

Social Forestry as Solution to Agrarian Conflicts? A Case Study between Oil Palm Smallholders and Industrial Plantations in Jambi, Indonesia

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ABSTRACT

Extraction activities across Indonesia have caused drastic changes to forest ecologies. The Indonesian government responded to this through a policy of Industrial Plantation Forest concessions, which were given to the private sector in the hopes of overcoming damages from forest extraction activities while at the same time utilizing unproductive forest land. However, this policy does not pay attention to the existence of people who de facto control and use the land and has triggered new conflicts around agrarian claims based on different interpretations of land rights. In an effort to resolve conflicts, the government has implemented a community-based forest area management policy, which involves a partnership between local communities and companies known as the social forestry partnership scheme. This scheme is partial tenure in the form of management rights and legality to communities to manage land in forest areas. In this study, we report how the community interprets this program as a solution to agrarian conflicts. Using qualitative methods, this study finds that social forestry has not been entirely accepted by local communities for several reasons. These include the low level of public trust due to the actions taken by the company during the land claim process, demands for property rights from social movements that were not fulfilled through this scheme, and the community's continued cultivation of oil palm, which is a non-forest crop, on their land. The last reason requires the community to replace their plantations with non-oil palm plantations if they wish to participate in the social forestry program. This research further examines how the community's readiness to adopt non-oil palm plantations is influenced by factors of income, convenience, socio-cultural and ecological adaptation, and the potential for new conflicts to arise.

KEYWORDS

Social forestry; Agrarian conflict; Palm oil expansion; Forest area; Indonesia.

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1. INTRODUCTION

Changes in land cover and land use have occurred through various processes over distinct periods in Indonesia. Widespread changes result in transformations of natural ecosystems, including forest area ecosystems and can have far reaching effects (Yuliani et al., 2020). Sumatra Island is one of the areas in Indonesia which has lost a significant portion of natural forest cover due to deforestation (Laumonier et al., 2010) drive by the expansion and growth of export-oriented large-scale crops such as oil palm and rubber (Ekadinata and Vincent, 2011; Villamor et al., 2015; Drescher et al., 2016). Expansion of these cash crops continues to occur due to high global market demand (Sayer, 2012; Warren-Thomas et al., 2018). In the last ten years, the area planted for global rubber and oil palm plantations has continued to increase relatively rapidly, resulting in ecological and socio-economic impacts (Tyson, 2009; Lee et al., 2014; Gatto et al., 2015; Warren-Thomas et al., 2018).

Conversion of land use into monoculture plantations in Indonesia is driven by Forest Concession policies (HPH or *Hak Pengusahaan Hutan*), which grants licenses to private

parties to log timber within forest areas and market it. This policy causes large-scale loss of forest cover (Melati, 2017). The government then responds to this change through two policy forms, namely Industrial Plantation Forest (HTI or Hutan Tanaman Industri) under the authority of the Ministry of Forestry (*Kementerian Kehutanan*) concessions and the release of the status of forest areas to become Areas for Other Uses (APL or *Area Penggunaan Lain*). APL land is administered by the National Land Agency (BPN or *Badan Pertanahan Nasional*) and it can be used for land concessions for large scale agriculture estates (HGU or *Hak Guna Usaha*), transmigration settlements, or adat community resettlement programs (Mardiana, 2017). HTI policies are established to overcome ecological damage in forest areas (Mardiana, 2017) and take advantage of production forest areas, which are no longer productive (Kartodihardjo and Supriono, 2000). These HTI concessions are generally used as monoculture plantations for rubber, acacia, and teak commodities. In comparison, HGU concessions are used as oil palm plantations.

Concession policies on land (HPH, HTI, and HGU) regulated by the government ignore local and customary community rights, causing agrarian problems at the site level. Even though the land is *de jure* "controlled by the state," it turns out that lands are often *de facto* owned, claimed, and used (cultivated) by local people (Sunito et al., 2012; Kunz et al., 2016; Rietberg & Hospes, 2018). The companies involved in these concessions are usually private companies that are affiliated with and licensed by the state, which in turn heightens tensions between them and local communities already residing in the concession areas. The overlapping claims and conflicting interests between parties lead to conflicts between local communities and state-backed companies (Li, 2018; Abram et al., 2017). In Jambi Province, where this research was conducted, 21 conflict cases were recorded in an area of 17,988.23 hectares in 2020. This figure represents the second highest number of conflict cases among all provinces in Indonesia for that year. The conflicts were primarily dominated by plantation conflicts (HGU), with 11 cases, and agrarian conflicts in forest areas (HTI), with 9 cases (KPA, 2020).

Rubber plantations are the prevalent land use practice among communities, commonly cultivated through traditional methods that integrate agroforestry practices, which are often referred to as 'Jungle Rubber' (Ekadinata & Vincent, 2011). Although the rubber agroforestry cultivation system is often viewed as a land use option that can offer diverse environmental benefits due to its structural similarity to secondary forests (Schroth et al., 2004; Gouyon et al., 1993), its low productivity makes it insufficient to meet the needs of local communities (Junaidi, 2020).

The higher economic value of oil palm compared to rubber, coupled with the expansion of oil palm plantations through HGU in the surrounding areas, has prompted local communities to shift their livelihood system from being rubber agroforestry farmers to entering the oil palm production circuit (Gatto et al., 2015; Yulian et al., 2020). Changes in livelihood systems have also occurred among communities living in and around HTI concessions that border HGU areas of oil palm companies and private plantations. This has resulted in oil palm expansion within HTI concessions by communities in dispute with companies due to overlapping permits and land ownership claims, further increasing the complexity of conflicts.

2. PROBLEM SETTING

HTI area conflicts have persisted for decades, and many remain unresolved. Land and agrarian conflicts continue to change form and increase in intensity. Through ongoing community movements and struggles, new political forces are emerging to support the fight for access and ownership of resources by the community. These community

movements and struggles consolidate with Non-Government Organizations (NGO), which receive support from the wider community. This escalation of community power then significantly influences conflict dynamics (see Fig. 1).

The Indonesian government is currently offering conflict resolution through the Agrarian Reform/Social Forestry policy (RA/PS or *Reforma Agraria/Perhutanan Sosial*). The position regarding this policy is regulated in the 2020-2024 National Medium-Term Development Plan (RPJMN) with policy directions and strategies in the form of alleviating poverty through social forestry. Under the social forestry program, the solution is offered through the forestry partnership scheme to solve conflicts within the company's concession area. Social forestry is a community-based forest management approach that involves granting legal access to communities to utilize and manage forest resources sustainably, with the goal of improving the livelihoods of people living in and around forest areas (Zakaria et al., 2018).

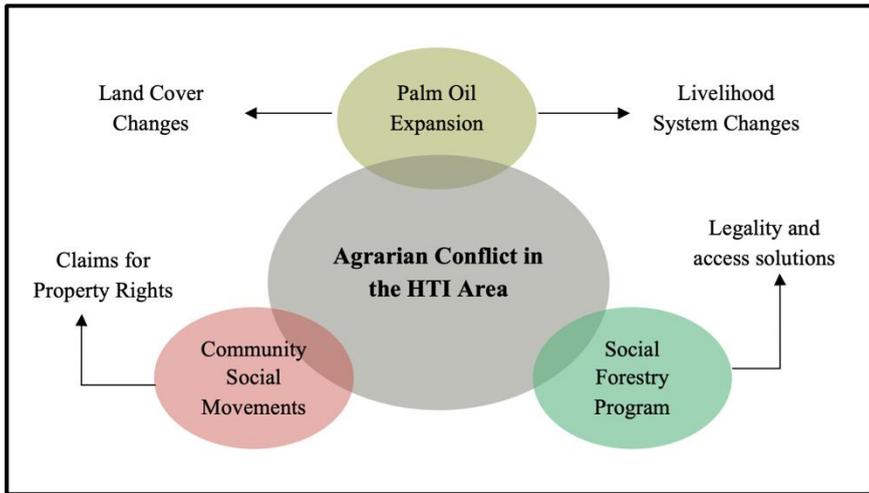


Figure 1. Agrarian Conflict and Linkages with Social Movements, Oil Palm Expansion, and Social Forestry.

However, in practice, this scheme has yet to become a meaningful step for addressing conflict. The community has yet to find it to be an effective solution to their land conflict issues as happens in Jambi, Indonesia. They continue to fight and demand a resolution of the conflict through policies that can facilitate their ownership rights over the land they currently manage. They consider this more beneficial than the social forestry scheme, which only provides legal access. The existence of oil palm plantations on the community's land has also created obstacles to implementing the forestry partnership scheme. Oil palm is a non-forestry crop that can only be cultivated in APL areas. The presence of oil palms in forest areas is illegal. The community continues to reject conflict resolution efforts due to the solutions offered that do not accommodate their oil palm plantations.

Several studies have revealed that the expansion of cash crops such as rubber and oil palm is considered an effort to improve the living standard of rural communities (Rist et al., 2010; Hu & Lee, 2015). However, this also has an impact on changes in ecology, land cover, and rural socio-economic systems and raises agrarian conflicts in response to policies that limit people's access to land (Rist et al., 2010; Euler et al., 2017; Santika et al., 2019; Fridayanti & Dharmawan, 2015; Afiff, 2016). Social forestry as a conflict resolution offered to solve the mentioned problems actually has its own complexity and

intricacy in its implementation. In addition, strong willingness and ability from all parties are required for social forestry to be implemented to its fullest potential (Forestdigest.com, 2021). Furthermore, Rakatama & Pandit (2020) stated that not all studies on social forestry clearly state information regarding the schemes used and study locations, as well as the challenges and benefits that need to be reviewed.

Given this background land, forest, and agrarian change and conflicts in Indonesia, two questions drive the research in this paper, namely: (1) What are the main issues that increase the complexity of agrarian conflicts in HTI concession areas? How is the social forestry program through the forestry partnership scheme interpreted by the community as a solution to ongoing agrarian conflicts?

3. METHOD

This study utilized a qualitative approach to investigate the social reality of agrarian conflicts and social forestry programs. By exploring the perspectives and experiences of the participants, the study aimed to provide a holistic understanding of the complexity of these issues and the effectiveness of social forestry programs as a solution.

This study was conducted in Napal Putih Village, Tebo District, Jambi Province (Fig. 2). This village was chosen with the consideration that this village is a village directly adjacent to the HTI concession permit area which is located around the Bukit Tiga Puluh National Park Landscape. The Napal Putih area, which is directly adjacent to the company's concession, has a high intensity of land use conflicts. Such conditions have a very broad impact on the surrounding community and also represent the dynamics of natural resource conflicts that occur in general.

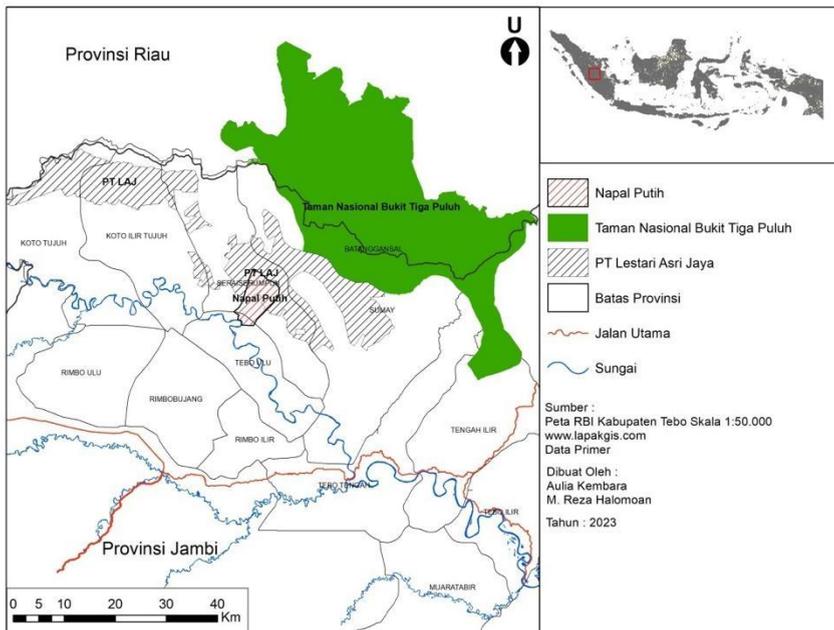


Figure 2. Map of The Bukit Tiga Puluh National Park Landscape of Tebo District, 2023

After our initial empirical findings in Napal Putih, we conducted an in-depth study of the case, collecting field data in November 2022 and March 2023. The study used a qualitative data collection method involving in-depth interviews with semi-structured

guidelines, problem-focused group discussions, and participatory observation. To prepare for the fieldwork, the study conducted a comprehensive analysis of secondary data, including literature, government documents, archives owned by the community, maps, photographs, and other materials related to the study. The study used this analysis to develop an interview guide, which was then modified based on the information we gathered during our field data collection. These contents were also then analyzed again and adapted to the information obtained during field data collection.

All interviews were conducted in the Indonesian language with the local Jambi dialect. Based on the agreement of the participants, the interviews were recorded and transcribed so that descriptive data were obtained, which were then analyzed using narrative analysis. Focus group discussions were conducted with village officials and the local government to understand the history of the village, the social situation of the village community, the community's livelihood system and land use, the process of granting company concession permits, social organizations in the community, the dynamics of conflicts that occurred and the involvement of the village government and local government in conflict resolution efforts. In-depth interviews were conducted with community leaders, leaders of farmer organizations, and several farmer representatives. The interviews centered on the participants' subjective experiences regarding land use conflicts that occurred, efforts to resolve them, and changes in the types of plants they cultivated into oil palms. In addition, interviews were also conducted with key informants from company representatives to obtain information about the implementation of social forestry as a conflict solution and the presence of oil palm in concession areas. Data collection was closed after data saturation was reached (O'Reilly and Parker, 2013; Bowen, 2008). This is achieved when no new information emerges, and the collected data together forms a complete story (Otten et al., 2020). The interviews were accompanied by participatory observations, which broadened perspectives and provided a deeper understanding of the crucial aspects of this study, especially about the norms, values, and social practices of participants in their living spaces. Finally, accuracy and reliability in this study were determined through the triangulation method, namely the use of different methods and data sources, so as to ensure the credibility of our findings (Bowen, 2008).

4. RESULTS & DISCUSSION

In this section, we will discuss the results of this study from the case of agrarian conflicts that occurred in the HTI concession area of PT LAJ, a subsidiary of PT RLU. This company is a joint venture between the tire manufacturer from France, Michelin, and the BP Group, which was founded in 2015 (Michelin, 2015). PT LAJ, as a subsidiary company, utilizes its concession area as a monoculture rubber plantation. The community stated that there had been a forced handover of land by PT LAJ, which had caused land conflicts due to efforts to expand the plantation (Otten et al., 2020).

4.1 History of land tenure

The site for this study was originally a state forest area that had been granted an HPH permit and subsequently became a conflict area. This permit was owned by PT IFA for an area of 300,000 hectares which was also a subsidiary of the BP Group (Voxeurop.eu, 2022). The company operated from the 1970s to the 2000s. PT IFA concession areas were located within the territories of indigenous people, the Orang Rimba and Talang Mamak ethnic groups. The presence of PT IFA in the customary lands of the Orang Rimba and Talang Mamak areas was initially met with resistance from the communities, because they were concerned that PT IFA's operations would damage the forest. However, the communities were unable to take significant action. During that time, the

Suharto regime was still powerful, and the investment was justified in the name of development, leaving the communities too fearful to assert their customary land rights (Yasa and WWF, 2005). After the end of its operational period, PT IFA returned its concession to the Ministry of Forestry. This then resulted in an open access regime that allowed anyone to utilize the area (Hanna et al., 1996).

The presence of PT IFA opened access to previously isolated forest areas and created new economic opportunities for both local and indigenous communities, including the Orang Rimba and Talang Mamak (Halomoan et al., 2023). During PT IFA's operational period, these communities began integrating into the logging business. PT IFA also recruited workers from outside the region to work in production roles. PT IFA's permit expired in September 2001. Since then, the local community utilized the unproductive ex-PT IFA concession by reopening it and cultivating rubber as a livelihood. However, due to limited resources and labor, some of the cleared land remains unused, leading to abandoned land. This then encourages the practice of land transactions between locals and migrants. The relatively cheap price of land and the opportunity to improve living standards are strong reasons for migrants to buy the land. They then built houses and cultivated rubber on the land they had purchased. This has led to demographic changes in the village of Napal Putih, where this research was conducted. The number of migrant households continued to increase, reaching 270 households in 2022, compared to the 305 households of locals living in the village settlement area of Napal Putih.

The presence of communities in forest areas can be understood through the perspective of Ribot & Peluso's (2003) access theory. An individual gains access to and benefits from something through broader social relations. This ability is determined more by a bundle of power rather than a bundle of rights alone. This perspective explains how the relations between the local community and migrants have provided the means for migrants to access land. Conditions also resulted in land cultivated with rubber and so attracted other migrants to come.

These managed and occupied frontier areas then create a "transition site" (Fold & Hirsch, 2009) where community land use activities challenge the development of plantations and protected areas as well as the establishment of land markets (Hein, 2019; Peluso & Lund, 2011).

"Obviously, we can come here because someone opened the door; we did not know that there was land here; it is impossible for us to come suddenly. At first, we knew the land info here was from Mr. J (early migrant). Because Mr. J is the one negotiating with the people here. With a land-sharing system, Mr. J's portion is then divided among the people who want to farm." (Mr. LH, 53 Years Old Napal Putih Migrant Community Leader)

Territorialization practices (Li, 2002) carried out by the state through the granting of concession permits continued after a decade of this open access regime. These ex-HPH areas that had been managed and used by local communities and migrants were then given concession permits to PT LAJ since 2010 for HTI development. This added new actors with interests in land at the site level and led to agrarian conflicts (Therville et al., 2011; Juniyaniti et al., 2020). The HTI permit granted to LAJ is for an area of 62,000 hectares and is valid for 60 years. This is stated in MoFE Decision Letter: SK. 141/Menhut-II/31-03-2010. With the issuance of this permit, LAJ then has the right to carry out land-clearing activities.

The community only realized that their land was an HTI concession after PT LAJ initiated land claims and clearing activities for expanding their plantation. In the beginning, the community only knew that the land was an ex-PT IFA Production Forest

(HPH) which was obtained through the former village head of Napal Putih. Aware of the unfavorable situation, the community tried to gain recognition as villagers in order to strengthen their position on the land that they manage and occupy. This was welcomed with open arms by the village head at the time, who acknowledged that the area was a Rukun Tetangga (RT) and its residents were allowed to have an identity as residents of Napal Putih.

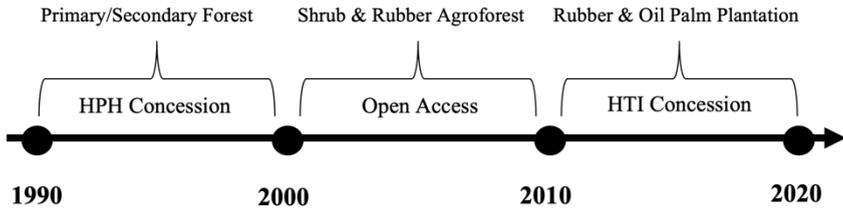


Figure 3. Evolution of changes in status and land cover in Tebo District, 2000-2020

Napal Putih Village itself is a transmigration village that was formed in 1997 and had another name, namely Satuan Pemukiman VI (SPVI). This village later officially became a definitive village after the issuance of the Regional Regulation of Tebo Regency Number 17 of 2004. Napal Putih is part of the Serai Serumpun District with the first village head, DE, who led until 2022. With an area of 39,500 ha, the majority of residents are oil palm farmers. Napal Putih can be accessed via a plantation road owned by PT RAU, which is a partner company for the transmigration community of Napal Putih Village. There are 8 RTs in Napal Putih. RT 1 to 6 are outside the forest area and have no conflict cases. RT 7 and 8 are in the forest area and are still in conflict with PT LAJ. At the time this research was conducted, there was no precise data available on how much of the Napal Putih village area was located within the forest area. However, Fig. 2 above shows that half of the Napal Putih village overlaps with PT. LAJ's concession, which is classified as a forest area.

4.2 Conflict dynamics

Land claims are a source of agrarian conflicts in Jambi. This is caused by poor land governance, which also results in the degradation of forest areas and changes in land cover and land use. (Mardiana, 2017; Hein, 2019; Nurrochmat et.al. 2020). This poor governance situation can be traced back to the colonial government's "*domein verklaaring*" doctrine, which deemed that all land without proof of ownership belonged to the state. This doctrine became the initial framework for the continued development of large plantations (Jiwan, 2012; Sampat, 2013; Davidson, 2016). This impacted forest function and worsened socio-economic conditions of local communities (Afiff, 2016; Butler, 2011; McCarthy et al., 2011; Rachman, 2011; Siscawati & Rachman, 2014).

The development of large plantations that exclude local communities has sparked resistance in various forms of struggle over land (Bernstein, 2019). In Napal Putih, the people fought back by claiming land rights based on their citizenship status to benefit from state resources using the concept of citizenship-based justice (McCarthy & Robinson, 2016; Sardjo et al., 2022). In addition, the community also uses their residence status as a local community to strengthen their position in defending the land.

4.2.1 Forms of resistance by the community

There are two ways in which the community in Napal Putih resisted the pressure exerted by the company. The first one is unstructured small-scale resistance, as Scott (1985) described in his concept of everyday resistance, where plantation areas or forests are

claimed and utilized secretly and quietly. This type of resistance involves a broader community refusal to move and surrender the land they have managed and lived on for years. They continued farming, constructed facilities independently, and even converted rubber plantations into oil palms in forest areas. Through this form of resistance, the role of communities in forest management has increased, while the control of forest authorities over their domains has gradually decreased, as argued by Lukas & Peluso (2019). In their study, Lukas & Peluso (2019) analyze the transformation of human-environmental relations in Java's political forest. The growing involvement of villagers, particularly the shifts in everyday land and resource use practices within the forest areas, has significantly reconfigured the power relations between foresters, local communities, and village governments. The transformation of land use in the Napal Putih forest area took place by altering the density of key species, modifying labor regimes, and changing the nature of investment in the land, particularly through the conversion of rubber plantations to oil palm plantations.

The Case Box 1 below provides a detailed overview of the daily forms of resistance carried out by the Napal Putih community. Although these acts of resistance are not formally organized or coordinated, they can exert significant pressure on the authorities and give voice to local people, who are often unheard.

Case box 1. Forms of daily resistance in Napal Putih

Mr. MB revealed that the people of Napal Putih Village, who are in the forest area, are still in conflict with PT LAJ as the concession permit holder. The community, who previously did not know about the concession permit, were surprised when PT LAJ started claiming the land. PT LAJ forced the community to give up their land as compensation of seven million rupiahs per hectare, which according to Mr. MB, was not worth the money he had spent. Mr. MB paid fifty-four million rupiahs for 2 hectares of rubber land and the house he is currently living in. For this reason, Mr. MB refused to surrender the land. According to Mr. MB, the people who have survived to this day are because the land they are currently managing is the only asset and livelihood they have. Therefore, they are ready to fight for it at any cost. Apart from that, as the community leader, Mr. MB is also active in discussions related to the development of his area. The community builds facilities such as mosques and security posts on their own due to the impossibility of their area accessing government assistance because their area is in a forest area. Currently, Mr. MB is also experiencing the same problem in his rubber grove, namely low productivity and fungal diseases that cause damage. Facing this situation, Mr. MB, like others, began to convert their crops to oil palms. They no longer care about the banning of oil palm in forest areas, feeling they had to make the change because their rubber plantations were unable to meet daily needs.

Source: Mr. MB (48 years old)

Interview: 27 November 2022

The forms of daily resistance by the community continue to this day and are known to the village government and the forest district office (KPHP). This is because when they first arrived, the migrant community reported their arrival to the village head and sought advice before managing and occupying the land they had purchased from the local community. At that time, the village head said: "That area is a state-owned production forest; if you want to clear the land there, I neither forbid nor encourage you to do so" (interview, 28 Nov 2022). The village head also informed the district

government about the presence of the community in the Napal Putih forest area, but there was no response. As a result, the community continued to clear land and establish settlements in the area. Aware of the status of the land as a forest area, the community chose not to plant oil palm, which is not a forestry crop, and instead planted rubber. The community began to be forced to leave the land when PT LAJ obtained their HTI permit and started operations. The company cooperated with the local community, including the village head of Napal Putih, to force the community to surrender their land with inadequate compensation. The community refused and continued their activities on their respective lands. In response to the community's resistance, the company deployed enforcers to intimidate and individually threaten members of the community. Some of the threatened community members then surrendered their land and moved elsewhere or returned to their hometowns. Others who remained joined with SPI (Indonesian Farmers' Union) and engaged in collective and organized resistance while continuing their daily forms of resistance. The community not only persisted in their agricultural activities and infrastructure development but also started converting their rubber plantations into oil palm farms. This change was largely influenced by new settlers from North Sumatra, who brought with them expertise in oil palm cultivation. These newcomers planted oil palms on the land they had purchased and saw higher returns compared to rubber farming. Witnessing this success, other community members became interested in cultivating oil palms as well, eventually ignoring the restrictions against growing oil palms in forested areas. By the conclusion of data collection for this paper, almost every farmer in the Napal Putih forest area had either planted oil palms or had seedlings prepared, ready to replace their existing rubber plantations.

4.2.2 Form of social resistance facilitated by an organization

This second form of social resistance was facilitated by an organization (SPI) in accordance with their principles of agrarian reform. SPI is a mass organization that represents the interests of farmers and farm workers in Indonesia. SPI is affiliated with a global agrarian resistance movement organization La Via Campesina. La Via Campesina itself is one of the most well-known global agrarian movements defending constituents against globally regulated agricultural cooperatives (McMichael, 2006).

Case box 2. Form of social resistance facilitated by SPI

Mr. J is the founder and former head of SPI at Napal Putih. Since its establishment in 2011, SPI has become a local protector. SPI accommodates the resistance of farming communities to land claims made by the company, such as blocking evictions, demonstrations, and attempts to negotiate conflict resolutions. The resistance that received the most attention from SPI was bringing an end to eviction, involving the burning of 5 of the company's heavy equipment in 2019. This case began with conflict negotiations carried out by the community, company representatives, local government, and the police, which resulted in a written agreement for community land protection and cessation of heavy equipment activity. However, this agreement was not fulfilled by the company. A few days later, the company returned to operating its heavy equipment and sparked public anger. Coordinated by Mr. J, the community carried out demonstrations and ambushes. During this demonstration, the entire community living in the Napal Putih forest area gathered at the site where the heavy equipment was operating. The high level of community solidarity was driven by the fact that several written agreements, previously reached during mediation or conflict resolution meetings, had not been honored. Disappointed by the breach of this agreement, under Mr. J's direction, the

community then burned the company's heavy equipment. As a result of this action, Mr. J was arrested and detained in Tebo in 2020 and then released in 2022. Since Mr. J's arrest, there have been no more acts of intimidation and eviction of community land.

Source: Mr. J (51 years old)
Interview: 28 November 2022

SPI became a form of community social movement to resist the company's pressure to surrender their land. This movement supports the redistribution of land to the poor with the argument that people must be given fair access to productive assets and economic opportunities that come from productive land use (White et al., 2014; Afiff, 2004). Resistance in this form received more widespread attention because it was carried out in a more structured and formal manner. The actions taken were in the form of mass demonstrations and obstruction of land-clearing activities carried out by the company. Case box 2 describes how community members who are affiliated with SPI resisted against the company's land claims. These actions then resulted in open conflict between the community and the company.

Mr. J was one of the pioneers in settling in the Napal Putih forest area. He first arrived in 2009, invited by the local community to help them clear the land. From assisting in land clearing, he acquired two-thirds of the land he helped clear. Most of the incoming settlers obtained land through Mr. J's network, often by providing compensation. The term compensation is used here because buying and selling land in forest areas is illegal. Additionally, Mr. J donated some of the land he controlled for public facilities, such as the market and mosque in the Napal Putih forest area. In 2017, Mr. J also donated 2 hectares of land subsequently used for the settlement of new migrants. His actions are considered by the community to be significant contributions to the development of the Napal Putih forest area. As a result of these contributions, the community entrusted Mr. J with the leadership role in efforts to defend their land, including becoming a member of SPI and electing him as leader. Under Mr. J's leadership, SPI and the community in the Napal Putih forest area continued their collective resistance through land eviction blockades, demonstrations, and negotiations. Between 2016 and 2019, the community's resistance intensified in response to the increasing frequency of land claims by the company. This period of heightened opposition culminated in an open conflict between the community and the company, which resulted in the incident of burning the company's heavy equipment at the end of 2019.

In the early days of SPI's establishment in Napal Putih, all residents living within the forest area were members. However, in recent times, particularly following the incident involving the burning of heavy equipment and Mr. J's subsequent arrest, some community members have decided to withdraw from SPI. The reasons for leaving include internal conflicts with the SPI leadership in Napal Putih, a perceived lack of progress in the land struggle, membership dues that were seen as burdensome, and frustration with the ongoing, unresolved conflict with the company. For the latter reason, some former SPI members have joined the Forest Farmers Group (KTH or Kelompok Tani Hutan) established by the company as part of the social forestry program, which has been one of the conflict resolution strategies employed by the company since 2019.

4.3 Actors of different interests

According to Kinseng (2013), one way to categorize conflict is based on the actors involved. By knowing who the actors are, we can gain a more comprehensive understanding of the conflict. This understanding includes the interests pursued by

each actor, the efforts made to fulfill those interests, and then the impact on the social life of the community. Table 1 below shows the actors involved in the agrarian conflict that occurred in Napal Putih. This table provides information about the interests of each actor and the conflict resolution efforts offered by each actor to fulfill their interests.

Table 1. Site-level actors involved in the conflict and their interests in forest land in Napal Putih, 2023

No.	Actors	Main Interest in land	Proposed solution to land conflict	Risks from the proposal
1	Migrants or local communities	Getting legal land rights to already occupied land located inside the forest concession area.	Agrarian Reform program (TORA)	Providing assets for the community enables the land market to grow and creates pressure on forest areas by increasing agricultural activities.
2	SPI (an NGO)	Supporting local farmers remain inside the forest concession area.	Agrarian Reform program (TORA)	Providing assets for the community enables the land market and the intensity of pressure on forest areas to increase.
3	PT LAJ	Continuing to control all of its forest concessions granted by the Indonesian government.	Forest partnership scheme as proposed by the social forestry program	Providing only legal access for the community is not similar to giving real sovereignty over the occupied land to the community.
4	Village and regional government	Proposing a proposal to participate in controlling the state forest area.	Forest partnership scheme as proposed by social forestry program	Having legal access to land is not the same as having the legal right to land.

[Source: Primary data, 2023]

From the field data shown in Table 1 above, it can be seen that there are four key actors involved in the conflict, each with their own interests over the land. From Table 1, there are two solutions offered by actors to resolve the conflict, namely: 1) Social forestry, which provides legal access to the community, but the community still needs to partner with the company, and the land remains a state-controlled forest area; 2) Agrarian reform program, that provides property rights to recipients and may create land markets and increases pressure on forest areas. The difference in interests among these actors causes interest decoupling (Putri et al., 2022), so the conflict resolution solutions offered are not aligned and are less effective.

4.4 Social forestry land conflict solution

Community-based forest management has been promoted as an innovative policy to address rural poverty, environmental degradation, and agrarian conflicts within forest areas (Sikor et al., 2013; Zakaria et al., 2018; Erbaugh, 2019). This community-based forest management policy is now known as social forestry. The Indonesian government has adopted the concept of social forestry as part of its efforts to increase community participation in forest management, empower local communities, improve their welfare

and environmental outcomes, as well as reduce conflicts between communities and companies operating in and around forests (Thompson, 1999; Rakatama & Pandit, 2020; Moeliono et al., 2023).

Since being elected in 2014, President Joko Widodo, in accordance with the Nawacita development vision he campaigned for, declared a forest area of 12.7 million hectares (about 10%) of state forests to be distributed to local communities through several social forestry schemes (Maryudi, 2017; KLHK 2017). Since 2015, social forestry in Indonesia has grown rapidly. Until the end of Joko Widodo's initial period in 2019, around 4 million hectares of forest area permits had been granted to local communities and customary groups (PKPS KLHK 2020). This is more than what was provided by his predecessor, although it is still less than the initial target (Rahayu et al., 2020).

4.4.1 Community rejection of the partnership scheme

In 2019 PT LAJ began adopting the social forestry program through the partnership scheme, which serves as an instrument of conflict resolution in its concession area. Based on the Regulation of MoFE Concerning Social Forestry Management Number 9 of 2021 (P.9/2021), partnership is one of the social forestry schemes that takes place in the form of a cooperation agreement between local communities and the forest area concession permit holders. PT LAJ's public affairs department offered this option and began socializing this scheme directly to the community. The company collaborated with various stakeholders in promoting the partnership scheme they offered, including local NGOs with sustainability missions, forest district office, and the provincial forestry department. Meanwhile SPI, the organization representing the community in the Napal Putih forest area, was not involved at all in the formation of this forest farmer group. Through a series of outreach programs and training sessions, the company eventually succeeded in gathering a group of individuals who were then organized into a forest farmer group. A KTH was formed, namely Wana Mitra Lestari (WML) with 17 members. The individuals who joined the forest farmer group were primarily those who had left SPI membership. Weary of the ongoing conflict and believing that cooperation with the company would provide a sense of security in accessing land, these farmers decided to align with the forest farmer group and partner with the company.

Putraditama (2019) revealed that the process of applying for a social forestry permit has complex procedures and significant management costs, so the community needs help from external actors, including the government. PT LAJ did this by collaborating with the Tebo Barat Production Forest Management Unit (KPHP), which is a representative of the local government to be involved in forming groups and submitting permits for social forestry in Napal Putih. This has helped KTH WML obtain a Certificate of Recognition and Protection (KULIN KK) from MoFE in 2019 as proof of the legality of KTH members managing land in forest areas.

Even though currently two forest farmers groups have been formed in Napal Putih – KTH Anugrah Rimba Lestari was formed in 2020 – the implementation of the partnership scheme as a conflict resolution mechanism has not been entirely accepted by the community. There are several reasons why. First, memories of intimidation and coercion by the company are still powerful in the community. The actions taken by the company during the land claim process have lost the community's sense of trust in the company. People are afraid and think that partnering with companies is the same as submitting to them. Second, the strong influence of SPI in society has been significant. The struggle of SPI members, who are the majority in these communities, is considered not in line with the partnership offer. Partnerships only offer legality and management rights, while SPI members claim to fight for property rights over the land they manage. The forest farmers group members are also viewed among SPI members as betrayers of

the struggle and are criticized for agreeing to only gain access to their land rather than ownership rights, which the community had long advocated for through their collective efforts with SPI. The third dimension relates to the conversion of plants carried out by the community into oil palms, which will be explained in more depth in the next section.

4.5 Readiness of the community in adopting non-oil palm crops

Based on forestry law number 5 of 1967, oil palm plantations are only allowed in non-forest cultivation areas, which were then defined as APL by the Decree of the Minister of Forestry SK.382/Menhut-II/2004. In addition, plantation managers must have cultivation permits in the form of HGU for companies and *Surat Tanda Daftar Budidaya* (STD-B or a cultivation registration certificate) for small farmers. However, weak law enforcement, rampant corruption, and socio-political conditions have led to oil palm expansion continuing in state forest areas (Mandemaker et al., 2011). This required the community to convert oil palm groves into non-oil palm plantations as a precondition to participate in the social forestry program. Next, we will explain the factors that influenced the community's readiness to adopt non-oil palm crops.

4.5.1 Income

Land conversion occurred due to productivity issues and low prices in the community's rubber plantations. In their research, Ekadinata & Vincent (2011) revealed that the community's forest rubber has a high probability of conversion. Even though it has a high potential for environmental services, this system does not yet meet the needs of the community, encouraging conversion towards more intensive farming systems such as oil palm groves. The surge in palm oil price can be attributed to the strong global demand for palm-based products (Sayer, 2012). This then stimulated investment and generated benefits through fiscal revenues and regular revenue streams for many large and small-scale farmers (Pacheco et al., 2017). In contrast, low natural rubber prices in the global market have had the opposite effect. In Napal Putih, farmers can only generate an income of 1.5 to 2 million rupiahs per hectare per month from their rubber plantation. For oil palm, they can yield 3 to 4 million rupiah per hectare per month.

4.5.2 Technical convenience

The biophysical conditions of the land in Sumatra have benefited oil palm cultivation (Sayer et al., 2012; Pramudya et al., 2017). In terms of production costs, Indonesian palm oil also has the lowest production costs compared to other vegetable oil-producing crops (McCarthy, 2010). In addition, the production of palm oil also requires less labor compared to the production of rubber. For example, oil palm plants only need to be harvested once every two weeks compared to rubber trees which must be harvested at least once every two days. From this difference in the input of labor, financially, rubber does not provide a higher income than palm oil. Instead, it is often lower. Furthermore, oil palm is also more resistant to disease than rubber. Many of the community's rubber groves have also succumbed to disease.

"People's rubber has fallen a lot when the wind is strong when you see the roots are rotten. If the garden is one-hectare normally there are five hundred stems; if there are still three hundred, that's a lot. Maybe if the community's rubber is healthy, the community will not switch to oil palm." (Mr. LH, 53 years old)

4.5.3 Socio-cultural and ecological adaptation

The expansion of oil palms is not only carried out by plantations but also through government-owned programs involving smallholders. One of these programs was the *Perkebunan Inti Rakyat* (PIR or People's Nucleus Plantation) which was implemented from 1978 to 1999 (Bissonnette, 2016). One of the locations for implementing this

program is Napal Putih Village in Tebo. The expansion of oil palm through this program has had a social impact on the community by integrating people's livelihoods with the palm oil production circuit (Rist et al., 2010; Hidayah, 2016; Yulian, 2019). For the people of Napal Putih who live in forest areas, converting plantations into oil palm is much easier than non-oil palm plantations. This is because the main village of Napal Putih is the location for the implementation of the PIR program, which is an oil palm plantation collaboration between the community and the company. Ease of access to seeds, fertilizers, markets, and the environment surrounded by oil palm plantations is a driving factor for this.

"We get our seeds from Rigunas (an oil palm partner company of Napal Putih), we buy our fertilizer at SP6, and we sell our fruit to a store from SP6. Usually, they come here to pick up the fruit directly" (Mr. G, 60 years old)

4.5.4 Potential conflicts

The potential for conflict is one of the community's considerations in adopting non-oil palm plantations so they can participate in social forestry programs. There are not many types of non-oil palm plants for the community to choose from. The community has had experience cultivating horticultural crops and has caused conflict with some wild animals that still live around their area, such as monkeys, wild boars, and elephants. Meanwhile, when cultivating fruit trees, people are worried that there will be claims of ownership from "Orang Rimba" over the fruit they cultivate. The community itself is currently living side by side with Orang Rimba, who is one of the Indigenous community groups in Jambi. Therefore, the choices that the community can make are only around the type of wood plants or other cash crops such as rubber, coffee, and cocoa, which also require more intensive land management.

"If we are asked to plant fruit trees like durian or duku, we are afraid that there will be a claim from the 'Orang Rimba' that the fruits belong to their ancestors." (Mr. A, 50 years old)

4.6 Conceptualization of Social Forestry

The main reason social forestry is promoted as an innovative solution to conflicts in forest areas is the economic opportunities it generates, which can improve the welfare of the community and reduce their dependence on the forest (Winarni et al., 2017; Lee et al., 2017; Wulandari & Inoue, 2018). Several studies have revealed that social forestry schemes have increased income and capital for farmers (Irawanti et al., 2017; Kaskoyo et al., 2017; Lahjie et al., 2018) as well as providing environmental services such as springs, ecotourism, biodiversity, and carbon absorption (Irawanti et al., 2017; Setiahad, 2017). In addition, social forestry is also a mechanism for empowering local communities (Purnomo and Anand, 2014; Fisher et al., 2018). However, the goals of social forestry innovation are also often not achieved because the choices given are very limited (Widyaningsih et al. 2021). Such is the case with oil palm farmers in Napal Putih.

This study found that there is a need for a social forestry scheme that accommodates the transformation of oil palm plantations into non-oil palm plantations that still provide economic benefits and convenience for local farmers. Next, we will explain the alternative schemes that can be applied to the case of oil palm expansion in Napal Putih.

4.6.1 Agroforestry scheme

The agroforestry scheme for existing oil palms in forest areas is still a superior alternative, according to farmers. In addition to increasing income, agroforestry also

continues to provide environmental services (Ekadinata & Vincent, 2011). Madjid et al. (2022) revealed that oil palm agroforestry has the potential for adoption among oil palm smallholders. However, this concept requires external assistance from the government at various levels to accelerate peak adoption rates and reduce the time needed to reach peak adoption rates. Furthermore, this scheme needs to be intensely socialized with the community so that people can gain comprehensive knowledge of the benefits of this scheme.

4.6.2 *Improvement of community rubber productivity.*

The low productivity of rubber in the community is the reason for the conversion of rubber plants into oil palms. Increasing productivity can be an alternative scheme to address the presence of oil palms in forest areas. Companies can offer partnership schemes that encourage the transformation of oil palms into non-oil palms by providing access to improved quality rubber seedlings, appropriate technology use, knowledge of cultivation, and fair market access. In addition to improving the economic situation of the community, this scheme also maintains forest areas only planted with forestry plants.

4.6.3 *Jangka Benah strategy*

Jangka Benah is an effort to restore the function of monoculture oil palm plantations into mixed oil palm plantations with certain agroforestry techniques accompanied by institutional commitments with the parties involved. What distinguishes *Jangka Benah* from the previously mentioned agroforestry scheme is the presence of oil palms which are only allowed for one cycle. After this cycle is completed, oil palms will be completely replaced with forestry plants to restore the structure and function of the forest area.

The implementation of *Jangka Benah* is currently also supported through Government Regulation Number 23 of 2021 concerning Forestry Administration. This regulation states that *Jangka Benah* is needed to optimize the function and benefits of Forest Areas. This is in line with the goal of the *Jangka Benah* Strategy, which in addition to improving the structure and function of forest ecosystems, this program is also expected to contribute to the social and economic well-being of the community (Jangkabenah.org, 2021).

5. CONCLUSION

This study shows the complexity of the conflict between the community and companies that receive concession permits from the state within a forest area. This complexity is influenced by the intensity of community resistance, existing oil palm, and conflict resolution that do not match the reality at the site level. The community, having made claims and invested in the land, are supported in their struggles by NGOs. The community has also converted their rubber land into oil palms due to pressure to meet their needs. The social forestry program is then offered as a solution through a partnership scheme by the company based on government policy. Nevertheless, the acceptance of this scheme is still low at the community level. This is because the scheme is considered to not yet accommodate the community's demands.

For community groups with oil palm plantations within the HTI area, the partnership scheme is difficult to accept as an alternative solution to the conflict. This is because the community is reluctant to transform their oil palm into non-oil palm crops. The transformation, which is a requirement of the partnership scheme, does not offer benefits comparable to those obtained from oil palm production. These benefits include relatively high income, technical, social, and cultural convenience, as well as a lower likelihood of new conflicts arising in the community.

Hence, it is crucial to establish a social forestry program that supports the conversion of oil palm plantations into non-oil palm crops. This program should provide economic benefits and equal or greater convenience than what is provided by oil palm while ensuring alignment with the vision of sustainable and inclusive forest area development.

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