

**Traditional Knowledge  
for Ecosystem Services in ASEAN Countries –  
Folk Culture: Proverbs, Old Sayings and Community Rules**

2–4 Mac 2016  
Kuala Lumpur, Malaysia

# **EXTENDED ABSTRACTS**



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## CONTENTS

<b>Acknowledgements</b>	<b>1</b>
<b>Workshop Report</b>	<b>2</b>
<b>Efforts of Dayak Punan Adiu Customary Community Protecting Their Legacy</b> <i>Ellyn K. Damayanti, Andi F. Yahya, Doni Tiaka and Boro S. Nikolaus</i>	<b>6</b>
<b>Nature Philosophy of Minangkabau Ethnic in West Sumatera, Indonesia</b> <i>Ervizal A.M. Zuhud</i>	<b>18</b>
<b>Protocol to Survey Proverbs, Old Sayings and Community Rules Related to Ecosystem Services in ASEAN Countries</b> <i>Junghyun Hong, Chan-Ryul Park and Yujin Shin</i>	<b>22</b>
<b>How to Map the Tangible Resources of Cultural Ecosystem Services in ASEAN Countries?</b> <i>Yujin Shin, Chan Ryul Park, Jung Hyun Hong and Kyongha Kim</i>	<b>28</b>
<b>Interacting with the Forests: The General Values of the Orang Asli in Peninsular Malaysia</b> <i>Lim Hin Fui, Norya Abas and Norshakila Yusof</i>	<b>37</b>
<b>A Study on the Traditional Beliefs and Practices on the Agricultural Land, Forest Resources, River Resources and Conservation by the Dusun People in Tambunan District, Sabah, Malaysia</b> <i>Julius Kulip</i>	<b>44</b>
<b>Documentation of Folk Culture of Selected Indigenous Communities in the Philippines: An Initial Assessment</b> <i>Antonio M. Dano, Karen Rae M. Fortus and Donnabel Elpedes</i>	<b>60</b>
<b>Customary Laws and Old Sayings in Relation to Forest Management of Thai Group in Viet Nam</b> <i>Pham Duc Chien and Bui Trong Thuy</i>	<b>66</b>
<b>Appendix A</b> List of Participants	<b>74</b>
<b>Appendix B</b> Workshop Programme	<b>76</b>



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We are also indebted to several colleagues from NIFoS including Dr Kim Kyongha, Director General, Forest Ecology Division, NIFoS, and also the Secretary General of the Asian Centre for Traditional Forest Knowledge (ACTFOK), who had provided guidance and valuable suggestions for organizing this fruitful workshop.

# Workshop Report

## Introduction

The very diverse types of forests, typical for tropical and sub-tropical countries, in Southeast Asia, have been providing various different types of ecosystem services. Likewise, there are many indigenous groups that have been residing in and around these forests, with diverse culture and rich traditional knowledge. Many of the traditional knowledge directly or indirectly contributing to sustaining the various ecosystem services which are crucial to their livelihood and wellbeing.

Prompted by encouraging early results from questionnaire surveys conducted in Korea to document traditional knowledge related to ecosystem services, the National Institute of Forest Science (NIFoS, formerly known Korea Forest Research Institute (KFRI)) has contacted the Asia Pacific Association of Forestry Research Institutions (APAFRI) to engage other Asian countries in this initiative. Five countries: Cambodia, Indonesia, Malaysia, Philippines and Vietnam, participated in this initiative. The outputs were presented during a workshop convened in Kuala Lumpur, 2–4 February 2015.

The undertakings to document traditional knowledge related to ecosystem services have stirred up much interest. Many more similar knowledge, some may have been long forgotten, could still be relevant to the present days, warrant detailed study and proper documentation. These traditional knowledge, more often than not, are being passed down the generations by words of mouth, often then in the form of proverbs, poems, folk tales, or songs. Some have since time immemorial, been encrypted into rituals, customary practices, or even community rules and regulations.

The National Institute of Forest Science had initiated a project documenting and analyzing old sayings and proverbs related to ecosystem services in Korea. NIFoS is interested to extend this project to cover other countries in Asia Pacific region, especially in Southeast Asia.

## The workshop objectives, programme and participants

A workshop was organized in Kuala Lumpur, Malaysia, 2–4 March 2016, to share the experiences of collecting and documenting old sayings and proverbs, including rituals and community rules and regulations, related to ecosystem services. This workshop, organized by APAFRI, in collaboration with FRIM, was supported by the contributions of NIFoS to APAFRI.

The three-day workshop with seven presentations from Indonesia, Korea, Malaysia (Peninsular Malaysia and Sabah), the Philippines, and Vietnam, also included a day-long field trip to an *Orang Asli* (Indigenous People) community near Lake Bera, about 160 km from Kuala Lumpur. The detailed programme is as in Appendix A, and the list of participants is appended as Appendix B.



### Presentations and discussions

The workshop was jointly opened officially by Dr Kim Kyongha, newly appointed Director General, Forest Ecology Division, NIFoS; and Dr Abd Latif Mohmod, Director General Forest Research Institute Malaysia. Dr Kim also assumed the position as the Secretary General of the Asia Center for Traditional Forest-related Knowledge, currently hosted by NIFoS.



There were a total of seven presentations by the colleagues from Korea, and the four SEA countries: Indonesia, Malaysia, Philippines and Vietnam. Their presentations summarized the results of studies/surveys, focusing on collecting and interpreting proverbs, old sayings, rituals and community rules, from various indigenous communities in their countries. Various challenges and hurdles encountered due to the complexity of the indigenous peoples in these countries. Very often, the meanings and context/contents had been distorted and twisted over time. However, there is a general agreement that many of the old sayings and rituals provided important guidance to these people in the sustainable utilization of the ecosystem services in ways that they themselves are not aware.

The discussions after the presentations had concluded that:

- The presenters shall submit extended abstracts (of length of about five pages) to be compiled and published as proceedings for this workshop. APAFRI would format and go through the drafts submitted, and suggest improvements wherever necessary. The deadline for submitting the draft shall be end May, and the proceedings shall be printed by end of June 2016.
- APAFRI, building from the proposed protocol of Ms Hong Junghyun, would draft a proposal for conducting surveys in Indonesia, Malaysia (Sabah and Pen Malaysia), the Philippines, and Vietnam; on documenting proverbs, old sayings, community rules and regulations of Indigenous Peoples. The proposal would be sent to all Focal Persons before end April 2016. The survey will need to be completed with a report by end December 2016.

In the afternoon, Ms Shin Yujin of NIFoS presented a proposal to map cultural sites (historical, religious, sacred, ritual) as a means of documenting cultural component of the ecosystem services. NIFoS would like to propose that this would be the activity for the participating ASEAN countries in 2017. The participants had generally agreed that this could be a good project, and would discuss further probably in early 2017.



Dr Park Chan Ryul started the second day of the workshop off with a presentation outlining the current status of TFK research in ASEAN. He then continued to discuss a number of activities which NIFoS would like colleagues in ASEAN to work on for the next few years: mapping of cultural services; resilience of indigenous communities to natural disasters. All these would cumulate to the launching of an Asian Initiative of TFK in 2019.

Dr Park would also like all the participating countries: Indonesia, Malaysia (Sabah and Pen. Malaysia), the Philippines, and Vietnam, to send him the raw data collected during the survey conducted in 2014. These data would be used for a comparative study which would be reported as a peer-reviewed paper.

In closing the workshop, an agreement was signed between NIFoS represented by Dr Kim Kyongha, and APAFRI, represented by Dr Gan Kee Seng, the Executive Secretary of APAFRI. The agreement reaffirms the commitment of NIFoS in supporting TFK research in ASEAN countries, to be coordinated by APAFRI.

## Field trip



The participants then traveled out of Kuala Lumpur, eastwards towards the Main Mountain Range of the Peninsular Malaysia and visited indigenous people settlements near the Lake Bera, a large fresh water lake and a RAMSAR site established in 1994. Villages around the lake were regrouped in 1980s under the government regroupment scheme (known as RPS Iskandar) now with an estimated population of 2,500 people. In this regroupment scheme, various basic facilities such as government administrative office, primary school, rural clinic, community hall, play ground, electricity and pipe water supply were provided. Lake Bera has provided crucial livelihoods to the Indigenous People *Semelai*, settled around the lake. The *Semelai* at Lake Bera was traditionally a forest-dependent community. Since 1950s, the community began to plant rubber which is now the major source of cash income. Rubber is planted with own initiative and also assistance from the government. In recent years, some smallholders began to replace rubber with oil palm.



Regroupment of villages has transformed the traditional forest-dependent *Semelai* community. The community does maintained some traditional crafts: wooded handicrafts from trees around the villages, and also weaving using the tall, thorny leaves of the *pandanus* or *mengkuang* (*Pandanus spp.*) into colorful gift boxes, mats, beach bags, hats, fans, purses, and slippers.



## Efforts of Dayak Punan Adu Customary Community Protecting Their Legacy

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### ABSTRACT

*Dayak Punan Adu* Customary Community is member of one of the 11 customary communities which is still dwelling in and near the Malinau forests. Their nomadic lifestyles have been gradually changed to semi-sedentary. Although they have already adopted Christianity and established a sedentary village, the strong bond with the nature and their traditional beliefs kept them unified with their land and forests - their home. However, their home has been deforested by logging concessions for some years, and their hunting and gathering areas had shrunk. Their awareness on the sovereignty of their customs and intact boundary of their home has been raised by researchers and NGOs who have been in contact with them since the 1980s. Just in this decade, their awareness had been affirmed and efforts have been made to legalize their home as customary region and customary forest through the Malinau District Head Decree. The objectives of this study are to document and analyze the legalization process of the *Dayak Punan Adu* Customary Region and Forest in the context of Indonesian policy and local regulation and to identify the impact of this process to the livelihood and legacy of *Dayak Punan Adu* people. Results showed that the legalization process is not as simple as reversing one's hands. Designated forest areas according to national regulation and areas for forestry and agricultural concessions again limited the customary boundary agreed by the neighboring customary communities. The process has not yet finalized, but several positive impacts have been obtained by *Dayak Punan Adu* people. Among others are the confidence of planting agarwood trees for marking their customary boundary and building a big wooden house in the forest for patrolling purposes. The eagerness to protect their customary territory and to use the forests traditionally and sustainably as was practiced by their ancestors which followed the main philosophy of *Dayak* ethnic: "*bumi adalah ibu dan hutan adalah air susu ibu*". The most remarkable impact is the appreciation and respects from the neighboring customary communities that made *Dayak Punan Adu* community becoming a role model for mapping and establishing the boundary of neighboring customary communities' regions and forests.

**Keywords:** *Dayak*, customary forest, legality, Malinau, North Kalimantan, Indonesia

## Introduction

Indonesia is not only well-known as one of mega biodiversity countries in the world but also for having mega cultural diversity. Based on the 2010 Census, Na'im & Syapurta (2011) reported there are more than 1,300 ethnics in Indonesia. Inhabiting 1,910,931.32 sq.km of Indonesia's extent, the total population of Indonesia is 252,264.8 thousand people (BPS 2015). These population formed 64,771.6 thousands households, of which 13.34% dwelling in 21,284 forest villages, which located in and around forest areas (Rustiadi *et al.* 2015). The existence of communities dwelling in forest areas has definite relations to the respective forest areas, either positively that forests are utilized, managed, and conserved for these people's livelihood; or in positive-negative relation that forest are extracted by the forest manager for the State revenue but neglecting the wellbeing of the forest communities.

Forest can be utilized following the State legislation and regulation or customary rules and regulation. Based on Act No. 41 of 1999 on Forestry (hereinafter called **Forestry Act**), the status of forest areas in Indonesia is either State Forest or Titled Forest (or publicly known as private forest) with three functions: protection forest, production forest, or conservation forest. In 2012, a judicial review on Forestry Act related to the status of a Customary Forest, forest that is managed under customary law and was put as part of State Forest by the Forestry Act, was carried out. Through Constitutional Court Decision for Case No. 35/PUU-X/2012, Customary Forest was excluded from the State Forest, as long as the relevant customary law community is still alive and the law is recognized (Constitutional Court 2013). Thereafter, there are three forest categories based on the forest status: State Forest, Titled Forest, and Customary Forest.

The forest infrastructures, both soft and hard infrastructures, are enabling conditions for sustainable management of forest (Damayanti & Masuda 2008, Prasetyo & Damayanti 2010). Forest demarcation and mapping, institution and administration system to manage the forest, and human resources to support and implement the system are the soft-forest infrastructures, while the availability of roads, buildings, and equipment are among the hard-forest infrastructures. In Indonesia, these forest infrastructures were initially established by the Dutch colonial government in Java Island (Damayanti 2008). During the Dutch colonial period, forest areas have been demarcated and mapped, and the management of teak forest has been established. These were later adopted and continued by Perum Perhutani (State Forestry Corporation) which took over the management after Indonesian independence and provide human resources input including involvement of local communities to implement the system that is acknowledged by the communities (Damayanti 2008, Prasetyo & Damayanti 2010). Clearly understood land property rights acknowledged by both the government and the people also ensured the continuing existence of the forests (Prasetyo *et al.* 2012). Forest areas and resources in Java Island are utilized based on Indonesian State legislation and regulation. However, a different setting has been implemented in the other islands. Conflicts on the ground mostly occurred when customary community exists, manages, and utilizes the forests based on their customary law preceding the forest manager assigned by the State.

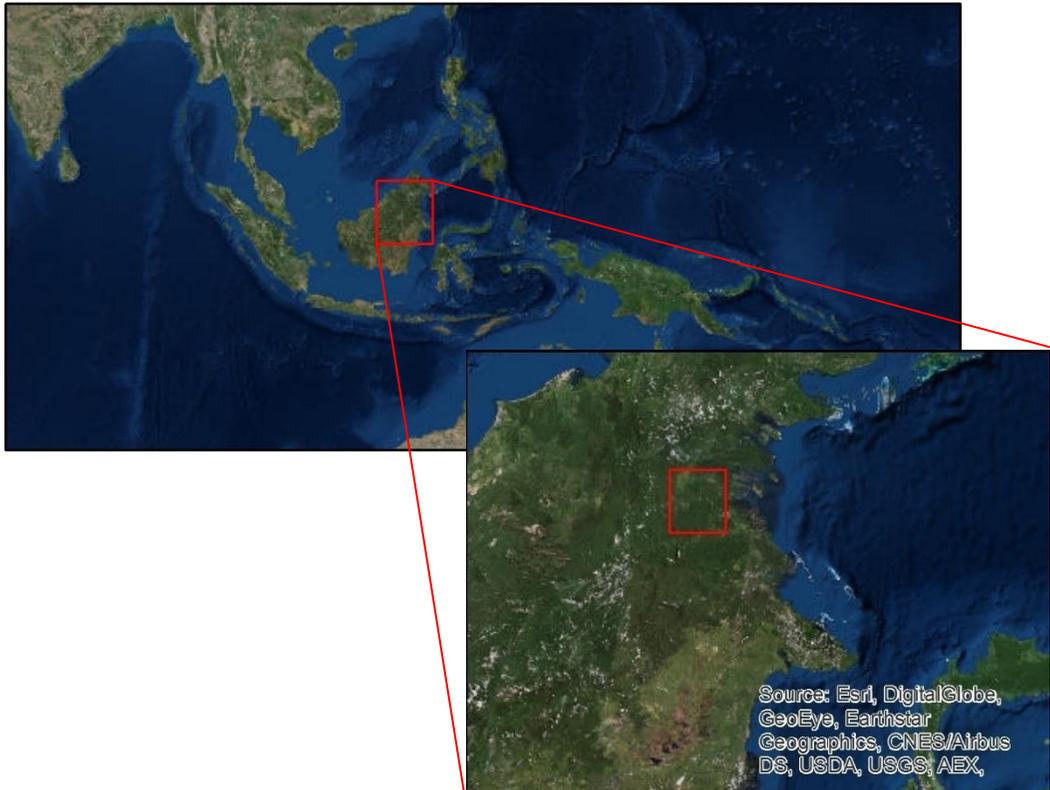
*Dayak Punan Adiu* Customary Community is one of the over 1300 ethnics in Indonesia. It is member of one of 11 customary communities dwelling in and around the Malinau forests. Their nomadic lifestyles have been gradually changed to semi-sedentary. Although they have already adopted Christianity and established a sedentary village, the strong bond with the nature and traditional beliefs kept them unified with their land and forests, their home. However, their home has been deforested by logging concessions for some years and their hunting and gathering locations become limited. Their awareness on the sovereignty of their custom and intact boundary of their home had been raised by researchers and NGOs who have been in contact with them since 1980s. Just in this decade, their awareness affirmed and efforts have been made to legalize their home as customary territory and customary forest through the Malinau District Head Decree.

The objectives of this study are to document and analyze the legalization process of the *Dayak Punan Adiu* Customary Territory and Forest in the context of Indonesian policy and local regulation and to identify the impact of this process to the livelihood and legacy of Dayak Punan Adiu people.

## **Methods**

*Punan Adiu* Customary Community resides in the Punan Long Adiu Village, Malinau Selatan Hilir Sub-district, Malinau District, North Kalimantan Province (Figure 1). The population of the village is 184 from 27 households. The community has been managing their customary territory of approximately 17,496 ha for generations.

A literature review and a key informant interview were performed in January-February 2016 to collect information on *Punan Adiu* people and relevant government policies, legislation, and regulation. These were followed by policy analyses as well as review on the historical and institutional aspects of *Punan Adiu* Customary Community.



**Figure 1.** Location of study in North Kalimantan Province, Indonesia

## **Results and discussion**

### ***Customary forest in Indonesian legislation and regulation***

Act No. 41 of 1999 on Forestry (Forestry Act) is the main legislation for managing Indonesian forests and forestlands. Based on this Act, there are only two categories of forest, namely State Forest and Titled Forest (or publicly known as private forest). Customary forest, a forest that is managed based on customary rules and regulation, is part of State Forest. Under this Act, forest has also been categorized based on their functions: protection forest, production forest, and conservation forest. Both State Forest and Titled Forest have these functions based on the characteristics of the forest area.

In 2003, based on Act No. 24 of 2003 on Constitutional Court, a Constitutional Court was created in Indonesia. This institution has the following functions: a) Judicial Review on Acts against 1945 Constitution, b) to decide disputes between state institution authorities whose authorities are granted by the 1945 Constitution, c) dissolution of political party, and d) to decide disputes on the results of elections. Two customary communities in Indonesia have requested a judicial review on

Forestry Act related to the status of a Customary Forest. The case was partly granted through Constitutional Court Decision for Case No. 35/PUU-X/2012.

Customary Forest which can only exist under customary law is regulated by Act No. 23 of 2014 (**Local Government Act**), particularly in the joint government affairs on the recognition of customary law community (CLC) existence, local wisdom and CLC rights related to environment protection and management. Referring to Forestry Act on the forest functions, the Local Government Act also regulated that the protection and production forest areas are managed jointly by both the Central and Provincial Governments, while conservation forest areas are managed by Central Government, except the Grand Forest Parks that are managed by the Local Government (province, district, or city). This means, when the State Forests are changed to Customary Forests, the management of the Customary Forest will follow this regulation.

### ***Customary practices in the context of Indonesian legislation and regulation***

Customary law communities and forests have never been represented in the Indonesian legislation and regulation until the Judicial Review of Forestry Act in 2012 on customary forest was conducted. Customary communities have been dwelling in or around the forest areas long before the State existence in the forest areas. However, these customary communities' livelihood was disturbed and destroyed by the presence of logging companies that manage the forest areas on behalf of the State. Customary communities are often labeled as forest area encroachers, illegal loggers, etc. Their existence prior to the State's presence in the forest areas was ignored.

Awareness of customary rights was significantly raised only in the last two decades, after several Non-Governmental Organizations (NGOs) and Civil Society Organizations (CSOs) launched campaigns and activities to defend and support customary communities throughout Indonesia. Inventory, identification, mapping, facilitation, empowerment, awareness, and other development activities have been conducted by these NGOs and CSOs. Bill on recognition and protection of customary law community rights has been prepared, but it has not been enacted yet as an Act.

### ***How a community can legally manage a forest area?***

Based on the Forestry Act and its sub-legislation and sub-regulation, there are five types of management that community can obtain: (a) *Hutan Kemasyarakatan* (HKM)/Community Forest, (b) *Hutan Tanaman Rakyat* (HTR)/Community Plantation Forest, (c) *Hutan Desa* (HD)/Village Forest, (d) *Pengelolaan Sumberdaya Hutan Bersama Masyarakat* (PHBM)/Community-based Forest Resources Management – only applicable in Java, and (e) *Hutan Adat* (HA)/Customary Forest.

Basically, there are three steps for a community to gain management of a forest area, namely:

a) *Application procedure to obtain working area*

A set of documents must be prepared by the community and then submitted to the District Forestry Service (DFS). After processing at the district level, the DFS will submit the document to the Provincial Forestry Service (PFS). Likewise, after processing at the provincial level, the PFS will submit the document to the Ministry of Forestry (now Ministry of Environment and Forestry, MoEF). A team in the MoEF will process and verify the document and conduct field survey. If everything is clear and fulfills the requirements, the Minister of Environment and Forestry will issue a decree on the designation of the requested forest area for the community use.

b) *Application to obtain business permit (for HKM, HTR) or management rights (for HD)*

After obtaining the Minister's decree on the designation of working area, the community has to follow another procedure to obtain the business permit (for HKM, HTR) or management right (for HD). A set of document, including the work plan must be submitted to the DFS. After processing at the district level and all documents have been verified, the DFS will submit the application to the PFS. The Governor as the head of the province will issue management rights for HD after a team established by the Governor verified the area and work plan. Likewise, the Governor will issue a permit for utilizing the forest areas as HKM/HTR area.

c) *Application to obtain timber utilization permit (IUPHHK)*

For utilizing (extracting) timber from the HKM/HTR/HD area, another permit, called timber utilization permit (IUPHHK) must be applied to the MoEF. A Minister Decree will be issued when the community fulfilled the requirements.

Different sets of procedures must be followed by customary communities to obtain the Customary Forest (*Hutan Adat/HA*) status, even from the beginning of the implementation of Forestry Act in 1999. First, the customary community must prove that they are still implementing the customary law, so that they are also known as Customary Law Community (CLC) and obtain the recognition of CLC from the Provincial Government through the Provincial Regulation (*Peraturan Daerah Provinsi (Perda Provinsi)*). The *Perda Provinsi* is not only recognizing the customary law and the community implementing it, but also the areas which are managed based on the customary law (customary territory). Only after that, the CLC can start the application procedure to obtain the Customary Status (HA) status for the forest inside the customary territory. These sets of procedures for obtaining the CLC recognition and Customary Forest Status were regulated by the Minister of Forestry Circular Letter No. 75 of 2004. In 2014, the Minister of Internal Affairs (MIA) issued a regulation, MIA Regulation No. 52 of 2014, on guidance for recognition and protection of Customary Law Communities (**MIA regulation**). In Article 4 of this regulation, recognition and protection of CLC are stipulated by the district head or mayor, through the District Head/Mayor's decree. If the CLC exists at two or more districts/cities, then the stipulation of recognition and protection of CLC is done through a Joint Decree from all the relevant District Heads/Mayors.

## **Case Study: Efforts of *Dayak Punan Adiu* customary community to protect their legacy**

Although Kalimantan Island (Indonesian part of Borneo Island) has rich tropical forests with wide biodiversity as well as the cultural diversity, the vast area of Kalimantan Island with limited access to development has made the people in Kalimantan under developed. Splitting administrative regions has become the dream of many people in order to improve their livelihood and development. Malinau District was established on 4 October 1999 through Act No. 47 of 1999 on the formation of Nunukan District, Malinau District, Kutai Barat District, Kutai Timur District, and Bontang City. These newly established-districts and city were formed from splitting two districts in East Kalimantan Province which has relatively vast area: the Bulungan District and Kutai District. Malinau District was previously part of Bulungan District. Splitting the two districts was intended to improve the development in remote areas, provide better services to the citizen, and build the regional capacity in utilizing its potential within the implementation of regional autonomy (Act No. 47 of 1999). In line with these intentions and considering the need for improvement in the country's border regions and outer islands, especially for the prosperity of the people, North Kalimantan Province was established by splitting East Kalimantan Province through Act No. 20 of 2012 on 12 November 2012. North Kalimantan Province was established by splitting the following districts in East Kalimantan Province: Bulungan District, Tarakan City, Nunukan District, Malinau District, and Tana Tidung District.

Even before the Indonesian Independence on 17 August 1945, Kalimantan Island was the target of natural resources extraction, after Java and Sumatra Islands. Timber, coal, oil, gas, gold and other minerals have been the main commodities extracted from Kalimantan. After the forests were destroyed for timber extraction, timber and palm oil plantations replaced the rich tropical forest. The deforestation followed by agricultural land expansion has been considered as development for Kalimantan. However, the existence of local people, especially the traditional and indigenous people whose livelihood depends on the forest was neglected. The newly established districts and cities, like Malinau District, were in difficult position trying to balance between improving the livelihood of their citizen (which mostly are customary communities in the forest and remote areas), and utilizing resources in their regions designating concessions to private companies, for logging, mining, as well as palm oil plantation. The rights of local people, the customary communities, have been neglected ever since Indonesian Independence Day, even though these rights have been written in the 1945 Constitution.

In order to return the rights to the customary communities in Malinau District, there was a need to issue a District Regulation on the recognition and protection of customary communities' rights. In 3 October 2012, the Malinau District Head issued the Malinau District Regulation No. 10 of 2012 on the recognition and protection of customary communities' rights in Malinau District and included this regulation in the District Gazette. Through this regulation, the customary communities in Malinau have rights on (a) land, territory and natural resources, (b) development, (c) spiritualism and culture, (d) environment, (e) to take care of themselves, and (f) to implement the customary law and justice. The first step to implement this regulation

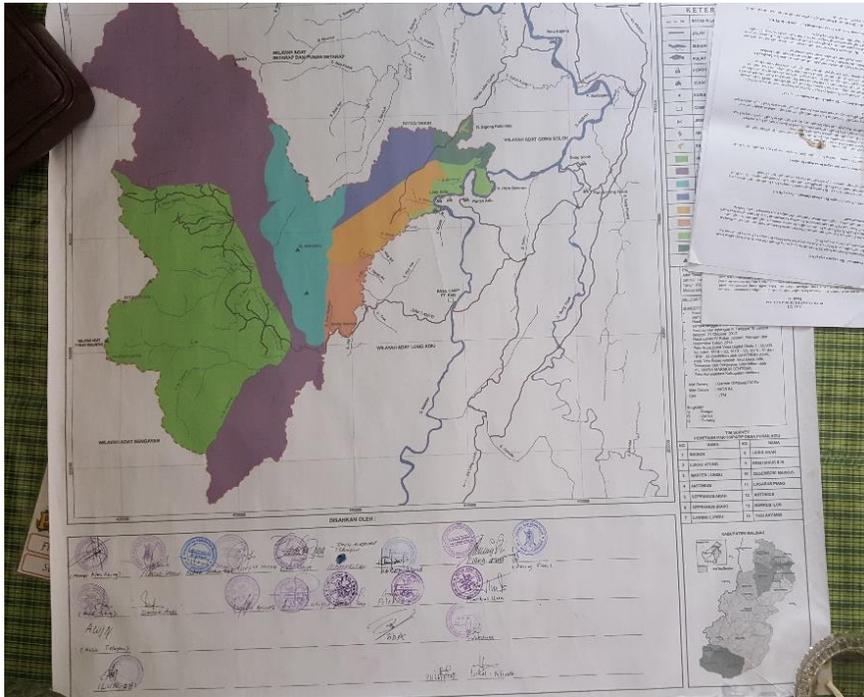
is to identify and to register the customary law and communities. The procedures include:

- 1) Identification of Customary Law Community (self or supported), including history of the community, customary areas, customary norms, institution/customary governance system, and customary rights.
- 2) Submission of application form to Management Agency for Customary Communities' Affairs/*Badan Pengelola Urusan Masyarakat Adat* (BPUMA), which will be processed for verification, opinion/claim by adjacent communities, and settlement of claim.
- 3) Stipulation of the recognition and protection of Customary Law and Communities by Malinau District Head.

*Punan Adiu* Customary Community has been preparing the requirements for obtaining the recognition from the District Government. The processes taken by *Punan Adiu* Customary Community are as follow:

- 1) Tracking the settlement/hamlet movements, participatory mapping and delineation.
- 2) Writing up the history, customary norms, institution/customary governance system and customary rights, and compiled them into Profile of *Dayak Punan Long Adiu* Customary Community (Nikolaus *et al.* 2015).
- 3) Consultation with and recognition by the neighboring communities (Figure 2).
- 4) Application for recognition was submitted to the Malinau District Government.
- 5) Verification by district team resulted in the fact that within the customary territory, the forest areas has been assigned according to national regulation, for forestry (timber concessions), agricultural (oil palm concessions), and mining concessions.

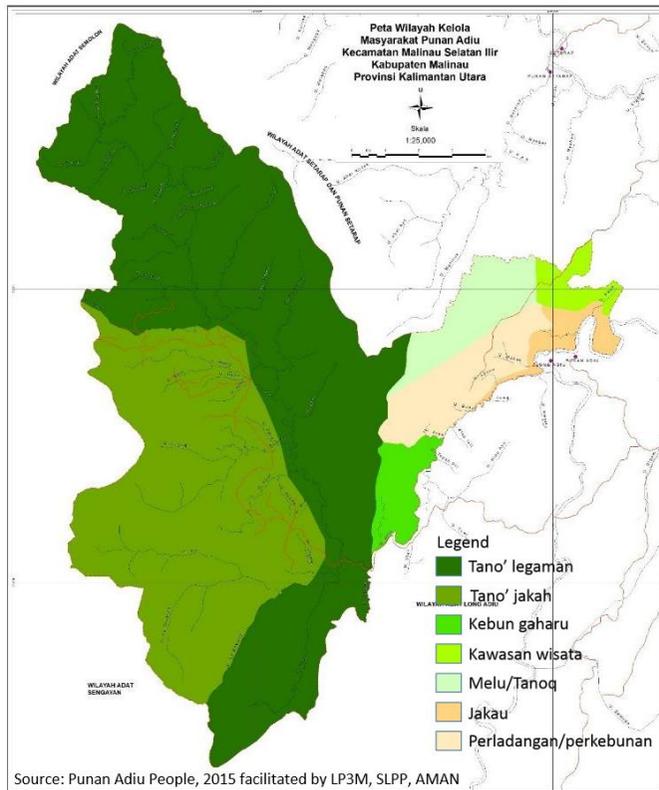
*Punan Adiu* Customary Territory was mapped through participatory mapping involving the surrounding village chiefs and customary communities and was facilitated by several NGOs. This map, which shows the customary area and management that have been done by the *Punan Adiu* people, was one of the requirements for obtaining the recognition and protection of customary law community from the District Government.



**Figure 2.** Recognitions by adjacent communities were given by signatures and village stamps (Photo: D. Tiaka 2016)

During the mapping, the land uses of the territory were also mapped. Punan Adui people have divided their customary-managed areas based on their traditional and customary uses, as follow (Figure 3):

- *Tano' Legaman* — Forests which is protected because of legends and folklores.
- *Tano' Jakah* — Forests for hunting, and fruit and food gathering.
- *Kebun Gaharu* — Areas for planting agarwood trees.
- *Kawasan Wisata* — Recreational area.
- *Melu/Tanoq* — Forests reserved for subsistence timber supplies.
- *Jakau* — Forest recovered from shifting cultivation (*merimba*).
- *Perladangan/Perkebunan* — Area for food crops cultivation.
- *Merimba* — Clearing forest for agriculture.



**Figure 3.** Customary land uses of Punan Adiu customary territory

### Impacts of legalization process

The facilitation of several NGOs and CSOs has raised awareness of the *Punan Adiu* people's rights and concerns for the sustainability of their forests as well as their ethnicity. Although the legalization process for obtaining the recognition and protection of the customary law community from the District Government has not yet completed, several improvement and development in the *Punan Adiu* people could already be noticed, as follow:

- The confidence of planting agarwood trees (*Aquilaria* sp.) for marking their customary boundary.
- Building a big wooden house in the forest for patrolling purposes.
- Eagerness to protect their customary region and to use the forests traditionally and sustainably as practiced by their ancestors, following the main philosophy of *Dayak* ethnic "*bumi adalah ibu dan hutan adalah air susu ibu*".
- The appreciation and respects from the neighboring customary communities that made *Dayak Punan Adiu* community a role model for mapping and establishing the boundary of neighboring customary communities' regions and forests.

## Conclusion

Judicial review on Forestry Act related to the status of a Customary Forest has been a breakthrough on recognition of customary law communities and their activities in Indonesia. Constitutional Court Decision on Case No. 35/PUU-X/2012 and the enactment of Act No. 23 of 2014 on Local Government have benefited the local communities in claiming and protecting their customary forest and management practices. *Dayak Punan Adiu* Customary Community, which has been dwelling in and around the Malinau forest over generations, had initiated the claims for recognition and protection of the sustainability of their forests and ethnicity. However, the forest areas within their customary territory have been assigned according to national regulation for forestry (timber), agricultural (palm oil) and mining concessions, and hindered the process for settlement of claims. Yet, several improvement and development in the *Punan Adiu* community could be noticed including marking their customary boundary by planting agarwood trees (*Aquilaria* sp.), building a wooden house for patrolling purposes, managing their forests traditionally and sustainably following the main philosophy of Dayak ethnic “bumi adalah ibu dan hutan adalah air susu ibu”, and recognition as a role model by the neighboring customary communities.

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# Nature Philosophy of Minangkabau Ethnic in West Sumatera, Indonesia

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## ABSTRACT

People of Minangkabau named their homeland *Alam Minangkabau* (Minangkabau Nature). The use of the term *alam* (nature) has an extensive meaning. *Alam* is everything for the Minang people. It is not just a place where they were born and will die, a place where they live and grow; but there is also philosophical meaning such as conveyed in their proverb: *Alam takambang jadi guru* (literally means: nature unfurled to be a teacher; the nature is there to teach people). Therefore, their teachings and philosophy of life, as stated in their proverbs, adages, axioms and others, take expression from the forms, characteristics, and life of the nature.

They see the nature as composed of four elements or could be divided into four elements, which they call *nan ampek* (the four). Just as there are: sun, moon, earth and stars; noon, night, morning and afternoon; west, east, north and south; fire, water, soil and wind. Each of these elements of nature has different degrees and roles. They are related to each other, but do not bind each other; collide with each other, but do not obliterate each other; and are clustered with each other, but do not merge with each other. Each element exists on its own in harmony with the others, but also dynamic in accordance with the nature's dialectics, which they named as *bakarano bakajadian* (cause and effect).

**Keywords:** philosophy, Minangkabau, harmony, nature, teacher

## Introduction

According to the book *Alam Terkembang Jadi Guru* (Navis 1984), people of Minangkabau named their homeland *Alam Minangkabau* (Minangkabau Nature). The use of the term *alam* (nature) has an extensive meaning. *Alam* is everything for the Minang people. It is not just a place where they were born and will die, a place where they live and grow, but there is also philosophical meaning such as conveyed in their proverb: *Alam takambang jadi guru* (literally means: nature unfurled to be a teacher; the nature is there to teach people). Therefore, their teachings and philosophy of life, as stated in their proverbs, adages, axioms and others, take expression from the forms, characteristics, and life of the nature. This paper reveals some of these as follows: the Minangkabau social-cultural perspective; nature, institution and individual in harmony; defend life and defending life; and the perspectives of conservation and sustainable utilization.

## The Minangkabau social-cultural perspective

*Adat bersendi Syarak, Syarak bersendi Kitabullah*: Social-Culture must be based on religion. Religion must be based on The Holy Book (Navis 1984).

- The perspective of nature unfurled to be a teacher
- They see the nature as composed of four elements *nan ampek* (the four): sun, moon, earth and stars; noon, night, morning, and afternoon; west, east, north and south; fire, water, soil and wind
- Each of these four elements of nature has different degrees and roles
- Each element exists on its own in harmony with the others, but is also dynamic: *bakarano bakajadian* (has cause and effect)
- Related to each other, but do not bind each other
- Collided with each other, but do not obliterate each other
- Clustered with each other, but do not merge with each other

## Nature, institution and individual in harmony

If the nature and all its elements are equated to human life, just as they liken the nature as their Minangkabau homeland, then these elements can be considered as institutions or individuals in their community. Each has the right to maintain existence in the course of their lives. On the other hand, each institution has the responsibility to maintain individual existence in their institution. In addition, each individual also has the responsibility to protect the existence of their institution. Meanwhile, harmony is valued as conformity or suitability of life among institutions and among individuals, between institutions and individuals, and vice versa. Each institution or individual has different degrees and roles. Therefore, they will not be able to *merge* with the others, but will still be the same as the others. So, in the dynamic of harmony, they are *each* become *one/unity* to be *together*, and each become the same/equal to be *individuals* (Navis 1984).

Minangkabau philosophy puts human nature as an element of the same status as other elements: land, housing, tribe, *nagari* (*kampung* (village/community)). If the

nature and all its elements are equated to human life, just as they liken the nature as their Minangkabau homeland, then natural elements can be comprehended as institution or individuals in their community. Each has the right to hold the existence in the course of their lives.

The functional difference in nature does not cause a different assessment. The proverbial saying: *nan buto paambuih lasuang, nan pakak palapeh badia, nan lumpuah paunyi rumah, nankuaik pambawo baban, nan bingjuang disuruah-suruah, nan cadiak lawan barundiang*: the blind could blow clean the mortar, deaf could light the canon, the limp keeps the house, the strong carries the load, the stupid could be ordered, and the smart one could query and negotiate (Navis 1984).

### **Defend life and defending life**

Minangkabau's philosophy of nature interprets life as a dynamic containing shifts and changes continuously. Therefore, everyone should be able to adapt themselves to nature and its environment which is a part of the nature. The suitable adaptation pattern is by adapting to better situation as disclosed by mamang (proverbs/ old sayings): *melawan dunia orang* (challenging other's territory) meaning rivaling the victory of the people. But, on the contrary, it adapts to the lower life. From another mamang: *yang besar jangan melanda, yang cerdas jangan menjual* (the big ones do not hit/knock, the clever ones do not sell (boost)). These teachings are basically to prevent a power conflict between the parties who compete in victory, because the big stronger ones are not given the right to hit the weaker ones. Greatness and height of a person or a community group (clan or tribe) is to be upheld and raised together by a system of its communal society (Navis 1984).

But they also understand the dialectical law which they called *bakarano bakajadian* (cause and effect). Any dispute between them that cannot be resolved would be guided by these:

- The role of brotherhood is to protect the brother
- The role of village life is to protect the village
- The role of tribe life is to protect the tribe
- The role of country life is to protect the country

Definition of maintain and enclose can be interpreted with different meanings. Firstly, they can be interpreted as activities; secondly they are more passive in maintaining condition and/or position already owned, either by people or by a group who lives together. In the attitude of fencing and defending ourselves and our environment, the priority is first their close relatives, then the people in the whole village or community, and then those who are in the same tribe.

Targets in defending life on a neighborhood level is *melawan dunia orang* (challenging other's territory). *Melawan dunia orang* can be defined as competition to reach the same level. While in *mamaga* (hedge or enclosure) one would need to protect each others physically and spiritually. Defend and enclosure need togetherness in all conditions, and participation based on individual ability.

## **The perspectives of conservation**

Nature conservation and sustainable utilization in Minangkabau is guided by proverbs such as: *Nan rato kaparumahan, tabu tumbuhan di nan lereng, kok manggu kapakuburan, nan bancah ditanami sawah* (flat land for houses, sloping land for crop/plant, dry land for the cemetery, and wetlands for paddy field) (Kosmaryandi 2005).

In West Sumatra there are local wisdom relating to forest management, soil and water conservation, such as conveyed in the following statements/rules:

### ***Rimbo larangan (Protection forest)***

Forests under customary rules should not be cut down because their functions are vital for maintaining water supply and preventing landslides. If there are people who need wood to build a house, permission must be given by the *nagari* head. Cutting down trees must be done only with hand tools.

### ***Tabek larangan (Protection pool/hole)***

Pool is created by people in ancient times for the dual purposes as water supply and also rearing various kinds of fish.

### ***Parak (Traditional agroforest for food security)***

Planting of multi-use plant species such as coconut, durian, suren, duku, mangosteen, rattan, cinnamon, nutmeg, coffee; and crops such as chili, bulbous plants, nuts (Michon *et al.* 2000).

### ***Menanam pohon sebelum nikah (Planting tree when a man is getting married)***

Saving for the next generation to meet the needs of families: plants usually planted are coconut (*Cocos nucifera*), suren (*Toona sureni*) and others.

### ***Goro Basamo (Mutual cooperation)***

“*Goro Basamo*” or “*Gotong royong*” is doing activities together, it can turn difficult tasks easier, and it can also create sense of togetherness. These include building new roads, building houses of worship, cleaning the river, planting crops, etc.

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# Protocol to Survey Proverbs, Old Sayings and Community Rules Related to Ecosystem Services in ASEAN Countries

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## ABSTRACT

The world has been going through the sudden change of climate and the environment. It is strongly needed to find ways to mitigate and adapt this change. More than 2,000 indigenous communities are living in Asia. They have their own culture derived from their natural environment. When the ancestors had interacted with it, they had observed nature closely and learned how to deal with severe situations such as climatic disturbances and how to manage their natural resources. This traditional ecological knowledge (TEK) has many implications even in this modern society.

TEK is often transmitted by oral tradition. Out of oral tradition, there are proverbs and old sayings which are expressions of truth based on common sense or experiences of communities. Also, community rules have been established by communities' philosophy. These can reflect spiritual values of each culture. Therefore, proverbs, old sayings and community rules can be the means to explore TEK which could supplement modern sciences to solve current problems.

**Keywords:** climate change adaptation, indigenous people, oral tradition, sustainable management, traditional knowledge

## Introduction

There are 260 million indigenous people in Asia and they constitute more than 2,000 civilizations and languages. These ethnic groups live in diverse environment over the continent, some live in high mountains, some live in forests, or along rivers and in coastal regions. Over time, they had developed and nurtured cultures from their co-existence with the natural surroundings.

When their ancestors had interacted with nature, they had observed it closely and learned how to manage their resources and deal with severe situations such as climatic disturbances. Those knowledges which have been handed down to next generations, is collectively known as Traditional ecological knowledge (TEK), which has been defined as “a cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.”

TEK of indigenous people are linked to ecosystem stewardship. For example, the *Hakka's* tradition of maintaining *fengshui* forest and tomb forest contributed to Changting landscape restoration in China (Zhang *et al.* 2015), and traditional weather forecasting enables sustainable agroforestry in Ilocos Norte Province, Philippines (Galacgac & Balisacan 2009). The United Nations (2014) also stated that Indigenous People can contribute their traditional knowledge of effective use and preservation of the environment. They emphasized indigenous knowledge can inspire the world in the aspect of climate change and disaster risk reduction.

Mason (2000) indicated that oral tradition is not trustworthy as it depends on memory and verbal transmission. However, proverbs, old sayings and community rules have validity by its nature. Proverbs and old sayings are expressions of basic truth or practical percept that based on common sense or cultural experiences. Also, community rules have been established by communities' philosophy. This oral traditions transmitted to next generations from ancestors can reflect their TEK, because proverbs, old sayings and community rules have same properties with TEK which is based on empirical observations and accumulation of facts by trial-and-error (Berkes 1993). Kurien (1998) showed how proverbs can contain the TEK. He presented five proverbs of Asian coastal communities with references to pursuing of ecosystem sustainability. Furthermore, proverbs and old sayings are traditional knowledge themselves and also can be included in cultural services that nature provides.

Exploring proverbs, old sayings and community rules are therefore an effective way to learn about the TEK of Indigenous People. Differences or similarities in the knowledge system in Asian countries can be discovered by comparing proverbs, old sayings and community rules among ethnic groups or nations. For example, two ethnic groups with similar geographical environment may have different ways of managing their environment, or similar ways but expressed differently. A better understanding of the proverbs, old sayings and community rules can contribute to solving the problems of modern society. However, globally, there is very little research done on collecting and understanding proverbs and old sayings as means

of documenting TEK.

## **Methodology**

### *1. Gathering proverbs, old sayings and community rules of Indigenous peoples*

- a. Interview the elderly in each village/community to gather proverbs, old sayings and community rules following the steps in the field note (Annex 1).
- b. Document the proverbs, old sayings and community rules in the native language, and translate into official language and English.
- c. Note the literary meaning in English and state the subject/keywords of the proverbs, old sayings and community rules you collect. For example, for the proverb "If swallows fly low, it will rain", the subject could be swallow and rain and explain the contained traditional knowledge.
- d. Select type of ecosystem services which it is relevant. In this case, it would be regulating. Also, it could be categorized in multiple types.
- e. Ask respondents where or whom they learn it from.
- f. Explain its implication in the past and applicability to modern society. Researcher's suggestion can be included in this part.

### *2. Recognition survey*

This questionnaire (Annex 2), adopted and modified from Brown & Wright-Harp (2011), aims to understand:

- a. if the respondents know the proverbs, old sayings and community rules;
- b. how they recognize it;
- c. if they know it, then provide the meaning correctly
- d. respondents are asked the validity as stated in the proverbs, old sayings and community rules.

It is recommended to fill the form as in Table 1, with the results of gathering proverbs, old sayings and community rules. The need of whether to conduct a recognition survey is up to each researcher's discretion.

**Table 1.** Data sheet of gathering oral tradition of IP

Nr.	Oral tradition	Type of oral tradition : proverbs / old sayings/ community rules	Ecosystem services (ES) provisioning, regulating, cultural, supporting	Scientific interpretation	Implications (Practices) sustainable forest management, strict management for watershed, weather forecasting, etc .....	Suggestions: strategies to enhance and improve implementation of forest related programs or projects for ES
1						
2						
3						
.						

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### Field Note

1. Proverbs / Old sayings / Community rules

(In native (local) language) 제비가 낮게 날면 비가 온다

(In official language) 제비가 낮게 날면 비가 온다

(In English) If swallows fly low, it will rain.

2. Meanings

1) Meaning: People believed if swallows fly low, it will rain.

2) Subjects (keywords): Swallow , rain

3) Scientific interpretation

When air pressure is low, insects fly nearer to the ground, so swallows fly near the ground to catch prey insects.

3. Types of Ecosystem services

Provisioning / Regulating / Cultural / Supporting

4. Source of knowledge

Where / Whom did you learn this from?

Parents / elders / friends / media / literature / others (     )

5. Applicability to modern society (researcher's comments)

When we observe the behavior of animals, it is possible to predict the change of microclimate and forecast the weather.

## Recognition Survey

This survey is designed to see which *proverbs, old sayings and community rules* you recognize. People know different sayings depending on where they grew up, how old they are, and many other reasons. Some people may recognize very few of the sayings below, and some may recognize many of them.

### Instructions

1. Please put an X next to *proverbs, old sayings and community rules* that you have heard before.
2. It is alright if a word or two is different from the way you have heard the proverb. For example, if you have heard "Don't bite more than you can chew" then you can check off "Never bite off more than you can chew."
3. Do not guess the meaning of *proverbs, old sayings and community rules* that are unfamiliar. Only mark those that you have heard before.
4. If you know the meaning of the *proverbs, old sayings and community rules*, write down the meanings below.
5. If you agree with the meaning, check **yes**. If not, check **no** and please write down the reasons.

- .....
1. 1)  When swallows fly low, rain comes.  
Meaning:  
 2) Do you agree with it?  
 yes    no (why? \_\_\_\_\_ )
  2. 1)  Rice ripen well when the summer is sweltering.  
Meaning:  
 2) Do you agree with it?  
 yes    no (why? \_\_\_\_\_ )
  3. 1)  If it rains often in spring, the hand of women becomes bigger.  
Meaning:  
 2) Do you agree with it?  
 yes    no (why? \_\_\_\_\_ )
  4. 1)  Trees with deep roots sustains drought.  
Meaning:  
 2) Do you agree with it?  
 yes    no (why? \_\_\_\_\_ )
  5. 1)  .....  
Meaning:  
 2) Do you agree with it?  
 yes    no (why? \_\_\_\_\_ )

## How to Map the Tangible Resources of Cultural Ecosystem Services in ASEAN Countries?

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### ABSTRACT

Cultural ecosystem service (CES) usually includes intangible resources such as spiritual rites, communal ceremonies, and funeral ceremonies; many are related to traditional forest knowledge. One can recognize and evaluate CES of community based on the documentation of the participation and experiences of indigenous peoples. Also, CES includes tangible resources like tombs, heritage sites, statues and temples. These tangible resources can be easily quantified, and their spatial extents mapped at local community. This case study of mapping process at Pyeongchang region in Korea could be the guide on how to map the tangible resources of cultural ecosystem services in the ASEAN countries. The cultural services like local story, and the history of local name, were mapped based on a questionnaire to local residents who have lived over 30 years at studied areas. One statue related to filial piety, temples, curious rocks symbolizing men, village shrines and historic sites were excavated and mapped digitally with a scale of 100,000. This information could be utilized to select eco-tour courses and rebuild local community to restore village rites barely existing in local areas. Mapping the tangible resources at studied areas can conserve local resources and community culture.

**Keywords:** spatial distribution of cultural tangible resources, mapping, local community.

## **Introduction**

The ecosystem provides necessary and beneficial services for human and ecosystem wellbeing. For example, forest ecosystems supply timber and wood fiber, regulate the climate condition by absorption of carbon dioxide, and they provide and regulate water resources, attract people for recreation and tourism. The types of benefits that people obtain from ecosystems are known as 'ecosystem services' (Millennium Ecosystem Assessment [MEA] 2003).

Among the four ecosystem services categories of provisioning, regulating, supporting and cultural, the cultural services usually are intangible because they are embodied by perception and recognition of local people. People who receive these services can feel from their own experiences, and they build-up their perception.

Previous survey on ecosystem services conducted at some ASEAN countries showed that local peoples had recognized a few CES at their local areas, however, ASEAN countries do possess diverse cultural services and they have survived and transcended important TFK in their livelihood and cultural activities and ceremonies (TEEB 2010). Therefore, it is very valuable to try to excavate their own cultural services and understand their characteristics such as the background stories, related contents and location.

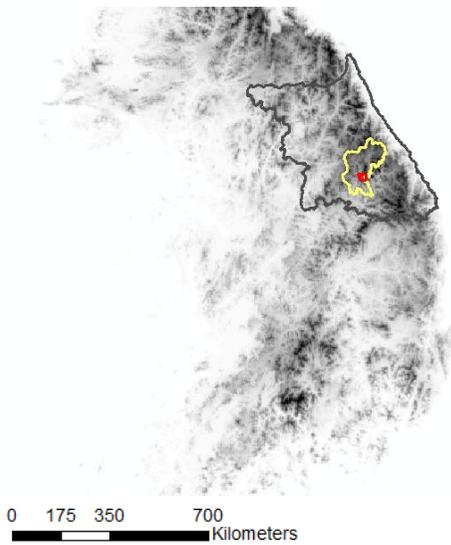
The aim of this study is mapping the cultural services for a better understanding of their usage. Documenting the spatial distribution of cultural services could be an effective way for preserving and enhancing their value. Information for the mapping process was gathered using a questionnaire interviewing residents who have been living over 30 years in the locality.

## **Study area and method**

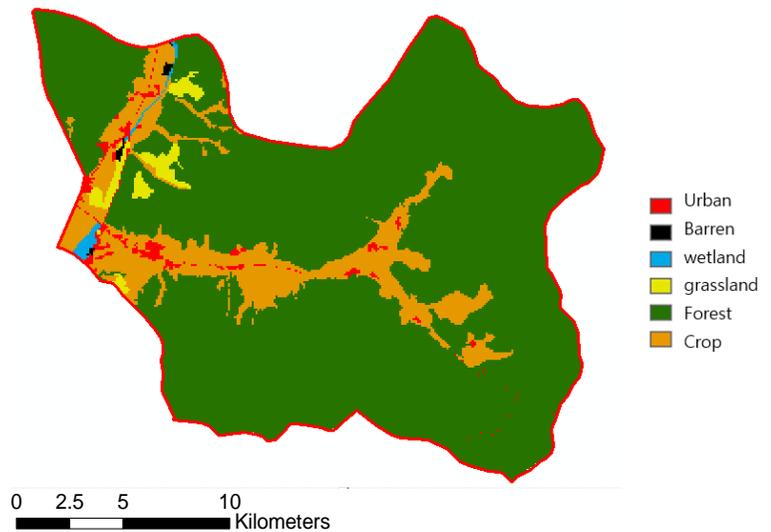
### ***Study area***

The study area is the Pyeongchang region, Gangwon-province in the northeastern part of Korea (Figure 1). The focus area was identified with the assistance of the local authority of Haanmi-ri. This area is around 40km<sup>2</sup>(4,000 ha) with 1,407 residents. Most of land is covered with forest and agricultural crops, and urban area is along the crop land (Figure 2).

The reason why this area has been chosen is: first, the area has many kinds of cultural resources documented in literature. Secondly, the residents of this area are usually more than 45 years old, so they have various experiences and knowledge of their region.



**Figure 1.** Study area



**Figure 2.** Landcover map of study area

### ***Relevant literature reviews***

The study started with a search of relevant literature such as regional culture brochures, books, and published papers from the internet and culture research center of Pyeongchang region. Through this process, primary information of this area like previous name of the places and the background stories of famous attractions were documented.

### ***Questionnaire survey and interview***

This was then followed by the questionnaire survey to identify valuable cultural ecosystem service resources in local community.

The questionnaire asked their forest usage, recognition and perception of cultural tangible resources (Annex 1). First part of the questionnaire consisted of questions for their forest usage. This is for checking local residents' knowledge about the forest or mountainous area around them. Then, the interviews aim to gather information about culturally or historically famous tangible resources (temples, statues, mysterious place, beautiful scenery, village shrine) and their location.

The survey was conducted in September of 2015, and six residents who have been living over 30 years in this area were interviewed. Although the number of interviewees is rather small, they were very familiar with their village and the surrounding area. Besides, they have lots of experiences during their residence and extensive knowledge about the environment in the past. The in-depth interview took more than one hour.

## **Mapping**

Next, historical and cultural sites or valuable places researched in previous process were identified and mapped at the digital map on the scale of 100,000. The specific locations were checked using GPS, as well as visited directly, and then cross matched with aerial photograph for the accuracy (Table 1).

**Table 1.** Steps to map tangible resources of cultural ecosystem service

1. Relevant literature reviews	<ul style="list-style-type: none"><li>• culture research center of the region<ul style="list-style-type: none"><li>- regional culture brochure</li><li>- books, published papers(regional research)</li></ul></li></ul>
2. Questionnaire survey	<ul style="list-style-type: none"><li>• interview residents who stay there over 30 years (minimum 20 years)</li><li>• forest usage</li><li>• cultural tangible resources...<ul style="list-style-type: none"><li>- experiences from doing directly/ heard indirectly</li><li>- recognition, perception</li><li>- location (with map)</li></ul></li></ul>
3. Mapping	<ul style="list-style-type: none"><li>• checking the location with GPS</li><li>• marking the location on a 100,000 scale map (depending on the area)</li><li>• cross-match with aerial photograph</li><li>• analyzing the distribution pattern of resources</li></ul>

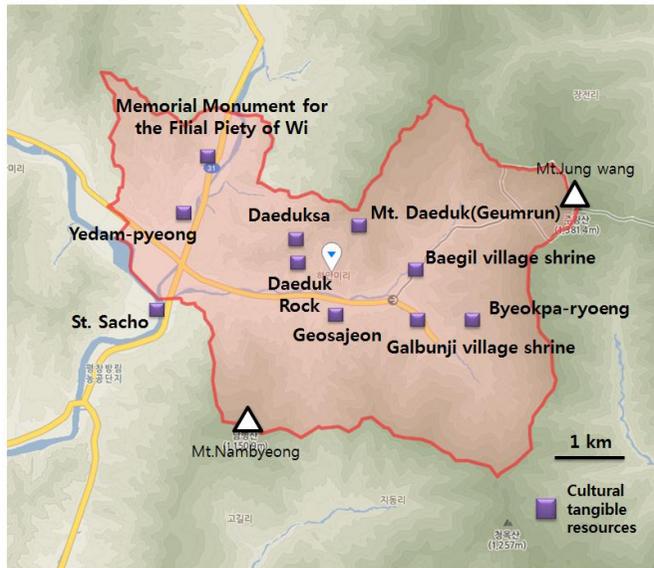
## **Results and discussion**

### ***Questionnaire survey response – forest usage***

The response for the first part of the questionnaire – forest usage: was that they usually use forest or mountainous area as farming field or gathering edible greens. While visitors consider this area is good for sports (climbing, mountain biking), residents use it for their living. Thus, they also showed the opinion to use it as daily and informal way like leisure walking.

### ***Cultural tangible resources map***

Through the responses of the questionnaire communal cultural tangible resources such as village shrines, temples, historical places and monuments could be identified (Figure 3).



**Figure 3.** The map of cultural tangible resources

There were the monument for honouring the filial piety (the filial piety of Wi), and historical places during sites related to the Japanese invasion (Yedam-pyeong). In addition, special praying place such as the village shrine, they pray to trees and mountains for their health (Baegil, Galbunji village shrine).

These resources are considered as visible reflections of the culture, with many historical stories from the past as well as the main thoughts of the residents. Therefore, documenting and mapping them could help in analyzing the cultural extent and the usefulness of them for regional enhancement.

The information needed for mapping is as detailed in Annex 2. This framework can get the primary information of cultural resources, and also can identify the perception of residents in cultural resources. All these could be useful for drawing up recommendations for conserving local resources and community in a sustainable way that transcended from the nature.

In conclusion, this mapping procedure is very meaningful because a better understanding of the spatial distribution of cultural resources is necessary for the management and tour-course decision making.

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## Annex 1. Questionnaire



### Cultural Ecosystem Service Resources Questionnaire

Thank you for your interest in this questionnaire about “Cultural Ecosystem Service Resources”. We are surveying the kind of cultural ecosystem service resources local residents know and how they recognize cultural resources as cultural ecosystem services of their region.

‘Cultural Ecosystem Services’ are cultural benefits people obtain from the ecosystem. For example, they are psychological comfort or emotional fulfillment through recreational activities and aesthetic travel in the nature.

Please fill this questionnaire sheets as fully as possible based on your experience and knowledge. Your answers will be helpful for us to better understand the local residents’ perception of regional cultural resources.

2015. 09



#### Forest Usage

Q1. How do you usually use forest (or mountainous area) around your village?

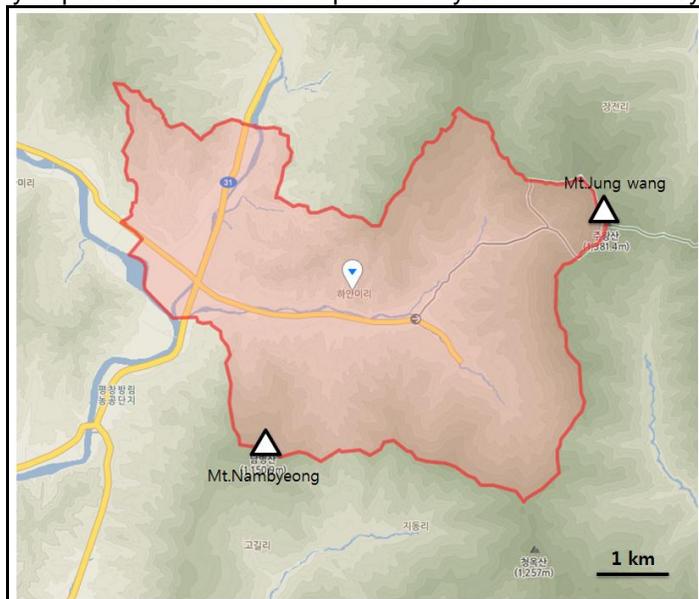
- ① Rice paddy or farming field (crop) ② Walking (enjoying the scenery) ③ Sports (mountain biking, climbing) ④ Gathering edible greens ⑤ Forest education (green school) ⑥ Spiritual space (prayer) ⑦ rarely use

#### Recognition

Q2. What do you know or hear about cultural (or historical) places such as temples, village shrines, curious rocks, rivers and statues related to cultural ecosystem services? Have you ever heard about them when you were young? Or are there any regional places which are famous and popular as the tourist attraction?

## Location

Q2-1. Could you please mark on the map below if you know where they are?



1. Gender	<input type="checkbox"/> Male <input type="checkbox"/> Female
2. Age	<input type="checkbox"/> 30-40 <input type="checkbox"/> 50-60 <input type="checkbox"/> more than 60
3. Educational level	<input type="checkbox"/> did not finish middle school <input type="checkbox"/> middle school graduate <input type="checkbox"/> high school diploma <input type="checkbox"/> college graduate
4. Residence	Gangwon-do
5. The length of residence	_____ years
6. Occupation	<input type="checkbox"/> agriculture <input type="checkbox"/> highland agriculture <input type="checkbox"/> livestock <input type="checkbox"/> housewife <input type="checkbox"/> unemployed
7. Household Income(month)	<input type="checkbox"/> under \$1,000 <input type="checkbox"/> \$1,000-\$2,000 <input type="checkbox"/> \$2,000-\$3,000 <input type="checkbox"/> \$3,000-\$4,000 <input type="checkbox"/> over \$4,000

### **Perception**

Q3. Do you think it is very important to preserve these tangible resources as cultural ecosystem services?

- Very important, no more development should be allowed
- Important, but need development for local economic enhancement
- Not really important, need more development
- I have no idea

### **Socio-demographic Information**

**⌘ Thank you very much for your cooperation! ⌘**

**Annex 2.** The list of cultural tangible resources

Cultural tangible resources	Type	Contents	Perception			Location (GPS)	Possession	Religion	
			Conservation	↔	Active use				
1. Yedam-pyeong	Historical place	<p>Stories</p> <p>During the Japanese invasion, the local people piled up stones to indicate the number of killed Japanese for honouring the saving of their country. Now, this flat area with the high stone wall is known as 'Yedam-pyeong': 'Ye' of 'Yedam' means the past, and 'dam' means the wall; and 'pyeong' means flat area.</p>	1	2	3	4	5	community	X
2. Memorial monument for the Filial Piety of Wi	Monument		1	2	3	4	5		
3. St. Sacho	Historical place		1	2	3	4	5		
4. Daeduksa	Temple		1	2	3	4	5		
5. Daeduk rock	Curious rock		1	2	3	4	5		
6. Geosajeon	Historical place		1	2	3	4	5		
7. Galbunji village shrine	Village shrine		1	2	3	4	5		
8. Baegil village shrine	Village shrine		1	2	3	4	5		
9. Byeokpa-ryeong	Historical place		1	2	3	4	5		

## **Interacting with the Forests: The General Values of the *Orang Asli* in Peninsular Malaysia**

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### **The *Orang Asli* in Malaysia**

The *Orang Asli* (Indigenous People) is a minority group among the Malaysian population. Official statistics showed that there were 178,197 *Orang Asli* in Malaysia in 2010. With an annual population growth rate of 2.5%, it is estimated that there are 207,000 *Orang Asli* in 2016, which is less than 1% of the 31-million Malaysian population. There are 18 sub-ethnic groups of *Orang Asli* in Peninsular Malaysia, namely: *Bateq, Che Wong, Jahai, Jahut, Jakun, Kensiu, Kintak, Lanoh, Mah Meri, Menderiq, Orang Kanaq, Orang Kuala, Orang Seletar, Semai, Semelai, Semoq Beri, Temiar* and *Temuan*.

Despite its minority status, the forest-dependent *Orang Asli* community has received world-wide attention as the impact of development has affected various aspects of their livelihood. It is observed that the knowledge and culture of *Orang Asli* has 'eroded' over the years as they are getting more integrated into mainstream development and modernization. In general, they are less dependent on forest resources for livelihood compared to the past. Living within or at the fringe of forests, their ties with the forests, albeit loosen, remain. This paper examines how the *Orang Asli* community in Malaysia interact with the forests whose resources they are still dependent in varying degrees to meet subsistence needs and to generate cash income. Primary data was collected from discussions held with the sub-ethnic groups of *Bateq, Che Wong, Jahai, Jahut, Jakun, Kensiu, Kintak, Lanoh, Mah Meri, Menderiq, Orang Kanaq, Semai, Semelai, Semoq Beri, Temiar* and *Temuan*, in 2015 and 2016.

### **The customary belief system**

As a forest-dependent community, the *Orang Asli* community in general has traditionally interacted with the forests based on certain values. The upholding of these values determines how villagers think, talk and behave in their daily livelihood in relation to the wider forest environment and resources. These values are embedded in their customary belief which is based on myths, legends and historical events. This customary belief system is related to the close interaction with the forest environment (Amran 1991).

A typical case of such historical event was narrated by the *Semai* of Kampung Ulu Geroh in the state of Perak. There is a place within the Ulu Kinta Forest Reserve

known as *Kawasan Jolkeeg*, a place where a villager was hung to death and it is believed to have spirits. Villagers narrated that some time in the past a pregnant woman's husband went into the forest. At the same time, villagers were poisoning fishes in the river but did not get any yield. The villagers went to consult the local traditional medicinal practitioner, *bomoh* (also known locally as *Tok Halaa*). They were informed that the pregnant woman had to be sacrificed and then thrown into the river in order to have good fishing yield. Soon after, the husband returned from the forest and found his wife missing. He was told that she had become the offering to *penunggu sungai* (spirit of the river). The man went *amok* (mad) and killed some villagers. In return, other villagers shot the man with blow pipes, caught and then hanged him in the forest. The place where hanging took place is known as *Kawasan Jolkeeg* and believed to have spirits. Villagers today avoid going near *Kawasan Jolkeeg* for fear of any misfortunes. Generally, such is the forbidden forest known as *kawasan keras* (literally means 'hard area') among the *Orang Asli* communities in various parts of Peninsular Malaysia.

In this traditional customary belief system of the *Orang Asli*, the world view is that certain objects (such as tree, river, water source, stone and caves) in the natural environment is resided by certain spirits or super natural beings that influence human livelihood. These spirits or super natural beings are generally known as *makhluk ghaib* or *makhluk halus* which are sometimes known as *penunggu*, *penjaga*, *penghuni*, *bunian*, *hantu*, *jembalang*, *jin*, and *roh*.

The *makhluk ghaib* are regarded as "unseen guardians of the forests". They reside everywhere in the forests, i.e. stone, tree, cave, hill and river. Among the Semai community, spirit of the river is known as *Nyanik tew* or *penunggu sungai*, those deceased in the forest is referred to *ruwai* or *roh*, ghosts in forest are *jembalang*, the 'protecting' spirit is *jin*, spirit of the soil is known as *Ludot*, spirits of special trees is called *bunian*, spirit of ancestors is *bek but*.

The *makhluk ghaib* are sometimes categorized into the "good" and "bad" beings. The good ones help the *Orang Asli* to overcome difficulties while the bad ones disturb them. These *makhluk ghaib* also influence *Orang Asli's* behaviour. If a villager's behaviour is against the norms, he/she and sometime the whole community will be punished by *makhluk ghaib*. As such, the community members are very careful regarding their behaviours (Hassan 2001, Norshakila 2007). Despite the adoption of Islam and Christianity by some *Orang Asli*, the community in general continues to hold on to this customary belief system when interacting with the forests.

## Observing general values

The *Orang Asli* villagers have to observe general values so as not to offend the *makhluk ghaib* which could bring negative consequences. **Respect** for *makhluk ghaib* is most important prior to conducting forest activities. Such respect “reinforce their ecologically sound relationship with their surroundings through symbolic acts in everyday actions regulating behaviour such as walking through the woods, hunting, gathering, harvesting, and eating, as well as through richly beautiful singing and dancing rituals” (Roseman 1993). **Seeking permission** is essential before the *Orang Asli* commences any activity in the forest. **Seeking protection** from the *makhluk ghaib* could ensure safety while working or walking in the forest. **Observing the taboo and rules** while in the forest has been practised by the *Orang Asli* community. Be **humble** when entering or working in the forests help to avoid misfortune. They also believe that an *Orang Asli* who might have accidentally offended the *makhluk ghaib* could subsequently encounter mishap or fall sick. With the assistance of traditional medicine men via rituals and religious ceremonies, offering **apology** to the *makhluk ghaib* is critical to resolve the misunderstanding or mistake made. Practise **sustainable use** of resources is the basic value that the *Orang Asli* community needs to observe to be in line with the expectations of the *makhluk ghaib*.

It is clear that to the *Orang Asli* community, the *makhluk ghaib* are in control of all the activities taking place in the forests. All activities in the forests require the blessings and permission of these spirits. Activities which have not granted with such blessings and permission of the spirits are not going to succeed or bring along desired results. In fact, these activities are likely to face various obstacles. Villagers performing activities without permission and blessings might even encounter misfortunes in the future.

The appeasing and offering activities to be carried out by the villagers and led by traditional practitioners, known generally as *bomoh/ Tok Halaa* in the forests, include the followings:

- (1) opening up of new farming area, planting paddy and harvesting paddy;
- (2) building a hut near the farming area;
- (3) avoiding misfortunes;
- (4) overcoming illnesses and diseases;
- (5) chasing away bad spirits;
- (6) keeping away pests;
- (7) burying deceased family member.

Since the *makhluk ghaib* are staying in the forest, the *Orang Asli* in general respects these spirits, known as *Tenrog*, or ‘*Orang Bunian*’ among the *Temiar* community. The *Tenrog* live in forest, hill or mountain. The *Tenrog* have the look of human and the difference is they are unseen. It is believed that they live in a community with beautiful garden and nice food. According to the *Temiar*, *Tenrog* like to befriend human being. They behave like children and hence also like children very much. If someone goes missing in the forest, the *Temiar* instantly link it to the *Tenrog*. To find the missing person, the *sewang* ceremony is held, sometimes lasting a few months if the missing person does not come home. Similarly, there was the case of a young

*Semai* girl who underwent a traditional treatment by *Tok Halaa* (a ritual specialist) to retrieve her *ruway* (the head soul) that was believed to have wandered off, causing her to be listless (Gomes 2004). Curative rituals for the *Semelai* are seen in the performance of the *belian* healing rites when the medicine man or *puyang* gets into his trance (Hood 1979) or the *beni soy* traditional treatment among the Jahut (Suhaila 2007).

*Sewang* is a combination of musical instrument, dance, songs and *jampi serapah* (prayer). The ceremony is led by traditional practitioner known as *bomoh* or *Tok Halaa*. The song and dance in the *sewang* are to appease the *Tenrog*. *Sewang* is also performed in treating patients and to chase away the ghosts thus providing security to the village and to avoid disturbances by *makhluk ghaib*. Types of ceremony performed include *sewang adat* (custom), *sewang menyambut tetamu* (welcoming guests), *sewang berubat* (traditional treatment), *sewang perkahwinan* (marriage blessing), *sewang kematian* (death), *sewang kesyukuran* (thanks) and *sewang manyambut tahun baru* (welcoming a new year). *Sewang* is also performed for good health, harmonious and peaceful family.

## **Forest rules**

Because of the presence of *makhluk ghaib* or *Tenrog*, *Orang Asli* normally observe certain *pantang larang* (taboo) in the form of *peraturan hutan* (forest rules) when they plan to go into the forests. If these rules and regulations are not observed, there will be misfortune such as falling sick and the service of *bomoh* has to be sought for treatment (Carey 1976). Thus, observing the code of behaviour in the form of rituals and taboos is important for the *Orang Asli* (Nicholas *et al.* 2003).

### ***Before leaving home***

The *Orang Asli* would recite a prayer informing *makhluk ghaib* that he plans to go into the forest and also seeking blessings that the intended purpose is fulfilled as well as ensuring a safe journey. An example of this prayer, "Dear *Datuk-datuk* (addressing *makhluk ghaib* with respect), grand-children (referring to oneself) are going into the forest to hunt for animals as food. We are poor and we need your approval to have a good hunt".

### ***Before entering a forest area***

As the *Orang Asli* approach the forest area, they normally request permission by reciting a prayer to the *makhluk ghaib*. Seeking permission to enter the forest normally involve recitation of verses such as "*Datuk-datuk*, grand children ask for permission to enter the forest now. Please protect us." It is believed that such prayer would keep them away from any misfortune.

### **The Dos and Don'ts in the forest**

- (a) *Orang Asli* must not wear fancy or expensive clothes/shoes in the forest as these are signs of showing off which are disliked by the *makhluk ghaib*. Usually, their dress/shoes show that they belong to the poor who enter the forest to fulfill household subsistence needs.
- (b) If villagers cook in the forest, they would avoid using spices which may cause discomfort to *makhluk ghaib*. It is best to prepare the food in a natural way.
- (c) While in the forest, the *Orang Asli* is forbidden to *takbur* (boast), to damage or pollute the forest environment. For example, he should not utter such a statement as "I am not afraid of the elephants or tigers". If he does so, it is likely that elephants or tigers would come near and even attack him.
- (d) Do not urinate without informing the *makhluk ghaib*. If the person wishes to urinate, he needs to inform the *makhluk ghaib* and seek forgiveness. This involves recitation of verse such as "*Datuk-datuk*, grandchildren asking for permission to urinate in this area. Kindly forgive grandchildren."
- (e) If an *Orang Asli* unintentionally offended the *makhluk ghaib*, it is important to recite another prayer offering apology for his ignorance. Otherwise, he might not be able to find his way out of the forest.
- (f) Children are not allowed to go into the forest alone without accompanying adults. If this rule is not observed, the *makhluk ghaib* may get angry and misfortune may occur.

### **Taking non-timber forest produce**

- (a) If the person wishes to take something home with good intention, he has to seek permission from *makhluk ghaib*. Recitation of verses such as "*Datuk-datuk*, grandchildren ask for permission to bring home some fruits to meet daily subsistence needs".
- (b) When taking forest resources, he has to practise sustainable utilization. For example, he should not harvest immature fruits or rattan. This is to ensure that the harvesting is done to meet necessary needs and does not damage the environment without specific reason (Abdul Talib 2002).

### **Leaving the forest**

Before leaving the forest for home, the *Orang Asli* would recite another prayer thanking the *makhluk ghaib* for ensuring his safety and fulfilling his needs.

### **Old sayings and songs**

There is limited research on the old sayings and songs of the *Orang Asli* related to forest resource utilization. Below are examples among the *Orang Asli Jahut* community who have been planting hill padi in the forest area for a long time.

*Apabila piantan (riang-riang in Malay or cicadas in English) berbunyi, kemarau sudah bermula.* ("When cicadas are making noise, drought has begun"). This shows how fauna could be used as a weather indicator.

*Bermulanya musim kemarau, bermula musim bekerja.* (When drought begins, it is time to start work)

The detailed activities to be carried out in forest hill padi farming are often expressed in *lagu rakyat* (people's song) of the Jahut community, known as *Proh Proh Kebatax Ruoh*.

## Conclusion

The values of showing respect, seeking permission, seeking protection, be humble, offering apology and be thankful to the *makhluk ghaib* in the forest guide the behaviour of *Orang Asli* in interaction with the forest environment and utilizing its resources to sustain their daily livelihood. These values are expressed in observations, practices as well as rules and regulations which are related to forest management and climate change. However, such observations, practices, rules and regulations are merely orally passed down from generation to generation. It is essential to record such social and cultural expressions which are relevant for modern application, especially in terms of sustainable forest management.

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# **A Study on the Traditional Beliefs and Practices on the Agricultural Land, Forest Resources, River Resources and Conservation by the *Dusun* People in Tambunan District, Sabah, Malaysia**

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## **ABSTRACT**

A Study the traditional beliefs and practices on the opening of agricultural land, harvesting of forest resources, river resources and their conservation was conducted among the *Dusun* people in Tambunan District, Sabah, Malaysia from December 2015 to January 2016. The objectives of this study were firstly to list down all traditional beliefs and practices regarding the opening of land for agricultural, harvesting forest resources and river resources and secondly to relate these traditional beliefs and practices with the conservation of these resources. Data were collected from interviews among the *Dusun* people in Tambunan as well as from previous studies. Results showed that there are 14 traditional beliefs and practices regarding the opening of land for agricultural, harvesting forest resources and river resources that are being practiced in Tambunan which related to the conservation of the resources, there are namely: *Moginupus*, *Madsalud*, *Monoruang*, *Paus*, *Bambarayon*, *Lintugi*, *Hokiu*, *Gonsuri*, *Tiasok*, *Tonduk*, *Misarawang*, *Pemewonod*, *Pemehingos*, *Mosubak* and *Toud*. These beliefs and practices are their Traditional Ecological Knowledge which have been handed down from generation to generation and are very important for the conservation and sustainable harvesting of resources by the *Dusun* people in Tambunan District.

**Keywords:** *Dusun* people, Tambunan, Sabah, Malaysia, traditional beliefs and practices, conservation

## **Introduction**

The survival of endangered species and ecosystems depends on long-term participation and understanding of local populations (Oates 1999). Because of the close relationship between cultural diversity and biodiversity, traditional knowledge systems should play an important role when developing species conservation and management strategies (Caldecott *et al.* 2005). For example, the United Nations Convention on Biological Diversity (UNCBD) (Article 8j) calls for parties to respect, preserves, and applies knowledge and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity (UNCBD 2007). Environment is an invaluable creation of God and it is our responsibility to manage the natural resources with good-care. For centuries, human being has been facing substantial challenges to perpetuate and nurture the environment which has deteriorated from the increase of consumerism. The challenge to conserve sustainable ecosystem and protected environment has led to some debates concerning conservation and biodiversity issues.

Biodiversity has emerged at the center of one of the most contentious global debates of this century. Critical to the debate are questions of how biologically endowed countries can achieve economic progress while balancing environmental and social concerns. This argument is closely related to the question of how biodiversity and traditional knowledge among indigenous people could establish meaningful collaboration towards biodiversity conservation of a mega diversity country, such as Malaysia. Scientists are now looking at the indigenous people on how they managed their resources sustainably in traditional manners.

The flora and fauna of Sabah is one of the notable natural features, and the number of wild plant species is likely to be approximately over 10,000 species. The natural ecosystem of Sabah supports a diversity of animal life including Orang-Utans, elephants and many bird species, as well as a diverse marine species which can be found off Sabah's long coastline. The indigenous communities in Sabah, of about 35 ethnic groups, have for centuries developed a unique system encompassing social, economic, political, spiritual, and customs aspects among their community. This system has been safeguarded by the indigenous people to create peace, a stable way of life and also to preserve resources and their environment (Woolley 1936).

## **Literature reviews**

Traditional knowledge is similar to Western science in that it is based on an accumulation of observations of life experiences for thousands of years. The bulk of this traditional knowledge has been passed down through the generations by means of traditional songs, stories, beliefs, legends, dreams, old sayings, rules and also other methods including living practices of the indigenous societies. Traditional knowledge is a knowledge–practice–belief complex (Berkes 1989). Interest in Traditional Ecological Knowledge has been growing in recent years, partly due to a recognition that such knowledge can contribute to the conservation of biodiversity (Gadgil *et al.* 1993), rare species (Colding 1998), protected areas (Johannes 1998),

ecological processes (Alcorn 1989) and sustainable resource use in general (Schmink *et al.* 1992, Berkes 1999).

Halim *et al.* (2012 and 2013) studied the traditional knowledge and environmental conservation among indigenous people in Ranau, Sabah; and Indigenous Knowledge and Biodiversity Conservation in Sabah, Malaysia. These studies focused mostly on the uses of plants. Low and Lee (2012) investigated the Kadazandusun beliefs about paddy spirits, riddling in harvest-time and paddy-related *Sundait* or riddle. Low and Pugh-Kitingan (2015) studied the impact of Christianity on traditional agricultural practices and beliefs among the Kimaragang people of Sabah.

The practice of Traditional Ecological Knowledge differs from that of scientific ecological knowledge in that it is largely dependent on local social mechanisms. These social mechanisms may be thought of as a hierarchy that proceeds from local ecological knowledge to social institutions, to mechanisms for cultural internalization, and to world views. Institutions, in the sense of rules-in-use, provide the means by which societies can act on their local knowledge and use it to sustain livelihood from the environment (Berkes 1989).

### Locality of study

Tambunan (Figure 1) is a valley district covering an area of 1,347 sq km in the Interior Division of the State of Sabah, Malaysia. It is located about 80 km by roads to the east of the State capital, Kota Kinabalu. It is connected by the Kota Kinabalu-Tambunan-Keningau Highway, 48 km south of Ranau and 48 km north of Keningau. Average altitude is about 750 m above sea level. This valley, which is part of the Crocker Range and Trus Madi Range, is covered with lowland mix dipterocarps forest vegetation (Figure 2) and experiences a mild tropical climate all year long. The valley is peppered with terraced padi fields and has 88 villages. The dense forests of bamboo Poring or *Gigantochloa levis* around Tambunan are a legacy of the British colonial period, during which an edict stated that 20 bamboo sprouts had to be planted for every bamboo plant cut. Its populace is mostly Dusun.



Figure 1. Map of Sabah showing the location of Tambunan District



**Figure 2.** Tambunan plain showing the rice padi fields and surrounded by mountains (Mt. Trus Madi range) (Photo: Julius Kulip)

According to Gibbon (1986), in the early 20th century, the social structure of the Tambunan *Dusuns* consisted of seven sub-tribes namely *Tuhauwon*, *Tagahas*, *Tibabar*, *Bundu*, *Gana*, *Palupuh* and *Kohub*. *Tuhauwon* arrived earlier than the others. The *Tuhauwon*, *Tagahas*, *Gana* and *Tibabar* sub-tribes are still concentrated in Tambunan till today.

### **The *Dusun* Tambunan native customary law**

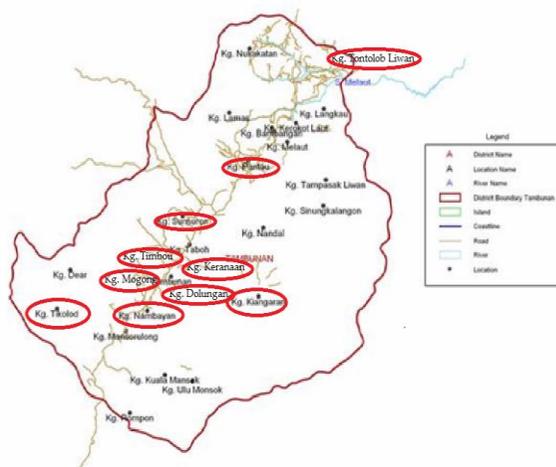
Customary Law is an ancient unwritten law that is found in a particular place where no rules has ever been enacted by the legislative authority. In Tambunan, the *Dusun* people have two sub-categories of Native Customary Laws. The first one is *Adat Kampung* which is on human – human relationship and the second one is *Adat Pantang* which is on human – nature relationship (Gidam 2016). This paper discussed more on the second category. The majority of the native peoples residing here are known as Tambunan Dusun (Figure 3). With an estimated population of around 60,000, they are traditionally padi cultivators and forest products gatherers. They cultivated two varieties of padi namely Hill Padi or *Parai Tidong* and Wet Padi or *Parai Dumoh*.



**Figure 3.** Traditional costumes of the Dusun of Tambunan (Photo by Julius Kulip)

## Methodology

This study employs two methods of data collection: survey by interviews and literature search from library and Internet. The respondents for the survey are groups of *Dusun* people located in seven villages in the Tambunan District (Figure 4): Kg, Timbou, Kg. Sunsuron, Kg, Tontolob-Liwan, Kg. Nambayan, Kg, Kaingaran, Dolungan and Kg. Tikolod (Table 1). Furthermore, in-depth interview sessions were held with six key-informants and representatives of the present and previous District Chief and Native Chiefs of Tambunan District.



**Figure 4.** Map of Tambunan District showing the localities of study

## Data collection

The library research are confined to the books, journal articles and intellectual contributions which related to biodiversity, indigenous knowledge (IK), ethnic relation, history of Tambunan District and other relevant areas.

## Results

### *Respondents' Profile*

**Table 1.** Respondents' profile

<b>No.</b>	<b>Name</b>	<b>Gender</b>	<b>Age (Years)</b>	<b>Village</b>
1.	Kulip Gidam	Male	80	Timbou
2.	Justin Gambun	Male	60	Timbou
3.	Johnny Gisil	Male	45	Tontolob-Liwan
4.	Boni Jaumin	Male	38	Nambayan
5.	Jamain Agang	Male	52	Sunsuron
6.	Thadeus Yungot	Male	70	Tikolod
7.	Motogor Gulung	Male	77	Dolungan
8.	Sabina	Female	55	Kaingaran
9.	Radin	Male	60	Kaingaran
10.	Jamilin	Female	55	Kaingaran

**Table 2.** Summary of the *Dusun* Tambunan traditional knowledge system practice and belief

Traditional knowledge system	Belief (adat) and practice
Agriculture:	
1. <i>Mongumoh</i> (Wet padi cultivation)	1. <i>Moginupus</i>
2. <i>Momuntaras</i> (Hill padi cultivation)	2. <i>Madsalud</i>
	3. <i>Monoruang</i>
	4. <i>Paus</i>
	5. <i>Bambarayon</i>
	6. <i>Lintugi</i>
	7. <i>Hokiu</i>
	8. <i>Gonsuri</i>
	9. <i>Tiasok</i>
Forest:	
1. <i>Kouwaan</i> (Fruiting fruits forbidden)	10. <i>Tonduk</i>
2. <i>Mogin Poring</i> (Harvesting bamboos)	11. <i>Misarawang</i>
3. <i>Mogin Rusap</i> (Collecting herbs)	12. <i>Pomowonod Pomohingos</i>
4. Forested area	13. <i>Mosubak</i>
Water:	
1. <i>Toud</i> (Spring water)	14. <i>Toud</i>

**Belief 1: *Moginupus* (respect to the newly dead person)**

If a villager dies in that village during *Momuntaras* or *Mongumoh* season, all villagers must stop working immediately for 10 days. It is a mourning period for the whole village. If someone did not respect the newly dead person in the village, his padi will die or no rice grains found inside the matured padi grains. After seven days of his/her burial, *adat Monumpoli* will be performed, then normal activities are restored again.

The normal activities of the two types of padi cultivation:

A. *Momuntaras* or hill padi cultivation

Rice padi is the staple food for the *Dusun* people of Tambunan. They will open primary or undisturbed hill forest land for planting rice padi (*Parai Tidong*) and will stay there for several years until the land is not productive anymore. Then they will move to another fertile forest land.

Before or on the way to the forest, members of the group must give attention to these *Pantang* (taboo/observance):

- a) If a group member encountered a '*Lintugi*' or large millipede, the group must cancel the trip and return home immediately. It is a sign of bad luck and it is believed that if the group did not follow the *Pantang*, one of the members of

the group will be hit by large log during opening of the forest land and will die or injured!

- b) If a group member heard a *hokiu* bird's call (the bird calls "Kiu...kiu...kiu"), the group must cancel the trip and return home immediately. It is a sign of bad luck and it is believed that a member of a family in their village will die soonest in that week.

Below is the process of planting of hill rice padi. Overall this process is known as *Momutaras*.

- i. *Mintong*: Firstly a group of man will go and see (resee) the forest where they intended to open for planting. This is to make sure that the land is suitable for planting rice padi.
- ii. *Momorihik*: Cutting small trees, tree-lets and shrubs below the big trees.
- iii. *Managad*: Felling big trees. Wild fruit trees and trees that have Bee hives (Potiukan) will not be fell.
- iv. *Tutudan*: Burning all dried tree, tree-lets, shrub after about one month. Below are the Native Customs for burning in agricultural hill land:
  - a. Must inform the villagers in advance.
  - b. Start burning from the highest level of the forest.
  - c. Start as early as possible, if it is not raining at around 9-10 in the morning.
- v. *Untunan*: Gathering all woods that are not totally burnt. Usually at the edge of the plot.
- vi. *Mangasok*: Holes are made using a one-end sharpened pole then other member of the family will pour rice padi seeds into the holes, and the holes are covered with soils.
- vii. *Magamas*: Cutting and throwing all newly grown shrubs or grasses inside the newly planted rice padi plot. This activity is done continuously as often as possible until the rice padi plants are tall enough and start fruiting.
- viii. *Sinurambi*: Erecting a small but high hut to watch and chase off birds.
- ix. *Mongimuau*: To scare away birds, a piece of bamboo is cut horizontally into two halves and tied with rattan at one end to. The rattan is pulled and released and will produce a loud 'bang'. Bamboo traps called *Sungu* and *Sodi* are made to trap the rats and squirrels respectively.
- x. *Mongomot*: Harvesting the rice padi. Usually done with the help of other members of the village.
- xi. *Monoud*: padi grains are separated from empty husks and the the padi grains will be kept in a barn.
- xii. *Kaamatan*: The *Dusun* people will celebrate the Harvest Festival or '*Tadau Kaamatan*' which is a thanksgiving day to '*Kinorohingan*' God after a good harvest of paddy. They will eat new rice and drink '*Kinomo*' or traditional rice wine with gongs beaten, singing and feasting for two days.

## B. *Mongumoh* or wet padi cultivation

Below is the process of *Mongumoh* and the associated Native Cultures or *Pantang*:

### 1. *Mangasok Tatakan* (rice padi nursery)

- i. *Mogihum Tatakan*: Finding and selecting a suitable land area as nursery for raising seedlings of rice padi.
- ii. *Mongimporing*: Gathering bamboo to build fences for the nursery.
- iii. *Buaton*: Cutting tree-lets, shrubs and grasses, and leveling for the nursery.
- iv. *Mongukup*: Gathering all tree-lets etc... and cleaning of nursery area.
- v. *Ansaran* – Erecting fences surrounding the ‘Buaton’ to protect the new seedlings.
- vi. *Mangasok* – Planting holes are made using sharp ended pole.
- vii. *Monumpos* – Putting padi seeds into the holes by women.
- viii. *Mamahabu* – Covering the holes back with soils using coconut leaves.

In two months or so, seedlings of the padi or ‘*TotoK*’ grow and will be pulled and transferred to the main padi plot or ‘*Dumoh*’. No food and drinks were allowed inside the nursery during this work.

### 2. *Morobuat* (preparing padi plot)

This activity is done two months after the ‘*Mangasok Tatakan*’ activity, usually in the month of June.

- i. *Mangansar*: Erecting fences around the padi plot.
- ii. *Meminatang*: Making sub-plot boundaries.
- iii. *Papahagob*: Flooding the prepared sub-plots by irrigation river water.
- iv. *Maradu*: Plouging.
- v. *Maragus*: Clearing of twigs, grass, stones etc... from the plot.
- vi. *Mananom*: Planting paddy seedlings into newly prepared padi plot.
- vii. *Mamagamas*: Maintaining the padi plot by weeding regularly.

### 3. *Megemot* (harvesting ripen padi grains)

- i. *Popoilo*: Announcing to neighbors the time of harvesting day for your plot.
- ii. *Mokotu*: Taking seven stalks of excellent ripen padi plants. A short traditional prayer is conducted; this is to get permission from the padi spirit or ‘*Bambarayon*’ for harvesting.
- iii. *Popouhi do Bambarayon*: Bring the seven stalks into padi hut store or ‘*Hingku*’.
- iv. *Mengemot*: Harvesting day for the new padi grains.
- v. *Mongogik*: Separating the padi grains from its stalk.

- vi. *Monoud*: Separating padi grains from empty padi grains. *Monoud* is carried out with the help of other villagers. When the work is done, a big party is organized to celebrate the success year of planting of padi and a good harvest. During the celebration, rice wines or *Kinemoh* and foods are served. The celebration can last for weeks until all food and rice wine finished!

At present, this activity is replaced by *Tadau Kaamatan* (Kulip 2015).

- i. *Mamirangkat*: Carrying and bringing all harvested new padi grains into a permanent and safe padi store or *Hingkut*.
- ii. *Kaamatan*: This is the time that the Dusun people will celebrate the Harvest Festival or 'Tadau Kaamatan'. It is a thanksgiving day to 'Kinorohingan' God after a good harvest of paddy. They will eat new rice and drink 'Kinomo' with gongs beaten, singing and feasting for two days
- iii. *Koliwasan*: Free time. Usually from January to end of May.

#### *Conservation values*

The seven days resting period will restore villagers' energy. The wild animal in the forests can save their live. In agriculture, this will give time for the land to rest. Allow animal in the water i.e. fishes, frogs, crabs etc... to 'escape', reproduce, etc... Allow animals, such as rats, snake, to 'escape', reproduce. In term of forest resources, this will give time for forest's resources to grow, to multiply,

#### ***Belief 2: Madsalud***

*Madsalud* custom is practised during the stage when the padi is ripened. This is to protect so that the padi will not die (Jamilin 2015).

#### *Activity*

People are prohibited to enter the padi field. This is to protect the growing padi from diseases.

#### *Conservation value*

Newly planted padi are protected.

#### ***Belief 3: Monoruang/Mogumpau (new born baby).***

A new born in a village will be respected by the whole village. Whoever ignores this will be questioned by the Head of Village, and bad luck will befall unto him/her.

#### *Activity*

All activities in the village will be stopped for one day. After one month from the date of new born, an *Adat Monoruang* or *Mogumpau* is performed. All villagers must visit the new born baby by bringing a gift, usually a chicken, rice, '*tapa*' or rice wine and cakes. Villagers will celebrate for one day welcoming the new born in the village. It is like a Birthday Party. But only one birthday party in a life time!

#### *Conservation values*

Human energy is respected. The new born baby is their future workforce in the field. Villagers rest for a day (Officially!). Land, plants, animals have a day of rest.

#### **Belief 4: Paus**

*Paus* is a *Dusun* Tambunan word for barking deer (*Muntiacus atherodes*) and is a sacred animal for the *Dusun* people in Tambunan.

#### *Practice*

During *Mananom* stage, if a person went to the jungle nearby and caught a deer *Paus*, and brought it into the padi plots and someone/everyone saw it, all *Mananom* works must be stopped immediately. Works can only be resumed when all the *Paus* meat has been eaten or after two days. The *Dusun* people in Tambunan believe that the newly planted padi plants will die as the padi spirit or *Bambarayon* is *Mengaus* or sad and angry.

#### *Conservation value*

The population of barking deer in the forest will be protected.

#### **Belief 5: Bambarayon (padi spirit).**

The *Dusun* of Tambunan believes that the *Bambarayon* spirits look after the padi plant. Without them the padi will not produce fruits or died. The seven *Bambarayon* spirits (Evans 1953) are:

1. Ohinopot – guards the supply of paddy in the store.
2. Sambilod – controls the damage to the rice plants
3. Gontolobon – gives rice piled up in “boulders”.
4. Momiaud – gives paddy as abundant as spring water.
5. Moniudan – gives paddy as abundant as spring water.
6. Sompidot – gives opidot (full grain in the ear).
7. Kabang – makes the rice kembang (swell) in the cooking pot

#### *Practice*

Seven stalks of fruiting padi will be harvested in the paddy field in the morning of the first day of harvesting season. The seven stalks represented the seven spirits and were brought to the padi barn or *Hingkut* and kept there.

#### *Conservation value*

The best padi seeds will be kept as the next season’s planting materials.

#### **Belief 6: Lintugi (sacred insect).**

If a ‘*Lintugi*’ millipede (*Archispirostreptus gigas*) crossing over your road/trail to the forest/agriculture land, it is a sign of bad luck/omen. The *Dusun* people in Tambunan believe that the body of the millipede resembles a big log. The feet are the people. The *Lintugi* itself symbolizes a big fallen log onto people!

#### *Practice*

If the *Dusun* encounters a millipede crossing his path, he must cancel his trip and return home immediately, as some misfortunes will happen.

*Conservation value*

Millipede will not be killed, thus this will be saved.

**Belief 7: Hoku**

The call of the woodpecker (*Dinopium javanese*) (Figure 5) inform the *Dusun* people in Tambunan that a person in his/her village will die in a week.

*Practice*

Upon hearing the 'Hoku' (woodpecker) bird call, a person who is on his way to the forest, must immediately return back home. This is to make sure the person would not miss the funeral.

*Conservation value*

The bird will be saved.



**Figure 5.** *Hoku* bird

**Belief 8: Gonsuri**

Gonsuri is the name of a sacred forest rat for the *Dusun* people in Tambunan. Something bad will happen in the near future if this rat crosses your path (Gisil 2016.).

*Practice*

One must return home whenever one encounters a herd of 'Gonsuri' rats crossing your path. During the Mt. Kinabalu tremor in 2015, many had witnessed the unusually large numbers of rats came down from the mountain in the early morning, and about four hours later, the summit of Mt. Kinabalu was shaken by huge quakes.

*Conservation value*

The *Dusun* people in Tambunan will not kill this rat thus the rats are saved.

**Belief 9: Tiasok**

*Tiasok* is the second harvesting of padi left-over from the first harvest. Villagers cannot harvest the padi if group of bees or 'Potiukan' passing by the paddy field. It is believed that the paddy will burnt (Jaumin 2016)

*Practice*

The seeds of the padi will be kept for next season's planting materials.

*Conservation value*

Bees are respected by the Dusun in Tambunan. They can save their paddy being burnt. Eventually the bees are protected.

**Belief 10: Tonduk (sharp end pole).**

A 'Tonduk' is a sign that a tree or paddy field has an owner, and is forbidden for harvesting without permission from the owner.

*Practice*

A 'Tonduk' or a sharp end pole is erected near a fruiting tree or fruiting paddy field. This is to tell people that the fruit tree or padi belong to someone and are forbidden to be taken by anyone without permission (Gidam 2015). A bamboo clump if it is found with two sharp ends of bamboos with pig's skull erected near it means that a fine equivalent to one pig will be imposed if found taking the bamboos without permission (Gambun 2015). Prayers will be performed by the traditional Dusun priest or *Bobolian* during the erecting of the sharp pole. Failure to observe this belief, a person could be fined a *Sogit*, one black young chicken.

*Conservation value*

Fruit trees and padi are protected.

**Belief 11: Misarawang**

*Misarawang* (full moon): when harvesting of bamboos and trees for making house or/and fences during this period, a water buffalo in the village will run and destroy them (Gidam 2016). If someone is planting during this time, no fruits will be produced (Gisil, 2016).

*Practice*

Harvesting of bamboos for making house/constructions during full moon phase is not recommended. Planting agricultural crops are also not recommended.

*Conservation value*

Scientific studies show that moths are attracted to light trap at night. Dhawan and Mishra (2005) reported that the season has great influence on the durability of bamboo species. The bamboos harvested during winter months were more resistant to termite attacks than harvested during summer. Effect of the moon phases is found significant on termite resistance. The bamboos felled during the dark phase were comparatively more resistant than felled in full moon phase.

**Belief 12: Pemewenod Pemohingos**

Every plant/mountain in the forest has spirit. One must not tell people that you are going to the forest to collect herbs, and cannot look back/behind after collected the herbs. If a snake or 'Lintugi' millipede or 'Gonsuri' rat crosses the path, or hears the 'Hokiü' bird calls, the person must return home. These are all bad omen.

### *Practice*

Collecting/harvesting of wild herbs in the forest is limited to seven kinds/species only.

Do not say bad words about the forest/mountain or misbehave (Mt. Kinabalu tremor 2015). When collecting the herbs, one must:

- i. Not inform someone where you are going and your intention;
- ii. Not make unnecessary noises.
- iii. Must get permission from the spirits when arrive at the location where the herbs grow,
- iv. Go home without looking back after collected herbs.

### *Conservation value*

Shamans determine the number of animals to be hunted and the species that need to be protected, based on field observations (Reichel-Dolmatoff 1976). By limiting the number of species of herbs that could be collected, the population of herbs in the forest is controlled and sustained.

### **Belief 13: Mosubak**

*Mosubak* is a practice to protect forest resources such as animals, fish, etc...

### *Practice*

Prayer "*Momurinait*" by a *Bobolian* (Priest) is performed to an area of forest or river so that any illegal hunters/poachers will not succeed in finding any animals/fish in the forest/river concerned.

### *Conservation value*

Forest/River resources are saved.

### **Belief 14: Toud**

A *Toud* is a natural spring and source of drinking/cooking water, a spirit is living in the *Toud* and protecting it.

### *Practice*

If someone pollutes the spring water, he/she will be fined. The kind of *Sogit* (penalty) is a table spoon of salt. One is not allowed to build house, or make a pond at the *Toud* area.

### *Conservation value*

The natural spring will be saved.

## **Conclusion**

The are 14 traditional beliefs and practices of the *Dusun* people in Tambunan recorded in this study in relation to working in agricultural land, harvesting forest products and activities related to water sources which related to conservation of the resources. There are namely: *Moginupus*, *Madsalud*, *Monoruang*, *Paus*, *Bambarayon*, *Lintugi*, *Hokiu*, *Gonsuri*, *Tiasok*, *Tonduk*, *Misarawang*, *Pemewonod*

*Pemehingos, Mosubak and Toud*. These are their Traditional Ecological Knowledge which has been handed down from the generations. Each of this belief is meant to conserve and protect the natural resources to ensure sustainable utilization. Some of these traditional beliefs have been proven scientifically and in line with modern practices.

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# Documentation of Folk Culture of Selected Indigenous Communities in the Philippines: An Initial Assessment

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## ABSTRACT

Traditional knowledge passed-on from one generation to another preserves the national identity and cultural diversity of the indigenous communities. It also contributes in sustaining the community's livelihood and conserving their resources. This paper presents some folk culture related to sustainable management of the forests of selected indigenous communities in the Philippines. The paper is based mostly on information gathered from previous documentation study of traditional knowledge related to ecosystem services. The selected tribal communities were the *i-Agawa* of Cordillera Autonomous Region (CAR) and *Talaandigs* of Bukidnon.

The *i-Agawa* tribe gathers annually on 30 September (or 29 for a leap year) to celebrate the *Linapet*. It signals the start of the planting of taro or the sowing of seeds. Specific religious rituals are done for each stage of the agricultural cycle in which specific roles are played by male elders, older women and young men and women. They believe, up to now, that the forests are haven of unseen spirits and entities. Thus, proper conservation and protection of the forests must be done.

The *Talaandig* elders continue to teach and transfer cultural beliefs and practices to their descendants through oral and actual practice in their own School of Living Traditions. Among the practices being observed by the communities are avoidance of hurting the *kalumabata* (Philippine eagle) for it can lead to a death in a family or a tribe member; observance of respect and prudence in the utilization of forest resources inside the territory; and consulting nature spirits through rituals like *Pangampo*, *Pamahandi* (asking God for more harvest) and *Igbabasok* a ritual performed before planting.

These communities continue to live in isolation from the lowlanders and are self-sufficient within their communities. Their culture and traditions are reflected in their views on land, rituals, songs and folklores. They regard the land and forests as their heritage that must be properly cared and protected for future generations. The information gathered can be useful in formulating programmes and strategies involving these communities to sustainably manage the ecosystems.

**Keywords:** traditional knowledge, sustainable management, Talaandig and i-Agawa

## **Introduction**

Globally, traditional knowledge is recognized for its contributions to, and potential for sustainable development in food security, natural resources management, and biodiversity conservation. Passed-on from one generation to another, it preserves the national identity and cultural diversity of the indigenous communities. It also contributes in sustaining the community's livelihood and conserving their resources. They are expressed through language, oral traditions, spirituality which are displayed in broad complex of beliefs, ceremonies and practices (UNESCO 2007). This same scenario is shared in the Philippines which has rich cultural diversity and natural resources.

The Philippines is an archipelago of more than 7100 islands bestowed with abundant natural resources, diverse culture, rich history and different groups of indigenous people. The indigenous people are found in the upland and as isolated communities in Luzon, Mindanao and some islands in Visayas. These communities encompass collection of distinct languages and cultures. They continue to live in isolation from lowlanders and are self-sufficient in their communities. Their culture and traditions are reflected in their views on land, rituals, songs and folklores. They regard the land and forests as their heritage that must be properly cared and protected for future generations.

Formulation of programmes and strategies with consideration of folk culture and involving upland communities – *i-Agawa* and *Talaandigs* for sustainable management of their ecosystems is important to ensure proper sustainable forest management in their areas.

## **Methodology**

Gathering and review of previous documentation studies on traditional forest knowledge and folk culture in the Philippines was conducted through library research and collation of research reports. The tribal communities selected for this initial assessment were *i-Agawa* of the Cordillera Autonomous Region (CAR) and the *Talaandig* tribe of Lantapan, Bukidnon.

### ***Talaandigs***

Manupali Watershed in Bukidnon traverses the upper part of the Pulangui River Basin. Within the watershed is Lantapan, which serves as home for several tributaries. The *Talaandigs*, with about 100,000 in population, are among the 110 groups of indigenous peoples in the Philippines. The Mt. Kitanglad range, whose highest peak is 2,938 m above sea level, is considered by the *Talaandig* as their "remaining marker" from which their history emanates. Interestingly, their name originated because they are inhabitants of mountain slopes (*andig* means slope).

The cultural relationship of *Talaandigs* to nature and the forests is defined through the myth of their creation. According to their story, the physical and spiritual composition of the *Talaandig* being is derived from the different elements that

composed the world - the soil, water, forest and wildlife, air, sun, sounds and spirits. For their creation, the soil became the flesh; the water as the blood; the tree, vines and grasses as the bone, veins and hairs; the air as the breath and strength; the sun as the light of the eyes; the sounds as the language; and the spirits as the foundation of the human soul.

Mt. Kitanglad is the fountain of their culture, traditions and knowledge that have shaped and sustained them and their ancestors for centuries. The elders consider that the upholding of their ancestors' legacy depend on them. For them, culture is their identity. It is a link in the past that defines the present.

### *Cultural beliefs*

The *Talaandigs* have established community protocol to ensure that visitors and outsiders comply with customary laws and are sensitive to the local culture. This ritual signifies the community's acceptance and welcoming of its visitors. It is performed by the elders and women, involving the offering of one peso by each participant, the butchering of four chickens, prayers and chants. Through this protocol, visitors are assured of their safety and health while inside the territory of the tribe. However, outsiders' entry is also dependent on the frog who guards the forest. One cannot enter the forest once the frog makes a sound that says otherwise.

For those who enter their premises without permission are penalized through the *Sala*. *Sala* is the customary way of resolving conflicts and disagreements among the tribal community. The outcome of the *Sala* may be in the form of penalty (excluding execution and imprisonment), admonition or agreement depending on the crime or conflict being resolved. All forms of agreements and penalties are treated as sacred and binding. Failure to comply will make the mediator sick, curse the offender for life, and bring misfortune to the tribe

Rituals are also done to ask guidance from *Tibulon* and *Balaog* (god and goddess of farming spirits) and *Bulalakaw* (for water spirit) for their daily activities and economic survival. Their ancestors taught them to get things inside the forest that are enough for their needs. They also told them not to sell their lands, for losing ancestral home is like burying the tribe beneath the ground.

Rituals are performed every year as a sign of gratitude or tax for the services provided by the forest to the community. Among the rituals performed were:

- *Pamahandi* – household ritual asking God for good health and wealth (every January)
- In *sari-sari* store (small grocery store in the community), *Pamahandi* is also performed to ask for good sales
- *Igbabasok* – ritual done before planting for good harvest
- *Lagon* – ritual during harvest
- *Talabugta* –farming ritual asking God for good harvest and fertile soil

After the *Binaki* has been constructed, the whole family will do a ritual for *Man Doceno*, *Man Panglaw* and *Man Ulinay* who were the first farmers of the tribes. According to one of the respondents, they will ask for signs to indicate the

appropriate time/season for planting. Every living creatures in the forest give signs for every activity to be conducted.

### ***I-Agawa tribe***

The forest is the heart of the tribe's survival – source of wood that can be used for timber and farm tools, and source of medicinal plants. There are two types of forest: pine forest (*batangan*) and mossy forest (*kallasan/pagpag*). *Kallasan* serves as hunting ground for several wild animals.

*Agawa* female consider the *binang-owaw* mountain sacred because it is the main source of water (*puon ti danum*). According to them, the mountain should be protected from fire and any kind of disturbance that might endanger the water source. To protect the forests, the *i-Agawa* tribe continues to practice the *sinan-adum ay pamati*.

*Linapet*, an annual gathering on 30 September (or 29 for a leap year), signals the planting of taro or the sowing of seeds. It is the time of the year when the sun's rays pass right through the center of two huge rocks called *Ambaon Bato* in Mt. Langsayan, a phenomenon that used to be seen from a designated rock in *Awaw Dap-ay* in Gueday at sunrise. This is called *Calendar Bato*.



Unfortunately, this can no longer be witnessed at present because the location of *Calendar Bato* has sunk and pine trees have grown near the *Ambaon Bato*. Despite this, the community still marks the occasion.

### ***Cultural belief***

The community, though Christian, continues to follow traditional religion – *sinan-adum ay pamati*. Tauli-Corpuz (2001) and Scott (1974) provided information about the observance of *obaya* and the ritual *begnas*:

- Living things are attributed with souls and spirits. If a person dies, the soul will become a spirit (*anito*) which will reside nearby.
- A major religious concern is the placation of spirits of the dead (*anito*) through animal sacrifices in communal ceremonies.
- Land formations, water bodies, rocks, etc. are believed to host spirits who protect them from pollution or destruction.
- There are specific religious rituals for each stage of the agricultural cycle in which specific roles are played by male elders, older women, and young men and women.

*I-Agawa* people believe that the river is guarded by spirits. Incidents have allowed them to believe such. One farmer from the community tried to divert the flow of the river towards his farm, and the volume of water in the river decreased. It only came back when the farmer put back the river to its original course. From then, they imposed to themselves to keep the river clean and not pollute it so that the spirits guarding the river will not be angered.

The community has sacred places or things that had led them to modest gestures of preservation and conservation. The *Patpatayan*, a tree where the elders offer prayers to *Kabunyan*, is considered a sacred place. Thus, it is a taboo to cut the branches of this tree, or urinate or defecate under it (Fiar-od 2001). Forests, at large, also serve as burial grounds of their ancestors. Anyone who disturbs the area will experience misfortunes. Burial sites are usually close to their forest, hence, the community avoids practicing what they consider to be destructive and unsustainable practices.

## **Conclusion**

A rich environment is able to develop and promote a rich culture. When the resources in the forest are preserved and developed, the cultures of the local people attached to it are also developed. Likewise, when the resources of the forest deteriorate, the cultures of the people attached to it also deteriorate. In order to promote an effective forest management, the resources of nature must be sustained for the survival and development of local cultures.

Various scientific approaches and attempts had initiated to sustain the forests and natural resources. However, success will be enhanced if modern scientific approaches supplemented with traditional knowledge. Embracing folk culture - cultural beliefs and traditional practices - of *I-Agawa* and *Talaandigs* and combining them with scientific knowledge can produce specific and more effective strategies and strengthen current initiatives on sustainable forest management in Besao, CAR and in Mt. Kitanglad, Bukidnon, respectively. Beneficial change would be achieved when two hands are working together - the management and implementers or beneficiaries (communities).

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# Customary Laws and Old Sayings in Relation to Forest Management of Thai Group in Viet Nam

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## ABSTRACT

Customary laws and old sayings related to forest management of the Thai Group have been developed and maintained for ages. These customary laws and old sayings are important for the protection and development of the natural resources and daily life of the villages. Therefore, understanding customary laws and old sayings of the Thai are crucial to conserve and improve the ecological environment and the livelihood of local people in the region.

Since a long time ago, the Thai Group of Vietnam has developed and maintained customary laws, accompanied by rituals, to manage the worship forest, sacred forest and ghost forest around their villages. The Thai Group also respects and protects well the forbidden forests, including forest of watershed, forests for harvesting and tree possession. Those types of forests are very valuable and respectable in regard to Thai belief and attitude and the ecological environment protection. By using customary laws and principles created, the Thai villages have strongly and continuously protected and conserved forests in the region.

The Thai Group has also developed and maintained a lot of old sayings, many of which are related to forest management. By containing two sentences to compare a right event/issue, old sayings aim to confirm the experiences or truths that have been widely confirmed. Old saying of the Thai language are normally simple and easy to remember, so that they have been greatly restored and disseminated from one generation to another, and to have a great contribution to the management of ecological environment in the region.

Due to many reasons, customary laws and old sayings of the Thai Group have dramatically been neglected for decades. As a result, the ecological environment of the region has been degraded, resulted in deterioration of the daily life of local people. In order to improve the ecological environment and livelihood of local people, it is very necessary to restore and strengthen the customary laws and old sayings of the Thai Group. Further study and documenting of customary laws and old sayings of the Thai are therefore important and require urgent actions.

**Keywords:** customary law, old saying, Thai group

## Introduction

Customary laws and old sayings related to forest management have been developed and maintained by the Thai Group for ages. Customary laws and old sayings are well respected and executed by the Thai that greatly contribute to the protection and management of ecological environment and livelihood of local people. Therefore, understanding customary laws and old sayings of the Thai are crucial to protect and improve the ecological environment and the daily lives of local people in the region.

## Thai Group of Viet Nam

The Thai is one of 54 ethnic Groups of Vietnam. The population of Thai Group is 1,550,423 people, occupying 1.81% of the national population and being the third largest population group of the country (UNFPA 2011).

Thai people distribute along the country, but they settle mostly in the northern provinces of Lai Chau, Son La, Hoa Binh, Dien Bien, Yen Bai, Thanh Hoa and Nghe An (UNFPA 2011). The Thai may only settle in a totally Thai village, but they could also live with other ethnic minorities. A village of Thai people is rather stable, having boundary with other villages, using natural terrain such as rivers, streams or mountains. Thai people often choose their villages near water sources that suitable for agricultural cultivation and daily life. This is the main foundation for a Thai village to sustain and develop economically. According to Thai laws, a village has a right to manage and use natural resources such as forest, farm field and land. The boundary of a village, its land and forest, is determined by experienced village patriarchs using stream, river or mountain gorge. Even though the boundary is not official, it is respected and obeyed by local people (Care 2012).

A long time ago, the Thai have adopted wet rice cultivation, using suitable irrigation networks. Their work can be summarized in the Thai saying "*muong - phai - lai - lin*" (which means digging of canals, consolidating of banks, guiding water through obstacles, and fixing water gutters) in the fields. In the past, Thai people grew only one sticky rice crop a year, but currently, they have converted into two crops of ordinary rice annually. They also cultivate fields in the mountains, where they could grow rice, corn, and other subsidiary crops, especially cotton, indigo and mulberry for cloth weaving.

The Thai Group has developed and maintained customary laws and old sayings over time, of which sacred forests and forbidden forests have been established and protected over time.

## **Sacred forest**

Thai Group has three types of sacred forests: Worship Forest, Sacred Forest and Ghost Forest, that had to be located near their villages (Care 2012, Cam Trong 1998).

### *Worship Forest*

Each Thai village has a Worship Forest (called *Dong Xua*), an old and good forest close to the village. The Worship Forest must have some big and old trees, in which one is selected to be the altar to serve the divine worship of the village. The Worship Forest is respected and well protected by the local people.

### *Sacred Forest*

Sacred forest is a primary and dense forest near the village that possesses a lot of old and big trees. According to the Thai customs, the Sacred Forest is the settlement for the forest ghost, so no one likes to enter and harvest the forest. The Sacred Forest is normally attached with secret legends, and Thai people respect Sacred Forest/secret legend as a religion. Therefore, the Sacred Forest is well respected and protected.

### *Ghost Forest*

Each Thai village has a Ghost Forest, a place to bury dead people from the village. According to the Thai customary laws, forests play a great role to bring up and protect people for all their lives, and when they die, forests will receive and cover them up like a mother. Thai people also think that dead people must be buried in a separated place, so that the tomb will not be seen by their relatives to avoid unhappy and unlucky impact. Like Worship Forest and Sacred Forest, the Ghost Forest is well respected and protected by local people.

## **Forbidden forests**

Apart from sacred forests, the Thai Group has created and maintained forbidden forests, including forest of watershed, forest for harvesting and tree possession (Care 2012, Lan 1998).

### *Forest of watershed*

Adapted paddy rice cultivation as a main livelihood, the Thai Group understands deeply the crucial role of the water sources and watershed. The Thai people passed down from generation to generation customary laws: "Protection of forest for the development of generations, for the sustainable water sources; and one has to know this issue to be a person".

### *Forest for harvesting*

A forest area near a village is stipulated for providing timber for housing, bamboo and bamboo shoot and other forest products for the daily life of local people. The protection and uses of this forest is governed by the customary laws of the village.

### *Tree possession*

The possession of trees in the forest is stipulated in customary laws of the Thai People. Each family or person has the right to possess trees in the forest. The first person finds and marks the tree (called *Ta leo*) will have the right to own that tree, and this is respected by other people. If one cuts down the marked tree without approval will be fined by the village.

## **Customary laws of the Thai Group**

Customary laws of the Thai Group have been developed and maintained overtime to manage and conserve the forests, the ecological environment and the daily life of villages. Customary laws cover a wide range of issues of the Thai Group, including the management of sacred forests and forbidden forests.

Sacred Forests, including Worship Forest, Sacred Forest and Ghost Forest, are well respected and protected by Thai people. All activities in these forests must follow the customary laws of the village. Whoever breaks the law will be fined by the village.

Watershed is also strictly protected as any damage or harvest activity is forbidden. All villagers have the responsibility to protect the watershed following the customary laws and principles created by the village. Whoever breaks the law will be fined by the village.

For Protection Forests, the customary law allows villagers to harvest bamboo, bamboo shoot, firewood, timber and non-timber forest products, but under the control of the village as stipulated by the customary laws. For instance, the time and the method to harvest bamboo should be suitable for the maintenance and development of the forest, and it could be from tenth to twelve month of the Lunar Calendar. Harvesting during this period will cause minimum negative impact on the forest and the products are the best (Care 2012, Ty 1998). On the other hand, the way to harvest bamboo shoots is to dig and get both top and stump of the shoot, not only the top of the shoot. Harvesting bamboo shoot will start from late 5th month of the Lunar Calendar only, and is well controlled by the village to make sure that bamboo forest is not severely damaged by over harvesting (Care 2012).

The customary laws regulate that a villager could be allowed to harvest trees for housing or other purposes, but he/she has to plant 10 or more seedlings of the same species in the gaps of that forest.

Agricultural cultivation is not allowed in natural forest. It is only implemented in young or degraded, and bamboo forests, that determined by the village for agriculture cultivation. It is forbidden to damage good natural forest for cultivation. Burning for cultivation is well controlled by the village, to make sure fire will not damage the forests.

In forests for harvesting, the management and uses are regulated by the customary laws of the village. For instance, farming and shifting cultivation in the forest are forbidden. In case, someone is allowed to cut down a tree for housing, they have to plant, tend and protect 5-10 seedlings of the same species within or outside the gap of the falling tree. Regarding the bamboo harvesting, each year villagers are allowed

to enter the forest two to three times to harvest bamboo and bamboo shoot in certain time of the year to make sure that the bamboo shoot is well maintained and developed. Whoever breaks the laws will be fined.

For sacred and forbidden forests, the village assigns people to patrol and protect during both day and night. When the bamboo shoot harvesting season comes, more people are assigned to patrol and protect. Each forest guard will receive 500 kg of rice per year for their work to protect sacred forests. In order to have a budget to meet all the expenses for forest protection, the village could harvest some forest products from sacred forest in a suitable time (Care 2012).

The village also has the convention to punish people who break the customary laws and principles stipulated by the village. Shifting cultivation in the sacred forest must get approval from the village patriarch. If not, one will be fined according to the principles of the village. Harvesting in sacred forest is forbidden except the harvesting of bamboo and bamboo shoots during some periods of time following the principles stipulated by the village. If a person breaks these principles, he/she will be fined in the form of apig or wine or equivalent in money. Whoever illegally harvest timber or bamboo and bamboo shoots from sacred or watershed forests could be fined a certain amount of money and punished by standing half a day, and has to admit the mistake in front of all villagers (Ty 1998).

At the beginning of each year, a worship festival is formally organized to worship the powerful spirit resided in the forest. On behalf of the village, a sorcerer worships the divine spirit to bestow good weather, good crop, good health and happiness upon all people of the village. The Worship Forest is respected and well protected by the local people. They believe, if one damages the Worship Forest, he or she will be fined by the powerful spirit in the forest.

### **Old sayings of Thai Group**

Thai People have developed and maintained various old sayings, many are related to forest management and ecosystem services. By using two sentences to compare a right event/issue, the Thai People like to confirm the experiences or truths that have been widely confirmed. These sentences of the Thai language are normally simple and easy to remember, so that old sayings have been greatly restored and disseminated from one generation to another of Thai People.

The followings are some old sayings in regards to forest management of Thai people (Lan 1998):

TT	Châm ngôn (Người Thái)	Thai old sayings
1	<i>Sống rừng nuôi, chết rừng chôn</i>	Live: forest feeds, dead: forest buries
2	<i>Giữ rừng cho muôn đời phát triển; cho muôn mỏ nước tuôn trào</i>	Protection of forest for development of future regenerations; and for abundance water source generation
	<i>Ai không nhớ điều này thì không thể là người</i>	Without remembering this issue, one could not become a person
	<i>Đất đen thì trồng lúa</i>	Black soil grows rice
3	<i>Đất đỏ thì trồng dưa (sau khi đốt có nhiều nhiệt)</i>	Red soil grows water-melon (soil after burning is better for water-melon)
	<i>Đất cửa suối không dựng nhà</i>	Do not build house in stream mouth
4	<i>Đất quá dốc không được ở</i>	Do not settle on steep land
	<i>Làm nương phải ủ mùn</i>	Terraced-field cultivation must make humus
5	<i>Làm ruộng phải ủ đất ngấu</i>	Paddy rice cultivation must make soil ripe
6	<i>Đất tốt đảo lên mới cho năng suất</i>	Good soil: turn upside down gives good yield
	<i>Đất xấu đảo nhiều lần mới bền</i>	Bad soil: turn upside down many times to stabilize
7	<i>Muốn ăn chuối phải trồng</i>	Want to eat banana, must grow banana
	<i>Muốn có con phải lấy chồng</i>	Want to have children, must get married
8	<i>Muốn khó làm nương rừng sặt</i>	Want to be hard, cultivate terraced-field in bamboo forest
	<i>Muốn nhà om sòm thì lấy vợ lẽ</i>	Want to make noise in house, marry another wife
9	<i>Muốn ăn đừng ngồi</i>	Want to eat, do not sit
	<i>Muốn giàu đừng ngủ</i>	Want to be rich, do not sleep
10	<i>Ngăn nước cần đất sét</i>	Prevent water, need clay
	<i>Dựng mường cần người già</i>	Build village, need old people
11	<i>Đánh cá phải chung bè Thả lưới chung nơi Ăn chuối phải chung nải</i>	Fishing, must share raft Drop fishing net, must share place Eating banana, must share bunch

	<p>Ăn hoa phải chung cọng          Ăn lạp phải chung thớt          Bò, trâu phải chung bãi cỏ          Voi ngựa phải chung bịch thóc</p>	<p>Eating flower, must share blade          Eating <i>lap</i> (traditional Thai food), must share chopping – board          Buffaloes, cows must share weed area          Elephants, horses must share rice container</p>
12	<p>Miếng cơm ở trong đất          Miếng ăn ở trong rừng          Một hạt cơm chín hạt mồ hôi</p>	<p>The rice is in the land          The food is in the forest          A rice seed could equal to 9 seeds of sweat</p>
13	<p>Quả đa chín thì gieo mạ          Quả nhội chín thì cấy ruộng          Mưa rơi gieo mạ          Trời sấm làm ruộng sớm</p>	<p>When <i>Da</i> fruit is ripe, scatter rice seeds          When <i>Nhoi</i> fruit is ripe, grow paddy rice          Raining, scatter rice seeds          Thundering, soon grow paddy rice</p>
14	<p>Nương đầy mắt không bằng          ruộng một mảnh</p>	<p><i>Milpa</i> (field in the mountain) is full of eye, but is not equal to a piece of paddy field</p>
15	<p>Trời nắng đừng đi trên cây          nương cũ          Trời mưa đừng đi trên cây          nương mới</p>	<p>Do not go on trees in old <i>milpa</i> when it is sunny          Do not go on trees on new <i>milpa</i> when it is rainy</p>
16	<p>Trâu đực non thích húc          Người âm no thích nói nhiều</p>	<p>Young buffalo likes to butt          The rich like to be talkative</p>
17	<p>Làm cái nào phải chăm cái          ấy</p>	<p>One should work hard to be successful</p>
18	<p>Khi nước lên cá ăn sâu bọ          Khi nước xuống sâu bọ ăn cá</p>	<p>When the water rises, fish eats insects          When the water recedes, insects eat fish</p>

## Conclusions and recommendations

Customary laws and old sayings are very diverse and important in regard to forest management and daily life of rural people. They have great roles in conserving and sustainable utilization of ecological services.

Due to many reasons, customary laws and old sayings of the Thai Group have dramatically been neglected for decades. Further study and documentation of customary laws and old sayings are needed to restore and strengthen the role of customary laws and old sayings to the forest management, ecosystem services and daily life of local communities.

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## WORKSHOP PROGRAMME

Day 1	2 March 2016	Remarks
09:00	Introduction NIFoS: Opening remarks FRIM/APAFRI: Welcoming remarks	Kim Kyongha Abd Latif Mohmod
09:30	Participants Introduction	
10:00	Group Photo & Coffee Break	
10:30	Introduction about the Workshop	APAFRI/Sim HC
11:00	<i>Folk Culture: Proverbs, Old Sayings and Community Rules for Ecosystem Services:</i> in Korea in Indonesia in Peninsular Malaysia	Moderator: Park CR
12:30	Lunch	
14:00	<i>Folk Culture: Proverbs, Old Sayings and Community Rules for Ecosystem Services:</i> in the Philippines in Sabah in Vietnam	Moderator: Lim HF
15:30	Coffee Break	
16:00	Follow-ups for Surveys in SE Asian Countries: Mapping	Shin YJ
17:30	<i>Concluding Remarks for Day 1</i>	
19:30	Dinner	
Day 2	3 March 2016	Remarks
09:00	Current Status and Future Directions	Park CR
09:30	Discussion on Future Research	Participants
10:30	Coffee Break	
11:00	Continuation of Discussion and Planning for Future Research	Participants
12:30	Concluding Remarks on the Workshop	NIFoS
13:00	Lunch	
14:30	Depart for Bahau	Lim HF
19:00	Dinner	
20:30	Night at Bahau	
Day 3	4 March 2016	Remarks
08:30	Depart for Field Trip	Lim HF
18:30	Back to Bahau	
Day 4	5 March 2016	Remarks
	Depart to Kuala Lumpur/Home	