e-ISSN: 1306-3065

2019, Vol. 14, No. 6, 325-334

Implementation of Forest Management Units Policies within Indigenous Agroforestry Systems of Buru Island, Moluccas

Iskar ¹, Marthina Tjoa ¹, Hendrik H.E.S Aponno ¹, Fransina Latumahina ^{1*}

¹ Department of Forestry, Faculty of Agricultural, Pattimura University Ambon, INDONESIA

* CORRESPONDENCE: M fransina.latumahina@yahoo.com

ABSTRACT

Forest Management Units (FMUs) or KPHs, intended to improve forest management at the ground level therefore, need to adopt policies that can align with, complement and strengthen existing local land-use systems. The purpose of this research is to gain an understanding on how KPH policies, those with direct implications on the ground, can be aligned with indigenous peoples' traditional agroforestry systems of Buru Indonesia. We used a qualitative descriptive approach based on in-depth interviews with key informants and focus group discussions with indigenous groups of Buru.

Results show that the indigenous peoples of Buru have and continue to follow a set of norms and rules in their forest land management practices: lands are utilized to plant various agricultural commodities that are combined with forest species which are left to grow naturally upon clearing land for agriculture or in establishing gardens. There are also norms and rules in establishing fields and gardens, starting from clearing of the land, to maintenance, to harvest. Every family in villages own fields and gardens, making them a vital part of community life. KPH policy of land use at the site level requires an understanding of how rules of resource use can be made compatible with and support community needs. In the operationalization of KPH, indigenous peoples' rights to regulate the use of forest land, access to forest land use, and use of forest products need to be accommodated so that these communities continue to benefit from activities on their land.

Keywords: customary agroforestry systems, indigenous people

INTRODUCTION

The practicing of forest land utilization by indigenous people has created history of mastering forest land by community which has been built harmoniously in order to manage the continuity of forest resources. Long lasting forest management based on local policy has settled the utilization of forest continuously for the next generation. The management forest by the Indigenous forest based on the rules, values and norms which have been applied for generations strengthened the rights to forest resources. Forest management include clearing for farming and other agricultural activities, livestock shepherding, the hunt of wild animals and collecting forest products have been treated continuously (Suharjito et al., 2000).

The existence of various forest management practices by indigenous peoples in Indonesia known by various terms such as shifting cultivation developed into *Dusung* in Moluccas, *Mamar* in South Eastern Nusa, *lembo* for Dayak people in East Kalimantan, *tembawang* for Dayak people in West Kalimantan, *repong* for Paminggir community in Lampung, and *tombak* for Batak people in North Tapanuli. The practicing of forest land utilization shows that indigenous people for generations have been able to manage nature's resources, including the forests continuity. These patterns have a system that is strongly related to the management of

Article History: Received 17 June 2019 \bullet Revised 19 July 2019 \bullet Accepted 19 July 2019

© 2019 The Author(s). Open Access terms of the Creative Commons Attribution 4.0 International License (http://creativecommons.org/licenses/by/4.0/) apply. The license permits unrestricted use, distribution, and reproduction in any medium, on the condition that users give exact credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if they made any changes.

natural forests, plantations, orchards and farms, so that it's form is very diverse, dynamic, integrated to produce a range of benefits for society and the environment, whether in economic, social culture, religious, and ecological (Suhardjito et al., 2000).

The practicing of forest land management by indigenous people in Moluccas which well known as *Dusung* that is farm system with a combination of agricultural crops among forest plants has categorized *Dusung* as traditional agroforestry systems. Hairiah et al. (2004) explained that the agroforestry system is natural' resource management system which is dynamic and based on ecology. It combined various species of trees in the agriculture lands (plots) as well as in landscapes. The purpose of preparation land using agroforestry system is to maintain the quantity and diversity of farm production, that potentially providing benefits for the land users in social, economic and environment.

Dusung has developed based on local policy which is belongs to each indigenous community. This system which developed by each regions in Moluccas have variation in technique and management. It shows the diversity of socio-cultural values in society can be used as reminder them about forest management system.

Sustainable forest management practices by indigenous peoples that have been done until today proved that the agreement of values and rules developed in indigenous people has the tradition power to be implemented and concerned by certain community groups. Pursuance for values and customs rules encouraged people to maintain harmony among people also between them with the natural environment.

Forest management in Indonesia based on government's rules and policy, nowadays has changed and adapted that can provide benefits to society and also to preserve the forest. On the other hand, many policies for society to manage forest caused many conflict not just between government and society but also between society and private agents which are authorized by the government to manage the forest.

Today the Government determined the Forest Management Units (FMUs) at the site level as the foundation to forest management systems which appropriate to achieve sustainability and prosperity of society. The Ministry of Forestry (now claimed as State Minister for The Environment and Forestry) defined FMU as the forest management to make the forest area appropriate with its main function, so that can be managed effectively, efficiently and continuously. FMU built based on philosophy for the forest management at the site level, because of forestry problems appeared as consequences of the absence manager at the site level, it made forest seen by the public as an open access area. Hopefully the existence of FMU is able to solve forestry problems in this case forest management at the site level, community access, forest conservation and social issues related to tenure (Ministry of Forestry, 2011). KPH held the control of forest resources but does not mean it gave licenses to forest utilization but to daily forest management (Kartodihardjo, 2001).

The Determination of the FMU areas exists in all functions of forests, likewise Production Forest, Protected Forest, and Forest Conservation. On the other hand, custom forests exist in all functions of forest areas even in forest areas that legally licensed by the government (Kartodihardjo, 2013). This indicates that was overlapping access between custom rights area to the same forest area. Generally, community with legal administration (usually government and corporate) have strong rights and access to the area in which has legal status determined by the government; meanwhile for indigenous peoples their claimed for those areas are illegal. To get their right, it will take complicated process, that makes their right often ignored. The lack of respect and protection for indigenous peoples' rights in forest management is not only exists at the operational level but also in the strict of norm, the understanding and the basic thoughts of management (Kartodihardjo, 2013). "Self-evident" for indigenous peoples within their control over custom forests should be used to provide their prosperity and also for the environment conservation through management continually (Cahyadi, 2013). It should be prove that indigenous peoples are communities who esteemed humans as the part of nature that should keep and maintain the balance and harmony with nature (Nababan, 2008). Agroforestry systems traditionally applied in Buru Island, has been implemented in a variety areas that would be implemented with FMUs' program. Therefore this study will solve problems of how the land utilization system which has developed for generations by indigenous peoples will understandable in the framework of FMUs' implementation, in which include the indigenous peoples management areas in several of forest area functions. The purpose of this research is to build an agreement on the implementation of FMUs' policies and traditional agroforestry systems applied by indigenous peoples in Buru Island.

RESEARCH METHODS

Framework Research

At the moment, there are 600 FMUs design results on production forest (Production Forest Management Unit) and protected forest (Protected Forest Management Unit) all over Indonesia which are spread in all provinces (Strategy planning KLHK, 2015). On Moluccas there are 22 units FMU (17 Production Forest Management Units and 5 Protected Forest Management Units). On Buru island as the study area, there are 3 FMU (Production Forest Management Unit in Wae Apu, Wae Tina, and Wae Mala) which are spread in two districts, they are Buru Regency and South Buru Regency (Moluccas' Government, 2009; Ministry of Forestry, 2010). Production Forest Management Units in Wae Apu and Wae Tina have been defined. Each of them with the Ministry of Forestry Decree No. 770 / SK-Menhut / 2012 and Ministry of Forestry Decree No. 977 / SK-Menhut / 2013. And for Protected Forest Management Units on Wae Mala is still on the planning.

FMU as a forest management system at the site level directly related to the people who lived on the forests area. FMU implementation in order to cooperative with the local community around FMU, became a challenge neither for the people nor for the FMU.

There are differences in the concept of forest management for those people who lived on the forests and those people who lived surround it, generally they have some rules, values and norms in traditionally to manage forest resource and environment. On the other hand, FMU has a more normative concept based on the obtained rules and regulations furthermore will be introduced to the public. FMU's concepts which are offered hopefully would be accepted by society. On the other hand people with custom systems that runs for generations, and became a lifestyle which is influenced them to do all forest management activities, they also wish for the understanding of the FMU about it. Both of them (people with custom systems and FMU) have an interest in forest management with common aim is that for forest preservation and its benefits for the community. The challenge of indigenous people existence also their law issues that supported them often being questioned about their capacity in manage land and forest resources. It is become a challenge for indigenous peoples to "prove themselves" to manage the forest. It also need in cooperation with the other parties in order to reach the common aim in synergy and harmony.

Approach and Process Research

This study used methods with qualitative approach, focusing on specific issues that occur in society. Irawan (2007) stated that the truth which is built in a qualitative study is the intersubjective truth, that is built by the correlative of relationships factors in which facts are found are not free from any interpretations, but should be perceived in a context that occurs in social interaction society. Furthermore, Suharjito statement (2014) qualitative terms on a qualitative approach does not refers to the use of qualitative data, but also allows for the qualitative research using quantitative data.

Data Collection

Types of collecting data is on primary and secondary data. Primary data is data obtained directly from the respondent and direct observations on the field. Secondary data is other supporting data which collected through study some literatures, reports, and other policies related to indigenous people's rights and FMU. To obtain such data, there are some ways of data collection methods applied, they are:

- ~ *In-depth interviews* with key informants. Key informants are people who are considered to have knowledge of certain issues. The key informants consist of village chiefs, *Raja Petuanan* or people who rule over certain areas, (in Buru Island there are 8 *Raja Petuanan*), The traditional leader or the head of the clan and the FMU.
- Focused Group Discussion. The purpose of this method is to obtain detail information about concepts, perceptions and ideas from a group of people.
- Literature study, conducted by analyze some publications, reports, documents, legislation and others things which are relate to the cases of indigenous peoples' forest land tenure and FMU

Data Analysis

Data on this study analyzed with descriptive qualitative approach proposed by Miles and Huberman in *Sugiyono* (2014). Activity in the data analysis performed interactively and continuously at every stage of

research until the data saturation. Activities in the data analysis likewise: data reduction, presentation data (display), verification and conclusion.

RESULTS AND DISCUSSION

FMU Policy and Implementation at Society Level

The fundamental formation of Forest Management Unit (FMU) based on several laws and regulations including the Legislation No. 41, 1999 jo Regulation Number 19, 2004 about Forestry. Government Regulation No. 44, 2004 about Forestry Planning, Government Regulation No. 6, 2007. Jo regulation number 3, 2008 about Forest Management, Forest Management Planning, and Forest Utilization, Ministry of Forestry' Regulation P.6 / Menhut-II / 2009 about the Establishment of FMU' Regional and Ministry of Forestry' Regulation P.9 / Menhut-II / 2010 about Norms, Standards , Procedures and Criteria of forest Management on Protection Forest Management Unit and Production Forest Management Unit. Based on those regulations clearly determined the main points of the content which is added into the essential policy of FMU formation. FMU as forest area management appropriate with its main function and allocation; which has been managed efficiently and continuously. FMU' development policy became the part of public interest supplying in forestry implementation.

In Moluccas' context, where is the entire of forest in this Province are divided into the FMU which are the part of the National Forest Management System, the Provincial Government and District / City Government. The administration of Moluccas' Government region is divided into 11 districts / cities likewise Ambon, Tual City, Central Moluccas, Buru Regency, Southeast Moluccas regency, West Southeast Moluccas Regency, West Seram Regency, East Seram Regency, Aru Islands Regency, Moluccas Southwest and South Buru Regency. The total area of the Moluccas' land is 54 185 Km2 Moluccas and its oceans about 527.191 km2. The administration area for the Regency / City government gave the limitation on forest management authority besides the status of forest land function which is suitable with indication map of forest areas and waters in Moluccas. The division of management area FMU based on ecological proper assessment, the assurance of management area, institutional proper and utilization of forests acquired 22 FMU, consisting of 17 Production Forest Management Units and 5 Protected Forest Management Units which is divided into 11 districts / cities were established with Ministry of Forestry' Decree No. SK.66 / Menhut- II / 2010 about the Zoning of Protected Forest Management Unit and the Zoning of Production Forest Management Unit on Moluccas. Scrutiny of the forests' status, make it able to know the aim of forest management include the Producted Forest Management Units and Protected Forest Management Units. That is also applied on the this research' examiner area in Buru that is Producted Forest Management Units on Wae Apu (the 2nd Unit) which has been established by Ministry of Forestry' Decree No. 770 / Menhut-II / 2012 dated December 26, 2012 and Producted Forest Management Units on Wae Tina in South Buru Regency and Buru which is Producted Forest Management Units Crossed and established by Ministry of Forestry' Decree No. 977 / Menhut-II / 2013 dated December 27, 2013.

FMU development policy considered as an effective solution to do protection of forest resources management. The Management of production forests which had been managed based on the license; but it can't give a guarantee for the preservation of forest resources. In order to conduct forest management the establishment of forest management areas is required, which are held at the Province, District / City and management unit. Forest management activities include (1) Forests Management and Forest Management Plans, (2) The Forest utilization and The Forest Employing, (3) Forest Rehabilitation and Reclamation and (4) Forest Protection and Nature Conservation.

Related to the implementation of FMU policy at society level, which is not separate from their access and existence to the forest resource. The society access itself, consists of variety form and typologies according to the social conditions and cultural of society, their history interaction with forest communities and also their expectations of economic to improve their lives. If related to licensing or determining the status of the forest area, then the problem of public access could not be settling by FMU since the authority was in the hands of the government or the local authorities. Therefore, the existence of FMU allows the identification clearly and accurate about the existence and society needs toward the benefits of forest resources, so that the processes of legalization of rights, license and collaboration more possible, then the problem to settle the conflict and the prevention of conflicts more manageable. Besides, FMU can facilitate communication with the Government and / or local governments to organize community rights and access to forest resources (Director General of Planning, 2011).

The Existence of Indigenous Peoples

The existences of indigenous people in Molluca are legitimated by the Regional Regulation No. 14 Year 2005 about "The re-establishment of country as the unity of Indigenous People in the Maluku Province Government Territory". The condition of indigenous peoples' existence in Law and regulations, according to Sumardjono (2009), did not need qualify cumulatively, it is an indication that the custom rights forward land and natural resources among indigenous peoples is still exist. These criteria are expected would not be a boundary for some indigenous communities, but it would help the decision-makers to accept the existence of them. As a whole, the indigenous peoples who inhabit the villages which are included as study area has a system of kinship / community which is based on customs in which are essential substances that inherited from generation to generation.

The structure and form or the social system in villages on the study site has some form of social unity, such as; family is the smallest community structure consist of father, mother and child; *Mata rumah* that is a community of several families who have a genealogical relationship; clan is a community of some *mata rumah*; soa is a community of clan who came from the same *mata rumah*; villages is a community of some people who have a kinship that have rules and norms that occupies a specific location together with other people, who has been occupying in their territory; *petuanan* is a wider group of kinship which is includes of clans community and *soa* community in some indigenous villages that formed a *petuanan* (one or some areas which claimed by a clans community)

Administration authority in villages on Buru Island, held by the village' leader and in the institutional structure of *petuanan* (Regentschap) led by *Raja* (King) who ruled over several villages on one *petuanan* area. There is the higher institutional called *Latupati* which is divided into two, likewise *Latupati* of Buru and *Latupati* of South Buru. *Latupati* of North Buru consist of King Kayeli (the leader of *Latupati*), Lesiela, Tagalisa and Liliali. On the other hand, The *Latupati* of South Buru consist of King Masarete (the leader of *Latupati*), Waesama, Ambalau and Fogi.

The institutional structures of the six *Petuanan*, that can be interviewed formed a structure that includes all the custom' components in every *petuanan*. There are several custom services that are not exist on other *petuanan* like Seget natan, matgugul, portelu, kaksodin. They only occured in *Petuanan* Leisela, except Kaksodin only exist in Kayeli, but only the king (*Raja*), the leader of *Soa*, and *marinyo* exist in all of *petuanan* custom service. While the term of *Tuan Guru* is only exist in Ambalau and *Saniri* exist on all petuanan except in Ambalau. The term of *tua adat*, *porwusi* and *kawasan* exist just in some *petuanan* regions.

Indigenous territories on Buru Island called *Petuanan / Regentschap*. One *petuanan* consist of some merger administrative villages or sub district areas and the ownership of each region consists of the ownership from the original clans who occupied on those villages. Each *Soa* has land belongs to clan */ soa* of its own, but the utilization of forest products can be carried even on the outside of their land, which is called as "tampa makan bersama" (tampa: place; makan: eat; bersama: together – the place where the people eat together)

Regentschap areas and borders which are made in the Dutch colonial era and its changes (clarification with some king of *Petuanan*) can be seen in Figure 1.

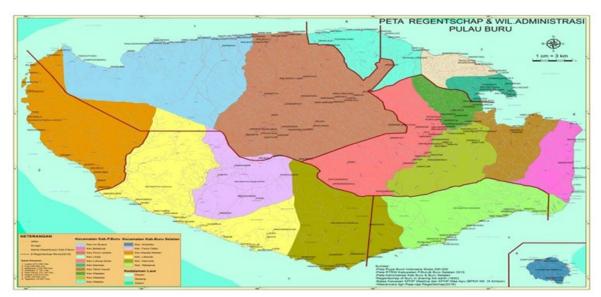


Figure 1. Map of Regentschap and Regional Administration of Buru Island (Clarification with some kings of *Petuanan*, 2016)

Utilization Land with Agroforestry Systems

People in Buru Island divided its space into three parts; the first part consists of a protected area because of its supernatural qualities, this area including Date Mountain, Rana Lake, and sacred place in primary forest. The second part consists of managed areas which are include some settlements, agricultural fields, forest for hunting or gathering and eucalyptus forests. The third part consists of unmanaged areas which are including used agricultural fields and coarse grass field (Pattinama, 2008).

In doing several livelihood activities, with traditional technology, they followed numbers of habits and customs inheritance from generations. Some custom systems related to traditional way in management land using by the indigenous people in Buru Island to fulfill their daily need is managed an agricultural field.

Indigenous peoples in Buru Island called an agricultural field as hawa. Usually, in manage an agricultural field; they work in a group. These groups consist of several families who usually have family relationship. Their farm system still move from one place to another with rotation for 3 until 4 years. An agricultural field (hawa) will be abandoned after being treated for 3 years. After 3 or 4 years abandoned, that used agricultural field (wasi) can be reopened for the new agricultural field (hawa). There are variety terms to identify agricultural field (hawa) (Huliselan et al, 1988; Pattinama, 2012), they are:

- 1) Hawa Fehut (fehut = new, hawa fehut = new field) is a new agricultural field which is cultivated and planted but its products are not collected yet. So this term (hawa fehut) used since a field cultivated, starting from felling of trees, cleansing of felled tree residue and planting until the first harvest.
- 2) **Hawa** is an agricultural field which is on harvest time. So, since the first harvest, this field was not call as *hawa Fehut* anymore, just *hawa*. This term commonly use for agricultural field in general. Some of them likewise *hawa hala* (rice plant field), *hawa magat* (*petatas* / yams field) dan *hawa mangkao* (sweet potato field).
- 3) *Hawa wasi* is a term for a field which its product is harvested on some years and nearly abandons. Usually because of the field' product reduced so it would not treated, but the remnants of its product will still be taken likewise bananas, pineapples, etc
 - 4) *Wasi* is the term for re-use agricultural field.

On *Wasi* there were longevity plants, which its' fruit/product still harvesting, such as Jackfruit (*Arthocarpus integraifolia*), Cempedak (a kind of fruit which is similar to Jackfruit /*Arthocarpus champeden*), Mango (*Mangifera indica* L), and others. After a *Wasi* abandoned for 3 to 4 years, it would reopened as a new agricultural field. The new agricultural field were opened in a *wasi* is called *nogit hawa*. (*Nogit* means is to fell a medium size tree).

Wasi is an agricultural field that is actually going to be abandon; it is also called wasa wasi therefore some other forest trees grew. Other plants such as Nakan / Jackfruits (Arthocarpus integraifolia), Nakan Dengen / Cempedak is a kind of fruit which is similar to Jackfruit (Arthocarpus champeden), Waplane or Mango (Mangifera indica L), Hosiroit or orange (Citrus nobilis Lour), hosi hat (Citrus grandis L) Osbeck), Coffee (Coffea sp), Warian or Durians (Durio Zibethinus, Murr), Biafolo (Arenga pinnata), nutmeg (Myristica fragrans Houtt), and Clove (Eugenia aromatica OK). After the Wasi area left for 8-9 years, this area will be called as Wasilalen area. On Buru Island, there are about 10 species of plants on the Wasilalen area (Pattinama, 2012).

To open the area of primary forest as an agricultural field usually followed by several of custom events which are commonly they did before the activity begin. The agricultural field custom involved several activities which are related with the agricultural field' process, started from the effort to own the forest area/land until the collecting of its product (harvest).

Sihit Custom

Sihit in Buru' language showed a ban to protect the own right either it's permanent or temporary; either it's belong to individuals or groups from the others' effort to take over it. Sihit could be manage for primary forest, hunt forest, Resin Dusung, orchards and some kind of crops. Sihit shapes are a sign called eslelet. Eslelet usually formed from the leaves of plants were taken from the dominant plants in the forests area or in the agricultural field which sihit will take a place. The other way is to put the leaves into a tree by removing a bit of its skin. The marked tree is sign to the corner of their agricultural field. The tip of the leaf as directions, pointed to their selected area. As conclude the function of eslelet is a prohibition sign, with the direction showed by the leaf tips people will know which field/ forest areas has been selected.

Latak / Tahak Custom

The next activities of clearing for the new agricultural field are cleared cut and cut down all the bushes and felling of treess on the area. Before these activities done, usually they run some of custom event called *Latak /tahak*. This ceremony was held based on people in Buru Island belief is that generally there are guardian spirits and tutelary spirits on each tree (especially large trees) which grown of the primary forests. This is the reason why when the trees will be cut down, they need to run ceremony as a sign to get those sprits' bless.

The opening of the new agricultural field can be done in a former farm that has been replant (wasi) after being abandoned for 3-4 years (wasi). In this case, members of the group can return to the their used agricultural field, because there are some longevity plants which are belongs to them that always marked and harvested, such as jackfruit, Cempedak (is a kind of fruit which is similar to Jackfruit fruit), Mango and many others. Even though one man is able to choose others' used agricultural field, whether he is members of the group or not with condition that he must give four types of goods as compensation. The goods could be axes, short machetes, spears and white cloth (objects that are usually being exchanged). The effort to reopen used agricultural field did not need any ceremony as well as they did for the opening of primary forest.

Burned Custom (Sigi Rahe)

After the felling of trees, the next activity is dry in the sun. This activity will take $1-1\frac{1}{2}$ months (around September and October). If the leaves and twigs are dried then it was time to burn them (burn = sigi). For the origin people in Buru Island to burn a new agricultural field also started with some custom events. This custom event intended that the fire which is burned that new agricultural field will not exceed some specified borders. The essence of this event is to protect their lands and forests were considered holy and sacred.

This ceremony is an event to watering their agricultural field' borders with water which took using 5 pieces of certain kind of bamboo (uka) called luleba. Each uka consist of just 1 space between its' joints (Uka is a kind of bamboo in small size about 2-3 cm diameters). Before the leader of this ceremony take the water using 5 pieces of Ukai, he must say saruk – cast a spell (he mentioned the famous spring's name) by the word (called esnaru) as follow: " $Akoi\ Wae\ Nibe$, $Atofabo\ hawa$ " which is means I took $Wae\ Nibe$ water, I flushed around this agricultural field.

Plant custom (Sekak)

Planting will begin after each member of the clan get the land which they belongs. Planting is done by each family. For the origin people in Buru Island, at the beginning they will plant *Hotom (Fetem)*, except for rice plant's fields are usually planted in another area.

In agricultural field which are planted some kind of crops all together, on this field will be planted other crops such as corn, beans, cassava, and other types of tubers. For people in Buru Island, Hotom and Rice plants (*Hala*), are the two main types of plants, so to plant them, it will started with custom ceremony.

Technique to plant those two main plants; Hotom and Rice plants (*Hala*) are different from one another. Hotom will be planted by scatter the seed on the land meanwhile Rice plants will insert to some holes have been made with a stick.

Harvest Custom (Egu)

Harvesting crops such as Hotom and Rice plants (*Hala*) begin with traditional ceremony known as *Egu hala* (rice plant harvest) and *Egu fetem* (hotom harvest). The indigenous peoples in Buru Island usually do the harvest activity secretly, with consideration to prevent any obstacle such as rain or the owner field is sick.

On the harvest day, all clan members should come in the field. This ceremony will begin by put the *eslelet* on the four corners of the field by the leader of the group. After that, he will do the first plucking by saying 'pray' as an asking for help so the harvest will success, then all members are allowed to harvest.

Tema Custom

Tema is a banquet for one village after the last event of some traditional events which are related to farm an agricultural field. The purpose of this event is conveying their grateful for their crops. This grateful is presented to Lord (*Opo Lastatala*), The Old People / orang tua-tua (rom tuan) and to those spirit (guardian spirits and tutelary spirits) whose stayed on that field. This event usually has done after they harvest Hotom and Rice plants (*Hala*).

Rules in Land Use Systems for Indigenous people in Buru Island

Natural Resources in the *Petuanan* region can be utilized to fulfill the local needs of the villager, but its utilization for the people who lived outside the village area should be done under license. Forest resources should be used is timber and non-timber products such as rattan, resin, bamboo, animals, medicines, water resources and other minerals. The utilization land by outsiders should be done under license and also known by the Lead of *Petuanan* (*Raja Petuanan*).

The land belongs to the clans in the *petuanan* region arranged by each *soa*. The land belongs to citizen could sold or contracted depends on the clan's agreement. If the land which will be sell less than 2 hectares, usually handle by the member of clan groups himself, but if it is not (more than 2 hectares), it will sell to the logging company as an example, then the rules not just must through, but also know and legitimate from the king, because it is related to the other clan's right of land's boundary. For example, the legitimate for the utilization of timber of PT Nusa Padma Corporation, all traditional leaders and clans of landowners of the land where the timber exploitation will be done, they met together and made an agreement with companies which built from 2007 to 2017. As the result of their agreement about incentives / distribution timber production systems (cubication) - in this case 20 thousand rupiah per cubic. All prominent figures on the clan who owns the land, they signed the documents which are declaring extrication of utilization for that company. Basically, this document is about their agreement that the land be able to use by that company. In this case the King/ *raja* (their leader), as well as the village head, he also signed the document (such a letter of agreement for handing over the land to be used by the company).

Process monitoring in *petuanan* area implemented by the society together with *perangkat* adat – some people who rule over the village (the leader of the area). In this case the society refers to the clans who owners the land on *petuanan* area because the leader of the area may not supervised the extents field. They just monitoring land which follows custom regulation.

The Violation of customs regulation which are obtain on *petuanan* region will get custom punishment runs on that society.

The Adjustment of Custom System and FMU's Policy

The clarity of borders land as physical and individual rights on land management is a necessity. On other words, FMU needs to know and admit the physical borders of indigenous peoples' territory management; they should understand and admitted the society's right also integrated their knowledge on their operational.

Study showed that the region's custom border in general is still natural and each clan knew them. That is the reason; FMU management should consider the nature's border claimed by the environment. This can be done by implementation the mapping of society land participative, which is further be able to integrate on FMU's block map as what has been determined.

Related to the clarity of native clan's territory right in tradition belongs to them and inheritance from generations to be managed. But, on several *petuanan* regions in Buru Island, there are native clan's territory right which are belongs to newcomer through transaction between them and the native clans. This integration more focused to the rights which it will belongs to the indigenous people and migrants.

Society's rights over the forest resources is difficult to enforce because some people do not get their right legitimation from the government. Local communities understand that they have the right to use the timber for local needs, but this right is illegally because it is contradiction with the formal rules of forest management (restriction of the of wood utilization). On FMU's operational, the right to manage the utilization of forest field; the access to utilization of forest field; also the using of product utilization of indigenous society's forest field, all of them need to accommodated so that the public be able to get the benefits from those activities on their field. The approach taken can be directed to the ownership integration and access to resources that exist on land owned by communities in tradition ways.

The indicators used for this principle is the relevance of rules on the operational level, collective level and constitutional level. There is a relevance between rules on the operational level and on the collective level, but is not supported by constitutional rules. A rule developed in one level but without supported by rules on other levels, will deliver imperfect system so that the rules would not run for long. The suggested of integration form is to mergered customs rules and FMU's rules due the utilization field which is supported by national law.

CONCLUSION

The existence of indigenous people on Buru Island showed their tradition systems that still occurred in social relations as well as in the management of forest lands. The implementation of traditional institutions with indigenous institutions systems based on local policy in managing forest land which has been built since the ancestors, it proved that they still exist and still categorized as indigenous people. Custom territory is a part to strengthen the existence of indigenous people because each system of mastery the *petuanan* region can be determined by each custom institution and known by the indigenous people. The division of indigenous territories has strong evidence whether in the field as well as on the maps, which are made since the Dutch era. It became a proved for indigenous peoples to defend their custom territory. Even the tradition system that held strong is illegal according to the law, but the neglected of indigenous peoples' existence also their rights on some fields it will not help the implementation of social development program.

The Adjustment of customs system in the implementation of FMU's program on indigenous land that has been managed with traditional agroforestry systems in Buru Island, ought to use the principles of the clarity physical territory borders and the clarity of individual rights, the integration of ownership and access to resources that occurred on the land which is belongs to the society in custom way to mergered customs rules and FMU's rules due the utilization field which is supported by national law.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Iskar - Department of Forestry, Faculty of Agricultural, Pattimura University Ambon, Indonesia.

Marthina Tjoa – Department of Forestry, Faculty of Agricultural, Pattimura University Ambon, Indonesia.

 $\label{eq:hendrik H.E.S} \textbf{Aponno} - \textbf{Department of Forestry, Faculty of Agricultural, Pattimura University Ambon, Indonesia.}$

 ${\bf Fransina\ Latumahina-Department\ of\ Forestry,\ Faculty\ of\ Agricultural,\ Pattimura\ University\ Ambon,\ Indonesia.}$

REFERENCES

- Cahyadi. Erasmus. (2013). Kajian Putusan MK 35/PUU-X/2012. Respon Para Pihak dan Tantangan Penerapan Bagi Penguatan Hak Tenuriaal Masyarakat Adat atas Hutan Adat di Masa Depan. *Warta Tenure*, Edisi 11.
- Hairiah, K., Suprayogo, D., & Noordwijk, M. V. (2004). *Ketebalan Serasah sebagai Indikator Daerah Aliran Sungai (DAS) yang Sehat*. Bogor: Word Agroforestry Center.
- Huliselan, M., Rumahlewang, E., & Isa Odar, M. (1988). Orang-Orang Bumi Lale dan Dunianya. Organisasi Sosial, Pertukaran dan Perubahan Sosial di Sentral Pulau Buru Maluku Tengah (Indonesia). Ambon: Laporan Penelitian.
- Irawan, P. (2007). Penelitian Kualitatif dan Kuantitatif untuk Ilmu-Ilmu Sosial. Jakarta: DIA Fisip UI.
- Kartodiharjo, H. (2001). Pemerintah Perlu Memetakan Kembali Hutan Adat. *Harian Media Indonesia*, Sabtu 24 February 2001.
- Kartodiharjo, H. (2013). Kajian Putusan MK. 35/PUU-X/2012. Kelola Hutan Baru dengan Mindset dan Kepentingan Politik Lama. *Warta Tenure* Edisi 11.
- Kementerian Kehutanan dan Lingkungan Hidup. (2015). Rencana Strategis Kementerian Kehutanan dan Lingkungan Hidup Tahun 2015-2019. Jakarta.
- Kementerian Kehutanan. (2010). Penetapan Wilayah Kesatuan Pengelolaan Hutan Lindung (KPHL) dan Kesatuan Pengelolaan Hutan Produksi (KPHP) Provinsi Maluku.SK. No. 66/Menhut-II/2010. Jakarta
- Kementerian Kehutanan. (2011). Pembangunan Kesatuan Pengelolaan Hutan (KPH) Konsep, Peraturan Perundang dan Implementasi. Direktorat Jenderal Planologi Kehutanan. Direktorat Wilayah Pengelolaan dan Penyiapan Areal Pemanfaatan Kawasan Hutan. Jakarta.
- Kementerian Kehutanan. (2012). Pembentukan Wilayah Kelola KPHP Model Wae Apu.SK Menteri Kehutanan Nomor 770/SK-Menhut/2012. Jakarta.
- Kementerian Kehutanan. (2013). Pembentukan Wilayah Kelola KPHP Model Wae Tina.SK Menteri Kehutanan Nomor 977/SK-Menhut/2013. Jakarta.
- Nababan, A. (2008). Pengelolaan Hutan Berbasis Masyarakat Adat: Antara Konsep dan Realitas. Jakarta
- Pattinama, M. J. (2008). Orang Bupolo dan Lingkungannya. Yogyakarta: PT. Citra Aji Parama.
- Sugiyono. (2014). Memahami Penelitian Kualitatif. Bandung: Penerbit CV. Alfabeta.
- Suharjito, D. (2014). Pengantar Metodologi Penelitian. Jawa Barat: IPB Press.
- Suharjito, D., Khan, A., Djatmiko, W. A., Sirait, M. T., & Evelyna S. (2000). *Karakteristik Pengelolaan Hutan Berbasis Masyarakat*. Yogyakarta: Aditya Media.
- Sumarjono, M. (2009). Catatan untuk Rancangan Peraturan Pemerintah tentang Tata Cara Penetapan dan Pengelolaan Hutan Adat, Yogyakarta.

00