

THE EVOLUTION OF PROPERTY RIGHTS AMONG THE BIDAYUH COMMUNITIES IN BAU, SARAWAK

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ABSTRACT

This paper examines the evolution of property rights in regard to resource use and tenure systems. It specifically highlights the rapid change from the communal property system to private or state property rights in Bau, Sarawak. In this paper I have explained the Bidayuh traditional resource use and tenure systems based on local customs and histories, and how these have been effective to ensure sustainable use of natural resources. However, the findings also show that even if the communal resource use and tenure systems based on the adat is effective in managing the communities' natural resources, there is an inclination for these communities to gradually change to the state tenure system in order to secure their access to natural resources and their land rights.

Keywords: Access, adat, Bidayuh, communal property, property rights

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INTRODUCTION

The evolution of property rights has been controversial especially with the use of terms like common property, open access and private property management. Many scholars argue that common property is not necessarily synonymous with open access (in Swaney, 1990). This debate began with Hardin's (1968) claim that 'common' in a form of property ownership would result in environmental destruction. According to Hardin's argument, natural resources for the 'commons' are presumed freely accessible to everyone, with resource users competing with one another for a greater share of resources. But the unregulated use and consumption of these resources would eventually exhaust its capabilities to sustain the users' livelihood. He described this as 'tragedy of the commons'. Hardin's argument, however, has been critically debated and was deemed sociologically naive, historically uninformed, economically simplistic and just plain wrong (see Appell, 1995). His misconceptions over the notion of 'open access' and 'common property' failed to recognise the functions of local customs, rules and arrangements in regulating sustainable resource use. Moreover, Hardin's recommendation for privatisation and state control of resources as a way to resolve the issues of commons was criticised. Empirically flawed, the thesis in 'tragedy of the commons' has been debunked by many case studies showing the value of indigenous knowledge in resources management and traditional forms of ownership (in Appell, 1995).

Schlager and Ostrom (1992) mentioned property rights institutions are best seen as set of rules to understand distinct configurations of rights granted to individuals and groups of individuals in a larger

concept of common property management. There have been many cases where local communities in Borneo, particularly Sarawak, manage their natural resources and property rights without relying so much on privatisation or state intervention (see Appell, 1986; Cramb, 1989; Sather, 1990; Wadley, 1997; Horowitz, 1998; Eghenter, 2000; and Ngidang, 2003). One must realise that local communities have their own governing systems to regulate rules pertaining to the nature of rights to resources and its histories. This also includes conservation of resources like trees, rivers, and forests. Such a system has been long established, locally constructed and practiced according to local rules. In fact, the local communities' customs, religion, kinship, and social behaviour are shaped by the same rules that govern their natural resources (see Howes, 1960; Sandin, 1980). Like many cultural groups in Sarawak, the Iban refers to this as *adat* which "...covers all the various customary norms, jural rules, ritual interdictions and injunctions that guide an individual's conduct, and the sanctions and forms of redress by which these norms and rules are upheld" (Sather in Sandin, 1980, p. xi). Although these norms and rules have been transmitted orally through the generations, it has been effective in regulating property rights because they are flexible and adaptable to changes over time (see Agrawal, 2002). Nevertheless, these customs or *adat* have been strained by the growing pressures from economic fluctuations, legal constraints, political forces and ecological shifts. The issues only arise when local customs begin to erode, making way for state tenure systems that are not often compatible with the *adat* (see Egay, 2010). This is when local communities lose control over their own resources. I agree with what Cramb (1989, p. 277) has mentioned that a variation in local tenure systems must be explained by considering the processes a society chooses to adopt in order to maintain a particular set of rules and conventions.

This article is based on a research carried out with two Bidayuh communities in Bau district, Sarawak. The two communities, Bijagoi and Bitringgus, still practice their customary rules or *adat* in their resource use and tenure systems. As mentioned earlier, Hardin's (1968) thesis in the 'tragedy of the commons' suggested state control and privatisation of property rights as the only way to escape from property rights conflicts. But this assumption overlooks the significance of communities' local institutions that have been effective in governing their own resources. Hardin also failed to distinguish the terms 'commons' and 'open access'. In this article, I choose to use Ostrom's (1990) four categories of property rights: open access, communal or common, private and state property to examine the evolution of property rights among the Bijagoi and Bitringgus communities from their informal *adat*-based rights to formal property rights regulated by the state. This paper also outlines the interaction between these two communities and their local environment, and identifies the processes, shortcomings, and consequences of the evolution of property rights.

The evolution of property rights has always been in tandem with the economic and development agenda. For example, according to Demsetz's theory (1967), the evolution of property rights emerges in response to changes in resource values and its cost-benefit. A rise in resource values increases the benefits of capturing resource rents through property rights. This inevitably leads to establishing and enforcing a private property interest. However, I am sceptical with this simple assumption as there is a 'grey zone' obscuring the relationship between the communities and their natural resources. In this paper, I examine the state policies and resource laws that have been the catalyst in the evolution of property rights and claims over specific resources. This includes policies dealing with land titling, the establishment of protected forest areas, and development of rural agriculture. Then, I scrutinise its purposes, actions, strategies and implications on property rights among the Bijagoi and Bitringgus communities. Conflicts relating to property rights within local communities often revolve around who should have the rights and what type of rights one is entitled to. Yet some believe that privatisation of property rights is expected to stop these conflicts. But can we assume that privatisation of property rights is the only solution for rural communities in dealing with issues relating to the state's development policies and management of natural resources? Even if there is a need to privatise property rights, to what extent do these property rights be privatised? Is it capable of extending the 'bundle of rights'? Lastly, who will ultimately benefit from these property rights? In this paper, I also refer to Schlager and Ostrom's (1992) concept of 'bundle of rights' – i.e. the access, withdrawal, management, exclusion and alienation – and how these influence the two Bidayuh communities in accepting or rejecting the idea of privatising their property rights.

PROPERTY RIGHTS REGIME

It is fundamental for us to understand the meaning of property rights. Property is merely an object if it does not have any attachments, interactions, and relationship among different actors, individuals and collectives (Sikor & Lund, 2009). Taking it to another extent, Ribot and Peluso (2003, p. 156) identified property as being generally interweaved with socially acknowledged and supported claims or rights – whether that acknowledgement is by law, custom, or convention. Hence, property rights only exist if there are rules and regulations to legitimise it, followed by social institutions that sanction it. According to Feder and Feeny (1991, p. 136) property rights define the legitimate uses of resources and determines the exclusive use of these rights. As such, property rights are often imposed on specific resources, such as allocating rights to trees, types of vegetation and wildlife. This is done in accordance to the local institutions and rules, depending on the communities' values and relationship with these resources.

It is important to distinguish between common property, open access and private property to avoid confusion and overlapping use of terms. Theoretically, there are four categories of property rights that govern common property resources, namely open access, private property, state property and communal, collective or common property (see Ciriacy-Wantrup & Bishop, 1975; Hanna et al., 1995; McCay, 1996). In this article, I use the term 'communal property' rather than 'common property' to refer exclusive rights that are assigned to a group of individuals. Unlike other types of property rights, Berkes and Farvar (1998, p. 10) described communal property as “use rights for the resource are controlled by an identifiable group and are not privately owned or managed by governments; there exist rules concerning who may use the resource, who is excluded from the resource and how the resource should be used”. The open access category refers to the absence of well-defined property rights (Berkes et al., 1989; Feeny et al., 1990) where access is free, unregulated and open to everyone. The resources users have a tendency to irrationally exploit natural resources and cause serious depletion. As argued earlier, communal or common property is not synonymous with open access. Under the private property category, rights are extremely exclusive and transferable. An individual or a group has the rights to exclude others from using the resources and to regulate its use. Lastly, the state property category refers to the rights to resources that are vested exclusively in government which controls access and level of exploitation.

Tenure rights to common property resources are conceived as 'bundle of rights'. This bundle is generally simplified by identifying the use, control and transfer rights (FAO, 2002). The largest bundle of rights in tenure rights system includes those who own or inherit, manage, use and dispose of the resources. This article uses the concept of tenure as a bundle of rights in common property regime. Schlager and Ostrom (1992) identified five different types of property rights that are most relevant for common property resources including access, withdrawal, management, exclusion, and alienation.

Access	:	The right to enter a defined physical property.
Use	:	The right to obtain the “products” of a resource.
Management	:	The right to regulate internal use patterns and transform the resource by making improvements.
Exclusion	:	The right to determine who will have access rights, and how these rights may be transferred.
Alienation	:	The rights to sell or lease either or both of the above collective choice rights.

(Adapted from Schlager and Ostrom, 1992)

Schlager and Ostrom (1992) said that property rights are made up of two components: (1) operational rights and (2) collective choice decisions. Operational level involved access and withdrawal rights while, at the collective choice level, there are management, exclusion and alienation rights. Normally in communal property regime, rights to access and use the resources are equally distributed within the community (Feeny et al., 1990). In some cases, when an organisation is formed to gain economic and ecological advantages, it enforces the collective-choice rights of management and exclusion (Ostrom & Hess, 2010). According to Ostrom and Hess (2007), most of the private properties are defined as equivalent to alienation. For instance, individuals who held farming land privately possess the rights to sell and lease the resources.

Privatisation is a way to legalise property rights usually under the government's formal rules and laws. It is used to restrict access to resources (Levmore, 2002). In addition, Starr (1988) defined privatisation as the withdrawal from any conceived public spheres (public property) by an individual or particular groups. By doing so, the creation of property rights allows the resource property to be clearly specified, exclusive and secure. One advantage of privatisation is that the holder of the property rights can decide to change the way the resources are used, to even destroy it, and to transfer it (McKean & Ostrom, 1995). One particular pattern of interest today is to bring common property regimes to private arrangements that focuses on exclusionary rights and individualistic approach of property rights. The following sections in this article describe the ways the Bijagoi and Bitringgus communities traditionally establish their communal property and resource tenure systems, and their responses to the changes in property rights regimes.

THE BIDAYUH

The Bijagoi and Bitringgus communities of Bau district described in this article belong to the Bidayuh ethnic category. The Bidayuh is one of Sarawak's ethnic groups that makes up 8% of Sarawak's total population, or a population of 198,473 in 2010 (Sarawak Fact and Figures, 2012). The Brooke colonial administration in the 19th century ethnically categorised them as 'Land Dayak'. Geddes (1954) said the name 'Bidayuh' generally translates as 'people of the land/hills' and originally, the label seemed to apply only to the Bukar and Sadong groups (see Tillotson, 1994). But the use of 'Bidayuh' as an ethnic label only became official after the formation of Malaysia in 1963 (Chua, 2007, p. 265). With the passing of the Interpretation (Amendment) Bill 2002 at the Sarawak's State Legislative Assembly on 6th May 2002, the 'Land Dayak' category is replaced with Bidayuh (Chang, 2002, p. 18). Since the Brooke colonial rule, the ethnic categories in Sarawak are often exonyms created for government administrative purposes (see Harrison, 1958; Tsing, 1993; Winzeler, 1997). Traditionally, however, local communities especially those living in Sarawak's hinterland would identify themselves based on toponyms, that is, as people belonging to a particular place or a community settlement named after their physical landscapes such as rivers or mountains (see Rousseau, 1990; Metcalf, 2002; Metcalf, 2010). In this article, the categories Bijagoi and Bitringgus are toponyms as it refers to people who originate from Jagoi (name of a mountain located south of Bau town) and Tringgus (S'ringos was the name of an area in the upper reaches of the Sarawak River). Today, Jagoi comprises 10 villages²³ while Tringgus has a cluster of three villages, namely Nguan, Rabak Rotan and Bong. The households in Jagoi and Tringgus today are still tied to their lands and forests, as many are dependent on their surrounding natural resources to sustain their livelihoods. Because of this they are also governed by their *adat*, often seen in their rituals and offerings during festivals and agricultural activities.

THE BIDAYUH COMMUNAL PROPERTY AND RESOURCE TENURE

Land, forest and territories

Chua (2015) observed that many Bidayuh still adhere to the *adat gawe*a (a farming ritual that relates to spirits, ancestors, and other non-human entities) until the late-twentieth century. Walker (1998, p. 94) states the Bidayuh *adat* rituals and customary laws, along with a range of constraints on human behaviours, are still enforced to maintain a proper balance in human affairs. All these customs, laws

²³ These villages are Sri'eng, Serasot, Buow, Skibang, Sebobog, Stass, Bogag, Duyoh, Pinomu and Serikin.

and *adat* are derived from their farming activities, particularly shifting rice cultivation, and use of forest and river resources (see Howes, 1960). Traditionally, when the Bidayuh pioneering ancestors found suitable areas for farming, and established their new settlements, they clearly marked the boundaries of their territorial domains with natural landmarks such as hills, ridges, mountains, streams and creeks. Here, I adopt Ngidang's (2005, p. 49) notion of territorial domain as "...a specific land area, where indigenous peoples carry out their subsistence activities such as hunting and gathering, farming and earning their livelihoods from generation to generation". The Bidayuh communities refer to their territorial domain as *tolun tana'*. Their ancestors named the places and areas after the rivers, mountains, hills, animals and trees within the *tolun tana'*. For example, the Jagoi village at Stass is named after the ironwood tree, while the village, Bong, in Tringgus is named after the river tributary next to it.

Generally, the *tolun tana'* comprises *tu'uan* (primary forest), *tembawang* (old settlement sites), *obud* (reserved forest), *lison* (fruit trees groves), *tiboie'* (land that is left uncultivated for short period of time), *damon* (land that left uncultivated for long period of time), *toyak* (garden), *umoh* (paddy field), *plaman* (temporary settlement for farming) *tambak* or *tinungan* (cemeteries or ritual sites) and *kupuo* (village). Appell (1997) noted that among the Bidayuh households, rights to land are obtained through bilateral descent from the original ancestor who first cleared the *tu'uan* (primary forest). As such, the establishment of *tolun tana'* forms the Bidayuh resource tenure regimes, which covers all the methods by which people gain legitimate access and rights to natural resources for the purpose of resource management, utilization, extraction and disposal. These rights include rights to carry out livelihood activities such as farming, hunting animals, gathering forest produces, and fishing. It also includes inherited lands under cultivation and fallowed, inherited fruit trees and other valuable trees (e.g. *tapang* tree), rubber gardens, and land cleared and trees planted by their parents during their lifetime. Thereafter, rights to farm the *tiboie'* is passed down to their direct descendants. Access to these resources and property rights continue to provide the necessities for the Bidayuh communities.

Fallow and farm land ownership

The practice of shifting cultivation by the Bidayuh pioneering ancestors began when they first settled in the upper reaches of the Sarawak River (see Minos, 2000). Hong (2015) noted that the Bijagoi settled on the summit of Mount Jagoi (Bung Jagoi) in the 1830s, after fleeing Bung Bratak – another mountain-top village settlement – from enemy attacks. Migrated from Sungkong mountain range in what we know today as west Kalimantan, they had lived around Bratak for about 500 years prior to that historical attack. The Bidayuh have always preferred swidden rice cultivation on the mountain slopes. When peace reigned, they gradually moved downhill from their mountain-top settlements. Some households began switching to wet rice cultivation, taking advantage of the swampy patches of lands around their village. The tasks in swidden rice cultivation are complex, strenuous and laborious. Mertz et al. (1999) said that hill rice farming involves traditional method of slash and burn, rotation of fields, and fallow periods. These activities are often referred to as 'swidden' cultivation and practices surrounding it are often dynamic and complex (Padoch et al., 1998; Mert et al., 2009; Cramb et al., 2009; Schmidt-Vogt et al., 2009; Van Vliet et al., 2013). The Bitringgus and Bijagoi swidden cultivators prefer to execute rotation of fields when there are plenty of lands. Chua (2009) said the Bidayuh rice farming consists a series of rituals held at various stages, which purpose is to invoke the blessings of rice spirits, as well as ancestors and other benevolent spirits residing in the surrounding mountains, rivers and jungles. Howes (1960) recorded 12 tasks based on the Bidayuh old *adat* (*adat omba*) that required rituals in each of swidden rice farming cycle beginning with choosing the farmland, clearing the undergrowth, felling, burning, clearing of debris, blessing the seeds, planting, blessing the young rice, weeding, blessing the rebuilt veranda, harvesting, and ends with the storing of paddy. There are four to five series of *adat gawea* performed by the Bitringgus and Bijagoi communities today – before felling the trees, after finished cultivating, before and after harvesting the paddy.

According to the Bidayuh farming *adat*, the selection of farm plots depends on the direction and sound of several omen birds, specifically the *kusa*, *kriak* and *asi*. Directions (left-right and front-back) of the bird's calls during the rice cultivation cycle signifies different meanings to the Bidayuh, whether it brings good luck or a warning to pre-existing dangers. Howes (1960) mentioned in his article that the

call of two bird species – *kusa* and *kriak* – are important to assure a good farm. If they first hear a *kusa* on their left, then *kusa* again on their right, and finally *kriak* on their right, the omen is good. Therefore, farming activities can proceed on that farming plot. Both Bitringgus and Bijagoi have similar practices relating to and interpretations of the omen birds.

The Bidayuh refer to the paddy field as *umoh*. Farming or use rights to the *umoh* are held by the individual household members through the inheritance system, transferred from their ancestors who first cleared the land. After harvesting, the *umoh* will often be left fallow for a certain period. Depending on the length of fallow, the same plot will be cultivated again in another cycle. During the fallow period, farmers would select another suitable area for their *umoh*. This method is said not only be able to restore soil fertility but fosters the regeneration of secondary forests (Lawrence, 2004).

The Bidayuh recognises three types of fallows. These are based on the length of the fallow period and vegetation types. An area that is left fallow for 1-15 years is known as *tiboie'*. There are two stages of fallow in *tiboie'*. The first stage is called *tiboie' bauh* (new fallow) which refers to an area that has a fallow period of 1-5 years. The second stage, *tiboie' omba* (old fallow), would be 5-10 years. Finally, a fallowed area of 10-15 years is called *damon*. During the early stages of *tiboie'*, the land will initially be covered by weeds and shrubs, before it gradually transforms into a secondary forest. A variety of food crops such as wild ferns, shoots, tubers, and fruits can be found in a *tiboie'*. When it becomes a *damon*, a secondary forest, it supplies essential resources such as timber for building materials, firewood, herbal medicines, and wild games. Sather (1990) stated that as long it remains a forest fallow with available resources, all the community members can exercise their access and use rights for foraging. Bitringgus and Bijagoi communities enforced similar rules and arrangements over the resources found in *tiboie'* and *damon*. Nevertheless, the rights to fell trees for timber is confined to the *damon* owners. Other resource users would have to seek for permissions from the owners to extract timber.

Apart from rice cultivation, the Bidayuh also plant food crops, cash crops, and fruit trees. *Ba'at* (farm plot boundaries) are traditionally demarcated using a stream, watershed, hill ridges (*keked* in Bidayuh), bamboo pegs, rattans and fruit trees, including *tibodak* (jackfruit) or trees with few branches (Freeman, 1970; Ngidang, 2003; Azima et al., 2015). This is to avoid disputes when the fruits from the trees fall to the adjacent lands. For the Bidayuh, *ba'at* are the physical evidences used to secure the owner's possession and rights to land. Farmlands cultivated with other subsistence crops such as corns, pineapples, vegetables, cocoa, and cash crops like rubber, pepper, and oil palm, are known as *toyak*. *Toyak* are usually privately owned by individual households. These households have rights to access, use and manage it for economic benefits and these rights will be passed on to their descendants. Another type of land for the Bitringgus and Bijagoi to subsist on is *lison*, which refers to orchards or fruit groves. *Lison* are often land planted with various local fruit trees likes durian, rambutan, *tibodak* and longan. *Lison* can either be individually or collectively owned.

Rules of access to communal forests

Most rural Bidayuh settlements in the Bau district are surrounded by forested areas. According to their *adat*, certain forested areas are reserved and sacred. The Bidayuh refers to the area of deep primary forests as *tu'uan*. *Tu'uan* is strictly a communal reserve and collectively managed by the villagers. This type of forested space has significant ecological and cultural values where trees such as the *kabang* (*Shorea macrophylla*), *taas* (*Eusideroxylon zwageri*) and *tapang* (*Koompassia excels*) can be found. Every household member has rights to access and use the *tu'uan* to gather forest produce, hunting animals and fishing. Among the Bidayuh, right to clear the *tu'uan* for the rice cultivation is exclusive to community members. The rights to cultivate it belong exclusively to the household members who are descended from the ancestor who pioneered and first cleared the forest.

Within the *tu'uan* there is another type of forested area considered sacred known as *obud*. This forest can either be a primary or secondary forest. *Obud* does not belong to an individual but rather managed by the community for the preservation of plants and animal species deemed useful to them and future generations. The *obud* is often located deep in the forest far from the village settlement. A large number of Bitringgus community still practicing the *adat omba* view the *obud* as a sacred forest inhabited *mud*

(forest spirits). Sacred sites among Bornean societies are often associated with spirits, as these spirits connect the community with their natural resources (see Wadley & Colfer, 2004). Any access to and extraction of forest produce, hunting wild animals, collecting rattan, felling of trees for timber from the *obud* is strictly prohibited unless permissions are obtained from the community. Once the permission is granted, the *bigawe* (ritual ceremonies) needs to be performed before entering the forest. This is to appease the forest spirits and mitigate possible spiritual or physical misfortunes. Some Bitringgus households are still attached to their beliefs in powerful spirits like *medur*, *komang* and *mud* that dwell in the deep forest. It is this belief that sustain the community's relationship with their environment and its resources. According to the Bitringgus belief, these spirits are said to oversee, protect and even punish whoever pollute or desecrate the forest. Conversely, the Bijagoi who are less attached to forest spirits simply regard the *obud* as their reserve forest where they conserve valuable trees such as the durian, *kabang*, *tapang*, and rattan.

The Bidayuh not only exercise their rights to the land and forest but also extend these to trees. Individuals may reserve wild but valuable trees such as the *tapang* if they first discover the tree. The *tapang* is valuable because bees build their nests and produce honey on this tree. In Chapter II, Section 46 (1) of the customary law states that every *tapang* tree is owned by an individual or a family (Majlis Adat Istiadat, 1994). According to Cramb (cf. Sather, 1990, pp. 31-32), claims to trees are created in two ways. First, the individual who first discovered the particular tree may mark their ownership over it. In some cases, like the Bitringgus, the *tapang* tree can be jointly owned by the individual and the co-founders who discovered the *tapang* together. Once claims to the trees are made on its first discovery, there are few ways to mark their ownership: by planting bamboo sticks around the tree, clearing the undergrowth at the base of the tree or by leaving a machete on the tree trunk. The honey collected from the *tapang* are then shared among the co-founders. No other person is allowed to collect the honey or honeycomb without prior consent from its owners. Whoever is found to breach this *adat* shall be fined three *pikul* which is equivalent to RM300.00 (Majlis Adat Istiadat, 1994) or can be subjected to the current prices of honey in the market. Hence, all the earnings gained from the *tapang* trees must be given back to the actual owner.

Second, the trees are planted. The exclusive rights to these trees are also extended to owner's household members. Due to the numbers of wild *tapang* trees have declined in the Jagoi forests, some members of the Bijagoi community planted the *tapang* with the aim to conserve them for their future generations. Information on tree ownership, which includes its location and rights to use the *tapang* trees, is orally passed down to the household members over many generations. Apart from *tapang* trees, some individuals in Jagoi and Tringgus are also known to plant other valuable trees like the ironwood and illipe nut trees. In reference to his own studies among the Saribas Iban on tree tenure, Sather (1990, p. 30) said "in addition to tracts of land over which felling is communally restricted, or ritually prohibited, tenure rights are also claimed in a variety of individual trees...both wild and planted".

Former settlement sites (*tembawang*)

In the past, after the establishment of a *kupuo*, the household members are given privileges to farm around their house compound called *rimbang-badag* (36 meters from the outside post of the main building) (Majlis Adat Istiadat, 1994). The household members typically planted all kinds of fruit trees and cash crops around the house compound. All the trees belong to the household of the original planter and to all of the descendants of that person (Cramb, 1989). Once an old settlement site is dismantled and abandoned, the old *rimbang-badag* no longer belongs to the original household members. It now belongs to everyone in the *kupuo*. As a result, this old abandoned settlement eventually transforms into a secondary forest, and among the Bidayuh this is known as *tembawang*. The *tembawang* are often rich with fruit trees like durian (*Durio zibethinus*), rambutan, langsung, mangosteen and *tibodak*. These fruit trees also define the personal and collective identities and histories of the community. Hence, the evidence of the Bitringgus occupying the *tembawang* at Sang, Matan, Plaman Wak, Plaman Pasoh and Sudoh, while Bijagoi had occupied Bung Jagoi, Tembawang Sauh, and Bung Bratak, can be determined by the existence of these old fruit trees. Individuals, particularly the elderly, living in Tringgus and Jagoi for most of their lives would be familiar with who planted the trees and the oral narratives surrounding the old fruit trees in the *tembawang*. Like any other type of secondary forest, the *tembawang* supplies

important sources for construction materials, food, handicrafts and ritual paraphernalia to the Bitringgus and Bijagoi communities. Therefore, the broader Jagoi and Tringgus landscapes are also defined by the existence of their *tembawang*.

Due to their shifting cultivation culture, the Bidayuh have traditionally migrated from one place to another in pursuit of fertile farmlands. Migrations of the Bitringgus and Bijagoi over many generations have left marks of their *tembawang*, *toyak*, *lison* and remains of old farm huts on their forested landscape. Over the years, especially during the British colonial period, the Bijagoi began to descend from Bung Jagoi and gradually established different settlements (*kupuo*) around the base of Mount Jagoi. Their descent, however, does not mean that they abandoned their *tembawang* at Mount Jagoi. Some Bijagoi households still tend to their fruit orchards (*lison*) and other crops at their *tembawang*. Similarly, the Bitringgus who moved down to their present settlement in the 1980s did not totally abandon their various *tembawang* in places like Plaman Wak, Sudoh, Sang or Matan. As long as the *tembawang* supports fruit trees and other valuable plants like rattan, the rights to these resources now belong to the community. For the Iban of the Paku region, Sather (1990, p. 26) stated that "...by maintaining the *tembawai* [*tembawang* in Bidayuh] a community's domain is not only historicised, but a knowledge of this history and the sequence of apartments in previous communities, serve as a practical aid to remembering and validating claims to what, in the case of fruit trees, are considered a significant household asset". Similarly, Peluso (1996) argues that access to these resources is influenced by more than economics or subsistence rights. It also serves a social, political, ritual purpose as well, representing kinship, power relations, and ritual harmony. For example, the Bitringgus' access to their *tembawang*, such as *durian* trees, reflects the kinship ties and provide a sense of belonging to the place after many generations. While household members are allowed to collect fruits from the *tembawang*, felling trees for timber, engaging in farming activities or building houses there are not permitted. Since the location of the *tembawang* is far from the present settlement in Tringgus, they would occasionally return to their *tembawang* during the fruit seasons. In contrast, the community's maintenance of *tembawang* forest in Jagoi is relatively more regular as they would clear the pathways and undergrowth of the area.

THE EVOLUTION OF PROPERTY RIGHTS

The evolution of property rights in Sarawak has come into effect through multiple legal procedures and policies in order to allocate access to resources and to define the range of rights to certain resources. Property rights are constantly evolving and quite often, this evolution is motivated by economic benefits (Demsetz, 2002). Furthermore, the connection between local communities and their natural resources is inextricable, although this relationship has increasingly shifted from communal property to private property rights. When property rights evolve, Quiggin (1988, p. 1075) argues that it involves the changes in the structure of property rights such as the creation of new rights, the abrogation or limitation of existing rights and changes from common to private property. Significant changes to such rights are often catalysed by state policies on land and natural resources. In the following sections, I outline how state policies on land titling programme, establishment of protected areas, and agricultural development have impacted the local customary arrangements in Jagoi and Tringgus.

Land titling programme

In recent years, land titling programmes have gained momentum in many rural areas of Sarawak. This involves formalization and registration of the local communities' rights to land. The World Bank has highlighted the importance of property rights and has supported and financed programs for the formalization of property rights and the creation of titling systems to secure such resource rights (Trebilcock & Veel, 2008). However, Hall et al. (2011) viewed land titling as one of four key forces propelling processes of exclusion from access to land, along with the market, the use or threat of force, and legitimation. A registered property gives the communities the rights to use assets, to exclude others, to transfer to others and to retain the rights from one generation to the next. The primary purpose of land titling is to formalize any type of existing property rights under tenure arrangement into private property. Following de Soto's arguments (in Trebilcock & Veel, 2008) land titling is perceived to be a necessary precondition for economic growth and development. In the context of Sarawak's state policies, land titling does not only secure property rights but also has the potential to maximise land

productivity through capital investment in land development projects. This is the core of private property ownership. Consequently, this concept of private property rights allows the individual or group to have the right to exclude others from using the resource and to regulate its use.

The present Torrens system in Sarawak was introduced during the Brooke era (1841-1946), consolidated by the British Crown Colony (1946-1963), and today, continues to enable the Sarawak state government to facilitate the registration of land titles (see Toh et. al., 2019). For native land titling, the creation of native customary rights (NCR) to land is given to the natives who cleared the customary land prior to 1st January 1958 (Fong, 2011). According to the Sarawak Land Code (1958), Native Customary Rights (NCR) is created through the felling of virgin jungle and the occupation of the land, the planting fruit trees on the land, the occupation or cultivation of land, the use of land for burial ground or shrine and the use of land of any class for rights of way. Based on this creation of NCR, the state initiated a programme to address the landowners' request for their native customary rights (NCR) lands to be surveyed and issued title incorporated under the Tenth Malaysia Plan (2011-2015). This they believed could ease the process of title deeds and documentation of communities' property rights. However, land titling exercises through boundary marking also function to exclude the rights of certain individuals or groups (Stead, 2017). The process is often costly, underpinned by a detailed survey of land boundary. In Sarawak, native land titling is awarded in few stages with reference to Section 5, 6 and 18 of Sarawak Land Code (1958). Upon the completion of surveying land boundaries and validation of Native Customary Right (NCR) lands, these lands then constitute a Native Communal Reserve. The next stage will be carried under Section 18 of Sarawak Land Code to continue surveying the individual lots to be issued land titles.

The landowners in Jagoi and Tringgus have made progress in this land titling programme. For the Bitringgus and Bijagoi, knowledge of land boundaries is narrated through oral history passed down from generation to generation. Following the local *adat* system, virtually all farmlands belong to Bitringgus and Bijagoi regardless whether it is fallow and cultivated. These farmlands have been under the process of being formalised into private property with title deeds. However, Cramb (2007, p. 134) asserted that disputes over boundaries are often unavoidable and remain contested in a time of rapid economic change and mounting population pressure. In such cases, the surveying of land boundaries will be halted if the landowners still have disputes either within the community members or with the state authorities concerning the boundaries. Land surveys will only continue after such disputes are resolved.

Bungo Range National Park

In many parts of the world today, modern states have increasingly alienated forested spaces by converting them into protected enclaves such as the establishment of national parks, wildlife sanctuaries and conservation areas (see Dowie, 2009). The Sarawak state government's ultimate goal is to allocate one million hectares of land as Totally Protected Areas (TPAs) and six million hectares of land as Permanent Forest Estate (PFEs) (Yusop, 2017). Legislation on forested areas falls under the Sarawak Forest Ordinance 1953 and other forestry-related laws like National Parks and Nature Reserve Ordinance 1998 and Wild Life Protection Ordinance 1998. The Sarawak Forestry Department is the government institution that oversees the implementation of Totally Protected Areas (e.g. national park, wildlife sanctuaries) and ensures the laws are regulated.

The state's constitutions of totally protected areas in Sarawak, however, tend to ignore or overlook local boundaries and indigenous practices within those boundaries in regard to their natural resources. In many cases, this has jeopardised the source of community livelihoods and their history to the area (see Dowie, 2009; Egay, 2010; Rubis & Theriault, 2020). This constitution of national parks under Section 19 of National Parks and Nature Reserves Ordinance (1998), which extinguishes the rights and privileges within the park, can be disastrous for the local communities. This includes any type of communal forests like the *tu'uan* and *tembawang* that falls under the boundaries of the national park or state forests, where local communities can easily lose access and control over their communal claim over natural resources. This often gives rise to endless disputes and overlapping rights between the communities and the state.

The Bungo Range National Park was established in February 2009 covering 8,096 hectares of forest area (Sarawak Forestry Department Website, 2020). Before declaring the official constitution of the national park, the authority would publish the notification of gazette of national park in a local newspaper circulating in Sarawak and display it at the local District Office. The gazette contains specific boundaries and the description of the land intended to be constituted as the national park. Within 60 days from the date of publishing the notification, the affected communities have to extinguish their rights to their land and submit their claims to the Regional Forests Officer (see Forest Ordinance Sarawak, 2015). The notification serves to inform the communities to cease their activities on wildlife hunting and gathering of the forest products within the gazetted area. Once gazetted, the state classifies and maps the area denoting the official boundaries in a cadastral system and communicate restrictions on activities within a territorial zone. Peluso (2005) said the territories are represented on the cadastral map and plays a central role in implementation and legitimation of territorial rules.

In 2013, Sarawak Forest Department has announced the proposed Bungo Range National Park Extension, which covers an area of approximately 3,572 hectares (Papau, 2014). Fifteen villages from the Krokong-Tringus area were affected from the proposed extension of national park. In a move to take possession of their native customary rights (NCR), they have written and submitted their claims to *tembawang* and *tu'uan* that were permitted under Section 12 of National Parks and Nature Reserves Ordinance 1988. Although Section 12 of the ordinance stipulated that such constitution should not affect the local communities' rights to resources, it is limited to certain resources for use and collection. As a consequence, the Bitringus were only granted to collect and hunt for forest products with condition of being subjected to product-specific regulations enlisted in the forest ordinance.

Bung Jagoi Heritage Site

Rampant logging activities and timber extractions over the years have destroyed the community's forest in Jagoi. To guard their forest from further destruction and exploitation of forest resources within community's territories, the Bijagoi initiated the idea of conserving their *tu'uan* and *tembawang*. About 526.6 hectares of forested areas in Jagoi have been demarcated for community forest area consisting of various type of communal forest includes *tembawang* and *tu'uan*. Nelson et al. (2015) stated the importance of community forestry to not only manage the community's dependency of its forest resources, but also preserve the community's indigenous knowledge and their rights to their resources. This would ensure a sustainable management of forest resources by the local community themselves. The Bijagoi participated in this community project that would secure their rights to their communal forests by engaging the various environmental non-governmental organisations (NGOs) and other local institutions (see Sarok & Britin, 2016). In 2007, the community established the Jagoi Area Development Committee (JADC) that manages their community forests.

To achieve this goal, one territory has been set aside by the community, where the forests are locally classified and its management enforced based on the Bijagoi rules and *adat*. According to Agrawal and Gibson (1999), within communities, individuals negotiate the use, management and conservation of resources. However, the distribution of access rights to this forest varies from village to village in Jagoi. Not all the Bijagoi are granted similar rights to access and use the resources in the communal forest. For instance, according to Sarok and Britin (2016), only the Bijagoi who reside in Duyoh and Pinomu villages are allowed to take forest produces in the communal forest, while the neighbouring Bijagoi villagers are allowed to access the forest as visitors. In ensuring their rights to communal forests are not threatened by rapid development around the Jagoi territories, the Jagoi Area Development Committee (JADC) applied to have their forests gazetted as 'native communal forest' from Land and Survey Department Sarawak. However, under the Sarawak Land Code 1958, forested areas that were not cleared prior to 1st January 1958 cannot be included in these communal rights. This means the Bijagoi's claims to their *tu'uan* forest purposely for hunting-gathering activities were considered to be null and void. As a result, the size of forested areas applied for native communal forest was reduced. This situation leaves the Bijagoi communal forest vulnerable to forest exploitation in the future.

Agrarian transformation and land development policies

As cash crop transition gained speed in the 1990s (Mertz et al., 2017), it rapidly replaced shifting cultivation in most rural areas of Sarawak. Cramb (2007) noted that by the 2000s, land use was dominated by the cultivation of perennial cash crops, notably pepper, rubber, and oil palm. Mertz et al. (2013) also argues that the practice of shifting cultivation was diminishing in some parts of Sarawak due to extensive conversion of swidden land into cash crop agriculture, driven Malaysia's economic development and land policies. More importantly, these economic and land policies have eroded the local community's common property arrangements especially in regard to fallow forests in shifting agriculture. These fallows have often been misinterpreted idle, unproductive, marginal or wasted lands (see Cooke, 2006; McCarthy & Cramb, 2009). The introduction of *in-situ* land development policies, often large-scale oil palm plantations through the joint-venture concept (JVC), by the Sarawak government have influenced landowners in rural areas to convert their fallow lands into so-called 'productive' lands. Landowners participating in the JVC is required to lease their land to the state's land development authorities for 60 years. In return, they will acquire 30 percent stake in the joint-venture company's share equity. Ten percent of the total equity belongs to the state government who act as a trustee, while the remaining 60 percent is owned by the investor (Ngidang, 2003).

A vast area of *tiboie'* and *damon* in Jagoi have been converted into oil palm plantation since the 2000s. In the early stages of development, dubbed as the 'Native Customary Land development areas', the policy may not seem to affect the legal ownership of land. But Cramb (1993) said that conflicts with the communities usually arise when the state failed to fulfil their pledge to issue individual land titles to the landowners within the first 25 years before deciding whether to renew or terminate their JVC agreement. Cramb and Sujang (2011) illustrates this problem occurring among the Iban communities along Lemanak River and Tinjar River in Sarawak. This situation is similar to the Bijagoi where the JVC landowners are not able to secure the titles for their lands.

Unlike in Jagoi, the landowners in Tringgus were less affected by the JVC. This is because the JVC consider the Tringgus land to be poor in terms of its soil quality and the steep terrain. Furthermore, conversion of forest into oil palm plantation more than a decade ago have significantly contributed to forest loss in Tringgus. For the Bitringgus, learning from this past experience, conversion of land into large-scale oil palm plantation is not a favourable option.

CONCLUSION

I have discussed several ramifications of transforming the local communal property by replacing it with the private and state property. The latter, as has been illustrated in this article, is a category where the state has access and rights to natural resources. Changes in this category of tenure system and the ensuing land policies regulating property rights have reduced the local communities' control over their natural resources. From the Jagoi and Tringgus examples above, this article shows how the local communities' indigenous tenure system is a viable mechanism in managing the common resource property without causing severe environmental degradations and disputes over lands. Several other studies in Sarawak mentioned in this article have also shown how customary rules that govern the community's common resources can ensure a sustainable management of resources. However, due to global economic pressures, top-down development policies, and political interests, local customs or *adat* relating to management of communal property is disintegrating in Sarawak. This article argued that we should not merely attribute the evolution of property rights to purely economic aspects of change. It is more relevant that this evolution process be examined by analysing the changes in the relationship between local communities and their surrounding natural resources.

From this study, we can identify a trend where the Bijagoi and Bitringgus tend to favour the private tenure system but only if it means this would secure their access rights to their lands. While other studies have focused primarily on the downside of privatising land rights, the Bitringgus and Bijagoi communities realise that privatisation in the form of land titling would be an effective solution to protect their access rights to resources. They realised that rights solely based on the identification of their *toyak*, *tiboie'*, *damon*, *tu'uan* and *tembawang* may not be adequate to meet today's economic and political

demands. It would be ideal if the state can incorporate local *adat* systems or indigenous tenure systems in their development and conservation policies to ensure a sustainable use of natural resources.

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