CHAPTER 1

INTRODUCTION

1.1 Background

From the past five decades, natural resources and ecological system of Thailand were under press. According to the data from the Environment and Environmental Quality between 1998–2005 of the office of the World Bank (2004), Green World Foundation (2005), and the Office of Natural Resources and Environmental Policy and Planning (2006) revealed that natural resources, soil, water and forest had been degraded and caused the changes of the watershed ecosystem at all levels, both in the physical and biological aspects. Natural resource degradation had impact on biodiversity as well. This problem led to conflicts which were increasingly intense and complex. Most scholars in the field of social sciences, for example; Peluso (1992), Wiber (1993), Vandergeest & Peluso (1993), Chusak Wittayapak (1996), Anan Ganjanapan (1998), attempted to explain conflicts of natural resources by focusing on a major conflict between the state and the community that is based on rights over natural resources.

Previous studies from Anek Nakaboot (1993), Banchon Kaewsong (1995), Prateung Narintharangkul Na Ayudthaya (2000), and Sorak Ditprayoon (2006) found that the current situation, conflict of natural resources has a dimension of the problem which was more complicated and more dynamics, both from the context and conditions within and outside of the community that could be a push or pressure to cause changes in the use of resources: land, water, and forest. They created a dispute which was complex and dynamic between the multi-stakeholder parties to struggle for the natural resources and to reduce impacts from ecosystem, both the rights to access and the different use of natural resources between the state and the community, and between community and community under the same context. Chalardchai Ramitanon, et al (1993), Aphinop Thanasarn (1996), Phaiboon Hengsuwan (1996), Tavit Jaturapheuk

(1995), Chalermsak Khattiya (1998) had discussed the struggle of resources and impacts that were formed by the changes of production which were results from the development policy of the state and the state wanted to achieve economic development and modernization by using natural resources, land, water, and forest in agricultural production to focus on the expansion of production for the mainstream commerce. Therefore, community must look for commercial production which depends more on market and production inputs from outside of the community in order to compete with production such as seeds, fertilizer, chemicals and energy-saving equipment, and technology that could not be obtained in the community or locality. In addition, consumerism and Western modernization had dominated the local community increasingly. It created the consumption that meets the capital and changes the relationship or interaction between families, communities, organizations and institutions in society which had more hardship and shattered economy and society in the community in social, economic, and political status. Those changes could be found in many communities, especially in the highlands of northern Thailand. Hence, it could be said that human ecological changes affected natural ecosystem as well because changes in the ecology of human or nature have paid an impact on each other and systematic linkage.

However, according to the study of Prisana Promma and Montri Juntawong (1998), Wisut Baimai (2005), and Walaiporn Oadaompanit (2005), the relationship between agricultural production and biodiversity had changed as a result of the increase of population and the imbalance of population distribution. The expansion of arable farm and the intensive agriculture, especially on breeding and planting of the same plants. The maximum increase of products per rai, the reduction of area for planting multi crops and the use of chemicals, and management of biological resources such as land and water. In addition, the study of social and cultural dimension from Yos Santasombat (1999), Vantana Shiva, et al. (1994), Prawet Wasi, et al. (1994), and Samphan Techaarthika, et al. (2001), had revealed that such a change affected the disappearance of indigenous knowledge, thinking system, and body of knowledge. It affected on the biodiversity of the local community and was an important part to the development towards the sustainability of the area. In conclusion, the problems were caused by the complex interaction between natural ecology and human ecology.

Situations of conflict in the use and management of natural resources occurred some 10-20 years ago. It was found that a problem existed with a variety of different problems. Whether the issues are forestry, water, air and other pollutions, the deterioration of natural resources is increasing. In the Upper North provinces as Chiangrai, Phayao, Nan, Phrae, Mae Hong Son, and Lampang which are mostly highland and mountain complex, the problem are much severed. Since 1957, the Royal Forest Department has set the national forest and wildlife conservation and between the year 1985-1992, the law of Council of Minister has approved the watershed classification which the quality of the watershed divided into different classes. The declaration of protected areas over the community in the North and many of national parks and wildlife sanctuaries has raised conflict in the areas as Mae Hong Son and Nan province declared 90 percent 80 percent of conservation forest area, respectively. In 1978, Wieng Chai district, Chiang Rai province, and Chiang Dao district in Chiang Mai province, was announced as a reform district area. Chiang Mai was declared as sanctuary for all districts and finally declared a Wildlife Sanctuary and National Park. Sometimes the National Park officers demolished houses and residential buildings from the area, the case of reforestation covers the lives of the villagers, as Mae Tho district and Mae Prik - Mae Sarieam forestry plantation, Lampang province. The conflict of forest land was resolved by the joint committee between the government agencies. The forest officers, Tambon Administrative Organizations (TAOs) and villagers conducted the survey of land demarcation and the land holding, but the survey which was shelved together stakeholders from all parties has not been accepted by the executive level of state policy. So the problem has not been solved effectively (Permsak Makarapirom, 2006: 3-4).

Characteristics of the resource and environmental conflicts are divided into two types, the first type includes structural problems such as conservation areas, dam and water management, pipeline ; the second type includes technical problems such as the allocation of the land and water pollution. The problem cannot be resolved because of the increased demand of resources, as the population increased, the demand for resources and subsistence level increased. They have developed the breakthrough technology to make its resources available and the need to trade quickly so bring more

utilization of resources . The critical resources depletion and the environment and the solution of problem that have caused the conflicts. So the solution was not successful because it didn't solve the real causes of the problem and the structural problems, such as the adjustment of ideas, policies, and laws. This is not easy because it involves faith, values and patterns of social practices that are influenced by globalization.

Human and resource management can be viewed as two ways of looking, the first: human and resources are perceived as a modular and death with specialized knowledge and confidence with the government centralization, and the second, human and resources as a holistic view that deals with the participants to produce a balanced and sustainable ecosystem and that is the lack of policies and mechanisms to resolve issues in a clear and concrete for both local and national levels. The people who are affected have not resolved the issue of fairness. (Permsak Makarapirom, 2006: 13-15)

The preceding solutions or management of natural resources lacked of absolute knowledge or solutions that were not targeted and missed links. The characteristics of the knowledge to solve problems did not integrate in terms of the description, conditions of the problems, methods, tools, including people who gave the descriptions because the problems and the management of natural resources and biodiversity could not be separated from the land, water, forests and human resources in an ecosystem or watershed area, but they were linked to each other. The changes that occurred would affect the whole system. Thus, the management or the solution needed to look at the whole system. The unintegrated solution was seen as the cause of the problem; the expansion of the state's power to control and manage resources, in practical situation the state itself could not do that and it caused conflict between the state and the community increasingly.

Therefore, the extension of such power deprived the right of natural resource management of the community and then solution was proposed to return the rights and powers to the community. They believed that local community had the potential to manage its own resources with the use of social capital and cultural capital or local wisdom. These studies could be found from Chalardchai Ramitanon, et al. (1993), Chusak Wittayapak (1996), Santhi Jeeyaphan (1996), Prateung Narintrankul Na

Ayudhaya (2000), Anan Ganjanapan (2000), Yos Santasombat (2000) and Santhipong Changpheuk (2003). It missed a context of the problems which were complex and dynamic as well as conditions and factors of the physical area and natural resources. It was impossible to solve problems which were interlinked and there was a discourse between the communities, scholars, NGOs and the states, which has yet to be resolved.

Moreover, there were problems in the area as pointed out by Sorak Dittaprayoon (2006), Thitikorn Yawichai (2006), and Chanyut Tepa (2006) that the conflict between community and community in the watershed or unit area where the exploitation of natural resources was done together by various parties and the trend of severity of the situation had increased. The preceding solutions such as the opening space for negotiations and management in the form of network management, have not yet actually ended the problems because the previous problem management focused on the solution rather than the end result. It did not deal with the cause of the intensive use of land and natural resources by state, community, and capitalists in order to accelerate economic development. On the other hand, it was a try to preserve natural resources by having the myth of state power as a principal.

The result showed that stakeholders of each party must fight for themselves, while the ecological impact was increased. Eventually, it created the conflict and it was excerpted to solve the conflict by any of these methods which were full of prejudices and myths of the solutions. It eventually became a matter of finding their own parties or dividing into parties. Actually, the main problem was the interactions between human ecology and natural ecology, and natural resources which were linked to the utilization of the community. It was not used to manage natural resources in a systematic way as literally. In describing or creating of body of scientific knowledge had the same problem because it was the Western methodology that limited dimensions of the phenomenon with the use of scientific methods and in-depth analysis in the purpose of body of knowledge in in-depth and international level. For example, an attempt to explain the reproduction of weeds in genetic in order to see how the biodiversity of the area will change or an attempt to justify the conversion of carbon in the soil as a result of the use of different forest exploitation. Such knowledge could be called the basic of knowledge which resulted in the solutions of natural resources and biodiversity and it turned out to

be less because this basic of knowledge could not be explained the changes of the complete whole ecosystem (Bush-hansen, Oksen, and Prabudhanitisarn, 2006).

Therefore, there must be ways of thinking and new practices in the area with a higher level of structure and must not ignore the following important factors.

1. The root cause of the problem, such as land use and sensitive ecosystem.
2. The fair of rights and legal rights.
3. The utilization of land with livelihood, economy and wealth.
4. Community management to the public or for personal or group.
5. Managed by government officials for sustainable outcomes, solving conflicts or maintaining the status of the practitioners or the agencies.

The transfer of concept into practice is regarded as co-management that concentrates on the participation of community and community agencies in mobilizing natural resource management with government and non-government agencies (that act as the trainer) and having people's section as a core of operation.

For the use of co-management with new concept, the new practice in 2006 under the Joint Management of Protected Area (JoMPA) project, which is a partnership between the state, Department of National Park, Wildlife and Plant Conservation, the officials of the National Park Wildlife and Plant Conservation as a practice and academic of university, GIS Institute, TAO and NGOs, network of the watershed community and the board / community organizations as well as community members who take advantage of the protected area. A form of co-management concepts and principles of the stakeholders in land use and management of natural resources are involved, tools are used to manage the empirical data. The color aerial photograph with high resolution, satellite maps at a scale of 1:4000 and the exploration of the history and condition of land use and natural resources, including the sensitivity of the ecosystem and the status of the resource base in the area were used.

The result is a substantial achievement in the establishment of community organizations of the management of natural resources and the environment at village, watershed, and national levels. The common boundary setting in the buffer area, conservation areas with government agencies, local officials and various organizations

have explored the conversion of arable to forest communities and habitat conservation by using the survey data to capture the coordinates and a geographic information system with the public hearing level. To establish mutual recognition within the community and between the communities in the watershed, government officials and all parties involved to determine the regulatory agreement between the community and government officials in the use and conservation of forest types. The promoting projects and activities to protect and rehabilitate natural resources such as forests ordination, fire control, building dams for trapping sediments, patrol in the area, and observe the interaction between the staff and the community. The success of activities includes reduction of land use conflicts and determination the boundaries of the land. Stakeholders encourage all parties to work together to change a land use zone that is recognized by all parties to the agreement and the rules of the land and are enforced effectively. Ensuring the sustainability of natural resource management in the area of Mae Tia - Mae Tae stability of the land use in the community and the resulting economic development in the region by promoting the production of various forms of agricultural and non-agricultural occupation (Sidthinat Prabudhanitisarn, 2010: 12-14).

However, the project has succeeded in solving the problem at a local level only. The survey of participatory land use that can help manage the sensitive ecosystem, matter of fair right can be solved, only legally available in all areas. But livelihood, economy and wealth, is unmanageable. Since the implementation of the project before the end, the majority can be managed by the community to some degree and managed by the state authorities. They can handle to manage a certain level, managed by an individual although the results depend on only a certain extent. They used of some part of the co-management, the conflict of land use management at Mae Chaem district, and Kalayaniwattana district, Chiang Mai province by NGOs was involved. A feature to help solve some of problems in the region, particularly the mapping of land use as part of the community only while the policy is still not integrated into the natural resource management plans. The participation of all sectors has problems with the regulation of the government, including the ambiguous role and personnel transfer. Thus, success of the project has been concluded (Sidthinat Prabudhanitisarn, 2008: 15-18) as follows:

1. Organization and management which includes national advisory committee, participated organizations, watershed committee and National Park committees.

1.1 Workshop that government and private sectors have a new perspective on the management of natural resources with coordination, collecting data from participating organizations and activities plan of the watershed committees.

1.2 Organizations are conceptualized and co-operation is divided by the main host / co-driven activity-based policy framework and action plan and the relationship among the participating partners, watershed committees and conservation commission by organizing an informal stage and the use of scientific instruments with simple social processes and culture.

1.3 Watershed and National Park committees can drive the demarcation of the special use zone in the target villages. There are rules and regulations of the community to accept shared by the training, the authentication and verification in the real space, including the use of empirical data, such as maps at 1: 4000 scale to clearly identify the area.

Problems and obstacles as the variation are; 1) unable to integrate ideas, planning and management of natural resources with the participation of all sectors to effect the policy of the districts and provinces due to the rules of the government organization for staff transfer and discontinuity of thought, 2) the management of the coordination of community development organizations and government sector was not well coordinated because of the ambiguity of the role of government at the DNP, and 3) the lack of continuity enforcement of the rules and regulations by the community due to the overlapping of the law, enforcement and situations in the area.

2. Participatory resource management by the orientation of buffer and conservation area consists of orientation buffer area and regulatory community through public hearing, conservation areas by putting out the control of fire, conservation areas to watch out for protect natural resources and the trap sediment weir. The result is listed as follows:

2.1 The alignment area shows the boundary of the special use zone area and conservation areas clearly and mapping and agreement document between the communities, National Park officials and participating organizations through the survey process and participatory land demarcation in project area.

2.2 A regulatory agreement in the community and watershed, organized by

the community.

2.3 Plans and activities related to the fire break, survey, surveillance for conservation with the officers. The sediment dam was built along the creek and its tributary with the support of the participating organizations.

Problems and obstacles as the variation are; 1) procedures and processes required time and resources significantly; 2) the legal limitation and the overlap in enforcement; and 3) limited and discontinuous duration of action.

The partial success of JoMPA was an experimentation in the project area. The main component of the operation is integrated co-management which has proven successful in one area only to resolve, but it cannot be either continued or fully extended. It was proved to be successful at the project area but cannot be replicated in other areas. Thus, it is needed to investigate the real operational problems. If the concept of principles and processes operating in the area, likely to be achieved accurately, by (a) the integrity of the concept; however, there are structural problems and problems in the area, or (b) the concept may not complete at the beginning, or in other words, that the variability caused by the omission of concept, principles and practice or an operational problem. For example, the mapping of land use doesn't consider the sensitivity of the ecosystem. Evidence base were focused on accuracy without considering the ecosystem. In terms of operations may be variances by the stakeholders who are not strong from the meeting of stakeholders at all levels found that collaboration in solving problems in the area.

The stakeholders at the district level and provincial departments did not actively participate in solving the problems in the project area with the community. This reflects the variation at the structural level and the co-management was unable to tackle this problem. In addition, the problems were adjacent structural system and it could not manage at the area level. However, the variation in the area might cause by the community involvement with government agencies at the department level. The relationship between the community and the TAO has no problem, because they can work together effectively. However the officials and agencies in the area cannot work collaboratively. Thus, the existing variation can be considered from two parts If the concept is logical valid but not covering the structural and operational problems in the

area.

1. The variability caused by the structure consists of the relevant agencies and roles and duties of the officers who are involved.

2. Variability arising from operating in the area includes the refinement of the process and the use of tools and the relationship of the stakeholders in the area.

In view of the concept of co-management is logical in practice but the variation still occurs because of the structural and operational problems in the project area exist. Despite the well-designed project, the operation was partially successful due to the variation in practice. Thus, this variation leads to the research questions of this study.

1.2 Research Questions

1.2.1 What are the success and failure or variation of co-management application at a community of protected forest in Ob Luang National Park?

1.2.2 What are the contributing factors to the partial failure or variation of co-management at the community from central and regional agencies?

1.3 Research Objectives

1.3.1 Analyze success and failure of co-management application and action in the communities of Ob Luang National Park.

1.3.2 Analyze the factors contributing to the partial failure or variation of co-management from central and regional agencies.

1.4 Terms of Definitions

Variation refers to the deviation and causes of deviation from the operating factors in the area.

Forest Conservation/ Protected Area refers to National Park or Wildlife Sanctuaries area.

Co-management refers to the system and processes involved with participatory of natural resource management at the watershed for all of stakeholders as community group, government agencies and NGOs.

Structural Level refers to the role of the central agencies and the officials in supporting the operational agent to JoMPA.

Operational Level refers to the implementation process at two levels in the

community and the relationships of stakeholders in participatory natural resource management, staff of government agency, Tambon administrative organization, leaders and community group and non-government organization.

Special Use Zone refers to the designated area to engage for activities that are not a function in tourist attraction. There are other reasons, such as action is necessary to ensure stability, agriculture and local development.

Participatory Land Demarcation refers stakeholders do land demarcation with participatory process and use evidence bases for boundary line of utilization areas and set the rules for community forest management .

1.5 Expected Results

1.5.1 To understand the success and failure of co-management application and action at communities of Ob Luang National Park.

1.5.2 To understand the factors contributing to the partial failure or variation of co-management from central and regional agency.

1.6 Thesis Outline

The thesis is organized into five more Chapters, including the introductory Chapter:

Chapter 2: Reviewed literature in basic concept of natural resource management which includes ecology and watershed ecosystem concept, political economy concept, and political ecology concept. The concept of natural resource management conflicts by state and community, the concept and practice in natural resource management participation co-management and integrated co-management and concept of stakeholder analysis. The summary of conceptual framework.

Chapter 3: Research methodology was conducted as qualitative method by collecting the data from agencies and organization reports and the key informants' in-depth interview with the issues of local management mechanism, management processes and other related processes tools are also included. All data were organized, prioritized and summarized regarding the problems and conditions in the area.

Chapter 4: Describes about JoMPA project in Ob Luang National Park, Chiang Mai, the central and regional agencies with overall result project assessment and project outcomes and outputs both successful and unsuccessful. Including the analyze factors

that affect the outputs successful and unsuccessful with variance occurs in the area.

Chapter 5: Synthesis of variance in concepts and implementation, joint management of protected areas project at Ob Luang National Park that based on the synthesis of the impact of the influence of four factors as understanding of concepts and thinking systems, bureaucratic structure and system, organizational culture, and power relation.

The final Chapter summary of findings, discuss ideas and recommendations.