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## ROLE OF LOCAL INSTITUTIONS IN COMMUNAL FOREST PRESERVE '*RIMBO LARANGAN*' IN PARU VILLAGE, WEST SUMATRA<sup>\*)</sup>

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### ABSTRACT

Communal forest management practices often regarded as illegal and unsustainable activities by the Indonesian government. In the Paru village, West Sumatra '*Rimbo larangan*' is a communal forest management practices based on local/indigenous peoples to maintain sustainability. This study aims to identify and understand how they are able to establish and maintain the area as protected forest activities, so the area is remain sustainable until today. The study used a descriptive method to clarify the role of local custom institutions in the management of protected areas '*Rimbo larangan*'.

The results showed that the local customary institutions facilitated the rural communities' interests of Paru villages for the environmental conservation purposed as a source of water for paddy fields. *Rimbo larangan* justified to use non-timber forest products, while the use of timber prohibited. Agencies involved in the management of *rimbo larangan* involved all elements of community. Control by community which local agencies as local initiatives. The rules *rimbo larangan* management carried out in a legal form of village regulation (*PERNA*) as formal rules and as informal rules maintains *rimbo larangan* was a customary rule. As tenure institution, in *rimbo larangan* there was formalization of the indigenous people's rights to communal interests, which limits the individual interests of the forest products, thus supporting sustainability.

Key Words: *Rimbo larangan*, communal land, tenure institution, sustainability, West Sumatra

### I. INTRODUCTION

Many interests of the forest caused wide-scale deforestation in Indonesia. To address deforestation and land, forest management policy encourages local community-based, such as customary forests. Customary forest itself categorized as state forests, where the government has the right to determine the status of forest management. This often leads conflicts between local communities and the government. This conflict occurs because of the unclear rights of local communities benefit on land and trees. The conflict caused the reluctance of people to keep and maintain the forest, such as the failure of the forest reforestation adverse impact on environmental quality and land in the long term. In other words, result of the failure of reforestation programs caused by unclear property rights to land and trees.

Issues of uncertain and unclear of land and tree tenure system are often overlapping causes undeveloped forest management. The lack of clarity whose take advantage and get what resources and how long. Therefore, the success of reforestation or tree planting requires setting clear the land and tree tenure. Land tenure as a form of property right by Parsons (1956) to determine the successful development of the area. Institutional arrangements in land tenure demonstrated the ability of individuals to gain access to the benefits that exist on

the land or on the dimensions of the future. The success of resolving conflicts depends upon the clarity of one's property is concerned (Unruh, 2004). Tree tenure as institutional systems or rules demanding clarity of indigenous peoples' rights to land and trees. Local rules generally sourced from local institutions, in this case from the customary institutions.

*Rimbo larangan* in Paru villages as customary forests have existed more than 20 years. *Rimbo larangan* approximately 4.000 Ha which serve as a protected forest by the Paru village. The area established by local community initiatives in managing forests for the purpose of preserving the water resources for agricultural land (paddy) in Paru. Sustainability of *Rimbo larangan* based on the local institutions that specifically manage the area as a protected forest from any extraction activities. Local value system as the rules and obeyed by the villagers' Paru ensure the preservation of the area.

Management rights relating to land and tree tenure rights (property rights) in *Rimbo larangan* as an institutional system of rules in force in the community. This condition is the implication of the land and tree tenure institutions provide appropriate incentives for communities to adopt tree planting. The absence or lack of incentive system is impossible to defend the area from the long run pressures.

Based on the above it can be said that the successfully of building *Rimbo larangan* due to strong local organizations to ensure the sustainability of the area. As a system of rules that apply (role in use), the question in this research is the how the local institutions play the rules in securing land and tree tenure on *Rimbo larangan* to encourage the sustainability?

## II. STUDY AREA AND METHODOLOGY

### 2.1. Area of Study

The study was conducted in Paru village, Sijunjung district. On the northern border with Durian Gadang village, with village Sungai Batuang in the East, in the South side with Solok Amba village and Aie Angek village, and with Silokek village in the west (Figure 1). Consist of three *lorong* namely Bukit Besar, Batu Ranjau and Kampung Tarandam. Paru village distance to district capital 33 km to the district capital, and to the provincial capital 160 km.

Paru Village located at an altitude of about 160 m above sea level, with an area of 24,010 ha, with the average daily temperature was 12.50 to 24.60 ° C, and the average rainfall 2078.3 mm / yr. The population as 2128 peoples, 450 head of households (HH), with 779 of men and 1349 women. The livelihoods of most (95 percent) are farming. Paru Village is also a rice barn to meet the needs of the neighboring villages (Monograph of Paru Village, 2008).

The number and distribution of the Paru showed predominantly only primary school graduates. The population do not complete primary school up to 82 percent, with an average distribution of the highest population in the range of productive age 15-40 years at 68 percent. Work generally farming population reached 50 percent.

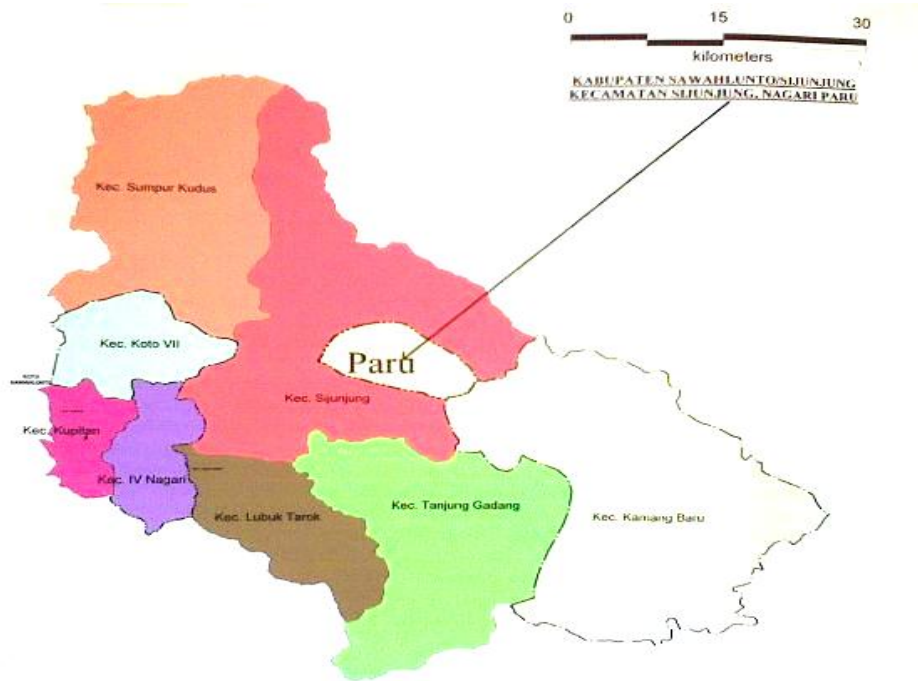


Figure 1. Paru Village Layout

## 2.2. Methodology

### Research Design

The study used a descriptive method to identify the forms of the relationship between land tenure and tree tenure. The security of land and tree tenure status will provide incentives for the development of customary forest; this is indicated by the level of the property rights to the tree. Related to these tenure systems, government policies that have been issued as laws and regulations relating to the rights within the framework of land and tree tenure widely.

Strategy of research approach as follows: 1) to assess and describe the patterns of tree tenure on communal land. Approach refers to Rapid appraisal to social forestry for land and tree tenure (FAO, 1989). 2) Assess the role of local institutions in relation to the control of land and tree tenure. Local institutional forms and functions described in connection with the acquisition of land and trees in the community. 3) Third assessing the status of people's rights to land and tree tenure with the approach of the rights to land and trees.

### Data Sources

These data and other data collected in this study are as follows:

1. The physical condition of the study area that includes the location and area, soil and physiographic conditions, topography and elevation, land use, local climate and forest areas in the form of secondary data from relevant agencies.
2. Land and tree tenure arrangements based on local rules. Data obtained from direct interviews with households and key informants, namely customary leaders, community leaders and village leader.

3. The rights owned by the land's holder on the land and tree. Data from semi-structured interviews with farmers as land's holder. These rights confirmed by customary leaders and village leader.
4. Institutional or local organizations with the structure and role in *rimbo larangan* management especially in the control of land and trees. Data obtained from the villages agency and sub-districts, and further interview with the chair and members of the institution to know the implementation of rules.
5. Legal or informal regulations connection with forest management particularly with respect to land and trees tenure. Secondary data was obtained from the relevant authorities, namely Forestry Agency, District and Village.

### **Household Sample**

Sample of households to obtain data on household characteristics (socioeconomic and demographic), also to know the security of property rights in land and trees based to the rights owned by household as a land rights holders. Randomized sample of households taken based on household data with the above terms on the land under their control. Sample household determined by 20 households, which ranged 5-10 percent of the population agroforestry farmers.

### **Data Collection Techniques**

The view of land and tree tenure patterns based on data from household respondents and further confirmed with the key informants: the community leaders, customary leaders and village leader. Confirmation done to ensure the suitability of the individual rights that exist and determined by the communal. While the role of local institutions conducted an interview with the chair and members of the institution concerned. Interview conducted by semi-structured question guide.

### **Data Analysis**

Descriptive analysis to explain the factors that affect the tree and land tenure rights types. An assessment of the status of land and tree tenure measured based on the rights that exist at the community level. Which can be seen from the recognition of the public rights in the use of land and trees, and the securities of tenure in obtaining such rights. The structure and the role of local institutions in connection with the acquisition of land and trees are analyzed based on the shape and role on *Rimbo larangan*. It is associated with a variety of system rules prevailing in the society formally or informally.

## **III. LAND USE PROFILE IN PARU VILLAGE**

### **3.1. Land Use**

The profile of land use in Paru villages are the for customary land / ethnic groups, and also a communal land villages and state land. Agroforestry systems that are generally applicable to many customary land tribe/clan are rubber-based agroforestry. Rubber-based agroforestry patterns by mixing some other agricultural crops. In addition to the rubber trees, gardens also planted other types of plantation crops such as oil palm. Fruit crops are common types mixed in the garden. The land used in Paru villages shown in Figure 2.

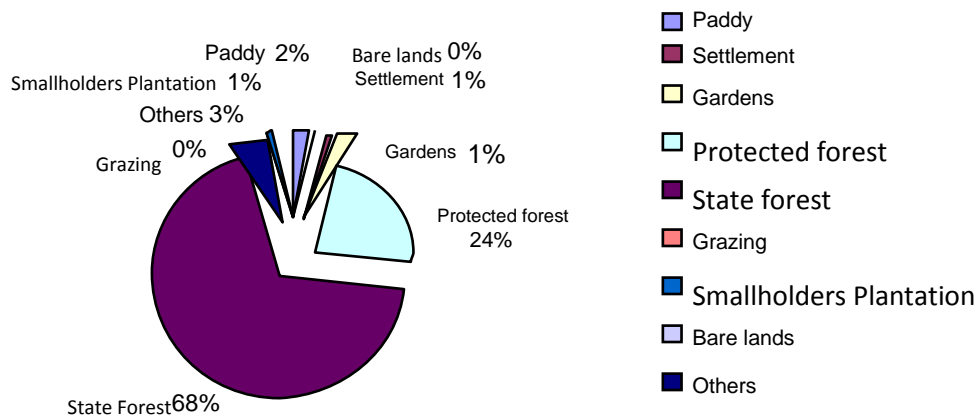


Figure 2. Portion of land use in the Paru villages  
(Source: Paru villages Monograph 2009)

While in communal land's villages on Paru as protected forest, or *Rimbo larangan* in the local context. *Rimbo larangan* an area of about 4000 ha approved by local customary leaders (*ninik mamak*) and legalized by village regulation (*Perna*) as a protected area. *Rimbo larangan* was made in response to the illegal logging in circa 80's that resulted in environmental damage in the Paru. It is characterized by the rice crop failed due to drought and pests and diseases. *Rimbo larangan* before a reservoir of water for the rice fields critical due to illegal logging. Based on this critical condition, *ninik mamak* initiative to save the communal areas were a source for irrigating of locals rice fields.

State land is forested area about 10 km to the south Paru village. Natural forest area is an area that is often encroached by local people to be converted into rubber plantations. This forest was considered as communal property of Paru villages by *ninik mamak*, the conversion of forest to plantations there are no restrictions. The types of plants are commonly cultivated in Paru villages are rubber, cinnamon, chocolate, coconut and others. It is also commonly cultivated species of food crops such as rice, cassava, maize and other species.

The founder of Paru village are Datuk Panji Alam and Datuk Gindo Tamajo. Both Datuk have right to decide all things related to customary law. People who had the custom villages are Datuk Sejo Panji Alam, who is in charge of customs, Datuk Sarih panghulu, in charge of religion, Datuk Bandaharo Kayo, who is in charge of customs legislation, and walinagari as the leader of village's government. In accordance with the amount of the six tribes in the Paru, the all Datuk in Paru villages are Datuk Panji Alam (Malayu bauh), Datuk Gindo Tamajo (Patopang), Datuk Nitam/Bandaro Kayo (Chaniago), Datuk Katumanggungan (Piliang), Datuk Gadang Jolelo (Malayu Tengah), and Datuk Rajo Penghulu (Malayu Ate). Each tribe is assisted by three devices namely Manti, Dubalang and Malin.

In Paru villages, the owners of communal land are Datuk Sejo Panji Alam and Datuk Gindo Tamajo. Customary land given to four others Datuk. Datuk Panji Alam gave to Nitam or Datuk Sarih Panghulu. Datuk Gindo give the use right or immediate delivery. Granted use rights cannot be sold, but can be transmitted to nephew. Giving directly, for example to the children. Giving directly from Datuk (father) to the child, such as the father of the tribe Chaniago give the land directly to his Malayu tribes, if the child was dead all the land was taken back by the Chaniago tribe. Customary land if not worked then it can be worked by others. Customary land got was Datuk, but can use it together (for the common needs). Land in the Paru cannot be sold by Datuk, because violating the oath.

### 3.2. Rimbo Larangan

Customary lands in Paru village were in the form of protected areas (*Rimbo larangan*). *Rimbo larangan* that is located in the northern part of village. Customary land village an asset to the villages. Land of *Rimbo larangan* previous is customary ownership Datuk Gindo Tamajo and several other tribes. For the purposes of village, these areas approved by ninik mamak become protected forest. Therefore, the status changes from of customary land tribes to tribal villages. This is understandable because the status of customary land in a village may be a multilevel hierarchy according to their interests (Figure 3).

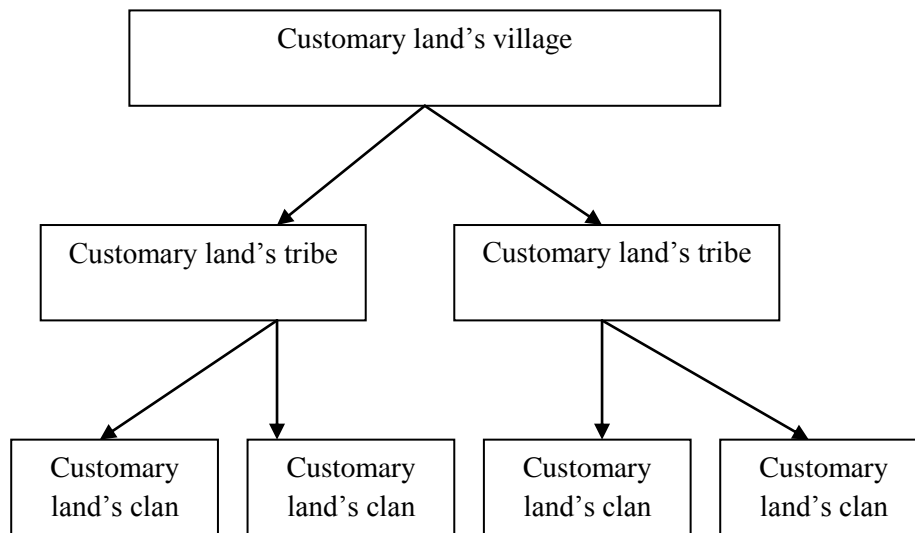


Figure 3. Hierarchy of customary land

*Rimbo larangan* at first seized by *ninik mamak* Paru due cultivated and exploited by other people in Mudik Paru and Bukit Mandi Angin areas. Which at the time was Datuk Gindo Tamajo, Datuk Gadang Abu, Manti-manti, and other young nephew along the Datuk. The boundaries of this area have only agreed statement: on above bounded with *ponten kasik*, the downstream side with the *Mabung* river upstream, the lowerwith the field and next to village with *ponten tempirah*. Furthermore, with the *ninik mamak* agreement village leader agreed to make the area as *Rimbo larangan*. It was agreed by the six *Penghulu*, *Orang tuo nan batigo* and related agencies.

But this time since the area was used as *Rimbo larangan* was agreed under control by village. Access to this area can be done by the people and villages surrounding Paru villages. The use of this area as *Rimbo larangan* regulated by village rule which is the legalization of local community initiatives in Paru villages. *Rimbo larangan* legalized in accordance with Village regulation (Perna. No. 01/2002) on conservation of protected areas, while control of *Rimbo larangan* basically the responsibility of all citizens of the villages, where the authority gets legalized in this case is the Consultative Village, the Village's customary representative (KAN), *Bundo Kandung*, Youth, Government Village (*Walinagari*, BPN, and LPM), community leaders and a group of farmers concerned forest (KPPH).

In a further development of *Rimbo larangan*, Forestry Departement (DEPHUT) assisted planting and maintenance as well as making boundaries. Benefits received by the Paru of these protected areas are indirect benefits, source of water for the rice fields and to maintained Paru as producer of rice surrounding villages. Timber species common to the area *Rimbo larangan* is meranti (*Shorea* sp), Borneo (*Shorea sumatrana*), marsawa (*Anisoptera*, spp), timbalun (*Parashorea lucida* Sp), tengkawang (*Shorea* sp), Medang (*Litsea* sp) , bayur

(*Pterospermum javanicum*), balm (*Palaquium gutta*), jelutung (*Dyera costulata*), cinnamon (*Cinnamomum burmani*), rubber (*Havea brasiliensis*) and others.

#### IV. Pattern of Individual and Communal Rights at *Rimbo Larangan*

##### 4.1. The rights to the Land

In the customary land, area of villages used as *Rimbo larangan* is conservation area. Individual rights on the land limited to the right to plant and grow again as part of the conservation activities, while other rights not performed (Table 1). This illustrates the existence of individual rights to be very limited and there is a dominance of communal rights to the individual rights on the communal land.

Table 1. Individual rights and communal land in the communal lands communal villages

Type of Rights	
1. Planting and transplanting again	Communal
2. Bequeath	X
3. Renting	X
4. Giving to others	X
5. Mortgaged	X
6. Sells	X

Description: X = not done

The pattern of individual and communal rights on customary land's villages describing the communal land rights will vary depending on usage/utilization of the land in question (Table 2).

Table 2. Matrix characteristics of land tenure on customary land's village

Types Rights	Dimension		
	Man (Who)	Usage (For what)	Time (How long)
Possession (ownership)	▪ Village	▪ <i>Rimbo larangan</i>	▪ Unlimited
Utilization (use right)	▪ villages resident	▪ <i>Rimbo larangan</i>	▪ Unlimited
Control right	▪ Village and members of the Village	▪ utilization type, restrictions on the use	▪ Unlimited
Transfer right	▪ X	▪ x	▪ During of the tenure

In the customary land's village, tenure patterns shown by individual and communal rights is determined by status of the land use. The land had previously been customary lands tribe that approved as *Rimbo larangan*. This land belongs to several tribes, and the majority ethnic Patopang and Malayu, and for the common needs approved as customary land's village. Land was protected from any timber extraction by the villages. Land use as *Rimbo larangan* with protected function, but people can take distressed wood for other uses such as a fence, or firewood. In some parts of *Rimbo larangan* still allowed for rubber or other crops in places once function as the land cultivation, while the new opening is not at all justified.

## 4.2. The Tree Rights

Pattern of tree tenure rights on communal land's village in Paru showed individual rights are very limited to timber products. This is due to land use as conservation areas were protected from timber extraction activities. As land ownership by the villages, the communal rights for preserving the environment more dominant than the individuals rights (Table 3).

Table 3. Matrix characteristic of tree tenure at in communal land's villages (*Rimbo larangan*) Paru

Products of <i>rimbo larangan</i>	Human (Who)	Usage (For what)	Time (How long)
▪ Firewood	▪ Members village	▪ Consumption	▪ Unlimited
▪ Cinnamon	▪ Village's member	▪ Consumption and sold	▪ Unlimited
▪ Rattan	▪ Village's member	▪ Consumption and sold	▪ Unlimited
▪ A rubber latex	▪ Village's member, owners	▪ Revenue	▪ Unlimited, but permission with village leader
▪ Medications	▪ Village's member	▪ Medicinal	▪ Unlimited
▪ Fodder	▪ Village's member	▪ Livestock	▪ Unlimited

In the communal land's villages (*Rimbo larangan*), tree tenure system can show the ownership is by villages, but use may be made by members of village. Utilization generally is indirectly benefiting from the *Rimbo larangan* area in form of environmental sustainability for the Paru's member. The benefits of tree conservation aims as to ensure the sustainability of agricultural production

Category of use, in *Rimbo larangan* directly to take firewood, medicines, fodder, and cinnamon. This was done in addition to the utilization except wood products, such as rattan and resin. Utilization indirectly also significant in preserving cultural identity, which is known as durian for all citizens of Paru villages. Durian fruit that falls can be taken by any citizen of Paru village every time, but were forbidden to get fruit by climbing. The main utilization of the forest preserve is a reservoir of water sources for paddies fields in Paru village.

Utilization of *Rimbo larangan* can be done by the citizens of Paru village nor prohibited by the citizens of neighboring villages, such as Aie Angek and Aie Amo. This is done because there is no rule which prohibits the non-members of Paru village to take advantage from *rimbo larangan*. Utilization directly on *Rimbo larangan* prohibited even though the rules, but it is still permissible for citizens to take rattan, small pieces of wood to the fence but not on a steep section, may also take wood and cinnamon. On the land that had been cultivated, can be planted again. It shows wisdom in utilizing forest could be appreciated that these common benefits do not harm personally.

While control of using the outside rule, all the villages member involved (Village's customary representative (KAN), youth, *Bundo Kandung*, Village leader, community leaders and farmers' groups concerned forest (KPPH). Rules of control *Rimbo larangan* is



stated with village regulation (PERNA) No. 01 Year 2002 on protected areas (*Rimbo larangan*) and Decree of village leader No. 188.47/05/Kpts-Wn-2003 about farmers' group concerned forest (KPPH) to safety of forest in Paru villages, region Sijunjung, district Sijunjung. Violation of the rules that have been enacted so logs seized by villages and imposed a fine of livestock or cement to be used for villages need. Similarly, violations conducted by residents of other villages are also subject to similar rules. However if they did not comply with the rules, then the problem was brought to the authorities. So currently there is no dispute about *Rimbo larangan*.

Farmers' group concerned forest (KPPH) designated appointed in securing *Rimbo larangan*, initially making activities every month to planting and maintain, but then the activity decreased only 3 months, and 6 months, so just oversee on it. In 2002, timber theft had occurred, then the wood was captured by *ninik mamak*, then invited the three neighboring villages, and then agreed to support Paru villages in preserving *Rimbo larangan*, it was confirmed the decision of three villages and sub-district police chief added.

Individual and communal trees rights existing on communal land in Paru villages as shown in Table 4. This illustrates the allocation or customary function as conservation areas restrict individual access to the tree. However, these rights can still be done on non-timber products. This illustrates that the individual rights and communal both exist at the same time, but there are slices of such rights to the conditions above.

Table 4. Individual rights and communal at the tree in the communal land village

No	Type of Right	
1.	Planting and planting again	X
2.	Maintenance	Communal
3.	Cutting down	X
4.	Using the tree	X
5.	Bequeath	X
6.	Sells	X

Description: X = not done

Rights to the land and trees on communal land in West Sumatra is not only seen from the existence of individual rights, which is defined as the totality of rights and without the intervention of others in claiming these rights. On communal land, the rights to the land and tree cannot separate from the communal rights. The rights acquired individually obtain because it is concerned are members of a communal (Syamsul Bahri, 1983). Therefore, the status of security on the land and trees by land holders is determined by it relates to communal rights.

The ability to issue other users (exclusion) on communal land also apply strong, and consequently control over land tenure may be made by the land holder which is supported by local customary institutions. Another user intervention can only be done on the utilization of heritage trees and plants that are not planted by the landholders. While the interventions to use by other users is prohibited.

## V. ROLE OF LOCAL INSTITUTIONS IN LAND TENURE AND TREES

### 5.1. Local Institutions That Plays In Land and Trees Tenure

Institutional interpreted as a barrier derived to direct or guide the interactions between humans, as a system of values or a set of rules that applies to communities or organizations to facilitate coordination among people in obtaining their expectations appropriately. This reduces the uncertainty in daily life by providing a structure for interaction and human behavior (Hasan, 2000; North, 1999; Hayami and Ruttan, 1984).

While the organization is a place where these values can be done. Organization associated with one group of actors who operate or work together for a specific purpose. So the organization has a system of rules in changing behavior can be classified as well as institutions. Included in these organizations are political bodies (political parties, parliament), economic bodies (firms, cooperatives), and social agencies (associations, NGOs, the Mosque), and educational bodies (schools, Universities, Training Center) (Auzins, 2004).

Theoretically institutions to this study means as rules and organization, although not always organization can be classify as institutions. Good institutions can ensure the sustainability of system and finally secure the development as internal dynamics of local community (Pasandaran, 2004).

Table 5. Institutions / organizations in Paru village

Village	Public Sector	Central Sector
Paru	Village Government, Pemerintah, Village Consultative Body (BPN),	Village's customary representative (KAN), Community Empowerment Agency (LPM), <i>Bundo Kanduang</i> , Youth, Crop Farmers, Group Of Farmers Concerned Forest (KPPH), Police Community Partnership Forum (FKPM).

Source: Paru villages Monograph 2009

Local institution referred to the institutions in villages that are formal and non-formal relating to the system rules of villages, and participates in the control of land and trees (Table 5). Institutions in Paru which participate with land and tree tenure or generally involved with natural resource management as follows: Village Consultative Body (BPN), Village's customary representative (KAN), *Bundo Kanduang*, Youth, Community Empowerment Agency (LPM), Crops Farmers, and Group Of Farmers Concerned Forest (KPPH).

The role of local institutions in the Paru villages formally indicated by the Village Consultative Body (BPN), consists of five elements: *Ninik Mamak*, *Cadiek Pandai*, *Alim Ulama*, *Bundo Kanduang* and Youths. Its role: designing village's regulation (PERNA), designing village's development, developing budgets, establish Village's definitive planning, Supervise/control village's program, and village aspirations.

The Community Empowerment Agency (LPM): to promote public participation for development. Solely to assist the village leader task (*walinagari*). Village's customary representative (KAN) in Paru villages consisting of 32 *ninik mamak*, which functions in the maintenance of customary issues. KAN participates directing the village's policy simultaneously.

Youth activities more oriented on sports events and the village security, including the *Rimbo larangan*. FKPM (Police Community Partnership Forum), under district police chief (Kapolsek) chaired by *walinagari*. Its role is to securing villages. All of village's elements

take a part to its institution. This forum work to discuss the cases in the villages. Forum means of communication between police and the community to solve the crime problems and to provide secure for the citizens. But the work of forum limited on minor crimes cases such as fighting and stealing.

Group Of Farmers Concerned Forest (KPPH), an institution established by the village to specifically secure *Rimbo larangan* as communal land's village of Paru. The entire community elements *ninik mamak*, *alim ulama*, *cadiek pandai*, *Bundo Kanduang*, community and youth were also involved in this group that safeguards *Rimbo larangan*. Its means the responsibility of all villages citizens on *Rimbo larangan*.

In 2002, there was illegal logging in *Rimbo larangan*. Settlement involving all Paru institutions with villages neighboring pioneered by *ninik mamak*. Arrested just wood, but then invited three neighboring villages as a potential disruption of *Rimbo larangan*, then made an agreement to support the Paru villages in maintaining *Rimbo larangan*, and strengthened by the decision of the three villages and the district police chief added.

This local institution determines claiming of individuals or groups rights. In village Paru agencies involved in the claim these rights are customary institutions such as KAN. Because KAN is *ninik mamak* unity which is actually a representative of the tribes in Paru. As land in the Paru is known a customary given by Datuk to his nephew to be managed, so that the land right actually governed by the KAN. This rule is a habit that no-writing but validated by the Village.

In village Paru, the mechanisms of development consultation involving all *ninik mamak* in determining the direction and execution of development into a capable force of moving entire village's people involved, including the development *Rimbo larangan*. Consequently claim to land and trees rights in Paru can run well with less of conflicting ownership. Conflict resolution through traditional mechanisms that have been going well. Implementing agencies at all levels indicated by various local institutions that have a range of powers. Although these institutions are more locally specific but clearly in a variety of rules to use the land and trees.

Institutions/ local organizations play an important role in the monitoring of land and tree resources. Local organizations have an important role in regulating the sustainable management of natural resources; particularly on common property resources (CPR) included *Rimbo larangan* as communal ownership. According to Uphoff (2004) and Wijayaratna (2004), institutions can be grouped into three types, namely, public, private and third sector are not clear design, or a collective activity sectors. The public sector is all the institutions and organizations instituted by government authorities and operate with authorities pushed. This authority may be in a lower level provincial or local who works as part of the government sector. While private sectors achievements by individuals or groups, generally aim economy. The third group is not clear design sector, or collective action sector. The difference with the public is not under the authority of the government.

Viewed from the local institutions category is largely of institution/ organization on the third sector (central sector). This group design not quite clear structure and function (Uphoff, 2004; Rasmussen and Meinzen-Dick, 1995). These institutions play a greater role to the collective activities (collective action). Therefore, the role of such monitoring done by all these institutions. This is important because their communal system, the presence of these institutions form was to safeguard and secure local resources. According to Rasmussen and

Meinzen-Dick (1995) the role of these institutions in regulating resource management is related to the limits and access to their resources, including who can use it, the rules of allocation, user contributions, monitoring and sanctions, and conflict resolution.

As a communal system in West Sumatra, the role above basically a system of customs rules that exist as a communal system. As mentioned by Benda-Beckmann and Benda-Beckmann (2004) arrangement of resources in the *Minangkabau* people are complex of human-property as a communal unity in any respect and internally differentiation in utilization, rights, and individuals authority. As a result of monitoring and sanctions are run in their communal basis. This can be seen when there is a conflict of resources use, the mechanism of deliberation resolved from the lowest level (*mamak rumah*), if it is not completed or there is still a dispute it will be forwarded to the extent tribe level, if it has not been resolved at the level of the then forwarded to the clan level and further if the rate cannot be resolved then it will be resolved at the villages level. It is described as a communal system, the localization problem or conflict in accordance with the matrilineal basis and further up to the communal villages which embodies matrilineal bases around the villages.

## 5.2. Rules Category In Land and Tree Tenure

Based on a literature review noted that institutional intended as a system of rules and organizations, in this case related to the acquisition of land and trees. A set of rules that govern and limit human interaction. In connection with the land and tree tenure, rules can be formal or informal contained in the villages. Types of rules in the land and tree tenure in Paru villages shown in Table 6.

Table 6. Types of rules in the system of land tenure and tree villages Paru

Rules	Formal	Non-formal
Land	Ownership	√
	Utilization/control	√
	Transfer	-
Trees	Ownership	√
	Utilization/ control	√
	Transfer	-

Description: √ = there is a rule that applies

In Paru basically rule is customary norms prevailing in the community as a growing pattern with local indigenous institutions. Rules in land and tree tenure depicted in Table 6 shows that this pattern based on local customary tenure. Land ownership is a customary rule that has prevailed for generations in communal land's villages. While the violation of such tenure as conflict if cannot be resolved at the *mamak rumah* then will be forwarded to a higher structure, in which sanctions can be imposed customs.

In customary land's villages, that function as *Rimbo larangan*, monitoring and sanctions made by the specially formed group of farmers concerned forest (KPPH), an institution established by the district to secure *Rimbo larangan* in Paru villages. From categories of rules on the communal land constitute strong legality to control tree. It is derived from village's customary representative (KAN), which makes setting the communal system. Rules are made in traditional institutions is an unwritten rule, but binds to members of communal villages. This is because of strong monitoring and sanctions imposed in case of rules violation that apply customary.

Existing rules, both formal and non-formal does not mean anything if it cannot be implemented. As mentioned above, the rules of the land and tree tenure working in Paru villages, so the claims of individual and communal rights occupy the portion that had been accepted by the villages. This can be seen in the monitoring mechanisms and sanctions imposed for violations under control.

Rules in land and tree tenure depicted on the Table 6 shows that the pattern is based on local customary tenure. Land ownership is a customary rule that has prevailed (matrilineal) for generations. The pattern of ownership control by the female line, according to Benda-Beckmann and Benda-Beckmann (2004) began when she married usually given part ownership held on use right (*ganggam bauntuak*) for their own interests. This was called *harato dapatan* received by women. The main function of land (*Pusako*) is to provide economic resources in the generation of offspring members. This separation is only temporary and permanently prohibited.

Land when obtained as a heritage as an economic resource to be utilized and should not be neglected. On dry land (fields) cultivated accordance with the need of land's holders. Types of rules contained in tenure system above is a non-formal rules, this can be understood because the communal ownership would remain if there are locally-based arrangement. The rules are derived from the complex customary villages. As a matrilineal society, they live in villages that are relatively autonomous villages with communal land, which is referred to as the 'village republic'. Organized in matrilineal location, comprising heads of matrilineal descent (*panghulu*). Council chiefs' maternal lineages of villages form a government. Village consists of groups based on tribes. In customary law philosophy, members of the descendants form a unit of economic, political and social. They are a single unit in many respects. They are descendants of the uterus (womb). They share the leadership of the lineage and ownership of their offspring, *harato pusako*. Complex property-human is the economic and political unit in *Minangkabau* village (Benda-Beckmann and Benda-Beckmann, 2004).

Types of rules on land and tree tenure in customary land generally non-formal derived from customary institutions in a complex property-human relationship (Table 7). While in the communal land's village's ownership by village, formal rules in the tenure system was the formalization of the village's ownership. Formal rules of communal land's villages restrict the individual needs, especially timber.

Table 7. Types of rules in the control of land and trees on state land in three villages

Rules		Formal	Non-formal
Land	Ownership	√	√
	Utilization / control	-	√
	Transfer	-	-
Trees	Ownership	√	√
	Utilization / control	-	√
	Transfer	-	-

Basically the rules applied in practice is not rigid, because the existence of customary escorted by Datuk-Datuk, and also in village systems force *Tigo Tali sapilin*, mean the scholars held by the theologian, custom which is set by KAN, and law held by village. If there is an agreement to the three groups then there is no problem to make changes or

negotiations. Therefore, this mechanism suggests that there remains a negotiation spaces that will affect claims against the land and tree tenure rights. As a basic guideline is customary ‘*syarak mangato adat mamakai*’.

If there is a problem or dispute at the tribes level over the customs issue, resolved at the level of *tigo jinih* (*malin, manti* and *dubalang*), if not completed then coupled with *Datuk* (*Ampek jinih*), if not done well, the matter forwarded to the three people who had village. So that the peoples in the villages Paru alignment is *bajanjang naik batanggo turun*.

### 5.3. Sources of Tenure Security

Sources of resilience (security) in the land and tree tenure here comes from local institutions (customary) living in the village’s community. Values and local rules under control by village’s customary representative (KAN). KAN in *Minangkabau* is the highest institution in local institutional structures. Legality of ownership of land (communal), the use and control of the land based on the customary rules with KAN as a form of traditional institutions in the villages. In simple relationship individual and communal rights with external factors that build strength security shown in Figure 4.

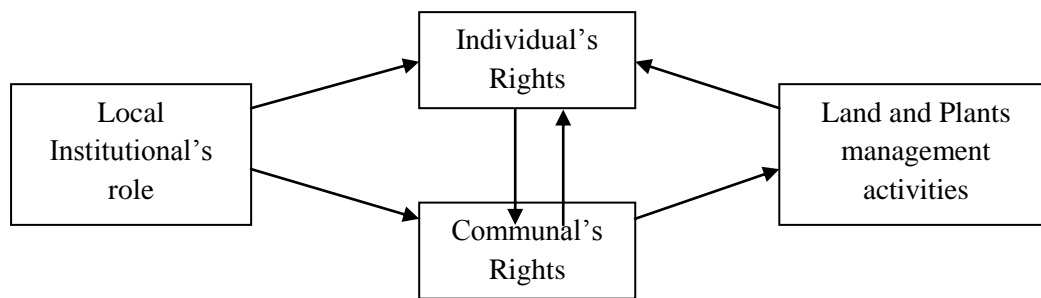


Figure 4. Relationships individual rights and communal in the communal land

Sources of this security by the FAO (2002) there are several determining factors, including institutional, government recognition and formal legal rules. In West Sumatra in the customary system, a local institution that determines the status of security is the customary institution in the form of KAN (village’s customary representative). The existence of individual rights in communal system when he/she is a member of the clan.

The right of use, control and transfer of land acquired when he/she hold the clan land belongs. This right also includes issuing others people of the land. Whereas recognition of the government in this case also applies by village government in recognition of this communal lands, because villages government itself is actually also part of the customs system prevailing in the society in *Minangkabau* village. Although currently happening dualism in the government system village, where village leader act more as an arm of government rather than the villager because most of the programs are government programs.

The third source of security in West Sumatra is a government rules to communal land. BAL (UUPA) of 1960 recognizes customary land-based as long as the indigenous peoples still exist. *Minangkabau* as the core of West Sumatra remains customary systems prevailing in the society. Therefore, the rights of indigenous people on communal lands are also automatically recognized, although in the BAL contained if the land cannot be proven then it becomes the state's ownership.

Based on the presence of sources that reinforce the security status of customary land, then the communal land in the *Minangkabau* can say have a strong security. This refers to the FAO (2002) the status of security is not a single measurement to an existing rights, but it's cumulative of all the constituent factors above. It is clear that despite the communal land rights of individuals deliberately limited or restricted, but the assurance of support system generate a high level of security to customary land's holders.

## VI. CONCLUSIONS AND RECOMMENDATIONS

### 6.1. conclusion

1. *Rimbo larangan* as protected forest has existed over 20 years, due to the clarity of individual and communal rights on the land and trees. The clarity of these rights in accordance with the primary objective *Rimbo larangan* as conservation of water resources for rice farmers land in Paru Village.
2. Community rights on *Rimbo larangan* laid out in the legal system of written rules agreed upon by the entire community in Paru villages (Village Regulation/PERNA). Individual rights are limited by the communal rights for the common need as a water resource for the Paru. The rules are derived from the values of the local customs in facilitating the member of Paru villages public interest.
3. Agencies involved in the management of '*Rimbo larangan*' involve all elements of society that *ninik-mamak*, *Alim Ulama*, *cadiek pandai*, *Bundo Kanduang*, and youth. KAN was the highest body of representatives from all the tribes of the Paru village as a source of security of people's rights.
4. Resource conflict resolution done in stages in accordance with customary law, which sanctions imposed by traditional institutions through deliberation, while the monitoring carried out by all citizens of Paru village.

### 6.2. Policy Recommendation

1. *Rimbo larangan* management may exist because the local authorities that perform various maintenance activities, outside interference needs to be done carefully, because it can adversely affect public involvement in establishing protected areas.
2. The emphasis of the management area should continue to be supported *Rimbo larangan* by giving authority and encouragement to the community as a common interest to maintain forest resources, which have positively impact to their own environment.

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