



## Sustainable finance in financing plantation companies by banking (case study of palm oil corporation in Donggala Central Sulawesi)

Linda Rosalina<sup>ab</sup>, Hariadi Kartodihardjo<sup>a</sup>, Arie Sujito<sup>c</sup>

<sup>a</sup> Faculty of Forestry and Environment, IPB University, IPB Dramaga Campus, Bogor, 16680, Indonesia

<sup>b</sup> Center for Agrarian Studies, IPB University, IPB Baranangsiang Campus, Bogor, 16129, Indonesia

<sup>c</sup> Faculty of Social and Political Sciences, Gadjah Mada University, Sleman Yogyakarta, 55281, Indonesia

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### Corresponding Author:

Linda Rosalina

Faculty of Forestry and Environment, IPB University;

Phone: +6281219427257

Email:

rosalinalinda304@gmail.com

**Abstract.** Sustainable finance is a form of financing provided by Financial Institutions (FIs) to debtors by considering sustainability aspects in their decisions. Sustainable finance has not become a serious concern and orientation of FIs in providing credit or financing to debtors. Problem financing reflects the problem of two conflicting economic actors (agency). By conducting an analysis of sustainable financial performance and agency relationship analysis, this study shows that assessing a company's sustainability performance (the debtor) requires detailed criteria and indicators of sustainable finance. When disbursing credit, banks cannot only look at the financial health and stability of a company. This is because companies that already have sustainability certification and fulfill administrative aspects still have unresolved Environmental, Social, and Governance (ESG) issues. The involvement of the parties in building an "Information Hub" (coordination forum) related to ESG practices centered in the regions is important.

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## INTRODUCTION

Massive expansion of land in the use of natural resources for forestry and plantation businesses has occurred in Indonesia, and continues to this day, which at the same time causes tragedy. The tragedy of land expansion presents a problem in the form of territorialization of the community's living space which leads to tenurial conflicts between the community and large companies (Li 2017; Wibowo et al. 2019). Another problem of the consequences of monoculture is the tendency to lose biodiversity, which leads to issues of deforestation and forest degradation (Edwards and Laurance 2012; Abood et al. 2015). Audit results from the Audit Board (*Badan Pemeriksa Keuangan/BPK*) in 2019 showed that there are 2.74 million ha of oil palm plantations planted without the process of releasing forest areas. The extent of this unprocedural use of resources has an impact on very great environmental damage and is a portrait that there are problems in resource management. On January 6, 2022, the government announced it would revoke thousands of mining, forestry, and plantation business permits (*Hak Guna Usaha/HGU*) (Kemensetneg 2022).

The revocation consists of licenses that are not executed, are not productive, are transferred to other parties, and are not in accordance with their designations and regulations. So as an effort to correct inequality, injustice, and environmental damage, it is important to evaluate the licensing of resource use. The utilization

of resources can not be separated from capital as a factor of production. The use of capital in this production process is in the form of loan capital (Elly and Umboh 2017). With regard to sustainable use of resources, it can be done by directing Financial Institutions (FIs) to provide loans to companies or industries that are considered environmentally and socially friendly (INFID and IWGFF 2014). Therefore, bankers and banks must dare to avoid lending to companies without environmental performance (Keraf 2021). This is in line with the mandate in implementing the Environmental Protection and Management Law Number 32/2009 and government programs through the Financial Services Authority (OJK) regarding sustainable finance (OJK 2016). An interesting thing that needs to be observed in this context is that although there are references for OJK and FIs to support sustainable resource utilization, there are still irregularities committed by FIs. As noted, the involvement of Bank Indonesia and the majority of foreigners financed 17 group companies involved in forest and land fires (Karhutla) in 2019 (TuK INDONESIA 2019).

Referring to research Greenpeace (2020) states that oil palm plantation companies dominated the companies involved in the forest fires incident, and some of them had been perpetrators in the previous year. Then other irregularities involve several banks in Indonesia and most foreign banks with Adaro Energy, a coal mining company in Indonesia (BankTrack 2023). Adaro Energy's operations have caused environmental damage in South Kalimantan, and in practice, the company has also diverted much of its profits to the offshore network allegedly to avoid paying taxes to the Indonesian authorities (Global Witness 2019). As a comparison, a similar case also occurred outside Indonesia, involving the Australia and New Zealand Bank Group (ANZ) and Phnom Penh Sugar (PPS). ANZ Bank Group and ANZ Royal Bank were reported for their customer operations (PPS) for forcibly evicting and seizing land and productive resources from 681 families (OECD 2014). The comparison of the two cases may indicate that sustainable finance has not become a serious concern and the orientation of LJK in providing credit or financing to customers.

There are still many similar cases involving banks with their customers, such as in Central Sulawesi, involving several banks in Indonesia and the majority of foreign banks with oil palm plantation companies belonging to the AALI where in their operations, there are indications of human rights violations, agrarian conflicts, community criminalization in plantation areas, and legality (Conant and Madan 2022). In the context of sustainable finance, some argue that problematic financing is a reflection of agency problems (Utami et al. 2019). Theoretically, the agency concept describes two conflicting economic actors, namely the principal and the agent (P–A). A P–A relationship is a contract in which one or more people (P) instruct another person (A) to perform a number of services on behalf of P, and A is given the authority to make the best decision for P (Jensen and Meckling 1976). Conflict occurs when A does not carry out P's orders and carries out A's own interests. What is interesting in that context, which becomes the understanding of this research, is that the relationship between banks and OJK as P and debtors as A is used to assess sustainable finance practices in the oil palm plantation sector. If examined in practice, sustainable finance in Indonesia has not yet effectively integrated Environmental, Social, and Governance (ESG) principles into the main activities of IFs as part of risk management (Prakarsa 2019).

Regulators, large companies, and investors argue that ESG aspects should be considered in a decision (The Global Compact 2004). Referring to Lokuwaduge and Heenetigala (2016), ESG is a business strategy to support sustainable development. This idea is in line with (Scholtens and Klooster 2019), which confirms that establishing good performance on sustainability reduces the risk of default and contributes to reducing the risk of the financial system. Because if the bank only considers profits and ignores ethical considerations, the bank can actually fall into bankruptcy, as happened in the housing credit crisis in the United States (Keraf 2021). According to Leins (2020) provide momentum for integrating ESG into a technique for aligning the ethical market order. The view states that companies that get high credit are companies that protect the environment (Höck et al. 2020), which implies that sustainable finance is a relevant and urgent need to be implemented by banks in Indonesia. This is because the potential impact of including ESG criteria in the investment decision-making process is at the core of sustainable development, which in a broader interpretation, is equally

important for policymakers, investors, and managers involved in the process of making investment decisions regarding the utilization of natural resources (Syed 2017).

In addition to opportunities, there are also obstacles faced by banks in implementing sustainable finance. There are at least three obstacles, namely the unclear regulatory framework in providing direction to financial institutions; inadequate risk management, such as financial institutions without the tools and capabilities to assess credit, social, and environmental risks; and there are political interests in financial institutions and regulatory bodies (Guild 2020; Setyowati 2020). Thus, knowing the opportunities and obstacles in implementing sustainable finance is relevant in this study. Considering the context of the themes, problem descriptions, and challenging issues as illustrated above, this research focuses on the relationship between oil palm companies as the cause of conflict and deforestation in the financial sector.

Social and environmental problems that occur downstream cannot be separated from the workings of capital upstream. Research by tracking and uncovering sustainable financial problems, especially the palm oil industry, for the implementation of the banking financial services industry in supporting sustainable development in various countries is still limited (Haddad and Maftuchah 2015). This concept is relatively new, so the literature and definitions are still evolving (Guild 2020). So, in this study, we reformulate the conceptual framework of sustainable finance to develop a roadmap for its implementation in Indonesia. Also, contribute to the theoretical and practical development of analyzing sustainable finance against ESG principles and agency relationships in providing credit/financing by banks to customers.

## **METHOD**

This research was conducted from October to December 2021. This research is located at PT Lestari Tani Telaand (LTT), a palm oil plantation subsidiary of the AALI in Donggala Regency, Central Sulawesi. The research location is chosen because cases involving the AALI Group related to human rights violations, agrarian conflicts, criminalization of residents in plantation areas, and environmental pollution and destruction have become the international spotlight. This case is in contrast to the company's internal sustainability commitment. This group of companies has also received financing in the form of debt and guarantees from 14 creditors in Indonesia, and the majority have been foreign over the past five years (Forests & Finance 2021).

The research instrument used a survey by distributing questionnaires and in-depth interviews using an interview guide. The survey instrument is used to collect quantitative data in measuring sustainability performance by assessing ESG criteria and indicators. Meanwhile, in-depth interview instrument data was used to support the quantitative data findings. The approach used is quantitative, which is supported by qualitative data. The quantitative approach is the main research component in calculating ESG criteria and indicators scores on sustainable financial achievements and banking relationships with debtors. Quantitative data were collected by survey method by distributing questionnaires. Meanwhile, a qualitative approach is used to support the findings of the calculation of ESG criteria and indicators consisting of observations, interviews, documentation, and audio-visuals (Creswell 2016; Leavy 2017).

Respondents in this study were determined purposively based on the criteria, namely those who mastered the problems being studied in the case of LTT (Astra Agro Lestari Group) and their funders. The selected respondents were 21 people. The respondents include Bank A, Bank B, and Bank C; the Indonesian Financial Services Authority (*Otoritas Jasa Keuangan/OJK*); PT LTT and AALI Tbk.; the Rio Pakava Community; Ombudsman RI Representative of Central Sulawesi; National Land Agency (BPN) Regional Office of Palu; Tax Office of Palu; Central Sulawesi Manpower and Transmigration Office; Central Sulawesi Plantation and Livestock Service Office; Department of Food Crops, Horticulture, and Plantation Donggala; WALHI Central Sulawesi, Kompas Peduli Hutan (KOMIU), and the Forests and Finance coalition. The process of data verification and validation in this study used the cross-check triangulation method and rechecked the same data source through previous research and investigations of findings from secondary data. While the unit of analysis is a source of information needed in research, namely financial institutions, companies, related

Ministries/Institutions, civil society institutions, and affected communities. The determination of the unit of analysis is adjusted to the problems studied.

The extent to which the achievement of sustainable finance was analyzed quantitatively by calculating the sustainability performance score of the ESG criteria and indicators applied to LTT (AALI) in Donggala Regency, Central Sulawesi by banks. The measuring instrument used in this research is the development of ESG criteria and indicators from OJK (2019) and the Ministry of Agriculture (Kementerian Pertanian 2020). The basic aspects developed include four principles, namely: (1) Administrative compliance (legality); (2) Governance; (3) Social; and (4) management of the environment, natural resources, and biodiversity. These four basic aspects were developed into 35 indicators, ESG criteria, indicators, and verifiers.

The results of observations based on these criteria and indicators are then analyzed by using the Likert scale calculation model (Sugiyono 2016). That, each LST indicator that uses a Likert scale has a gradation from very positive to very negative in the form of an interval of 3 (fulfilling all the elements contained in the verifier), 2 (fulfilling some of the elements contained in the verifier), and 1 (not fulfilling all the elements) contained in the verifier). The assessment of the overall score of criteria and indicators is carried out in three stages: First, determining the value in one criterion; Second, determining the final result of the assessment; Third, the final results of the assessment will be presented in the form of an index, as follows:

$$\text{Criteria score} = \frac{\text{Total score of indicators on one criterion}}{\text{Number of all indicators on one criterion}}$$

$$\text{Final score} = \frac{\text{Total score of indicators on all criteria}}{\text{Sum of all indicators on all criteria}}$$

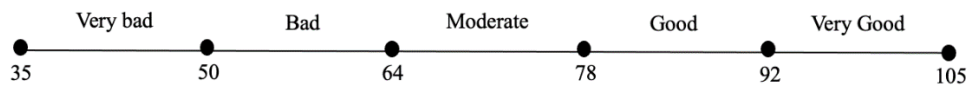


Figure 1 Continuum Line Map in Likert Scale

Furthermore, the relationship between banking and customers in the map of the problems it causes is analyzed using agency theory (*agency theory*) (Jensen and Meckling 1976). The triggering factors for non-performing financing are analyzed through potential issues in agency problems (Murthy 2007), including:

1. Selection of agents: Considerations of principals (banks) in selecting agents (debtors in the oil palm plantation sector)
2. Contractual relationship: contract payload, reward–punishment, self–enforcing
3. Asymmetric information: equivalence of information between principals (banks) and agents (debtors in the oil palm plantation sector)
4. Incentives: rewards for agents who have shown good performance
5. Risk preference: risk sharing and contract implementation consequences
6. Moral hazard: behavior of abandonment of contracts/agreements
7. Control: control or monitoring in the implementation of the contract (granting credit), and the alignment of objectives between the principal and the agent

## RESULTS AND DISCUSSION

### Portrait of Oil Palm Plantation Mastery in Central Sulawesi

The area of large-scale oil palm plantations in Central Sulawesi in 2021, based on the permits that have been issued, reaches 608.62 thousand ha. This figure consists of 25% or 149.29 thousand ha of Cultivation Rights (HGU) and 75% or 459.33 thousand ha of non-HGU or with a Location Permit (*Izin lokasi/Inlok*) and/or Plantation Business Permit (*Izin Usaha Perkebunan/IUP*) (Dinas Perkebunan and Peternakan Sulteng 2021). Referring to the Plantation Law Number 39 of 2014, which was strengthened by the Constitutional Court Decision Number 138 of 2015 that oil palm plantation companies, both those that have been established and those who will establish, are required to have land rights and plantation business permits. Thus, the legitimacy of a large-scale plantation business on state land is determined by proof of ownership of HGU and IUP. Thus, many oil palm plantation businesses in Central Sulawesi are subject to maladministration (Article 1 paragraph 3) of the Ombudsman Law Number 37/2008).

All palm oil plantation permits in Central Sulawesi by 2021, both HGU and non-HGU, will be owned by 47 companies (Dinas Perkebunan and Peternakan Sulteng 2021). The identification results show that five oil palm plantation subsidiaries belonging to the AALI control the most extensive oil palm plantations, namely 86.61 thousand ha or 14% of the total palm oil permits in Central Sulawesi (Table 1). The bigger finding is that as many as 26 oil palm plantation companies in Central Sulawesi, with an area of 323.77 thousand ha or 53%, were not identified with large groups, and the realization of planting until 2021 was only 4% of the total area given. On average, the permits were issued before 2013, when Central Sulawesi should have had a lot of productive oil palm plantations. This shows that Central Sulawesi is suspected of only doing business with permits (palm oil).

Table 1 Mastery of large-scale oil palm plantation in Central Sulawesi in 2021

Group	Companies	Area (Ha)		Total (Ha)	Percentage
		HGU	Non-HGU		
AALI	5	6,891.43	80,079.33	86,970.76	14%
Kencana Agri	3	-	60,000.00	60,000.00	10%
BW Plantation	1	22,780.00	-	22,780.00	4%
SMART	5	55,603.23	6,450.00	62,053.23	10%
Cipta Cakra Murdaya	1	6,010.00	-	6,010.00	1%
KLS	1	4,145.00	-	4,145.00	1%
Sime Darby Plantation	5	10,029.52	33,229.00	43,258.52	7%
Tidak teridentifikasi	26	44,155.27	279,615.13	323,770.40	53%
Total	47	149,614.44	459,373.46	608,987.90	100%

Source: Dinas Perkebunan and Peternakan Sulteng (2021), AALI (2020), LTT (2020), Responsibank (2015)

Not only in Central Sulawesi, AALI is one of the 25 largest palm oil groups in Indonesia and is controlled by tycoons (TuK INDONESIA 2018). This group of companies is a producer of Crude Palm Oil (CPO) and Palm Kernel/Core Oil (PK), which operates integrated with business activities including oil palm cultivation, processing of Fresh Fruit Bunches (FFB), CPO processing, marketing and distribution of downstream customers (AALI 2016). Until 2020, AALI has reported a total planted area of 287.60 thousand ha of oil palm. The area consists of 75% or 215.37 thousand ha from nucleus plantations and 25% or 72.22 thousand ha from plasma plantations/Primary Credit Cooperative Members (*Kredit Koperasi Primer Anggota/KKPA*) (a form of collaboration with the community) spread across Sumatera, Kalimantan, and Sulawesi. In the same year, AALI has only replanted an area of 5.58 thousand ha (AALI 2020).

AALI's profile is listed on the Indonesia Stock Exchange (IDX), with a dominant shareholder of 79.68% is PT Astra International Tbk, an Indonesian car manufacturing company. Meanwhile, the other 20.32% of shares are owned by the public (AALI 2020). The majority share of Astra International is owned by Jardine Cycle & Carriage, a company registered in Singapore, amounting to 50.11% (AI 2020). Bermuda-based Jardine Matheson Holdings Limited owns Jardine Cycle & Carriage shares through a complex holding structure involving four intermediary holding companies based in the British Virgin Islands, Bermuda, and Singapore (TuK INDONESIA 2018; JC&C 2020) (Figure 2). The group's business scope now includes engineering and construction companies Jardine Pacific Ltd., automotive businesses Jardine International Motors Group and Astra, retail group Dairy Farm International Holdings Ltd., an investment holding company Cycle & Carriage, property company Hongkong Land Holdings Ltd. and hotel chain Mandarin Oriental International Ltd.

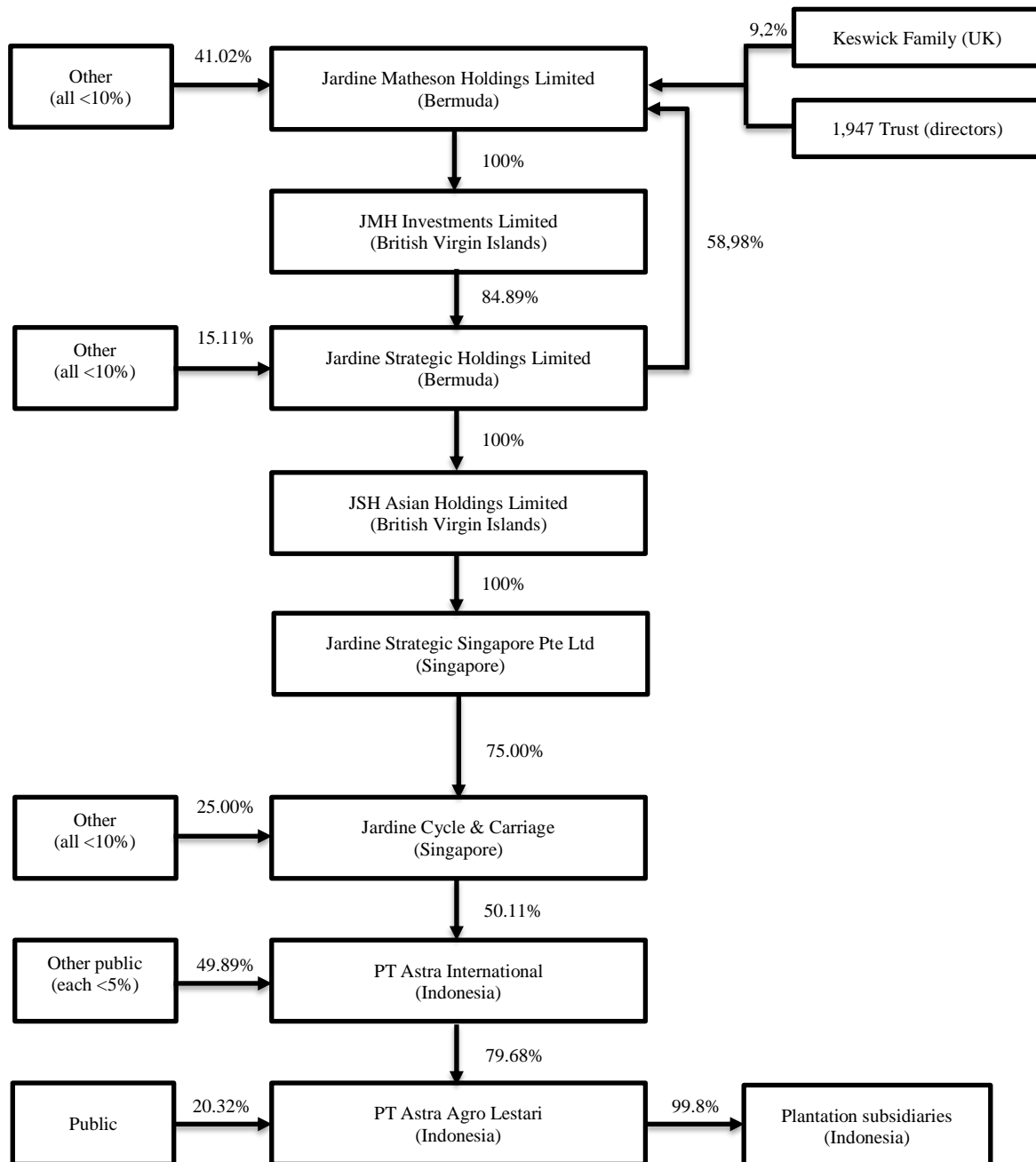


Figure 2 Jardine Matheson Group Ownership Structure  
(Source: JC&C (2020), AI (2020), AALI (2020), TuK INDONESIA (2018))

This group, in the last five years (2017–2021), obtained debts and guarantees from 14 national and majority foreign investors amounting to USD 927 million. Meanwhile, 294 parent investors, all foreign, became shareholders and channeled investments to AALI/Jardine Matheson, amounting to USD 417 million in 2021 (Forests & Finance 2021).

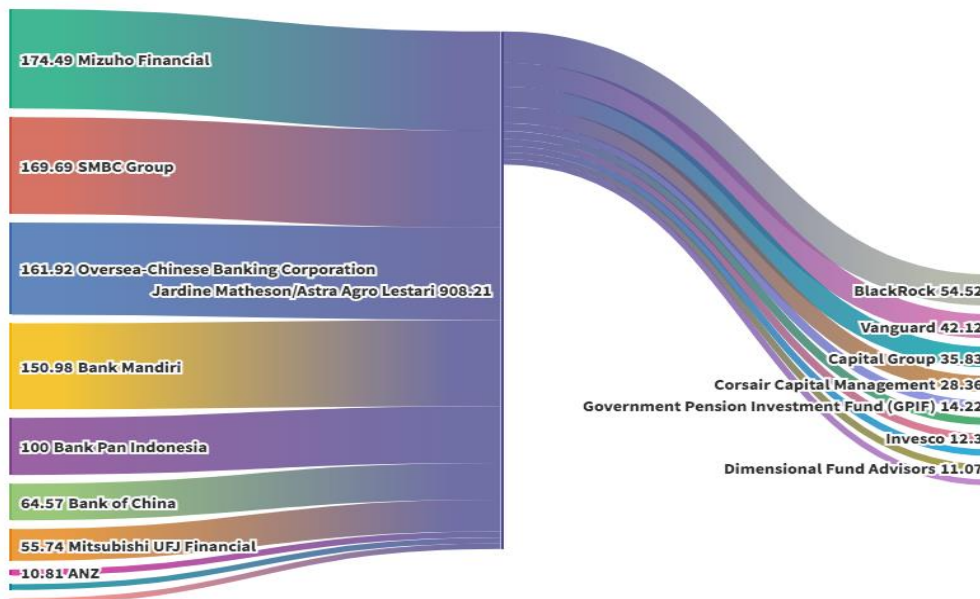


Figure 3 (Left-right) Top 10 Creditors and Investors Jardine Matheson/AALI (Source: Forests & Finance (2021))

### PT Lestari Tani Telaand's Sustainability Performance

PT LTT is a palm oil plantation subsidiary belonging to the AALI located in Rio Pakava District, Donggala Regency, Central Sulawesi (AALI 2020; Ditjen AHU 2021). This company was founded in 1993 and had a HGU area with a total area of 6,891.43 ha (LTT 2020). Currently, PT LTT already has the Indonesian Sustainable Palm Oil/ISPO certificate and obtained the Blue Proper from the Ministry of Environment and Forestry (AALI 2021). In this study, the sustainability performance of PT LTT that can be assessed is 25 out of 35 indicators. There are 4 indicators that are not relevant to the PT LTT situation, and the other 6 indicators cannot be given weight because data are not available. The results of the assessment show that the average sustainability performance of PT LTT is quite good. The administrative and management aspects of the environment, natural resources, and biodiversity have higher scores than the governance and social aspects.

In the administrative aspect, there are ten indicators that are assessed. A total of five indicators have a score of 3, and five other indicators have a score of 2. Overall, PT LTT fulfills all administrative indicators, such as having a legal entity, Taxpayer Identification Number (*Nomor Pokok Wajib Pajak/NPWP*), Business Identification Number (*Nomor Induk Berusaha/NIB*), Building Construction Permit (*Izin Mendirikan Bangunan/IMB*), policy on reporting on plantation business activities, the legality of land tenure, the legality of plantation business, the process of fulfilling land legality/business permits in order, and environmental permits. However, the physical map and the area of the existing plantation do not match the HGU: (1) the company operates outside the HGU; (2) HGU is included in the reserve for transmigration areas and business land (*Lahan Usaha/LU 1 & 2*) transmigration; (3) HGU overlaps with other property rights.

In the aspect of governance, there are four indicators that are assessed. One indicator gets a score of 3, two with a score of 2, and one with a score of 1. The results of the Plantation Business Assessment (*Penilaian Usaha Perkebunan/PUP*) by the plantation assessor, PT LTT are included in the plantation class I (very good). However, PT LTT did not fulfill its obligation to allocate a minimum of 20% for community plantation development from the area of its plantation business permit. With a HGU area of 6,891.43 ha, there is at least

1,378.29 ha of community gardens that must be developed by PT LTT. Based on Article 26 of PP 26/2021, with a land area (LA) of 1,378.29 ha multiplied by the Cost of Plantation Development (*Biaya Pembangunan Kebun/BPK*) assuming IDR 55 million per ha, there is a potential IDR 75.8 billion for fines not being facilitated by 20% of community gardens that can be billed by the license issuer to PT LTT.

In the social aspect, there are five indicators that are assessed. Three indicators get a score of 2, and two indicators with a score of 1. Even though PT LTT already has an HGU, there are still community lands that are claimed to be PT LTT's HGU. One of them is land with the status of SHM (Certificate of Ownership) Mr. A in Minti Makmur Village covering an area of 0.5 Ha, which until now there is no clear settlement. In October 2020, WALHI Central Sulawesi reported a complaint to the US conglomerate Procter & Gamble (P&G), an indirect buyer of AALI's palm oil. The report contains allegations of land grabbing and criminalization of Hemi and other farming communities in Central Sulawesi and West Sulawesi by three AALI subsidiaries, namely PT Mamuang, PT Agro Nusa Abadi (PT ANA), and PT LTT. Wilmar International, which bought from AALI and sold it to P&G, was asked by P&G to investigate a complaint from WALHI Central Sulawesi. But it has been more than a year, according to P&G and Wilmar reports, with no resolution in sight, and AALI did not respond to requests for comment (Brook 2022).

In the aspect of the environment, natural resources, and biodiversity, there are six indicators that are assessed. One indicator gets a score of 3, and five indicators with a score of 2. Overall, PT LTT fulfills all of these indicators, such as having SOPs for waste management, technical guidelines for monitoring and integrated pest control (IPM), SOPs for preventing and controlling forest and land fires, identification of protected areas and areas High Conservation Value (HCV), implement conservation of areas with high erosion potential, and HGU does not overlap with the New Permit Delay Map (PIPIB) and Peat Restoration Map. However, the results of the water quality test in November 2020 showed that several parameters from the results of the well water analysis of the residents of Towiora Village, Rio Pakava District, exceeded the standard quality threshold (Dinas Lingkungan Hidup Sulteng 2020). According to the Indonesian Ombudsman Representative for Central Sulawesi, the residents' wells were polluted by the waste from the PT LTT Palm Oil Mill (Ombudsman Central Sulawesi, personal communication, October 21, 2021).

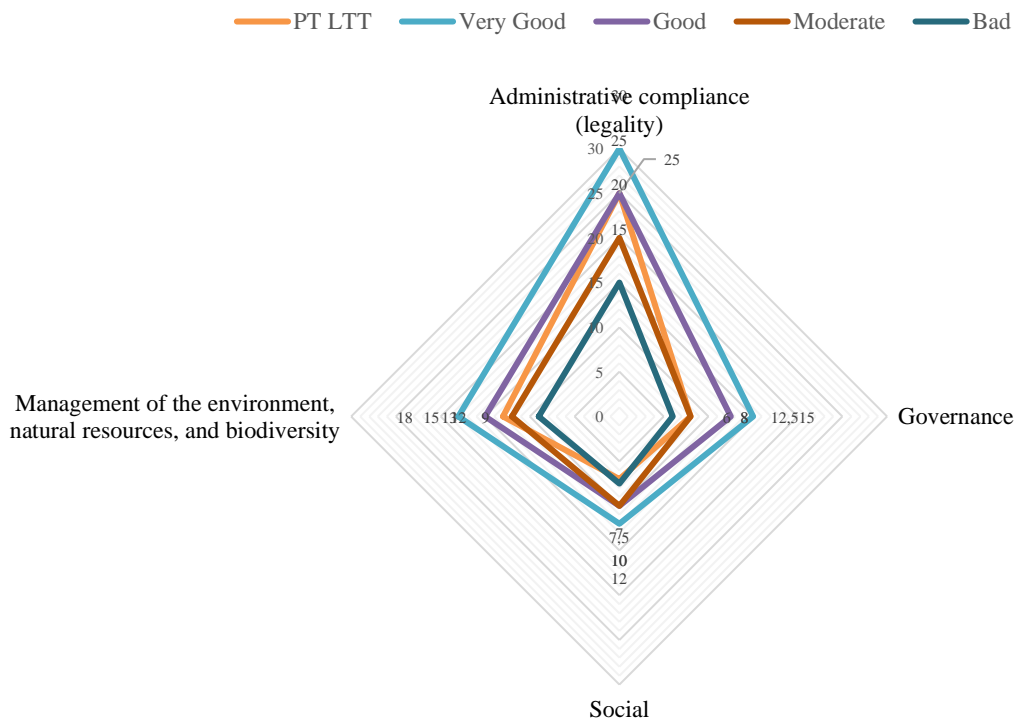


Figure 4 Sustainability performance of PT LTT, AALI



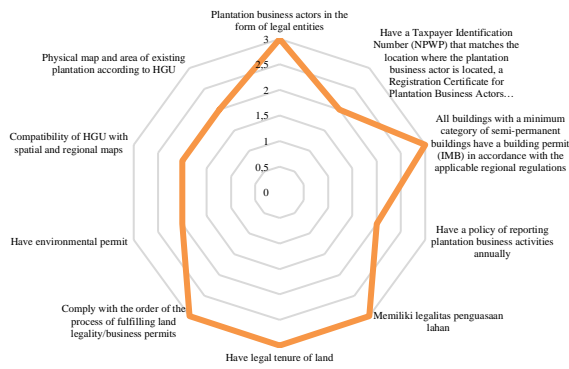


Figure 5 Assessment of administrative aspects of PT LTT

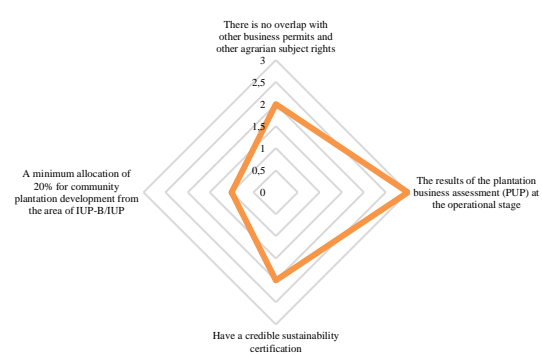


Figure 6 Assessment of the governance aspects of PT LTT

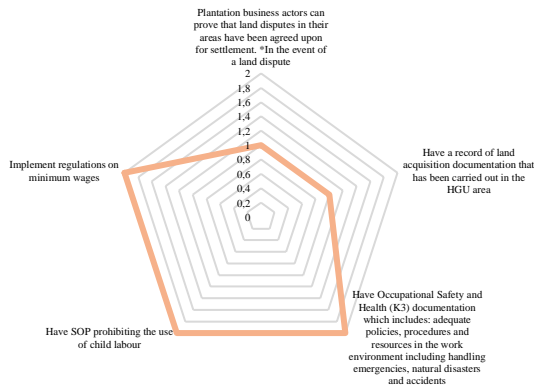


Figure 7 Assessment of social aspects of PT LTT

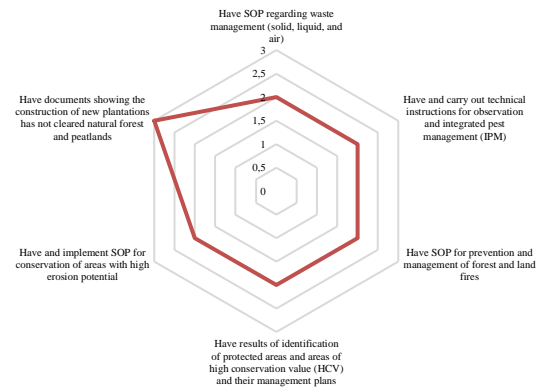


Figure 8 Assessment of environmental aspects, natural resources, and biodiversity PT LTT

In the case of PT LTT, it shows that companies that already have sustainability certification and fulfill administrative aspects have the potential to have unresolved ESG issues. The variety of certifications that have been obtained by the company cannot directly reflect the actual conditions in the field (Gatti and Velichevskaya 2020). Research by Gatti et al. (2019) found that the production of certified palm oil causes high deforestation and is probably no more sustainable than the production of uncertified palm oil. Therefore, ownership of certification in the green taxonomic assessment indicators (OJK 2022) is recommended that it does not automatically fall into the green criteria (no significant harm, applies minimum safeguards, has a positive impact on the environment, and is in line with environmental goals). Financial service institutions must look at the overall fulfillment of the principles and criteria of sustainable financing and sustainable business. Thus, the concept of sustainable finance should be interpreted as not limited to certification (only), but further related to the process of value activities for resources and the surrounding community.

### Agency in Sustainable Finance in the Oil Palm Sector

Agency theory takes assumptions about human nature. Rational choice (consideration/rational choice) assumes that economic people act based on rational considerations, costs, and gains (results obtained/profits) (Weber 2009). This human nature becomes the motive of his economic actions to survive and achieve his interests. Economic actions carried out by humans always try to get optimal benefits by utilizing facilities and

limited resources (natural resources). Economic logic in rational choice theory has brought many practices of environmental damage, social tensions, conflicts of interest, and corruption. Errors in rational calculations can be made by banks and companies in making policies. Errors in policy making and political decisions are uncovered (debungking) by using imperfect information theory (asymmetric information) and transaction costs. Asymmetric information theory is used to see conflicts of interest in the distribution and utilization of financing. This is because the asymmetric information theory pays attention to the details of the terms and conditions of various contractual arrangements and regulations between various parties and the environment (Bardhan 1989).

Nugroho (2016) sees the P–A relationship always raises the problem of asymmetric information because generally, A has more complete and perfect information than P. If asymmetric information occurs before the contract is made and agreed (*ex-ante*) it will create the risk of choosing the wrong agent (adverse selection risk). If it is made after the contract is made and agreed (*ex-post*) it will create a risk of breaking a promise (moral hazard). The main concern of using asymmetric information theory in this study is the problem of asymmetric information (limited information) in financing contracts between banks and companies. Where banks cannot assess the quality of the company's inputs, processes, outputs, and outcomes in resource utilization and management. The limited information can lead to unfair competition and exploitative use of financing, namely, increasing revenues and profits by companies that are not responsible for implementing sustainable finance. Or conversely, banks provide financing to companies without caring about sustainable financial standards that sacrifice environmental, social, and governance quality.

Asymmetric information between banks and corporations can be used to extract uncompensated benefits or value from others by manipulating contracts, financing requirements, and regulations in the use and management of resources. Manipulative actions have an impact on transaction financing and reputational or regulatory risk for banks and companies in financing transactions and loss of access and capital. Therefore, to analyze requires the support of the transaction cost theory approach (transaction cost theory) changes in the behavior of the government, investors, banks, and customers to realize sustainable finance or its main orientation in achieving sustainable development. Transaction cost theory according to Williamson (1988) assumes that human agents are subject to limited rationality and are opportunistic in seeing opportunities to increase their economic level or welfare. Transaction cost theory will show the preferences of banks and their customers who decide to seek self-interest by deceit in meeting ESG standards and instruments in sustainable finance.

The implementation of sustainable finance by banks and various related stakeholders is not enough just with goodwill. However, they have to let go of bounded rationality (the limits of profitability instrumental rationality) in the preparation of contracts and deviations from the system of unclear authority rules. Therefore, banks as financing actors and the government as regulators are most responsible for eliminating environmental crime practices, namely environmental damage caused by intentional or reckless actions (negligence) by humans in the use of natural resources (Williams 1996), in preparing sustainable finance. This is because, so far, environmental crimes have been deliberately rationalized in a limited way to seek institutional and personal interests. The attitude of opportunism and bounded rationality of banks is used to develop a governance structure to protect financial transactions and the explosive use of resources in the contracts they use. In this study, the relationship between banking as principal and debtor as agent is traced in a map of the problems it causes towards sustainable financial quality in the oil palm plantation sector.

The agency relationship between banks and companies is also influenced by the existence of the government/regulator. That, the principal gives the agent the responsibility for the agreed contract in accordance with the regulator's policy. This study identified 14 banks that provided financing facilities to AALI from 2017–2021 in the form of debt and guarantees amounting to USD 927 million. These banks come from Japan (43%), Indonesia (27%), Singapore (20%), China (7%), and others (3%). They are Mizuho Financial, Sumitomo Mitsui Banking Corporation (SMBC), Oversea-Chinese Banking Corporation (OCBC), Bank Mandiri, Bank Pan Indonesia, Bank of China, Mitsubishi UFJ Financial Group (MUFG), Australia and New

Zealand Banking (ANZ), The Development Bank of Singapore (DBS), United Overseas Bank (UOB), Cathay Financial, Hongkong and Shanghai Banking Corporation (HSBC), Industrial and Commercial Bank of China (ICBC), and JPMorgan Chase (Forests & Finance 2021). Analysis of the principal–agent relationship in the application of sustainable finance was carried out on three banks and the OJK as the regulator with the authority on banking supervision. Some of the statements of the informants are presented in the quotations below:

*“...your financial health, how long your company has been established is one of the factors. If it's been a long time, even though the finances are a little fluctuating, the establishment will be taken into consideration...”*

*“...debtors on that scale, when it comes to sustainability, it's a smile. They said it was a cost unless there was an incentive...”*

*“...when there is an ISPO, the RSPO is still considered difficult for the debtor. Then the risking position, for example, insurance covering, who will depend on when something happens later, the premiums are high...”*

*“...making a sustainability report, this is a cost. Hire a consultant, this is also a cost. In fact, if the capacity of internal human resources is increased, they can make their own...”*

*“...The KLHK green PROPER credits are Call5. Now, while this red PROPER (credit) is running smoothly. There must be something...”*

Based on the results of the interview, it was found that financial health and company stability were the main factors for banks in selecting prospective debtors. The smooth repayment of debt and interest by debtors is an indicator of providing contractual rewards and punishments. Information on debtor performance in the field often does not reach the banking sector. According to OJK, a lot of financing for the agricultural sector, especially plantations, is financed directly by central banks, not in the regions, so that supervision becomes weak and costs are high. The existing incentives are only in the form of awards, and OJK is currently encouraging incentives if the debtor's ESG aspects are fulfilled to the sector through a green taxonomy (OJK 2022). The distribution of risk does not work because all risks are borne by the debtor who does business. So, this is often the reason debtors ignore governance and social risks. Control over the performance of debtors is only carried out if they experience bad credit problems.

The findings of agency problems based on the results of interviews are presented in Table 2. Several problems found in the agency, it is important to encourage the role of local governments/permit holders in ensuring clear and clean permits in supporting land management as a guarantee of sustainable financial sustainability factors. This is referred to as one of the “Information Hubs” between principals and agents. Another thing, in making business decisions, banking must be able to ensure to avoid or refuse to channel financing to companies that are problematic from the ESG aspect even though certain businesses/activities are very promising in terms of business and financial calculations. This is because, according to Keraf (2021) the public's dissatisfaction and distrust of banks is due to ignoring ESG issues. In turn, when the incident continues to repeat itself and become more widespread, it will erode the reputation of the bank.

Then, violations or negligence in complying with the provisions of the applicable laws and regulations can also create legal risks for the bank concerned. The dilemmatic situation faced by banks in making decisions must be carried out with critical reflection to make choices, behave, and act correctly. So that in managing a good and correct bank, ethics are needed, strengthened by legal norms, and based on moral motivation (Keraf 2021). As an intermediary institution (financial intermediary), banks cannot directly influence sustainable development. However, bank financial service facilities that take into account ESG criteria can be the controller of an unsustainable business.

Table 2 Finding agency problems in the implementation of sustainable finance

Potential issues	Findings
Selection of agents	<ol style="list-style-type: none"> <li>1. Established company</li> <li>2. The company's financial health is the main factor</li> <li>3. Profiling (individual/corporate) for screening prospective debtors is carried out. If hits are found (news), they will be considered</li> </ol>
Contractual relationship	<ol style="list-style-type: none"> <li>1. Due diligence on prospective debtors (large scale) on human rights and environmental aspects has not yet been implemented. This is because the implementation of ESG aspects is a cost for companies (large scale). The implementation of continuous finance is also a cost for banks.</li> <li>2. Reward and punishment (new) are seen from the smooth repayment of debt and interest by the debtor/company. This is because certification is not correlated with collectibility</li> </ol>
Asymmetric information	<ol style="list-style-type: none"> <li>1. Information about ESG practices does not reach the banking sector</li> <li>2. Internalization of ESG principles does not work, both in companies and in banking (institutions are available, but their duties and functions are not running)</li> <li>3. The information gap between banks, companies, and local governments (the principles of transparency, coordination, participation, and accountability are not working)</li> </ol>
Incentive	<ol style="list-style-type: none"> <li>1. Incentives (new) are seen from the smooth repayment of debt and interest by the debtor. If you pay smoothly, you are given incentives with lower interest, and if you pay late, you will be subject to a fine</li> <li>2. OJK is encouraging incentives if debtors fulfill ESG aspects to the sector through a green taxonomy</li> </ol>
Risk preference	<ol style="list-style-type: none"> <li>1. The risk is borne by the debtor/company so that the risk distribution does not work</li> <li>2. Bad governance from companies, banks, and local governments creates a tiered domino effect</li> </ol>
Moral hazard control	<p>Neglect of governance and social risks by debtors</p> <ol style="list-style-type: none"> <li>1. Control is carried out if the debtor has bad credit</li> <li>2. Local governments do not have the power to impose sanctions</li> </ol>

## CONCLUSION

The results of this study indicate that in viewing a company's sustainability performance, detailed criteria and indicators for sustainable finance are required. When disbursing credit, banks cannot only see from the aspect of financial health and the establishment of a company. This is because companies that already have sustainability certification and fulfill administrative aspects have the potential to have unresolved ESG issues. As shown in the implementation of sustainable finance by banks for PT LTT in Donggala where the findings are still in a fairly good criterion. The lowest score is shown in the governance aspect, namely the company's non-fulfillment of the obligation to allocate a minimum of 20% of community plantation development from the area of the plantation business permit. In addition, the lowest score for the social aspect is the lack of clarity in the resolution of land disputes between companies and the community.

Several agency problems in implementing sustainable finance, namely first, financial health and company stability, are the main factors in selecting prospective debtors by banks. Meanwhile, the debtor's track record related to ESG aspects tends not to be prioritized. Second, the ESG aspect has not become a prerequisite in the contractual relationship between prospective debtors and banks. Third, there is asymmetric information because often, information about debtor performance in the field does not reach banks. Fourth, there is no incentive if debtors carry out ESG aspects. Fifth, risk sharing does not work because the debtor often bears the

risk of running a business. Sixth, debtors ignore governance and social risks. Seventh, control or supervision has not been carried out by banks if the debtor ignores ESG aspects. Therefore, problems in the palm oil sector will continue to occur if financing does not refer to ESG criteria and indicators as a condition for providing credit by banks. So, in ensuring sustainable finance can run in the region, an "Information Hub" is needed as a liaison between agencies.

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