

## **A Study of Local Wisdom in Management of the Community Forest in Ban Nong Hua Khon, Tambon Nong Muen Than, At Samat District, Roi-Et Province**

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**Abstract:** The main purpose of the qualitative dissertation was to study local wisdom in management of the community forest in Ban Nong Hua Khon, Tambon Nong Muen Than, At Samat District, Roi-Et Province. The target group population was 90, including 36 local learned persons and 60 community forest users, derived through a purposive selection. The instruments used for collecting the data were the interview, participative and non-participative observation and documentary review. The data analyses were deduction and classification methods. The research findings revealed that the villages of Ban Nong Hua Khon in both villages, Moo 6 and Moo 15 used local wisdom in using community forest resources beneficially and worthwhilely by emphasizing the a cummutative local wisdom of the accepters. These included tending cattls in the community forest and collecting mushrooms, insects red ant eggs, krajiaw flowers, dry wood sap and herbs. This yielded the mutual and supportive plant ecological systems forming the balanced and sustained ecology. In addition there were conventional wisdom, beliefs, observation of Lord Buddha's Teachings in self-independence and mutual dependency and maintenance of harmony between humans and humans and humans and environment. The finding also revealed that there was selection of natural resources for economically beneficial and worthwhile use in eating, living, healing and in conservation for future generations. The villages of Ban Nong Hua Khon had the model in management through the forest management processes of the Villager Voluntary Group on forest Protection (VVGGEF). The group was naturally formed up for group living and rather highly supporting the community and society and there was the senior citizen group with beliefs and transfer of knowledge in forest management to youths. Nevertheless, even through community forest management practices were not fully carried out, the community forest of Ban Nong Hua Khon would still exist as the heritage for future generations up to the present.

**Key words:** Local wisdom, community forest, community forest management, group population, community forest conservation, Samat District

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### **INTRODUCTION**

Human being and ecology are so closely related that they cannot be separated. Human beings have to depend on ecology for living for collecting things from natural resources and from ecology for use, especially from the forest and from ways of living and local community culture on forests, it has been carried on side by side with connection and support so far. The process of local community living related to the forest has been accumulated experiences in management for mutual living and interdependence as the social and cultural foundations. The evidence on the community forest is the beliefs in the ancestor's spirits forest patch (Don Pu Ta) of the Northeast that gave rise to the tradition of using the forest with respect and fear of sins, blessings and

sacred things in the forest. This has been developed as the foundation of morality in management of using benefits from natural resources and ecology, observed from generation to generation.

The human's relationship with forests, therefore, has been so close that they cannot be separated from the life cycle. The forests are the place where humans, animals and plants have to rely upon, exist and germinate and of a variety of herbs. The villages get benefits from the forests by dividing them according to their types for examples, the spirits forest patch of Don Pu Ta is used for performing rituals as of their beliefs; the graveyard forest is used for burying or cremating dead bodies and so on. In addition, the forests are used for tending cattle and providing villagers for collecting things useful for living and survival in all seasons.

Ketthes (2006) mentions that human beings still use benefits of the forests of all kinds, such as forests near the rivers (Pa Bung) or forests overflowed during a heavy rain period (Pa Tham) for tending big herds of cattle and raising ducks for collecting forest products, such as firewood, charcoal, lumber, wood for construction, mushrooms, vegetables, fruits, herbs and wild animals. The forests are also the learning resources on local history and legends about sacred and holy areas related to spirits, ghosts, protecting and maintaining supernatural power and rituals (Ketthes, 2006).

In the past human beings used benefits from forest ecology for foods, living quarters, medicines, lumber, firewood and wood for other purposes. The local people, therefore had to protect their own ecology and support the forest ecology for their benefits. Those processes of support and protection became part of the life ways and had developed into traditions and culture.

The natural forests are plentiful of a variety of plant species that exist both in friendly and competitive manners but they can well settle with mutual dependency and balanced supports. Plants of each kind need food nutrients and sunlight of different quantity in terms of quality and quantity. These give rise to the plant communities that support and maintain one another and became balanced and sustained ecology in such areas.

The villages in rural areas of the Northeast, similar to the North, use local wisdom in manage their own public forests for example, the hill tribes in the North know how to use many kinds of plants to grow together in the same plots and circularly change according to the seasons, suitable for the alternative agriculture or natural agriculture which is the balanced ecology plants are grown for food, such as rice, maize, beans and so on and some kinds are grown for roots to hold top soil and to chase away pest insects, such as marigolds, wild egg-plants and so on. In addition, villagers in the Northeast know a variety of herbs that can be used to heal many kinds of ailments (Baimai, 2005).

Nevertheless, some villagers in the Northeast do deforestating and clearing up pieces of land for crop farming but there are some of them still observe their old traditions and social norms in obeying and respecting the nature. They do not trespass the forests for making living without consideration of the nature. According to their ways of life, they divide up the land areas for building houses for the spirits forest temples for the forest patch of Don Pu Ta and community forests for the forest conservation and benefits from them. The forests are sources of food, firewood, wood for building houses, agricultural tools and utensils, herbs and so on.

In addition, the villages in the Northeast of almost all areas there are public forests upon which the villages depend as the places to collect forest products and food items for daily living to look for herbs for healing ailments to tend domestic animals and to seek mental dependency for paying respect to the ancestors' spirits (Pu Ta) and to build the temples for performing religious practices (Ketthes and Som-In, 1992).

The community forest belongs to the community, managed by the community and for the community. It is conserved and used according the rules set up by the community Ramitanont and others summarizes that the community forest where the villagers have common awareness in creating, maintaining and using the forest areas and soil (Ramitanon, 1995). The organization is officially on traditionally forward with the authority in setting up the rules for using the forest and classifying a clear boundary accepted by the nearby communities. This is to fairly fulfill living and to use natural resources efficiently and sustainably.

The community forest of Ban Nong Hua Khon is the one that has been continuously maintained and conserved by the villagers from generation to generation. In the past the community forests of Ban Nong Hua Khon were abundant and the villagers had mutually used them for such a long time. The villagers ways of life had depended upon and related to the forests since they settled down and carried on up to the present. They used the forests for collecting forest products, finding food making daily living, seeking herbs for healing ailments, tending domestic animals being mental dependency for paying respect to ancestors spirits (Pu Ta) and being the sites for the forest temples to perform religious activities. However, the number of forests now days is reduced, a great deal because of deforestation by some villagers in the village and neighboring villages.

The community forest of Ban Nong Hua Khon is nowadays the the inhabitat of villagers of two villages, namely Moo 6 and Moo 15 with the population of 895. Some of the villagers manage the forest resources through the local wisdom with the belief in spirits or ghosts, building the forest patch of ancestors' spirits (Don Pu Ta) to be the site abided by them and the belief in sacredness or holiness. Deforestation is prohibited because the forest belong to the ancestors' spirits. If anybody destroys the forest, the bad consequences will follow. However, there are some the villagers, who are greedy and not afraid of the ancestors' spirits, break into the community forest to occupy the forest areas and hold them as their own properties. The villagers of Ban Nong Hua Khon, therefore have joined together to form a committee on forest management and cooperation with the government

sector to support and increase knowledge in the community forest management by setting up agreements on the use of the community forest and clear division of the areas for these purposes.

From the states and problems as mentioned, the researcher was interested in conducting research on management of the community forest and the use of local wisdom in management of the community forest of Ban Nong Hua Khon, Moo 6 and Moo 15, Tambon Nong Muen Tham, At Samat district, Roi-Et province. The findings would be used as a guideline on management of the community forest and forests in other communities. They would also make those dependent upon the community forests become alert and aware of conservation of natural resources for their sustainable existence.

#### **Purposes of the research:**

- To study the local wisdom in management of the community forest of Ban Nong Hua Khon, Moo 6 and Moo 15, Tambon Nong Muen Than, At Samat district, Roi-et province
- To study the management model, conservation and the use of the community forest of Ban Nong Hua Khon, Moo 6 and Moo 15, Tambon Nng Muen Than, At Samat district, Roi-et province

#### **MATERIALS AND METHODS**

This research was a qualitative study, collecting data through field work in order to investigate bodies of knowledge relevant to local wisdom on the management of the community forest by using the frameworks of cultural dimensions. Accordingly, the researcher had to keep on going and spending time in the community for a long period to gather data through the participative observation and the in-depth interview. The procedures were as follows:

**Target group population:** The target group used in this research were 96 people living in Ban Nong Hua Khon, Moo 6 and Moo 15, Tambon Nong Muen Than, At Samat district, Roi-et Province including 36 learned persons (comprising 6 ritual masters 8, community leaders, a group of 20 forest protection villager volunteers and 2 Buddhist monks) and a group of 60 forest users. These were derived through the purposive sampling.

**Data gathering methods:** The researcher contacted the community leaders, officially and unofficially in order to get into the villages for field studies. Firstly, the researcher met with the community leaders who gave the

main data related to the community backgrounds. Then, the researcher met with the community hardcores, organization member, teachers and Buddhist monks. Two of the interview methods were used, namely a formal interview in line with the research purposes and an informal interview. Two patterns of observation were employed, namely participative observation and non-participative observation by which the researcher had to stay in the villages and took part in their activities.

**Data analysis:** The methods used by Ngamcharoen (2007) were employed as follows: Deductive analysis to reach conclusion from the concrete data or perceived evidences, such as daily living activities of the community in regular events, as well as in community ritual activities in accordance with conventional beliefs in which the villagers performed practical behaviors in line with the local wisdom in relation to the management of the community forest as of the analytical steps: Who performed the rituals, how to select the time for performing the rituals, what characteristics of the rituals for whom were performed and what meaning for the villagers of such rituals, data classification analysis to classify the data into types based on the culture to analyze forest resources, community leaders roles in using local wisdom for management of the community forest (Ngamcharoen, 2007). The frameworks for data classification included action, activities, meanings, relationships, participation and social settings and field work data analysis by using the concept of Nathalon (1998) classied into two groups namely data analysis in action of the field work in an informal manner but this had to do regularly as a base for collecting data in the next step and data analysis of the data collected from the field work in a systematic manner and had to be carried on periodically. This was to evaluate how the research progress in accordance with the purposes to classify the collected data to analyze characteristics of each small unit of classification to the data types to find out the pattern or the structure or the model of the research conclusion and to link the relationship between the conditions related to the phenomena by showing mechanisms that made such conditions resulted in the relationship in reality with the phenomena studied.

#### **RESULTS**

The research findings were summarized as follows. The local wisdom in management of the community forest revealed that the community forest of Ban Nong Hua Khon was the public interest forest, classified into the forest patch of ancestors spirits (Don Pu Ta) and the

forest temple forest (Pa Wat Pa). In the past, the forest of Ban Nong Hua Khon was very abundant. There were a variety of plants densely growing. There were various kinds of animals abiding in the forest. When the time past by, there were many people many to live in the areas. This made them trespass and clear the forest for farming land. They deforested so much land that the permanent villagers feared that if they let go as it was the forest around their village would completely destroyed. The villagers, therefore, informally united to find measure to protect their own forest. The ways of simple living in the community and living with sufficient products helped in reduction of destroying the nature of the community forest. The villagers carefully brought forest resource into use for their own and the community benefits as much as possible including producing tools for religious activities. The conservation and care of the villagers' forest came from culture, tradition and faith in ancestors spirits and the belief in the community benefits. If the forest had been destroyed completely, their living and existence would have been in trouble.

The management of the community forest of Ban Nong Hua Khon was relied on the villagers conventional system of beliefs in ancestors spirits (Phi Pu Ta) and there were formal and informal leaders setting up rules for taking care and protecting the forest with the villagers who were ready to bring the forest products to be used in daily living. There was a transfer of local wisdom in interdependency and mutual dependency by setting up the youth groups for conservation of the community forest to take care and seek knowledge from the forest. The village school also used the forest as the natural classroom to build up awareness for children to value the forest to know how to use herbs found locally for health care and to become basic ideas of self dependence at the young age.

The patterns in management of the community forest were found to use the Buddhist beliefs in sympathy for other human beings and the beliefs in the ancestors teachings on environment, a transfer of local wisdom through rituals from generation to generation and setting up the villager Volunteer Groups for the Forest Protection (VVGFP). In addition, the rules and regulations for using the community forest were set up in order to use it in collecting forest products, such as edible plants and herbs. The community had developed the methods for collecting the forest products by closing the forest in certain seasons cutting some trees for allowing them to produce more young branches or shoots and developing the method for sustainable forest management from those rules and regulations. For instance to collect the tiny little yams for use but to put them under the

ground when found; to bring the no underground roots of Krajiaw flower plants out of the forest; not to cut the mushrooms growing on the dry wood but to pull them by hand because if they were cut by knife, no mushrooms would grow again in the next season not to use knives, big or small and spades to cut or dig the soil where mushroom fungi were found but to use wood sticks could be used, otherwise no mushrooms could grow.

In addition, there was an organization to monitor how to use benefits from the forest with clear rules, regulations and roles, structure of work but not written verbally. The people in the village had accepted until it became the behaviors that lead to tradition and ways of life. It was evident that the people in the community cooperated in conservation of the community forest and they could maintain it. The natural resources were remained and really became a green planet earth.

## **DISCUSSION**

The villagers of Ban Nong Hua Khon moved from Suvannaphum district, Roi-et province and settled down in Ban Nong Hua Khon lived in relation to the forest, dove peace peacefulness fullness and trespassed the forest for farmland at the beginning. Finally it became the community with love and belongingness and harmony, intention to build up a permanent society and thinking how to build up safety for the community. The villagers used natural resources as dependent sources, adapted themselves to the environment, knew how to use the resources wisely for living and avoiding danger. They knew how to use their beliefs in the forest and the Buddhist teachings in building up words and encouragement for the community. They set up the rules and regulation for mutual living sympathy within the same tradition and similar social status and existence. These experiences and bodies of knowledge could be regarded as the valuable local wisdom of the villagers in Ban Nong Hua Khon.

The result of this research was agreeable with the research of Khetthes and Som-In (1992) revealing that the forest was abundant at the beginning of its existence. When the number of population increased, the forest was trespassed and the environmental problems followed. Finally they were aware of the value of the community forest among all stakeholders and cooperated in campaigning for the forest protection (Khetthes and Som-In, 1992).

In regard to the management of the community forest the finding was in line with the research of Sitthi and others finding that the concept of the management of the community forest came from the villagers conventional

beliefs (Sitthi-Amorn, 1995). They were the relationship with the forest on supernatural power, such as spirits, gods, ancestors spirits, forest temples and graveyards and the research of Thirasatvat (1992) finding that the factors effecting the forest conservation were the villagers conventional beliefs on prohibition of using the forest products for fear of ghosts and spirits and the strength of the community, especially of the village leaders. Finally, they became the village rules for punishing those who disobeyed.

The patterns of local wisdom on the management of the community forest were found that the forest was used in terms of conservation and maximum benefits to use just enough for living and lasting longest. In using each kind of resources there were rules, prohibition and customs related to the natural resources. The importance was the ethics and morality of the users to know the value, importance and the benefits of the natural resources for future generations. These bodies of knowledge stemmed from the social sub-systems with the base of the need for stable society of Ban Nong Hua Khon. The results of this stability and conservation of natural resources in connection with ethics and morality of mutual living between people and the nature yielded the sustainable development of the community environment. The proofs on this were the prohibition or customs related to each kind of natural resources and the beliefs in ancestors' spirits. In addition, there were concrete evidence that the community forest of Ban Nong Hua Khon was found to be around. The community shared their ownership, use and care of the forest had awareness in conservation and management of the forest resources in order to have people live peacefully in harmony with them and took part in investing, practicing and following-up and evaluation.

The use of social rules or social orders was the means for success in management of the community forest. This finding was in line with the research and reference of Sukwong finding that the key to success in the management of the community forest by the community was that the community had the social rules (Sukwongs, 2007). This was agreed with Jamarik and others studying on the community successful in management of the forest and finding the following characteristics: the community highly being community with the strength of relationship of social members. This strength of the community reflected in tradition and rituals. In addition, it was the community with forest resources in the functional condition or in the state that could be restored and to be used for mutual benefits such as sources for food, medicines, building houses and fuel.

## **CONCLUSION**

In this study, the conservation of forest resources was the cooperation in protecting the benefits of the community and the awareness in conservation of the resources inherited for so many generations that it became the tradition, beliefs and ideology (Thirasatvat, 1992). This was agreeable with the research of Khetthes finding that the thick forest or the forest patch of ancestors' spirits (Don Pu Ta) was the sacred place of the community. It had a strong bond with the villagers and there was a ritual to respect this forest before growing rice or thank for the crops yielded from the farms (Khetthes, 2007).

## **RECOMMENDATIONS**

General suggestions as following: the method of using the villagers' traditional local wisdom of the ancestors in Ban Nong Hua Khon should be brought into use in protecting the community forests with the similar nature and in nearby location of the Northeast. The model of the management of the community forest in Ban Nong Hua Khon with emphases on formal and informal groupings should be implemented in conservation of forests in other areas.

Suggestions for further research, as following: should conduct the research into the methods and means in improvement of the management of the community forest of the relevant groups, especially the Villager Volunteer Groups for the Forest Protection (VVGFP) and other groups for more effective performance. Should conduct the research on the models and patterns on management of the community forests and their sustainability.

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