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Achievement of Indonesian Sustainable Palm Oil Standards of Palm Oil Plantation Management in East Borneo Indonesia

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Abstract
There has been a strong opinion toward the industry of palm oil plantation in Indonesia, indicating that this industry has caused the destruction of environment in Indonesia. One effort that has been done so far by the Indonesian government to develop this industry continuously is by creating the continuous standard called Indonesia Sustainable Palm Oil (ISPO) which has the characteristic of mandatory. This research aimed to know the capability of palm oil plantation companies in the research areas in fulfilling the standards of Indonesia Sustainable Palm Oil (ISPO). The evaluation of companies' capability in achieving ISPO standards was conducted by using audit method to identify the continuous status in the existing condition and condition in which the situation change was needed, and continuous status were evaluated using index analysis and method of Multi Dimensional Scaling (MDS) respectively. The identification of key factors was performed using Rap-Palma Ornidasi, need analysis of stakeholders and prospective analysis. The results showed that the plantation companies' capability in the research areas achieved 87% in fulfilling the standards of ISPO, and this capability can be increased until it reaches 100% by increasing the efforts to fulfill the principles, criteria, and indicators that are still inappropriate with ISPO requirements.
Keywords: Palm Oil, ISPO, Plantation Company, Continuous Management.

1. Introduction

In Indonesia, the plantation subsector plays an important role for the economy so that it requires to be developed. Based on the constant prices in 2000, the agricultural sector's contribution to Gross Domestic Product (GDP) amounted to 10.97 per cent, in which the plantation sub-sector contributed as much as 2.31 percent after the food crops subsector which reached 6.96 percent (Ditjenbun, 2010). Indonesia plantation subsector has become a source of non-oil foreign exchange and is capable of providing employment for more than 6 million people (World Growth, 2011). Oil Palm is an option commodity in the plantation revitalization program based on several considerations, namely: (1) the commodity developed has a strategic role as a source of public revenue, and (2) the commodity developed has a market prospect, both for domestic and export markets, (Department of Agriculture, 2008). Oil palm plantations in Indonesia in 2012 reached 9.5 million hectares. The Indonesia's CPO production rose from 23.5 million tons to 26 million tons or had an increase of 11.01% in 2013. Based on this total production, Indonesia is still the largest producer of palm oil and has a 48% share of the world market (Wiryawan, 2013).

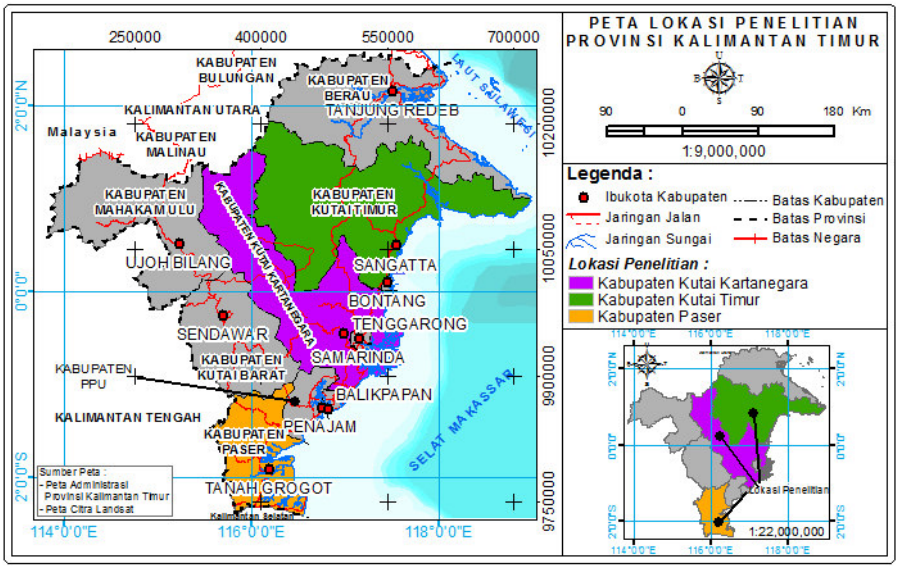
Despite the achievement, our oil palm industry has encountered a number of challenges that must be addressed wisely since there are a lot of views which portray that the oil palm plantation development in Indonesia has devastating effects on natural resources and environmental conservation, and such views continue to exist in a planned and systematic way. Furthermore, negative campaigns both in the country and overseas become more intense. The demand frequently asked among the stakeholders is to implement a system of sustainable palm oil development. One of the efforts made by the Indonesian government to ensure the sustainability of the palm oil industry is by establishing standards for plantation sustainability called the Indonesian Sustainable Palm Oil (ISPO). ISPO was officially released by the Directorate General of Plantation, and this standard has been in effect and its nature is mandatory for every plantation business; moreover, it was prepared based on the laws and regulations of the Indonesian government (Ditjenbun, 2011).

ISPO is the "guidance" as well as a commitment based on the laws and regulations applicable in Indonesia. This provision is mandatory, or it is an obligation that must be implemented by the plantation business agents in Indonesia (Suharto, 2013). In regards to the problem, it is necessary to carry out a research to obtain the value of the capability of oil palm plantation companies in the research areas to meet the standards of Indonesian Sustainable Palm Oil (ISPO), and to obtain the index value and sustainability status as well as key factors in the management of the plantations.

2. Research Method

2.1 Place and Time of the Research

The research was conducted from June 2012 to May 2013 in East Kalimantan Province, and the objects of the research were five (5) palm oil plantations. The determination of the 5 samples of the plantation companies was conducted by purposive sampling. The basic consideration for the choice was that these three regencies represented the width distribution of the oil palm plantations in East Kalimantan and these companies are still managing the development areas, Immature Plants (TBM), Produce Plants (TM) and have an a palm oil mill (MCC). Administratively, the five companies are located in Kutai Kartanegara Regency, East Kutai Regency, and Paser Regency with a total area of ± 85,225 ha.



2.2 Data Types and Resources

The primary data were collected by means of field observations, interviews and consultations. The secondary data were collected through literature review (desk study) on the reports of the companies, Indonesia Statistics, Offices, and related institutions and research centers.

2.3 Data Analysis

Data analysis was conducted by comparing the data from the results of field observations based on ISPO standards consisting of 7 Principles, 27 Criteria and 128 Indicators, an evaluation on the capability in fulfilling ISPO standards through audits and verifications of all plantation management activities associated with the principles and criteria and ISPO indicators based on Regulation Number 19 of 2011 (Ministry of Agriculture, 2011). Determination of suitability value was conducted by adding up the values of the indicators in accordance with the provisions of ISPO on each principle in percentage. Inventory on problems which became the constraints for each company in fulfilling the ISPO standards was also conducted.

3. Discussions

Results of the evaluation showed that the overall achievement of Principles and Criteria in accordance with ISPO standards for the management of oil palm plantations conducted by the five companies in the research areas reached 87 %. Of the 128 indicators, 111 indicators were appropriate and 17 indicators were inappropriate. The 17 indicators were spread from principle of 1 to principle 5, whereas the principles of 6 and 7 were completely met by the 5 companies (100%). The percentage of the achievements of the principles of ISPO in 5 plantations is presented in Table 1.

Table 1 Percentage of total achievements of the principles and criteria of ISPO in 5 companies studied

Principles and Value Weight (%)	Company					Average	Value (%)
	1	2	3	4	5		
Principle 1 License System and plantation management (33.30)	27.00	27.05	30.87	26.87	25.52	27.46	82.47
Principle 2. Application of cultivation technique guidelines and palm oil processing (7.40)	5.81	5.17	5.59	5.59	5.17	6.95	93.86
Principle 3. Environmental management and monitoring (26.00)	19.1	16.00	12.60	12.60	10.80	19.42	74.69
Principle 4. Responsibility in labor (18.30)	13.87	12.39	13.87	13.87	13.87	17.23	94.17
Principle 5. Community and Social Responsibility (7.40)	7.40	3.70	3.70	5.55	5.55	5.18	70.00
Principle 6 Empowerment of community economic activities (3.70)	3.70	3.70	3.70	3.70	3.70	3.70	100.00
Principle 7 Improvement in performance and sustainable production (3.70)	3.70	3.70	3.70	3.70	3.70	3.70	100.00

Based on the data in Table 1, it can be explained that the whole plantation companies studied have been able to fulfill the standards of the principles of 6 and 7 and ISPO standards (100%). They also have fulfilled the standards of the other principles of 4, 2, 1 and 3 by 94.17%, 93.86%, 82.47%, and 74.69% respectively. The smallest percentage of 70.00 % came from principle 5.

The achievement value for the completion of license document related to the operation of the plantation business (Principle 1) is 82.47% with the indicator of the fulfillment of all forms of license required based on the applicable regulations. The fulfillment of this requirement is related to the service system of the government existing in the regency both in granting the license or services in dispute resolution between the company and other parties. Differences in the service systems in each region have impacts on the time and requirements needed so that it is relatively difficult to set the time for the fulfillment of the indicators in this principle.

The application of technical guidelines in the cultivation of oil palm processing (Principle 2) reached an achievement value of 93.86%. Although the value is considerably high, the cultivation practice has not fully applied the technical standards of cultivation recommended. The errors still occurring in the cultivation process include activities from seedling stage to harvesting stage. Indeed, the application of cultivation technical guidelines is an important part of Best Management Practices (BMP). According to Donough *et al*. (2009), the increase of yields to be achieved through the implementation of Best Management Practices (BMPs) and success of BMP programs greatly depend on the commitment of top management to provide direction and budget allocations required. Also the managers at the plantation level must implement the practices strictly and efficiently.

The achievement value of environmental management and (Principle 3) value is 74.69%, and this principle is one of the principles whose achievement is still low. The indicators state that the company should manage and monitor the qualities of water, air, soil and waste as well as the biodiversity. The purpose of the management and monitoring is to preserve the ecological functions of an area that can support the sustainability of the plantation's activities.

The audit results showed that the activities of B3 waste handling and management of biodiversity had not been conducted in accordance with ISPO standards. The aspect of environmental management is very important and associated with other aspects, as described by Basiron and Weng (2004) stating that an environmental management system implemented to improve the overall environmental performance is a key strategy to move toward greater sustainability with the target to minimize emissions and improve energy efficiency and efficient use of other resources.

The achievement value for the responsibility for the laborers (Principle 4) is 94.17%), and the indicators of this principle state that the company: 1) gives wages based on the government regulations, 2) provides health care costs, 3) includes all workers in the social security labor program (Social Security), 4) provides working facilities, and 5) provides an opportunity for its employees to form a labor union. However, facilities and infrastructure that support the organization of SMK3 (helth and safety management system) and delivery mechanisms of complaints from the employers are not available yet. The constraint faced by the company is lack of human resource in handling the management program of K3 (helth and safety).

The achievement value of community and social responsibility (Principle 5) is 70.00%. This principle is the principle with the lowest level of compliance, and the indicator states that the company has a program to maintain local wisdom with the indigenous people. The program, in fact, has been incorporated into the Corporate Social Responsibility (CSR). However, not all companies in the research areas have implemented the principle. The constraint faced is the difficulty in formulating the activity form because the existing indigenous organizations are unclear so that it is difficult to appoint the person in charge of activities in the community.
Empowerment of community economic activities (Principle 6) has been successfully fulfilled by the five companies with the value of 100%. The indicators state that the companies have conducted activities related to human resource development for the community, implemented empowerment programs by providing assistance and working capital loan, and provided opportunities for the surrounding communities, and such activities are also parts of their Corporate Social Responsibility (CSR).
The achievement value of performance improvement and sustainable production (Principle 7) is 100%. The indicators are the improvement of the performance of the employees and staff, improvement of the plantation management and yield processing, application of new technologies obtained from the researches in the field of environment, corrective actions to accomplish optimum plantation management and sustainable production, and preventive actions against land fire hazards.
Based on the audit results and field observations, it can be explained that there are several problems that make the companies unable to fulfill the principles and criteria of ISPO. These problems include: 1). the companies' lack of understanding in ISPO standards; 2). lack of qualified personnel available to prepare the documents and create programs related to ISPO standards; 3). business agents' lack of understanding in real benefits and questions on the consistency of the government as the policy maker of ISPO in applying the policy; 4) highly strong principle of confidentiality of the companies in providing information during the audit process.
The enforcement of ISPO standards requires better cooperation between the government and plantation companies as the business executors and a number of efforts, among others: 1). supports from all stakeholders, 2). sufficient time to understand and prepare for all types of documents and programs required; 3). a guarantee to obtain benefits for the compliance of the standards and legal certainty over the regulations that have been met. This is consistent with the results of the study by Harsono (2011) stating that low enforcement is required for ensuring the compliance of the existing regulations, and most importantly, low enforcement is a critical success factor of ISPO. In addition, a number supporting success factors in the application of ISPO are required, namely, time adjustment, guarantees or benefits and supports from the government as the stakeholders who are also responsible for the development of sustainable plantations.

4. Conclusion

The capability of plantation companies in the research area in meeting the principles and criteria of ISPO standards has reached 87%, and this performance can be improved up to 100%, considering the fact that there is a potential for the fulfillment. Sustainability management of oil palm plantations can be achieved by applying the principles and criteria of ISPO and supports from the government with a strategy of guiding the institutions of plasma farmers, creating legal certainty on the status and ownership of land, providing infrastructure, as well as regulating the availability of land in accordance with the applicable regulations.

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