

CHAPTER VII

CONCLUSIONS AND RECOMMENDATIONS

This thesis is concentrated on NTFP commodity chain that neoclassical framework applied to analyze economic activities and networks with broader notions of local economic, politics and culture in order to understand how the chain are organized locally. Besides, it intends to address the issues of how to explain ecological and economic development and sustainability management at the local level under the recent trends of commercialization and globalization. To link those factors together, the commodity chain approach, which incorporated applicable and realistic theoretical notions, broadened understandings of access and institutional dynamics, was adopted in analysis. This conclusion draws a numbers of the key findings, and then discusses those findings in relation to relevant theories. The policy recommendations are also made. The final section presents limitations of this study and suggestions for further research.

7.1 Major Findings of this Study

Through empirical data on the commodity chain of NTFP extracted by Huibinhe community in Nuozhadu Nature Reserve, this study generated a great deal of crucial findings.

First, this study has analyzed the significant role of NTFP in local, regional, national economic and ecological development. Those roles emerged for a long history and increased accompanied with market liberalization. Bamboo shoots, for instance, had played a key role in local livelihood to resolve food shortages before Chinese market reform. Later, after the establishment of nature reserve, bamboo shoot products continue playing a key role in local living-standard improvements to reduce the negative impacts of nature reserve establishment. As compared, tapping resin are

practiced after the market opened; however, its role in local, regional and national economies grew rapidly. In turn, it contributed to ecological conservation. Tapping resin, for example, had to wait to the full-grown tree to ensure the production. Hence, as the alternative to timber production, villagers have some incentives to protect pine tree. At the regional level, in Yunnan as a relatively poor province in comparison with coastal region, NTFP development has contributed to the local economy as well as national development. Thus, it has been observed that NTFP utilization actually lead to local, regional and national economic and ecological development.

NTFP development and utilization has also associated with the development of terminology. This study found out that there are no local terms like NTFP or NWFP in Huibinhe community. Rather, villagers treat the ecosystem as a whole by mentioning specific species. The categorization of NTFP or NWFP is rather vernacular than academic. However, the development of terminology reflects the development of non-vernacular people's understandings and attention to NTFP researches, development and policy making.

Second, policies on market liberalization and globalization make NTFP as the alternative use of resource possible, by creating more options, potentials and opportunities for local diversification of resource use. It also contributed to NTFP development in term of both value and diversifying use. Associated with commercialization and globalization, there was also technology introduction and advocacy for creating "new" NTFP utilization (e.g. resin tapping practice). Moreover, this study also found out that some local villagers who are sensitive to market tend to be less dependent to forest. Many of them raise livestock and relocate to the place, which are easy to trade their products. Thus, it is clear that commercialization and globalization had demonstrated some positive aspects to provide more alternatives to households and local economic development.

However, the market expansion has also some negative impacts on local environment, and undermined local traditional institutional arrangement of NTFP, and further led to forest degradation. Bamboo shoots tenure system in term of inter-community boundaries, for instance, had been broken down, after commercial NTFP emerging. State titling activities caused unclear property rights with respect to NTFP resource. As a result, tenure system of NTFP is *de facto* open access. Owing to unclear tenure system of bamboo shoot, as the study showed, there was actually overharvesting, which inevitably led to bamboo forest degradation. Market intervention associated with poor policy applications could have threats to local environmental sustainability.

Thus, under the circumstances of market expansion, local institutions and organizations responses in establishing a joint management institution can be a form of adjusting market intervention. On the one hand, it decentralized usufruct of resource to local community so as to create incentives for economic development and efficient resource extraction. On the other hand, joint management institution initiated a new tenure system to prevent overuse of the resource. Rule and regulations are applied to guide harvest and trading, and to ensure sustainable resource use. Thus, the external factors and market require local officials to give more attention in NTFP to improve their managerial arrangement to be more comprehensive. Besides, externality such as the Sino-Dutch project also introduced participatory approach in the process of institution building and organization, which has encouraged a new process wherein multi-stakeholders discussions to ensure an actual practice of joint decision-making. It is also observed as an initial step to form local institutional pluralism, since it combines both current tenure and traditional tenure arrangement.

Third, commodity chain of NTFP is actually complicated and dynamic. The chain is generally organized and regulated by several different institutions and mechanisms. The outsiders, in this case, have played a major role to commercialize NTFP extraction. Further, local traders tend to challenge those chains through the process to formulate

“social and geographic identity”. Thus, the network of social actors in the chain is the network of institutions, which underpin and shape how the commodity chain organized. It is concluded that the commodity chain approach is an appropriate tool to analyze and identify not only the social actors’ involvement and benefit distributions, but also to understand the networks of institutions and mechanisms along with the chain. In this case, two NTFP commodity chains were examined. Therefore, the complexity of commodity chain is not only the various differentiated social actors’ involvement and distribution of income, but the networks of local institutions. In addition, the institutions are confronted with contestation, challenge, negotiation, adjustment and maintenance, which manifest the dynamics aspects of commodity chain.

At the local level, social geographic identification is a key social mechanism, which guides and shapes the commodity chain. Local traders group with local people by identification process to strengthen local identity, which is mainly based on the territory of Simao prefecture. The dialectical process of identification associated with the activities of negotiation with both government and outside traders for priority of market access, and later struggle for the maintenance of priority access. In turn, outsiders also challenged this institutional arrangement. However, it is clear that the process of identification as a response to trends towards globalization indeed enhanced local access and control over market. Thus, local institutional responses in the form of social and geographic identification promote the charges in power relation at local level.

Besides, being a form of social mechanism, social ties also play a role in guiding and shaping the commodity chain. Social ties in economic relations among actors exist in various types, which are composed of patron-client relations, kinship, friendship relations, economic partnership relations and so forth. Each of those ties enable people to be involved in NTFP commodity chain, then access to benefit from NTFP marketing. People’s action to tie with each other is a form of benefit sharing, however, it is difficult to identify whether this benefit sharing is fair or unfair from the viewpoint of outsiders.

But, it is clear that the negotiation process tended to challenge the patron-client power relations. That action might have made further steps for local traders and local farmers to gain more power. Besides, by tying with each other, local traders' power was generated and strengthened for negotiation, which lead to dynamic aspect of social ties.

Forth, local people and trader's economic performance, practice and decision-making are guided by both price-based and non-price-based mechanisms. In addition, both mechanisms are shifting in responses to commodity chain. Shifts might be depended on the species local people traded, the person local people do business with, which is different from the macro circumstance of transformation from non-price-based mechanisms to price-based mechanisms. Local negotiation activities promote the shifts to fit the local situation.

Fifth, the homogeneous concept of "middleman", which refers to the traders in the middle between extractors and consumers, is problematic. The traders in both NTFP chain—resin and bamboo shoots--- are actually diverse and differentiated, in term of benefit they reap, functions they provide in the chain, social identity they have and power they carry. In addition, different traders are guided by multiple institutions in the chain. Furthermore, this case study has demonstrated that traders or "middleman" are not always parasitic intermediaries who can accumulate wealth at expense of poor forest dwelling extractors. The incomes they reaped are varied in both vertical and horizontal dimensions, and even within groups at the same level the income distribution are skewed. The benefits that some of them can earn are just a bit above subsistence, and some of them are even in debt. Moreover, elimination of some traders should be considered carefully, since some of them are providing a crucial function to stimulate in commercialization and globalization process of NTFP, such as providing information, credit and processing, and sharing of certain risks.

7.2 Theoretical Discussion of the Findings

Based on a single village case study, the following discussion is intended to raise further questions or some observations for further studies and concept applications. My statement does not aim to make any generalization on market and commercial NTFP. However, the study has provided many interesting observations which relate to current theoretical debates on neoclassical and institution schools and approaches. The findings of this study present some discussion on social and economic theories.

First, the abstract concept of “market” has been simplified as “place” in common understanding is problematic. At macro-economic analysis level, the concept of “market” has been almost solely used by the economists who generally establish a number of assumptions and mathematical model analysis. In development studies, a concept can be applied to produce good results based on empirical data on actual ongoing process occurring within local contexts and all linked levels of regional and national system. A complex market actually is a dynamics of interactions and institutions¹. These have been demonstrated throughout the analysis of this study in Yunnan Province.

In current economics theories, the economists tend to refer market as demand; this understanding is attributed to supply surplus; thus, to fulfill exchange activities seeking for demand is most important. However, at empirical level, local terms on the market contain a complex concept. It generally refers to an articulation or a link of supply and demand, rather than the places or volumes of demand. In actual situations, there are no such a place is market or demand can be sought without the articulation of supply and demand. Therefore, the interaction is most important.

¹ This argument source from author personal communication with Dr. Uraivan Tan-Kim-Yong.

Moreover, in this study, the articulations are actually regulated and varied by local seasonal calendars. Therefore, the underlying concept guiding actual market is local institutions. In the other words, the articulation of supply and demand is determined by local institutions and their links. As Clammer (1993) indicated, market is more like institution, rather than place that is physical market. The institutions guide the various differentiated social actors engaged in marketing activities and their performance. Nonetheless, it should be noticed that there are no simple institutions working there; instead, there are various cross-scale institutions co-existing and overlapping. However, neoclassical theories do not identify the multi-institutions. The theories only rely on price-based mechanism as a single factor with an assumption on competitive price structure and profit. The market then guides social actors' marketing behaviors. Consequently, market or the articulations of supply and demand, in neoclassical theories, are referring to capitalism market.

In term of commodity chain analysis, therefore, neoclassical perspective is dominated by the distinctive features---“price-based mechanism”. However, in other perspectives, anthropologist focused on the culture-based in commodity chain organization (e.g. Scott 1975), and political scientists apply commodity chain analysis with political emphasis (e.g. Le Bill, 2000). This study had found that the organizing commodity chain is more complex than those explained by single theory, such as neoclassical theories, anthropological moral economy theories, and political factor in political sciences. Rather, there are some combinations of various institutions guiding the organizing commodity chain. The international agencies or global trading entities are also key actors who play a key role in commodity chain, and add to a complex market structure.

In addition, at each level of commodity chain, there might be many factors affect and shape commodity chain with price-based and non-price-based mechanisms, and all levels of the chain are affected. Cultural morality, economic rationality and political

negotiations and claims are all important factors. At local level, cultural factors have strong influences on benefit sharing on their exchanges. Cultural base----“social and geographic identity”---is claimed for priority of local groups, but eventually are accomplished in maintaining the access to commodity by political action in negotiation with authority. Thus, there are cultural-politics and political-culture occurring to provide a context for all rational calculation in commodity chain, as Gudeman (1992) pointed out. It also verifies that Gudeman’s “practice model” is helpful tool in commodity chain analysis, rather than reifies mortality, rationality and politics at the first place of commodity chain analysis.

Second, this study also provides better understanding of the concept “access”. For the neo-political ecology school and most of property-oriented development project, the access refer to the rights to benefit from thing, as reviewed in literatures (see Chapter II). In this case, at the local level, the villagers who have access to NTFP can earn benefit in their livelihood strategies. This case study also indicated that the access rights could not exist without reinforcing responsibility and monitoring. Thus, taking property perspective into analysis, at community level, access is the rights, which is transformed from *de facto* to *de jure*, and it is associated with multiply mechanism for enforcement of the rights. To avoid abusive use of power, the joint management institutions initiate a practice of responsibility allocations and monitoring. Besides, in this case, spatial and temporal arrangements of property also constrain access rights. Thus, in case of NTFP, access are not solely controlled sphere of right claims. They are subjected to various institutions, and mechanisms.

Broadly, Ribot and Peluso (in press) argued that the access is “ability” rather than “rights”. However, it is encompass property rights. Through mapping access along with commodity chain, the empirical data support this argument. At local level, resources access (rights) can gain benefit, but the benefit actual are generated from market (market access). Therefore, understanding of access should be broadened. At higher

level, the company and traders can reap the benefit from commercial NTFP, through their access to better information, knowledge, authorities, export rights, quota and so forth. Besides, the traders at the middle level, should have good ability in organizing products to ensure their maintenance of access to commodity chain.

Therefore, in commodity chain analysis, access means ability of individuals or groups, rather than their property rights. But, notably, Ribot and Peluso (in press) focus on the property rights of access and distinguish access (ability) with rights, which is property right in their argument. In this case study, there are also considerable market access rights, which restrict actors' access to market. Those rights are composed of transportation license, export rights, quota system and so on. Thus, when we analyze access to market, we can not simplify access as ability of trader only. Rather, a complex market access rights guide peoples' ability. This should be concentrated on and distinguished from property rights. Therefore, Ribot and Peluso (in press) indeed make a good argument to define access in a broad understanding. And what I focus on market access rights is also included in their broad definition.

Moreover, the dynamics aspect of access control and maintenance (Ribot and Peluso, in press) provide a useful framework to better understand the underlying institutions and structure underpinning access (ability). It also verified Uraivan's (personal communication) argument that ability (access) to benefit should be concerned that human ability is actually structured and embedded with social relations and hierarchies. Therefore, the access to commodity chain is restricted by economic and extra-economic, political and extra-political, cultural and extra-cultural, legal and extra-legal mechanisms. Ribot's (1997) access mapping offered me the helpful tools to examine the complexity of those mechanisms. Therefore, to understand resource access and market access, it is better to examine the underlying structure and institutions. This will broaden our perspective from rights approach to ability approach.

Third, for institutions, this study had demonstrated that institutions are built under various conditions and situation. The institution generally guide not only the resource management patterns, but also market activities. Therefore, as Leach, et al. (1997) and Agrawal and Yadama (1997) argued, institutions are mediators between human, organization and environment. Through understand institutions, the impacts of both market and population density on natural resources can be explained. Thus, when we attempt to identify whether it is “malignant market” or “gilded market”, it is significant to examine how institution respond to market. This is for people to take advantage from it or to avoid negative impact. Hence, there are no such a “malignant market” or gilded market”; instead, there are only “malignant institution” or “gilded institution”. Therefore, regulations which are endogenous feature of market (both state and non-state forms) should shift debates from their current focus on “more vs. less” regulation to the study of “better vs. worse” of regulation (Ribot, 1997), since there are no such a so-called “free market” at all.

Furthermore, in most literatures, scholars identified the institutional dynamics through “*rule-in-use*”, “*regulated practices*”(Ostrom, 1998; Leach et.al 1997; Agrawal and Yadama, 1997), which attempt to distinguished from a set rule. In the other words, people do not follow the rule rigorously, rather everyday performance is in the way to recreate institution. However, this study showed that it is inadequate to examine how people use the *rule in practice* to understand the dynamics of institutions. Between *rule* and *rule-in-use* there are gap to explore institutional dynamics. It is how institutions had been contested, protested, maintained, readjusted, negotiated, that could explain a process of institutional dynamics. The process should be emphasized, rather than examining how people use rule.

Fourth, this study also found out that role of “social and geographic identity”² in

² “Social and geographic identity” in the sense of Chinese culture refer to identity which people self-accepted that they come from the same motherland which can be broadened as same nation or

regulating the access of market. In the context of China, local “social and geographic identity” in guiding market access is treated as “Regional Protectionism” by outsiders, which is viewed as the constraints of socialist market development. It is because the neoclassical narrative blame protectionism is barriers of free market, eventually limited competitive mechanisms and efficiency of resource allocation. However, the so-called “Regional Protectionism” actually is practiced everywhere throughout the world. There are also maintenance and negotiation process of this “social and geographic identity” to let “natives” take advantage in the trading at local, regional, and global levels. This study had indicated this process in local and regional levels. At global level, there are also market protectionism between European Union and China in this case. For instances, the quota system set up by European Union aims to protect European domestic industry. China’s entry WTO, another example, needs a successful negotiation with various trading entities, particularly United States. The United State tends to protect their textile industry by applying high tariff on China. On the other hand, China tends to protect their car industry by slowing down the pace of market opening. Therefore, the “social and geographic identity” had been embedded in trading activities at multi-levels and scopes to protect “native” economy from outside impact. Moreover, at local level, it is a mechanism to safeguard the local people’s benefit.

“Regional Protectionism” with the connotation of constricting free market is the narrative used in China by the economic powerful actors (the eastern traders in China) to promote their access to a weaker regional trading (the western region in China). More

narrowed down as same village depend on the scope. This is regardless of ethnicity, gender and age. In Chinese, “*laoxiang*” demonstrate this kind groups of people. “*lao*” refer to old; “*xiang*” refer to township which is element of administrative structure. In actual practice, it is flexible in the sense of who is “*laoxiang*” of who, which depend on the scope and context the people facing and talking about. During my field survey, I found out there are no such term of “*laoxiang*” in research village before the establishment of People’s Republic of China; however, people are feeling that they have close relationship with the person who come from or born in the same place as they. In this sense, the nation-state building and modern mapping indeed impact on how people grouping themselves. In particular, China is the country with ethnic diversity, in the context of modernity and co-existing diverse ethnic groups, social and geographical identity become “new” standard of people grouping themselves.

broadly, at global level, the economic developed countries also use this narrative with the meanings to promote free market which aims to gain market access to the developing countries' market. In this study, "social and geographic identity" indeed improve the benefit distribution locally; in the other word, it promotes developing regions benefit distribution. As the result, the practice of "social and geographic identity" (identification process), in fact, balances the spatial income distribution between developing and developed regions.

Besides, to well understand how social and geographic identity is practiced is important to examine the process of identification. Making insight into identification are attempts to understand the process of how people grouping and identifying themselves in the making of modern world, as Sahlins and Scott (2001) argued. Therefore, identification is a dynamic and dialectical process, and in the contrast, the concept of identity is more like essentialism. This process involved different people's negotiation activities for identification. However, in this study, there is no clear distinction between official and vernacular identification, in term of struggling market access. Rather, in the process of vernacular identification, officials facilitate and recognize their identity, and then help to strengthen and maintain it. In the contrast, outside traders negotiated and challenged this identification process. Thus, in the process of identification, there are always negotiation and struggle for changes of power relations. The complex and dialectical process is interesting for further observation and study.

7.3 Practical and Policies Recommendations

In this section, I aim to suggest several practical recommendations based upon the findings of this study. It also is expected to support the implementations of the Green Economy Polices and "Opening and Developing West" Polices

First, as the findings show, the attention on NTFP, as a key component in rural

economic development and conservation, had been increased rapidly under the current trends in commercialization and globalization. The government is aware of significant role of NTFP. However, their consideration focuses on economic sphere. In particular, within the current issues of logging ban implementation and nature reserve establishment, central government as well as provincial government should start to plan and design NTFP policies and a guideline of NTFP management and development for all protected area.

Second, regarding technical issues, as the study showed, in resin commercialization process, the government has introduced technological training, and at current time government still invest in its technical development, in term of tapping skill. However, for bamboo shoots, government highly rely on market mechanism to motivate the technical improvement. Therefore, there is an absence of technical training at in community level. However, it is widely known that selling bamboo shoot is low value-adding usage of bamboo. Thus, to improve community development, local government also should invest more on training alternative processing and utilization. It will be contributed to advance bamboo utilization development and ecological conservation.

Third, this research presented how local groups manage NTFP in cooperation with government. Thus, joint management with participatory approach is suitable institutions to achieve rural sustainable development. The management can meet needs of rural heterogeneous groups and changing social, cultural and economic conditions. In particular, building up several types of property regimes with consideration of spatial and temporal dimensions, rather than simple and clear-cut, geographic-based or land-based property arrangement, would be more effective way to manage NTFP. Also, local institutions and clearly defined access arrangement can reduce negative impact of globalization and commercialization. Therefore, with the recognition of local tradition and participatory approach, joint management and local institutions are critical approach for government implementing resource management strategy.

Fourth, with respect to the current issues of market reform, Chinese always ask how intensive it should be, how extensive a free market should be opened? The implication is what is the role of government in market. This study has partially presented the understandings of government role in market. The crucial role of government is to prevent a conditions of “market failures”, such like environment issues and uneven development. Practically, in this case, the export right system should be abolished, and replaced by application system for monitoring enterprise activities in international trade, rather than restrict some qualify enterprises by examining system. For the quota allocation system, competitive bidding system should be implemented as soon as possible. Those are expected to reduce uneven distribution among regions and actors. For the price system in resin trading, this case had indicated how government facilitated rural development, which aims to reduce the gap between rural and urban. Even though it system had the negative impact on urban society, it is the readjustment of consequences of previous urbanization and industrialization. Thus, central government should consider using price system to reduce to gap between urban and rural without reducing the incentive of actors.

Fifth, this case also promotes the idea of how to manage ecosystem through management of local market. However, its practice is so costly. Thus, as the leader of Simao County Resin Factory, alternative to management ecosystem through control management directly is to establish an effective taxation system. Although there are taxation system in local, it is not effective in term of managing market. Taxation as the tool to adjust supply and demand, punishing extra-marketing activities, reducing uneven development is crucial. On the other hand, the effective taxation system might well further stimulate the environmental improvement.

Sixth, a formal tax system is an indirect return benefits to local communities. An alternative to taxation system for improving environmental condition should be

considered as environmental fund system. It is fund collected from the actors involving NTFP commodity chain and share environmental cost. The collected fund can return to conservation program, and then the process is monitored by those stakeholders. Thus, the trading actors can clearly understand how his/her contributed to environment, and how the contribution can assure their production in long-run.

7.4 Limitation and Recommendations for Further Study

Due to limited time, resource and finance, this research has experienced some field research problems as follows:

- 1) During fieldwork several methods and tools were applied to gather information based on the topic and the situation. However, rural society and commodity chain are complex, and varies from place to place and over the time. In particular, the rural economic structure and emerging market are influenced by different policies and global environment. Thus, it is sometimes different to properly apply these methods and tools to serve the purpose of a real situation. It is also difficult to collect complete information to fully understand the commodity chain within limited time and resource.
- 2) This study focuses on the commodity chain exploration. The commodity chain approach formulated in the literature (Chapter II) is a major approach in studying NTFP market links and cross-scale institutional links. Therefore, this study is an early step in research to apply and explore commodity chain approach for understanding commercial NTFP market and institutions. Due to the complexity of commodity chain in term of the actors involved in and its institutions, the study can only observe a part of the whole structure.

- 3) The investigation and research of this study are conducted based on one selected natural village. The findings of this research therefore have limitations for a broad generalization.
- 4) The focus of investigation products in this research are only two products on which the selected village high depend, and which extensively commercialized. Although other products are mentioned, there are inadequate findings to make conclusions on NTFP management and market.

Therefore, the further study on new problems and how the commodity chain change to adapt to the recent situation is the challenge for further in rural China studies. In addition, commodity chain approach to seek for cross-scale institutional links also is critical field to promote theoretical understandings of commodity chain approach. Moreover, NTFP study should be incorporated more ecological aspect to understand sustainable resources use for commercialization with the consideration of carrying capacity.