Impacts of Industry Towards the Structure of Customary Land Tenure on the Natural Sago Forest in Imekko, Sorong Selatan Regency-West Papua

Mecky Sagrim

Department of Social Economic of Agriculture, Agricultural Faculty, Papua University, Manokwari, Indonesia

Email address: meckysagrim@yahoo.com

To cite this article:
Mecky Sagrim. Impacts of Industry Towards the Structure of Customary Land Tenure on the Natural Sago Forest in Imekko, Sorong Selatan Regency-West Papua. Agriculture, Forestry and Fisheries. Vol. 5, No. 5, 2016, pp. 135-140. doi: 10.11648/j.aff.20160505.11

Received: July 15, 2016; Accepted: July 25, 2016; Published: August 12, 2016

Abstract: The goal of the research is to assess structural dynamics of customary land tenure in Imekko communities as a result of emergence regarding the operations of PT ANJ-AgriPapua and PerumPerhutani in Sorong Selatan Regency. The objectives are as follows: (1) to identify and map the structure of customary land tenure rights over the Natural Sago Forest (NSF) in Imekko; (2) to identify and map structural dynamics of customary land tenure on the NSF in relation with the emergence of PT ANJ-Agri Papua and PerumPerhutani in Imekko. The research reveals that the customary land tenure exists under communal and collective ownership with regard to keret/fam (family names). Local communities are entitled with rights to access, collect forest products, use, control, manage, transfer and release, reclaim, and own their land. Individuals who do not have rights over the customary land are able to acquire ownership after obtaining permission with or without compensation on the line. In the case of Dusun Sagu, ownership belongs to family groups (member of nuclear family). Inheritance on the NSF and Dusun Sagu are passed down to sons, or to the keret/fam, heirsof the family who cultivated the land. Moreover, the research finds that the structures of customary land tenure among Imekko communities are changing due to the emergence of PT ANJ-Agri Papua and Perum Perhutani in the area. From the eight rights that have been practiced for generations, only three rights remain: rights for limited access, use, and collecting forest products in the concession area of the factories. The community groups are supported to utilize these rights in order to meet their basics needs as well as and to generate income through forest utilization.

Keywords: Land Tenure, Industries, Local Community, Natural Sago Forest, Papua

1. Introduction

Interactions between humans and natures (land, forest, etc.) are mutual [10, 16]. Sustainability of natural resources is influenced by the structure of tenure rights in communities who live close to the resources. In line with this, implementations of such structure are affected by the availability of natural resources [12]; [2]. Humans, in fact, play a central position in this regard.

Land disputes in Indonesia are common, particularly inequality in land use rights. Land-related conflicts such as land tenure exists from the latent to more obvious ones [16, 8, 1]. Problems on tenure rights over Natural Sago Forest (NSF) are just some of many observed in the country. The NSF is a source of livelihood for communities because it provides food and industrial materials [16, 4, 3]. Sago is a type of palm tree that grows in swamp areas with low soil pH. It is commonly known as staple food of indigenous people in the eastern part of Indonesia, especially the Mollucans and the Papuans. In Sumatra and Sulawesi, sago is not staple but complementary food, and is sold for industry. In Java, sago starch is used as raw material for industry, for example to make noodle, spaghetti and macaroni. Meanwhile, In Japan, it is used to make biodegradable film, high fructose syrup and alcohol [5].

Indonesia is noted to have the largest sago areas with approximately 51.30% of the total of 2.2 million ha of the world’s sago forests. It is followed by Papua New Guinea (43.3%), Malaysia (1.5%) and Thailand (0.2%) [6]. According to [4] with his interpretation of a satellite image,
Sago forest covers approximately 1,528,000 ha on the peatland in Indonesia. In fact, it is reported that the highest sago forest area (approximately 90%) is located in Papua. Sago forest area in Sorong Selatan covers approximately 149,777,42 ha in Imekko region: Inanwatan, Metemani, Kais and Kokoda [7, 15].

Ownership of land rights and property rights (forest products, rangelands, marshlands, and uncultivated lands) on the NSF in Imekko belongs to the indigenous peoples of Iwario, Kaiso, Awee, Moge, Medewana, and Maybrat. The NSF, in fact, has been gaining interest from investors such as PT Austindo Nusantara Jaya (ANJ)-Agri Papua with 40,000 ha, and Perusahaan Umum (Perum) Perhutani with 16,055 ha of concession area [6, 7]. It is suggested that the emergence of the two factories have contributed to the change of the structures of customary (adat) land tenure of the communities.

In brief, the goal of this research is to assess structural dynamics of the customary land tenure in Imekko communities driven by the emergence of PT ANJ-Agri Papua and Perum Perhutani operations. The objectives of this research are by identifying and mapping the structure of customary land tenure rights over the NSF in Imekko and structural dynamics of customary land tenure on the NSF in relation with the emergence of PT ANJ-Agri Papua and Perum Perhutani in Imekko.

2. Methods

The research was conducted in four districts: Inanwatan, Metemani, Kais, and Kokoda (Imekko) of Sorong Selatan Regency, Papua Barat Province. These are significant locations to focus on because: (a) the NSF is located in these districts – locations of the factories; (b) the communities living in these areas are originally under the customary land law the owners of the land rights over the NSF. They eventually experience changes in customary land tenure rights as being ‘pressurized’ by sago industries, namely PT ANJ-Agri Papua and Perum Perhutani.

Land rights owners of the locations include eight local ethnics, residing in four districts as shown below.

| Table 1. List of villages based on the ethnic groups and districts in Imekko (focus area of the research). |
|---|---|---|
| District | Village | Ethnic groups |
| Inanwatan | 1. Sibae | Sowabau |
| | 2. Isogo | Sowabau |
| Metemani | 1. Puragi | Iwario |
| | 2. Mugim | Muge |
| Kais | 1. Sumano I | Awee |
| | 2. Kais | Kaiso |
| | 3. Mogalemin | Maybrat |
| Kokoda | 1. Tarof | Amee |
| | 2. Kasuweri | Medewana |

The research adopted purposive sampling in identifying and choosing respondents whose lands are occupied by the factories. The communities are experiencing changes in the structure of customary land tenure due to the factories’ emergence in the NSF. In addition, the fact that some government officials lack of competency in decision making regarding regulation of land use rights have supported this trend. This research chose 55 key respondents and 36 case-based respondents. In total, there were 91 respondents who originally come from and live in villages in Imekko. According to [11]; and [10], qualitative research requires data collection to be gathered under a natural setting, and based upon primary data source. Meanwhile, techniques used for collecting data made based on participant observation, interview, and in-depth interview.

![Figure 1. Map of research areas (South of Sorong Regency).](image-url)
3. Result and Discussions

3.1. Structure of Customary Land Tenure of the NSF

This section provide analysis of customary land tenure on the NSF in Imekko, including structure of land tenure rights, and patterns of land tenure inheritance.

3.2. Structure of Land Tenure Rights

It is commonly known that land tenure and properties right (e.g. forest and natural resources) in Papua belongs to communal ownership. This system stipulates tenure to be acquired based on family name (keret/fam/marga), clans and kinships, and tribal groups. Generally, keret or family groups in certain areas has historical background. For example, member of keret Ugaje in Kasuweri Village, Kokoda District, claim that their ancestors were actually from Fakfak Region who in fact migrated from Ternate and have been living in Fakfak for generations to date.

When first migrated, the ancestors of keret Ugaje claimed their ownership towards unoccupied lands. That ownership was then passed down to their descendants. Inheritance linehas become multiple due to growing human population. Members of the keret since then have claimed themselves as the owners of customary land rights over the area that is now called Kokoda District.

The status of customary land tenure here is similar to the land tenure practice in Javanese culture which is called yasan, yasa or yoso (Javanese Language). This means that one’s right of ownership comes from his/her ancestors who were the ones to initially opened the lands or cultivated crops on the land [13, 15].

Land rights are acquired through legal status as established by the 1960 Basic Agrarian Law (UUPA). In this case, member of keret Bawei, Giruri, Nuwaru, Karosogu, Tawerasaro, Weusaro, Usasarau, Mogu, Aitago, Rairaro, Sianuriago, and Oregago are the owners of customary land rights over the NSF in Saga. In Puragi-Tawanggire customary land rights belongs to member of keret Bobe, Gowae, Kauete, Bibigane, Idee, Daimar, Ameec, Ajane, Rihe, Jare, Akore, Bumere, Orapae, Mengge, Gue, Kawaiane, Amanonge, Kadae, Maineri, Dariane, Keime, Dobee, Bibireme, Korie, Manutune, Manas, Watarace, and Berae. In addition, rights over customary land in Bedare village belong to keret/Giwa, Kabu, Sigeare, Abisai, Orie, Voaire, Asii, Dobore, Taipue, Udaire, and Saway. These keret are Iwaro by ethnicity.

In Kokoda, indigenous people and owners of customary land-rights and property rights act communally according to their ethnic groups: the Eme and the Awee. These communities classify themselves into old keret and young keret.

Old keret can be considered similar to yasa/yoso, the structure of land tenure and inheritance system in Javanese culture. In contrast, young keret refer to people who came and resided later in the area. Hence, the young keret sown less right on the land forest site comparing to the old ones'.
the communities) that is more accessible and ready to use, and the NSF that is poorly located, far and/or inaccessible.

It should be noted, that it is not absolute that a community naturally owns the customary land rights over the NSF sites in the area they reside. In fact, it is reported that sometimes land rights owners reside in different villages. Such case can be observed in Saga village, where some members of keret own the rights over the NSF in Puragi and Tawanggire; and so does some kerets in Puragi and Tawanggire who own rights over the NSF site in Bedare village. A few members of keret in Bedare own right over the NSF located near the upstream of Metamani River (administratively located in Puragi and Tawanggire). Futhermore, apart from the NSF, parcels of Dusun Saga are also found in and around NSF site.

Meanwhile, even though tenure pattern of the NSF is communal, its use is collective based on nuclear family and extended family setting. Family members can use of the NSF where they live in. On the other hand, collective pattern allow 1 – 3 heads of household in one keret together with members of different keret to make an agreement of how to make use of the NSF sites around their villages and/or residency.

The pattern of land use on the NSF is collective. However, an ownership of sago forest is acquired through nuclear family members who are the descendants of people who grew and cultivated sago trees.

This research reveals that the NSF in Puragi and Tawanggire belongs to people of Saga. Structurally, Saga communities own the customary land rights over the NSF; but it is the people in Puragi and Tawanggire who own use and management rights of the NSF. Similarly, in Kais District, particularly people living in Siranggo, Makaroro, and Mogatemin enjoy de facto rights to make use of the NSF on their land. The forest supports their basic needs, for example food and functions as their source of income. However, it is the people of Kais and Tapuri who own de jure right over the NSF. With regards to forest use, outsiders, people who are not originally from local community, have limited rights to access, use and collect forest products.

3.4. Pattern of Land Tenure Inheritance

Pattern of inheritance refers to rights of ownership on land resource and sago forest that is managed by one person with his family member [13, 15]. This research found that tenure structure of the NSF in Imekko follows patrilineal structure. Thus, the pattern of land inheritance follows this structure. It is known that besides the NSF, some Dusun Saga are grown and cultivated by family groups, in either their own land-forest site or others’. Dusun Saga is usually inherited from cultivators to their descendants under patrilineral structure.

In the entire locations, it was found that every keret/fam groups uses and/or owns a customary institution which is an indigenous territory. The institution is managed by one keret, who is considered senior by the communities. Right to govern the institution will be as well passed down through generations. In Sibae village, for example, land ownership and inheritance occur in patrilineral structure for four keret groups: Yawai, Ibau, Eridasar, and Gusasara. Management of this institution is given and trusted to an individual for his status of being the eldest one. This person is the chief, who leads and coordinatesland ownership and property rights with members of the institution. Often times, the chiefs from the reference group: elder people who are highly respected in a keret/fam group. In Sibai village, Mr. Agustinus Yawai is chief of the customary institution. In Kais and Tapuri village, Kais District, chief of the customary institution is Mr. Samuel Asikasao.

3.5. Impacts of Industry Towards the Structure of Customary (Adat) Land Tenure

The structure of customary land tenure of the NSF in Imekko here were analyzed in relation to the emergence of PT ANJ-Agri Papua and Perum Perhutani.

3.5.1. PT ANJ-Agri Papua

PT ANJ – Agri Papua came to Imekko in 2007. Its main goal is to exploit the NSF through sago starch industry. This factory obtained its certificate of registration from Bupati (Head of Sorong Selatan Regency) through SK Bupati Kabupaten Sorong Selatan No. 103, 18 July 2008 concerning the granting of Non-Timber Forest Product Utilization Permit (Ijin Usaha Pemanfaatan Hasil Hutan Bukan Kayu (IUPHHBK) – Sago) in natural forest, with concession area of 40,000 ha of Convertible Production Forest (Hutan Produksi yang dapat dikonversi) [6].

Owners of customary rights over the concession area of PT ANJ-Agri Papua are the Iwaro ethnic group. In particular, lists of keret/fam members with rights over the area are Orie, Dobore, Udai, Mairera, Deriane, Korie, Manas, Watarae, Berae, Bawey, Nuwaru, Karosogu, Taweresaro, Werusaro, Udarseru, Mogu, Aitago, Riaro, Siniauriago, and Orerago. Meanwhile, local communities’ responses towards PT ANJ-Agri Papuarea split: positive and negative. On the one hand, the factory benefits the communities. They earn more for living and have better welfare as the factory collects and buys sago logs from them. The communities can get the sago logs in and/or around the concession area, and later sell them off to the factory. They are paid based on how many logs they have. These logs are then turned into sago starch (flour).

On the other hand, it brings a disadvantage to the communities. Changes occur to their land tenure rights over the NSF, concession area of the factory. The companies have some restricted areas where are inaccessible to the local communities particularly, in terms of safety reason. Since company has been harvested sago logs almost everyday.

This research discovered numbers of keret/fam lose their customary rights over locations that become concession areas of the factory. Such keret are Manas, Bawey, Nuwaru, Karosogu, Taweresaro, Weusaro, Udarasu, Mogu, Aitago, Riaro, Siniauriago, and Orerago. As a result, they depend only on particular sago forests under factory approval. It all depends on the factory’s willingness for such commitment. For instance, the owners are not permitted to cut down the living sago tree in the concessionarea; they are only allowed
to collect the broken sago logs that are not harvested by the company.

To sum up, under the initial structure settings of customary land tenure prior to the factory, local communities own the rights of free access, harvest and crops, ownership, land-forest use and management, land disposition and repossession [5]. Nevertheless, when this research project was still ongoing, the ‘absolute’ rights over the same spots have been interfered and become limited after PT ANJ-Agri Papua operates and evolves. Nowadays, they have less and limited access to the sago forests, as well as to use and to collect forest products.

3.5.2. Perum Perhutani

Perum Perhutani obtained its Non-Timber Forest Product Utilization Permit (Ijin Usaha Pemanfaatan Hasil Hutan Bukan Kayu - IUPHBBK) on the Natural Sago Forest according to Bupati’s Decree (SK Bupati Kabupaten Sorong Selatan) No. 522/223/BSS/XII Year 2012, on 14 December 2013. This factory owns land-forest use and management rights over approximately 16,055 ha [7].

The concession area of PerumPerhutani includes Kais, Tapuri, Makaroro, Sumano, and Benawa I in Kais District; and Saga, Puragi, and Tawanggire in Metemani District. Based on Environment Impact Assessment, PerumPerhutani is highly likely to cause impacts on land use practice in community [7]. It is so as the factory will operate on the sites, which have been managed, utilized, and owned by local communities (owners of customary land tenure rights) for generations. They live by growing crops and do fishing in the forest area. In fact, some spots in the forests are considered sacred to the local communities.

Indeed, Perum Perhutani has made quite significant arrangements on its industrial sites. These, however, have led to changes in the pattern of customary land use and management. Hence, less and limited space is given to extract sago trees, hunt, grow crops, etc. There is a shift of land use from one keret to another administratively. In the short term, such case brings impacts on the patterns and routines of the community in terms of making use and managing the land-forest sites. In otherwords, it is highly likely that the local communities will have less and limited access to the sago forests in the concession area of the factories. Obtaining permit from the factory is now necessary.

Prior to Perum Perhutani emergence, the structure setting of customary land tenure allows local communities to gain free access, collecting forest products, land-forest use and management, land disposition and repossession, and ownerships. According to the communities, the case now is different that their rights over use, access and collecting forest products have become limited (only in the concession area of sago forests). In other words, they have less and limited control over their ancestral lands. The following presents customary land-forest tenure rights before and after.

Table 2. Collection of Customary Tenure Rights over the Natural Sago Forests (NSF) Before and After PT ANJ-Agri Papua and Perum Perhutani Established in Imekko, Sorong Selatan Regency.

| Property | Tenure Patterns | Bundle of Rights |
|----------|-----------------|------------------|
|          | -1              | -2               | -3               |
| Before   |                 |                  |                  |
| The Natural Sago Forest (NSF) | Communal | 1. access | 5. work and activities related to management process |
|          |                 | 2. collecting forest products | 6. transfer and relief of customary land (land disposition) |
|          |                 | 3. use | 7. reclaim (land repossession) |
|          |                 | 4. control | 8. Ownership |
|          | Individual | 1. access | 3. use |
|          | Communal | 2. collecting forest products | 4. work and activities related to process of management |
|          | Individual | 1. access | 5. work and activities related to management process |
| Dusun Sagu (Sago Forests) | Communal | 2. collecting forest products | 6. transfer and relief of customary land (disposition) |
|          | Individual | 3. use | 7. reclamation (land repossession) |
|          |             | 4. control | 8. ownership |
|          | Individual | 1. access | 5. work and activities related to management process |
|          |             | 2. collecting forest products | 6. transfer and relief of customary land (disposition) |
|          |             | 3. use | 7. reclaim (land repossession) |
|          |             | 4. control | 8. ownership |
|          | Individual | 1. access | 2. collecting forest products on a limited basis |
|          |             | 3. limited use | 3. limited use |
| After   |                 |                  |                  |
| The NSF in Factory Concession Area | Communal and Individual | 1. access | |
|          | Individual | 1. access | |
| Customary Sago Forests in Factory Concession Area | Collective and Individual | 2. collecting forest products on a limited basis in village area in forest concession | 5. limited work and activities related to management process |
4. Conclusion

The followings conclude and summarize the significant points of the research:
1. Naturally, customary land tenure over the Natural Sago Forest (NSF) in Imekko are owned by communal and/or collective ownership based on keret/fam system. Communities are entitled with rights to: access, collect forest products, use, control, manage, transfer and/or release, reclaim, and own their land.
2. Ownership of non-local communities over the NSF can be acquired by obtaining permission with or without compensation. In the case of using the forest for basic needs (e.g: food), and/or as source of family income (e.g: selling forest products), no compensation is needed. Ownership over the Dusun Saguis obtained through nuclear family members whose ancestors cultivated the sago forest.
3. Because of the emergence of PT ANJ Agri-Papua and Perum Perhutani, changes occur in customary tenure rights practised in Imekko. From eight (8), only three (3) rights that the communities retain under one condition: rights for accessing, collecting forest products, and using the forest. The condition that such practice can only be done in the village area of the forest concession plotted by the factories (using the forest for basic needs and assurance of income). In addition, inheritance rights over Dusun Sagu forests are arranged under patrilinial line (descendants of cultivators).

References

[1] Fauzi, N. 2003. Be witness for reformation in Agraria: Base on The Local and Regional Demand. (Bersaksi untuk Pembaruan Agraria: Dari Tuntutan Lokal Hingga Kecenderungan Global) INSIST Press Printing. Jogjakarta.
[2] Hayami, Y. dan M. Kikuchi. 1987. Economic Troubles in Village: An Economic Approach on The Dynamic Of Organization in Asia (Dilema Ekonomi Desa: Suatu Pendekatan Ekonomi Terhadap Perubahan Kelembagaan di Asia). Yayasan Obor Indonesia. Jakarta.
[3] Jong, F. S. 1995. Research for the Development of Sago Palm (Metroxylon sagu Rothb.) Cultivation in Sarawak, Malaysia. Dept. Agriculture, Kuching, Sarawak, Malaysia. 139 p.
[4] Matanubun, H. L. Maturbongs. 2005. Sagu Palm Potential, Biodiversity Ang Socio-cultural Considerations for Industrial Sago Development in Papua, Indonesia. Di dalam: Sago Palm Development and Utilization. Proceeding of the Eighth International Sago Symposium. Jayapura, 4 – 6 Agustus. Manokwari: Root Crops ang Sago Research Center. The State University of Papua. Hlm 41-54.
[5] Numberi, F. 2011. Sagu; Potensi yang masih terabaikan. Bhuana Ilmu Populer. Jakarta.
[6] PPLH Unipa. 2008. Suitability Study on Plantation and Industry of Sago in Kais, Inanwatan, and Kokoda Districts, South of Sorong Regency; (Studi Kelayakan Pengembangan Perkebunan dan Industri Sagu di Distrik Kais, Inanwatan, Kokoda Kabupaten Sorong Selatan) Collaboration between Environmental Study Center UNIPA and PT ANJ Agri-Papua Unpublished.
[7] PPLH Unipa. 2013. Environmental Impact Assessment: Planning of Non-Timber Forest Product Utilization on NSF and Sago Starch Industry (Analisis Dampak Lingkungan Hidup (ANDAL): Usaha Pemanfaatan Hasil Hutan Bukan Kayu pada Hutan Alam (UPHHBK-IA) Sagu dan Industri Pengolahan Padi Sagu) By: Perum Perhutani In Kais and Metamani Districts South of Sorong Regency, West Papua Province. Unpublished.
[8] Ruwiaistuti, M. R. 2000. Deceive Insight; Political Law In Agraria: Break In The State Controls over Land Tenure Rights (Sebat Berpikir; Politik Hukum Agraria: Membongkar Alas Penguasaan Negara Atas Hak-Hak Adat). Insist Press; KPA dan Pustaka Pelajar. Yogyakarta.
[9] Sardjono, M. A. 2004. Mozaic of Sociological Forestry; Local Community, Politic and Resource Sustainability (Mosaik Sosiologi Kehutanan: Masyarakat Lokal, Politik dan Kelestarian Sumber-daya). Debel Press. Jogjakarta.
[10] Sitorus, M. T. F. 1998. Documentation Group of Social Science) (Kumpulan Dokumentasi Ilmu-Ilmu Sosial) Published by IPB Bogor.
[11] Sugiyono. 2005. Memahami Penelitian Kualitatif. (Understanding of Qualitative Research) Alfabeta. Bandung.
[12] Syahyuti. 2006. 30 Valuable Concepts of Village and Agriculture Development: Description on Concept, Theory, Indicator and Variable (30 Konsep Penting dalam Pengembangan Pedesaan dan Pertanian: Menjelaskan tentang Konsep, Istilah, Teori, dan Indikator serta Variabel). Jakarta: PT. Bina Rena Pariwara.
[13] Tjodronegoro, S. M. P. 1999a. Sociology of Agraria: Based on Best Writing Collection (Sosiologi Agraria: Kumpulan TulisanTerpilih). Yayasan AKATIGA. Bandung.
[14] Tjodronegoro, S. M. P. 1999b. Green Revolution and Social Dynamic in Javeness Villages (Revolusi Hijau dan Perubahan Sosial di Pedesaan Jawa. Dalam Buku”Keping-keping Sosiologi Pedesaan.”); Indonesia Higher Educational Department of Jakarta.
[15] Wiradi, G. 1999. Problems on land Tenure Rights and Customary Law: Land Use Right and Indonesia Forest (Sekitar Masalah Hak Ulayat dan Hukum Ada pada Umumnya. Dalam: Hak Penggunaan Tanah dan Hutan Indonesia) Bogor, A Script on Community Forest Discussion, Forestry Faculty, Institut Pertanian Bogor.
[16] Yumte, Y. 2008. A Model for Estimating Starch Content of Wet Sago in South of Sorong Regency (Penyesuasan Model Penduga Berat Basah Tepung Sagu Duri di Kabupaten Sorong Selatan. Bachelor Thesis, Forestry Faculty Institut Pertanian Bogor. Unpublished.