

## **CHAPTER II**

### **LITERATURE REVIEW**

This chapter is a review of three concepts: (1) Local Knowledge and Scientific Knowledge on Natural Resource Management, (2) Local Marginalization, and (3) Dynamics of Local Responses. These three concepts will be used as lens to analyze research problem throughout the thesis.

#### **2.1 Scientific Knowledge and Local Knowledge on Natural Resource Management**

##### **2.1.1 Scientific Knowledge vs. Local Knowledge**

In the past centuries, scientific knowledge has taken a dominant position that is considered to be universally applicable. Modern science is seen as the only solution for poverty and environmental problems.

The Concise Oxford Dictionary of Sociology in 1994 clarifies that there are two approaches to science. The first one assumes that science is “universal standards of logic and rationality and fixed points in the physical world and in nature” (Gordon 1994: 464). The second approach differs from the first, and argues that scientific knowledge is socially constructed and that there is no accessible a “truth or reality” beyond human activity (loc.cit.).

Supporting the first perspective, Kuhn (1972:25) defines science as a process of ‘fact-gathering’ through experiments and observations. He contends that there are three key elements to factual scientific investigation. The first is a “class of facts that the paradigm has shown to be particularly revealing of the nature of things”. Second, this class of factual determinations can be compared directly to facts predicted by the paradigm theory. The third element consists of “empirical work undertaken to

articulate the paradigm theory”, explaining some ambiguities and providing solution of problems (Kuhn 1972:27).

Claude Alvares (1992), who follows the second approach, looks at science in the relationship with development. He contends that science is a catalyst of development because “science made development possible” (Alvares 1992:221). Differing from Kuhn, Alvares analyzes the power of science and scientific knowledge. According to him, science is opposed to nature and handicraft production, because development is evaluated through efficiency of resource utilization. ‘Inefficient’ processes are discounted by scientists. They ignore the costs of development and just perceive “only high energy input rayon and pulp units that really process the forest resources and contribute to economic growth and production” (loc.cit., p.223).

Science believes itself able to ‘revamp’ the society (Alvares 1992:225). Undeveloped countries in the Third World have attempted to adopt the development of science in hopes of bridging the widening gap between them and First World countries. Claude Alvares looks at modern science as a ‘totalitarian edge’ (loc.cit. p.227). He argues that science dismisses all existing processes in nature and traditional techniques as inferior or of marginal value. It also redefines the very conception of what constituted human normality. People loose the right to claim that they can function as competent human beings unless they underwent the indoctrination required by modernity (Alvares 1992:223). From the perspective of science, scientific knowledge becomes the preferred and primary ‘instrument for social transformation’ (loc.cit. p.229). To illustrate more about this issue, I focus on the discussion of the implication of scientific forestry into resource management.

According to Lang and Pye (2001), forestry science is an effort to provide scientific principles that allow systematic planning and reduce fiscal management of the early modern European state that views its forest through fiscal lens of revenue needs. It is considered a way to remove forests from local, rural economies and make it serve the needs of an industrializing state economy (Lang and Pye 2001:26). States use scientific forestry to measure revenue yield of the forest and to replace ‘untidy, unpredictable, chaotic’ forest with ‘logical, predictable’ plantations (loc.cit. p.27). Consequently, as Scott (1998:15) observes, forestry science produces monocultural

and even-age forest. "Forest trees were drawn up into series, uniform ranks, as it were, to be measured, counted off, felled, and replaced by a new rank and file of look-alike conscripts" (loc.cit.).

Most states have relied on scientific forestry or science as a strategy to develop and solve environmental degradation. Scientific knowledge has conventionally been represented in opposition to local knowledge (Nygren 1999). Based on the perspective that local knowledge is 'static', 'backward', 'unchangeable' or 'underdeveloped', scientific knowledge is used as a technology of power to exclude local people from the resources. Powerful states have imposed ideology and created discourse of science to legitimize their control over resources (Peluso 1992, Scott 1998, Pinkaew 2001).

States have attempted to replace what is locally 'traditional' and 'backward' with what is universally 'scientific' and 'modern'. Thang (2001) observes that in Vietnam the state considers local knowledge inferior to scientific knowledge. He contends that state officials who work with ethnic minority communities often do so without regard for the local culture. They have carried out development projects without considering real demands of either local people or local contexts. Various discourses have been created to legitimize their actions and to ignore the local practices. They have rationalized their imposition of scientific knowledge by describing local knowledge as 'insufficient' and 'undeveloped' (McElwee 1999). Shifting cultivation in particular is singled out as a 'primitive' and 'destructive' land use, and peasants are often condemned for their 'ignorant' and 'backward' ways (Parnwell and Bryant 1996, cited in Peluso 1992; Bryant 1997: 8). As human-induced environmental change intensified in the 20<sup>th</sup> century, the propensity of the state to differentiate between 'scientific' and 'unscientific' resource use has increased. The state imposes 'scientific' resource management on diverse local contexts on the principle that local knowledge should be replaced by "scientific knowledge". Thus, shifting cultivation should be replaced by fixed cultivation, and so on. Moreover, states often use scientific forestry to legitimize their decisions about forest management and control.

The bias toward science and scientific knowledge has ignored local practices and local communities who lived in the forest before the emergence of the nation-state. Many scholars started studying local knowledge seeking guidance for a more sustainable future. In this context, the concept of 'local knowledge' is used as a critique of 'scientific knowledge' or modernism. The focus on local knowledge is a "shift away from the preoccupation with the centralized, technically oriented solutions of past decades, which failed to improve the prospects of most of the world's peasants and small farmers" (Agrawal 1995).

Local knowledge is broadly defined as the knowledge used by local people to make a living in a particular environment. Derived from many years of experience and accumulated from generation to generation, this knowledge reflects local's perception of the natural landscape and environment. It is seen as a form of traditional culture. Different terms, such as 'indigenous knowledge', 'indigenous ecological knowledge', 'traditional knowledge', 'ethnoscience' and 'rural people's knowledge' are used interchangeably to refer to 'local knowledge'. Several studies attempt to demonstrate crucial role of local knowledge in development and natural resource management. They have demonstrated that local people have their own knowledge system that aims to conserve nature.

Among scholars who disagree with the discourse that local knowledge is backward and unscientific, Barsh (1996) states that the traditional ecological knowledge (TEK) of local people is scientific because it is empirical, experimental, and systematic. He contends that local knowledge is different from Western knowledge for two respects. First, TEK is highly localized and focused on the web of relationship between humans, animals, plants, natural forces, spirits, and land forms within a particular locality or territory. Second, he claims that TEK is closely related to the social and legal dimensions of a given community. Bash argues that 'each ecosystem is conceptualized as a web of social relationship between specific group of people and other species with which they share a particular place' (Barsh 1996:220).

The debate between proponents of scientific versus local knowledge is highly dichotomous. However, I argue that knowledge is not static and explicitly distinguished. It is a process of experimenting and learning. In this thesis, I operate

from the assumption that local knowledge is a repertoire of situated experience developed in particular physical and cultural context in an intimate interaction between human and nature.

### **2.1.2 Local Knowledge as Situated Knowledge**

It is very important to study local knowledge if we are concerned about sustainable development. However, the above scholars romanticize local knowledge over its actual nature. Romanticizing local knowledge is succumbing to a trap of dichotomy that distinguishes the scientific and local knowledge systems. Local knowledge is unintentionally considered be static rather than realistically dynamic. Local knowledge is embedded in its local cultural context, but I do not think that it represents something contrary to scientific knowledge. Local knowledge is a repertoire of situated experience developed in a particular physical and cultural context in an intimate interaction between humans and nature (Yos 2002:42). It thus involves a mixture of several systems of knowledge in the process of adaptation, contestation and coexistence.

Agrawal (1995) and Nygren (1999) have strongly criticized the distinction between local knowledge and scientific knowledge. They argue that local knowledge not only encompasses technical but also 'non technical' insights, such as wisdom, ideas, perceptions and innovative capabilities. They contend that there is the contact, diversity, exchange, communication, learning and transformation among different systems of knowledge and beliefs.

Agrawal (1995) agrees that local knowledge is essential to development, and that to ignore local people's knowledge is to ensure failure. However, he claims that theorists of local/indigenous knowledge are "caught on the horns of a dilemma" (Agrawal 1995:13). He points out the failure of the indigenous/local vs. scientific knowledge dichotomy on at least three accounts: substantive, methodological and contextual. In relation to substantive differences, the classification fails not only because there are similarities across these categories and difference within them. The attempt fails because it seeks to separate and fix in time and space knowledge systems



that can never be so separated or fixed (loc.cit.). Methodologically, it is claimed that 'science' is open, systematic, objective and analytical. Meanwhile indigenous knowledge is closed, non-systematic, holistic rather than analytical, and advances based on new experiences, not on the bias of a deductive logic (Baruni and Apffel-Maglin, 1993; Howes and Chambers, 1980, cited in Agrawal 1995). However, Agrawal (1995) points out the failure of numerous philosophers of science who tried to find satisfactory demarcation criteria between science and non-science. For contextual differences, local knowledge is often seen to exist in a local context, created by a particular social group in a particular setting at a particular time. Meanwhile, scientific knowledge comes out from an epistemic framework in the search for universal validity (Baruni and Apffel-Maglin, 1993, cited in Agrawal 1995:14). However, this perception is not appropriate because the practice shows that attempts to implement scientifically oriented solutions failed for their ignoring the imperatives entailed by different socio-political-cultural contexts (Agrawal 1995).

Nygren (1999) provides another view that helps to avoid the dichotomy approach. Using the term 'situated knowledge', Nygren (1999) provides a critical view of the various approaches representing local knowledge as a 'scapegoat' for underdevelopment or as a 'panacea' for sustainability. According to her, the static oppositions of local versus universal knowledge are challenged by establishing more diversified models to analyze the relationships of heterogeneous knowledge systems. She focuses on the complex articulation of knowledge systems through viewing the process of social negotiation involving multiple actors and complex power relations. She notes that the arguments of local knowledge as traditional knowledge, intimately linked to a particular place, transmitted from one generation to another, and going from practices to practices, could not explain the situationality of knowledge involved in the struggles of development and power. Local knowledge should thus be analyzed in a certain situation with multiple forms of domination and hybridization.

In my thesis, I will not focus on how local knowledge is integrated with scientific knowledge. Rather, I aim to point out the contradictory perceptions of natural resource management by the state and the local people. These different perceptions lead the state to enforce certain policies on the local people. Through

their researches, several sociologists/researchers have helped local people to expand the actual role of local knowledge in the state's natural resource management. However, the state still has a strong bias in favor of scientific knowledge. As a result, scientific forest management is imposed, and local knowledge/practice is still neglected.

### 2.1.3 Local Knowledge and Cultural Landscape

Most studies of local knowledge focus on intellectual rights, customary rights over the resources, and local property regimes, etc. However, I contend that cultural landscape is significant to study because it expands our understanding of the relationship between human and nature. In addition, with this approach, we can understand the cosmology of the local people, their management over the resources, and their identity.

Referring to local knowledge as “traditional ecological knowledge”, Chaperkie (1996) mentions the resource management practices of local communities. Looking beyond the technical content of knowledge, he focuses on the cultural aspect of the local knowledge, examining the link between man and cultural landscape, knowledge and locality. According to him, local knowledge has the same grounding of cultural diversity in locality and its connections with biological diversity. He identifies the need to understand the ‘cultural context’ of knowledge. According to him, local knowledge reflects a range of observations, information and interpretations made by local people.

Milton (1996) looks at cultural belief of local people and recognizes that it plays an important role in resource management. For instance, she contends that in the eyes of the Kogi, the world was created by the Mother; her son “Serankua” created humans who have responsibility to look after the world and to care for everything in it. Kogi people's ethical considerations over resource use stem from this belief. For instance, if they want to fell a tree, they have to discuss it with other villagers carefully and may make some offerings to spiritual forces. They are not allowed to waste wood or other agricultural products.

Along the same vein, Morphy (1995) argues that there is a close relationship between landscape and ancestral past of the aboriginal people in Australia who believe in reincarnation. "They recognize the existence of ancestral forces in the land, and they feel the spirits of generations of the dead in the surrounding land" (loc.cit., p.186). He states that in the aboriginal society, every place, every ceremony, every creature on the land is cemented with mythological stories as original histories. The physical form of the earth was created by ancestral beings. As they traveled, they made the landscape of hills, valleys, rocks, pools and streams, the plants and animals that inhabit the landscape, and the elements on which all life depends. Many ancestral beings were themselves embodied in landscape features located at their journeys' end. They also created ceremonies to ensure the perpetuation of the environment, and sites where ceremonies should be performed. Generally, each aspect of the landscape can be linked to ancestral beings and it reminds human beings to remember their historical origin. Moreover, the Aboriginal people believe that their life depends on how they behave toward their ancestor's creative acts. Therefore, their actions over the land and their moralities of land use are determined by such beliefs. Responsibility for the continual recreation and protection of the environment is distributed among Aboriginal clans according to their ancestral ties. All living Aborigines are considered to be reincarnations of ancestral beings, and each clan is responsible for continuing the work initiated by its ancestors (loc.cit.).

Also looking at aspect of cultural landscape, Kahn (2000) points out the relationship between the Tahitians and land. She recognizes that the Tahitians perceive land as a nurturing mother of human and that the genealogical ties to land define their personal identity and social relationships. For the Tahitians, their ancestral past and their current life are grounded in the relationship between people and land. When a child is born, his/her mother will bury the placenta and umbilical cord in the ground where they live so that the land can take care of the child. They contend that the land feeds them; it provides them with means to survive and care for their offspring. In addition, it provides them with a moral and spiritual feeling of identity and genealogical connection because many of the land's topographical features were imprinted by their ancestral movements and settlements (loc.cit.). As a result of these beliefs, the Tahitians take responsibility for caring for the land. For



that reason villagers protested the French government's decision to test a nuclear bomb in this area. Villagers claimed that the explosion would disturb and violate their sacred sense of the place, like a "missile of death in their mother womb". They therefore reacted passionately against the nuclear testing programs.

## 2.2 Marginalization

When talking about marginality or marginalization, ordinary people often think about the physical distance. But social scientists do not stop at that level, they rather use the concept of marginality or marginalization to understand the invisible and abstract power relationship between different actors in society. Burton and Kagan (2003) describe marginalization as follows

Marginalization is a slippery and multi-layered concept. Whole societies can be marginalized at the global level while classes and communities can be marginalized from the dominant social order. Marginalization is a shifting phenomenon, linked to social status. So, individuals or groups might enjoy high social status at one point in time, but as social change takes place, they lose this status and become marginalized. Marginalization is at the core of exclusion from fulfilling and full social lives. People who are marginalized have relatively little control over their lives and the resources available to them; they may become stigmatized and are often at the receiving end of negative public attitude

(Burton and Kagan 2003:2-3)

With a more abstract level, Rose Uchem (2001) contends that

The term marginalization derives from the word margin, which in turn is to be on the edge, at the limit and on the fringes and so on. Margin is related, conversely, to space and freedom, in terms of scope, franchise and self-determination; in the sense of being unlimited, unconditional and so on.

(Uchem 2001:2).

We can draw from these two definitions that it is a relational concept, involving a social construction. In addition, to be marginalized is to be limited in scope, space, freedom of operation and the right to self-determination; to be marginalized is to be excluded and isolated.

Reviewing the concept of marginalization, I found that it applies to two dimensions. Firstly, some scholars are interested in how development brings about marginalization, primarily through class differentiation (Scott 1985, Karson 2000, Li

1999). Secondly, some scholars look at marginalization in the context of nation-state, where it occurs as a result of resource control. For instance, when the state declares forest as a protected area, they exclude local people out of the resource through the strategies of territorialization, mapping, etc. Therefore, marginalization process is also a process of constructing power relationship

### 2.2.1 Development and Marginalization

Escobar (1995) points out that marginalization of Third world countries is a result of unequal development process between the First World and the Third World. He contends that development is not simply an instrument of economic control over the physical and social reality of Asia, Latin America and Africa. It is also an invention and strategy produced by the First World about the 'underdevelopment' of the Third World countries (Escobar 1995). He claims that development has created marginalization by defining poor countries through comparison to the First World. While Escobar observed marginalization at the global level, his perspective can be applied at the local level to see how the development marginalizes the poor.

Karlsson (2000) describes how development causes the marginalization process in Bengali society. In the eyes of the Bengali ordinary middle class, forest and forest community are defined by a lack of culture and decent way of life. They consider forest tribes their burden and responsibility. Therefore, they create many development programs for the tribal areas, which has not improved the situation, but rather has led to further deterioration. Karlsson contends that this is because large-scale development projects like dams, mines, roads, etc., serve the very class of developers rather than the poor people. The implementation of these programs only aims at uprooting and evicting the tribes out of their land and forests.

Like Karlsson, Scott (1985) recognizes that the development causes marginality, but Scott claims that marginalization is a consequence of unequal economic growth among social classes. He contends that the introduction of high technology widens the gap between the rich/landlord and the poor/landless. When the rich/landlords have capital to invest in production and mechanization, the poor/landless villagers find themselves "cut adrift and marginalized" (loc.cit. p.76).

Their manual wage labor, their primary source of income and livelihood, is replaced by machines, so their employment becomes needless. In some cases, local people are still pushed to the margins though they have their own capital such as land. This is because the political economic pressure changes the ecological situation and the poor do not have enough means to adapt to the changes. Blaikie (1985) considers the case of soil erosion, which he argues is due to the impact of political economic changes. He contends that the inequality of state policy, along with new ecological conditions have marginalized people from land resources, causing them to lose both physical and social space for their survival. Therefore, it is contradictory in development process. Objectives of development are to improve of the living condition of people, to reduce poverty, and so on, but the very development process creates the marginality. It impoverishes the poor not simply in terms of material but also spiritual life.

### **2.2.2 Marginalization and Resource Conservation**

Marginalization is caused by not only the unequal development but also ideology of nation-state on resource conservation. Departing from the above scholars, Pinkaew (2001) uses the case of Thailand to demonstrate how establishment of a nation-state with demands for territorial control leads to the marginalization of highland people. In Thailand, the enforcement of new administrative structures in the process of centralization made territorial control increasingly important. Together with the creation of a 'geo-body' (Thongchai 1992), the modern Thai state used ethnic classification as a technology of power to construct the Thai and the non-Thai. By this racial differentiation, the state has created discourses to show the non-Thai is 'uncivilized' in opposition to the 'civilized' Thai. From this we can see that marginalization is expressed through rhetoric of the dominant toward the marginalized. The term "hill tribes" is used in a pejorative sense to show those who live in mountainous areas, those who carry out shifting cultivation, opium production and migratory behavior. Though hill ethnic groups are very diverse, they are still "lumped" under the same category, hill-tribes as forest destroyers. However, according to Pinkaew (2001:5), marginalization is an "integral part of the process of nature-making" forming the 'protected areas' ideology. She contends that

“marginalized people, in this process, are not excluded from the domain of the pristine landscape; on the contrary, their presence is acknowledged granted attention, and categorized into a fixed, malign entity overriding their actual history” (loc.cit., p.5). However, “marginalization is a negotiated process and any form of alienation or deprivation always carries with it the sources of contestation” (loc.cit. p.5).

From this practice, I would argue that the marginality is not a natural process but constructed by the powerful/dominant actors. As Pinkaew (2001:54) mentions, the “term ‘hill-tribe’ does not refer simply to groups of ethnic minority in highland who possess distinctive cultures of practicing particular types of cultivation, but rather has a quite specific geo-political implication”. Tracing back the ideology of nation-state formation that aims to assimilate all nations under one state, we can see clearer this intention of marginalization by the dominant actors. Therefore, under nation-state regime, those who are resistant to being “assimilated, not open to development, not willing to become civilized citizens ... not attempt to cross the line of inferiority are threat to the national security, and thus deserving punishment” (loc.cit.).

Together with ‘nature-making’, discourse of ‘scientific’ knowledge, and the hegemonic ideology of the nation-state, local knowledge is ignored. Local people, especially ethnic minorities, are pushed into the process of marginalization.

When ‘scientific’ knowledge is seen as the only orthodox knowledge, which most nation-states have imposed on local communities, local villagers will be excluded from the focus of their traditional knowledge. Local people, instead of having their living conditions improved, are marginalized from resources around them. Under these circumstances, the traditional cultural identity of many communities is threatened with extinction because it is associated with nature. Local people perceive nature as cultural landscape, as spiritual dwellings and their ancestral past (Reichel-Dolmatoff 1976, Morphy 1995). I think that marginalization of the poor is also a process partly engendered by the discourse that local people are backward and uncivilized. States have introduced scientific knowledge and technologies to the communities as the only solution without regard for the local knowledge. Therefore, local people are excluded from participation in decision-making process of development of their own life. They are expected to follow what has been externally



designed. In this situation, the control of knowledge creates marginalization because powerful actors take away the local rights to use their knowledge, and exclude local people from the process of development, or even their community.

When discussing the impact of state forestry policy on local people, how local people are marginalized from their resources and their traditional livelihoods, I will not see all villagers as a homogenized whole, but differentiated in terms of age, gender, class, and ethnicity. In addition, different economic, cultural or political aspects of marginalization will be very important to mention. Although much research has been done on "marginalization," most of them stop at level of livelihood-the visible physical dimension of material life. But I contend that an important aspect missing in previous studies is the reduction of ritual space. Indeed, if local people are deprived of resource access, their cultural life would necessarily be influenced. As mentioned above, since forest communities perceive forest as cultural landscapes, where they practice their cultural and religious activities and where they produce morality or ethics of forest use, it is important to consider how they behave to maintain such traditions under outside pressure.

There are different opinions about the marginalized people's capacity to resist domination and to maintain their lifestyles. Burton and Kagan contend that marginalized people have relatively little control over their lives and the resources available to them; they may become stigmatized and are often viewed negatively by the public. Their opportunities to make social contributions may be limited and as a result they may develop low self-confidence and self-esteem (Burton and Kagan 2003). This is true, but it does not mean that the marginalized are entirely powerless. Though the dominant groups in society impose ideology, control resources, and so on that lead to the marginalized class, it does not mean that the impact is always unilinear. Marginalized people have normally relied on local knowledge, customary laws, and social memory to respond to those who cause the marginalization.

In this thesis, I focus on how the marginality affects the cultural aspect of the Makong people. By cultural aspect, I refer to local knowledge on forest management, rituals, local institutions, morality. I will examine how the Makong people change all of these aspects to adapt to modern society.

### 2.3 Dynamics of Local Responses

Previous sections of the literature review mention domination by state agencies, the powerful class and the problems it causes for the local people. This study would be incomplete without consideration of such points. Practice is always complex, changeable, and animated. It is not simply unilinear relationship that the powerful control the powerless, somebody gives and somebody receives. Actors in society always have interactive relationships.

In development process, it is said that local people are marginalized from their livelihoods opportunities, and from space to construct their cultural identity and so on. But it does not mean that local people do not have any power and reaction. Though considered powerless, they rarely accept external forces passively. "The oppressed are not passive victims who uncritically accept the ideological justifications promulgated by the privileged, but that they resist oppression in many covert and subtle ways" (Agarwal 1994). Indeed, the oppressed and marginalized have their own responses in any context. In some cases, the responses are shown openly, while in others the reactions are hidden in everyday activities and in the behaviors of the oppressed.

#### 2.3.1 Adaptation

Bryant and Bailey (1997) contend that normally poor people have solutions to maintain their livelihood opportunities, but they always try to avoid any retaliatory action of powerful actors that might exacerbate their difficulty. They therefore often apply strategy of adaptation or measures that aim to minimize any adverse effects on them. For instance, they adapt to enclosure or environmental degradation by extending the time spent pursuing livelihood needs, or to utilize diverse 'coping' strategies including the modification of economic practices, the storage of crops from good seasons, the sale of livestock or the request of assistance from neighbors and relatives. In some cases, local people adapt by taking advantage of new economic opportunities generated by the capitalistic market that is called to be a 'partial reversal' (loc.cit. p.169). However, the strategy of economic reversal may lead to the

degradation of local resources and the increasing of their plight. This practice can be observed clearly in many parts of Third World. For instance, when cash crops were introduced to Central Highlands of Vietnam, many ethnic households engaged in intensive cash crop production. But the result shows that many of them become poorer and even landless because they are not able to cope with fluctuating price. At the same time, the depletion of local resources such as soil erosion, deforestation, and so on becomes more and more serious. When resources are exhausted, and the local people feel that they have no livelihood alternatives, they may decide to migrate to other areas (to deeper forest, or to urban for wage labors, etc.).

The case of fishers in Tonle Sap Lake in Cambodia can be illustrative for the above theory. Piseth (2001) discovers that under the exclusion of fishing policy of Cambodia, marginalized fishers have flexibly adopted various important strategies to sustain their livelihoods. One interesting strategies is that individual fishers have articulated relationships among kinship groups or have set up networks with customers or patrons to strengthen their potential resource access. However, not all fishers can apply this method because it requires certain capacities and potentials (loc.cit. p.145).

However, local people do not always choose strategies of adaptation in the environmental changes. In several cases, they fight against those who wish to dominate and marginalize them. This local resistance also expresses into two forms. One form is organized collectively such as colonial peasant rebellions, contemporary peasant movements, and protest demonstrations. The second form is called 'everyday forms of resistance' by Scott (1985) and Peluso (1992).

### 2.3.2 Everyday Resistance

Scott (1985) in his book *"Weapons of the Weak"* uses the term 'everyday forms of peasant resistance' to describe the struggle between the peasantry and those who seek to extract labor, food, taxes, rents, and interest from them. However, Scott does not stop at level of struggle over work, property rights, or food, but focuses on

the struggle over ideological domination among different classes in society. He contends that

the struggle between the rich and poor is a struggle over appropriation of symbols, a struggle over how the past and present..., a struggle to identify causes and assess blame, a contentious effort to give partisan meaning to local history

(Scott 1985:xvii).

When the poor are dominated and seriously suppressed, they react not only through overtly contested movements but also through the individual covert acts and behaviors. Though their reactions are varied, all can be seen as efforts to resist the economic and ritual marginalization they have to suffer (Scott 1985). Similarly, Peluso (1992) shows in her book *Rich Forest, Poor People* that local people in Java responded to 'scientific forestry' in various ways encompassing illegal extraction, non-cooperation with state officials, arson, etc.

In contrast, Moore (1996) looks at the symbolic struggle of the Kaerezi people to against the Zimbabwean government. The Kaerezi use nationalism to claim their ancestral rights over the land when all land in Kaerezi in Zimbabwe was officially designated state property and administered by government officials and the scheme's resettlement official. Local people use social memories, such as their participation in the liberation revolution, how they supported and secured the current President of Zimbabwe from the enemy, and so on. All of their stories demonstrate that they make great contributions to the country. They construe this as a justification for legal rights over the land. By looking at the historical context of development in Zimbabwe, Moore (1996) also shows the struggle over the land rights of local people as a discursive practice. In order to control the resources, different powerful agencies rely on discourses to legitimize their rights. But at the same time, local people also have their own discourses to use against those powerful actors.

The above scholars focus on the class nature of resistance, particularly on the encounters between poor peasants and landlords. However, I contend that resistance is individually expressed. Not all members of the same class have the same perception and reaction toward outside intervention. For instance, men and women have different perceptions because of their different positions in family and



community; their reactions to social changes are not the same. As Agarwal (1994) argues, women's forms of resistance might be different from those of men because their social positions and points of views are not the same. Women's resistance could have a dual dimension: against the class character of economic and social oppression and against its specific gender aspects, both within the household and outside it. To look at women's resistance, and their form of contestation, Agarwal (1994) suggests that it is necessary to consider everything from individual acts of covert non-compliance to overt confrontation by women's organizations. He contends that the situation of disaffection reflected in women's everyday forms of resistance provides necessary grounds for mobilization on a mass scale, that is, for progression from a situation of individual-covert to group-overt forms of contestation and resistance.

Therefore, local responses to outside interventions vary within the community. There is a difference between men and women, between the young and the old, between the rich and the poor, etc. In Makong community, when their forest was enclosed as a protected area, and influenced by market economy, some young men engaged in timber logging and game hunting for trading, or become wage labors transporting illegal forest products. Women seemed to ignore what happened in their forest, never reporting to police the many outsiders they see come to exploit illegal forest products. They know that a report just fills pocket of the police, without improving their forest protection. Meanwhile, some old people recognize the state challenge to their future forest resource access; they have started to set up permanent hill-gardens in compliance with the state's demands rather than attempting to circumvent the state.

### **2.3.3 Ritual Practice as Local Responses**

While the concept of local responses has been popular, few researchers focus on the ritual aspect. I contend that responses are also expressed in how the local people construct their ritual practices. Comaroff (1985) and Komatra (1998) identify the ritual and symbolic resistance of marginalized people. Recognizing ritual practice as power, they seek to explore how ritual constitutes an important cultural form in which counter-hegemonic consciousness is codified.

Comaroff (1985:78), in her study of the Zionist movement in Tswana society, focuses on mythic and ritual constructions which can be used to 'grasp, condense and act upon qualities' in the social and material world (loc.cit.). She contends the force of ritual resistance is always compelling and its meaning is explicit because it provides an appropriate medium through which "the values and structures of a contradictory world may be addressed and manipulated" (Comaroff 1985:196). This scholar argues that modern Zionist signs and practices are the product of a dialectical interaction between indigenous social forms and elements of more general currency in the culture of colonialism. According to her, in some cases, the marginalized are prevented from overt reaction and attaining the level of open discourse, they thus use a 'subtle but systematic breach of authoritative cultural codes' to protest the domination (loc.cit.). Therefore, she suggests looking at ritual articulation process that involves domination and resistance, rather than just stops at the conventionally explicit domains of 'political action' and 'consciousness'.

In the same vein, taking ritual as an element of historical practices, Komatra (1998:36) examines the how ritual establishes an 'oppositional consciousness' in the Kui's collective memory. He argues that those who have been marginalized attempt to constitute symbolic resistance in the ritual domain to against the dominant sector. He claims that the Kui's resistance aims to "countervail and domesticate the alienating structure of control that has come to pervade their domains" (loc.cit. p.36).

Generally, when external forces affect the traditional livelihood of a community, there are certainly reactions from villagers. But how villagers express their reactions is not always the same. Villagers develop different strategies in accordance with their cultural, political and social contexts to tackle their obstacles. They may overtly or covertly resist, or find adaptive solutions in changeable circumstances. As de Sousa (1999) argues, since every individual has a point of view, a perspective, each has his/her own interpretation, apprehension of the world and own response to external forces. Moreover, they may convert their religion or change their ritual practice as an articulation with the modern society. Therefore, investigating the subjectivity of the marginalized or the powerless will help to explain their responses.

## 2.4 Conceptual Framework

Reviewing concepts of local knowledge and scientific knowledge, marginalization, and dynamics of local responses helps me to develop a conceptual framework for this research. First, I will look at the local cultural landscape and spiritual practices of the Makong people to point out the difference between state and local knowledge systems. By cultural landscape and spiritual practice, I refer to the ways in which the Makong people create meanings over the forest and nature and what kind of rituals they practice. In addition, I will examine how the Makong people reconstruct rituals and belief as an expression of local response to the state policies.

Secondly, I will examine the exercise of state power over forest that leads to the marginalization of local people from their traditional livelihood and cultural practices. I will observe how the authorities view the Makong people and their culture because it helps determine the way they intervene into local people's life. In addition, I will consider which technologies of power are used by the state to control the resources and people. Scientific knowledge in forest management and discourses painting local people as forest destroyers are used to exclude local people from the forest access and their traditional life. Moreover, together with the adoption of market economy, cultural meaning of the forest has been changed by economic activities. As a consequence, the cultural landscape of the forest has been changed. In terms of marginalization, I will focus on the spiritual aspects rather than the physical. I will consider how authorities manipulate local rituals in ways that lead to the exclusion of local people from their traditional belief and values. I will also trace to the change of local institutions and traditional morality.

Thirdly, the concept of dynamics of local responses will guide my analysis of local reactions to the marginalization. I contend that people, as agentic subjects, do not passively suffer the external forces; they will find solutions to deal with the new context. People will not always conform to or resist the domination. In some cases, they may attempt to adapt through strategies of negotiation or partial participation. But in other cases, they may protest to regain their equality. In this thesis, I will look at different levels of local responses by analyzing local people's view toward the authorities and changes in their livelihood strategies. In particular, I will look at ritual

practice as local response. I will examine the way that people transform their rituals and use social memories to deal with the domination to see how the traditional life of the local people is affected by the pressure of outside forces.

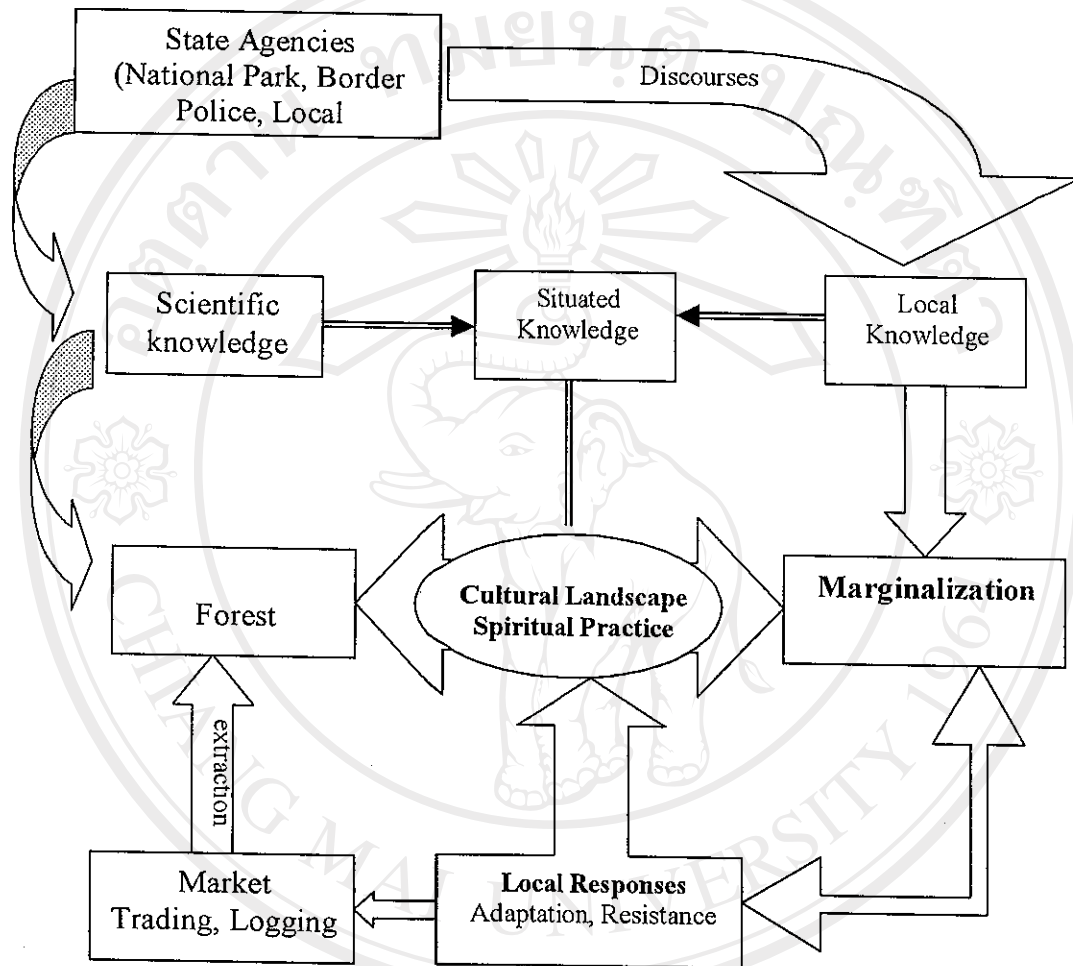


Figure 2.1 Conceptual framework