil company, PT Saraswanti Sawit Makmur. Community oil palm plantations that continue to emerge are a profitable alternative for the community. This is due to promising selling prices, regular harvests, and the availability of seedlings, fertilizers, pesticides, and polybags.

The entry of the oil palm plantation company PT Saraswanti Makmur provides experience in cultivating oil palm plants to the community, so that people can develop their skills to open new businesses/jobs. This is a consideration for the community to make livelihood changes. The existence of the private oil palm plantation company (PBS) provides opportunities for the creation of new business alternatives for the people of Kerang Dayo Village, one of which is becoming an oil palm farmer.

Timber Commodity Decline in Community Forest Areas

The change in livelihoods from logging workers to oil palm farmers occurred in 2010, after the existence of the industry provided experience and results of cultivating oil palm plants. The limited supply of timber commodities in the forest area encouraged loggers to look for alternative jobs. The condition of the forest, which has been depleted since 2010, has resulted in less timber production by logging workers. Decreased timber production has resulted in a decrease in the income of logging workers. Timber production, which depends on the supply of timber commodities in the forest area, makes logging workers' income uncertain every month.

In 2010, the availability of oil palm cultivation skills and the desire for a more regular income encouraged logging workers to choose an alternative job, namely becoming oil palm farmers. For the people of Kerang Village Dayo's job as an oil palm farmer is more profitable than being a logger in the dwindling forest area. In 2010-2014, there was a decrease in the supply of timber commodities along with the depletion of forest areas. This led to a decline in timber production by logging workers. The limited timber commodities encouraged competition among logging workers in producing timber. Logging workers must enter the deeper parts of the forest, because the peripheral areas have no trees to harvest. This intense competition between workers has led to a reduction in labor.

In 2014, the number of workers decreased dramatically due to declining timber production and the increasing difficulty of finding timber to harvest. The work of loggers began to change from the main job to a side job, and some of them even left the job and looked for other jobs.

Distribution of Palm Seedlings

In 2014, the community of Kerang Dayo Village received a distribution of oil palm seedlings to improve the community's economy. The distribution of oil palm seedlings was evenly distributed to all people living in Kerang Dayo Village, as evidenced by the existence of a KK (family card) and/or KTP (identity card). KK and/or KTP are collected by the Head of the RT to collect data on palm oil seedling recipients.

The distribution of oil palm seedlings was carried out evenly using the Village Fund Budget (ADD). Each family received 2 packs of PPKS Lunsum short-leaf oil palm seedlings in the form of sprouts. The distributed oil palm seedlings are additional seeds for people who open oil palm plantations.

Although the seedlings distributed are of poor quality, they can help increase the number of seedlings owned by the community. The oil palm seedling distribution program opens up opportunities for the development of community oil palm plantations (PR). Especially over time until 2014, the forest area that is the location or place of logging workers is decreasing (thinning). Plus the process of growing trees from replanting activities takes a long time not proportional to the increasing needs of life.

The number of loggers who have changed their livelihoods to become oil palm farmers is increasing. The oil palm seedling distribution program is enough to help the community to carry out oil palm nurseries independently. Loggers who see a new opportunity in oil palm plantations as a replacement job are able to improve the household economy. Promising results from a number of oil palm farmers who have enjoyed the harvest of oil palm plantations encourage people to change their livelihoods as oil palm farmers.



Figure 1. Palm Oil Plantation in Kerang Dayo
Sumber: Personal Documentation, March 11, 2023

In Figure 1, it can be seen that the oil palm plantations that were planted in 2014-2015 have been categorized as Producing Plants (TM). The oil palm plants have produced ripe fruit or what we usually call Fresh Fruit Bunches (FFB). Sales from the FFB harvest provide income for oil palm farmers to fulfill their daily needs. Income as an oil palm farmer is considered by the community to be greater than that of a logger, especially for those who have large areas of oil palm plantations >2 Ha.

In 2018, village officials provided assistance for infrastructure development in the form of roads and bridges to the community's oil palm plantation areas (Village Fund Budget, 2018). The implementation of this program is intended to improve the economy of the Kerang Dayo Village community in the agricultural/plantation sector. The form of implementation of the program is the construction of a road to the plantation area to be enlarged so that it can be entered by 4-wheeled vehicles, and the bridge is repaired / built as a road link to facilitate access to the community plantation (PR). The oil palm plants have entered the harvest period and have provided income for oil palm farmers in 2019-2020.

Nawiruddin (2017) in his research revealed that there are separate benefits obtained from the existence of oil palm plantations. The benefits are such as previously there were no grocery stalls then many stalls were opened by the community since the existence of oil palm plantations (Nawiruddin, 2017). Even local economic growth has increased by 6.94% (Utami et al., 2017). Thus, the presence of oil palm plantations can increase the economic growth of the community, including those experienced by oil palm farmers in Kerang Dayo Village.

Communities that used to depend on rubber products for a living then switched professions to become laborers in the oil palm plantation sector. This is due to unclear rubber yields due to declining rubber prices (Apriansyah et al., 2020). However, oil palm plantations have a negative impact. The negative impacts damage the environment, namely affecting soil quality, reducing the quality of soil to retain rain, loss of animal species, plants, and microorganisms that maintain the balance of the environmental ecosystem (Lisdayani & Ameliyani, 2021). Suryadi et al. (2020) added that the impact of oil palm plantation expansion from a social aspect can lead to conflict.

PENUTUP

The process of livelihood changes that occurred in the Kerang Dayo Village community in 2010-2020 began with the existence of a private oil palm plantation company called PT Saraswanti Sawit Makmur. PT Saraswanti Sawit Makmur provides experience and knowledge to the Kerang Dayo Village community about cultivating oil palm plants. In 2010, a shift in livelihoods from logging workers to oil palm farmers occurred. This change was caused by the experience gained in the industry and the results of oil palm cultivation. The limited availability of timber commodities in the forest encouraged loggers to seek alternative employment. With the depletion of forests since 2010, the timber production produced by logging workers has decreased, and this has resulted in a decrease in their income. The income of logging workers has become uncertain every month because timber production is highly dependent on the supply of timber commodities in the forest.

The ability to cultivate oil palm plants and the desire to have a more stable income encourage loggers to choose an alternative job, namely becoming oil palm farmers. For the people of Kerang Dayo Village, becoming an oil palm farmer is considered more profitable than remaining a logger because their forest area is decreasing.

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