Sustainable Palm Oil and Landscape Program

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Abstract. Palm oil is a commodity with a significant land area development. Thus, raises concerns about its impact on the landscape. This study uses a case study in South Tapanuli, a center of smallholder oil palm plantations with a high conservation value and an action plan for a sustainable palm oil program. This study uses a combination of a desk study of government publications and interviews with key stakeholders. The results show that the sustainable palm oil program can affect landscape sustainability through regional development and spatial plans. The sustainable action plan has altered strategic issues in the regional development plan by focusing on oil palm plantations management in forest areas. However, the strategic issues have not been followed up by targets and programs. Coordination between the central and regional governments is lacking, and related local government organizations do not fully understand the plan. The annual plan has been completed with sufficiently detailed outputs and thus cannot use it as a reference for evaluating achievement stages. Therefore, although the sustainable palm oil program positively impacts regional planning in South Tapanuli, it still needs to be followed up by operationalization in synergistic programs.

1 Introduction

The use of natural resources needs to balance economic gain and environmental quality [1]. Land use for monoculture plantation development requires the same balance. The management of oil palm plantations has sparked many debates regarding this balance [2]. From 1980 to 2019, the total oil palm plantation area has increased significantly from 294,560 ha to 14,724,420 ha [3]. This increase dramatically affects the landscape of palm oil-producing countries such as Indonesia and Malaysia [4] [5]. As the major producing countries are in the tropical forest region, this concern has become worldwide. Tropical forests affect greenhouse emissions and world biodiversity [6]. The embedded palm oil supply chain generates a total value of USD 282 billion, USD 52.5 billion of gross profit, and USD 18 billion of operating profit, which are distributed among plantations, refineries, FMCG producers, oleochemical and pharmaceutical industry, and the retailers and foodservice sector [7]. Therefore, the world needs a solution to create a more sustainable palm oil management that can maintain a sustainable landscape [8] (Sayer et al., 2012). One approach that can balance the use of natural resources for profits and maintaining environmental quality is through policies [9][10][11].

In many countries, the Government partakes in landscape planning. However, this involvement is rarely effective as the planning is often not fully inclusive and not the result of the commitment from all stakeholders. Another problem is the lack of authority of law enforcement in its implementation [12]. In Indonesia, the policy solution is outlined in the National Action Plan for Sustainable Palm Oil (RAN-KSB) strategic program and ratified through Presidential Instruction No. 6/2019. The RAN-KSB
contains an activity plan to overcome these problems, including the negative impacts of improper landscape development. The provincial and district-level action plans then adopt this plan. As centers of Indonesian palm oil production, three districts (South Tapanuli, Pelalawan, and Sintang) from three provinces (North Sumatra, Riau, and West Kalimantan) will pioneer its implementation [13].

The RAN-KSB primarily targets smallholdings as their numbers have significantly increased. During its early development stages, smallholdings were plasma plantations that received assistance from oil palm companies. The enormous profits generated from these smallholdings motivated other smallholders to develop their own without waiting for support and partnership from the Government or companies. Many smallholders turn other crops into oil palm plantations without accounting for environmental impacts [14]. In 2020, independent smallholdings made up 2.27 million ha of the total smallholding area in Indonesia [15]. However, without good planning and assistance, the average productivity of these smallholdings is relatively low, only reaching 3.25 tons of CPO per ha per year compared to the average productivity of state or private plantations that reach 3.85 tons of CPO per ha per year [3]. In other words, independent smallholding land use is inefficient [16]. This study was conducted to analyze the impact of a sustainable palm oil action plan on improving the sustainable landscape, particularly in the South Tapanuli land-use plan.

2 Method

The authors conducted this study in South Tapanuli. This district is selected as a case study as 61% of its total area is classified as having High Carbon Stock (HCS), and 50.69% of the oil palm smallholdings are located in the sensitive areas. In addition, South Tapanuli is the only district that has completed the palm oil sustainable action plan [17].

This study analyzes the 2019 South Tapanuli RAK-KSB sustainable palm oil program. The authors adopted the descriptive case study method by combining desk study and interviews with key stakeholders [18][19]. The impact of the program on the landscape is analyzed through a review on government publications, namely (i) South Tapanuli Regent Decree No. 188.45/621/KPTS/2020 concerning the Implementation Team for the Sustainable Palm Oil Action Plan under the name of the 2020-2024 South Tapanuli Indonesian Sustainable Oil Palm Forum (FOKSB), (ii) 2016-2021 South Tapanuli RPJMD, (iii) 2016-2021 Final RPJMD Draft, (iv) 2016-2021 RPJMD Technocratic, (v) 2016-2021 South Tapanuli Agriculture Service Strategic Plan, and (vi) Regent Regulation No.63/2020 concerning Special Cultivation Areas. The interviews were conducted with 9 critical stakeholders from Regional Developing Plan, Agrarian Spatial Planning/State Land Agency, Agriculture, Statistics Offices. Sustainable landscape refers to a balanced composition of land usage among sectors in a region. This study also adopted the concept of spatial planning, which appears as the core of national land and urban development [20].

3 Results and Discussion

3.1 The Relationship between Action Plan, Regional Planning and Spatial Planning

In general, the relationship between the palm oil sustainable action plan, regional planning and spatial planning can be seen in Figure 1. The sustainable palm oil program analyzed is the Regional Action Plan.
Figure 1. Relationship between sustainable palm oil management, regional planning, and land use

The landscape-related document analyzed is the spatial planning document of the RTRW. The government will realize the action plan through the RPJMD regional planning. The Action Plan, RPJMD, and District RTRW are derivatives of their national and district counterparts. Furthermore, the Strategic Plan, local government organization tasks, and budgeting will adopt the District RPJMD for its eventual implementation.

3.2 Landscape-related components in the South Tapanuli RAK-KSB

The Government designed RAK-KSB before inaugurating the North Sumatra RAN and RAP. Therefore, its components are not the same as the five sustainable palm oil action plan components contained in the national (RAN) and provincial (RAP) action plans. The RAK elaborates these components into missions. The South Tapanuli RAK emphasizes the landscape approach in preparing all its activities. The South Tapanuli Government aimed to complete this activity by the end of 2019 and officially mark its completion by signing a joint statement between smallholder and Government representatives. By the end of 2020, the Government aimed to complete land data collection for smallholdings in non-forest estates (APL). The Government then issues land certificates for 29,000 ha of land, while the remaining 22,000 ha receive certification in the Social Forestry Program. From 2019 to 2020, the Government aimed to issue the Registration for Plantation Cultivation (STDB) and the Statement of Ability to Manage and Monitor the Environment (SPPL). From 2021 to 2028, the ISPO certification process will begin.

The whole series illustrates that the landscape approach is crucial in a sustainable palm oil program. However, the Government has not detailed the RAK-KSB in the annual activities. Therefore, it is not effective as an indicator of monitoring and evaluation for output targets. At the same time, to achieve a sustainable palm oil industry, the RAK-KSB also needs to be sustainable. Action Plans have a five-year term, meaning that the Government will only involve its staff (relevant local government organizations) for the same period, even though oil palm plants generally have an economic life of 25 years. The issuance of various regent regulations shows an increase in awareness from the Government as a regional landscape planner. In addition, the increase in sustainability programs issued by NGOs and
palm oil companies improves smallholder knowledge and skills among planters. However, different approaches are needed to implement this condition into the implementation phase of a systematic Action Plan, such as increasing vertical and horizontal coordination, providing sufficient financial support, and maintaining close long-term cooperation.

3.3 Impact of RAK-KSB on sustainable landscape

One of the impacts of RAK-KSB is the change in strategic issues. The 2016-2021 RPJMD is still targeting the expansion of smallholder oil palm plantations, while the 2021-2026 RPJMD emphasizes the increase in productivity and handling of oil palm plantations in forest areas. The RPJMD focuses on four sub-districts with forest areas and appears as centers of oil palm smallholdings, namely Batang Toru, South Angkola, Angkola Sangkunur, and Muara Batang Toru that are considered as Special Cultivation Areas.

Since 2010, a total of 22,840 ha of smallholdings and company-owned plantations have been established in sensitive areas, 98% of which are smallholdings (2010 National Agency for Disaster Countermeasure in the 2016-2021 South Tapanuli RPJMD). The RPJMD states that "Forest cover in South Tapanuli has decreased due to the expansion of oil palm plantations into forest areas." However, the Government also states that palm oil is a leading commodity and does not explain harmonizing these two statements. The RAK-KSB explained three approaches in dealing with oil palm plantations located in forest areas, namely (i) converting oil palm plantations to timber plantations or agroforestry areas, (ii) acquiring the area through land legal documents, and (iii) restoring and rehabilitating the area. In 2020, the Government issued the Job Creation Act on a national scale which accommodates these approaches. However, the 2021-2026 RPJMD does not contain articles 110A and 110B of the Job Creation Act, which directly regulate the establishment of oil palm plantations in forest areas.

Such as condition lead to unclear follow-up to the Local Government Work Plan (RKPD). One of the examples can be seen in the inefficient process of obtaining an STDB, which is a legal document stating a plantation is outside the forest area. The Ministry of Agrarian and Spatial Planning/National Land Agency Office Service processes STDBs as part of its annual work program and requires data on smallholders from the Agricultural Office. However, the Agricultural Office does not have such a program. The Implementing Team in South Tapanuli has focused on stakeholders directly involved in activities that support sustainable palm oil. However, not all team members understand their respective roles and coordination channels at both the central and regional levels. The district Ministry of Agrarian and Spatial Planning/National Land Agency designs 20-year land-use composition plans. In practice, however, the Local Government does not have complete control of the areas in the composition plan. The Central Government issues the Right to Cultivate (HGU) for oil palm plantations. Without good coordination, the ideal land use design prepared by the Government cannot be maintained or achieved.

4 Conclusion and Recommendations

The key finding of our study is the link between sustainable palm oil action plan and landscape through the horizontal and vertical relations with the regional and spatial planning. This study shows that the RAK-KSB can potentially provide a sustainable landscape through the RPJMD and RTRW. However, its implementation requires several improvements, namely (i) detailing the development of annual achievement indicators, (ii) conducting more specific internalization of action plans into the RPJMD, (iii) ensuring common understanding among stakeholders, (iv) improving vertical and horizontal coordination, (v) increasing long-term partnerships with relevant stakeholders and (vi) ensuring sufficient funding for implementation. Details of these improvements could be further explored with additional documents from particular SKPD and interviews with the persons in charge. In addition, observing the action plan internalization process could give a better understanding of the coordination process. Collecting such documents is quite challenging, and the internalization process is often conducted through short-notice meetings. Further studies on the SKPD level documents and
internalization process are expected to capture a complete picture of the potential impact of a sustainable palm oil program in improving the sustainable landscape.

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