



សាកលវិទ្យាល័យភូមិន្ទភ្នំពេញ

Royal University of Phnom Penh

Faculty of Social Sciences and Humanities

Department of Sociology

**Situated Knowledge on Land Use Practice among Highland
People in the Context of Development**

**ការសម្របចំណេះដឹងរបស់ជនជាតិដើមទាក់ទងនឹងការប្រើប្រាស់ដីធ្លី
ក្នុងបរិបទនៃការអភិវឌ្ឍន៍**

Thol Dina

December 2008

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THOL Dina

A thesis submitted in partial fulfilment of the requirements of the degree
of Master of Arts

Supervisor Mr. DORK Vuthy

Sponsored by
New Humanity

December 2008

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Royal University of Phnom Penh

TO WHOM IT MAY CONCERN

This is to certify that the thesis that I, THOL Dina, hereby presented thesis entitled “Situating Knowledge on Land Use Practice among Highland People in the Context of Development” for the degree of Master of Arts Major in Rural Development at the Royal University of Phnom Penh is entirely my own work and, furthermore, that it has not been used to fulfill the requirements of any other qualification in whole or in part, at this or any other University or equivalent institution.

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ABSTRACT

Ratanakiri is located in Northeastern area of Cambodia. It was established in 1959 separated from Steung Treng Province. There are many ethnic groups who have inhabited there in which the majority is highland people followed by Khmer, Lao, and a small number of Cham and Vietnamese. Highland people have mainly practiced upland rice shifting cultivation as well as forest product gathering and fishing along the stream nearby their village locations.

In the context of development with the introduction of land and forest concessions, the introduction of cash crops, and the flow of immigrants into the province, the livelihood and their resources have been exploited and affected. There are land conflicts, land grab, and land cheating in the highland areas. To deal with the outside pressures, some ethnic highland people have situated their knowledge in order to challenge and survive. Therefore, a study on situated knowledge on land use practices in the context of development must be conducted.

This study focuses on the situated knowledge on land use practices in the context of development among Highland Kreung in Yak Poy Community which is located in Poy Commune, O' Chum District, Ratanakiri Province. The study has three main objectives. The first objective of the research is to understand what are the highlanders' knowledge on land use practices. Secondly, it investigates how highlanders' knowledge has been developed, maintained and strengthened in the context of development. This focuses on the development of highlanders' knowledge on their natural resources in the field of land use from French period to the present day. Thirdly, it studies on how the highlanders use their knowledge (making claims, etc) in dealing with conflicts in resources management.

According to the research findings, Highland Kreung Yak Poy Community have little impacts on their natural resources, but the areas around their village locations affected badly on their livelihood as well as their resources management. Kreung in Yak Poy Community, to deal with outside pressures and protect their resources, have situated their knowledge in order to have a stronger and legal voice to conserve their resources. They established Forest Community which helps them control their forest communally among the five villages in Yak Poy Community. In addition, they have adopted the communal land title registration which helps them protect their land security from the outside land grabbing and land cheat which is increasing in the province.

Acknowledgements

First and foremost, I would like to extend my sincerest gratitude to highland Kreung people in Yak Poy community, especially in Kres village about whom this dissertation focuses on. Overcoming, patient, and understanding during my field work, I got encouragement and kindly receptions from the villagers that help me enlarge my knowledge. My thank also goes to the provincial authority, O' Chum district governor, and local authority in Ratanakiri Province who provided me the easy access to the field work as well as the research processing.

After the villagers, this dissertation will not come into exist without the help from my advisor Dork Vuthy to whom I owe immeasurable gratitude. This thesis would not exist or come to fruition without his tireless help, inspiration, and support through advice and secondary documents. He provided me helpful comments and suggestions on my topic, but most importantly build my confidence and kept me focused and motivated. I am thankful to Dr. Chayan Vaddhnaphuti who through his kind and friendly discussion which gave me many valuable advices to develop my research topic and design.

My special thanks to my respected boss at CKS Dr. MEN Chean Rithy who provide me a job and necessary tools that I can use to do this thesis. Small financial support for this thesis also comes from only CBNRM to whom I am grateful. My special thanks to Dr. Kate Frieson who informed me about the grant and helped me to get the grant. Most importantly, she always gives me good documents related to my study I would to express my appreciated thanks to Dr. Brian Pointer and his wife Dr. Elizabeth who have been really helpful for advice on this thesis. I would specifically thank to Dr. Frederic Bourdier who gave me good advices and his valuable document for this thesis. I would like to thank thesis committees who spent their valuable time to read and criticized my thesis. Special thank to Dr. Henry Loucard who spent his time to read every lines of my thesis and gave good comments.

I would also like to thank the authority in Ratanakiri, especially the district governor and Kres village chief who arranged the house and taking care of me during my fieldwork. Further thank is also given to Dam Chanthy and the staffs of HA, especially aunt Wat who spent her valuable time bring me to the field work. I also provide thank to CBNRM, NTFP, DPA, and Adhoc that provided me documents, opinion, and interviews. I would like to give Special thanks to Mr. Seng Sovathana who provided me useful document.

I would like to express my gratitude to New Humanity that sponsor for this program. Special thanks to program coordinators Mr. René Ayala Moreira and Mr. Mel Sophana who have always encouraged my research. I would like to express my appreciation to all professors in this program who have spent their valuable time and share their great knowledge to me and my classmates.

Last but not least, I am indebted to my father and sister who devoted their time and patience my sick mother until she passed away while I was in the half way of my study. I would like dedicate this work to my dear mother who always encouraged me to study and support my study in Phnom Penh even we are in a poor peasant family.

Thol Dina

ABBREVIATION

ADB	Asian Development Bank
ADHOC	Cambodian Human Rights and Development Association
CARERE	Cambodian Rehabilitation and Regeneration Project
CBNRM	Community-Based Natural Resources Management
CNRM	Community Natural Resource Management
CPR	Common Pool Resources
CIDSE	Coopération Internaltional pour le Développement de la Solidarité.
DPA	Development Partnership in Action
HU	Health Unlimited
ILO	International Labor Organization
IYDP	Indigenous Youth for Development Project
KR	Khmer Rough
MI	Ministry of Interior
NGO	Non-Government Organization
NTFP	Non Timber Forest Product
PDRD	Provincial Department of Rural Development
PRDC	Provincial Department of Rural Development
PRK	People Republic of Kampuchea
VDV	Village Development Committee
WB	World Bank

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CHAPTER I

Introduction

Ratanakiri is located in the extreme north-east of Cambodia with an area of 12,561 square kilometers covered by rich basaltic soil and abundant natural resources. This province was established in 1959ⁱ. The whole province is divided into nine administrative districts. In these nine districts, there are many different highlander ethnic groups who have inhabited for years by practicing their traditional practices mostly seen as rice shifting cultivation as well as forest products gathering in various ecological zones.

The ecological zones in Ratanakiri are classified into four main agro-ecological zones: the central plateau, hill region, mountainous region, and low land plains region (Sara Colm, 1997: 5). The central plateau ranges from 200 meters nearby Vietnam border and 500 meters elevation near Banlung. Because of the rich red basaltic soil which allow trees to grow well, this area has dense semi-evergreen forest including swidden cultivation plots.. The hill region locates in the average of 300 meter elevation. Mountainous region is located north of Sesan River along Ratanakiri and Laos border. This location rises to 1000 meters elevation with dense forest and abundant wildlife. Finally, lowland plains region is located in the average elevation ranges from 60-100 meters. This location has fertile alluvial land from Sesan and Srepok River with small area of low land cultivation.

There are two main rivers flow through Ratanakiri. Sesan and Sre Pok river flow through many districts in the province toward Mekong river. According to Bourdier, these two rivers have served as the important ways for highlanders in Cambodia to contact with highland groups in Vietnam. Highlanders from central Vietnam transported goods through these rivers into northeastern area of Cambodia. In the 15th century, Cham people who was defeated by the Dai Viet forces, traveled through Sesan River into northeastern area of Cambodia. In addition, highlanders also used Sesan and Sre Pok to reach Mekong River in order to contact with Khmer around Steung Treng and Kratie. This can be seen from the relationship between Khmer and Jarai in Sambok in which every year, Jarai sent their diplomats to meet Khmer diplomats. From this meeting, they strengthen their relationship and exchanged gifts.

Most highland people live in a poor condition because of several reasons. Firstly, most of them are illiterate and live far from downtown and business areas as

well as public servicesⁱⁱ. Secondly, their natural resources are exploited by the powerful outsiders who cause trouble to their sustainable subsistence. In addition, their rich natural resources are being exploited by the outsiders which cause more burdens to them to stabilize the resources use, especially on land security which is in dangers because of the appearance of land grabbing. Furthermore, the introduction of agro-industry which occurs from the introduction of market economy after 1993 has also threatened the highland community's land security (Chhim, C: 2005).

Nowadays, all the nine districts have more or some experienced with the development projects mainly land concession and land contraction. Conflicts on land ownership occur nearly every week between the highland people with the same highland people and between highland people with the outsiders as well as high rank people. Traditionally, highland people controlled their land communally with cultural boundary. They did not have legally land title for each family, but they have a good system of land division. Because they do not have legal land title and have little understanding, it is easy for the outsiders to grab their land by using legal land title.

At the same time, the interaction between highlanders and lowlanders is increasing because of the improvement of infrastructure in the province as well as the access to modern tools such as motorbike or cars among the highland people. This can be seen through the improvement of road quality from Ban Lung to Borkeo, Ban Lung to O Chum, Taveng and Veun Sai. With these roads, people can travel quicker to other districts towns in dry season. However, the living standard of the highlander people is not even better. In contrast, within the context of development and market economy, the land price increases, and the highlanders' land property is facing threat (Sokhong, C. 2004:).

However, although the property land of highlander people is being threatened by powerful outsiders who grab land, most of those ethnic highlander groups still practice their traditional knowledge while only some of them have changed their practices. This research is designed to study the situated knowledge of the highland people from their traditional practice of land use, the development or the repertoire of their knowledge, and the strategies of dealing with outsiders by using their located knowledge.

1. Background of the study

The term indigenous people have no universal standard or fixed definitions but it can be used to refer any ethnic groups who inhabit the geographic region with which they have the earliest historical connection. However several widely-accepted formulations, which define the term Indigenous People in stricter terms, have been put forward by prominent and internationally-recognized organizations, such as the United Nations, the International Labor Organization and the World Bank, and ADB.

ILO defined indigenous people as people who are regarded by themselves or others on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries. In addition, it also refers to who has irrespective of their legal status, retain, or wish to retain, some or all of their own social, economic, spiritual, cultural and political characteristics and institutions.

ILO definition on indigenous people is still broad and not clear enough. Thus another definition was proposed by UN. The UN defined indigenous people as those who have historical continuity with pre-invasion and pre-colonial societies that have developed on their territories, considered themselves distinct from other sectors of societies now prevailing in those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems.

Drawing from this definition, a contemporary definition of “indigenous peoples” for certain purpose has criteria which would seek to include cultural groups (and their descendants) who have historical continuity or association with a given region, or parts of a region, and who formerly or currently inhabit the region either. The criteria of indigenous people are as following:

1. Before its subsequent colonization or annexation.
2. Stays alongside other cultural groups during the formation of a nation-state.
3. Stays independently or largely isolated from the influence of the claimed governance by a nation-state.

In Cambodia, according to Asian Development Bank, the term “indigenous or highlander” is used for those people who live in the northeastern provinces of Cambodia because this region is considered as upland areaⁱⁱⁱ. In fact, there are many terminologies refer to indigenous people such as tribal people, forest people, minority, and highland people. In this thesis, the author uses highland people to call these people.

Nearly all the highlander groups in Cambodia practice the same technique of upland rice shifting cultivation. They mostly have been practicing “shifting cultivation” agriculture or rotational cultivation and pragmatically gather trees products (Chayan et al., 1995). They plant mixture of vegetables in their *Chamkar* (vegetable garden). They make new plot by clearing the forest in their community and use it for several years. Then they leave it fallow for years in order to regain fertility. Besides the barter business, which they had long before and still today, in their communities on animals, fruits and trees products, there was no other business in the areas. In other words, the northeastern provinces were excluded from investment projects in the past.

However, in the context of development, some of the highlanders have also involved in cash crop practices because these new crops provide them more money than their shifting cultivation crops and they can stay permanently with the practice of these cash crops. With money from selling cash crops, highland people can buy modern tools such as motorbike, TV, new clothes and build wooden houses. In addition, cash crop planting is also a notion of claiming private land ownership property because with cashew crops or other cash crops, the upland families can mention their private ownership on that piece of land even most of the community land is still controlled communally. This kind of perception is happening in all the nine communes in Yak Poy and Yak Kaol Communities as well as other highland people in other districts. That is why cashew and cash crops become favorite crops among the upland people in the present time. Among the eight districts in Ratanakiri, cash crops are not difficult to find, especially along the main roads. The tendency to plant cashew crop among the upland people provides both advantages and disadvantages. With the rapid spread of planting cash crops, land becomes shortage for cultivating upland rice because some fields were are converted to cashew plantation. However, the tendency to plant cashew crop is not the only factor that

affects the upland rice shifting cultivation among the highland community, but the pressure from immigration is also another important factor contribute to the decline of traditional practices, especially land security among the upland community because low land people also need land to cultivate or for selling.

After 1993 Ratanakiri has become the new frontier for settlement because of the introduction of development projects in this area which some lowland people believe that it will provide new opportunity for them to seek a better living standard in this area^{iv}. Lowlanders from different provinces have moved to settle in the province along with the introduction of the cash crop products, culture, and problems that affect the land security of upland community. With the immigration of the lowlanders into the province, it causes more pressures to highlanders, especially their land security which exists from land cheating, land grabbing, land contraction, and especially from large scale land and forest concessions^v.

Land and forest concessions, immigration, land grabbing, land cheating, and land contractions cause many problems to upland community which they had never faced in the past. With these factors, many upland communities are confronted with land lost, land shortage, and the insufficient food supply. In addition, their environmental landscape also changes as well as the transformation of traditional practices such as the unsustainable upland rice cultivation, especially the soil quality decreases. Traditionally, upland community had enough reserved forest land for their rotational rice cultivation which was a sustainable system because after several years of cultivation, they left the soil fallow and forest will regenerate after uncultivated around 10 to 15 years. In contrast, in many upland communities, the period of fallowing is short (3-5 year) which is not enough period for the trees to regenerate and provide enough asses for planting upland rice.

2. Problem Statement

Nearly a century that northeastern provinces of Cambodia have involved in many development projects since French colonial period till nowadays which have caused serious problems to upland community than any previous periods. Many upland communities lost their land from land grabbing and land contraction. Despite the encroachment of forest land, land grabbing, land cheating, and land concession by outsiders, many highland communities can still keep and protect their forest, land, and their traditional practices as well as their customary laws. They can do like this

because of the participation of NGOs, the appearance of Land law 2001, and especially the enhancing of their traditional knowledge with the legal laws. However, from the researcher's observation in the first visit indicated that the land law 2001 is not aware widely among highlander people, but their customary laws associated with the administrative law, with help from NGOs, play an important roles in the upland community to stabilize their land use and land security.

Also, from researcher's observation in the first visit revealed that these highland communities have developed their knowledge on land use, and maintained their customary practices in the use of their natural resources. These can be seen through the majority of upland rice shifting cultivation, forest products gathering as well as the practices of planting cash crops. All the villages in two communities in Poy commune have practiced rice shifting cultivation. They have also still practice a numbers of traditional rituals and have enhanced their customary laws even though they face challenges occur from the development.

Development brings both advantages and disadvantages to highland people. From the author's observation, on one hand, highland people have a bit better road infrastructure which enable them to travel to long distant areas, especially to the provincial town. Also, highland people can have access to health care center, markets, and modern tools such as motorbike, TV, VCD players, battery and so on. Further, some upland people receive a valued at it benefit. It means that they can bring their products to the market, especially they will have better living standard when they live along the main roads. Living along the main roads provides them the economic opportunity to make their lives better.

On the other hand, highland people are facing with land security that occur land and forest concession, the land grabbing, land cheating and land contraction. The whole province has experienced serious problems of land conflicts between outsiders with upland community or intra-community land conflicts. Just only in the of O Chum district which was visited by the researchers, there are many problems related to land use. The Hero Taiwan land concession area overlapped with some upland Kreung communities which affected their livelihood. In addition, the activities of the company such as logging and building some roads are harmful to natural resources, environment and the crops of the upland people.

Besides the impacts from the land and forest concession, upland community in O Chum district has also experienced with land grabbing, land cheating, and land

contraction which affect on the highland people land security. The villages surrounded Yak Poy and Yak Kaol communities such as Ekapheap, Laak, Kam, and many other villages suffered from the land grab, cheating, and land contraction. Some local authority used to take the land from upland people and sold it to low land people. In addition, the same highland people sold other people village land to low land people by claiming that it is their ancestor's land. Furthermore, land contraction is increasing among the upland community. Recently, Tangtrapoung village, located near Yak Kaol community lost big piece of land along the road to Taveng district because some people in the community sold it to one business man in Ratanakiri who is very famous on land contraction. Even though they planted rubber trees already, upland people are still protesting about this case.

From these impacts, the upland people do not have enough land for cultivating their upland rice. In addition, some of their traditional practices become weaker. Conflicts among the same ethnic groups or between highland people and low land people are increasing^{vi}. However, there are some highland communities that can preserve much of their traditional practices and have efficient natural resources regulations, especially on their land use practices. Thus, with the later one what are their traditional land use practices of highland people in the context of development? Taking this into consideration, a research must be conducted.

3. Rationale for the study

This study will contribute to the field of anthropological study by focusing on the ethno-ecological knowledge of the insiders situated with their current environment. This research will also reveal the essential of the repertoire knowledge of highlanders as a dynamic and located force. Furthermore, it will help the developers or policy makers know how to help highlanders with sustainability.

4. Research Objectives

Following the research question, three main objectives have been raised to answer it. The first objective of the research is to understand what are the highlanders' knowledge on land use practices. Secondly, it investigates how highlanders' knowledge has been developed, maintained and strengthened in the context of development. This focuses on the development of highlanders' knowledge on their natural resources in the field of land use from French period to the present

day. Thirdly, it studies on how the highlanders use their knowledge (making claims, etc) in dealing with conflicts in resources management. Doing this research, the researcher raises the hypothesis: development affects the local knowledge, especially on land use management and land property which lead to absorption of situated knowledge.

5. Research Site and Methodology

5.1 Research Site

From reading previous documents, interviewing those who have experienced in Ratanakiri, and a brief preliminary field work in November, Yak Poy community which is located in Poy commune, O Chum district, Ratanakiri province is chosen for doing field work research. There are two communities in Poy commune: Yak Kaol community and Yak Poy community. Yak Poy community is chosen for the research because it has several criterions fit to the objectives of the study. Firstly, this site has been settled by the highlanders and they still practice their traditional knowledge on land use and maintained both customary laws while the other nearby highland villages such as Kam, Laak, and Ekapheap experienced serious impacts of land lost, except Yak Kaol Community. Secondly, the highlanders in this district have experienced with development projects, especially with land grabbing and land conflict including the introduction of cash crops. Thirdly, the highlanders in this study site used to use their knowledge in claiming their land property in order to deal with outside pressures, especially from land contractors and low land immigration.

Conducting this research, the researcher also has employed several research methods for data gathering: participant observation, key informant interviews, informal interviews, and document research.

Firstly, participant observation is used to gather data on the every day practices of land use practice in the village, including farming activities. This method will be used for getting information while conducting field work. After arriving in the village and introducing, the researcher will ask villagers to participate with their activities in order to understand the knowledge on land use practices. By doing this, the researcher will have the opportunity to live, work, and join the ceremonies with highland people. From this participation, the author will have the chance to learn, observe, and explore the local knowledge. Further, the researcher, after building

rapport with highland people, will have time to talk with many people about their land use as well as the way they protect their land from the outside pressures.

Secondly, a numbers of key informants who have a wide knowledge about highlander people, especially the knowledge related to traditional knowledge on land use practices will be asked for the permission for interviewing. The key informants were asked to answer question related to land use practices, the development of their traditional knowledge, especially from the French period, and the use of their knowledge in dealing with outsiders. Key informants are the important sources of knowledge about history, and kinship network in the village which help the researcher gain deep understanding on their perceptions on natural resources management, particularly on land use and management.

Thirdly, the researcher will also use informal interviews in order to get more information related to the objectives. The researcher will do this by joining the activities with old people or have conversation with them by starting from a general to specific information. Talking with old people provides a lot of knowledge about the village history as well as their lives which enable to understand village history and their traditional knowledge transformation.

Fourthly, documentary research by reviewing the information comes from the short time survey conducted by NGOs related to Ratanakiri, especially on the highland people issues. Other sources of information come from the books about indigenous people that most of the book were written by foreigners and government statistics. In order to fill some gap of information, interview with the people who have good knowledge about indigenous people was also conducted.

Limitation

With time and budget constraints, this research has focused mainly only on the highland people traditional knowledge on land management. At the same time, with two months in the field, this study can not cover all the knowledge of land use practice.

To make it easy, the researcher divides the research work into main three parts. The first part focuses on the knowledge of traditional land use as well as the appearance of new adaptive knowledge on land use. Again, the research covers only a few practices of natural resources management, especially on land use management. The second focal point is the development of traditional practices on

land use in which the researcher will start from colonial period to the present day. The researcher will draw the general overview of the province from each period by addressing what happened in each period related to land use practices and then connect it with the research site. Finally, the research will be based on the situated knowledge of highland people in Yak Poy Community on land use management.

CHAPTER II

Literature Review

This part will focus on the studies of situated knowledge in preserving their natural resources. Defining local knowledge is crucial for understanding their knowledge system on natural resources management as well as to stabilize their society. Then, property and access theory will be discussed in order to understand about their property relation in each regime from Sangkum period till the present day^{vii}. In addition, the concepts of development have been considered in order to have better understanding of development and its impacts in the context of indigenous knowledge.

This chapter is divided into three main parts. The first section will define the concept of local knowledge. A numbers of definitions on local knowledge will be reviewed in order to have better understanding on the perceptions on indigenous knowledge. In addition, property and access theory will be reviewed in order to reflect the system of property of ethnic highlander before and after the introduction of development. Further, the concept of development will be discussed in order to trace the impacts of development which leads to the appearance of situated knowledge which is the main theme of this study.

2.1 Defining Indigenous Knowledge

The study of indigenous knowledge becomes more interesting when previous studies indicate about its values on the efficient natural resources management (Johan. P 2003: 1). The indigenous knowledge, in the past, had been understood as backward or as the catalysts in destroying natural resources. This view point mostly comes from the government or the authority while anthropologists do not agree with this idea. Anthropologists believe that indigenous knowledge is scientific knowledge and work as a system in which it helps balance the stability of the ethnic highland groups. According to Anan (Anan G, 2000), he found that the destruction of natural resources in Thailand come from the activities of logging companies and high rank people in the government. In contrast, he found that indigenous people have helped preserve most of the natural resources in Northern Thailand. The area with indigenous people can conserve most forest compared to the other places^{viii}.

This later assumption can be applied to the situation of Cambodia. Ethnic highlanders in northeastern area of Cambodia, before the permission of land and forest concession, could preserve most of their natural resources. Before 1990s, northeastern area of Cambodia had thick forest cover with lots of wild life. However, after 1993, when Cambodia has opened its free market which allow to have land and forest concession, the natural resources depletion becomes bigger and bigger. From the researcher investigation in the field work, the highland community that still practices the knowledge strongly can preserve most of their natural resources. From this perspective, indigenous knowledge is mostly practiced by highland people in rural area.

Indigenous knowledge is practiced among the indigenous people who live in the undeveloped areas (Howes and Chambers 1979). That is why from the perspective of developers who are mostly Westerners conceived this knowledge as un-progressed. However, from recent studies of the anthropologists, the indigenous knowledge really contributes in conserving and sustainable development of natural resources (Virginea D. Nazarea 1999). It means that indigenous people live or have close interaction with the environment so their lives and environment tie closely with each other. From the milieu, they know how to use it in a sustainable way. For example, the practice of land clearing that they have practiced for generation. They have good knowledge of doing it from choosing new plot, clear forest, burning technique, and keeping the old plot fallow for appropriate time.

This knowledge, according to Frederic Bourdier, led to the doubt that how the non-literate people know well how to use and manage their resources sustainability. The answer is that because of the close and interdependence between them and nature or we can call ethno-ecological knowledge (Ronald, C 1957). Ronald Conklin fond that indigenous people have close interaction with the nature surround them. This good relationship with the nature helps indigenous people to develop a well ecological knowledge because only them who know their surrounding environment better than other people.

From the broader perspective, indigenous knowledge can be seen as the knowledge belonging to a community. It is not private or individual which is owned by a particular person. It is a common property in a community whose members of a community are familiar with. This knowledge exists in the ritual ceremonies or any taboos which every body in the village knows and respect. Indigenous knowledge is

seen as a process of passing from generation to generation through the oral teaching and daily practices.

From precise scrutiny, indigenous knowledge appears as multifarious, contestable product of an ever-evolving process (Sillitoe, P 1998). This concept indicates that indigenous knowledge has many functions and works as a process. The example from Thailand shows that customary role of indigenous people bans people from cutting forest especially the sacred forest (Annan Ganjanapan 2000). Due to Anan, indigenous people try to work by avoiding the violation to the nature. Furthermore, this knowledge plays an important role in solving the conflict among neighboring communities successfully. The village elder councils and traditional village chief solve the conflict among the highlanders following their customary rules (ibid).

Indigenous knowledge is not non-reflective but it is an evolved process (Scoones and Thomson 1994). It means that this knowledge will be developed when it is in an appropriated time. For instance, a case study of indigenous in northern Thailand shows that the villagers developed their customary rules into an organization to protest against outside intruders and this worked well to protect their forest. This can be clarify through another example from some ethnic highlanders in Ratanakiri province who have adapted their knowledge from time to time to survive. After 1993, with the increase of land grabbing, highlander people in Poy Commune, have situated their knowledge on their land use management by participating the process communal land title registration.

Because indigenous people have close interaction with forest, so their knowledge must have strong relation and developed with the nature. Thus, Yos Santasombat (Santasombat Y 2003) wrote that indigenous knowledge is a repertoire of situated experiences developed in particular physical and cultural contexts from intimate relationship between man and the nature. It means that without the natural resources, indigenous people will face difficulty because their lives strongly depend on the nature. In the other word, the destruction of nature or forest means the disaster to indigenous people. Because of having strong interaction with nature, indigenous people try to do and live avoiding violating nature or forest (Annan, 2000). Yos Santasombat also defined indigenous knowledge as the knowledge that is used by local people in order to make a living in a changing environment.

In the study of ethnography, indigenous knowledge needs to be understood in the broadest terms to encompass not only people's understandings of social universes they settled, but also of their rights. It means that when we talk about indigenous knowledge, we refer largely to the need for a better understanding and accommodation of people's knowledge of their right about land tenure arrangement and their approach to payment such as compensation (Sillitoe 2002). In other word, indigenous knowledge is not a limited knowledge that covers limited discussion which refers to only traditional culture, but it is sound science (Huns, 1993).

Studying indigenous knowledge becomes more important when it is recognized that this knowledge is not just the study of body of facts and things that are known. Studying about indigenous knowledge needs to include the issue of how rather than what (Gardner and Lewis 1996). According to Gardner (1997) the knowledge of indigenous people is generally of a sophisticated form. It means that the study of indigenous knowledge requires many variables and careful analysis in order to have deeper understanding which requires the researchers to focus on many aspects.

Indigenous knowledge, in the context of now a day study, is a scientific knowledge and could be understood as a system (Hunn 1982, Diamond 1966, Jones and Konners 1976, Nations and Nigh 1980, Johannes 1981, Gatter and Ichard 1993). The indigenous knowledge is not isolated but it has interaction in a variety of ways with science and other agencies of development. This idea leads to the definition which raises that indigenous knowledge never stands still or static, but it is dynamic and strategic (Sikana 1994 and Sillitoe 1998). According to Sillitoe, indigenous knowledge has evolved from time to time to adapt with the new situation it faces. This is clear when we talk about the experience of the indigenous people in South America, especially the Kiaspo minority. These people have developed their idea from being exploited by outsiders to the better understanding of how to get benefit from their resources such as valued tree and diamond. Furthermore, they have good knowledge on how to protect their resources from outside intruders through setting organization in their community.

In summary, indigenous knowledge is multifarious, reflective, scientific, practice by local community and dynamic. Ethnic highlanders have used their knowledge from time to time to sustain their livelihood. Their knowledge is maintained and used to protect and preserve their resources and property. Highland people have their own property regime which has evolved from time to time.

Therefore, in order to have broader understanding on highlanders' property system, a review of important property and access theory should be done.

2.2 Property and Access Theory

When the numbers of people increase, the access to resources also grows due to the limited nature of natural resources and the finite space they occupy. They may claim to own the property because they want to get benefit from that resources or they want to protect their resources from illegal grabbing. That is why the term property right has appeared with resources management. In property regime, there are varieties of definitions and concepts on property right.

Property right is defined as a schema ranging from authorized users to claimant, proprietor, and owner. The word right here is used to refer to access to natural resources. In the concept of property right, it is recognized that rights are the product of rules but it is not used equally to rules, shared norms and legal frameworks that encode these. However, the right may not be equally spread or accessible throughout the population. In addition, right refers to the actions that are authorized which means that legally acceptance (V. Ostrom 1976). Thus property right is the authority to undertake particular actions related to a specific domain (Commons 1968).

In the level of common pool resources management, property rights refer to access and withdrawal. Here, access is known as the right to enter a defined physical property while withdrawal is the right to obtain the products of a resource. For example, if one ethnic highland group has the right of access in the forest, they have the right to enter the forest while the right to get benefits from forest product represents the right of withdrawal of this ethnic group. Furthermore, referring to common pool resources, there is collective-choice property rights. Collective-choice property rights include the management, exclusion, and alienation.

Management is explained as the right to regulate internal use patterns and transform the resource by making improvements. For individuals who have the right of management can determine how, when, and where they can get benefits from the zone they hold legally. In the same way, for ethnic highlander community who hold the right of management, they can decide how to use their resources in an appropriate time. Exclusion is the right to determine who will have an access right and how that right may be transferred while Alienation is the right to sell or lease either or both of

the above collective-choice right. Right of alienation is a collective-choice right that allows the holders to transfer some part of the right to another people.

In property regime, there are two main kinds of property rights. The first one is called *de jure* rights in which the holders have lawful recognition by formal, legal instrumentality. In the other word, *de jure* right refers to the legal title the holder has on their property. The second one is called *de facto* right which is originated from the users or community resources users. This kind of right is not recognized by government authority. It is the traditional or customary laws of one specific ethnic group who has practiced it for century in their society. Even though it is not recognized by the state law of the government, users of *de facto* rights tried to develop their right and use it efficiently to protect community resources and sustain their resources.

This can be seen through the practice of ethnic minority in Northern Thailand. For example, indigenous people in northern Thailand, they developed their traditional custom from individual elderly to elderly council to protest against the outside intruders. This elderly council set up the forest patrollers and put regulation for those intruders who want to exploit their natural resources. If the intruders do not stop their activities, arrestment can happen. And if they still can not stop the intruders, they will inform the district authority which can reach to the king (Anan, G 2000).

The same example can also be seen from the ethnic highland community in Ratanakiri province of Cambodia. Highlanders in Yak Poy Community have developed their customary laws to protect their forest resources from the danger. They have built network among the five villages that share the interest of a big forest and make regulations, status, and roles for users in order to protect their resources from depletion and keep it for next generations to gain benefits as them.

In summary, in property regime, right is the legal access to the property while the holder can use both access and withdrawal to their resources. There are two kinds of practices in controlling the resources; *de jure* and *de facto* techniques in which *de jure* right means the legal means for holder and *de facto* refers to the local community right. In the latter one also are usually the traditional and customary laws of the ethnic groups which they have practiced for generations. For ethnic highland people, their property regime has also evolved from period to period depending on the context it situated. Development context is seen to bring more changes to the

property regime of the ethnic highland people. Thus, the examination of some relevant development theory should be taken into account for the study of situated knowledge in the context of development.

2.3 Development Concept

There are many theories and concepts about development. In this paper, I choose only one theory of development to explain and apply as a guideline for this research. Technology of power is one well known theory in development study, particularly in Ratanakiri province. The development agencies and the state government claim to build the local capacity in order to join with the process of development. In Ratanakiri, building local capacity was initiated during 1995 with the establishment of SEILA program. This section will discuss some concepts of development discourse in term of technology of power.

From the development and state agencies, they always mention that development is good people because development will help people to understanding their potential and use it to improve their living standard. However, from the development project, powerless and poor people are always the target and the victims from the impacts of it (Kaufman, G 1997: 118). In Cambodia, most ethnic highlanders became the victims of the development works. With the grant of land and forest concession, highland people lost their land and forest because the granted company areas usually overlapped with their territories. In addition, some companies committed illegal logging which destroyed the forest rapidly and affected on the livelihood of highland people because most of them rely on the forest product gather besides their rice shifting cultivation.

Development has been introduced in northeastern area of Cambodia long time ago. At that time, the state power (French) viewed development program as civilization mission to pull people from poverty, poor health condition, and improve the condition. In fact, this kind of development programs brought little benefit to poor people. In contrast, it is seen as the way the state used it to strengthen their power and get benefits for them (Komatra, C 1998: 337). During French period, they built military post and rubber plantation around Memot and Snoul. French purpose at that time was to collect tax from people in the northeastern area. However, French could no collect much tax from the highlander people because they lived in the forest

in which they can escape from French more easily. Even French caused burden to highland people, but they helped stop the slavery in the area.

The popular ideas of development related to the process of transforming poverty into prosperity and the integration of ethnic minorities into mainstream society (Quoted by Pen Dareth 1996). This policy is widely practiced by many states in Southeast Asia countries with their own highland people. In Cambodia, during Sangkum period, the government initiated new policy to integrate highland people into Khmer society. To make this policy work, the government at that time built school, health care centers, prepared journey for highland people to see low land area, and establish Phum Kumrou^{ix}. With this initiation, the government hoped to help highland people to increase their livelihood and increase their rice products. The policy failed to help highland people because the government did not provide enough technical tools for highland people who never practiced the low land rice technique.

The education system worked very little because the lesson was not suitable for the students and the big barrier was that low land teachers did not understand well about the culture of highland people. Most importantly, the low land people still felt scared to live with the highland people who they used to have not good perception on them. For the other reason, the policy of the government at that time was to control highland people and strengthen their administrative in this area to protect the spread of communist movement (Meyer, C 1979).

After colonial period, development is seen as the model of progress in which it aims to promote people living standard. Development appears as the economy improvement which is mostly based on the concept of Westerners without paying much attention to local perceptions in the areas implemented. According to Shiva (Shiva, V 1989) this type of development tends to exploit local people resources and violate the landscape and affect their culture. Drawing from the examples from ethnic highland people in Ratanakiri, with the open of market economy after 1993, highlander people have faced challenges from the impacts of development. Their forest resources have been destroyed rapidly by the illegal logging. Further, with the increase of land price, their land is grabbed or cheated. These factors affect their culture and their livelihood because they lost forest sources and do not have enough land to cultivate upland rice.

Development is also implemented in order to bring modernization to people. It aims to pull people from poor living and experience the modern tools and

technology. However, previous experiences indicate that modernization undermined the traditional society and traditional structures, identity, culture and livelihood of the people (Colm and Rigg 1997). With modern technology, some ethnic highlanders in Ratanakiri gradually abandon some of their traditional practices. Highlander people used to have traditional Kong when they celebrate their ceremonies. Nowadays, many villages do not use Kong to entertain in the ceremonies. They prefer to use modern musical tools in their ceremonies. Modernization also brings new culture to highland people. Traditionally, young highland people respected the elderly advices, but now they ignore the advices and do not pay attention to the teaching of elderly people.

The highland people are being marginalized and suffered from the impacts of development plans (Komatra, C 1998). They are excluded from making any important decision making for their future development. The government or development agencies do not listen to local people perceptions, but instead they design it for local people as if they have deep understanding of local people. Furthermore, development also reduces the social capital in the community. It means that when development exists, people care more about their own benefits and they will protect their interests through different activities which sometimes affect the people in the same community. Drawing on the examples from Ratanakiri province, some highland people have conflict with the same highland group because of the interest. Some highland people sold other village land to the business people or low land people by claiming that it is their ancestor land. This activity causes conflict among the same highland group and reduces the trust and social capital in their communities.

Development also focuses on the participation approach. Development and government agencies turn their approaches from model of progress, economic improvement, and modernization to participation. They stress on the participation of local community in the process of development in order to get more success. Again, according to Peter Hammer (Peter, H 2008), participation is not different from the previous approaches. It still serves the interests of development and state agencies. Participation is just a kind of new layer bases on the previous layers. It means that participation approach is designed to be new color, but in reality it is the same as the previous techniques. In participation approach local people are like the fish that swim in a pond of water and do not know clear about the water they are living in.

Population growth can cause particular challenges to the natural resources management including land use. The increase of population can result in the stressed farming system if land holdings are already in short supply. As Sianouvong Sovathvong (2000) pointed out that the population growth in highland of Laos increased land pressure. People do not enough land for sustained agriculture because some of their land is divided to children and next generations. To solve this problem, farmers developed adaptive strategies by changing and diversifying their land use and modifying their cultivation practices.

Furthermore, the transformation of land use affects on the household strategies. Some farmers who are lacking necessary resources are facing declining productivity and are forced to look for other opportunities such as off-farm activities or migration to another place. He also mentioned about solution on how to enhance technical capacity of the village community through access control, use regulations, and resources maintenance. Finally, he concluded that in-migration led to deforestation because of the demand requirement increases. In addition, market oriented and the policy of forest land allocation also led to the inappropriate land use.

Outside pressure can also lead to the expansion of the upland and agricultural land. It means that with the encroachment of the outsiders in the upland area, more demand on land use also increased. Research undertook on problems of “sustainable land use and natural resources management in a community in Thailand” (Catherine, H. T., et al. 2002) indicated that increased accessibility such as logging and transport improvement, fertile upland and highland soil, free market labor, market economy, land grabbing, and perception of land security caused unsustainable land use. From these external pressures, deforestation which causes the reduction of forest quality, increase on remained forest, high utilization of NTFP among highlanders, and the decrease of soil fertility.

Not only outside pressures that caused problems on land use, but the traditional practices of the insiders also contributes to the unbalanced land use and resources management. The traditional land inheritance can also make landlessness and the unsustainable use of land. For example, Decha Karnjankura (1996) stated that the tradition of land inheritance division equal among all children led to landlessness among rural people in Thailand because of the small fragmentation of land which led to the inadequate yields.

According to Ouk Thira and Ou Sopheary research on participatory land use planning (2004) concluded that the main cause of forest degradation in Toul Sambor resulted from forestland encroachment through illegal activities such as forest clearing for shifting cultivation, permanent cultivation, and new settlement. In addition, a study of community based protected area management and sustainable livelihood by Seng Leang, Pouk Bunthet and Dul Vuth (2004) found that shifting cultivation of people in Roveang district, Preah Vihear province contributed to the destruction of forest.

In his study on “Customary Land Rights of Indigenous People and their Violation in Ratanakiri Province, Cambodia, Sokong Chhay found that the highland land security is facing threat. He discussed the international right aspects on highland people and the Cambodian laws on highland people. He found that after 1993, the land price increases and led to land speculation. Highland people land was grabbed and their customary laws were violated. He also stated that land law 1992 and land laws 2001 worked little to help highland people to deal with the challenges.

According to recent research in northeastern provinces of Cambodia, ethnic highland community is changing. Kristina Chhim (2005) found that the transformation of highland community in northeastern provinces involved with the development of agro-industry and the land grabbing by the lowland people. She found that the agro-industry lead to land stability because more and more land is required to plant cash crops. In addition to the cash crops appearance, highland people are facing with the land lost resulted from land grab and land contraction.

In 2005, Sovathana Seng conducted a research on “The transformation of Northeastern Cambodia: The Politics of Development in an Ethnic Minority Community of Yak Kaol”. In his study, he found that development brought transformations to the highland community. Development projects such as land and forest concession such as Hero Taiwan Company caused harmful effects on livelihood, belief system, and the environmental landscape on highland people in Yak Kaol Community. To deal with this condition, highland people have adapted their knowledge on land tenure and enhance their management.

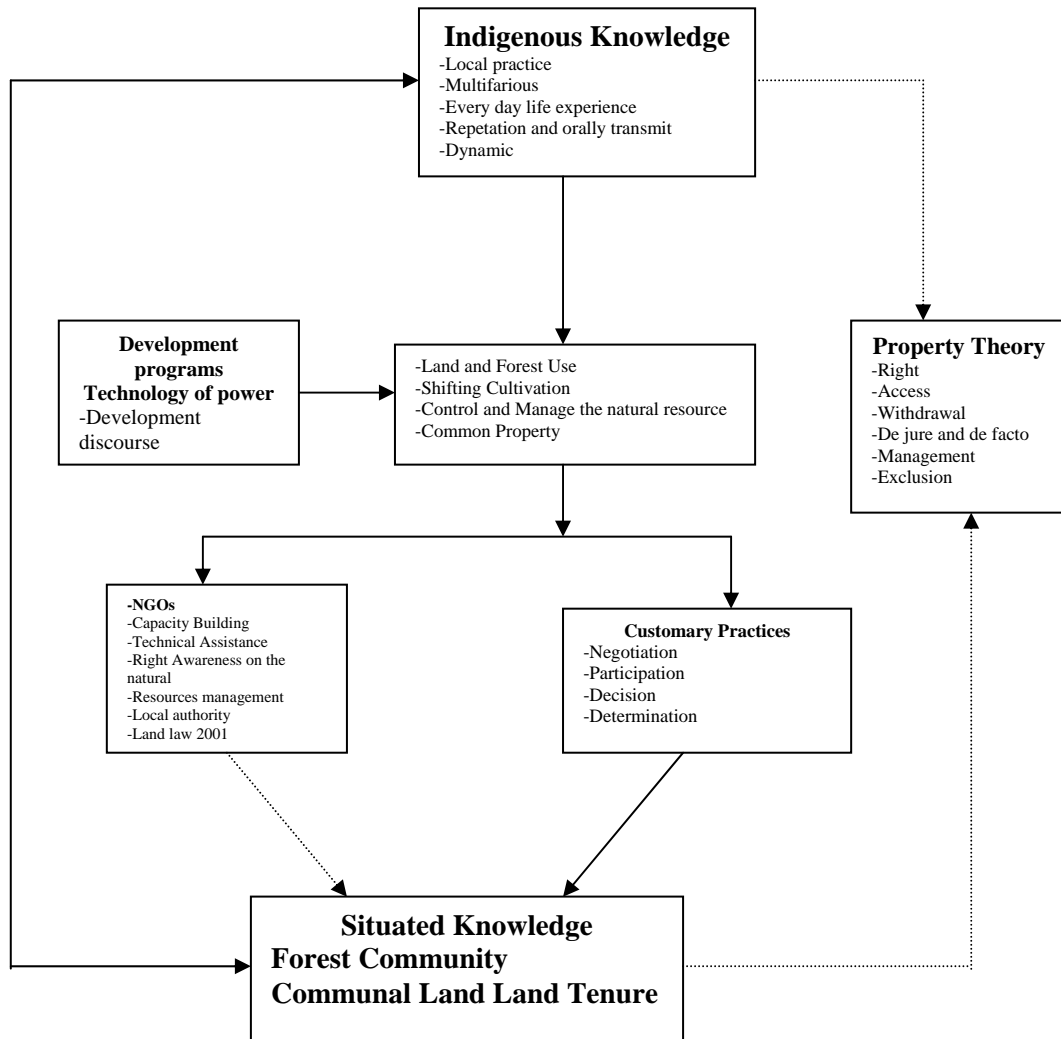
The previous studies found good results on the condition of highland people who have faced challenges from the impacts of development. I agree with the finding stated that development brought agro-industry and land grabbing. Development also brought changes and harmful affects on the poor community. Land and forest

concession affected the livelihood, traditional practices, customary laws and lead to the adaptive knowledge as what stated in Sovathana study. In the context of development, highland people have also situate their knowledge in order to deal with the pressures.

My research will provide more knowledge for the understanding of adaptive practices of Ethno-Ecological Knowledge or situated knowledge among highlanders. Because of the time constraint and the financial matter, I could not study very detailed with all the ethnic groups in Ratanakiri. Therefore, my study focuses only on the on highlanders who are living in Poy Commune, O Chum district, Ratanakiri province.

Conceptual Framework

Based on the above literature review, the researcher comes to a conceptual framework for the study on situated knowledge on land use practice in the context of development. A numbers of factors such as NGOs, local authority, land law, and the customary laws in the highland community as well as Krak Chhrok and community elderly councils play important roles in the situated knowledge. Firstly, the diagram shows the aspects of indigenous knowledge. Secondly, the diagram indicated the state agencies through development discourse and technology of power which have impacts on the indigenous knowledge. Thirdly, the diagram reveals the appearance of situated knowledge with the support from NGOs, local authority, and land laws, in order to deal with the effects on development. Finally, property regime is used to reflect the property system of highland community in both indigenous knowledge and situated knowledge system.



CHAPTER 3

Research Site in Context

Ratanakiri is one of the four provinces located in the northeastern Cambodia which was divided from Steung Treng province in 1959 by the Royal Decree. It covers the area of 1.16 million hectares of land and abundant natural resources (forest, gold, mines, basaltic soils, etc.). Most of the land in this province are inhabited by various highland groups in which Tampuan is the majority followed by Kreung, Jarai and other highland groups such as Kachak, Kavet, Brao, and small numbers of low land population^x. Highland people have settled in Ratanakiri for long time. These high land groups have practiced upland rice shifting cultivation accompany by hunting, fishing, and forest products gather from their ancestors time till present day.

Traditionally, highland groups lived in deep forest with little contact with lowland people. Although, they lived in deep forest, it does not mean that all of the highland groups in Ratanakiri did not have any relationship with lowland people. Some groups have contacted with other highland groups in Vietnam and Laos as well. According to Ian Biard, Brao people in Lao have maintained relationship with Brao people in Ratanakiri and Steung Treng. They also have proverb reveals their close contact when they have trouble^{xi}.

This relationship also exists among other highland groups with low land people. According to Frédéric Bourdier, Jarai in Ratanakiri has contacted with other Jarai in central Vietnam as well as low land Khmer long time ago. Sesan and Srepok Rivers have played important roles in this relationship. Highland groups in Vietnam have traveled into Cambodia through these water ways. They brought their goods to exchange with the food and products of highland groups in Ratanakiri and Mondolkiri. Further, the Jarai used to have close contact with low land Khmer authority. They used to meet each other in one area in Sambok (Kratie Province) to enhance their relationship and exchange goods.

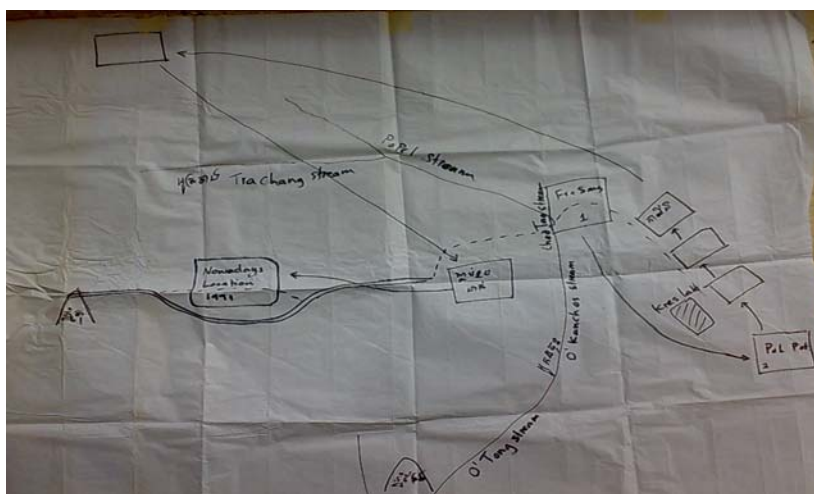
Traditionally, each highland group has their own beliefs and traditional customary laws. Highland groups in Ratanakiri and Mondolkiri believe on the spirits which consists of many spirits. They respect the belief of their ancestors, forest spirit, mountain spirit and so on. The highland groups have their own traditional laws to control their villages and stabilize their natural resources. They were governed by the Krak Chhrok^{xii} (Mekantreanh) and elderly councils. This system has maintained their

society for centuries until the present day even they have adapted their knowledge from time to time. Some highland people converted to Christianity more recently. In Mondolkiri, they were converted to Christianity during 1970s when they escaped from the war in Cambodia and went to live with highland groups in Vietnam who most of them already converted to Christianity.

Village History

Similar to Khmer, Kreung people name their villages or community by using their hero or the most respected person. Within this tradition, Yak Poy community was named after its founders, Yak Poy. The history of this community traces to the past long years ago. According to Kres elders, Yak Poy, was the Krakchhrok (tribal chief) who controlled the Kreung highlander community in Kresh terrace (Veal Kres)^{xiii}. Historically, Yak Poy controlled Kreung many Kreung people in cooperation with Yak Kanthao. However, from time to time, with the increase of population, Kreung people were divided into different clans that were led by many different Krakchhrok. That is why today, only in Yak Poy Community, there are five Kreung villages such as Kancheun, Kres, Koy, Mass, and Tagnach village while there are other four villages in Yak Kaol Community.

In the past, moving their villages was one of the traditional practices among most of highlander people. They move their villages because they want to stay near the new rice shifting cultivation plots or because there were people died in their village. Within this tradition, Kreung people in Kres village (the field work) moved their villages several time until they finally have settled in the current location.



The movement of Kres village location from French period till present day

From French period to People Republic of Kampuchea, Kres village had located in several locations near O (stream) such as O' Kapeung, O' Changlang, O' Kayeun, O' Trachang and O' Cheotao. Kreung people chose their village location near the stream because they could have easily access to water and the natural vegetable and edible plants grow near those streams. During the French and Sangkum period, Kres village location was nearby O' Cheotao which is around 6 kilometers eastward from the nowadays location. During Pol Pot time, Kres people were evacuated to live near Sesan River to do wet rice cultivation. They lived collectively with other ethnic highlanders, worked, and eat collectively.

After Pol Pot regime, Kreung people in Kres village moved their village location many time before arriving the present location in 1991. They moved their village location further up to north-west direction. From time to time, their village location moved closer and closer to main road. After Khmer Rough Regime, People Republic of Kampuchea (PRK) Regime wanted to allocate highland villages to stay near the main road mainly because of the security reason and controlled them strictly.

From 1991 on till nowadays, Kres village is situated between two main streams: O' Trachang in the north boundary and O' Tong in the south borders with Krola village. The reason that, at that time, they moved their village was the disaster in their village. When their village location situated four kilometers further east of nowadays village location, there were around 20 people died in the village. Nearly every family lost their members in a very short time. There were many people died and some families, most of the members in the family died. One family lost six of seven family members in one year. Thus, the elders and Krakchhrok discussed and found new location for their new village. Finally, after following the traditional rituals, they found the new location located between O' Trachang and O' Tong and have settled there till today.

1. The Ecological Setting of Kres Village

Kres is a mountainous village located in the north of the provincial town, about 30 kilometers from Banlung town. Kres village is one of the five villages in Yak Poy community situated in Poy commune, O' Chum district, Ranatakiri province. It is bounded on the north by Tagnach village, on the northeast by Koy village, on the east by Mass village, on the south by Krolla village, and on the west

by Santuk village. This village has the total population of 240 which made up of 120 males who most of them are children and young adult (informal information conducted by researcher in April, 2008).

Since the PRK government has practiced the allocation program, because they wanted people to live near the road so that they can protect them from the Khmer Rouge insurgents, Kresh village situated near the provincial road which stretches from Banlung town to Taveng district. It located 3 kilometers right farther from this provincial road with about 6 kilometers new path road built in year 2004 in cooperation fund from Seila program and villagers.

When the researcher first traveled into Kres village through the six kilometers red soil path, a fantastic impression existed. On the half way to the village, there is a mountain (To Mountain) which we can see the view of big area around it. On the left side of the mountain (North), is the green old Chamkar with green forest. The green forest is the reserved plots of Kres and Tagnach village. The forest is separated by the stream called O' Trachang. On the right (in the south) we can see Krolar villages situated southward around 5 kilometers from the mountain. In this part, there are no green forests, but there are lots of cashew trees. On the Northeast of To Mountain, we can see bald mountain without forest cover. There are big clear areas with small rubber trees. In contrast, on the west and northwest of To Mountain, there are some green forest and the cashew trees. This different landscape between the same Kreung communities really makes me wonder and become more interested with my research.

Kres village is surrounded by green tree, mountains, and many natural streams. There are many streams within the boundary of Kres village such as, O' Trachang, O' Tong, O' Chevtao, O' Kachos, and O' Popel as well as several small streams which connected each other and provide both the water sources for the villagers and their rice cultivation plots, as well as fish and other aquatic lives which provide extra vitamin sources to highland people who can not afford to buy meat from market.

On the Eastern part of the village is the cemeteries forest. This cemetery does not have big trees like the cemetery of Tampoun in Taveng. It is small and surrounded by the cashew plantations. The cemetery stretches eastward to O' Tong which separated Kres village from Krolar village. Along O' Tong, most of the land areas are converted to cashew plantation with only two main upland rice plots remained. In this area, there is one mountain called Phnom Treng (Treng Mountain)

which has a lot of bamboo. Villagers prefer to get bamboo shoot and bamboo bars from this mountain because it located near their village location. This mountain does not have big trees at all. Kres villagers have cultivated upland rice on the mountain hill and plant some cash crop trees.

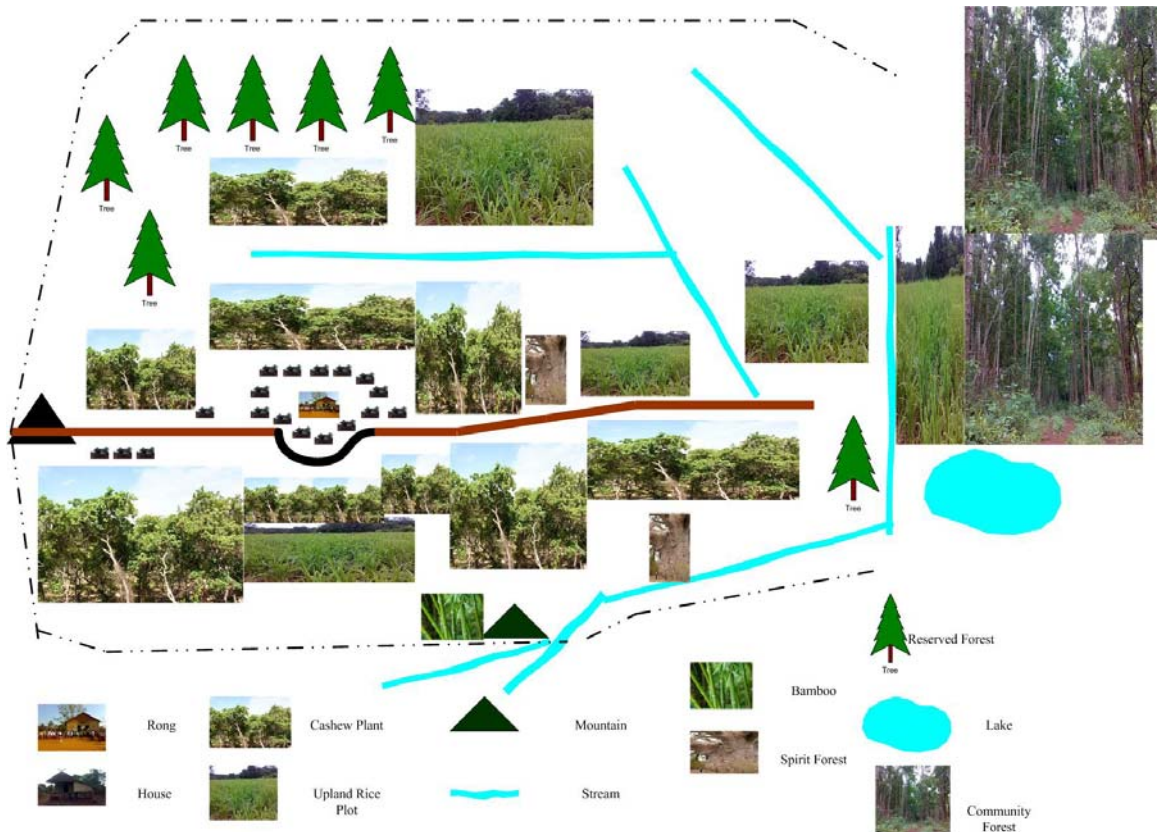
From the village location to the spirit forests areas (Northern direction) is the long cashew fields. Villagers started to plant the cashew nut trees since 1997, but this plot began around year 2002 or 2004 because the cashew trees is still young and villagers have just get the yield from their strategic plants^{xiv}. This cashew farm stretches from the village location, between O' Trachang and O' Tong, to the upland rice cultivation plots which lengths about 3 kilometers with the average width of 300 meters.

Further north of these spirit forest areas, there are big rice cultivation plots and the community forest. Most of Kreung people in Kres village clear their new plot areas in the area around O' Cheotao (6 kilometers east of village location) and Veal Kres because the soil in this area is fertile which can produce high yield of rice than other areas in the village rice plots^{xv}. This area consists of white soil and bamboo trees that provide both fertile soil for villagers to grow mixed plants in their Chamkar. Growing rice in bamboo areas, villagers do not care much to weep out the grass because the grass does not grow well in this area compare to the low land rice plots. In addition, this plot locates near O' Cheotao that provide both water and fish to villagers while they stay in their Chamkar.

On the eastern part, Kresh village is separated from Kam and Krolar villages by Treng mountain, O' Tong, and O' Kachos. Most of the border lands in Kam village are already cleared to cashew plantation and especially rubber trees. A few mountains in Kam village remained without forest covers anymore. During the last decade, Kam village has been intruded by lowlanders who come to buy or grab village land in order to plant strategic plants, most important rubber trees. Nowadays, nearly haft of the whole village land own by outsiders.

Krolar village is divided from Kres village by O' Tong. Krolar village is the biggest village in Yak Kaol community and villagers have settled there for generations (Sovathana. S., 2004). In fact, some parts of the current Kres village location used to be the former Krolar's village boundary. However, in 1991, with the agreement between elders and Krakchhrok, they agreed to take O' Tong as the village boundary between these two villages.

Kres Village Map



If we stand on To Mountain, we can see the view of Krolar village clearly while ten years ago, visitors could not see this village at all because of the forest. Wooden houses with zinc roofs appear in the south-west of Kres village. There are little green forests grow along the boundary between these two villages. O' Tong serve not only the water source for villagers, but also serves as a source of small fish for villagers as well as the village boundary.

Almost of all the area from the Kres village location to O' Tong stream is covered by cashew trees. The cashew trees in this plot are providing the high yield for the villagers. Those trees age about 7 to 10 years and it serves as the important main source of villagers' income. Nearly all the families in the village depend on the income from the cashew to fulfill their demands. They used the money from selling the cashew nut to buy rice when they run out of their rice from shifting cultivation.

In the west, Kres village is bordered with Santuk village by Phnom To (To Mountain). Phnom To locates about 1500 meters southern part of Kres village location. In the past ten years, villagers said that this mountain had big trees, but it

does not have any big trees at all. Villagers plant cashew trees on most of the land. There are only several plots that are still using as rice cultivation plots which located in the north. However, in several years ahead, these rice plots will be changed to cashew farm because the villagers have already planted the cashew trees in these farms.

In the north, Kres village is separated from Tagnach and Kan Koy village by O' Trachang. This stream is the important one among the several streams surrounded the village. Most villagers use the water from this stream to drink, cook, and bathe. Thus, O' Trachang is crowded in the morning and evening even there is a clean water pump in the centre of the village. Most of the villagers mentioned that water from O' Trachang stream is clearer than water from the pump. That is why villagers prefer using water from the stream. However, most children use water pump because it is easy and they do not need to walk up and down the hill to the stream. This stream located around 200 meter north of village site.

Since the development of market economy or money economy, especially the introduction of strategic cash crops such as cashew trees and rubber trees, villagers' settlement pattern has been changed. With the easy access to wood resources by using saw machine to cut trees as well as money from selling cashew nuts, villagers in Kres village have started to build the wooden house with zinc roof. However, most of the villagers still live in the traditional small house and build houses in a circular style.

Building their village in a circular style has been practiced long time ago. Living in a circular is not an instinct behavior, but it the clever decision. According to Kreung elders, living in a circular village has a few main benefits. The first benefit is the mutual help among villagers. Living near each other helps villagers protect each other when someone faces problem or the wild animals come into the village. Secondly, it is easy for the village chief or elders to inform villagers for meeting. If they live along the road, their houses will be far from each other, and this condition will make them difficult to have a meeting or inform the immediate news.

Because Kreung people believe in spirit and they have long respected and worshiped this belief, that is why they have two important spirit forests spirits or Bree Arak. These two spirit forests located on the northern direction of village location in which the big one is called Bree Arak Gnork and the other one is Bree Arak Gavan. All Kreung in this village said this forest spirit is strong and villagers

are afraid to violate it. If villagers dream the spirit want cow or buffalo sacrifice, they have to offer it to the spirit.

Kreung people have strongly believed on spirit forest areas. They do not allow people in the village to make the rice shifting cultivation plots overlap with the forest spirit areas, especially the two main important forest spirits. To show they really respect the forest spirits, elders in the village lead the villagers to celebrate the rituals dedicate to those spirits. They offer and sacrifice food to the spirits in return to the protection, good health for the villagers, and happiness.

Only the elders and the spirit medium who knows the spirits are happy or not. They mostly know the spirits will through the omens or dreams or sometimes from the unusual activities in the village. When the elders or the spirit medium inform that they have had bad omen or dream, a sacrifice ceremony, inevitably, has to arrange to appease the spirits. For example, during my field work with Kreung people, several people got sick, and at night, the spirit medium dreamt that the wild dog come across the village which is believed that it is the bad omen. Thus, in order to get the protection from the spirits, the villagers prepare the offering ceremony. Most of the village families sacrifice pig and chicken for the spirits. However, for the wealthy families they can sacrifice a cow for the ceremony.

The rituals and ceremonies consist of both manifest and latent functions. According to R.K. Merton, he explained that manifest function is the open function that we can observe it directly while latent function is the hidden role. For example, the ritual ceremonies of Kreung to appease the spirits serve not only the spirits but it also makes people meet each other and strengthen the village solidarity. From these rituals we observe that the manifest purpose is the chance that villagers meet each other while enhance their solidarity is observed as the latent function.

The two forest spirit areas have plenty of large trees, plants, and animals. All those trees are banned to be cut or fallen down and villagers avoid doing something that bothers the spirits. However, villagers can collect plant and vegetable around these spirit areas. In the past, these areas were rich in wildlife, but since PRK regime to nowadays the wildlife have decreased notably. The main cause is the anarchy of holding guns that people use it to hunt the wildlife.

Although many of the young adult have adapted to the lowland culture such as clothes styles and modern equipments utility, Kreung in Kres village still live in an extended family and with kin. Some extended families consist of several families

living together. They share food and help each other when someone faces problem or gets sick. Furthermore, living together can also enable them to preserve their tradition for the next generation. Elders in the family teach and tell the tradition, stories, and their knowledge to young members.

In Kres village, there is only one red soil path, about six kilometers, crosses the village. This road stretches from the west to the east and stops near O' Cheotao. It was built in 2004 with some contributed money from Kres villagers and the rest is the responsibility of SEILA program. This path enables villagers, especially young children to go to commune health care centre and school. It also assists villagers to go to their cashew farms and their rice cultivation plots quicker than in the past. Villagers can transport their rice, vegetable, wood, cashew nuts very convenient with this red soil road.

In every Kreung villages in Yak Poy community, there is a *Nampasom* (or communal hall) in the centre of the village which means the place for meeting^{xvi}. Usually, there are banana trees nearby *Nampasom*. In front of the it, there is big space for celebrating the spiritual ceremonies. In some villages, villagers grow both banana trees and Roka trees near the communal halls. The sacred banana trees are believed to be the home of guardian spirits who protect villagers from the evil spirits. Both villagers and the outsiders are not allowed to break or cut the banana trees at all because it is the symbol of village's stability and progress.

Nampasom serves several important roles. Traditionally, it is used as place for celebrating the ritual ceremonies. In addition, when there are some problems happen, elders collect villagers to meet in it to discuss and find solutions for the problems. Nowadays, it also plays important social roles. It is used as an illiteracy class, a meeting place for the authority or the teaching place for NGOs. Finally, it serves as the welcoming place for the outside guests or the residential place for the villagers themselves.

Within the introduction of democracy and the permission of civil society, especially NGOs organizations, Kres village has been involved with several organizations. Those organizations help villagers to build their capacity, protect their tradition, land, and improve the health awareness. Some organizations provide school, rice banks, cow bank, well, pump, rice mill machine, and trees nursery. Furthermore, some organizations assist villagers to establish Village Development

Council and Village Natural Resources Management Committees. They provide both technical skills and resources to villagers.

2. Village Structure

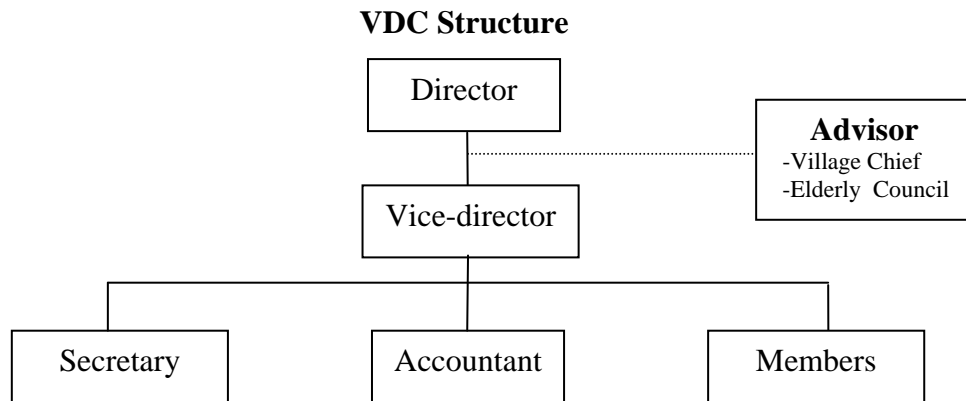
Traditionally, before the introduction of legal system, highlander groups in Ratanakiri used their own system to rule their communities. Krakchhrok including elderly councils played an important role in the community management. They were responsible for ceremonies and ritual arrangements, controlling, protecting, making decision, transferring knowledge, setting up taboos or customary laws, and choosing the new village location. Until Khmer Rough regime, this system was banned and highlanders had to live, work, and eat collectively. From PRK until now, even the tribal system has survived, but it has to work with administrative authority and some of their duties are abandoned.

In Kres village, two systems are working together, but apparently, the administrative authority has more power than the tribal system. Village chief, who was assigned by the commune council, has much influence in making decision and communicating with authority and NGOs. Thus, nearly all the assigned administrative jobs are done by village chief. The Krakchhrok and elderly council do most of the works that involve with ritual ceremonies or small conflict resolution. In Kres village, most of the villagers favor village chief than Krakchhrok. This trend has a root with a long story relates the preference of villagers and the contested power between nowadays village chief and Krakchhrok.

In addition to the two important village bodies, there are other committees that contribute to the governance as well as the development of the village. Those committees mostly come from the initiation of SEILA program, Department of Rural Development, particularly NGOs such as CIDSE, CARE, NTFP, HU, and HA. They helped and established many sub-committees in the village, but the two most noticeable are Village Development Committee and Land Use Committee.

Village Development Committee in Kres village comprises of seven members. This committee comes from the election among villagers in the village and work with the fixed mandate. VDC is controlled by a director, a vice-rector, a secretary, an accountant, and three or five members. Village chief and elder council in the village also play an important role in this committee. They serve as the advisor to consult or give opinions with VDC when they want to implement any projects or

programs. VDC also cooperates with commune council to work toward poverty reductions among their villagers.



They are responsible for any projects in the village and also extend knowledge to villagers. They work toward poverty reduction, improving education, sanitation, and improve the living standard of villagers in their village. They also get training with new skills from NGOs in order to build their capacity. Because all the staffs in VDC work voluntarily, so those staffs need to rotate from each mandate. That is why VDC does not work well as expected.

To secure land rights and control the natural resources like rich forest, Land Use Committee was established in the village. This committee works to help local people to protect their land and forest. With land issue, this committee developed the community-base land laws and regulations in order to protect their community land. With forest management, they set up local patrollers to patrol their community forest regularly. They work in cooperation with community chief, local authority, and NGOs. For example, when patrollers or villagers inform that there is illegal logging in their community forest, they report to community chief and local authority. Then, they will cooperate to stop the illegal logging with help from local authority. In Yak Poy community, NTFP seems to play main role with this committee.

3. Belief System and Traditional Practices

Like other highlander people in Southeast Asia, notably the highlanders in northeastern areas of Cambodia, Kreung have practiced their traditional beliefs for a long time. They have lived and have close interaction with the milieu around them. They have lived and learned from the nature surround them and they respect the

value of the nature. In addition, they try to make their daily life by avoiding violating the milieu. They respect forest, rivers, mountain, agricultural lands, and some special types of animal. Within this belief, they established the customary laws and taboos for restricting the activities that disturb the spirits who exist in the nature.

Even though they are in the same group, Kreung people in different villages have their customary laws and taboos differently, but there are also some similar or the same pattern of system beliefs among them such as the beliefs on eating wild taro, wild banana, and wild bamboo. Villagers in one village may ban to eat a special kind of wild animal while villagers in another village do not have taboo on such an animal. For example, Kreung in Krolar village do not eat wild pythons, but Kreung in Kres village eat wild pythons.

The different of practicing the customary laws and taboos also exist among villagers in the same village. Kinship's belief is the main reason for practicing the different taboos in the same village. Some villagers may have their relatives live in other villages who have restricted on eating some kinds of wild animals. For instance, in Kres village, some families do not eat wild chickens and squash while most of the families in the village eat them.

Kreung people have their narrative stories on each taboo. However, the taboos on eating some sorts of wild animals or vegetables may have different stories in different villages. Anyway, they still preserve those taboos very well. In Kres village, Kreung people have some stories relating to the taboos of eating wild bamboos, and wild chickens.

Kreung people in Kres village narrate the story of eating wild bamboo like this. There is a story mentions that, in the past, Siam wanted to invade the village. The villagers were very frightened. At night, a couple dreamt to see someone (hermit) told them that "Do you want to be secure? We can help you from this threaten if you follow us. You must not eat bamboo shoot because it will protect you from the danger." When the couple got up in the morning, they saw bamboo every where and they did not see Siam soldiers come into their village. They believed that the bamboo saved them from the danger, so they do not eat and take it into the village^{xvii}.

The taboo of wild chicken had existed long time ago. There was a story narrated about it. In the ancient time, villagers went bathing and the crocodile caught them and put them into the stone cave. The crocodile planed to eat these people in

another 5 days. The crocodile went to inform their relatives about eating their new preys. At that time, there were wild chickens scratched the upper cave until becoming a hole. Talking about those people, when they slept, a man came into their dream and told them not to eat the wild chicken so that they will be secured. When those people got up, they saw a hole and they escaped through that hole. From that time on, those people created more and more people and they also forbid their children not to eat wild chicken.

4. Settlement patterns

The housing structures vary from one ethnic group to the other ethnic groups. For example, Kreung and Jarai in Ratanakiri province build their houses differently. Kreung prefer to construct their house in circular fashion with larger houses control by heads of extended family. The Jarai constructs their houses in a vast long houses inhabited by each extended family.

Although they have different styles of housing structures, those highlander people, traditionally, have used the same forest materials such as wood, bamboos, leaf and bamboo roof. Most of Kreung houses cover with Kanna leaves. However, since villagers can get cash income from their strategic cashew nut, they started building the big wooden houses with zinc roof. This new tendency exists in every village in Yak Poy community. From year to year, new wooden houses with zinc are increasing because of the development in the community, especially the cash income from the selling of cashew nuts. This kind of tendency affects each village reserved forest because they need a lot of wood to build their new wooden houses.

Within the income from the selling of cashew nuts, Kreung villagers in Kres village have interested with the modern equipments. Nearly every time they go to sell their cashew nuts at Banlung, they come back with new households assets. They mostly spend their money on motorbike. Then they buy battery, video, VCD and CD players, and other household subsistence. Thus, Kreung people in Kres village do not save much money for the future demands because they think they have their own rice, vegetables, and they will get the money again when the cashew nuts harvest season arrives.

Houses and Household Assets in Kres Village (2007)

Types of House	Houses with leaf roof	Wooden house with zinc roof
Number	29	9
Battery	10	4
Television	1	7
Motor	20	

There are several kinds of housing structures in Kreung village. Those different houses serve for different purposes for the villagers. Kreung people in Kres village use the main houses that face the *Nampasom* for the parents and small children residents. They live in a clan with many members and share food together. However, some main houses are inhabited by small number of people, especially the new wooden houses with zinc roof.

There are also small houses that are inhabited by young women age from 13-17 years old. The reason that they build small house for young girl is spouse choosing chance. When the girls are believed to be mature, they are allowed to stay alone in the small house so that they can choose a satisfied future husband through night relationship. Further, newly couples who are under the controlling of the parents also stay in the small house, but they have meal in the main house with parents and relatives.

Besides *Nampasom*, main houses and small houses, there are also tall houses. This kind of house helps preserve the tradition of the highlander people. However, many villages in Poy commune do not have tall house as they had in the past. There are only four tall houses in the village that all of them are already abandoned while I was conducting my research in April 2008. The small houses are built by young men during cold season. They use it as a resident, place to chat with friends, girlfriends, and sometimes they sleep with each other at night. Also, building the high and beautiful is the proud of the builder and he can get more attentions from the young girls. Among the five villages in Yak Poy community, only in Kres village that they still have tall houses. However, young men tend to stay in small houses or in the main houses than stay in the tall house.

In the village, people build their houses in a circular mode. Their settlement pattern follows the clan relationship. There are four main clans in the village and they build their houses close each other for each clan. The main clan is the

Krakchhrok clan that has many families compare to other clans in the village. The other clans are small with several families inhabit near each other.

Each house settlement has important characteristic in claim their cultivated land surrounded their village location. It means that nearly every house can claim the land behind their house to be theirs. All of these land areas are the cashew plantations and a few fallow plots. However, some houses can not claim to have the land behind their house because they have just settled after someone already planted cash crop on that piece of land. Cash crop, mostly cashew trees is another tool that villagers use it to maintain the piece of land.

Villagers in Kres village use cashes crop to have priority on using the other plots. They agree that the plot located behind or in front of their plantations must belong to them. Other people can not clear or use those plots without the permission from the owner of the plantations at all. This type of claiming can use only with the land they planted cash crop and the land surrounded their village location. For the upland rice cultivation plots is the common property. People can clear as big as they want if they have enough labor forces. That is why some people have big plot while other people have small plots. Besides the above factor, education plays really influences on the amount of land they hold.

In Kres village, those who have better education or used to have contact with low land people always hold bigger amount of land compared to other villagers in the same village. Krakchhrok and his families hold big amount of cultivated land because Krakchhrok used to live in low land area and receive the influence from the low land people. Krakchhrok, during 1960s used to travel to Pailin to work in the orchids of Kola. In addition, he used to live in Phnom Penh with Khmer people for two years. From his experience, he learned a lot about Khmer people and their perception on land acquisition. When he returned back to the village, he had an idea on land holding.

In the village, Krakchhrok families hold more than 10 ha of land. Four of his children, who already married, hold at least two ha of cashew plantations with additional upland rice plots. During my field work, I notice that Krakchhrok always planted his cashew crops in his new rice plots even the plots locate far away from the village location. From this example, it clearly shows the long perception on claiming more land while the other villagers do not do it.

4.1 Family Structure

Kreung people in Kres village have a non harmonic pattern of residence (couple will stay successively in bride and than in bridegroom house during 7 years, then after 14 year, they separated if they want. Usually, their extended families live in the main houses with children who consist of parents and unmarried children, but they, including newly-marriage couple, have food together in the main house. All of them work together on the same farm plots without getting salary or stipend, but they learn how to do agricultural work until they can live separate from their parents. The relationship in the family is strong, harmonious, and parents give much freedom to their mature children in choosing their future spouses.

In Kreung society, parents provide a great freedom to their children in choosing the future spouses. This can be seen through the permission of young women to live alone in the small house and young men live in the tall house or granary house. During this time, boys and girls can establish their relationship before they agree to get married. The girls can choose any boys that she satisfies with while boys cannot. However, boys can complain or deny the married suggestions from girls through paying traditional fine. If the boy agrees with the girl proposal, parents from both sides will prepare the wedding ceremony for the young couple.

Marriage among people in the same clan is not allowed among Kreung people, but they can marry within people in the same village or people besides their villages and other ethnic group such as Tampoun. Cross community wedding now is increasing among Kreung communities^{xviii}. This may come from the increase of communication among people in the communities or because of lacking boys or girls in a community. Some researches found that a cross wedding reduces the labor in a community and in creases the labor in another community. However, for Kreung people I did notice this point because the newly-married couples stay with both sides of parents.

Usually, after marriage the couple lives with bride family for duration of time. There is no specific time for the newly-married couple to stay with the bride family. It depends on them who defines how long they should stay with bride family. Normally, the duration ranges from 2-6 years. They can live in the main house with their parents or live in a small separated house with their spouse. Whether they live with or separately, they still help parents work on the rice plots as usual.

After completing the set duration, the couple has to move to live with the groom's parents. They have to live the same duration as they live with bride parents. They still help work on the farm and household. They keep moving between both sides until the couple gains much experience with farming and household control. Then they start to live separately and have their own rice plots. This kind of traditional practice is still practiced by many couples in Kres village. Practicing this tradition, they can keep their identity and strengthen both families and communities solidarity.

4.2 The Socio-Economic in the Village

Traditionally, Kreung people in Kres village depended mostly on their rice. They plant mixture of crops in their farm, mostly rice. In addition to rice shifting cultivation, they gather forest product, fishing, and sell their labor within their community or outside the community. The concept of rich and poor did not exist in their community yet. However, when cash crops, especially cashew nut crop were introduced, people started to have income from the selling of cashew nuts. In addition, they start to have idea to do small business such as selling.

Within this condition, families in Kres village can be classified into wealthy family, medium income families and poor families. The wealthy families have wooden houses with zinc roof, big cashew farm which ranges from 3-5 ha, 1-3 rice plots and one or two motorbikes. There are only 9 better off families in Kres village. The medium income families have large big roof or bamboo houses, 2 ha of cashew nut farm, 1 ha of rice shifting plot. For the rest is the poor families which have small roof or bamboo houses with less than 1 ha of cashew nut farm and rice plot. Most of these families are small families that have widow, disabled people, and old people in their families. All of them still depend on forest products for most of their foods.

Even though all of them have rice plots, but they do not have enough rice to eat for the whole year. For those who have big rice and cashew nut farm, they do not face problem with food security because they can use the income from selling cashew nuts or their extra income from NGOs work to buy rice from Banlung market. However, for those who do not have enough rice and income to buy rice from the market, they have to find other jobs that mostly sell their labors within their community or outside.

Nowadays, I notice that Kreung people in Kres village can get income from selling rice, cashew nuts, cattles, pigs, small selling, and working for NGOs. They can work for DPA, NTFP, CARE, Khmer Leu Association, and HU. Their works mostly concern with their own community affairs such as natural resources management, community development, health care improvement, agricultural development, weaving encouragement, and informal education.

4.3 Education

Education is very important to reduce the poverty. The government has improved the education and spread it to the rural areas. Every year, many schools are built for the requirement of students. Even in the remote areas in Ratanakri, primary schools are built for the highlanders' children. However, the literacy rate among highlander people is very low. In Yak Poy, even though there two primary schools and literacy in every village, the rate of people who can read and write is still low.

All older Kreung people in Kres village are illiterate because they there was no school or education in their village in the past. Thus, they can not read and write even speak Khmer, but there is an exception for those who used to join in Khmer Rough military who can speak Khmer. For adults, most of them are also illiterate. Only some who can speak Khmer with difficult writing and reading skills. Most of them used to join in the literacy class in the village, but they could not continue for a long time. Farm work burden and the laziness are the two main obstacles to their studies. All the old people have big responsibility for the work on the farm, especially women. Women do not do only productive work as men do, but they are also involved with reproductive and community works. Thus the chance women can access to informal education. Further, because the literacy class is taught at night, so the older people can not bear with the tiredness and the night time study. Therefore, there are only few people in the village who can write and read because they have involved with administrative or NGOs works.

In Kres village, most of young boys and girls are also illiterate. Even though there are primary school about 3 kilometers from village location, and literacy class in the village, the rate of boys and girls in school is very low. Even they go to primary school, many of them can only speak and understand Khmer, but they can not write or read. Most of them go to primary school for only two or three years and then they will drop out school. For example, among ten boys age from 7-11, there are

only 5 who go to primary school and now all of the already left school. Environment around them including, discouragement, laziness, location of the school, and labor requirement contribute to the dropping of school among those boys and girls.

The chance to go to secondary school is very rare among the children of Kres villagers. They believe that going to secondary school is very hard and especially they have to spend lots of money for their children study. Furthermore, the school location is another obstacle for them. If they want to study in secondary school, they have to come to O' Chum which is far from home. In addition, culture also contributes to the low rate of getting higher education. Most of young girls in the village get married in very early age 14 or 15. Encouragement from parents and the whole family members is really important for children to access high education. Among all children in Kres village, there are two who go to secondary school. They can go to secondary school because both their parents and all members in their extended family encourage them to go to school.

5. Traditional Practices on Land Use

Kreung in Kres village still strongly practice their knowledge related to land use. Among those knowledge, upland rice shifting cultivation is practiced by the majority of the villagers. Nearly all the family has their upland rice plots and practices it every year. They have good knowledge on upland rice practices. There many step in cultivation upland rice.

Choosing new rice plot, they follow a numbers of practices and ritual ceremonies. After they left the old rice plots, they need to find another new plot for cultivating. Firstly, they have to Chheuk Pri which means that they have to find new plot before clearing it. Kreung have good knowledge on how to choose the fertile land. They know what kind of land is fertile for rice and what type of land is not proper for land. They mention that white land and bamboo land areas are good for cultivating upland rice while the red soil is good for planting cashew with high yield. They are also keen at selecting fertile soil for their rice. According to elder people, sticky soil is good for rice to grow.

After Chheuk Pri, they start doing another process which is called Mous. Mous means clear the forest. They cut around five to ten meters squares and then return back home. Homemut is another process in rice shifting cultivation. Homemut refers to the process of taking bath and dream of spirit on the new plots that they

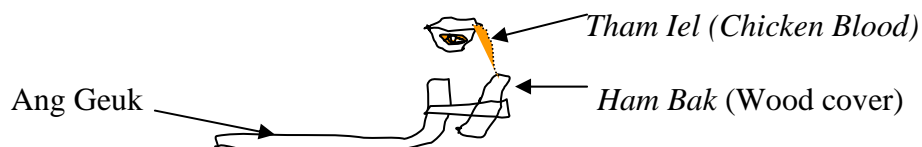
have just cleared. They return back from the forest, take a bath, eat food, and sleep. The dream plays important role on choosing the new cleared plot. If they see fish, pepper, pebbles, it means that they can cultivate on the new plot. However, if they dream that they spirit do not allow them to cultivate on that plot, they will abandon the plot and choose the new one.

After they have good dream, they will continue to cut all the forest in the new plot. They will fell down the big trees, but they will clear the small trees before cutting down the big trees. They will spend around 15 days to clear the forest. It depends on the labor forces each family has. Then, they will keep it dried. When it is dry enough to burn, Kreung people will inform other people who have plots near their new plots that they will fire their new plot because they want the neighbors to pay attention and protect their farm in case the fire spreads. Traditionally, Kreung people have good knowledge when they burn new plot. They can control the fire from spreading to other people farms.

During clearing the forest, they say something to get protection from the forest spirit. They said as follow:

Now I clear the forest to make new rice plot. Please allow me to live with you from this time on. Bad spirit please go out and good spirit please stay with us to help us, protect us, and give high rice yield to us. With this new plot, please give us high good yield and protect us from danger...etc.

After clearing forest, Kreung people have a small ritual. In this ritual, they brought a piece of wood cover and put it on the knife. Then, they will kill the chicken and take its blood. They will pour the chicken blood on the wood cover and pray for protection and good yield from the spirit.



The ritual protocol after they clear forest

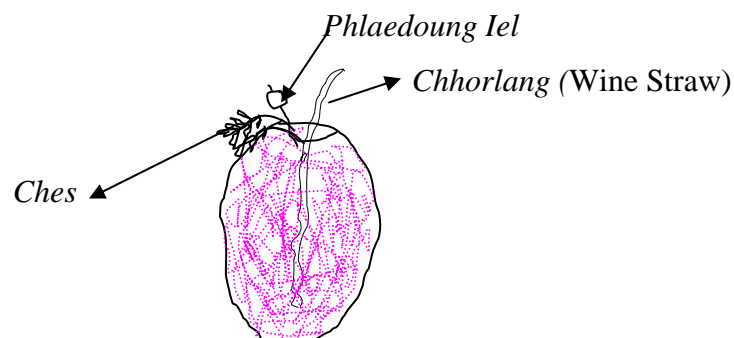
After they burn the dried trees, they brought back the bamboo stick that they used to bring fire to burn the dried trees. They will kill chicken and pig to worship the spirit and then drink with their clans and village members. In Kreung language, they called this ceremony *Beumprahkamameu*. After burning, all of the family members cannot go out far distance or go into the forest. Tree leaves will be put in

front of the house and around the house in order to inform that they are holding taboo.

After the first burn, they will go to the new plot to collect the remained wood and burn it again. After the second burn, they have to wait until the first or the second rain when the soil has enough humidity. They first plant corn and other vegetables because they can eat those vegetable before they can harvest their rice. When the land is humid, they will start planting rice. They plant rice by using the labor forces in each family. For the family who can afford to pay money for the labor forces, they can hire other people in the village to plant their rice.

When their rice grows about haft meter, they celebrate another ritual which is called *Brahcheunelrun*. They will kill chicken or possible pig for this ceremony. In this ritual, they want the spirit to protect their rice to grow well with good high yield. Then, they will spend most of their time to take care and weep out the grass for their rice. When they are free from agricultural work, they make their cooker from bamboo, Kapa, and weave clothes.

Before they harvest the first rice (*Champraklao*) they make another ceremony. They have chicken or pig to sacrifice for this ceremony. Only some people are invited to drink in this ceremony. They have special ritual preparation for worshipping.



Rice wine during ritual before harvesting the first rice

In this ceremony, they pray to avoid animal destroying their rice. They also ask to have good yield, safety and healthy after eating their new harvested rice. They need to put *Ches* (a kind of green leaves) in order to satisfy the spirit. They mentioned that without these leaves, the spirit will not accept their invitation. The other material is chicken heart. They put it because they want the spirit to see their offering. In this ceremony, the participants will spend the whole night drinking until their wine has less alcohol taste.

After they finished their harvesting, they will return to the village to take care the cashew trees. At this time, they have chance to meet all the villagers after staying in the farm house for more than several months. They have time to make ritual ceremonies or discuss about their village development. They also have time to get training from NGOs as well as spending evening time with video show.

Summary

Kreung in Kres village as well as Kreung in Yak Poy community still remain much of their tradition and customary laws. They live in harmony with the milieu around them even there is some few changes result from the development in the area. Their everyday lives still have close relationship with nature that can be seen from the location of the village situated near the streams and mountain cover by forest. Furthermore, they still practice their knowledge, rituals, and maintain their identity.

Kreung still live in the main houses, small houses, tall houses, even the trend of building wooden houses with zinc roof is increasing. Most of Kreung families in Kresh village live with relatives, clan, and their kin. They work and share food together within their relatives. Young girls and boys have much freedom in choosing their future spouses. They can live separately from the parents in the small houses and tall houses when they are believed mature. Cross marriage also exists and the tradition of moving to live with both parents sides of newly-married couple is still practiced.

When their community has involved with development process, Kreung people are encouraged to plant strategic crops or cash crops, mainly cashew nut trees. Within the income from selling cashew nut, they can build new wooden houses, buy motorbikes, and modern instruments from the market. Also, with better transportation, they have more contact with outsiders. Some of them can get extra income from employing for NGOs or selling.

Village chief, with the introduction of administrative system, and traditional leaders have worked together to govern and develop their community. They have their specific roles in the community and work toward the improvement of education and living standard, and health condition which is low among their people. To improve their works, many NGOs involved and helped them. Those NOGs provide both technical skills and fund to them. Thus, other committees are established to assist their works.

With the context of land grabbing and forest exploitation, the local villagers, with the help from local institutions and NGOs, have taken new strategy to deal with the problem. To secure land right among the community members, customary land laws and regulations are strengthened and improved or to be recognized by the state law. Furthermore, forest community is also established and forest patrollers are set up in each village in the community in order to protect their rich forest. Most importantly, they still have a variety of practices related to land use practices such as upland rice shifting cultivation which the majority of the family in the village practices their upland rice shifting cultivation.

CHAPTER 4

The Development, Maintenance, and Strengthening of Highlander Kreung's Knowledge

1. Historical Development in Ratanakiri Context

Nearly all the highlander groups in Cambodia have practiced the same technique of upland rice cultivation and their lives have close relationship with nature or the milieu around them. From close relationship with the milieu, they try to avoid something that violates nature and developed their rules or regulation from their everyday experiences (Anan, G. 2000).

They mostly have been practicing “shifting cultivation” agriculture or rotational cultivation and pragmatically gather trees products (Chayan et al., 1995). They plant mixture of vegetables in their *Chamkar* (vegetable garden). They make new plot(s) by clearing the forest in their community and use it for several years. Then they leave it fallow for years in order to regain fertility and allow forest to regenerate. Besides the barter business, which they had long before and still today, in their communities on animals, fruits and trees products, there was no other business in the areas. In other words, the northeastern provinces were excluded from investment projects or had very few contact with the lowland.

However, in the context of development and the introduction of strategic crops, some of the highlanders also have been involved in cash crop practices because these new crops were introduced to them by the provincial institutions, NGOs, and it provides them more money compared with their rice shifting cultivation, especially help them access to modern tools such as motor, TV, and new clothes. In addition, with these cash crops they will have sometimes to stay in the village and most important they can protect their land from illegal grabbing which is increasing after Cambodia opened to free market economy in 1993.

Ratanakiri was separated from Kratie province in 1959. Cambodian Royal Government divided Kratie into Ratanakiri and Mondolkiri in order to have better control in the northeastern area. At that time, the government was afraid of the communist movement that was increasing in Vietnam. After the division, Ratanakiri has experienced both benefits and challenges from the development projects that were introduced by the government.

After 1993 Ratanakiri has become the new frontier for settlement because of the introduction of development projects in this area including riches of natural resources, basaltic land, and the plan to make this area to be the future economic pole^{xix}. In fact, lowlanders from different provinces have moved to settle in the province since Sangkum period, but it had strong impetus after 1993 along with the opening of free market economy that Cambodia opened her market to foreign investors. Those lowlanders want to benefit from the development projects. In other word, they want to seek better lives from the new settlement in that province. With the land and forest concession, increase of land price which causes land grabbing and land contraction, and immigration of the lowlanders into the province, more and more pressures are arising among highland community, especially on their land security.

In fact, development has been introduced long before 1990s, but after 1993 development in this province appeared noticeably because most of natural resources have been overexploited and the highlanders face many problems such as land grabbing or intrusion as well as the conflicts on land interest. It is since the second half of the twentieth century that several development programs have been brought into Ratanakiri and gradually the highlander people need to situate their knowledge in order to deal with new situations. Thus, in order to have better understanding about development and the strength of highlander knowledge, we should trace the historical development in this area.

The first development projects were brought to the areas since the French period (Ironside et al., 2003). Those projects, proposed by French, were to build primary schools, and some health care center, especially huge rubber plantations. The rubber plantation provided very few benefit to indigenous people because there were only small numbers of indigenous people were hired to work in the plantation in Snoul. Most of the workers in the plantation were lowlander Khmer and Vietnamese. Eventually, most of French projects did not operate well because those projects were not aware by highland people and they participated very little with those projects (Fontanel, J 1967). At this time, there were not any interesting events beside the French initiation to collect tax from highland people and the diminish slavery in that area. Those efforts seemed to get little success.

To trace the stories of developments in the areas, it is important to investigate the characters and natures through different periods of Cambodia history.

1.1 Sangkum Period (1955-1969)

After Cambodia received full independence from the French colony in 1953, King Sihanouk became an important figure in Cambodia politics (Deap Sophal 2006). This period was recognized through political stability and the improvement of economic sectors during early 1960s. King Sihanouk proposed Khmerization Policy with ethnic groups in Cambodia. Highland people also became the target of this integration policy. The government wanted to integrate highland people into the mainstream people in Khmer society. To make the policy work, development projects were planned and implemented in Ratanakiri province. Infrastructure was improved in order to facilitate the smooth process of the projects and in part to protect national borders from neighboring countries (Meyer 1979 cited in Sovathana 2004). Then the government provided better public services and communication to remote villages in order to enhance the relationship between people and development agencies. Moreover, many schools and health care centers were built in Ratanakiri.

Education program at that time did not work well. Most of the children did not attend the class because they had to help their parents' agricultural work or take care of their cattle. Furthermore, both teachers and students did not understand each other well. The work books were also not suitable for students. Most important teachers were not willing to stay in the village surrounded by the thick forest.

The royal government also establish the pattern villages in order to teach highland people the techniques to do low land rice. The pattern villages were created in Ratanakiri and Mondolkiri with the special assistances from the government. Low land people from Takeo, Kampong Cham, and Prey Veng provinces were encouraged to move there. These people's duty was mainly share knowledge of low land rice methods to highland people who lived around the pattern villages. The government also developed other projects in this province. This program did not work well and there were only small numbers highland people learned to practice low land rice.

In mid-1960s, the Royal Government started the rubber plantations. It quickly re-established a large rubber plantation near the military posts in Banlung. The size of the rubber plantation at that time was 8,000 hectares located in Banlung district. Then in 1968 the rubber plantation was expanded 500 hectares more located in the same place (Banlung).

Who benefited from the rubber plantation: ethnic groups or the so-called lowlanders who had immigrated there? Though, it was beneficial providing many jobs, the rubber plantation ironically did not provide jobs to the local people (highlanders). As a matter of fact, the lowlanders occupied most of the jobs. Consequently, this project did not change the standard living of northeastern ethnic groups, but more pressures increased among the highland people and complaints were made about it. To make it worse, the government had no capacity to control the stability in the highlander's area because the insurgents built their base and manipulated many highland people to work for them.

In addition, the development projects also gave shocking effects to the highlanders' belief. As illustration, the projects of building roads crossing their villages and clearing the plots for rubber plantations negatively affected their belief of worshipping the Spirits which was believed to stay in the forest or some sacred zones. In other words, when the new plantations and road was built in those places, some religious beliefs which they had long practiced were destroyed. Some places such as Pri Arak (Sacred Forest) and cemetery forest were sacred zones. Furthermore, each rubber plantation requires big size of land and most forest was cut in order to plant rubber trees. This gradually led to the abandonment of some of their rituals and beliefs.

Lastly, their livelihood was also affected by the projects. Nearly all of highlanders had practiced shifting cultivation which required huge amount of land. But as soon as the rubber plantation started, some highlanders who lived near the plantations lost their agriculture land making them difficult and could not grow enough rice or collect forest products, fruits and animal products, etc. As their lives have close relationship and depend with milieu, this surely had bad impacts on the living subsistence of them.

However, one was still able to see some impacts of the project on the ethnic groups living in the place where the project was implemented. Some of them learned how to speak, to write and to read Khmer as well as to dress like Khmer. This result leads to the idea that the highlanders could be integrated into the Khmer society in Cambodia. This idea resembles the purpose of the Royal Government that wanted to integrate highlander people into the mainstream of society (Colm 1996, Ironside et al., 2003). During this period, the government also tried to educate them to understand the system of government. After this attempt, some people in

northeastern provinces adapted new way of life in order to survive, negotiate, and promote their community (Sugiarity 1997).

1.2 Khmer Republic (1970-1975)

From 1970 to 1975 Cambodia was renamed “Khmer Republic” which was under the control of General Lon Nol. This time was marked by the civil war between Republic soldiers and insurgent forces who got supports from Vietminh (Justin Corfield, 1994). The Khmer Republic soon lost the area under their influence, especially the northeastern provinces where was the base of Khmer Roug. General Lon Nol and his government officers, in order to make the situation better, exposed a new policy by sending high-ranking staff and the retired officers to live in those provinces including the provinces in the northeastern Cambodia in order to control people (Colm 1996).

Those who were included in the new project got quite a lot of benefits. As an illustration, they, the staffs who agreed to settle in northeastern provinces, received huge amount of land from the new policy. Furthermore, since the Republic government wanted to make the policy more effective, they were encouraged to move to the new places and got a three-year salary in advance plus 2,400 m² of land and another five hectares for farming. As a result, around 300 families went to settle in northeastern provinces, especially around military base in Banlung. Then, they started the rubber plantation and cash crops. What about the old settlers? What impacts might they have from this policy?

Not only the new settlers who were not satisfied with the project, but also were the old settlers of the ethnic groups. Beside the fact that the project was unsuccessful and the former rubber plantation as well as their cash crops failed because of lacking skills to control it (Colm 1996), the latter suffered a number of terrible experiences. It did not protect them from insurgents even though they were living in the area under the influence of government. This led to tension and serious situations. To make it worse, some high-ranking officers cut many big trees and violated local taboos. Furthermore, their soldiers killed wild animals for food. In addition, some highlanders were removed and forced to leave and some young girls were raped (Zweers et al., 2003). In addition, the area was also bombed by American air planes which caused disaster and scare to highland people. To escape from this danger situation, as older in Kres narrated, they had to move further deep in the forest and

lived in frighten as well as food shortage. As a result, some highland people joined with the insurgents to fight against the Republic soldiers.

1.3 Khmer Roug Regime

On April 17, 1975 Cambodia fell into another new regime. This Regime was called Democratic Kampuchea but generally known as Khmer Rough. In this regime, nearly all of Cambodians included highlanders were forced to work hard on the rice fields and got very little food. Consequently, around two million Cambodian people died from starvation and murdering (Kiernan 1982).

Old Kreung people still remember their bitter experiences during Khmer Roug regime. They were forced to live, work, and eat collectively. They had to work hard, with little food, on the collective rice plots. They had to plant wet land rice which was new for them and was very different from their rice shifting cultivation technique. Even highland people have never practiced lowland rice cultivation, but during Khmer Rough regime they inevitably had to practice lowland rice cultivation because they were afraid of death penalty. For Kreung in Yak Poy community, during Khmer Roug regime, they lived collectively in present Mass village location which stays close to Sesan River which is located about 5 kilometers east of nowadays Kres village location.

Kreung people were compelled to leave their ancestor land and abandon their rituals. Rice shifting cultivation was abandoned and instead their rotational plots were converted to lowland rice plots. Further, this regime also banned them to speak their language, celebrate the traditional ceremonies or any rituals. Khmer Rough also forced highland people to use Khmer language which was new and difficult for them. In addition, Khmer Rough took or destroyed a lot of highland traditional tools. During Khmer Rough regime, many drums and jars which were important for highland people were destroyed. The number of Gong and Jar is the symbol of the highland people and their family status. A family that has more Gong and Jar can be judged as wealthy or rich family in the village.

Khmer Roug regime used the Kreung who they manipulated with their communist ideology to control highland people. Even they are Kreung, but they did not have pity with the same Kreung people. If someone committed something against the rules and regulations of Angkar, they did not hesitate to punish and sometimes kill the guilty people. A man in Kres village narrated their stories during Khmer Rough regime as follow:

We lived in a very difficult and frighten situation during Khmer Rough regime. We were forced to leave our home and village to live collectively with people outside our villages. We had to grow lowland rice which we had never experienced before. It was very hard for us. We got little food from hard work. What is worse is that our leaders, although they were also Kreung, they did not favor us at all. When they found that we had guilty, they will put punishment to the victims.

(Interview with Kres village Krakchhrok)

Even highland people experienced a hard situation, but after this regime some highland people still keep practice low land rice cultivation. Some Tampoun and Kachak in Veun Sai village still practice both lowland rice and upland rice. In Poy commune, some villagers also practice both wetland and upland rice in their village. This can be illustrated through Krola, one of the big villages and stays in the same location for generations, has both paddy rice and upland rice in which they have practiced it since People Republic of Kampuchea.

1.4 People Republic of Kampuchea (1980s)

After the military intervention of Vietnam troops in 1979, Cambodia was liberated from Khmer Rouge regime. A new government was installed working with the cooperation of Vietnamese advisors. Soon afterward, the new government re-established the local administration system in their areas of influence including northeastern provinces that they liberated earlier compare to other areas in the plain region, especially in Ratanakiri in 1980. Governors, district governor, village chiefs structures were re-established in order to control the region firmly and protect it from remaining Khmer Rough guerillas. Highland people were encouraged and given important post in the province from provincial governor to village chief. Furthermore, the government practiced the policy of village allocation because it is more easily for them to control villagers and cut off the contact between the villagers and the insurgents. The government also had started schools again, and built infrastructures, health care centers in the urban and suburb areas.

At this time, PRK regime established *Kromsamaki* (Cooperative Unit). With this system, highland people in each village were divided into group or unit. Usually, there were around ten to fifteen people in each unit. They divided villagers by putting the number of the house and then count it from one up. Each unit was controlled by one unit chief with the help from two sub unit chiefs. These men work under the authority of village chief who was the agent of the government.

In this system, unit chief was responsible for recording the population demography, giving advice on agricultural work, and report what had happened to village chiefs. Two other sub unit chief had duty to remind people, collect people, and inform people the meeting information. People were strictly monitored because they wanted to cut off the relationship between highland people and the Khmer Roug in the jungle.

At that time, highland people were allowed to practice their traditional upland rice shifting cultivation and gather forest products, but they can do only nearby the village because of the security reason. Each group went to work together on the field and help each other. On one hand they can help widow or old people. On the other hand, they can protect each other from the attack or the contact of Khmer Roug.

After they harvest, they will share it among the members in each unit. Every people in the family got the rice from this share. However, the amount of rice each person received depended on their labor contribution. The more labor they spent on the farm, the more amount of rice they got. The adult labor will get a big Kapa of rice in each share while the old people and children got a small Kapa of rice. Pregnant lady got double because her baby also got the share. They believed that if they did not share to her baby, it means that they did not accept that baby as human. However, *Kromsamaki* was ended in 1989.

Gradually, with riches of natural resources, especially forest and red soil, northeastern provinces such as Kratie, Mondolkiri, and notably Ratanakiri became the target interests of businessmen, especially neighboring-country businessmen. In 1980, Vietnamese logging company started to build road from Vietnam border to Ratanakiri in order to transport logs to Vietnam. After Vietnamese, there were lowlanders, especially military officers and local rich people logged great amount of forest and grabbed huge amount of land in this area for different purposes. In addition, the province governor and his partners also joined in a plot to exploit the forest in the dragon tail conservation forest area.

In this situation, highlander people gradually faced many problems. Firstly, they lost their land and most of the spirit trees were cut down. This affected both the living condition and their religious beliefs. As mention above, highlanders worship animism and practice shifting cultivation, so land and forest were very important for them to stabilize their living condition as well as their identity. Above all, they did not receive much good things from those development programs. Even though the

development provides more negative points, a perpetuate stream of development in different aspects is still appearing in the area. Notably, after 1993 more and more program, especially land and forest concession have appeared in Ratanakiri province.

1.5 The Royal Government (1993)

After Paris Peace Accord 1991 and national election held by UNTAC in 1993, Cambodia began to develop slowly along with democratic lines. The government has tried and worked to enhance stability and security in the country. At the same time Cambodia opened her markets to foreign investment and any development projects. With this open policy, there were many investments and development projects flew into Cambodia. Once again, northeastern provinces became the new frontier for new development projects and immigration. Lots companies, mostly forest and land concessions, cash crop farm, NGOs and different types of projects were introduced to Ratanakiri.

It is important to look at development project related to land and forest concessions which affected the livelihood of highlander people. The Royal Government provided huge amount of land to companies for the sake of preserving forest and developing the areas. For example, in 1995, the government granted 1.4 million hectares of forest area located between Sesan and Srepok rivers, including Virachey National Park, to an Indonesian company to use for duration 30 years (Colm 2000). Another big land concession was also granted to Pheappimex Fuchan Cambodia Company over 350 000 hectares of forest in Ratanakiri and Stung Treng provinces. In fact, the concession law allows the company to cover only 10 000 hectare of land, but Pheappimex company controlled over 350 000 of land that is exceeded what was mentioned in the law. Furthermore, the company overexploited the forest resources without any environment impact assessment (Peter, L 2004). Both of the two big land concessions covered most of the area where highlanders were living.

In the same year, the government also gave right to many companies doing their business, particularly logging, in exchange of financing on building road and small hydropower projects. In late 1995, the government granted another land concession to Rama Khmer International and Mittapheap-Men Sarun, and Malaysian Company Globaltec Sdn which cover over 20 000 hectares of oil palms in Oyadao district. This project really affected the livelihood of 4500 people who live in the six

communes of land concession because some area of this concession overlaps with the indigenous land. Furthermore, there are only small amount of indigenous people are employed for the work in the concession zone. However, in reality there is little work is processing on this huge amount of land concession.

In 1996, the left bank of Sesan River and the right bank of Srepok River were put into the protected areas under collaboration between World Bank, WWF, and the Ministry of Environment. In the same year, many hydropower projects were proposed in order to provide electricity. Sesan I, Sesan II, Sesan III, and other two hydraulic projects on Sesan tributary were proposed. However, these projects affected many people who live along the river banks and if necessary they had to remove when the projects are operated. Later on highlander people who live along Sesan River were seriously affected by the Yali dam in Vietnam. Many animal died, canoes and gillnets were flown away. Most seriously, many hectares of cultivated land areas were flooded and people crops were destroyed. Villagers received no compensation from this destruction. Within this tough situation, with help from NGOs, local people established the community network to protest and protect the villagers' interests.

In 1997, only in Ratanakiri, there were over ten land concessions which covered huge size of land. Those land concessions were used to grow palm tree, coffee, and cashew nut which most of them located in Oyadao district (MCAndrew 2001). In the same year, another case of land grabbed happened in Borkeo District. There was a high ranking general grabbed 1 250 hectares of land with the help from district officers and commune chief.

In 1998, the government allowed Hero Taiwan Company to operate logging for 60 150 hectares of forest in O'Chum for 25 years. The operation of the Hero Taiwan Company caused many problems to villagers which led to protest from Yakaol Community (Sovathanna 2004). Nowadays, most land in this area is already cleared and nearly half of the land belongs to the low land people. They used that land to grow rubber and cashew nut trees. The villagers in this area remains smaller pieces of land and their livelihood will face difficulty because their lives has close relationship with nature and now the milieu has already gone.

In 2003 the government authorized another land concession to Heng Company in Andoung Meas district. The same year, the Ministry of Industry and Mines and Energy agreed to grant 1 600 hectares to SEOUL DIGEM Korean Company for

mining in Lumphat district, Ratanakiri. These two projects affected badly on livelihood of the people. Besides losing land, water was polluted by the activity of Gemstone Company. Another case was the activity of Tay Seng Company that forced highlanders to sell their land to the company for planting rubbers.

In 2000, with the agreement with Lao and Vietnam, the Royal Government of Cambodia joined in the initiation to establish Triangle Development Plan. From this development project, the government hoped that it will help promote the living condition of the people. However, this project did not relieve the difficulty of indigenous people, but added more pressures to them. As a matter of fact, this project attracts many lowlanders migrated to northeastern provinces and bought or grabbed the land from indigenous people.

In 2004, Mass village in Yak Poy community involved with land concession. Around 500 ha of land was provided to a person in return with some money and some development project such as improving infrastructure. However, the villagers protest to take the land back because they did not see any program was implemented. The villagers seek help from NGOs and the local authority to solve their problem, but they later became quiet without showing any explanation.

After Ratanakiri is being concerned as a development area, many highland people lost their land and their forests are in danger because of land conflict, and could lead to land lost. In addition, outsiders want to occupy land or start agriculture seen in cash crops, and some interested in forest. The lowlanders have migrated to Ratanakiri to seek new opportunity for their lives and make new cash crop farm. They mostly plant rubber and cashew nut while the other interested with abundant forest in the province. To deal with this new situation, highland villagers, with help from NGOs, have to situate their knowledge in order to be legalized accepted.

2. Kreung Livelihood and Women Roles

Traditionally, Kreung livelihood depended mostly on the milieu. In other words, we can say that their lives had a close relationship with the nature and the natural resources surrounding their village. Their practices, ritual ceremonies, and taboos have specific interaction with the nature. They practices shifting cultivation, hunting, fishing, gathering forest products for their subsistence, and sometimes live in the forest when they want to escapes from danger or the legal boundary (Annan,

G. 2000). Thus, in their daily living, they tried to avoid do or practice something that violated the nature. In their community, women have more responsibilities than men.

Men and women have their specific roles for every day lives. However, women have played important roles and have more burdens than men. Women do not do only productive works such as farming activities as men, but they also do reproductive and community affairs. From morning till night, women work full time while men can have time to relax and drink after completing their works. Sometimes, men spend a few days drinking while women still continue their jobs. Occasionally, women also spend long time drinking with men.

From early morning and evening time, group of women are crowded around the clean water pump and the stream. They pour the water into the water containers which most of them made up of wild gourds. They take the water home and prepare breakfast. They do not have a specific time for eating breakfast. If they do not go to the farm, they eat breakfast at around 7 or eight. Their breakfast usually consists of cold rice with boiled Kadiev (small green leave) with bound pepper and seasoning. Kreung people in Kres village eat huge amount of rice as well as peppers and seasoning and most of the time they do not have meat with their meal. They normally mix peppers with lots of seasoning or if possible with Pakrieve (the small garlic vegetable) and fish paste. They buy fish paste from Banlung market and occasionally Pakrieve when they ate out from their stock. They also eat huge amount of seasoning instead of sugar. I noticed that only one week, the family I stayed with that has six members can eat a packet of seasoning which weights around half kilogram. However, steam rice is the main food for every Kreung family in the village.

Pakrieve is the popular food for Kreng people. It is made up of Pakrieve, peppers, fish paste, and seasoning and then they pound all the ingredients together. They prefer putting a lot of peppers in making Pakrieve food which is very hot for the new comers who want to taste it, but it is delicious. They can eat Pakrieve with rice or use it as a sauce, especially with beef. Besides this food, they have other kinds of food such as stock fish, bamboo shoot, Chanang, Aranhang, Prong, Aranham or edible vegetables they collect from the milieu. Chanang is the special food and most eatable among Kreung people in Kres village. Prong is the mixture of vegetables in a bamboo and then they burn it. In nearly every meal, they eat Prong with rice and pound peppers with seasoning. They cook Chanang with meat such as pork, fish, beef, or wild animal meats with vegetables. They mostly prefer to boil the buffalo or

cow bone with vegetables. In addition to Chanang, Kreung in Kres village also eat Aranhang with their rice.

Aranhang is not popular among Kreung, but it is also eaten when they do not have Chanang or Pakriev. It is made up of cassava leaves. They collect only the young cassava leaves from the farm around the village. They boil those young leaves and eat with pounded peppers with seasoning. For outsider, Aragnang is not easy to eat and not delicious, but for Kreung it tastes good and they can eat it a lot. In addition to these foods, they still have other preserved foods for their meals. They keep fish or bamboo shoot in the bamboo tube and then burn it. They do not put any ingredients with this kind of preserved food, so it does not have taste at all.

Kreung still have another two meal times; lunch and dinner. They eat their lunch around one in the afternoon and dinner in the evening. When they go to Chamkar in the morning, women spend some of their time to collect edible vegetable from their farm for lunch food. It is hard to collect those kinds of vegetables during the dry season. They have to collect it from both on the farm and in the bush and they can collect very little from place to place. I used to join to collect those vegetables with them which I noticed it was a difficult task and requires us to be patient because we have to walk from place to place under hot sunlight. Also, we have to walk far from the village in order to get the vegetables, particularly to the mountain hill and the streams.

When they arrived home, women clean those vegetables and prepare to cook. The most popular type of cooking this vegetable is boiling. They boiled vegetables and then eat it with their rice. Kreung people do not have soup to eat at all. They prefer to make their traditional food even though they have enough ingredients such as meat, fish, vegetables, and other cuisines. They do not know how to fry or roast meats for their food at all even make soup. Only those who used to have contact with Khmer can cook fry, roast food, or soup, but they still prefer their traditional cooking style.

Besides collecting vegetables for their food, women also collect wood for cooking. They collected small wood that left from burning their Chamkar or cut the dead trees near their rice plots or around the village. They put it in Kapa (a basket made up of bamboo or rattan). Kapa is widely used among Kreung people which range from small work to big task. They use Kapa to bring water containers from the stream, put vegetables, rice, cashew nut, wine jars, wood...etc. Each Kapa that stock

wood weights at least 20 kilograms. Women go to collect wood individually, but mostly in group when there is ritual or ceremonies in the village. When there is ritual ceremony in the village, Kreung help each other. Women go to collect vegetables and wood while young men bring the water and slaughter the animals.

They eat their dinner with the food left from lunch. For most Kreung families they eat their dinner a bit late. They serve their meals at around eight and eat together with family members or relative in the main houses. Similar to lunch, they eat, nearly all the time, the same food. They eat the food left from lunch time and if it is not enough they can collect more vegetables while they were working on the farm in the afternoon. After dinner, they do not sleep yet. Some old people weave the Kapa, make house roof from Kanma leaves. However, most of the villagers from young to old spend the whole evening watching video that display in the village nearly every night.

In addition to the food they get from the nature around them, the Kreung also go fishing and hunting. Kreung do not fish and hunt regularly. They spend most of their time with rice cultivation work and cashew crop farm. However, they fish and hunt when they are free from the farm work. Kreung in Kres village usually go fishing in O' Chevtao which located in the eastern part about 5 kilometers from village location. This stream has water for the whole year and has some fish for fishing. They mostly use traditional tools such as basket and gillnets to fish. In addition, according to informant in Krola village informed that Kreung in Kres village also used electric tool to catch fish which destroyed fish resources rapidly. Besides O' Chevtao, they also fish at O' Tong which is located in the southern direction around one kilometer from village location. O' Tong has lots of water during rainy season and with little water during dry season. There is little fish and there are only small fishes in this stream. There are only four families in Kres village that still have their rice plots near this stream. Most of the villagers have their rice plots located near O' Chevtao stream or Veal Kres.

In the past, there were plenty of aquatic lives for Kreung in Kres village to fulfill their food demand and vitamins they need. During Pre-PRK regime and early years of PRK, Kreung could get a lot of aquatic lives they needed. There was enough fish in the stream. In addition, there were many frogs along the streams. Villagers used only stick and touch lighted to get enough to eat. However, nowadays there is shortage of aquatic lives in the streams and villagers could not get enough fish for

their food even they use modern tools. The decrease of aquatic lives comes from the population growth, anarchy exploitation with illegal tools, climate change, and the destruction of the forest.

From year to year, with decrease of infant and maternal mortality, the number of the villagers is increasing. Thus, food demand is needed twice or triple compare to the amount they needed in the past. Furthermore, after the war, villagers who used to be involved in war still have guns and munitions. They used guns and munitions to catch aquatic live which is a very big disaster for this resource. In addition, some villagers also used illegal tools such as electric equipments to help them catch aquatic lives. Even at the first time they can catch lots of aquatic lives, but the amount will decrease rapidly with those disaster fishing tools. Deforestation and climate change also contribute to the decline of aquatic lives. With the extension of cashew nut and other cash crop farms, more and more trees are fallen down every year. Villagers enlarge their cash crops farm to the edge of the streams; so many big trees are cut down. In addition, with short period of plot fallow (2-3 years) it does not allow young trees to regenerate into big trees at all before they are cleared again. Consequently, more or less it will affect the ecology of the lives that live in or along the streams or these areas. These practices lead to the shortages of aquatic lives and cause nutrition problems for highlanders themselves.

Definitely, aquatic lives have contributed some part to the food nutrition for the highland people. Upland people do not have money or can go to market regularly to buy meats because they have less contact with market economy and they live far from the town. In stead, they mostly depend on the aquatic lives they get from the streams surrounding their village to add in their food nutrition. Thus, what will happen when the aquatic lives in their community decrease rapidly? How can they find other solution to fulfill the vitamins requirement?

They inevitably face the lack of nutrition in their food. In return, they have to eat more vegetable to replace the amount of fish or meat they used to get from the streams or the milieu around their village. With this shortage of nutrition supply, highlanders need to find additional nutrition from outside their community through buying. With the income from selling cashew nut, they can go to Banlung market to buy fish or some meat, usually they buy pork fate, or they can buy cat fish in their village because once or twice a week, there is fish seller who takes fish to sell in the village. However, there are only few families that can afford this while most of the

family can not manage it and have to depend on the poultry they raise. Additionally, villagers can not afford to buy nutrition regularly. After they finish harvesting cashew nut, they do not have any money, so they have to depend on the food they get from nature. Occasionally, during this time, highlanders can have meat from their hunting or from the trap they set to protect their rice from wild animal, especially the wild pig.

Similarly, Kreung people hunt only when they are free from their farm work. They hunt in the village forest and community forest which is located about 7 kilometers from village location. The time when they stay on the farm to look after their rice, villagers can also trap some wild animals that come to eat their rice. They set their snares around their farms in order to protect their rice, especially protecting wild pigs which are the most danger for their rice. If they do not set traps or put signs to scare those pigs, the pigs will eat and destroy most of the rice. When they get wild animals, they share among their relatives or kin. Meats that they get from hunting help fulfill the vitamins nutrition in their food. However, they do not have enough meat to eat like they had in the past. Anarchy hunting, exploitation, and the destruction of forest are the main cause of wild live decline in the community.

Women also weave handkerchief and clothes in order to get extra income. In the village some weave clothes sell to the market and visitors who visit their village. They get help from DPA to find the market for them and loan them some money to buy the equipments to start their work. They set up a committee that monitor and report the work to DPA. They weave when they are free from their farm work. They buy the raw materials such as silk and thread from the market. They mentioned that they can produce such materials, but they need to spend much time and hard work. Thus, buying them from the market is much easier for them. Both young and adult ladies weave in their home and they sell individually. In 2007, DPA provided funds for them to build a house to store their product and sell to visitors. However, until April 2008, they did not complete the building yet because most of the villagers are busy with the farm work. Anyway, weaving is also a new strategy to help improve their living standard even the income is not as high as the income from selling cashew nuts.

3. Diversification and Changing of Livelihood Strategies

As mentioned above, traditionally Kreung people depend strongly on their rice shifting cultivation including forest products gathering, hunting, and fishing. Usually,

they start to clear the new plots in January or February. Then they burn the dried trees in March or April. They clear the plots and burn it again in May because after the first clearing, there are some trees remained. They grow rice in June when there are enough rains. Like other highland people in the area, Kreung grow a variety of crops in their plots. Those vegetables are corn, gourd, squashes, egg plants, sesames, chilli, cassava, cucumber, pumpkin, and Pakrievé. They grow many vegetables in the same plots because those vegetables will provide food to them while they stay on the farm to look after the rice. Also, those vegetable provide them extra food after they harvest. As I noticed, they still have chilli, Pakrievé, and pumpkin for their daily food during the season of harvesting cashew nut. Even they grow rice and a variety of crops, they can not sustain for the whole year. It is similar to Henry Baudesson reported in his book “Indo-China and Its Primitive People” the highland people have to depend on forest products such as bamboo shoots and cassava for several weeks in their food subsistence.

Many families in Kres village can not have enough rice to eat for the whole year. There are only a few families that have rice to eat nearly for the whole year. For the rest of the villagers they have to depend on the rice from Banlung market. Cashew nut selling is the main source of income for them to buy rice and other utilities from the market. Many of the families can subsist with their own rice for only five to six months which means that they will eat out their own rice during February or March. Luckily, during February and March, they can harvest their cashew nut during March which they can get money to support their living. Not all family that can support their living with the income from cashew nut selling.

For those who have big cashew farm, they can survive and buy household utilities from the market. However, for those families who do not have big cashew farm and their cashew nut does not provide good yield, they have to find other ways to survive^{xx}. Usually, they sell their labor within the village or to other villages in their community such as Yak Poy and Yak Kaol community. They have to collect the cashew nut for the families that hire them. They have two choices to get the compensation. They can take money or rice in return for their work. They can get 5000 Riel for a basket of Kapa that stock the cashew nut or 12 cans of rice in the same measure. Other people clear the forest or weep out the grass in the cashew nut farms.

During the cashew nut harvesting time, villagers have more contact with lowlanders than other seasons of the year. Also, they have chance to entertain with modern tools in the provincial market. They regularly go to Banlung market to sell their cashew nuts and buy food and equipments they can manage. Every four or five days, when they can collect enough cashew nuts, they hire a small car to bring to the market. They go in the morning and usually come back in late after noon. They mainly buy the rice including some ingredients for their subsistence. With the money remain, they save it to build wooden house with zinc roof or buy motorbike which is popular among the villagers nowadays. I asked many young Kreung teenagers who I went to the farm and worked with them “what do you want when you have money?” Their answers are motorbike, new motorbike. They told me that having motorbike is handsome for them and they can woo the other girls in the other villages. They give me an example of the girls in the other village who prefer men with new motorbike.

They are also interested with modern entertainment equipments such as video, VCD and CD player, battery, Tape players, radio and so on. With the money from selling cashew nuts they buy all these equipments from the market. Every night they display video which show American, Chinese, and Thai films. It is very hard to find people to talk with during evening time because both old and young people sit in front of video until ten or eleven. There are several places that show video for the villagers in the village, but there is one place that shows the video for their selling. They sell ice, sweets, and candies.

4. Livestock Production

Traditionally, Kreung raise livestock such as chicken, pigs, cows, and buffaloes for sacrificing in any ceremonies or rituals. They did not use cows or buffaloes to plow or rake the soil at all. They even did not sell, but they exchange it with other goods such as Gong, Jars, and so on. Kreung people have specific purpose of using those animals. Chicken, they use it to sacrifice to small ceremonies such as when somebody get sick or worship to the spirit of Chamkar. They also have some regulations with eating chicken egg. The family that I stayed with during my field work described that they have taboos on eating their own chicken eggs. They do not eat their chicken eggs before those eggs hatch, but they can eat the remnant eggs that do not hatch. They also can eat the eggs that somebody buys from the outside. Even eating, they have their way to eat. They do not divide the eggs and share among the

members or the people in their house. They believe that doing like this will lead to the division of those who eat these eggs. Sometimes, it can lead to bad accident or death.

Pig, cows, and buffaloes are also used in the ritual ceremonies, but it depends on the wealth of the family. Kreung in Kresh raise hundred of pigs, around 50 cows, and four buffaloes which they get from DPA. People usually sacrifice pig in accompany with chicken for the ceremonies. During my stay in the village, they killed around ten pigs and 30 chickens to worship the Arak. At that time, it is the time they worship their Chamkar after burning and there are several people in the village got sick. The women medium in the village also dreamt of bad omen which they believe that bad spirit is interrupting the village. The families of the sick people have to prepare the worship ceremonies in order to get protecting. From one family to family, they celebrate the ceremony consequently. Finally, a well-off family in the village kills a cow for the ritual.

Besides using for the ritual ceremonies and their vitamins, Kreung nowadays also sell their raised animals. They usually sell pig and cows to outsiders to get extra income for their family, but they do not chicken at all. For pig and cow, they sell only the male pigs and cows and they keep the female. That is why I noticed that all Kreung raise chicken, and pigs while some families have cows and buffaloe. They also raise dogs and ducks, but there are only three families that have ducks while many families have their own dogs.

5. Traditional Land Use Change

Kreung people have used their land to cultivate their shifting rice which rotates as a cycle. They clear new plots through cutting down the trees and then burn those trees. They grew only rice with a variety of vegetables in their rice plots. After using for several years, the old Chamkar was kept follow for a long period of time to regain the fertility. Each family had several plots and cultivated their rice conversely in those plots. With long period of fallow and rich of fertility that come from the ashes of burning trees, they could get high yield of rice.

Cultivated land is important for highlander and their lives have close interaction with the nature. Annan (2000) in his study “Local Control of Land and Forest” among highland people in northern Thailand found that highland people live closely with nature such as land, forest, mountains, and streams. They try to support

their daily lives avoiding violating the milieu around them. Similarly, Kreung traditionally had deep respect to the environment around them such as land spirit, forest spirits, and different Arak. Until nowadays, they still respect these spirits and celebrate the regular ritual ceremonies. During my stay in the village, I saw they put chicken hearts above their wine jars. This symbol means that they want the spirit to protect them while they cultivate their rice. It also asks the spirit to provide good yield and protect them from injury or wild animals while they are clearing new plots.

Boundary of the village and rice plot is determined by the customary laws and taboos. Because their village location moved regularly in the past, problem of Chamkar boundary may overlap with other village plots. This overlapping was not a problem for Kreung because they still had enough free land. They solve such a problem through the negotiation between traditional leaders and elder people from both villages. They will fine those who extended their plots overlapped otheThey defined their village boundary by taking mountain or streams to divide their boundary.

Because traditional boundary is not clear and with the increase of agricultural land acquisition among the highland people, some cases of the agricultural land overlapping happen among the neighboring village. People in one village accused people in other village of cultivating on their village boundary. This can be illustrated through example from Krola and Kres villages. People in Krolar village claimed that some parts of nowadays Kres cultivated land belongs to the Krola village. As mentioned in the ecological setting section, Kres village moved many times before it was located in the current location in 1991. However, from Kres villagers' viewpoints, they said that the current village location is their ancestor shifting cultivation land. To solve this problem, Krak Chhruk and elders from both village with help from the commune authority met to find solution for both village. They finally, agreed to take O' Tong and Phnom Treng to be the boundary line between the two villages. Recently, the boundary between two village becomes clearer after NTFP helped defined the Krola village boundary by using GPS and with the agreement of Kres villagers.

Even though the boundary of village was defined clearly, villagers in Krola village still mentioned that Kres people are cultivating on their cultivation land. They allow some Kres villagers to cultivate only rice on this land, but they said they do not permit Kres villagers to cultivate cash crops on this land at all. For details reasons

why they do not allow Kres people to grow cash crop on this land will be discussed in the next chapter. However, from my field work visit and observation, I noticed that most part of that land are already converted to cash crops farms, mainly cashew nut farms, by Kres villagers.

Extension of cultivation land overlapping does not occur only between Kres and Krola village, but it also exists between Koy village with Kres and Kam with Kres village. Kres villagers claimed that Koy villagers extended their cultivated plots overlapped Kres village boundary. This case happened in the northeastern site about 3 kilometers from Kres village. The case between Koy and Kres village was serious because both parties can compromise and find the solution for the problem. They informed Koy villagers that they are cultivating on Kres village land and ask them to stop if possible. However, Koy villagers still cultivate on the same plot. Similar to Krola village solution, Kres village allow Koy village to plant only rice on that piece of land. Luckily, because this piece of land located a bit far from the extension of cashew nut farms, so this land is used only to cultivate rice. We do not know for sure that Koy villagers will convert that piece of land into cash crops farm or not. However, from the current trend that many villagers are happy with the income of selling cashew nut which enables them to experience the modern life style with modern tool, they tend to convert the nearby land to cash crops farm. Thus, land issue, if without clear boundary defined, may become tense between people from both villages.

Similarly, Kres also has concern with Kam village. Some villagers from Kam village which is located in the southeastern of Kres village extended their cultivated plot overlapping Kres cultivated land. Kam village is one among other villages in O' Chum district that has experienced land contraction. Many villagers in this village sold their land to lowland people return of some money. As not in the past that they had enough cultivated land to grow their shifting cultivation rice, people in Kam village nowadays has small amount of land to cultivate. Within this shorter piece of land, they have to change some part of their land to plant cash crops such as cashew nut and rubber trees. Most villagers grow cashew nut while low land people grow rubber trees because they have enough money to spend for all the investment.

As a solution, elder people and village chief from both villages met to inform about this case. They still allow Kam people to cultivate on that piece of land, but they can grow only rice. Usually, such a case is solved through traditional law and

authority is needed only when there are outsiders grabbed their land. Traditionally, for those who extended their cultivated land overlapped other people plots without asking permission from the owners, that people are fined. They usually have to offer chickens or pig and wine to repay their violation. If they violators do not agree to pay the offering, villagers believe that they will meet accident cause by Arak that sometimes can lead to death punishment. Many villagers in my fieldwork still have strong belief with this case and traditional customary rules still have strong influenced on land management issue in the village.

Kres village still has strong traditional customary laws to control their land. Traditional institutions that consist of Krak Chruk and elderly council have worked to solve any problem on land issue. Additionally, this institution, since 1991, have worked in cooperation with local administrative authority such as village chief, commune council, and sometimes with provincial authority to manage land issue problems. NGOs also have played an important role in the process of land management through providing the technical skills and resources to villagers. For the last ten years, Non Timber Forest Product (NTFP) has played important roles help highland people understand how to protect their land from outside intruders and especially in the process of registering communal land title.

In Poy commune, only Krolar, San tuk, Khmeng, and Kan Chheun villages that had already the status of communal land title. Those villages, with the help from NTFP, discussed and reached the agreement to set up a committee to work with land title. They agreed to register their land communal use and have the clear regulations for that land. This communal land title also recognizes by the provincial authority and most important by the Ministry of Interior. Within this work, the village boundary is defined clearly through using GPF. However, they still need the traditional institutions in this process because this institution still has strong power in the village and can solve problem efficiently if there are any trouble during making village boundary.

Kres village does not have plan to have communal land title, but NTFP came to teach villagers about this project in April. NTFP staffs taught villagers about the land law, especially the articles that mention about the highland people such as article 23, 24, and 25. They taught villagers what communal land title is and how helpful it is for the villagers to protect their land from land grabbing. Through my observation with those people, I noticed that there are few people who are interested in this work

because they have very little knowledge about this topic and it is very hard to understanding even I myself. However, the current practice of villagers is similar to the objectives of this teaching.

Even though they do not have communal land title yet, but villagers are using the communal system with their land. All the land in the village, except land that had cash crops, is the possession of all villagers. Cultivated land does not belong to any one privately. It means that I can make new rice plot wherever I can in the village boundary. However, even though it is common property, they have to ask permission to the owner of the old plot if they want to make rice plot on that piece of land. They respect their land and suppose it as their lives. A group of villagers mentioned that:

We love our land so much because it provides us everything for our life. With land we can survive because we can grow rice with a mixture of vegetables, especially we can grow cashew nut that provides money to us every year. Without land, our life will be difficult and very hard to survive. We do not sell our land at all because if we sell land to buy modern tools such motorbike and car, we can feel happy for only a short period of time, but when it broke or when we do not have money to pay for petrol, it becomes useless. For example, villagers in Kam village who sold their land and buy such equipments, now they do not have enough land to cultivate and extended their farm overlap ours. We do not sell our land at all even though they provide us very high price.

Kreung in Kres village also evaluate those who keep their land and do not involve with land transaction. It does not mean that they restrict all the people in the village not to sell their land. Villagers can sell their land to outsiders, but those people will not get any help or permission to clear the new plots even they control the village land communally. However, land transaction between local villagers and outsiders do not exist in Kres village. Among the five villages in Yak Poy community, there is only one big issue related to land selling. People in Mass village that located about 20 kilometers east of Kres village experienced with land selling. This village is reported to have involvement with about 500 ha of land to the commander of special zone. That case used to be hot issue two years ago because the villagers opposed the owner and threatened to take back their land. However, in year 2008, the issue becomes quiet which means that both villagers and the owner do not have argument or law suit to the court.

In Kres village, there is only land sell among people in the village. There is a case that a Kreung family sold their cash crop land to the other family in the village. They can not sell all the land, but instead they can sell only the land that they already

grew cash crops because this land is *de facto* becomes their private property. However, they can not sell rice cultivated plots because it is the common property for all villagers. Villagers tend not to help those who sell their land when they face any difficulty, especially if they want to have more cultivated land. This is clear through the illustration of the Krak Chhrok:

I do not like those who sell land at all. We do not restrict them to sell their land to other people. They can sell their cash crop farm to whoever they want. However, they can not sell the rice cultivated plots at all because this land belongs to all villagers and for our next generations. We are afraid that if we sell land, then there will be more people come to buy or steal our land. Then we can not live when we lost our land. Thus, we do not feel happy with those who sell land to outsiders. We will not provide any land or feel pity to them at all when they face problem and want more land to cultivate.

Traditionally, villagers had enough cultivated land to grow their rice. However, nowadays with the population grow, land grabbing, and increase of cash crop farm extension tendency, villagers require more land to fulfill their demands. Currently, villagers in Kres village converted nearly all of their land located around the village to cashew farm. They planted cashew nut trees on the land that they are cultivating rice. A year or two year later, they cannot grow rice in this plot because cashew nut trees grow bigger. Thus, they have to clear another plot to cultivate rice. As mentioned in previous section, with the cash income from selling cashew nuts, villagers tend to convert their former rice plots to cashew farm and this trend is practiced nearly among all the people in Kres village. One of my key informants in Kres village impressed his tendency to cashew nut growing as following:

Before, we were very poor and we did not know cash money. We rarely went outside our village. On our land, we grew only rice with a variety of vegetables. Nowadays, with our cash crops, especially cashew nut, we have extra income that allows us to manage to build wooden house and buy the modern equipments from Banlung market. We are happy to grow cashew nut. I myself will extend my cashew farm further along the new road on the plots that I and my relatives are cultivating rice. Then we will move our rice plots toward the east.

. Actually, cashew crop was introduced to people in Ratanakiri during 1980s by the Provincial Agricultural Department and with the technical skills provision from NGOs. At that time, they called this cash crop strategic crop because, according to village chief, it provide income to villagers and stopped them from clearing new plots every year that is believed the cause of deforestation. In addition, with cash

crop they can protect their land and stay permanently. Kres village first experienced with cashew crop in 1997 when a few families in the village started planting this crop on the rice plots. At that time, many people in the village did not have interest with this crop and some people thought it was not good decision to grow cashew crop on their rice field that is the main source for their lives.

Poy commune has experienced with cashew nut since late 1980s after the introduction of this crop. Svay is one of the villages that started to grow cashew trees. After four or five years, cashew nut trees provide its fruits. With labor requirement to harvest cashew crop, they hired people in the village and outside village including people from Kres. Some people from Kres, after their rice harvest, they had free time and sold their labor to Svay villagers. They collected the cashew nut fruit for villagers in return to rice or money, but they mostly want rice because they did not have enough rice to eat even they cultivated rice. They noticed that cashew nut provides much cash income to Svay villagers and makes their living better. Within this interest, Kres laborers asked Svay villagers to provide them cashew seed instead of rice and money because they wanted to take it to plant in their plots. They took the seed and grow it by themselves without any help from NGOs yet.

Four or five years later after the first cashew trees provided it fruits, some villagers in Kres village could get extra income from selling their cashew nut fruits. This extra benefits attracted many villagers to consider the cashew crop. More and more villagers in Kres village converted their land to cashew farms. Some of them went to work in Svay village in return with cashew nuts while the other worked in the village to get cashew nuts. From year 2000 on more and more land are converted to cashew nut farm. Until 2008, Kres village has around 100 ha of cashew nut farm surrounded their village while most of their rice plots are removed eastward of village location.

Nowadays, nearly Kres family has their own cashew farm and more or less they can get extra cash income to subsidize their living, especially to buy rice from the market when they eat out their cultivated rice. From year to year, the cashew nut farm becomes bigger and bigger while the rice shifting cultivation plots move further from the village location. Within cashew crop, more and more families have their own private land with cashew nut trees on that land. With cashew nut trees, they can claim the other free land located in front of that cashew nut farms.

Each family in Kres village, they own more or less individual land that they usually plant cashew nut on that land. The sizes of private land each family belongs due to the wealth, power, and labor forces in each family. The wealthy families can access to bigger land because they have enough money to spend for expense on clearing, planting cashew nut trees, and taking care the farm. Also, extended families with enough labor can have large size of land. They can clear big size of land and grow cashew nut tree by using the labor among their labor. Averagely, both wealthy and extended families have around 2-5 ha of cashew nut farms. There are 10 families in Kres village who have 4-5 ha of cashew nut farms. For most of the families in the village own about 1-3 ha of cashew nut farms. Poor families that consist elder people, children, and widow have little amount of land. They usually have around 0.5-1 ha of land which can not support their living. There are eleven families that are categorized as poor families in Kres village. They do not have enough labor to work on the farms and most of the time they face long time food shortage.

6. Changes Forest Resources Utilization

The lives of highland people can not be separated from the milieu around them because of the close relationship between their livelihood and the natural resources they depend on. Most of the activities to support their livelihood come from the use of the ecology system around them, especially forest resources which range from the activity of rice cultivation to normal subsistence such as forest products gathering, fishing, hunting, and food collecting. Within several last decades, forest utilization among Kreung people in Kres village has changed noticeably. With this changing, a new strategy also appeared to adapt with this changes of forest utilization.

Traditionally, Kreung people clear the forest land to make their rice plots. They have several plots and cultivated those plots rotationally. Usually, they cultivated rice on one plot for around four years and then left it fallow to gain fertility. Then they clear another new plot on their former plots. Until they turn to the same plots again, it took long time which was around 12-16 years which was a sustainable way in forest utilization. With the duration of 12-16 years of keeping fallow, new forest can re-grow on the old cultivated plots and the trees are enable to provide enough fertility to cultivate again. In addition to rice shifting cultivation, Kreung highlanders gathered forest products, fishing, and hunting.

Kreung people hunted using traditional tools such as crossbows, trap, and Chroam (saltick) to hunt the rich wildlife in their forest. In the dense forest, there were many kinds of wildlife that people could hunt enough meat for their food. A variety of animals lived in that forest around their village. As I mentioned in the previous section, Kreung people could hunt a lot of small wildlife for their food even they used traditional tools. This is true through a group of Kres villagers' opinion who mentioned as following:

Before, there were plenty of wild lives in our village. There are a lot of fish, frog, and squirrels. In the evening, we went to the stream and could get a lot of squirrels and frogs. We did not use modern tools such as electric tools or battery light, but we could get enough meat from the wild lives. There was thick forest around our village. Sometimes, we lost our way when we went hunting at night time because of the dense forest. One case happened among our villagers while they went hunting in the forest located near Koy village. Our villagers could find the way home after hunting. They walked in the forest until they met people from Koy village who told them the way to the village because that person knew clearly about the geography in that area. Nowadays, we cannot find plenty of animal lives in the forest of our village. We hardly catch frog or other animal lives even we have battery and flash light to help us catching the wild lives.

From this information, we see that there were plenty of wild lives in the forest around their village. However, the number of wildlife declined rapidly because of the over exploitation with anarchic weapon use and the decrease of forest cover in the village. Before 1990s Kres village was mostly covered by dense forest. However, after 1990s, with the illegal logging, population growth, and the extension of cash crop plantation farms, more and more trees were fell down. This really affects the lives of highland people whose living depend strongly on the natural resources, especially that provide them daily subsistence.

Nowadays, many areas that used to have dense forest have only small trees. Surround Kres village location, especially on the northeastern site near Koy village does not have any thick forest as what villagers mentioned. Some of this area is converted to cashew farms and the rest is the rice shifting cultivation plots. Those plots have only small young trees and the land and forest in this area are not used sustain ably because the plots are kept fallow for a short period of time around 2-4 years. This short period of time can not enable trees to grow bigger and the land can not receive enough fertility.

Not only on the northeastern site of Kres village that do not have thick forest as they had in the past, the other sites had the same situation. Most of the area around

the village, used to be rice cultivation plots during and before 1990s, have been converted to cashew farms. Phnom To, located in the western site of the village around 1 kilometer from village location, does not have big trees as it had in the past. Villagers fell down the big trees to cultivate rice. However, during they were growing rice, they also planted cashew trees in that farm which de facto means that trees can not re-grow in this plot because villagers take care their cashew crops regularly.



The area around Phnom To

The other areas, especially the area along the stream are also transformed to cashew farms. On the eastern part along O' Tong, most of the land there were converted to cash crops farms that most of that farms are cashew farm include a few mango trees. There are no big trees in this area, but instead there are medium cashew trees ranges from 5-10 years. Phnom Treng that located along O' Tong does not have thick forest at all. It now remains only bamboo trees and the cash crops that Kres villagers planted. Nowadays, there are only several rice plots left in this area, but it will absolutely be changed to cashew farms in a few years because villagers already planted cashew trees on that plots.

Forest decline also happens in the eastern part of village location. Along the new path road toward the east around 2 kilometers is the cashew farms of Kres

village. The area near the village is medium cashew nut farms because the cashew trees age around 4-10 years. Continue from this area is the new cashew nut farm that consist of young cashew trees age around 2-4 years. Some of the cashew trees just provide the first yield while many farms still have young trees that do not provide yield yet. Eastward from this young cashew farms is the rice shifting cultivation plots with lots of bamboo trees. The land in this area has white color which is good for growing upland rice, but is not good for planting cashew trees at all. According to villagers' knowledge, cashew trees can grow well in this whit land area because it has much fertility than the red soil. However, cashew trees do not provide much fruits like the red soil. That is why villagers do not plant cashew crop on this land.

In this white soil, there are both old and new upland rice plots. The rice plot located both in the hill and on the top of the small mountain. Some upland rice plots located close to the stream, especially those that are near O' Cheotaov which has water the whole year. In this area, there are only medium and many small trees left and those medium trees is losing from day to day because of the requirement of cultivated land and wood for building house. With short period of fallow the trees can not grow bigger enough before it is cleared again.

Within this area, it is also the village forest for Kres villagers. Villagers in Kres village can cut trees in the area to build their wooden house. Only the villagers in kres village who can use the forest resource in this area because each village in Yak Poy community has their own village forest for their local needs. There are medium trees in Kres village forest. However, with the increase demand of wood to build wooden house which is popular among Kres villagers, more and more big and medium trees are fell down. Currently, there are only small trees left with very few medium trees and these medium are going to disappear soon in the future.

The decrease of forest resource in the village does not occur because of the land and wood requirement among villagers, but the use of saw machine also accelerates the shortage of forest. Traditionally, Kreung highlanders used axe to cut trees which required them long time in order to fall down a big tree. This practice was not harm to the forest resource in the village. However, nowadays Kreung in Kres village do not use axe to fall down big trees any more. Instead, they use saw machine to fall down big trees or saw trees into pieces. The access to such a tool really contributes to the depletion of the forest in Kres village and they can not use forest sustainable. In Kres village, there are two saw machines and one wooden

smoothed machine. They do not use this machine to cut trees in their village, but they also use it to cut trees in the other village when the outside villagers hire them.

The forest degradation does not occur in Kres village, but it has happened among every village in Yak Kaol and Yak Poy community. In Yak Poy community, Ta Ngach, Kan Koy, and Kan Chheun villages face the same problem as Kres is facing. People in Ta Gnach and Kan Chheun villages, have many wooden houses, mentioned that their village forest is decreasing rapidly with the huge demand of wood from villagers. Ta Gnach villagers cut most of the big trees in Phnom Chre which located around one kilometer west of their village location. Nowadays, there are only small trees remain.

Overall, Kreung livelihood in Yak Poy Community has been transformed since KR regime. During KR they were forced to leave their village to live collectively and worked in big unit. It was the first time they experienced the low land rice cultivation even though this technique was already introduced since Sangkum period. After KR, PRK re-establish the administrative system and gave high position to highland people. They created *Kromsamaki* in each village because they wanted to control the highland people more strictly and cut off their connection with Khmer Roug who struggled in the jungle. From this period, the natural resource in Ratanakiri was gradually decreased because of the appearance of big scale logging and anarchic gun use.

After 1993, Rataniki became the target of many development projects and the new settlement of low land people. There are many granted projected in this province such as forest and land concession. Highland livelihood faces difficulty because they do not have enough land to cultivate their upland rice and lost the sources of NTFP which they have depended for centuries. When there are more and more troubles arise, some highland communities have revitalized their knowledge and traditional values in order to deal with challenges as well as to have better control on their resources.

Chapter V

Situated Knowledge in Context of Development

1. Overall Aspects of Land Issues around Study Area

Since the introduction of free market economy, above all the immigration of low land people into Ratanakiri, many land concessions or land contractions have appeared in this rich natural resources province. O Chum district, one of the eight districts in Ratanakiri, located in the northeast of Banlung town has experienced land concession since year 1993. Most of the people who inhabit in this district are Kreung accompany by Khmer, Laos, and other small number of highland groups.

Traditionally, most of them practice rice shifting cultivation including hunting, fishing, and forest products gather. However, after 1990s some Kreung communities experienced the cash crops mainly cashew crop in which they can get income from selling cashew nut. In addition to cash benefits, local people claim that cashew crops help them to maintain private land ownership and protect their land from land grabbing or land lost which is increasing among highland community. Since 1993, Highland communities in O Chum district have experienced with land concession, land contraction, and land grabbing.

In 1993 and 1994, there were two big land concessions to private companies. The first land concession located in Samaki Commune near highway 19 covered the area of 1,650 ha for establishing cashew plantation. Within the same year, another piece of land in La'ak commune was granted to Ministry of Social Welfare and Disability. The granted land covered the area of 2,000 ha. Two of these land concession did not have any noticeable activities besides keeping it fallow and sell to other company when land price increases.

In year 1994, another 4,000 ha of land was also approved for Nara Pianik for planting Lahong Preng (Oil Papaya). This land concession located near state rubber plantation and some part overlapped the area of state rubber plantation that is why the provincial authority wanted to take it back. Even there were some problems; the stream of land concession did not slow down. Instead, more areas of land concession are increasing.

During year 1995, there were four land concessions in O' Chum district. The granted areas mostly located near O' Chum district around 5 kilometers from

Banlung town where many Khmer and other low land ethnic groups already inhabited. The first granted area located near Kalai village where until 2008, most of the cultivated areas belonged to low land Khmer while Kreung upland population moved further into the forest. This concession covered 200 ha of land. The second concession was legalized to Pie Vesana which stretched over 1,500 ha of land in the adjunction of Kalai village. In the same year, 300 ha of land in Ekapheap commune was contracted to a person to plant industrial crops while 100 ha of land in La'ak commune and another 100 ha in Samaki commune were approved to low land people.

Beside these medium and small types of land concession, there was one great land and forest concession to Hero Taiwan company in 1997 which overlapped with a huge area of some Kreung traditional upland Chamkar and their reserved forest area, especially the community forest of Yak Kaol community in Poy Commune. However, because of the bad rumor and the lack of experts in controlling forest in their granted area, the government of Cambodia withdrew the concession area from the company during year 2002.

Although the impetus of land concession declined since year 2002, but there are new kinds of land grabbing among many upland communities in O Chum district. There are many lowland Khmer and Lao involved in the business of land contractions in many Kreung communes. With the introduction of market economy and modern tools including the cheating from their local authority and promises from businessmen, Kreung people in several commune sold or lent their community land to those land contractors. Many Kreung people want to buy new motorbike, TV, Video player...etc. Thus they have to sell a piece of their land to land contractor in order to afford buying those modern tools. This behavior becomes the catalyst pattern which encourages other people to sell their land. It spreads rapidly among some highland communities. Even though they have dollars and can buy modern tools as they wish, but these activities really affects their traditional agricultural practices and also their social capital among the same upland groups.

For those who sold their land to outsider need to move further into the community forest because they need more land to cultivate upland rice. Some communities have to move the village location because they also sold the current village location. In addition, they can not clear the dense forest as they did in the past due to new land law 2001. Thus, they do not have land security for sustained upland

rice shifting cultivation when the population is increasing and the tendency to plant cash crops such as rubber and cashew crop become popular. Currently, many upland communities are facing land shortage because they lost and sold a huge amount of their traditional land to lowland people. Within this situation, social capital among the same upland group becomes weak.

Some upland communities who are in the same group grabbed the other communities territory by claiming it is their ancestor's land. This can be clarified from the event of land conflicts that happened in year 2004. Three highland communities from Ping, La'eun, and Prak villages in La'ak commune took illegally the upland rice plot and Chamkar of 16 families who live in Roya village, La'ak commune, O Chum district. This event reveals us the sign of decline of social capital among the same upland group which they maintained very well in the past.

Within year 2004, another land conflict also existed in Kalai 3 village between the upland communities and the local authority. People in Kalai 3 village accused the local authority with the components of O Chum district governor, deputy governor, and district land law officers of cheating them and took 400 ha of land to sell to low land Khmer and Lao. In fact, people agreed to give this piece of land to local authority because the local authority requested them with promise from provincial governor Kham Pheurn to convert it into wild life protected area. At first, the villagers did not agree, but after a few times of request and with the promise to allow local people to get benefit from controlling this project, they agreed to give that land^{xxi}. However, two month latter, Lao and Khmer came to settle in that granted land because those people mentioned that provincial governor sold it to them. This activity caused conflict among local people with new settlers and local authority which required a compromise to resolve problem.

More recently, from June 2008 until now, another big piece of land in Tangtrapoung village, O Chum district was converted to rubber plantation. This rubber plantation belongs to a businessman named Seng Pisith who is famous among the upland communities and land contractors in Ratanakiri. The clearing reserved forest areas in Tangtrapoung village caused protest among the villagers in this community. Villagers, with help from Adhoc and relevant agencies, asked the authority and provincial court to settle this land grabbing activity. After this protest, the court agreed to solve the problem by ordering the company to postpone its clearing and planting activities until they can find good solution from both sides.

However, while the villagers are waiting quietly for the result, the company still clears and enlarges the rubber plantation.

Actually, during 1980s, the district governor requested some piece of land from the village by claiming they wanted to cultivate upland rice or plant cash crop when they retire. However, they did not cultivate or plant any crops on that piece of land for several years. Then villagers absorbed that land back by planting cashew crop. Recently, by claiming that they are the owners of that land, district governor, deputy governor, and people who settled on that land sold it to Seng Pisith to plant rubber which later on was protested by villagers. In addition to plotting to sell, unequal benefit sharing is also the cause of protest.

According to my interviews with people in this village, they mentioned that the protest happened because of the envy and the unequal of sharing benefits from selling that land. In fact, this piece of land was first sold to middleman land contractor. That businessman gave 2, 500\$ to village authority which consists of village chief and village elderly council. This amount of money, according to my interviewee, was shared only among village chief and several people while the Krakchhrok received nothing from this land selling. The Krakchhrok may have been angry with this activity because sometimes he mentioned that it is his contribution who brought the village location to current site that has suitable land price so that they can sell it to land buyer. Thus, why he did not get any benefit from this selling.

Within this village, there is not only land lost to outsiders, but there is also land lost among the same ethnic community. For the last recent year, villagers from Krolar, whose village is populated, and does not have enough cultivated land have cultivated upland Chamkar on Tangtrapoung territory. Even though they have elderly council to resolve conflict, according to Tangtrapoung villagers, they need to divide the reserved forest area for each family in order to protect their territory because some upland people nowadays are ambitious which can plant cash crops on that land and claim their private ownership. That is why, with the discussion among village chief, Krakchhrok, elderly council, and villagers, all the family (around 35 families) in Tangtrapoung decided to divide the reserved forest land for each family in which each of them gets 3 ha of additional land and they need to protect it.

2. Development Impacts and the Appearance of Situated Knowledge

Since Cambodia opened its free market economy, there are many investments that have flown into Cambodia. There are many foreign investors who came to Cambodia with huge amount of money to build factories or companies. Also, infrastructure system has also been improved within the whole country in order to provide comfortable transportation and economic benefits. In addition, education program, especially in the northeastern provinces of Cambodia where many people had little chance to get better education, is also enhancing. To protect forest and provide job to local people in order to reduce poverty, the government also granted many land and forest concessions to many companies. Ratanakiri province, with abundant natural resources such as dense and valuable trees as well as red soil which favors the industrial crops, has become the target of development policy, particularly for land concession and land contraction. Further, this province has attracted many low land people to immigrate because of the economic opportunity that they can get to make their lives better.

With the land and forest concessions, huge numbers of immigrants, and the existence of land contractions and land grabbing cause by the outsiders, many highland communities are facing serious problems that affect both their environment and their cultures. Some land concessions such as Oil Palm concessions in O Yadao district and Hero forest concession overlap with the territory of the upland communities. Clearly the Hero concession area in O' Chum district overlapped many upland communities such as Kalai, Svay, Santuk, Krolar...etc. Not only land and forest concession that affect the upland communities, but the flow of immigration and land contraction also shape the landscape, traditional practices, and the solidarity of highland communities.

What are mentioned above really influence the upland communities. With land and forest concession as well as large numbers of immigrants and land contractions, many troubles arise among those communities. Some villagers lost their residential area and the upland rice shifting cultivation plot. Some Kreung communities located near O Chum town already lost their residential area and some part of their shifting cultivation plot which requires them to move further into forest in order to make new settlement area and clear new upland rice fields. In addition to this problem, the practices of rotational rice cultivation seem not to have sustainability. With land shortage (from land grabbing, land selling, and the

conversion of some upland rice plots into cashew plantations among highland communities) contribute to the unstained rotational rice cultivation.

In the past, highland community, after several years of rice cultivation (depending on the quality of soil), kept the plot fallow for 10 to 15 years. Doing like this, forest can regenerate until it was cleared again. However, nowadays in many upland communities, the period of keeping land fallow last for short time (around 3-5 year) because they do not have enough reserved forest area as they had in the past. Within short time of fallowing, young forest can not regenerate and the land quality also decrease which affects the livelihood of the people who mostly depend on the rice yield for their subsistence.

Land and forest concession, immigration, and deforestation cause by outsiders' plotting also make serious problem to upland communities' livelihood. Traditionally, the highland communities depend on the meat from hunting and fishing. This additional meat provide protein to their daily in which most of the time they have only steam rice with boiled vegetable or edible leaves. However, with the destruction of forest which is the shelter of various wild animals and the anarchy use of gun (left from the time they stopped served as soldiers), people rarely get wild animal from their hunting. In addition, with the destruction of ecology in and around the lake such as the water pollution and the stream bloc through felling big trees in the stream or lake which interrupts the movement of fish and some fish die. As a result, the wild animal and fish in their upland communities decrease which more or less affect the daily food nutrition. Besides having an effect on landscape and the sustainable ecology system, development in the images of land and forest concession including the immigrants and land contraction, also harmful to the customary law and community solidarity.

Traditionally, upland community had maintained good relationship among their members. They were controlled by the Krakchhrok and the elderly council who were responsible for managing, teaching, transferring knowledge, and solving the conflicts among their members in the communities or with outside community. Ritual ceremonies played an important role in enhancing social solidarity because all the members, at this time, meet, work, and drink together. In addition, it is also a time that elder people can transfer their knowledge to young generation. During the ceremonies, members in one upland community can invite people in other

communities to join and drink with them. This can be seen through the ghost ceremony of Tampoun people.

Externally, it is the chance for villagers to meet and drink or share knowledge to young generation, but internally the ceremony indicates us the building social capital not only among members in a community, but also with the other community. However, in the context of development and the appearance of land concession, immigration, land contraction, land grabbing, and the introduction of cash economy, social capital among some upland communities becomes weaker. People in the same community do not trust each other and less active in the ritual ceremony. Also, they become ambitious and cheat. They cheat both their community members and the outside highland community through persuading them to left finger print for accepting the development project such as building road or making big plantation which will provide benefits to them and help make their lives better. In contrast, there are no real development projects besides land contraction.

Land contraction also happens among the community and the outsiders. There are several cases that some upland communities sold the other upland community to outsiders by claiming that it is their ancestor's land. This activity causes conflict among the upland communities and really affects the intra-ethnic relationship which they had maintained in their ancestors' time. This can be seen clearly through the example happened in Ekapheap commune in year 2004 that Om villagers sold 150 ha of Pa Or village to outsiders.

Also, in this year, people in Kam village sold some part La Eun village to outsiders. Both events caused protests from the victims communities and de facto the inter-community relationship becomes weaker and it will be worst if the customary law in those communities were not enhanced or any legal solution are not provided because of the corruption. Although there are many upland communities experienced bad effects from the stream of development on both their landscape and traditional practices, but there are also some highland communities, until nowadays, can maintain their land security from both inside and outside pressures. In addition, they can maintain strong customary law working associate with the administrative system to protect their benefits and their traditional practices. From this chapter on, I will call this kind of knowledge as Situated Knowledge.

2.1 “Situated Knowledge” as a Dynamic Force

Since the first use in 1950s, situated knowledge has become more and more popular among the anthropologists (Conklin, R; 1957). Indigenous knowledge, local knowledge or ethno-ecological knowledge are the predecessors of situated knowledge when this knowledge faces with new environment or harmful conditions in which it automatically has to adjust in order to survive. Thus, situated knowledge is a dynamic and diverse force which means that it can adapt with new situation by still maintaining most of its traditional components, but more legalized accepted. In the other word, it means that when local knowledge faces with the serious problems, it has to adapt or transform in some level in order to survive in new situation. Doing like this situated knowledge has both traditional and legalized entity to deal with problems. However, this adaptation does not mean that most traditional components disappeared and the rests are going to vanish in the future.

Upland Kreung communities in Poy Commune, O’ Chum district, Ratanakiri province has situated their knowledge in order to survive as well as to deal with the troubles that are arising with their neighboring communities. All the nine Kreung villages located in Poy commune (Svay, Krolar, Santuk, Khmeng, Kres, Tagnach, Koy, Kanh Chheun, and Mass village) use their customary laws cleverly to associate with the legal law to protect their communities successfully. These communities, since 1990s, have enhanced their local capacity by using both their customary laws with administrative help. We also cannot forget the contributions of some organization that provided both materials and legal assistance.

Obviously, to protect their forest from illegal logging, five villages in Poy commune (Kres, Tagnach, Koy, Kanh Chheun, and Mass village) initiated to establish community forest which was called Yak Poy Community Forest. This community forest covers the area of more than 5000 ha of forest area. This community forest located in the east and northeast of Kres, Tagnach, Koy, and Kanh Chheun current village location while it covers all the location of Mass village. In this community forest, there are dense forests with big valuable tress, wild lives, medicinal plants, vegetables, vines...etc. This community forest was established after a meeting of the five village representatives with help from NTFP and the recognition of the authority. Then in year 1997, after making regulations, drawing maps, and legally registered, Yak Poy Community Forest was established.

Later on, seeing pattern from Yak Poy Community, all the rest villages in Poy Commune also initiated to established another community forest which covers 3 700 ha of forest land. Even some part of Yak Kaol Community Forest overlapped with the concession area of Hero Company, but with the strong determination of local villagers and help from NTFP and Oxfams as well, they finally can create Yak Kaol Community for Krolar, Svay, Santuk, Khmeng, and Vorng villages. Upland community in Poy commune does not only associate with forest protection by combining their customary laws with the administrative laws, but recently it also participates in the process of communal land tenure registration.

Krolar, one of the biggest Kreung community in Poy which has stayed on the same location for generations, participated actively with the process of communal land tenure registration. In 2002, Krolar villagers agreed on the regulations and status of communal land tenure registration after long discussions among members of the community, village chief, Krak Chhrok, elderly councils, and the relevant stakeholders. Highland people observed that the upland communities have experienced serious land lost and land grab which required them to have legal acceptance within their customary laws to protect their traditional practices as well as their ancestors' land from the threat. Therefore, NGOs, local authority seem to play important roles for helping the upland community in Poy commune, but most important factor is the highland customary laws and their elderly councils that have played very important roles in maintaining, preserving, and articulating their legacy.

3. Roles of Customary Law and NGOs as an articulation for Situated Knowledge

In upland community, traditional roles and the important people such as Krakchhrok and elderly councils play crucial roles to maintain, transfer, and disseminate knowledge to young generation as well as solving conflicts and enhance their social solidarity. In the same way, when facing outside threat, customary laws play vital roles to challenge the difficulty. When the problem is serious which is far from the power of customary laws to solve, help from NGOs plays important roles in assisting local community people to build their capacity.

Traditional laws play crucial roles in protecting the traditional practices as well as their identity. In Yak Poy community, with strong customary laws, Kreung communities in this area can preserve much of their traditional practices on land use

and land management. With the strong customary laws which ban the community members from selling land, this community can preserve much of their traditional practices and land security compared to other highland community surrounding. As a matter of fact, all the highland community in Poy commune, except Mass village that used to grant about 500 ha of land to outsider with some promises, can protect the land from outside land contraction or land grab.

Communal land control is still strong among the highland community in Yak Poy community. All the highland Kreung control their upland rice areas communally. In the other word, it means that all the rice shifting cultivation spot belongs to every highland Kreung members in the community. Even though they have their own rice plot and cultivate for their family, but the piece of upland rice plot a family is cultivating does not belongs privately to that family. It is the common property of the community; the common property of every member of the village.

Every member in the community can cultivate any plots they prefer within their community boundary by respecting the traditional rules. They can clear new upland rice farm in the reserved forest or on the old plot of somebody plots, but they need to ask permission from the people who used to cultivate on that plot. Usually, highland people will permit other people to cultivate on their old plot if they do not plan to cultivate on that old plot. This traditional system is still strongly practiced among the Kreung people in both Yak Kaol and Yak Poy community in Poy commune.

However, with the population growth and the enlargement of cash crop farms, people in each community needs more cultivated land which requires them to broaden their upland rice plots. As a result, some highland community made new upland rice plots overlap with neighboring community. This can be clarified through the example of Krolar community that some of their members are cultivating the upland rice plot in the territory of Tangtrapong community. In addition, people in Kres community mentioned that several families from Koy village are planting upland rice in their community territory while Krolar community claimed that Kres community is using some area (along O Tong stream) that belongs to their community. Although there is some overlapping of upland rice field between some communities, there were not any serious problem existed from such events.

To deal with this territory overlapping, elderly councils from the relevant villages including the authority representatives such as village chief and commune

councils negotiate and define the boundary that is recognized by all the parties. This can be seen from the negotiation between the elder councils from Kres village and Krolar about the overlapped area along O Tong stream located on the south of Kres village. The negotiation also occurred between Krolar elder councils and Tangtrapoung village which some of Krolar villagers are cultivating on the territory of Tangtrapoung boundary. Through these events indicate that the upland people in Poy commune still strongly practice their customary laws on land use to negotiate and solve the problems. This system reinforces the social capital among the highlanders and also helps strengthen their traditional institution from the outside pressure, especially on land grabbing and land contraction.

In every highland village in both Yak Kaol and Yak Poy community, traditional laws play an important role in protecting their land security. Besides controlling communally on the upland rice cultivated plot, traditional laws also function as a powerful authority to forbid the villagers from land selling with outsiders. Although the traditional laws do not directly restrict the village members not to sell their land to outsiders, but it de facto influences the villagers' decision on land selling with outsiders. All the families in Kres village, from my observation and interviews, indicated that they do not dare to sell their land to outsiders even selling is not completely forbidden. Most of the villagers mentioned that they are afraid of land less, especially from the traditional sanctions after they sold their land.

In Yak Poy community, most of villagers do not fine those who sell their land to outsiders, but they sometimes will not allow those who involved with land contraction return to live in the village. Most seriously, they do not give or allow those people to cultivate on their reserved area since they are afraid that those people will sell their land again. Even the reserved areas in the village is communally managed which means that it is belongs to every members of the village, but with those who concerned with land selling will face difficulty to make use of the communal management since many people in the village, particularly the elderly councils agree not to allow those people to control another piece of land in their village. This system works well in Poy commune, especially in my field work (Kres) where a majority of the population respects the system of restriction for those who sell land to outsiders.

People can not sell all kinds of land in the village to outsiders. They can sell only the land that it is de facto belongs to their private ownership. Not all land is the

private property of those who used to cultivate or are cultivating on that land. As mentioned above, most of the land in the village such as upland rice plots, reserved forest areas, forest community, streams, and mountains are the common properties of the villagers whose village boundary covers. From the local perception, land that covers by cash crops such as rubber, cashew, coffee, and other fruit trees are supposed to be the private properties of the holders. Even though this system is not mentioned in the land law 2001, but it is commonly accepted in Poy commune as well as other places in Ratanakiri.

Most of the private land property of upland people in Yak Poy community is the cashew crop farm. Huge amount of this area located around the village location while the further area is reserved for upland rice cultivation. Within this ownership, on one hand the holders can sell this private land property to outsiders, but on the other hand they also face challenges to find new piece of land if they want to stay in the same village and practice rice shifting cultivation.

From nearly two months of participating with the highlanders in Kres village, accompanied by visiting to various villages in Yak Poy community, I observed and found that nearly all of the villagers are afraid of marginalization from their community if they sell land to outsiders. They strongly claimed not to sell their land to outside people even they give them a high price. They mention that if they sell land, people in their village including the elderly councils will not allow them to cultivate on the other plots so that they will face difficulty since they do not know how to support their livelihood besides depending on traditional rice cultivation. I also observed that people in other villages in Yak Poy community have similar tendency as those in Kres village on their land use. From this tendency, it indicates that traditional laws plays an important roles in maintaining and preserving the land security of the highland people in Yak Poy community as well as those upland people in Poy commune.

Traditional laws do not always prevent highland people from selling their land all the time. Traditional laws do not restrict the highland people to sell their land to outside people, but it allows people to sell their land to the same ethnic groups who have their clan in the village that the sellers are living. People in the same village can sell their land to other people who are living in the same village. This activity rarely happens among the villages in Yak Poy community since every member of the village has equal right to take advantage from the communal land

within their village boundary. Land contraction among the community exists when the seller wants to move to other village with reasons, but mostly because he or she moves to live with his or her spouses. In this case, they can sell only the land that they planted cash crop such as rubber or cashew trees. In my field work there is one case of intra-village land selling because the seller has to move to live with his wife in other village where he has enough cultivated land.

Upland people can hire their cash crop farm to other people in the same ethnic group in return of something, especially money and motorbike. When the highlanders need money or motorbike, they can hire their cash crop farm to other people with exchange of the required tools with the limited duration. Usually, the period of hiring is not long since they know that it will be harmful if they rent their cash crop farm for long time.

There are two cases of this situation happened in my field work. There are two cashew farms were rent for two years in exchange of motorbike. Besides renting cash crop farm to other people, upland people can also invest with outside people on their land. It means that the outsiders pay money and all the required materials for the highlanders work on the farm. Then, they will share the benefits in three parts. The outsiders who have the capital get two parts of the benefit and the rest goes to highland people who have labor and land.

Although people can hire land to outsiders or invest their land with outsiders, it does not mean that they are against the traditional laws. Traditional laws still play important role on land protection since every upland people do not favor the land contraction to outsiders. Thus, the land owners can only rent or invest without the possibility to sell land to outsiders because of the pressure from the majority who oppose land selling to outsiders. The awareness of the land value and the effects of land lost among the upland people is also another contribution to the land security in Yak Poy community. NGOs have played crucial role associate with customary laws to build people capacity and make them aware of land for their traditional conservation as well as their next generation's future.

There are many NGOs that have been involved with the upland people in Ratanakiri. However, we should notice that before the presence of these organizations, there was one program called SEILA that worked with the upland community. After SEILA there are many NGOs were established in which most of their works are relevant to the upland people. These organizations focus on different

fields such as building local capacity, health care improvement, agricultural training skills, traditional conservation, land security, and natural resources management. Among these organizations, I noticed that there are several organizations that are working actively in Yak Poy community. These organizations are working closely with the traditional laws to assist highland people to protect their tradition, improve their living standard, and conserve their natural resources.

CIDSE (currently calls DPA) was involved with the improvement of agricultural works. They help highland people to improve their living standard through the improvement of their agricultural work. They conducted short course training skills to local people in order to assist them to improve their agricultural product. They teach highland people to plant more crops, especially cash crops on their land. In addition to training, they also provide seeds and cash crops tree to upland people. DPA also establish cow bank, rice bank, and buffalo bank for the local people through providing the resources for them. The poor people and widow families have priority to get this benefit, but they have to change the resources to other people in a limited time.

Further DPA helps highland people in my field work to establish the Association of Red Soil Agricultural Development which local people are the core members of this association with technical and needed resources from the organization. This association aims to assist local people to get more benefits from their cashew crop. DPA will train people how to run the association with providing machine to grind cashew nut into a product which will help highland people get more benefits than sell cashew nuts to middlemen. Most important, DPA also established literacy class for both adult and children, but there is only children literacy class since old people are very busy and do not have time to study at night time.

Recently, DPA plans to help people improve the upland productions through the introduction of new cash crops. The organization intends to provide cassava and oil papaya to highland people in Kres village. Within the new cash crop introduction and the benefits they get from the cash crops, upland people tend to convert as much of their possible land to cash crops farm. This tendency is rapidly spreading among the highland people in Kres village which requires more land for cash crop trees. From the researcher observation, he noticed that with the tendency to cash crops planting, more and more shifting rice plots will be converted to new cash crop plantation. Nowadays, each family in Kres village own around 2 ha of cashew

plantation in which we can multiple with 52 families in the village equal 104 ha. Kres village posses only 502 ha of land and now around 100 ha were converted to cashew crop. In the cashew farm, they can not plant any other crops because new crops can not survive under the cashew trees. Thus, they have to plant new cash crops on the upland rice plots which will make the rice shifting field shrink.

HA also plays crucial roles in awakening and preserving the traditional culture of upland people. The organization sends their staffs to every district of Ratanakiri to interview as well as to keep the record of the traditional practices. In addition to the work of HA, other organizations such as HU, CARE, and CANDO also involve with the upland people in Poy commune. HU and CARE works on the health promotion while CANDO works on the promotion of weaving. Still there is one organization that works closely with the upland people to manage the natural resources.

NTFP plays an important role relevant to land security and build local people capacity to deal with the outside land grab. They teach upland people the land law 2001 in which some articles mention about right of upland people to manage their resources. In addition, this organization also helps highland people to establish community forest and recently land title communal registration for upland people. NTFP works contribute to the adaptation of local knowledge in Poy commune because their works and objectives are not so different from the traditional practices. Land title communal registration which is legally recognized by the authority is similar to traditional common land property that upland people have used it for centuries. In addition, communal land registration will help upland people to protect their land security from land grab which is spreading widely in Ratanakiri province.

3.1 Community Forest Establishment

With increasing pressures on the natural resources, especially the encroachment to the dense and semi forest area that have provided other additional food sources to upland people after their rice. This situation caused concern to highland people whose lives depend on the natural resources. To deal with this challenge, in January 1997 representatives of Kreung highlanders from six villages (Kanchheung, Koy, Kres, Klong, Mas, and Tagnach) in Poy commune met in Poy commune centre to initiate a forest conservation association to protect their four old

grown forest sites located in northern Poy commune. These four parts cover huge forest area which upland people in Yak Poy community can collect NTFP.

Conserved Forest in Yak Poy community

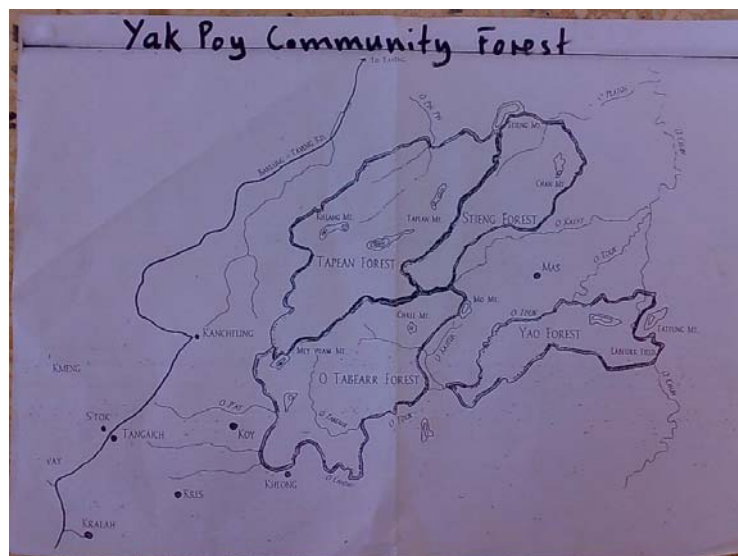
Forest Name	Covered Area (ha)	Village Use NTFP
Tapean	1 800	Kanchheung and Mas
O Tabearr	1 600	Klong, Koy, Kres, Tagnach
Stieng	900	Mas
Yao	850	Mas
Total	5150	Kanchheung, Koy, Kres, Klong, Mas, Tagnach

Source: NTFP project, May 1997

From the meeting, with concern on the danger which required the six villages to control the four main forest areas together, the representatives of the six villages agreed to establish conservation association. To control the forest areas legally, six village representatives suggested NTFP in Ratanakiri to compromise the authority and the relevant institutions in order to get recognition from the authority. Thus, Kreung people in Yak Poy Community can control the forest officially and can protect it from any serious dangers. In respond, NTFP worked actively to compromise the authority and finally they can establish Yak Poy Forest Community with the creation of clear status and regulations for the six village members to implement.

Yak Poy Community Forest located in Poy commune and covers the four main forest areas that six villages in Yak Poy community are using. This community forest covers 5390 ha of reserved forest as well as a lot of medicinal plants, vegetables, and fruit trees. In the north, it borders Ton village in Taveng Leu, while on the south it shares the boundary with La'ak village. On the east, it frames with O Chul and community rice shifting cultivation plots on the west. In this community forest has dense forest, semi forest, streams, and mountains.

Yak Poy Community Forest



Source: NTFP project, May 1997

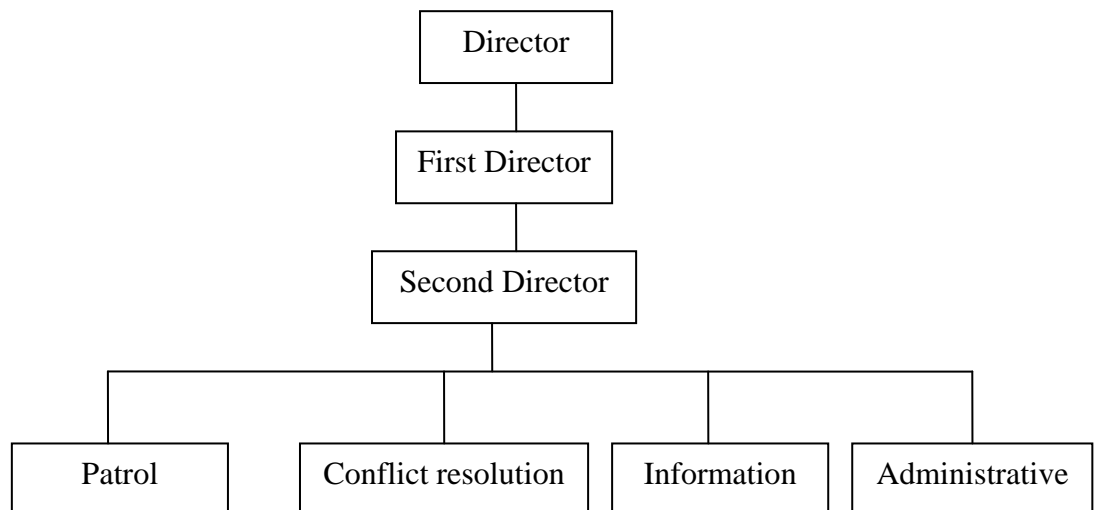
In the status of Yak Poy Community Forest, there are seven chapters which divided into thirty seven articles. Chapter one mentions the aim and objectives of the Community Forest, chapter two indicates the general regulations, chapter three reveals the community structure, its duties and responsibility, chapter four talks about the budget such as income and expense, chapter five describes the NTFP activity, while chapter six points out the fining and punishment, and the last chapter refers to the conclusion. Following, I will briefly summarize the important points from the first six chapters of the community forest status.

In chapter one mentions about the aims of the Yak Poy Community Forest Committees which focus on the sustainable use of the resources that can last long for generations. In addition, it aims to improve the living standard of the six Kreung villagers who use the forest. It also cites the action to protect the anarchy use and conserve the forest as well as reforestation.

Chapter two focuses on the location, resources, and the villages that can use Yak Poy Forest Community. In addition, it bans the encroachment into the community forest area as well as the use of illegal tools such as guns or electronic tools. Further, the regulations required upland people in Yak Poy to reforest.

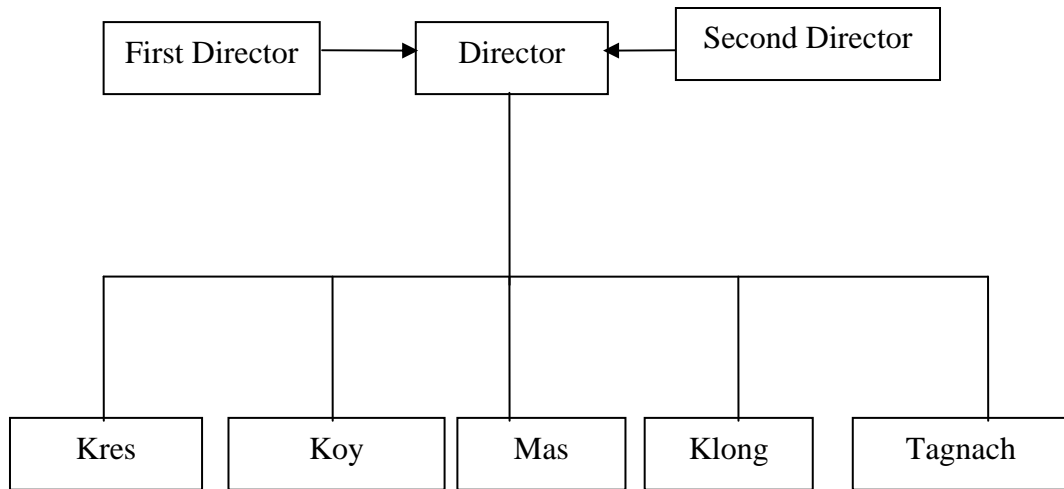
Chapter three describes the community forest committee, its duties, and responsibilities. The community forest committee structure consists of central committee and village committees work in cooperation with the supporters and commune advisors. Each village has its own committee which has director, two vice directors, and four departments. The four departments have patrol department, conflict resolution unit, information unit, and administrative sector. All the committee members are elected from the villagers and has two year mandate.

Village Committee Structure in Yak Poy Community Forest



Central committee which is the main committee to control the Community Forest has six members in which each member is the director of each village committee. This central committee works closely with the supporters and commune advisors that consists local authority, relevant institution from the government, and other volunteer organizations.

Central Committee Structure



Source: Yak Poy Community Forest status book

Chapter four of the community forest status mentions about the income and the expense of the central committee and village committee obtained from tourist, donor, supporters contribution as well as income from the NTFP. Chapter five describes the regulations on getting benefits from NTFP and the procedures required when villagers want to use trees and other NTFP products for their local use. In addition, this part also bans the falling down trees without permission, especially the fruits trees as well as the use of harmful tools trees in the community forest. Furthermore, it provides opportunity for outsiders to use the NTFP in the community forest, but the outsiders have to respect the rules and regulations.

Chapter six talks about the fining and punishment for those who commit against the rules and regulations of the community forest status. Local people in the six villages will be fined 230 000 Riel per ha if they make their rice plot in the area of community forest. For the outside villagers have to pay 500 000 Riel per ha if they make rice field or Chamkar in the community forest and they will be fined four times which equal 2 000 000 Riel per ha. It also regulates the punishment for those who cause forest fire. For forest fire causes by intention, the people who are responsible has to pay 150 000 Riel per ha, but if it is caused by accident, they have to pay 50 000 Riel per ha.

In short, the community forest regulations focus mainly on the communal forest conservation, reforestation, restrictions on the forest use as well as NTFP, banning illegal logging or using harmful tools in the community forest, and the

punishment for those who violate the regulations and cause dangers to the community forest. All of these regulations are enforced by the central committee and each village committee which has four units to implement.

3.2 Land Use Tenure Adaptation

Traditionally, highland people controlled their land communally which means that people in the village have the same right to use land in the village with clear sense of ownership. Although they did not have clear boundary on map, but they know clearly which patches of land belong to this family and other families. They rarely had serious problem with land use as well as land management because they had enough cultivated land with low population and less pressures from outside. However, after 1993 lots of pressures have appeared in the highland community. Land grabbing and land contraction are spreading among highland community in Ratanakiri as well as in O Chum district where a majority of ethnic Kreung inhabit. Many highland villages in O Chum district experienced land grab and land contraction which provided little benefit compare to negative effects. Some villages lost most or nearly half of their land along the main roads or path and some conflicts also arise within the same ethnic people and with outsiders. With money from selling land, they bought modern tools, popularly motorbikes which Land pressure encourages highland people to find new solution to protect their land security and their traditional practices. Inevitably, highland people have to tackle with the pressure through using their local knowledge, legally solutions, or combining the first and the second.

Some villages in Poy commune where I conducted my study have cleverly chosen the third choice to protect their land security. With helps from NGOs and local authority, they establish communal land title registration which is the combine of their local knowledge and the legal laws. The tendency toward the adaptation of local knowledge on land protection and land right appeared in 1997 among highland Kreung in Krolar village. At this time, a representative from Krolar village expressed their concern on land encroachment and their intention to reconstruct the community rules and regulation to the participants who participated in the national forum such as IMC, PLTD, NTFP, CIDSE, UNDP, CARERE, and ILO. This is the first time that highland people expressed their concern and intention on their land use and management in a public forum to support the highland community development,

especially their willing to awake the awareness of upland people regarding their resources management.

Responding to the highland concern, intention, and suggestion, in 1997, NTFP created a network with Krolar village and helped strengthening the local capacity through short course training as well as study tour to some provinces in Cambodia and Thailand. In the same year, NTFP conducted a pilot project on land right options in Poy commune mainly focused on Krolar village. As a result, they found that land security options for agricultural land and forest land in Poy commune included several main points such as individual title for the paddy rice, communal title for all or nearly all the current village agricultural land, communally management through traditional decision making processes, long term user or community concessions for use of communal agricultural lands, and long term user or community concession rights for forest lands through a contractual arrangement between the government and local villages or the commune.

In 1998, Land Use Committee carried out a workshop in Krolar to teach the villagers the land rights and land tenure policies. From the workshop, villagers agreed to control their land communally based on their customary laws combining with existed legal laws to protect their natural resources. By doing so, they have collective voice which is more legally acceptable and have stronger voice to deal with outside pressures on their land security which they can use legal actions to protect their land from the outside encroachment who usually use their power or any legal activities to grab the upland land.

To accomplish this purpose, Krolar villagers and NTFP staffs worked closely to prepare the land status, rules, and regulations. In order to make status, rules, and regulations, NTFP provided a numbers of trainings and meetings to Krolar villagers, especially the village chief, Krakchhrok, and elderly councils who are the important people in the village or in any decision. Local villagers shared ideas and discussed the status, rules, and regulations with helps from NGOs and relevant authority. Any rules and regulations derived from the local people while NGOs worked to compromise and facilitate them. Each rule and regulation are discussed and accepted from the villagers who participated in the discussion.

Before reaching status, rules, and regulations, NTFP helped villagers to draft their village map. They first train important people how to draft map and what should they include in the map. Then, they will ask villagers such as village chief,

Krakchhrok, elderly people, and villagers to draw a map on the paper. Villagers draw all the important locations in the village on the map as well as their village boundary with neighbor villages. When the draft map is completed, several days meeting will be held to discuss the draft map. Village chief, Krakchhrok, and elderly people from each neighbor village come discuss the draft map. They check the draft map carefully and discuss the draft map if there are some overlap areas. Then, they will compromise until each village representatives agree on the map.

Chapter VI

Conclusion

This study has sought to observe the traditional practices of highland people in Yak Poy Community on their land use, historical development that affected their knowledge, and the absorb of situated knowledge in order to deal with the pressures. The effects of the development on land use practices must be considered in broader aspects of historical development in Ratanakiri province and the development of local knowledge in Yak Poy Community. A central theme of this research focuses on how the highland people absorb their knowledge to deal with the outside pressures on land management. It also analyses how the appearance of cash crops, community forest establishment, and communal land title registration, play important roles in developing situated knowledge.

This final chapter summarizes the findings of the research. It is divided into three main sections. The first part reviews the major findings from the study. The second part put the findings in the context of concepts and theory by stressing on the situated knowledge over the issues of access and control over natural resources such as forest and land use and management. The third section focuses on the recommendation and suggestions for further researches.

6.1 Principal Finding

The study of situated knowledge on land use practice in the context of development tries to explore the traditional knowledge on land use and management, the historical development in the province, and development impacts on their traditional knowledge which lead to the adaptation of situated knowledge to deal with the challenges as well as to protect their resources. The study focuses on the traditional practices on land use among highland people in Yak Poy, above all Kres village that has been practicing their knowledge on land use and has been adapting to situated knowledge in order to have stronger voice to protect their resources. It is also stresses on the roles of customary laws, NGOs agencies, and local authority that have been involved in the processes of strengthening local capacity and enhances their knowledge to protect their resources.

Nowadays, highland Kreung in Yak Poy Community still practice their traditional knowledge related land use and management. A majority of the highland

people in this area are still practicing upland rice shifting cultivation which has been practiced in their society for centuries. They still keep the same practices on rice shifting cultivation which has many steps from making new plots until harvesting (See Chapter III). They have also control their upland rice plots communally even though they control cash crop plantations privately. Besides the traditional practices, they have practiced other knowledge related to land management as well.

They still have used their traditional system to solve conflict on land management. When there are conflicts on land acquisitions, Krakchhrok and elderly councils play important roles in resolving the problems with the help from village chief who represents the administrative power in the village. They meet together and find good solutions for both conflicted parties. From this study found that Krakchhrok, elderly councils, and village chief from Krolar and Kres villages met together to discuss the boundary overlapping between the two villages. Krolar villagers claimed that some of present Kres village's location overlaps with their village territory. From Kres villagers' view point, they claimed that this piece of land is their ancestor land. Thus, Krakchhrok, elderly councils, and village chiefs from both villages met and resolve their problem. They compromised with each other and each party agreed to contribute some of their land. Finally, they can resolve problem by using their traditional system without having any serious argument and they can maintain social capital between people in both villages.

People have strong willing to protect their land from the land grabbing or land contraction. The study found that traditional influences play crucial roles in maintaining their land security. Even though traditional laws do not directly ban them from selling land to outside people, but people in Kres village dare not to sell their land to outside people. They are afraid that community members will not allow them to clear new plots after they sell their land to outsiders. Most of people in Kres village agreed that they will control land communally and they do not want any community members to sell their land to outside people at all. Traditional laws play vital role in preventing people from selling their land which help stabilize their traditional practices, especially upland rice shifting cultivation. There are other factors that shape on the perception of local people and ban them from being involved in land contractions.

Awareness of land values and the bad impacts of land lost that they learned from other highland communities has also encouraged people in Kres village to keep

their land from selling to outside people. Most of the villagers in Kres understand that their land is worth over other things such as car, motors, and other modern equipments. They said that land provides food to them while they cannot eat those modern tools. Furthermore, with the income from selling cash crops, mostly cashew nuts, really influences on villagers' tendency on land selling. Nearly all the families in Kres have their own cashew plantation which they can get income from selling the cashew nuts. With this benefit, they do not want to sell their land at all because cashew nuts provide them long term benefits while selling gives them short time benefits.

Learning the experiences from their neighboring villages and from field trips is another factor that pushes people to maintain their land. From the research findings indicate that Kreung people in Kres learned the lessons from surrounding villages such as Kam, La'ak, Sammaki, and Ekapheap that involved with land selling. In the present time, people in those villages do not have enough land for cultivating their upland rice because nearly half of their land belongs to low land people. Furthermore, people in Kam and La'ak villages have occasionally encroached into Yak Poy Community Forest to cut big valuable trees. Kam, La'ak, and Samaki villagers do not have big forest areas to get NTFP any more after most of the areas were cleared for planting cash crops. Drawing from this experience, Kres villagers do not want to lose their land and forest resources which affected from the development impacts.

Related to historical development, transformation, maintenance, and preservation of traditional knowledge on land use, the research reveals that highlanders in Ratanakiri province have experienced with development projects long time ago since French colonial period. The scale of effects in each period depends on the government policy approaches and their implementations.

During French period, there were some projects such as building military post, the rubber plantation establishment in Snoul and the introduction of tax system. This project served the interest of French because French wanted to collect more tax while highland people who were the majority in this area received very little benefits besides the diminish of slavery system which had only in paper. French did not hire many highland people in their plantation, but they instead hire low land Khmer and Vietnamese people to work in their plantation.

Government policy during Sangkum period toward highland people was remarkably. At this time, the royal government separated Ratanakiri and Mondolkiri from Steung Treng in 1959. The royal government set up the policy of integration and tried to assimilate the highland population into the mainstream society through a few proposed projects. They improved infrastructure, schools, health care centers, and established the pattern villages (See Chapter IV). They encouraged low land people to live in the pattern villages and showed the techniques of low land rice to highland people. They wanted highland people to turn their routines to practice wet land rice instead of practicing upland rice. From this period, the government policy got very little success because there were only few highland people turned to practice low land rice. In addition, there were only few people who got benefit from the government policy on education. Some highland people in Ratanakiri had chance to study in Steung Treng province. At this time that highland people were persuaded to leave their villages and worked in the orchid in Pailin. In reality, the government policy at that time was to control the highland people more strictly because they were afraid of the spreading of communist movement into highland people Ratanakiri.

From 1970 to 1975, Cambodia fell into civil war and most of Ratanakiri area was controlled by the communist. There were not many projects initiated by the government besides sending their troops to this province to protect the spreading of communist movement which was a hard and unsuccessful task. There were many bombardments which push highland people to run into deep forest to escape from the bombs. At this time, some highland people joined with communist movement and fought against Khmer Republic.

From 1975 to 1979, there was a big change among highland community. The communists, after their victory, implemented new policy. They collected highland people to live in a cooperative unit. They had to leave their village, abandon their traditional practices, and worked together on the rice field. This is the first time that highland people were forced to forget their traditional practices and cultivated wet rice in stead of cultivating upland rice. From the study indicates that Kreung people in Kres village were forced to live near Sesan River and had to work hard with little food. From this time that highland people learned to cultivate low land rice and after the end of Khmer Rough, some of them have still practiced low land rice cultivation.

After Khmer Rough Regime ended in 1979, highland people, under PRK, were allowed to return their previous villages or stay in the same place. PRK regime

resettled the administrative system which was destroyed by Khmer Rough. They selected village chief, commune chief, district, and provincial governor. What is notable from this period was that PRK provided big position such as provincial and district governor to highland people. In this period, they also established Krom Samaki (Cooperative Units) in among highland community. They wanted people to work together and help each other in their productions work. Highland people in one community were divided into groups and worked under the control one unit leader and the other sub unit leaders. The main purpose of this structure was to keep security in each community and provided easy ways for the state to control the situation, especially to protect and cut off highland people from Khmer Rough who struggled in the forest. At the end of this period, the natural resources in this area were gradually destroyed by the illegal logging and anarchic gun using.

After 1993, when Cambodia opened its free market economy, Ratanakiri became the target of development projects because it has rich natural resources. The government granted many land forest concession to the investors. Some concession areas overlapped with the highland territory which had effects on the livelihood of highland people. After 1993, more and more troubles have arised in highland community. Land grabbing, illegal logging, land contraction, and land cheating affected the highland livelihood, their traditional practices and customary laws. Some highland communities lost their land and have to move further into deep forest. With land shortage, they can not sustain their traditional upland rice cultivation. At the same time, cash crops introduction also require more land which affect the highland community that has land shortage already.

After 1993, the government has tried to build more bureaucratic institutions from provincial until village level. The government ratified new land law 2001 in which some articles also mentioned about the privileges and status of highland community as well as their right to use and manage their natural resources. These affords aim to bring development agencies, relevant institutions, and investors to work closely with the local people and protect the conflicts and problems. However, the research found that the efforts of the government have still worked in little scale because many problems on land grabbing have not been solved yet. More seriously, there are more and more trouble arises among the highland communities (See Chapter V).

To deal with the outside pressures, highland people have adjusted their customary laws to secure their rights in dealing with the challenges. They have built network with NGOs and local authority to help them. They have combined their traditional knowledge and customary laws with the state laws (land laws) in order to have stronger voice in protesting as well as protecting their resources. This adaptation is one of the benefits for highland people to participate in development. This adaptation also enhances the social capital in the village customary laws. The research found that highland people in Kres respect the traditional rules on land use and management strongly. They dare not to sell land to outside people because they are afraid of marginalized from the community members.

Overall, the introduction of market economy and the implementation of development projects in Ratanakiri bring both positive and negative affects. Development provides them good infrastructure, cash economy, and modern tools, but at the same time it also affects the livelihood, traditional practices, and their land security. To deal with the problems, highland people in Yak Poy Community have strengthen their customary laws, make network, and build their capacity in order to protect their resources.

6.2 Theoretical Discussion of the Findings

This part applies my conceptual framework regarding the absorbing of situated knowledge among highland people in Yak Poy Community. These findings are connected to the theoretical of development discourse within highland communities and the combining of their knowledge with legal laws to maintain their resources. The debated on property and access theory will be linked to the finding in order to have better understanding on their property regime in resources management.

The government always claims that development is good because it will help highland people to understand their potential and use it to improve their living standard. Development help highland people to build their capacity and improve their living standard by changing from rice shifting cultivation to sedentary farming. However, poor people always fall into the trap of development discourse and get more bad impacts from it (Kaufman, G 1997). Highland people in Ratanakiri have received bad affects from the development projects. They lost their land and their forest which used to be their main NTFP sources. Their livelihood has become

harder and harder because most of them can not develop their potential to adjust with the speed of development. With low education level, they can not cope with the impacts from development. This clarifies the statement of Komatra who argued that development is seen as the way the state used it to strengthen their power and get benefit from them.

Since French period, French built military post and rubber plantations in order to serve their benefits. Highland people got little or none benefits from those projects. In stead, French wanted only to collect tax from highland people. Then, during Sangkum period, the royal government built school, health care centers, and established the pattern village because they wanted to help people understand their potential and build their capacity. However, the development at that time was set up to control highland people more strictly and cut off them from contact with the communist in Vietnam. The government wanted to strengthen security along the border and continue the big rubber plantations.

Development is also believed to bring modernization to people. It will pull people from poor living and experience with modern tools and technology. This is a good purpose from the development agencies perspectives because poor people will have new clothes, new motor bike, and other modern tools. At the same time, it also brings impacts to poor people. Highland people in Ratankiri sold or exchange their land in order to have new motor bikes. With the comfortable of modern equipments, they need money. In order to get money, they have to do something. Some highland people sold other highland land to low land people by claiming that it is their ancestor land. This causes conflicts and reduces social capital among them.

In respond to bad impacts from some development projects, some highland communities have situated their knowledge through the combination of their customary laws and the state laws that provided right to them. They built into group network and control their resources communally with the appealing help from NGO, local authority, especially inserting some state laws into their status and regulations.

Anan and Yos Santasambath defined that indigenou knowledge is not static, but it is dynamic. It will automatically adapt to new situation in order to survive. Based on this concept, highland people in Yak Poy Community have revitalized their knowledge to deal with pressures in order to survive. With the rapid destruction of forest in surrounding villages and the encroachment into their forest areas, six

communities in Yak Poy Community built networked and established the association to protect their forest areas communally with the recognition from the authority.

This Community Forest establishment shows two kinds of right in property regime. Before the establishment of community forest, highland people hold de jure right (See Chapter two page 16). It means that people have control their forest area communally base on their traditional rules. These traditional rules do not have enough power to deal with big dangers. Thus, in term of sustainable use and control their forest area efficiently, highland people from six villages in Yak Poy Community created Community Forest (CF) which means, in order to have de facto rights, that they have lawful recognition for their forest areas and management. In addition, this kind of combination reflects the access and withdrawal right in common pool resources management (CPRM). Access means the right to enter their community forest without any prevention or arrestment while withdrawal refers to the right to obtain the products from their community forest (See Chapter V, page 93-97). By doing this, they can keep their traditional rules, but add more legally entity in order to have a stronger voice to protest with serious threat.

People in Yak Poy Community have also involved in the process of communal land title registration. This is the combination of their traditional practices and customary laws with some existing articles in land laws 2001^{xxii}. They do this task with the help from NGO, Provincial Rural Development Committee (PRDC) under the control of Ministry of Interior (MI). They have many steps before reaching the status and regulations for communal land title registration (See Chapter V, page 97-100). From this communal land title registration reflects three main kinds of right in CPRM.

The first aspect is management right. It is the right to regulate internal use pattern and transform the resources by making improvement. In Yak Poy Community, highland people can invest their land with outside people and share the benefit in which the highland get one part of the interest among the three because the outside pay all the expense. The second one is the exclusion which defines who have an access right and how that right may be transferred. The third right is alienation. It is the right to sell, lease, or transfer some part of the right to another people. Even the laws allow highland people to do this, but in Yak Poy Community they dare not to sell or transfer the right to other people because they are afraid of being marginalized in their community. There are only few cases that few people who went to live with

their families outside the village that they can sell their cash crop farm to people in the same village or their relatives. There are also the cases that highland people transfer their right of withdrawal on their cashew farm to other people in exchange of motor bike or money, but this kind of alienation last for few years and then the owners will take it back.

In conclusion, highland people in Yak Poy Community have situated their knowledge to maintain their traditional practices, customary laws, as well as to have more legal status in protecting and managing their community resources. This can be seen through the establishment of Community Forest in which the six villages agreed to control their forest area communally with the legal recognition from the local authority and the state. In addition, highland people in Yak Poy Community have also situated their knowledge on land use and management. They have adapted the communal land title registration that allow them to have legal title with the communally control on their community land except the cash crop area that is controlled by the family that plant the crops.

This kind of adaptation is very useful for the rural community to protect their resources as well as their traditional practices and customary laws. As the benefits for the local people, the development agencies or decision-makers should take this pattern into consideration in order to have sustainable development in which it provides satisfaction to development agencies and accept by the local people in order to avoid the development discourse.

Notes

¹ Ratanakiri was separated from Steung Treng province in 1959 by the Royal Decree No. 298 dated 17, February 1959.

² They have little access to health service and there are only few numbers of them can get benefit from education because they can work for NGOs while most of them have low level of school education or none.

³ According ADB policy on indigenous people, it set up a numbers of criteria to identify the indigenous people. ADB identified that indigenous people are those who descended from presence in a given area, mostly before modern state or the defining of boundary, maintain their cultural identity, social identity, economic, cultural, and political institutions which separate from the main stream's dominance.

⁴ Usually, most of the lowland people who first came to Ratanakiri are poor people who face difficulty surviving in their hometown. However, there are some business and rich people who migrate to Ratanakiri to open new business or doing land speculation.

⁵ Land cheating using here refers to the way that outside people use the trick to get highland land through promise to build road or develop their area. In other case, it also mentions about the trick that other people persuade highland people to give their finger prints on the blank paper which is later written something to serve the purpose of taking highland people land.

⁶ During dry season year 2008, Khmer people in O Chum district caused serious wound to a highland person who live in the same village. The problem comes from the conflict of residential land area. Khmer person use the saw to cut the highland hand. After this, the highland victim got serious injury.

⁷ Sangkum period refers to the regime controlled by King Rorodom Sihanouk which lasted from 1955 until Sihanouk's dismissal in 1970.

⁸ The researcher uses indigenous people here because he wants to keep the original word of the author of the article that he quoted. In this thesis, the author uses the word ethnic highlander instead of using indigenous people, minority people, tribal people, or mountainous people.

⁹ Phum Kumrou (Pattern Village) was established both in Ratanakiri and Mondolkiri province. The main purpose of creating these villages was to introduce the low land life style to highland people to follow. Low land from Takeo, Kampong Cham, and Prey Veng were encouraged to live and practice low land rice as a pattern for highland people.

¹⁰ Low land people refer to the Khmer, Chinese, Chams, Lao, and Vietnamese who moved to Ratanakiri in different purposes. The majority of low land people in this province is Khmer followed by few numbers of Chinese, Cham, Laos, and Vietnamese.

¹¹ Brao has a proverb "If it is hot in the south, go to the north and vice versus" which means that Brao who live in Cambodian territory, when facing with problem, can move to Lao area and the Brao in Lao can do the same when they meet difficulty.

¹² Krak Chhrok is the Kreung language which is used to call their top traditional leader who plays important roles in controlling and preparing the ritual ceremonies in the village. Khmer people use *Mekantreanh* to call the tribal chief.

¹³ Now a day, Kres Terrace (Veal Kres) located in the east about 6 kilometers from the current Kres village location. This terrace is the rice shifting cultivation plots for most of Kres villagers. It is the large plot with fertile white soil and bamboo. I notice that this Veal Kres is also the sources of village forest that they, villagers, can cut these woods to build the wooden houses.

¹⁴ Strategic plants also refer to cash crops such as cashew, rubber, and other fruit trees.

¹⁵ The rice yield in this area, according to the commune data 2007, is around 1500 Kg per hectare while the other area could produce only around one tone per hectare.

¹⁶ It is mainly used for the ritual ceremonies and meeting place. It is also the contemporary resident for those who are building new house or do not have house such as the visitors or guests. This word is called Rong in Khmer which means similarly to Kreung Nampasum.

¹⁷ The taboo on bamboo restricted only with the wild bamboo. Villagers can use other types of bamboo besides the restricted one.

¹⁸ Community here refers to "collectivity" which include both living human beings and non human beings (good and malevolent spirits, ancestors who passed away, but also things from the nature..).

¹⁹ Preminister Hun Sen speech in Steung Treng provice when he chaired in the inauguration of Sekong bridge in May 2008.

²⁰ Most of these people belong to the widow and old families which there are totally 11 in Kres village. After their own rice, they depend strongly on their cashew trees, but it does not mean that all cashew nut provide good yield. This year (2008) most cashew nut trees do not have fruits at all.

²¹ The governor told the local people that he wanted to establish wildlife preservation area in order to preserve the wildlife and make this zone into tourist site. He also promised to offer the benefit to local people. That is why local people agreed to give that piece of land.

²² In land laws 2001, there are three important articles; 25, 26, and 28 that mention the special rights of highland people in using and managing their resources.

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