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Research paper



Family Story on Land-Related Tradition as Base for Land-Use Management and Sustainable Development: The Case of Indigenous Mentawai

Elfiondri[1*], Uning Pratimaratri[2], OslanAmril[3], Dibya Prayassita SR[4]

[1,3,4]Faculty of Humanities, Bung Hatta University, Indonesia
[2]Faculty of Law, Bung Hatta University, Indonesia
**Corresponding author E-mail: elfiondri@bunghatta.ac.id*

Abstract

Indonesian government is actively developing the indigenous villages of Mentawai. The development has brought social conflict over land and ineffective development due to the ignorance of the indigenous tradition on land. The indigenous people have a fanatically practiced tradition recorded in their family stories from which social norms on land are basically derived. Unfortunately, previous studies on the tradition in which there are rituals and taboos as the base for land-use management and development remains ignored and unexamined. The paper examines indigenous land-related tradition in village of Madobag Mentawai as basic social norms for indigenous land-use management and development. Its objectives are to identify indigenous social norms based on the tradition for possible land-use management and sustainable development. The study applies ethnography method based on theoretical approach of indigenous tradition and taboo on land. The result is that the indigenous people have a number of land-related traditions in which it is found rituals, taboos, sacred sites, and food, medical and ritual plants, plants for traditional home and canoe, and culturally important hunting area. The traditions include indigenous land-ownership, land-use for the indigenous, land-use for outsiders, and land-use for development. The traditions are social norms which should be seriously considered as base for land-use management and sustainable development. They can be as effective base for indigenous land-use management and development policy in using the land, solving social conflict over land, keeping social harmony, making policy on development, conserving environment and forest, and preserving indigenous Mentawai culture.

Keywords: *Family Story, Land-Related Tradition, Land-Use Management, Social Norm.*

1. Introduction

Indonesian government is actively developing the indigenous villages of Mentawai, an exotic Island off Padang, Indonesia. The development has infringed the indigenous social norms on land (1-2). It also has caused social disharmony – psychologically social anger, conflict over land and ineffective development due to the infringement on tradition and taboo on the land-use (3). Land is the most important asset due to the functions the land provides (4). The indigenous people of Mentawai have a system of land-ownership based on their tradition recorded in family story (1,5-6).They have land traditionally based on first occupation and claim on a plot of unoccupied and unclaimed land (5). It is the way of the indigenous people to traditionally own the land (7).The traditionally owned land is in accordance with the traditions and customs which are the indigenous rights (8). Ignorance of the indigenous right may $_{\text{cause}}$ a conflict over the land (9). Thus, indigenous land-use management should be based on the traditional land-ownership system. The system can be traced through historical development of the land use (10); while the indigenous life story can be drawn through the land-use (11).

In Mentawai, historical development of territorial configuration of the land can be drawn through oral tradition from family stories (1,5-6). Family stories can explain sacred natural sites with rituals and taboo which can be used as traditional land management (12).The tradition also can facilitate environmental management in village(13-14). A study by Tulius (5) is the only research on Mentawaians indigenous land based on oral tradition. Unfortunately, Tulius (5) did not include traditional rituals and taboos as social norms for land-use management and development. Tulius' study on Mentawaian land is limited to family stories on contemporary conflict over land by taking the case of Saibi Muara and Maileppet with focus on land-ownership based on phases of ownership regardless of land ritual and taboo.

The study on land-related tradition as the base for land-use management and sustainable development in indigenous Mentawai culture remains ignored and unexamined. This paper examines indigenous land-related tradition and taboo as social norms of indigenous land-use management through family story in the indigenous village of Madobag, Mentawai. The objectives are to formulate indigenous Madobag's tradition and taboo on land matters in order to identify the traditional way to own the land based on its rituals and taboo for a possible land-use management. Management of the indigenous land-use should include traditional rituals and taboo on land, because the indigenous have a number of traditional rituals with taboo on land-ownership and land-use which are significantly important for land-use management.

2. Literature Review

Tradition contains aspect of beliefs, knowledge and values which a community practices to shape the way the community under-

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stands and interprets their world (15). It is important to consider the traditional aspects in development attempts in order to avoid failure in development (15). According to Heinapuu (12), indigenous people have tradition on land matters in the form of sacred natural sites, such as sacred hills, trees, groves, rivers, and springs in which supernatural entities abide, taboos and restrictions are performed by society. The indigenous belief in the sacred sites is associated with religion (16). The sites imply life of supernatural entities which have forces from which taboos and restrictions on people's activities and attitude are derived; the belief leads the people to make social norms to protect and not to disturb the sacred sites (12).

The social norm firstly is realized in the form of suggestion, and then leads to a-must-norm (taboo) in order to avoid supernatural anger. The belief in turn leads the people to communicate with the supernatural spirits by performing rituals at the sacred natural sites and obeying taboos (12,17)and other norms in order to avoid the supernatural anger in the form of disease, death, or other misfortunes (12). In order to live in harmony with the supernatural spirits, rituals are performed. The rituals are regularly performed in various forms, i.e. repeated ones like giving thanks, and irregular ones for misfortunes in addition to village festivals held on the lands of sacred sites like hills, groves or other designated sites (12). The belief is a tradition which the indigenous people practice in their life. Therefore, tradition in which there are rituals and taboos is social norm which is importantly considered in land-use management. Ignoring the tradition in traditional land-use may bring a serious social conflict and ineffective development (5). The ignorance of tradition in using the traditional land may cause serious social and environmental conflicts (5,10).

One of factors which cause conflicts over the land is mastering of the nature (4). In Mentawai, conflict over the land is related to master of the nature (land). The land in Mentawai is owned traditionally through master of the land based on the first claim on plot of unoccupied land in the forest (see also Tulius (5). Local knowledge can be used to track an occurrence of clans firstly claiming the land (18). In this respect, the occurrence of land masters of indigenous Mentawai can be tracked in oral tradition through family stories (see also Tulius (5). The family stories are latent sources to know tradition on land-ownership in Mentawai (19). Land ownership of indigenous people is communal (5,19-20).Tradition of land-ownership in Mentawai culture starts from exploring the forest, claiming the territory of the unoccupied land, marking the land, delineating the land, naming the land, and strengthening the land, making agreement on the land, and remembering the agreement (5).Indigenous people use their land traditionally for herding, hunting, fishing (21), farming, compensation of death revenge, fine, bride-price, sold land, and awarded land (5; 19). The indigenous land as the case of Mentawai may be used for five development sectors like housing and residence, infrastructure, productive economy, government, and social sector (22). The indigenous land can also be used by outsiders in accordance with indigenous tradition (19).

Indigenous tradition can be a base for indigenous land management. Indigenous land tenure is characterized by land that is generation-to-generation asset, the land is managed on different levels of the social structure, and it is used in tradition-need ways (20). Indigenous peoples have shown themselves capable of adapting their tradition to manage their land (23). Sacred natural sites with rituals and taboo are parts of tradition which can be used as land management (12).Tradition also can be used to manage the environment in villages (13-14). In the case of indigenous Mentawaian villages, land management should be based on oral tradition of family story (5). Tradition contains local knowledge which is effective for land-use management to solve conflict over land (5,12,24-25). According to Liao (13), the knowledge can be as the basis for adaptive environmental management. Based on the literature review, it may be concluded that tradition can be as an effective base for indigenous land-use management and development. Tradition is indigenous social norm which can be known through oral tradition or family stories.

3. Methods

The study on land-related issues applies ethnographical method with qualitative approach. The method is cyclical, i.e. the observation, interview and interpreting works back and forth in field work (26). Data of the study, information on Mentawaians' land-related tradition are recorded in family stories. The tradition is known much by *Rimmata* and *Sikerei* (5,27-29). *Sikerei* is a magician leading traditional rituals and festivals. *Rimatta* is a leader of a traditional house, *Uma*.They are the key informants of the study supported by head of sub-village and clan members as supporting informants (Table 1.). Field work was held inindigenous village of Madobag located in the district of South Siberut, West Sumatera, Indonesia(Figure 1.). The village is chosen as it is the most populous indigenous village in the sub-district(30), and its people still strongly practice their tradition (28).

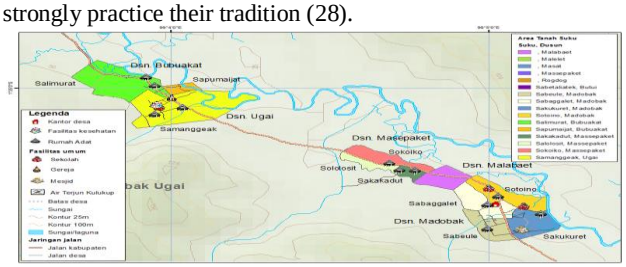


Figure 1. Map of Research Location

3.1 Participants

Table 1. Distribution of Informants

Informants	Sex		Religion		Informant number
	Male	Female	Christianity	Islam	
Sikerei	8	0	8	0	8
Rimatta	8	0	8	0	8
Head of Sub-village	4	0	4	0	4
Members of clan	33	22	44	11	55
Total number					75

3.2 Data Collection

The study uses secondary and primary data. Method of collecting secondary data is library research on the range of information on land-related tradition already existing on journals and books. Primary data are collected using the ethnographic method of participant observation and interview through field work based on recommendations by Spradley (31) and (26). Observation is closely related to the sense of sight which is "a highly charged data-collecting instrument" (26). Observation begins with descriptive observation with which ethnographers (researchers) enter the field and ask question to record as much information as possible (31). According to Whitehead (26), the information gained through the method is general, so that it needs method of natural inquiries to have more specific information with the instrument of the questions, *what*, *who*, *how*, *where*, *when* and *why* to be used in interview.

3.3 Data Analysis

Analysis begins with domains analysis which in this study is land-related tradition. The structure of the domain is analyzed by developing questions based on Spradley's nine semantic relationships (Table 2). The domain analysis results in the general description of the land-related tradition. The next step of analysis comes to classifying the structure of the domain in detail by way of taxonomy analysis. Result of the taxonomy analysis is a description of the land-related tradition in the form of kinds of tradition indicated by DLRT 1, 2 and 3 (Figure 2). In order to have a more specific and detailed description, the analysis goes to com-

ponential analysis – making similarities and differences of the components of the land-related tradition. The analysis produces componential parts and groups of the same and different components. The same components are posited under the same domain; while the different ones are under different domain (Figure 2).Analysis is then held on cultural theme analysis that is by searching relationship among the domains and a whole relationship.

Table 2. Model of Domain Analysis of Land-Related Tradition

Semantic Relations	Example of Questions to Explore the Domain	Example of Relationship Based on the Land-Related Domain
Strict inclusion	X is kind of Y	Rituals with taboo are kinds of land-related tradition.
Spatial	X is a place in Y, Y is a part of Y	Sacred site is taboo on the land.
Cause-effect	X is a result of Y, X is cause of Y	It results from indigenous belief in spirits.
Rationale	X is a reason for doing Y	Spirits is the reason for practicing ritual.
Function	X is a place for doing Y	The ritual is to live in harmony with spirit.
Means-end	X is a way to do Y	Claiming a plot of land is a way to own a land.
Sequence	X is a step (stage) in Y	Practicing ritual is step to own the land.
Attribution	X is an attribute of Y	Sacred tree is an attribution of land-taboo.

Figure 2. (See Annexure A)

4. Results and Discussion

The indigenous Mentawaians have a tradition on land which includes land-ownership, rituals, taboos, and sacred sites each of which is discussed respectively in the paper. Mentawaians practice the tradition as a traditionally recognized base to own and to use a plot of land legally. The tradition is social norm is a base for indigenous land-use management and sustainable development on Mentawai.

3.1 Land-Ownership

Indigenous people of Mentawai have a strong tradition on land which becomes the indigenous social norm on land-management. Mentawaian land-use management involved tradition of spiritual practice. It is similar to that of Estonian society (12) and Warlpiri society (32). In Mentawai, the land-ownership is based on the first claim and occupancy on the land. Tulius (5) also found that Mentawaian land-ownership system is that first groups who claim a plot of land are considered to own the land. Nederland (33) society of Brazilian Amazon society (7) own a plot of land in similar system. In line with it, Gans (34), and Murphy (1990) in (33) call the ownership politically as 'historical right' referring to the right to own the land because of first occupancy. The indigenous historical right as in the case of Aborigines can be tracked through their food-hunting areas (14).In Mentawaian tradition, clans get the land by way of exploring jungle through ritual process of traditionally legal ownership cf. (5).

The process of owning the land in Mentawai is based on the animism belief that everything on the earth has spirit cf. (6).The belief of animism is derived from an ancient religion of Mentawai so-called *Aratsabulungan*. Even though at present Mentawaians have the newly-worshiped religions of Christianity and Islam, they keep practicing fanatically their ancient belief which until now shapes their concept on land. It is almost similar to that of Bhutan people's belief that spirits inhabit the land (Himalaya), and it shapes their concept on and interaction with the land as derived from a blend of Animism, Bön, and Vajrayana Buddhism (17). In accordance with Karmay (35) and Dalton (2011) in Allison (17), Bön is an ancient religion of the Himalayas and Tibetan plateau that recognizesdeities of the landscape and hidden spiritual treasures called*terma*. Indigenous Mentawaians recognize spirit inhabiting landscape (jungle) called *taikaleleu*.

Based on their belief, Mentawaians consider plants, animals, and other dead objects are the same as human. Like human, they have feeling, emotion, expression, pride, self-concept, soul, and others. They can be angry, sad, happy, and friendly. Even though they look unmovable physically, they have spirit which can move easily like human; and the spirits and human beings connect each other. Mentawaians' recognition on the spirit is almost the same as that of Druid and Torajan community. The Druid community views that "their community as inclusive of 'nature spirits'—the spirits of plants stones, animals, places, and natural forces" (36).Similarly, theToraja people in Indonesia believe the spirit as invisible realms which have relationship with visible realisms (37). Tulius (5) found nine phases of Mentawaian land-ownership. The researchers found it necessary to add two other phases to those of by Tulius as indicated at Table 3.

Table 3. Tradition of Land-Ownership

Phase Number	Steps of Ownership System
First Phase	Passing through unoccupied and unclaimed land in the forest, making paths through forests, crossing rivers, moving further over the hills, and sailing over islands
Second Phase	Claiming territory of unoccupied and unclaimed land
Third Phase	Marking the claimed plot of land by chopping down trees (*saggri*), clearing the forest the land (*siau*), and leaving mark on the area they pass through (*batik*).
Fourth Phase	Delineating the claimed land by referring to topographical features like rivers, slopes, mountaintops, and entire hills
Fifth Phase	Naming the claimed land by referring to its surrounding characteristics features of landscape, and to a particular event.
Sixth Phase	Strengthening the claimed territory (land) by clearing and planting with a variety of fruit-bearing trees like durian trees, jackfruits, mangoes, and *rambutan*
Seventh Phase	Making agreement on borders and positions of the claimed land which is recorded in family stories
Ninth Phase	Remembering the agreement correctly and maintaining it properly.
Tenth Phase	The agreement is remembered and maintained mentally by *Rimata* and magicians (*Sikerei*)
Eleventh Phase	The agreement is transferred to the next generation

3.2 Rituals and Taboo of Land-Ownership

Process of land-ownership must be done some rituals in which there are obligations and taboos (restriction) to be practiced by the clans. The first one is ritual permission through which Mentawains ask for permission to spirit living in the jungle on which a plot of land they will own. Rudito (1999) found the spirit inhabiting in jungle in Mentawaian belief is called *taikaleleu*. Other indigenous people who have such belief are some Himalayan nation of Bhutan (17), Warlpiri (32) and Estonian community (12). The ritual is performed with presentation of certain tributes (or gifts) which consist of scoop-net (*subba*), beads (*ngalo*), cloth (*baiju*), arrow (*roro*), lobster (*iba*), and cigarette (*ubek*). In the jungle, they place the tribute somewhere on a piece ofland on which they will live. Usually they choose the land nearby a river. While placing the tribute, they pray by saying permissive words containing permission to cut trees, to farm, to build house, to hunt, to plant, and to fish. They give the tribute to *taikaleleu*, a spirit inhabiting the jungle, and call it in magical words.The tribute generally means permission. Scoop-net means appealing in order that indigenous wives can fish with scoop-net in the river on the land. The indigenous people give the spirits cloth and bead to make them have clothes and be beautiful like them (the indigenous people). The people want to have a long life like lobster which can have skin changed to be young. The arrow means being able to hunt for their food, while cigarette is for self-introduction.

The ritual permission then is continued with ritual of land-purification as the second ritual of land-ownership. The land is purified by using watery leaves deriving from *simmakainau*

leaves. The watery leaves are spattered onto the land to purify it from the bad spirits which will offend. The next one is doing small festival at which the indigenous people sacrifice animal. As also practiced by Torajan people, they sacrifice animal as attribute in the funeral rite (37). Mentawaians collectively sacrifice a chicken. They pull two pieces of chicken furthers to feed the jungle-living spirit, while the chicken body is to feed the indigenous people. Thus, the tribute means festival for the indigenous and the spirits. The last process is that the indigenous people take charcoal and put it on the land while saying magical words containing a statement, "the permission-festival is finished, please do not offend us, and we will not offend you". The festival legalizes the land belonging to the people. The land is traditionally legal owned by their clan.

They mark it by building a long and big house so-called *Uma* and plant durian trees, and feel free to cultivate the land, to fish, to hunt, to cut the trees, to build house, to make canoe, to a bath or swim in the river. The clan gives name to the land based on the river like *Sarereket*, a river on which the clan lives belonging to the clan of *Sarereket*. It is the way of owning the land in the indigenous culture. Thus, those who do it become the legal owners of the land traditionally.

Table 4. Rituals of Land-Ownership

Ritual	Ritual Accessory / Tribute	Accessory Meaning	Sanction of Ignorance	Function
Permissive Ritual	Scoop-net, beads, cloth, arrow, lobster, and cigarette	Scoop-net: Wives and daughters can fish	Natural disaster	Respecting & appreciating spirits living on the land (forest)
Purification of the land	*Simmakainu* leaves.	Cloth: in order that the spirits have cloth	Decease	Thanking to the spirits of the land (forest)
Permission Party	Chicken	Beads: in order to make the spirits beautiful like human		Asking for permission to cut the trees, to farm, build house, to hunt, to plant, and to fish.
		Lobsters: in order that the indigenous have a long life like lobster	Death	Traditionally legal recognition of land-ownership
		Arrow means that the indigenous are able to hunt for food	Social conflict over the land among indigenous	Avoiding spiritual curse
		Cigarette means self-introduction	Cultural destruction	Keeping social harmony
		Simmakainu leaves: to purify the land from the bad spirits	Social conflict with outsider & government	Preserving indigenous culture
		Chicken (symbolized by two pieces of fur) is presented to the spirit for party	Ineffective development	Avoiding social conflict over land
		Chicken means party for the indigenous		Getting permission of using the land and every things on it for life
		Chicken means: The indigenous and the spirit have party each other.		Keeping sustainable development

It is taboo for the indigenous people to use and cultivate the land regardless of the rituals. Clans who do not do the rituals before occupying and using a plot of land are considered not respect the land-living spirits. The clans will be cursed by the spirits, and the spirits will offend them so that they will get misfortune like decease and other disasters, and even they can die. The curse like natural disaster can also offend village and all villagers living it, so that the villagers will also get angry with the clans who ignore the rituals. Thus the ritualistic permission is practiced to avoid misfortunes imposed on them. In Buddhism, such practice is to seek to release all sentient beings from suffering (17).

The next norm for land management is the norm on land-ownership. Land-ownership in indigenous culture is based on the first land-cultivating clan. The first clan who cultivate a land in the forest becomes the owner of the land. In order to have a traditionally legal land, clans must follow and obey the norm based on the tradition – do permissive ritual followed by land-ownership-sign that is by planting durian trees. Clans disobeying the tradition will not get legally recognized land-ownership. It is traditionally illegal for the clans to have the land and to do the activities on the land like building house, cutting trees, farming, breeding, hunting, swimming, fishing, and other activities. The use of the traditional land by other clans, immigrants, government, and other parties, including the issue of land-ownership certificate by government should be managed based on the indigenous social norm.

3.3 Sacred Sites as Taboo on Traditional Land

Another social norm for land-use management which is important to be considered is taboo on land. Indigenous people have the lands with sacred sites (12,17,32,38). The sacred sites on Mentawaihave sacred plants grown on the land. The most sacred tree is durian which is used for*takep* and *kirekat* of the dead bodies as well as having traditional function as the land-sign. *Takep* is a carving of figure of the hand and leg of the dead bodies on the big durian stalk belonging to their clan. The *kirekat* (the height of the dead body) is also carved on the stalk of durian tree. To make *takep* and *kirekat*, two durian trees are needed; a selected durian which has dense of fruit is for *takep* and *kirekat*, while another durian is to be chopped down so-called *usut* in Mentawi language. *Usut* will be decayed and may not be used. Those who use *usut* will be traditionally fined (*tulou*).

The carved durian trees are highly respected by planting a flower near them while expressing magic words which contain permission and respect addressed to the spirit of the durians. The indigenous people believe that the flower must be plantedasa symbol of respect to the spirit of the dead body. Unless the spirit will get angry with family members living in the *uma*, house. The fallen and the *kirekat-takep*-carved durian trees as well as the spirit-respecting flower are highly protected. Even though they are almost like gravestones and not indigenous graves, but it is a taboo, strictly forbidden to ruin and destroy. The flower and the carved durian cannot even be stepped, removed and chopped down.

The tradition is social norm which must be seriously consideredas reference of land-use management. The ignorance of the social norm in land-use management can cause serious conflict which can lead to the worst form of murder by the clan owing the death-symbolizing durians and flower. The ignorance like stepping or chopping down the death-flower (Figure 3)and chopping down the durian tree of sacred *takep* (Figure 4) and *kirekat* (Figure 5) can meandestroying indigenous gravestone. However, it does not mean that the durians and flowers cannot be chopped down due to the development. The sacred plants can be chopped down based on the owner's approval with certain conditions like compensation.

(See Annexure B)

Besides the sacred plants, there are also other plants which are culturally important like sago as food stuff and other plants for food, traditional medicines, and for rituals. Even though the plants are not sacred, the indigenous people usually protect them. The indigenous traditions on land are social norms on which the land-use management should be based in order to keep social harmony and sustainable development on indigenous Mentawai. The tradition-based management can also be applied to solve the indigenous social conflict over land. Besides that, the indigenous people have norms on traditional lands to be used by government for development as pictured at following table 5.

Table 5. Indigenous Social Norms of Land-Use

Public Use (Development)		Indigenous Clans	Immigrant	Taboo and Re-striction
Development Sector	Conditions		Conditions	
Residence	Rental	Animal farm,	Rental	Sacred grove
Infrastructure	Exchange	Traditional Residence (*Uma*, *Lalep*). Fine	Exchange Compensa-tion Purchase Use for free**	Sacred river Sacred plants Sacred sites Ritual plants
Social Sec-tors: Schools, hospitals Church, Mosque, and etc. Economical-ly productive areas.	Compensa-tion Purchase Use for free*	Bride price Compensa-tion of Revenge. Hunting ground. Head-hunting area.		Medical plants Food-stuff plants * For public use only (not for busi-ness) Sacred land/area.
Inter Sector: Government facilities: offices, Banks, etc.		Farming Rice-Field Awarded land		**Use only – cannot be sold.

The Mentawian tradition is the social norm which should be seriously considered as the way to manage the indigenous traditional land-use of Mentawai. As found by previous researchers, tradition can beused to manage land (12) and to manage environment (13-14).In Mentawai, tradition recoded in family story can be used to solve conflict over land-use (5). Thus tradition is social norm to which the use and management of traditional land should be referred. Those who want to use the indigenous land of Mentawai including the government should refer to the social norm in order to avoid social conflict and to keep sustainable development.The tradition are social norms which can be an effective base for possible friendly pattern of indigenous land-use management and development policy. The norms are considered effectively to be applied to manage the land, solve social conflict over land, keep social harmony, make policy on development of indigenous Mentawai, protect and conserve environment and forest, and to preserve indigenous Mentawai culture. The pattern of land-use management and development policy is presented in the following figure 6.

(See Annexure C)

5. Conclusion and Recommendation

Land-use management based on tradition is an important pattern which should be followed in managing the indigenous land in the village of Madobag specifically and in Mentawai generally. Practically, the pattern begins by formulating social norms on land-use management. The social norms can be formulated by doing discussion on land-use for development or for other uses with chief clans. The chief clans based on their family story tell tradition on land, from which it will get traditional rule, ritual, taboo and restrictions, land ownership, land-use, land-owner, land location, and conditions of using the indigenous land. Government and other parties which will use the indigenous land should follow the pattern in order to create social harmony, solve social conflict over land, and achieve effective development. The pattern is a socially and culturally safe, possible management of indigenous land. For further research, it is importantly recommended to conduct a research on mapping of indigenous lands which will result in physical map of indigenous lands. Government and other parties involving in land-use of Mentawai greatly need the map due to that Mentawaians do not have the map. They only have mental map of lands – map based on their oral family story. The mental map is potentially risky to cause social conflict due to limitation to remembering stories related to land.

6. Conflict of Interest

The paper does not contain any conflict.

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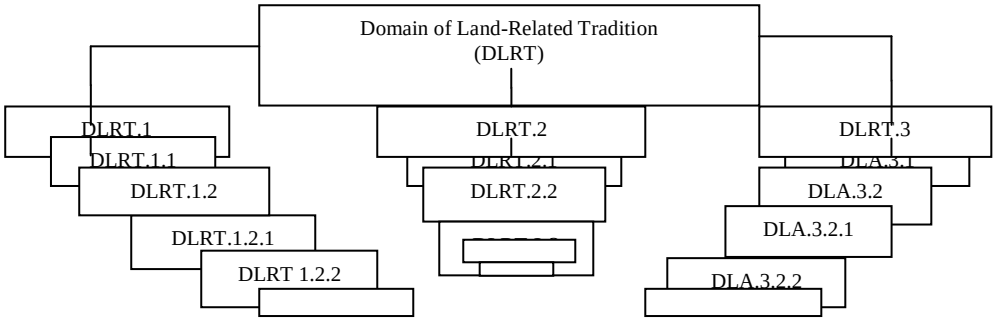
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Annexure A



Annexu



Figure 3 (Sacred death-flower near sacred durian tree)



Figure 4. (Sacred Takep)



Figure 5. (Sacred Kirekat on durian tree)

Figure 2.

Annexure C

Figure 6. Indigenous Land-Use Management

