

# Policy on Forest Land Use Change for Oil Palm Plantations in Lamandau Regency, Central Kalimantan Province, Indonesia

Iga Gangga Santi Dewi\*, Bambang Eko Turisno, Emy Handayani

Faculty of Law, Diponegoro University, Semarang, Indonesia

Received January 31, 2022; Revised March 2, 2022; Accepted April 15, 2022

## Cite This Paper in the Following Citation Styles

(a): [1] Iga Gangga Santi Dewi, Bambang Eko Turisno, Emy Handayani, "Policy on Forest Land Use Change for Oil Palm Plantations in Lamandau Regency, Central Kalimantan Province, Indonesia," *Environment and Ecology Research*, Vol. 10, No. 4, pp. 461 - 466, 2022. DOI: 10.13189/eer.2022.100404.

(b): Iga Gangga Santi Dewi, Bambang Eko Turisno, Emy Handayani (2022). Policy on Forest Land Use Change for Oil Palm Plantations in Lamandau Regency, Central Kalimantan Province, Indonesia. *Environment and Ecology Research*, 10(4), 461 - 466. DOI: 10.13189/eer.2022.100404.

Copyright©2022 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

**Abstract** The conversion of forest functions has often occurred in Indonesia with the background of regional development, tourism and plantation business. The various impacts of this forest conversion can be categorized into environmental impacts, namely hydrology, erosion and sedimentation, fires, extinction of flora and fauna, and impacts on the socio-economic community around the forest. The aim of this research is to analyze the policy of forest conversion into oil palm plantations in Lamandau Regency, Central Kalimantan Province. The research was conducted using the socio-legal method with a qualitative approach which is expected to find hidden meanings behind the objects and subjects to be studied. The data in this study were obtained through observation, interviews, document interpretation (text), and personal experience. The results showed that the policy of the Lamandau Regency Regional Regulation was in accordance with the Forestry Law No. 41 of 1999 Article 48 paragraph (5). The policy is to ensure the best possible forest protection. To ensure sustainability, communities with their local wisdom are involved in forest protection efforts through the provision of assistance, services, technical assistance, education, training and socialization about forest management processes. As suggestions, State Forest Company in Lamandau Regency is expected to increase socialization to palm oil companies and communities around the Lamandau forest area regarding policies related to forest protection. For forest village communities, in order to maintain the sustainability of production forests in

Lamandau Regency, they are expected to be more concerned about natural resources in production forests.

**Keywords** Forest, Land Use Change, Oil Palm Plantations, Environmental Protection

---

## 1. Introduction

Deforestation is one of the main factors that are often found as a cause of changes in ecological functions in tropical forests. The causes of deforestation are divided into 2 groups, namely direct causes and basic causes. The direct causes are human activities that directly affect the damage conditions such as timber exploitation, expansion of agricultural areas, plantations, settlements, industries, and so on. The basic causes are complex factors such as social, political, economic, cultural, and demographic factors. The development of Industrial Plantation Forests (IPF) and the system of converting forests to plantations causes deforestation to increase. Many entrepreneurs apply for IPF and plantation development permits only as an excuse to get big profits from Timber Utilization Permits in converted natural forest areas. After that they did not replant, which caused millions of hectares of land to be damaged. Landslide environment causes flooding in all areas. In addition, some plantation companies and IPF often use fire to clear land, which is the main source of

forest fires in Indonesia.

The state holds the right to control that regulates the utilization of all the natural resources for the greatest prosperity of the people. Forestry policies that have been issued, namely Forestry Law No. 41 of 1999, include strictly prohibiting communities and oil palm companies to cut wood around springs and requiring 30% of forest land for plantations to be planted with hardwood trees to hold water during heavy rains. Regarding the case of forest conversion in Indonesia, the fact is that there has been a conversion of forests into oil palm plantations, such as those occurred in Lamandau Regency, Central Kalimantan Province. This resulted in the forest environment being damaged due to the absence of hard trees in the forest area which had been converted into oil palm plantations, resulting in a catastrophic flood in Lamandau Regency. The forest has given everything to the people who live in the forest. They get from the forest which they make into plantations in the form of food, medicines, boards, and clothing to maintain the continuity of basic life. The relationship between the community and the forest is very close. Therefore, the management of forest resources should be carried out properly, with local wisdom and in a sustainable manner. Forests in addition to functioning as natural resources can be exploited for the sake of development and economic progress. The aim of this research is to analyze the policy of forest conversion into oil palm plantations in Lamandau Regency, Central Kalimantan Province.

## 2. Literature Review

Previous studies have found forest land use change in many regions in Indonesia [1-6]. Most of the forest land is turned into plantations and most of it is for agriculture, aquaculture and fisheries. The Sumatra and Kalimantan regions are the main areas for oil palm development, while in West Nusa Tenggara, the forest is a corn plantation area. Meanwhile, in Madura, Mangrove forests have been converted into aquaculture and fisheries

The conversion of forest functions or usually as land conversion is a change in the function of the entire land area from its original function. If it is not regulated in a good and comprehensive policy, it will have a negative impact on the environment and the potential of the land itself. The conversion of forest functions can also be interpreted as changes to other uses caused by factors which broadly include the condition of conversion of protected forest functions in several areas at this time which is increasing and worrying for the ecological conditions and surrounding ecosystems. In particular, mountains where protected forest lands have become agricultural land, plantation lands or have been converted into housing for residents which are legalized by the local government, central government or other forms of encroachment due to the increasing population level [7].

People's rights to land in Indonesia are regulated in Article 9 paragraph (2) of the Basic Agrarian Law which states "every Indonesian citizen, both male and female, has the same opportunity to obtain a land right and to obtain benefits and results for himself and his family". Meanwhile, the management of natural resources is reflected in Article 33 (3) of the 1945 Constitution of the Republic of Indonesia which reads "earth and water and the natural resources contained therein are controlled by the State and used for the greatest prosperity of the people". This means that natural resources are controlled by the State and used for the maximum benefit of the people, regulation, implementation, use, provision and maintenance of natural resources and the regulation of legal relations are regulated and determined by a State policy.

In law, the term policy is the basis or line of attitude or guidelines for implementation and decision making [8]. Friedman [9] suggests that structural, substance and cultural components of law mutually determine each other. Analysis through a systems approach examines that although the output of the legal substance component has good output, it will not work well if it is not supported by other components or subsystems, in this case the structural and cultural components or legal culture. Therefore, in making a policy, it must be in line with legal objectives that can provide certainty, benefit, and justice for the community.

Moreover, transfer of forest function is the change of part or all of the function of the forest in one or several forest groups into another function of the forest area. Land conversion or commonly referred to as land conversion is a change in the function of part or all of the land area from its original function, as planned, into other functions that have a negative impact on the environment and the potential of the land itself. The forest function conversion in several areas is currently increasing and worrying about the ecological condition and the surrounding ecosystem. Protected forest land in mountainous areas has been converted into agricultural land, while plantations have been converted into housing for residents. This encroachment is a result of the increasing population. In some contexts, this transfer of function is authorized by local, central or local governments to support housing and agriculture.

According to Sumaryanto [10], land conversion actors can be divided into two. First, the transfer of function directly by the owner of the land concerned. Usually, there are 3 motives for action which are meeting the need for housing, to increase income through business transfer, and combination of these two motives, for example to build a residential house which is also used as a place of business. The process of land conversion can basically be seen as a form of logical consequence of the growth and transformation of changes in the socio-economic structure of a developing community. The development in question is reflected in the growth of natural resource utilization activities due to the increasing demand for land use as a

result of the increase in population and per capita needs. Furthermore, there is a shift in the contribution of the development sectors from the primary sectors, especially from the agricultural and natural resource processing sectors to the activities of the secondary (manufacturing) and tertiary (services) sectors.

In addition, agriculture in the narrow sense or smallholder agriculture is a family farming business where the main food ingredients such as rice, secondary crops (corn, beans and tubers) are produced and horticultural crops, namely vegetables and fruits. People's agriculture is cultivated in paddy fields, fields and yards [11]. Meanwhile, Agriculture in a broad sense includes people's agriculture or called agriculture in a narrow sense, plantation (including smallholder plantations and large plantations), forestry, ranch and inland fisheries and marine fisheries.

### 3. Method

The research was conducted using the Socio Legal method with a qualitative approach which is expected to find hidden meanings behind the objects and subjects to be studied. This approach remains in the realm of law, only the perspective is different. This study looks at the facts of the policy of forest conversion into oil palm plantations with local wisdom in Lamandau Regency, Central Kalimantan Province.

The data in this study were obtained through observation, interviews, document interpretation (text), and personal experience. The researcher is the main instrument because the researcher himself directly conducts participatory observations in data collection. In-depth interviews were conducted with open-ended questions, especially for informants who had a lot of information [12].

### 4. Forest Function Transfer Policy in Lamandau District

Forests in Lamandau Regency have a total area of 76,318,026 Ha with the division of 76,316,000 Ha of community forest, 1,728.40 Ha of production forest, 278.10 Ha of protected forest, 12.5 Ha of urban forest, and 7 Ha of mangrove forest. The production forest in Lamandau Regency is a forest area that has the main function of producing forest products, which in this case the production forest in Lamandau Regency is managed by State Forest Company, companies and communities around the forest. The majority planted in production forests in Lamandau Regency based on the data obtained is oil palm. Palm oil is more dominant because it has high selling power or buyer interest.

In the new district of West Kotawaringin in 2002, 19 villages in five sub-districts were submerged. Heavy rains in the rainy season in Lamandau Regency caused several

villages and towns to experience flooding. Most of the villages are geographically located in the upstream. More specifically, they are in Lubuk Hijau village of Mentohi Raya subdistrict, Pedongatan and Nanga Palikodan villages from Bulik Timur subdistrict, Bintang Mengalih Batu Slipi, Bayat, Sei Buluh and Nanga Belantikan from Belantikan Raya subdistrict and Tapin Bini, Samu Jaya, Penopa, Karang Taba, Kawa, Sei Tuat, Tanjung Beringin, and Sekoban villages from Lamandau subdistrict. Meanwhile, in Bulik subdistrict, flooding had hit Sungai Mentawa Village, Sungai Bunut and Bulik Village. In Sungai Tuat Village, there are houses that have sunk almost to the roof. Floods in the upstream areas are due to a lot of conversion of forest functions to extractive industries, both mining and plantations. This causes the carrying capacity of the environment cannot meet the standards anymore. It can no longer accommodate heavy rainfall, and many areas are degraded. Deforestation is what causes degradation. The upstream area should not be for the extractive industry. As many as 80% of the Lamandau area has been controlled by extractive industries, including plantations, mining and forestry industries.

Forests have many benefits for the Lamandau community, one of which is as a source of the local community's economy. Forest resource management with the community is a forest resource management system carried out by State Forest Company and forest village communities with interested parties with a shared spirit so that common interests to achieve the sustainability of the functions and benefits of forest resources can be realized optimally and proportionally. Production forest management is the process of managing forest land to achieve production goals without compromising local wisdom and sustainable processes and not causing negative environmental impacts, both physical and social [13].

Logging occurs quite massively in the forests of Lamandau Regency. This includes cases of illegal logging along with the increasing demand for logs which are higher than the sustainable production threshold. In addition, the size and amount of timber harvested legally sometimes do not comply with established rules and practices. In the context of reforestation, poor forest regeneration reduces forest quality and function. Since 2020 the empowerment of forest village communities by State Forest Company has been made into a system, namely Community Forest Resource Management (CFRM) which is the framework of social forestry with shared, empowered, shared and transparent principles. Forest villages are villages bordering the forest whose people's lives depend on the forest. Independent farmers are the main objective of the village community development program around the forest. In the CFRM system the forest is divided into forest village circles, in the forest village found an institution called the forest village community institution is created.

The Forest Village Community Institution is an official institution in collaboration with Village forest company which binds all forest farmer groups in the village. This

forest village community institution has statutes and bylaws and is a legal entity, and can represent forest village communities. The Forest Village Community Institution (LMDH) members are cultivators who are members of farmer groups and other community members who care about the existence and sustainability of forests. LMDH as a forum for wood farmers whose roles include to (1) facilitate timber farmers or smallholders and interested parties in the process of planning, implementing, monitoring and evaluating activities; (2) harmonize forest resource management activities in accordance with regional development activities and the conditions and social characteristics of timber farmers as the goal of prospering and changing the living standards of timber farmers; (3) increase the responsibility and participation of smallholders or timber farmers and other interested parties in the management and sustainability of the functions and benefits of forest resources; and, increase the income of the state, the village of timber farmers and other interested parties simultaneously.

Article 29 paragraph (2) of Law No. 41 concerning Forestry of 1999 states that a business permit for the use of environmental services as referred to in Article 28 paragraph (2) may be granted to individuals, cooperatives, Indonesian private-owned enterprises, or state-owned enterprises or regional owned enterprises. Based on what is contained in Article 29 paragraph (2) of the Forestry Law No. 41 of 1999, the existing production forest in Lamandau Regency is managed by companies and individuals with Cultivation Rights.

Based on the Regulation of the Minister of Forestry No P.60/MENHUT-II/2011 concerning Guidelines for the Preparation of Forest Sustainability Regulatory Plans and Annual Technical Plans in the State Forest Company Area, it explains that the forest sustainability regulation plan is a sustainable forest management plan that provides an overview of the state of the forest, environment and its potential and contains a comprehensive management plan [14]. The forest sustainability management plan has a period of 10 (ten) years for the long or medium cycle, while for the short cycle it is adjusted which is further elaborated in the annual technical plan. An annual technical plan is prepared every year which contains the contents of the annual technical plan, namely nurseries, plants, plant maintenance, forest care and thinning, eradicating pests and diseases, maintenance of seed gardens, terraces, production of wood and non-timber forest products, and facilities and forest infrastructure.

In the forest management process carried out by Lamandau Forest Management Unit, they do not have or encounter obstacles that come from humans. According to them, the Lamandau community cannot be invited to work together to manage the existing forest so that the forest environment in Lamandau Regency is damaged. The land in the forest becomes landslide and causes flooding in almost all of Lamandau district when there is heavy rain for days during the rainy season.

Forest management is carried out by State Forest Company Lamandau Regency based on data obtained and through observation has been carried out as well as possible to maintain the sustainability of the existing forest. State Forest Company's policy is not to convert production forests in Lamandau Regency into agricultural and plantation land so that the natural resources in production forests are maintained and not exhausted. In addition, if a natural disaster occurs, it can minimize the impact of the natural disaster. So far, the production forests in Lamandau Regency have never been affected by natural disasters that have hit Lamandau Regency. This is because State Forest Company optimizes to maintain production forests and protected forests so that their sustainability is maintained. Sustainable production forest management by Forest Management Unit Lamandau Regency has been implemented based on forestry laws. The management aims to maintain the sustainability of the existing production forest and so that the natural resources of the existing production forest in Lamandau Regency are not depleted.

Several policies have been issued by State Forest Company which are based on Forestry Law No. 41/1999, among others, strictly prohibiting communities and oil palm companies from cutting wood around springs and requiring 30% of forest land for plantations to be planted with hardwood trees to retain water when heavy rain. State Forest Company urges timber farmers to monitor production and protected forest areas.

Assessment of sustainable production forest management has been regulated in the Director General of Sustainable Production Forest Management Regulation No. 93 P.14/PHPL/SET/4/2016. The regulation contains several rules regarding the assessment and management of sustainable production forest and regarding the legality of timber. Based on what has been conveyed by resource persons from State Forest Company, sustainable production forest management in Lamandau has been carried out as stated in the regulation.

In the management of production forests and protected forests in Lamandau Regency, State Forest Company in Lamandau cooperates with forest village community institutions. The forest village community was formed because of the vast forest in Lamandau Regency and the limited human resources working in State Forest Company, so a forest village community institution was formed. In Article 48 paragraph (3) of the Forestry Law No. 41 of 1999 it is stated that forest utilization permits holders and parties who receive forest management authority to protect the forest in their working area. When viewed from the article, State Forest Company provides proper protection, such as prohibiting the community from cutting down trees indiscriminately, checking production forest areas every day to providing doubts and directions to forest village community institutions in Lamandau Regency. Forest village community institutions are partners of State Forest Company in which the institution obtains a permit to

manage state lands to improve the standard of living of timber farmers by not converting the function of the forest.

Article 69 paragraph (1) of the Forestry Law No. 41 of 1999 states that the community is obliged to participate in maintaining and protecting forest areas from disturbance and destruction. The article explains that maintenance is not only the responsibility of the government, companies managing forest areas, but also the responsibility of all parties, including the community. Because forests are the source of life for all humans on earth. Likewise, the forests in Lamandau Regency are also a shared responsibility. Although the forest types in Lamandau are divided, it remains a shared responsibility to maintain and protect the forest area, including the Lamandau community. Community forest resource management is the framework of social forestry with the principles of being together, empowered, sharing and transparent. Community forest resource management is one of State Forest Company's programs, in which Forest Management Unit Lamandau manages forest resources on a community basis and on a forest resource basis, starting from aspects of forest planning (covering production, environmental and social aspects) to permanent ones. Community Forest Resource Management here is intended to provide direction for managing forest resources by combining economic, ecological, and social aspects in a professional and proportional manner in accordance with the vision and mission of State Forest Company. The objectives of forest village community institutions in Lamandau Regency are as a forum for forest village communities to cooperate with State Forest Company with the principle of partnership. Its objectives are to increase the responsibility of all parties (State Forest Company, forest village communities or timber farmers, and parties with an interest in the sustainability of the functions and benefits of forest resources), to expand access to forest village communities or timber farmers in forest management, to increase synergy with local governments, to increase productive efforts towards independent forest village communities, and to support the success of regional development, as measured through the level of purchasing power, education level and health level.

Forest village community institutions have the right to manage state forests in collaboration with State Forest Company. In management practice, the forest village community may not change the function of the forest or forest area, so that the forest village community has an obligation to maintain and protect forest resources. Basically, the collaboration between State Forest Company and forest village community institutions in Lamandau Regency uses a profit-sharing system from the collaboration. However, the state represented by forest agency of Lamandau Regency chose to give all the results of the collaboration to the forest village community.

In Law on Forestry No. 41 of 1999 Article 46 states that the implementation of forest protection and nature conservation aims to protect forests, forest areas and their

environment, so that the protection function, conservation function, and production function are achieved optimally and sustainably. If it is based on that article, the Lamandau community has maintained forest conservation as the purpose of implementing forest protection and nature conservation is contained in Article 46 of the Forestry Law No. 41 of 1999. Even though the Lamandau community does not really understand the rules for forest protection and what sanctions are only if they destroy the forest, but they maintain the preservation of the existing forest with the knowledge they get from the assistants of forest village community institutions as well as from extension officers of the forestry service branch.

## 5. Conclusions

In the management of production forests and protected forests in Lamandau Regency, State Forest Company in Lamandau cooperates with forest village community institutions. The forest village community was formed because of the vast forest in Lamandau Regency and the limited human resources working in State Forest Company, so a forest village community institution was formed. The policy of the Lamandau Regency Regional Regulation is in accordance with Forestry Law No. 41 of 1999 Article 48 paragraph (5) which in order to ensure the best possible forest protection, the community is involved in forest protection efforts by involving the community with their local wisdom by providing assistance, services, technical assistance, education and/or training as well as disseminating information about the forest management process openly to the community. Therefore, state forest companies in Lamandau Regency are expected to increase socialization to oil palm companies and communities around the Lamandau forest area regarding policies related to forest protection. Meanwhile, the forest village community is expected to be more concerned with the natural resources in the production forest in order to maintain the sustainability of the production forest in Lamandau Regency.

---

## REFERENCES

- [1] Turisno B. E., Dewi I. G. A. G. S. "Impact of coastal reclamation on environmental sustainability and tourism-based economy on the north coast of java," *International Journal of Criminology and Sociology*, vol. 10, pp. 695–702, 2021.
- [2] Turisno B. E., Dewi I. G. S., Mahmudah S., Soemarmi A. "Recovery policy and proper management of mangrove forests to preserve environmental sustainability and ecotourism in bangkalan Indonesia," *Journal of Environmental Management and Tourism*, vol. 12, no. 8, pp. 2188–2193, 2021.

- [3] Dewi I. G. S., Silviana A., Adhim N., Novana M. "Protected forest function change policy for food estate land in Subang, Indonesia," *Journal of Environmental Management and Tourism*, vol. 12, no. 7, pp. 1893–1898, 2021.
- [4] Aminah., Adhim N., Dewi I. G. A. G. S. "Land use policy of agroforestry: Case study of protected area changes in sekaro forest, east lombok west nusa tenggara," *Environment and Ecology Research*, vol. 9, no. 5, pp. 261–270, 2021. DOI: 10.13189/eer.2021.090506.
- [5] Mahmudah S., Susilowati E., Yunanto., Badriyah S. M., Benuf K. "The CV as an initiative for sustainable development of small-scale capture fisheries in Central Java, Indonesia," *International Journal of Criminology and Sociology*, vol. 10, pp. 249–253, 2021.
- [6] Badriyah S. M., Mahmudah S., Soemarmi A., Allam M. H. F., Larasati A. "The responsibility of private pawnshops in facilitating ecologically-friendly marine economies," *Environment and Ecology Research*, vol. 9, no. 6, pp. 362–369, 2021. DOI: 10.13189/eer.2021.090604.
- [7] Nurjannah S., Rasyid A., Fuhaidah U. "Upaya Dinas Kehutanan Tanjung Jabung Barat dalam Meningkatkan Fungsi Ekologi 2018," Jambi: UIN Sulthan Thaha Saifuddin, 2019, Doctoral dissertation.
- [8] Atmosudirjo S. P. "Hukum Administrasi Negara (10th ed.)," Jakarta: Ghalia Indonesia, 1994.
- [9] Friedman L. M. "A history of American law," New York: Simon and Schuster, 2005.
- [10] Sumaryanto S., Saptana B. I., Am H. "Kajian Pembaruan Agraria dalam Mendukung Pengembangan Usaha dan Sistem Agribisnis," Laporan Penelitian PSE, 2002.
- [11] Fauzi N. "Sesat pikir politik hukum agraria: membongkar alas penguasaan negara atas hak-hak adat," Yogyakarta: Insist Press, 2000.
- [12] Soemitro R. H. "Metodologi Penelitian Hukum Normatif dan Jurimetri," Jakarta: Galia Indonesia, 1994.
- [13] Sadma O. "The Role of Environmental-Based 'Green Startup' in Reducing Waste Problem and its Implication to Environmental Resilience", *Research Horizon*, vol. 1, no. 3, pp. 106-114, 2021.
- [14] Andriansyah A., Sulastri E., Satsipi E. "The role of government policies in environmental management," *Research Horizon*, vol. 1, no. 3, pp. 86-93, 2021.