

Potencial Social Conflict in Palm Oil Plantation Area and Alternative Solutions in Sambas Regency

Mustarini Dessy Vitiara¹, Herdis Herdiansyah^{1*}, Evi Frimawaty¹

¹Universitas Indonesia, Indonesia

ARTICLE INFO

ABSTRACT

Article history: Received June 03, 2024 Revised July 14, 2024 Accepted July 15, 2024 Available online August 31, 2024

Keywords:

Social Conflict; Environmental Damage; Local Community; Palm Oil; Social Approach



This is an open access article under the <u>CC BY-SA</u> license. Copyright © 2024 by Author. Published by Universitas Pendidikan Ganesha. The presence of a palm oil company in an area can be a mainstay in the economic sector, providing employment opportunities and indirect benefits from local infrastructure development. In other conditions, environmental damage and social conflict challenges emerge as risks from palm oil company activities. This study aims to analyze the positive and negative impacts of oil palm according to society, the social conflicts it causes because of environmental damage, and provide alternative solutions. For the objectives to be answered, a qualitative approach was used to gather a purposive sampling of informants with data collected from local communities near plantations (primary) and documentation (secondary). One hundred and one questionnaires were distributed, and interviews were conducted between 12 and 28 November 2023. It found that oil palm plantations boost local economies by facilitating easier sales of small-scale farmers' harvests to companies at stable prices, ensuring steady income, especially when prices are high. Infrastructure

improvements, such as road paving and bridge construction funded by CSR initiatives, benefit the community despite some road damage from plantation vehicles. However, plantations are causing environmental damage, creating economic inequality, and disrupting traditional communities. Expansion leads to social jealousy, cultural loss among Indigenous people, and road damage from plantation traffic; worse still, it causes conflicts between the community and the company. In addressing social conflicts, communities have engaged in environmental conservation through cooperation, customary deliberations, and dialogues with companies and the government. Therefore, social approaches are highly effective as alternative solutions for resolving social conflicts.

1. INTRODUCTION

The palm oil industry is one of the main drivers of economic growth in various regions, including Indonesia. Its contribution to the Indonesian economy makes it one of the national strategic commodities of Indonesia (Anggraeni & Hukom, 2023). Its prominent presence in several regions has formed a solid industrial phenomenon and has significantly impacted the Indonesian economy and regions that cultivate palm oil. The contribution of palm oil to Gross Domestic Product (GDP) in 2020 was 3.5% (Bainta et al., 2020) increasing to 3.76 in 2022 (BPS, 2023). In the plantation sector, palm oil is the primary commodity that contributes to Indonesia's exports, namely 96.86%, with profit sharing reaching 73.83% (Ditjebun, 2022). A study conducted in the study area (Santika et al., 2019) stated that between 2000 and 2014, the economy in Kalimantan increased rapidly due to oil palm plantations, which was very beneficial for the local community's economy.

However, behind its economic benefits, this industry also often gives rise to various potential social conflicts involving local communities, companies and the government (Sutrisno & Desanti, 2018). Social conflicts in oil palm plantation areas are generally triggered by various factors such as land disputes (Herdiansyah et al., 2023; Rokhim et al., 2020), injustice in the distribution of economic benefits (Ayompe et al., 2021; Levang et al., 2016), as well as environmental damage that impacts the livelihoods of local communities (Kinseng et al., 2023; Qaim et al., 2020). Land disputes between companies and indigenous communities are one of the most crucial issues, where traditional land rights are often ignored or not recognized relatively. Based on the results of a preliminary survey conducted by the research team in Sambas Regency, social conflicts between the community and companies are caused mainly by environmental factors (See Figure 1).

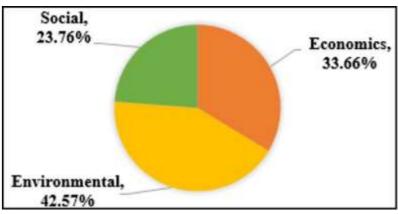


Figure 1. Factors that trigger social conflict in the study area

In Indonesia, especially from Indonesian Borneo (Kalimantan), environmental damage caused by oil palm plantation activities includes deforestation, land degradation, and water and air pollution. Massive deforestation not only threatens biodiversity but also disrupts the balance of the ecosystem, which is the source of livelihood for local communities (Meijaard et al., 2020). Based on the results of the documentation study, since 2016 there has been waste pollution from oil palm companies that hit the river flow in Subah, Sejangkung, and Sambas Districts, Sambas Regency. Whereas the water is the source of livelihood for people who live on the banks of the river, causing a decrease in the quality of life of the community and causing various diseases. Road access in Subah Subdistrict was also severely damaged by the activities of plantation transportation carrying palm fruit. Changes in the area of oil palm plantations between 2012-2023 can be seen in Figure 2.

The loss of forests causes a reduction in natural resources which the community has used to meet their daily needs (Faturrahman, 2023). Soil degradation due to the use of chemicals and unsustainable agricultural practices has an impact on reducing the quality of traditional agricultural land, thus threatening the food security of local communities (Hein et al., 2022). Water pollution by plantation waste results in limited sources of clean water, affecting people's health and welfare (Echeverría et al., 2023). Water pollution due to oil palm plantations impacts water systems, causing eutrophication problems and impacts on human health, such as skin diseases and even poisoning.

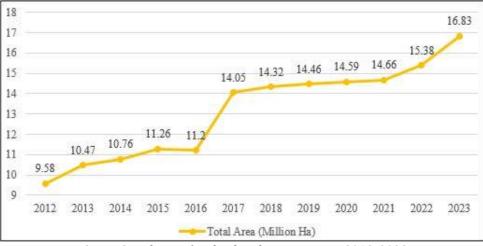


Figure 2. Indonesia's oil palm plantation area, 2012-2023

Based on interviews with informants at the research location, it was recorded that in 2023, there were 20 reports from the community to the Subah District government regarding environmental damage caused by the activities of oil palm companies, leading to strained relations between the community and the companies. The majority of these reports concerned damaged roads and water pollution, which disrupted the daily lives of the residents. By the end of 2023, conflict resolution mechanisms had been implemented with government assistance, such as open dialogues between the disputing parties, with the government acting as a mediator.

Community responses to environmental damage are diverse but are generally characterized by dissatisfaction and protests, which can lead to social conflict. Communities who feel they have lost access to natural resources and experienced a decline in their quality of life often voice their objections through demonstrations and protests. The lack of communication and community involvement in decision-making regarding land and natural resource management further exacerbates this conflict (Majer et al., 2021).

Despite numerous studies examining the economic benefits and environmental impacts of palm oil plantations, there is a critical gap in understanding the nuanced social conflicts arising from environmental degradation at the local level. Previous research has primarily focused on macroeconomic contributions and broad environmental assessments without delving into the direct social consequences experienced by communities living in proximity to these plantations. For instance, while Santika et al. (2019) highlighted the economic benefits of palm oil in Kalimantan, the resultant social conflicts due to environmental damage remain underexplored. Furthermore, studies like those by Herdiansyah et al. (2023) and Rokhim et al. (2020) address land disputes, yet they do not comprehensively link these conflicts to environmental degradation factors such as water and soil pollution.

Recent trends in palm oil research have highlighted the importance of sustainable practices and corporate social responsibility (CSR) in mitigating negative impacts. However, there remains a paucity of studies that integrate community perspectives on environmental and social impacts. Existing literature, such as Ayompe et al. (2021) and Qaim et al. (2020), underscores the environmental hazards posed by palm oil plantations but lacks a detailed examination of how these hazards translate into social conflicts. This gap is particularly pronounced in the context of local community dynamics, where traditional land rights and environmental sustainability intersect. This research emphasizes the experiences of local communities, offering a detailed account of their perceptions of both the positive and negative impacts of oil palm plantations. This bottom-up approach provides a richer, more nuanced understanding of the local context, which is often missing in macro-level analyses.

A comprehensive and sustainable alternative solution is needed to overcome this potential conflict. This solution must involve all stakeholders, including communities, companies, and governments, to balance economic interests and environmental sustainability. Approaches that can be taken include community participation in decision-making processes and environmental management, where consultation programs and open dialogue can help identify problems and find joint solutions. Additionally, encouraging companies to implement environmentally friendly and sustainable agricultural practices, such as agroforestry and organic fertilizers, is very important. Reforestation and ecosystem rehabilitation programs and improving water and soil quality are also crucial to rehabilitating damaged land. Education and increasing environmental awareness for the community and plantation workers must be carried out continuously to protect and preserve the environment.

Based on the identified research gaps and the urgency of addressing social conflicts arising from environmental damage, this article will explore in depth the community's response to the activities of palm oil companies and various actions that the community can take to manage the impacts of oil palm plantations and resolve social conflicts caused by environmental damage in oil palm plantation areas. Apart from that, this article will discuss various alternative solutions that can be implemented to control social conflict, create harmony in the welfare of local communities, and preserve the environment.

2. METHOD

This research was conducted using a qualitative approach, that is case studies type because it was following research objectives and relied on interviews and documentation (Rust et al., 2017). This qualitative method is very useful for exploring the condition of the local community in response to the existence of oil palm plantations in the area where they live (Corciolani et al., 2019). Case studies research involves collecting and analysing data from research objects regarding social conflicts caused mainly by environmental damage, local community responses to oil palm plantations, and other social conflicts.

The technique for determining informants is purposive sampling based on their mastery and understanding of the problem being researched (Rukajat, 2018). Based on this description, informant populations are local communities directly impacted by environmental damage due to palm oil plantation activities and have faced social conflict with palm oil companies. Next, 101 informants were included as a sample in this research. In addition, local communities who are used as research informants must live in the study area for a minimum of five years and experience social conflict due to environmental damage to maintain the validity of the information that will be used as the basis for discussion in this research.

The data required for this research was collected using a prepared short interview guide. Several questions were posed to the informants, aligning with the research objectives, including their knowledge about palm oil plantations, the negative and positive impacts they have experienced due to these

plantations, the social conditions in their area—specifically, whether the conflicts occurring are related to environmental degradation—and the efforts undertaken as well as recommended actions to address the ongoing threat of conflict.

This research was conducted in Sabung Village and Mukti Raharja Village, Subah Subdistrict, Sambas Regency, West Kalimantan Province. Data was collected for two weeks, from 12 to 28 November 2023. Meanwhile, secondary data was obtained from various documentation such as articles, reports, and other information. The triangulation method was chosen to cross-check field conditions in the study area to increase the validity of research findings (Olsen, 2004). Triangulation will help researchers view a problem from multiple perspectives, providing a more complete and in-depth of the phenomenon under study.

3. RESULT AND DISCUSSION

Local Community Overview

The research was conducted on community groups in Sabung Village and Mukti Raharja Village, Subah District, Sambas Regency. Subah District is one of the oil palm plantation centres in Sambas, apart from Sejangkung District and Sajad District. This phenomenon of palm oil activities began in 2004 and has proliferated under private companies until now. Now, this plantation helps the community a lot in absorbing labour, both as workers on plantations and in processing factories and can sell their agricultural products to companies. The CSR program provided by the company also contributes to the construction of health and social facilities, as well as helping to carry out traditional activities in the study area.

Based on sociographic data from the community, farmers and livestock breeders dominate the livelihoods in these two villages. As many as 483 of the 1798 residents in Mukti Raharja Village work in the agricultural and livestock sectors, while in Sabung Village, there are 509 of the 1708 residents. For information regarding the prevalence, the average age of informants is 54 years, with the youngest being 37 years and the oldest being 72 years. Data on the level of community education shows that the dominance of education is at the high school level, namely 36 people, with a percentage of 35.64%. However, some did not continue to the next level of education, so there were only 11 people with a percentage of 10.89% who were at the tertiary level (Table 1).

Level of education	Informant	%
No school	11	10.89
Elementary School	19	18.81
Junior High School	24	23.76
Senior High School	36	35.64
College	11	10.89

Table 1. Distribution of informants' education levels

The level of education distribution suggests that educational attainment could impact how community members perceive and respond to issues related to oil palm plantations. Higher levels of education may correlate with a deeper understanding of environmental and social impacts, potentially influencing attitudes towards plantation activities. Conversely, lower educational attainment might correlate with a different set of concerns or priorities regarding economic benefits versus environmental or social costs associated with palm oil cultivation. Understanding these educational dynamics can provide insights into how to effectively engage and communicate with different segments of the local community when addressing issues related to oil palm plantations.

The prevalence of income levels (Table 2) is as high as 50.50%, ranging from IDR 1,000,000 to 3,000,000. On the other hand, income levels above IDR 5,000,000 show the lowest proportion, namely only eight people or 7.92%. This distribution suggests that income levels may play a role in shaping community attitudes and responses to oil palm activities. Higher income levels might lead to different perceptions, potentially focusing more on economic benefits or business opportunities associated with palm oil cultivation. In contrast, lower income levels could correlate with concerns about livelihood impacts, environmental degradation, or social conflicts arising from plantation activities. Understanding these income dynamics is crucial for designing inclusive and effective strategies to engage and address the diverse perspectives within local communities affected by oil palm plantations.

Income Level	Informant	%
< IDR 1,000,000	19	18.81
IDR 1,000,000 – 3,000,000	51	50.50
IDR 3,000,000 – 5,000,000	23	22.77
> IDR 5,000,000	8	7.92

Table 2. Distribution of informants' income levels

Looking at the distance of the informant's residence from the plantation area (Table 3), the dominant population is in a radius of 500 to 1,000 meters, namely 47 people or 46.53%. Meanwhile, those who were close to plantations < 500 m were 25 people or 24.75%, and those who were quite far away, namely > 1,500 m, were 29 people or 28.71%. This distribution suggests that proximity to oil palm plantations may impact community perceptions and responses. Those living closest may experience more direct environmental and social impacts, potentially leading to heightened concerns or conflicts related to issues such as pollution, land use, and livelihood disruptions. Conversely, those farther away may perceive fewer immediate impacts but could still be concerned about broader environmental or economic effects. Understanding these spatial dynamics is crucial for addressing community concerns effectively and implementing sustainable practices that mitigate negative impacts associated with oil palm cultivation.

Table 3. Distribution of the distance between the informant's residence and the plantation

Distance from residence to plantation	Informant	%
< 500m	25	24.75
500 – 1,000 m	47	46.53
> 1,500 m	29	28.71

The daily life of communiy in this research area is led by traditional elders. Traditional elders play an essential role in leading and directing the community. They are respected as keepers of traditions and customs and leaders in traditional ceremonies and rituals. Besides traditional elders, decisions are often taken through deliberation involving other community members, including community leaders and prominent families. This role is essential to maintain the values of togetherness and cooperation in community life. They will help each other in various activities, from daily work to celebrating traditional events. The presence of traditional elders is not only beneficial for the community. However, it is also used by the government to extend its hand to the community and helps transfer information that needs to be known. Palm oil companies in the Subah Subdistrict also engage with traditional elders and community leaders to discuss important matters related to company activities and ask for their suggestions or feedback.

Community Response to Oil Palm Plantations

Oil palm plantations managed by private parties or companies are often carried out in locations that have direct contact with the community. Their activities, which are carried out by changing the type of land cover and land use and are often carried out in forestry cultivation areas, also require them to prepare an Environmental Impact Analysis (AMDAL). Febriyanti et al. (2021) states that AMDAL will prevent environmental damage and pollution from carrying out a business, in this case, oil palm plantation activities. AMDAL has an important role, one of which is to ensure and maintain the social life of local and broader communities that are not harmed by oil palm plantation activities.

Community responses to the existence of oil palm plantations are very complex and varied, influenced by various economic, social, and environmental factors. Several studies show that local communities can respond positively to the presence of oil palm plantations (Dib et al., 2018; Mosnier et al., 2017; Schaafsma et al., 2023), especially when they experience significant economic benefits. Available job opportunities, increased income, and infrastructure development such as roads, bridges, health facilities, and education are some benefits that local communities often experience. Apart from that, corporate social responsibility (CSR) programs implemented by several palm oil companies can also have a positive impact, such as skills training, economic assistance, and environmental projects (Christiawan & Limaho, 2020; Septiyarini et al., 2022; Tjilen et al., 2023).

However, there are many negative responses from the community towards oil palm plantations, especially related to adverse environmental and social impacts. Local communities feel that they only receive a small portion of the profits generated by palm oil companies, while companies and outside parties enjoy most of these profits. Rapid social changes resulting from the existence of oil palm plantations can also trigger tensions in society; for example, differences in views between community groups who support and reject plantations can lead to internal conflicts.

Several factors influence how society responds to the existence of oil palm plantations, including involvement in decision-making, level of environmental awareness, access to information, and external support. Communities involved in the decision-making process regarding land management tend to respond more positively because they feel that their rights and interests are respected. A high environmental awareness makes people more likely to reject oil palm plantations that damage local ecosystems. The following is a further explanation of the community's response regarding the profits and losses they obtain from the activities of palm oil companies.

Benefits of Oil Palm Plantations

Community acceptance of mustard oil plantation activities is still considered to be high because the benefits received by the community are pretty significant. This positive impact or benefit is very closely related to the economic factors of their lives (Santika et al., 2021). Informants stated that having oil palm plantations in their area will encourage the running of their economy. It will be easier for several informants who have small-scale oil palm plantations to sell their harvests to companies. Collaboration with companies will also provide them with price and harvest certainty. If the price of palm oil increases or the selling value is high, the community will benefit even more.

The company's efforts to empower local communities also feel very beneficial. Many informants work in palm oil companies, and the company's employment rate for the local community is very high, which can reduce unemployment in that location. This is also the opinion of Jiuhardi et al. (2023) which states that the existence of oil palm plantations in a location or region is one way to reduce the problem of unemployment and poverty in that area. Several informants also took advantage of this moment as a business opportunity, such as opening a food stall or coffee shop and a primary food shop visited by many company employees daily. Not a few companies work together to provide their food and drink needs.

The informant also stated that since the company started, their shop has become busier and has generated more profits. This, of course, has a positive economic impact that can be utilized. Even though, at the beginning, this business required a larger model, the informants thought that they had no problem with this. Economic life in the area also improves with buying and selling transactions. It indirectly benefits from public transportation services, which will take them to the city to shop for food stalls.

In the infrastructure aspect, road improvements and the construction of several small bridges by the company are considered to be very beneficial to the community (Krishna & Kubitza, 2021). Although roads are becoming increasingly damaged and destroyed in some locations due to the mobility of plantation vehicles, several parts of the road are improving, such as road paving carried out by companies using their CSR funds. Providing special public transportation for workers' families in companies and local communities is also very profitable. This public transportation is a school bus used to pick up school children and can serve across sub-districts (Subah District and Sambas District, Sambas Regency). Therefore, parents do not need to worry about their child's school transportation.

At the village level, there are also benefits from oil palm plantation companies. Companies often assist with their CSR programs. This assistance takes the form of goods such as providing water reservoirs, improving infrastructure, health programs such as providing health units in areas around plantations, and providing emergency cars often used by villages for emergencies to the sub-district or district capital. Many elements of society benefit from this assistance. Thus, the presence of palm oil companies in surrounding villages can provide significant benefits, both in economic, social, and environmental terms, if managed well and responsibly (Hanafiah et al., 2022).

Disadvantages of Oil Palm Plantations

Besides the advantages mentioned previously, oil palm plantations also have disadvantages or negative impacts on the environment and social and public health. The main environmental impact is carried out by changing land cover, causing deforestation, deforestation and forest destruction (Salman & Mori, 2023). If forest clearing is carried out by burning, the damage will be more significant. This burning causes deforestation, which eliminates natural habitats and threatens biodiversity (Arifin & Setyawan, 2022), as well as releasing carbon dioxide and other greenhouse gases that contribute to climate change (Fiantis et al., 2023). Smoke and dust particles from forest fires pollute the air, causing acute respiratory problems for residents and the wider region due to the spread of smoke (McCall, 2019).

Water pollution also occurs due to waste from plantation activities and contaminants carried by water flows to lower areas or community water sources. Oil palm plant waste that is carried away will also clog water channels, which can cause flooding. Forests that have abundant natural resources will also be disturbed due to land conversion for plantations, causing natural resources or biodiversity to be limited or even lost.

The disadvantage in the social aspect is that it does not rule out the possibility that there will be social jealousy (Manurung et al., 2021). The distribution of economic benefits also tends to be uneven, with large profits enjoyed by companies while local workers often earn low wages and work in poor conditions (Sobian, 2019). Additionally, rapid social change can disrupt the structure and culture of traditional communities (Choiruzzad et al., 2021; Rahayu et al., 2021). The massive expansion to fulfill oil palm plantations will change the socio-geographical conditions of local communities and immigrants living around plantation areas. Social jealousy and concerns about the loss of native tribal descendants due to the domination of immigrant tribes also emerged. Indigenous people have concerns about the loss of their tribal entity if migrant migrants continue to expand their land (Dadi, 2021). Moreover, land compensation carried out by companies also triggers social jealousy between communities. The research found that people whose land was included in plantation areas would receive much compensation. Meanwhile, people whose land is not included in the area automatically do not receive compensation.

Many people also feel a loss from road damage, especially when using the main road for daily activities. Some people whose houses are on the side of the road often feel disadvantaged by the damage to this road because it also impacts their yard, which becomes dusty and dirty, so they have to clean it frequently. Apart from that, many informants who had gardens or pets in their yards experienced complaints such as plants being damaged or even dying due to too much exposure to dust from the damaged roads.

Community Response to Social Conflict

Social conflicts cannot be avoided in the daily lives of local communities and oil palm plantation businesses. Communities affected by social conflicts resulting from oil palm plantations respond in various ways. The community makes various preventive efforts to avoid these conflicts or minimise the commotion. Many communities have taken joint initiatives to resolve the environmental damage problem, which is the source of conflict in their area. They work together to clean up the environment, such as cleaning waterways from palm oil waste and re-cultivating the land to be still used for growing crops.

Research informants stated that after they became aware of environmental damage and felt the negative impact of this damage on their daily lives, they would report it to the local elders and ask for a traditional consultation to be held. Often, these traditional deliberations result in continuing the meeting or holding a dialogue with the company to ask for accountability. It is not uncommon for this initial dialogue stage to result in agreements such as requiring companies to repair damaged environments to reduce the potential for conflict.

If the initial meeting does not produce a favourable decision, then the community will approach the government for assistance in dealing with this problem. The government will facilitate dialogue again between the community and palm oil companies (Sagala, 2023). It is not uncommon for the government to act as a third party or mediator when mediation is carried out. It is hoped that a peace agreement will be reached at this stage. Companies are often asked to reimburse profits for the detrimental impact activities they carry out. However, when there is no agreement, the potential for conflict will be tremendous. Communities often organize protests to voice their dissatisfaction with companies deemed to be harming the environment and taking away traditional lands without fair compensation (Berenschot et al., 2023). This demonstration aims to draw the attention of the government and the public to the problems they are facing and to demand justice and protection of their rights.

Some of the steps taken by the community as a form of protest against the company include closing the road portal to the plantation area, employees going on strike, asking the government to evaluate the suitability of the company's activities, even asking for the company's license to be suspended, and at the worst level, namely taking the matter to legal action. They filed a lawsuit in court to demand rights to the land that the company had taken over without a transparent and fair process. These legal steps are often supported by non-governmental organizations (NGOs) that provide legal assistance and advocacy.

Thus, local communities show various responses to social conflicts resulting from oil palm plantations, starting from preventive efforts by working together to protect the environment, reporting to traditional elders, traditional deliberations, and dialogue with companies to involving the government and holding open protests. All of these steps reflect the community's desire to find fair and sustainable solutions and maintain a balance between economic development and environmental conservation.

Social Conflict Resolution Strategies that Have Been Implemented

Social conflict in people's lives arises as a result of preventive approaches to avoid and reduce the risk of conflict not going well. Society already has the ability to identify sources of conflict and the ability to prevent social conflict. However, when a conflict breaks out involving the community and the company,

different responses will emerge from the community (Marchetti & Tocci, 2020). Many informants stated that their first step in dealing with social conflict was to report to traditional elders and hold deliberations. This deliberation functions as a forum to discuss problems and find joint solutions based on local wisdom. The result of deliberations is often a decision to hold a dialogue with the company to seek accountability and improve the environment. Dialogue between communities and companies is often carried out to find peaceful solutions. In many cases, initial dialogue can result in an agreement requiring the company to take corrective action (Pacheco et al., 2020; Schormair & Gerlach, 2020; Wielga & Harrison, 2021). However, if dialogue does not produce adequate decisions, the community will involve the government.

The government often acts as a mediator in these conflicts. The government is facilitating continued dialogue between communities and companies, seeking to reach fair agreements. The government can also play the role of a neutral third party, helping to bridge differences and ensuring that the agreements reached are acceptable to both parties (Rokhim et al., 2020). Deliberations or the formation of discussion forums are often carried out between the community and companies with government assistance. This effort is a form of collaborative approach so that each party can interact with each other and work together to solve problems that arise. The deliberations and mediation carried out will result in several agreements and agreements for peace (Dhiaulhaq et al., 2014). The agreements written include companies being obliged to take responsibility for the environmental damage they have caused, committing to improving the environment and carrying out environmentally friendly palm oil plantation activities.

If dialogue and mediation are unsuccessful, the community takes protest steps to pressure the company. These steps include closing road access to plantations, labour strikes, and asking the government to evaluate company activities. In the most extreme cases, communities take the matter to legal action, suing companies for environmental damage and violations of their rights.

Local communities have used ways of resolving social conflicts in a family manner or through traditional approaches, but the results are often not in line with what was expected. The informant considered that the company's willingness to take responsibility for damage was very low, and the informant thought that the company often underestimated them. So, this family step is considered by the informant to have a low level of success in mediating problems, and it is not easy to reconcile the community with the company. Some of the efforts and strategies that have been carried out have been quite successful in reducing conflict, but this does not rule out the possibility of new conflicts arising due to other problems.

Recommended Solutions for Resolving Social Conflicts

To overcome social conflicts between local communities and palm oil plantation companies, a comprehensive and sustainable approach is needed. The main objective of conflict resolution is to resolve conflicts that have occurred and create a safe and peaceful social life. The findings and recommendations from research informants highlight several key strategies for conflict resolution, involving multiple stakeholders: the community, companies, and government, as can be seen in Table 4. Firstly, enhancing collaboration between communities, companies, and government bodies is crucial. This includes repairing environmental damage, fulfilling CSR obligations, and ensuring impartial regulation and supervision by government authorities. Dialogue, deliberation, and mediation are advocated as essential tools for resolving conflicts peacefully and maintaining environmental compliance. Importantly, communities stress the need for active involvement in plantation activities and maintaining good relations with indigenous communities to foster trust and cooperation. It can be seen that the resolution of social conflicts does not only involve or depend on one party.

Things that several parties must do:				
Public	Company	Government		
Increasing collaboration with companies and government.	Repair damaged environments and infrastructure and carry out CSR responsibilities.	Be neutral about problems that occur.		
Utilization of dialogue, deliberation, and mediation.	Maintain the environment as stated in the AMDAL and other environmental permits.	Tighten regulations and supervise oil palm plantations.		
Ask for help from stakeholders such as the government and authorities. -	Involve the community in plantation activities and maintain good relations with indigenous communities. Carry out business or activities by predetermined Standard Operating Procedure.	Be tough on companies that violate the rules and are perpetrators of environmental destruction. -		

Table 4. Summary of suggestions for maximizing social conflict resolution.

In general, it is said that prevention from preventive efforts will be beneficial. The community is expected to monitor the activities of palm oil companies starting from the land-clearing stage. Then, the company is expected to be open or cooperative with the community at the start and to have a responsibility to protect the environment. The government or the provider of permits for company activities must be more selective in granting oil palm plantation business permits because oil palm plantation activities will cause many losses, both to the community and to the environment. If all these recommendations can be implemented and run smoothly as they should, it is hoped that social conflicts will subside and the community and company will agree to make peace.

Sutrisno & Desanti (2018) stated that finding and disclosing problems that cause conflict can produce alternative solutions that are suitable for solving problems. This solution is beneficial because if conflict resolution is not adjusted to the root of the problem, it will result in suboptimal strategy results. Majer et al. (2021) emphasize that identifying the causes of conflict using various perspectives will enable a more holistic understanding and more effective and inclusive resolution strategies.

Wibawa (2019) added that in dealing with social conflicts between local communities and oil palm plantation companies, a social approach is the primary key. The importance of increasing active community participation in all stages of decision-making, from planning to program implementation, cannot be underestimated. This can be done through the establishment of an open dialogue forum that facilitates the exchange of ideas and interests between all relevant parties. Strong recognition of customary land rights is also an essential basis for maintaining the sovereignty of local communities and strengthening social sustainability. In addition, increasing awareness of the importance of shared prosperity and environmental preservation must be instilled in the collective consciousness of society (Iskandar, 2020). This can be done through education and joint learning about sustainable agricultural practices and ways to resolve conflict peacefully. Governments and NGOs can act as social mediators who help facilitate dialogue between communities and companies while strengthening local community cohesion. By implementing these steps, it is hoped that social conflict can be minimized, community welfare will increase, and company operations will run more responsibly and have a positive impact on the environment.

4. CONCLUSIONS AND RECOMMENDATIONS

The study findings reveal a dual narrative where oil palm plantations in Subah District, Sambas Regency, West Kalimantan Province, significantly contribute to the local economy by creating jobs and developing infrastructure. However, these activities also lead to environmental degradation and social conflicts, particularly concerning deforestation, water pollution, and disputes over land rights. The study identifies the root causes of these conflicts and emphasizes the need for comprehensive conflict resolution strategies. Key recommendations include engaging all stakeholders in decision-making processes, recognizing and protecting customary land rights, and adopting sustainable agricultural practices. A social approach, emphasizing active community participation and education on sustainable practices, is crucial. Moreover, companies should adopt robust CSR policies focusing on environmental restoration and community welfare, while governments need stricter regulations and act as neutral mediators. The broader significance of this study lies in its contribution to balancing economic development with environmental sustainability and social justice. By fostering collaborative efforts among communities, companies, and governments, it is possible to achieve a harmonious and resilient socio-environmental landscape in areas affected by oil palm cultivation. Future research should consider longitudinal studies to understand evolving social and environmental dynamics over time, integrate quantitative and qualitative methods for a comprehensive understanding, expand geographical scope, and involve diverse stakeholders, including local governments, NGOs, and academics, to ensure diverse perspectives are considered.

5. ACKNOWLEDGMENTS

This research was funded by the Ministry of Education, Culture, Research, and Technology-National Research and Innovation Agency with research scheme the Penelitian Kerjasama Dalam Negeri and with contract numbers grant number [125/E5/PG.02.00.PT/2023 and 125./PKS/WRIII-DRP/UI/2023] and grant number NKB-1170/UN2.RST/HKP.05.00/2023], Research and Development (Risbang), Universitas Indonesia.

6. **REFERENCES**

Anggraeni, D., & Hukom, A. (2023). Analysis Of The Palm Oil Industry In South Kalimantan From A Sustainable Development Perspective. Jurnal Manajemen Riset Inovasi, 1(2), 198–209. https://doi.org/10.55606/mri.v1i2.1074

Arifin, B., & Setyawan, D. (2022). How palm oil industry is having a devastating impact on Indonesia's health,

rainforests, and labor market. *International Journal of Environmental Science and Technology*, 19(12), 11775–11788. https://doi.org/10.1007/s13762-022-03923-4

- Ayompe, L. M., Schaafsma, M., & Egoh, B. N. (2021). Towards sustainable palm oil production: The positive and negative impacts on ecosystem services and human wellbeing. In *Journal of cleaner production*. Elsevier. https://www.sciencedirect.com/science/article/pii/S0959652620339597
- Bainta, F., Kurniaty, & Mahyuddin. (2020). Economy and environmental impacts of oil palm plantation expansion in Mamuju Tengah district, West Sulawesi Province, Indonesia. *IOP Conference Series: Earth and Environmental Science*, *575*, 1–8. https://doi.org/10.1088/1755-1315/575/1/012046
- Berenschot, W., Dhiaulhaq, A., & Hospes, O. (2023). *Kehampaan Hak: Masyarakat vs Perusahaan Sawit di Indonesia*. Jakarta: Yayasan Pustaka Obor Indonesia.
- BPS. (2023). Statistik Kelapa Sawit Indonesia 2022. Jakarta: Badan Pusat Statistik Indonesia.
- Choiruzzad, S. A. B., Tyson, A., & Varkkey, H. (2021). The ambiguities of Indonesian Sustainable Palm Oil certification: internal incoherence, governance rescaling and state transformation. *Asia Europe Journal*, *19*(2), 189–208. https://doi.org/10.1007/s10308-020-00593-0
- Christiawan, R., & Limaho, H. (2020). The Importance of Co-opetition of Corporate Social Responsibility in the Palm Oil Industry in Indonesia. *Corporate and Trade Law Review*, 1(1), 68–79. https://doi.org/10.21632/ctlr.1.1.68-79
- Corciolani, M., Gistri, G., & Pace, S. (2019). Legitimacy struggles in palm oil controversies: An institutional perspective. *Journal of Cleaner Production, 212,* 1117–1131. https://doi.org/10.1016/j.jclepro.2018.12.103
- Dadi, D. (2021). Oil Palm Plantation Expansion: An Overview of Social and Ecological Impacts in Indonesia. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(3), 6550–6562. https://doi.org/10.33258/birci.v4i3.2469
- Dhiaulhaq, A., Gritten, D., De Bruyn, T., Yasmi, Y., Zazali, A., & Silalahi, M. (2014). Transforming conflict in plantations through mediation: Lessons and experiences from Sumatera, Indonesia. *Forest Policy and Economics*, *41*, 22–30. https://doi.org/10.1016/j.forpol.2014.01.003
- Dib, J. B., Alamsyah, Z., & Qaim, M. (2018). Land-use change and income inequality in rural Indonesia. *Forest Policy and Economics*, *94*, 55–66. https://doi.org/10.1016/j.forpol.2018.06.010
- Ditjebun. (2022). Kontribusi Minyak Kelapa Sawit Indonesia mengatasi Krisis Pangan Global. In *Jakarta: Kementerian Pertanian Direktorat Jenderal Perkebunan.*
- Echeverría, E. E., Canchingre-Bone, M. E., Segura, S. E. T., & Quiñonez, V. A. (2023). Contamination of the Esmeraldas River basin by industrial wastes from palm cultivation. *Sapienza: International Journal of Interdisciplinary Studies*, 4(3), e23035–e23035. https://doi.org/10.51798/sijis.v4i3.686
- Faturrahman, M. A. (2023). Brief Review: Plant Diversity Loss in Indonesia as an Impact of Oil Palm (Elaeis guineensis Jacq.) Plantation Expansion. *International Journal of Multidisciplinary Research and Publications*, 6(2), 207–209.
- Febriyanti, D., Aini, S. N., Resta, A. V., & P.K.P, R. B. (2021). Fungsi AMDAL dalam Pengendalian Kerusakan dan Pencemaran Lingkungan Setelah Diundangkannya UU Cipta Kerja. *Widya Pranata Hukum*, 3(2), 115–133. https://doi.org/10.37631/widyapranata.v3i2.410
- Fiantis, D., Rudiyanto, F. I. G., Agtalarik, A., Arianto, D. T., Wichaksono, P., Irfan, R., Nelson, M., Gusnidar, S. J., & Minasny, B. (2023). Mapping peat thickness and Carbon stock of a degraded peatland in West Sumatra, Indonesia. *Soil Use and Management*, 1–13. https://doi.org/10.1111/sum.12954
- Hanafiah, K. M., Abd Mutalib, A. H., Miard, P., Goh, C. S., Mohd Sah, S. A., & Ruppert, N. (2022). Impact of Malaysian palm oil on sustainable development goals: co-benefits and trade-offs across mitigation strategies. *Sustainability Science*, 17(4), 1639–1661. https://doi.org/10.1007/s11625-021-01052-4
- Hein, L., Sumarga, E., Quiñones, M., & Suwarno, A. (2022). Effects of soil subsidence on plantation agriculture in Indonesian peatlands. *Regional Environmental Change*, 22(4), 1–13. https://doi.org/10.1007/s10113-022-01979-z
- Herdiansyah, H., Mamola, R., & Rokhim, R. (2023). Palm oil cluster resilience to enhance indigenous welfare by innovative ability to address land conflicts: Evidence of disaster hierarchy. In *Open Agriculture*. degruyter.com. https://doi.org/10.1515/opag-2022-0206
- Iskandar, A. H. (2020). *SDGs desa: percepatan pencapaian tujuan pembangunan nasional berkelanjutan*. Jakarta: Yayasan Pustaka Obor Indonesia.
- Jiuhardi, Wijaya, A., & Nurjanana. (2023). Usaha perkebunan dan pengembangan produksi kelapa sawit di kecamatan busang Kabupaten Kutai Timur. *Jurnal Ekonomi, Manajemen Dan Akuntasi*, *25*(1), 106–115.
- Kinseng, R. A., Buchori, D., Alatas, H., & ... (2023). Natural resource-based social conflict and principles of sustainable landscape approach: case study of kelola sendang project, South Sumatera, Indonesia. ... and Environmental https://doi.org/10.1088/1755-1315/1220/1/012035

- Krishna, V. V, & Kubitza, C. (2021). Impact of oil palm expansion on the provision of private and community goods in rural Indonesia. *Ecological Economics*, 179, 1–9. https://doi.org/10.1016/j.ecolecon.2020.106829
- Levang, P., Riva, W. F., Orth, M. G., & Cramb, R. (2016). Oil palm plantations and conflict in Indonesia: Evidence from West Kalimantan. In *The oil palm complex: Smallholders, agribusiness, and the state in Indonesia and Malaysia*. NUS Press.
- Majer, J. M., Barth, M., Zhang, H., van Treek, M., & Trötschel, R. (2021). Resolving conflicts between people and over time in the transformation toward sustainability: A framework of interdependent conflicts. *Frontiers in Psychology*, *12*, 1–16. https://doi.org/10.3389/fpsyg.2021.623757
- Manurung, G. M. E., Siregar, Y. I., & Almasdi Syahza, S. (2021). Opportunity for Sustainable Palm Oil Practices by Smallholder Farmers in Riau. *Journal of Hunan University Natural Sciences*, 48(10), 28–35.
- Marchetti, R., & Tocci, N. (2020). Conflict society: understanding the role of civil society in conflict. In *Conflict society and peacebuilding* (pp. 11–40). India: Routledge India.
- McCall, C. (2019). Indonesian forest fires raise concerns about health. *The Lancet, 394*(10210), 1699–1700. https://doi.org/10.1016/S0140-6736(19)32721-7
- Meijaard, E., Brooks, T. M., Carlson, K. M., Slade, E. M., Garcia-Ulloa, J., Gaveau, D. L. A., Lee, J. S. H., Santika, T., Juffe-Bignoli, D., Struebig, M. J., Wich, S. A., & Ancrenaz, M. (2020). The environmental impacts of palm oil in context. *Nature Plants*, 6(12), 1418–1426. https://doi.org/10.1038/s41477-020-00813-w
- Mosnier, A., Boere, E., Reumann, A., Yowargana, P., Pirker, J., Havlík, P., & Pacheco, P. (2017). Palm oil and likely futures: Assessing the potential impacts of zero deforestation commitments and a moratorium on large-scale oil palm plantations in Indonesia (Vol. 177). CIFOR.
- Olsen, W. (2004). Triangulation in social research: qualitative and quantitative methods can really be mixed. *Developments in Sociology*, *20*, 103–118.
- Pacheco, P., Schoneveld, G., Dermawan, A., Komarudin, H., & Djama, M. (2020). Governing sustainable palm oil supply: Disconnects, complementarities, and antagonisms between state regulations and private standards. *Regulation & Governance*, *14*(3), 568–598. https://doi.org/10.1111/rego.12220
- Qaim, M., Sibhatu, K. T., Siregar, H., & Grass, I. (2020). Environmental, economic, and social consequences of the oil palm boom. *Annual Review of Resource Economics*, 12, 321–344. https://doi.org/10.1146/annurev-resource-110119-024922
- Rahayu, S., Santoso, S., & Wijayanti, P. (2021). The analysis of palm oil plantation impact on the social geographic conditions in Kapuas sub-district, Sanggau district. *IOP Conference Series: Earth and Environmental Science*, 683(1). https://doi.org/10.1088/1755-1315/683/1/012136
- Rokhim, R., Januari, A. D., Atik, U., Shara, S., Rusdayanti, N., Rokhim, R., Januari, A. D., Atik, U., Shara, S., & Rusdayanti, N. (2020). Palm oil social conflict resolution and mediation in Jambi. *Cogent Social Sciences*, 6(1), 1–13. https://doi.org/10.1080/23311886.2020.1812831
- Rukajat, A. (2018). *Pendekatan penelitian kualitatif (Qualitative research approach)* (1st ed.). Yogyakarta: Deepublish Publisher.
- Rust, N. A., Abrams, A., Challender, D. W. S., Chapron, G., Ghoddousi, A., Glikman, J. A., Gowan, C. H., Hughes, C., Rastogi, A., & Said, A. (2017). Quantity does not always mean quality: The importance of qualitative social science in conservation research. *Society & Natural Resources*, 30(10), 1304–1310. https://doi.org/10.1080/08941920.2017.1333661
- Sagala, A. (2023). Peran Pemerintah Dalam Upaya Penyelesaian Konflik PT. Laot Bangko Kota Subulussalam. *Jurnal Ilmiah Mahasiswa Fakultas Ilmu Sosial & Ilmu Politik, 8*(4), 1–15.
- Salman, F., & Mori, A. (2023). Aggregation and Representation in Knowledge Coproduction: Lesson Learned from the Indonesian Sustainable Palm Oil Scheme. In *Environmental Governance in Indonesia* (pp. 221– 239). Springer. https://doi.org/10.1007/978-3-031-15904-6_13
- Santika, T., Wilson, K. A., Budiharta, S., Law, E. A., Poh, T. M., Ancrenaz, M., Struebig, M. J., & Meijaard, E. (2019). Does oil palm agriculture help alleviate poverty? A multidimensional counterfactual assessment of oil palm development in Indonesia. *World Development*, *120*, 105–117. https://doi.org/10.1016/j.worlddev.2019.04.012
- Santika, T., Wilson, K. A., Law, E. A., St John, F. A. V, Carlson, K. M., Gibbs, H., Morgans, C. L., Ancrenaz, M., Meijaard, E., & Struebig, M. J. (2021). Impact of palm oil sustainability certification on village wellbeing and poverty in Indonesia. *Nature Sustainability*, 4(2), 109–119. https://doi.org/10.1038/s41893-020-00630-1
- Schaafsma, M., Dreoni, I., Ayompe, L. M., Egoh, B., Ekayana, D. P., Favareto, A., Mumbunan, S., Nakagawa, L., Ngouhouo-poufoun, J., Sassen, M., Uehara, T. K., & Matthews, Z. (2023). A framework to understand the social impacts of agricultural trade. *Sustainable Development*, *31*(1), 138–150. https://doi.org/10.1002/sd.2379

- Schormair, M. J. L., & Gerlach, L. M. (2020). Corporate remediation of human rights violations: A restorative justice framework. *Journal of Business Ethics*, 167(3), 475–493. https://doi.org/10.1007/s10551-019-04147-2
- Septiyarini, D., Kusrini, N., & Kurniati, D. (2022). Sustainability of palm oil company CSR in supporting village status change. *Economics Development Analysis Journal*, *11*(2), 165–181. https://doi.org/10.15294/edaj.v11i2.55735
- Sobian, P. (2019). Social and Economic Impact of Palm Oil Plantation For Local Communities in Kapuas Hulu District. *Wacana: Jurnal Sosial Dan Humaniora*, *22*(3), 240.
- Sutrisno, E., & Desanti, N. (2018). Identifikasi Pendekatan Dalam Penanganan Konflik Dan Pengaruhnya Terhadap Kinerja Pegawai Di Badan Kepegawaian Daerah Kabupaten Sanggau Provinsi Kalimantan Barat. *TRANSFORMASI: Jurnal Manajemen Pemerintahan*, *10*(2), 143–154. https://doi.org/10.33701/jt.v10i2.526
- Tjilen, A. P., Tambaip, B., & Ohoiwutun, Y. (2023). Did Corporate Social Responsibility (CSR) Succeed? A Model of Economic Empowerment For Local Oil Palm Farmers. *Journal of Southwest Jiaotong University*, *58*(3). https://doi.org/10.35741/issn.0258-2724.58.3.56
- Wibawa, K. C. S. (2019). Mengembangkan partisipasi masyarakat dalam perlindungan dan pengelolaan lingkungan hidup untuk pembangunan berkelanjutan. *Administrative Law and Governance Journal*, 2(1), 79–92. https://doi.org/10.14710/alj.v2i1.79-92
- Wielga, M., & Harrison, J. (2021). Assessing the effectiveness of non-state-based grievance mechanisms in providing access to remedy for rightsholders: A case study of the roundtable on sustainable palm oil. *Business and Human Rights Journal*, 6(1), 67–92. https://doi.org/10.1017/bhj.2020.33