

CHAPTER 1

Introduction

1.1 Research background

Tibetans are an ethnic group in China residing on the Tibetan Plateau. Tibet is called 'Bod' in the Tibetan language and 藏族 'Zang Zu' in Han Chinese. They number 5.4 million and significant numbers of Tibetan minorities also live in India, Nepal and Bhutan. There are three subgroups of Tibetan people who, according to their Tibetan language dialect, reside in three regions: Amdo, Kham and U-Tsang.

In these three regions, the people are practicing Tibetan Buddhism, a religious belief system that is tightly related to nature. This has resulted in their having a strong awareness about environmental protection, causing them to take care of natural resources including the water, land, mountains and animals. However, in recent decades, Tibetan cultural and religious values and the traditional Tibetan way of life are facing change due to State-led conservation projects and market intervention. This is particularly evident amongst Tibetans who make their livelihood as herders on the Three Rivers Source¹ of Tibetan plateau located in Qinghai Province. The Three Rivers Source has been designated a protected area by the Chinese government, thereby forcing changes onto the Tibetans living in this region. Ecologically, Qinghai Province is the birthplace of the Yangtze, Yellow and Mekong Rivers; known to the Chinese people as the 'Three Rivers Source', 'Roof of the World', and 'Chinese Water Tower'. The importance of these rivers is that together, they contain the majority of China's total water source (The Peoples Government of Qinghai, n.d.).

Qinghai also is one of China's five major pastoral areas with 940 kinds of natural livestock and good quality of 190 forage varieties, which have high nutrition values. The livestock includes sheep, yak, horse, camel, goat; animals that are generally resistant to high cold. The yak is especially adapted to extreme cold areas

¹ Sanjiangyuan for Chinese term.

and one third of the world's yak population lives on the Tibetan plateau (ibid). The majority of Tibetan people depend on animal husbandry to sustain their livelihood. Traditionally, Tibetan herders graze the yak, sheep, horses, goats and cows to develop their economy. For example, animals will produce the milk, cheese, butter, meat, and yogurt as food for herders. In addition, herders will shave animals' fur if it grows very thick and long each year. They will use these furs to make Tibetan robes, which will be worn in the winter. Tibetan herders also use sheep and goatskins to make clothes as well. However, herders will not kill these animals; rather they are killed by other causes, such as wolves and snowstorms. In this case, herders will collect skins to make different clothes including robes, shoes and hats. Regarding the animals' food productions, herders will use extra cheese, butter, meat, sheep woolen and yak fur to exchange for barley, wheat and canola oil from Tibetan farmers.

For the herders' living style, they are different from Tibetan farmers due to having both summer and winter houses. The winter-house is their permanent house; its location will not change and the house itself is built with stones, wood, soil and bricks. The summerhouse can be moveable, because herders only use a simple earthen stove and bed as they only stay in the tent temporarily for the purpose of animal grazing. Originally, Tibetan herders stayed in the black tent, made from yak wool, which is well organized and has many functions to prevent from natural disasters such as storm, wind, rain and sun. But today, herders use white tents, made from canvas which is very easy to move and carry everywhere, but impractical against the storms and extreme cold weather.

Tibetan herders have a very intimate relationship with the animals they care for and the environment they live in. Tibetan herders give human names to their livestock and treat them similarly to human beings. Unsurprisingly, the children of the herders will play with the baby animals and make intimate friendships. The herders' children will even carry the baby animals to sleep and eat together with them if they think those animals need their care. Concerning the herders' surrounding environment, they have a strong belief causing them to worship local deities including the sacred mountains, rivers, and trees. An important aspect of their worship is not taking

anything from sacred areas. For example, herders will not dig for gold, kill aquatic animals, cut trees or hunt wild animals in these areas. Therefore, the environment and livestock have not only an economic meaning, but also has a cultural meaning in the Tibetan society.

In recent years, land degradation has become a major issue in China, affecting most parts of the Chinese rangeland including Qinghai Province, the Tibetan Autonomous Region, Inner Mongolia and Xing Jiang Autonomous Region. Since the early 2000s, the government of Qinghai Province has sought to protect the rangeland from degradation. To this end, they have introduced various conservation projects including fencing projects, eco-resettlement projects, pika² control projects and reduction of livestock projects. These projects have affected the livelihood of herders who are residing in the four Tibetan Autonomous prefectures of the Three Rivers Source, namely Yushu, Guoluo, Huang Nan and Hainan.

Specifically, I carried out my research in the Sanjiangyuan Eco-resettlement Community³, and Rna Thang and Gser Thang herding areas, which are all situated in Xinghai County, Hainan Tibetan Autonomous Prefecture of Qinghai Province (Amdo Region in Tibetan). Moreover, the Sanjiangyuan Eco-resettlement Community was established under the Ecological Resettlement project in 2005. It comprises of 305 households and formerly 19 villages within four townships, whereby the government are directing the resettlement of parts of their population including Tibetan herders and semi-herders⁴ annually since the project began.

The initial objective of this project aimed to promote rangeland protection and improve herders' livelihood due to the severe rangeland degradation occurring in the Three Rivers Source of Tibetan Plateau. However, outcomes of the conservation activities have revealed a negative impact on Tibetan herders' livelihood and traditional culture (Du, 2012). In my research, I will particularly look at Tibetan herders' perspectives on rangeland degradation and their livelihood in cultural terms. I

² Pika is a rodent.

³ Source of Three Rivers Eco-resettlement Community.

⁴ Semi-herders derive their livelihood by combining the herding of livestock with agricultural and other livelihood practices.

will view how herders use their local knowledge to protect rangeland and how they adapt to urban life after resettlement under the Eco-Immigration project.

1.2 Statement of the Research Problem and Justification

As a Tibetan myself, I have experienced how livelihood has changed in my family and village. I grew up in a rural Tibetan semi-herding village in Qinghai Province. Traditionally, my family and other villagers were herders, grazing cattle, donkeys, sheep, goats and horses. In my lifetime, modernization, including the migration of younger people to the urban centers and introduction of machinery, has resulted in my grandparents initially adopting a semi-herder lifestyle and then abandoning this to becoming full time farmers. A sad memory I retain occurred when I was ten years old and my grandfather sold our last remaining horse, which he used for transportation, ritual ceremonies and festival purposes. From that time, there are no horses in my family's village resulting in the villagers borrowing horses from neighboring herder families annually to maintain cultural traditions where horses are essential. Recently, I asked my grandfather why they didn't simply stop the horse festival as it is becoming harder every year to find horses to borrow to stage this event. He replied that horses have always been an important feature in Tibetan history related to its religious festivals where they are raced to make the local deity happy and thus prevent natural disasters. In this way, he stressed the importance of the maintenance of Tibetan culture.

Soon after this conversation in 2008, I attended university in Qinghai. I met many other Tibetans who spoke of their relatives who were herders and had to sell their livestock and move to urban centers following the implementation of the government directed Ecological Resettlement Projects. While these projects aimed to improve rangeland conditions in their area and compensation was paid to the herders to leave their traditional livelihood, my new friends spoke of the many difficulties faced by their relatives in their changed environments. It brought to mind the words of my grandfather and I began to worry for the future of Tibetan culture. Livestock has always formed part of our identity. Without livestock, what will happen to our identity? These questions have persisted in my mind through my undergraduate study

to the present time.

In 2011, I had the opportunity to do research in the Sanjiangyuan eco-resettlement area on the Tibetan plateau. I observed that those who had previously earned their livelihoods as herders were unhappy with their current circumstances. Some had moved back to their pastoral areas resuming their original livelihood, while others stayed in the resettlement area mainly for their children's education and because of a labor shortage in their family. There were two main issues that I noticed. First, the issue of rangeland degradation is very controversial among the herders, with some agreeing with government concerns that the land is degraded while others disagreeing. Second, resettled herders are facing numerous difficulties including unemployment, social discrimination and maintaining their identity. These are the two central issues informing why I wanted to do this research. As a beginning point, alongside my own observations and personal experiences, I reviewed other researchers' findings in order to gain a wider knowledge of these phenomena.

Theoretically, the mainstream view of land degradation is referred to in terms of desertification, overstocking, overgrazing and climate change within the Chinese rangeland context based on the theory by Hardin (1968) referred to as 'the tragedy of the commons' (Yeh, 2003; Nelson, 2006). In particular, the policy-makers and researchers perceive 'overstocking' and 'overgrazing' to be the main contributors of rangeland degradation in the highlands of China (Banks, 2001, p. 718). Consequently, many people blame the herders for severe pasture degradation (Yeh, 2003, p. 505). On one hand, researchers such as Banks argue that the rangeland degradation is from rural reform dating back to the 1970s. These reforms privatized land, no longer making land collectively owned by herders; he argues no 'tragedy of the commons' existed in common rangeland management prior to this time (Banks, 2001). Oppositely, policy-makers and some scholars have perceived that 'overstocking' results from unclear property rights on common management rangelands.

In addition, the government-directed rehabilitation plans have been based on the assumption that herders' ignorance of proper pasture management has led to

countless rodent infestations and overgrazing resulting in a ‘black beach’⁵ (Yeh, 2003, p. 505). When gathering initial data to assist in the formulation of my research, I spoke with a herder, who stated that the Xinghai local government justified their instigation of wide ranging land reform policies in this area based on this belief (record of notes taken in interview with H1, 10 October, 2011). These State-led conservation projects, costing more than 320,000,000 RMB (approximately US \$53.4 million), were implemented from August 2005. These conservation projects included ecological immigration causing herders to move to urban areas, pika control and fencing projects (The People’s Government of Hainan Prefecture, 2010).

However, these were not the first land reforms to be carried out by the government in this area. This problem statement will conclude by comparing two previous land reforms – one carried out in 1980s and the second carried out in the 1990s. The common grassland management system (CGMS) was based on traditional pastoral practices, which legitimized the herders’ right to move around the grasslands and gave them rights to use the land in common, with a recognition that the land still belonged to the State. In this way, herders temporarily grazed their animals from place to place, moving their livestock around for eight cycles per year with one source of water being shared between five households. CGMS operated under a collective action within a tribal and kinship system of co-management and allowed the local herders to practice their traditional pastoral management, which strengthened their relationships with nature and its people.

Conversely, the household-based grassland management system (HBGMS) introduced in the 1990s distributed land according to households. State knowledge was implemented in fencing and pika control projects. This system caused herders to become sedentary in one place for much of the time and communal land was converted into private property, creating land boundaries between households and tribes.

The CGMS and HBGMS impacted differently on the grassland and its people. On the one hand, researchers claimed that CGMS contributed to a high mobility of

⁵ The term ‘black beach’ is used to refer to soil that has lost its nutrients causing the land to become barren

livestock, equal access to natural resources by both people and livestock, and less conflict between the groups who are able to conserve local knowledge (Yeh, 2003, p. 512). Contrarily, others claim that HBGMS resulted in the low mobility of livestock, decreased flexibility in the use of the land, increased conflict between groups, difficulty accessing water and unequal land allocation (ibid).

Now, with the previous projects failing to achieve the desired aims of conservation of the grasslands, the Government has implemented further rehabilitation projects including the Ecological-resettlement project, additional fencing, pika-control and reduction of livestock projects to solve environmental problems. The mainstream view in China continues to believe that rangeland degradation is the result of 'overstocking' and 'human interference', placing the blame on the herders' traditional livelihood practices. The local Tibetan herders' view places the blame for the degradation on mining activities and construction. Many agree that overstocking is also a problem, but disagree with the Government's belief that the problem is caused by herders increasing their livestock year by year. Rather, their belief is that the overstocking is caused from the uneven division of land among households under the HBGMS of the 1990s (record of notes taken in interview with H1, 11 October 2011).

With many of the herders having been resettled through the Government conservation scheme, their lifestyles and livelihoods have dramatically changed. Some continue to be able to partially lead their former lifestyle, now part sedentary and part nomadic, leading to a new classification of semi-herder. Even so, they struggle to make an adequate living to support their families. In interviews held in the fall of 2011 and the spring of 2014, semi herders who have been resettled under the eco-resettlement scheme for more than five years stated that living conditions in the new settlements are poor, citing poor quality housing, polluted environment, rising crime rates, high unemployment and a lack of a sense of 'home'.

Only a few scholars (for example, Miller 2008; Yeh 2003; and Banks 2001) have focused research into the issue of rangeland degradation on the Tibetan plateau and related areas of government management, gendered property rights, and cultural

and symbolic meanings of livestock from the context of the traditional Tibetan herders' identity and local knowledge. Therefore, the significance of this study is that it seeks to add to the limited knowledge in these areas, with a particular focus on how traditional herders use their local knowledge to protect their livelihood and the ecosystem of the Tibetan plateau.

1.3 Research Questions

- 1.3.1 How have herders' livelihoods been impacted by the Sanjiangyuan Ecological Resettlement Project in Xinghai County, Qinghai Province?
- 1.3.2 How is rangeland degradation perceived by the State and herders in the Rna Thang and Gser Thang communities in Xinghai County, Qinghai Province?
- 1.3.3 How do local herders' religious beliefs encourage environmental conservation on the Tibetan Plateau?

1.4 Research Objectives

- 1.4.1 To investigate the differences between the perspectives of the State and the herders' about environmental degradation in the rangeland of the Tibetan plateau.
- 1.4.2 To examine how state property reform policy and conservation projects have impacted on herders' livelihood and cultural values.
- 1.4.3 To analyze the relationship herders have between their limited ability to exercise cultural rights and the environment in which they live.

1.5 Conceptual Framework

In this research, I applied the political ecology approach to view the local and State perspectives of rangeland degradation in Three Rivers Source of Tibetan plateau.

I then assessed how state knowledge and local knowledge conserved the rangeland in terms of tenure systems, livelihood strategies and religious beliefs.

Figure 1.1 is a portrayal of the conceptual framework for this research. The research paradigm is based on theories relating to political ecology. Three aspects of this paradigm as developed in Neumann (1992) are relevant to the objectives of this research. Firstly, the paradigm is a 'bottom-up' approach focusing on the producers who work on the land and the immediate social forces which influence their everyday practices. Secondly, 'a chain of explanation' relates to the levels of explanations that are found on a regional, national and world scale. Finally, the importance of historical analysis is critical to understanding the development of social relationships and their subsequent links to degradation. In adherence to the principles of political ecology as developed by Neumann, this research developed three socio-anthropological concepts; livelihood, property rights and local knowledge. In this way, the conceptual framework shows the State and local Tibet herders have differing perspectives on environmental degradation of the rangeland. State views that the phenomenon of rangeland degradation has occurred since 'overstocking' existed under the traditional, common rangeland management through the misuse of natural resources and increase of livestock by local herders. A direct result of this State perspective is policies that changed the common land management system to private land management system (also referred to as household land management system) in the 1980s. The privatization of land management has enabled the State to introduce their knowledge on environmental conservation of rangeland in areas such as fencing, resettlement and pika control programs in recent years. However, the local herders' perspective is that the cause of the rangeland degradation is actually related in part to the very means State have introduced to prevent it - their land reform and conservation policies described above. Furthermore, herders perceive that the State conservation programs are seriously impacting their current livelihood and rangeland conditions. The conceptual framework enables these different perspectives and related issues of land tenure, knowledge and livelihoods to be explored within the wider issue of Tibetan rangeland conservation.

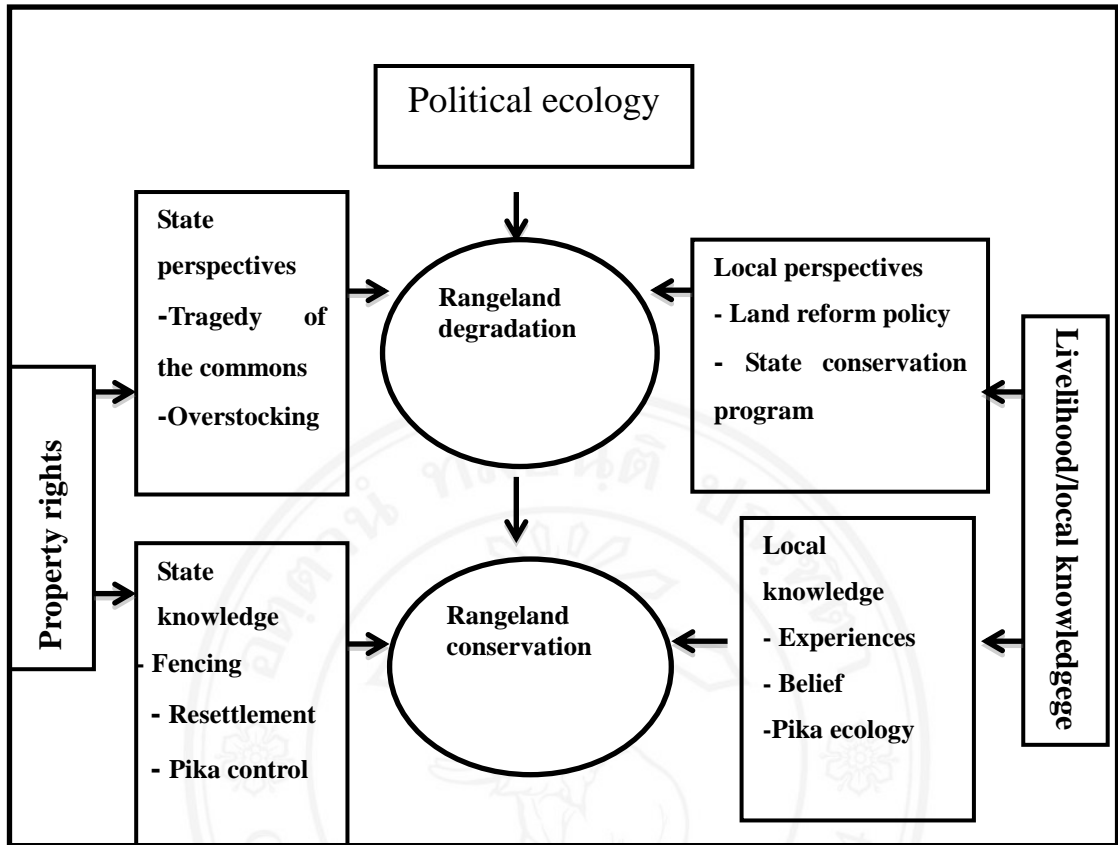


Figure 1.1 Conceptual framework

1.6 Research Methodology

For the purposes of this research, I decided on a qualitative research approach that enabled an in-depth study of livelihoods and local knowledge of herders on the Tibetan Plateau. I interviewed 25 informants, who were current herders, former herders and local environmentalists as well as carrying out participant observation. Schensul, Schensul and Le Compte (1999, p. 91) define participant observation as “the process of learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting”. In keeping with this definition, I was invited to stay in the Sanjiangyuan Eco-resettlement Community and in nearby pastoral areas from February to March 2014, returning in September 2014 for two weeks where I conducted my fieldwork (refer Figure 1.2 and 1.3 below). My relationship with these locations began in 2011 when I conducted a short-term research relating to ecological Resettlement of this area. From this research, I was

encouraged by the local people to return and carry out a more expanded, in-depth study into the impact resettlement has had on herders' and their families' livelihoods, identity and culture.

This section will now outline details of the research site and the unit and level of analysis, data collection and data analysis. It concludes with attention to ethical issues and issues relating to validity and reliability of the research data.

1.6.1 Research Site

For the research site, I conducted my research in Sanjiangyuan Eco-resettlement Community and Rna Thang and Gser Thang rangelands. All are located in Xing Hai County, Hainan Tibetan Autonomous prefecture, Qinghai Province in China. The Ze Ke Tan Township is the seat of Xing Hai County and the majority group is Tibetans whom sustain their livelihood on animal husbandry. Also, Ze Ke Tan Township is one of main conservation areas in Qinghai Province located Three Rivers Source. My research site is Sanjiangyuan Eco-resettlement Community, which under the Ze Ke Tan Township and Rna Thang and Gser Thang pastoral areas within a 50 km radius of the Community. The arrow in Figure 1.2 indicates the location of Qinghai Province and the arrow in Figure 1.3 indicates my research area –Xinghai County. First, the principal reason for selecting this research site is that while a limited number of independent scholars have conducted studies in other areas of the Tibetan Plateau, I have been told by local people that no independent scholars have focused their research in this area.

ลิขสิทธิ์ © by Chiang Mai University
All rights reserved

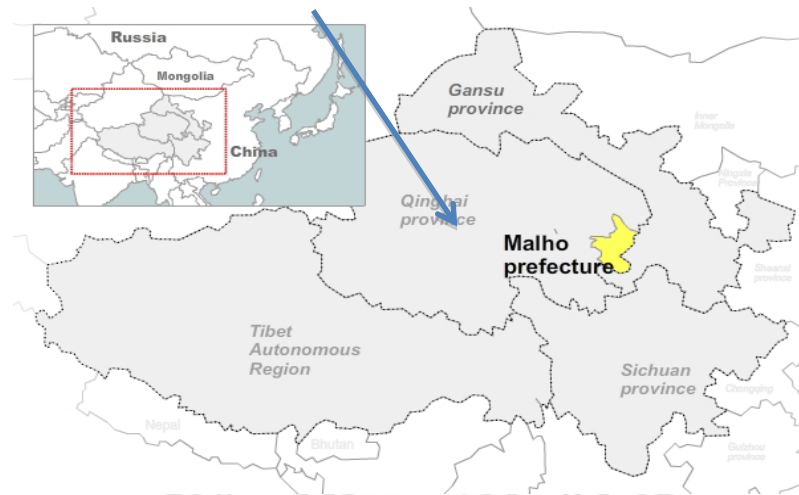


Figure 1.2 Map of Qinghai Province

(Source: Radio Free Asia; web: <http://www.rfa.org/english/news/tibet/jails-04152013154246.html>)



Figure 1.3 Map of Xinghai County (Source: ChinaMojoPosts; website: <http://chinamojoposts.blogspot.com>)

Second, I am of the same ethnicity and dialect background as these people, so I can easily communicate with them. Third, I have kinship connections with some people working in the government sectors in this county, who are supportive of this research and agreed to assist me to access public records, local government data and the local herders in the resettlement area.

1.6.2 Unit and Level of Analysis

The unit of analysis in this study is local herders in the Sanjiangyuan Eco-resettlement Community and its pastoral areas environs whose livelihood history was and/or is related to herding. Access to this area and its people was assisted by local community-based groups with whom I developed relationships during my 2011 research. I was also guided by independent researchers working on herders' urban livelihood and environmental protection issues in the wider Province. In this way, I was able to explore and assess the three concepts guiding this research: livelihoods, property rights and local knowledge.

For the level of analysis, I focused on two levels of community. The first level entailed local people who were formerly traditional herders, but now are resettled under the State directed Ecological Resettlement Project. Some of those resettled are still able to maintain a semi-herder lifestyle, while others have converted to a completely sedentary lifestyle. The second level focused on rural herders living on the rangelands who are still maintaining their traditional livelihood in pastoral areas, but facing various challenges with State rangeland conservation policies including grazing ban policy, resettlement project, mining and pika's destructions on the rangelands.

1.6.3 Data Collection

For the fieldwork part of this research, I used five methods to collect data: in-depth interviews, focus groups, key informant interviews, observational living and field notes, and review of contemporary documents relating to herders' livelihoods and State directed conservation policies.

In-depth interviews

A principal aim of this study is to give opportunity for the herders' (present and former) voices to be heard. State directed policies in recent decades have resulted in large-scale changes in their lives and livelihoods. With respect to the herder culture and in recognition that viewpoints can differ according to age, I conducted interviews in a semi-structured question style with men and women in younger (18-25 years) and

older (35-80) age groups for accessing the past lifestyle of herding and personal life stories. All interviews were digitally recorded with the permission of the participants.

Focus groups

I conducted four focus groups each with six to eight resettled herder participants, in the Sanjiangyuan Eco-resettlement Community and two pastoral areas. In both the age groups, I held groups of men, women and mixed gender. The main purpose for making such divisions was out of cultural concerns and personal security. Culturally, Tibetan women are less talkative and active when discussing community issues among the men. Therefore, I held focus groups only for women, expecting that they would feel more at ease to talk among themselves. The first focus group was in the eco resettlement community and was composed of seven resettled herders and was mixed gender. The second group was in Rna Thang rangeland with six men in the group who were current herders. Finally, the last group was Gser Thang and was made up of eight men and women; this group was current herders who were affected by the mining. Additionally, I conducted an informal focus group with four women in the Gser Thang rangeland. At the end, I obtained the various perspectives from female and male participants who strongly showed their dissatisfactions and resistance to the Eco-resettlement and mining projects.

Key informant interviews

Key informants are individuals who “possess special knowledge, status or communication skills and who are willing to share that knowledge with the researcher” (Le Compte & Preissle 1993:166). They are very important for helping the researcher understand the phenomenon under study (Gilchrist & Williams, 1999:73). With this in mind, I interviewed key informants who have experience and special knowledge of rangeland protection issues on the Tibetan Plateau and/or the Ecological Resettlement Project. I included community based organization personnel and local government personnel, village headman, independent national researchers and respected spiritual leaders to access any differ perspectives on resettlement and mining project, further, I trying to ask them any solutions for these undergoing issues

in the resettlement community and rangeland areas.

Participant Observation: Observational living and field notes.

I stayed in the herder communities and resettlement site for two months for conducting observational living and field notes, I gained a greater understanding of the research concepts, to “see things the way they do and grasp the meanings they draw on to make sense of their experiences” (Pope & Mays, 2006: 38).

Within my observational living role, I worked with villagers to create maps to demonstrate more clearly the environmental issues they were voicing and, where possible, to photograph these issues. For example, in the Gser Thang community, the mining activities are polluting the source of water, farmland, grassland and mountains. In order to get the whole picture of community and mining’s operational process, villagers created a map to describe the current situation. Moreover, I participated in the rangeland community’s religious activities to learn more about how local monastery or religious leaders play important role in herder’s life? I was told that many herder parents are sending their children to the local monastery for traditional education. I further observed that hidden resistance is occurring in the three communities. All of these experiences and personal observations helped this thesis’ first hand-data be more reliable.

Review of contemporary documents

As a secondary data collection method, I reviewed contemporary reports, books and articles relating to herder activities and conservation concerns on the Tibetan Plateau compiled and written by community based and non-government organizations, local and national government and researchers studying in the field.

1.6.4 Ethical Issues

In respect of research ethics, I provided a single page document in Tibetan language that provided a clear explanation of the aims and purpose of the research and my role to all the study participants (refer Appendix I). I committed to maintain the

confidentiality of the study participants by not revealing any specific identifying information in this thesis.

1.6.5 Validity and Reliability of This Thesis

Throughout the research process, attention was paid to ensure the validity and reliability of this study. When I was in the field site, I had a friend help to take notes, minimizing the risk of missing information, and we translated together in order to confirm that we had the same understanding from herders. Further, when I was a Mekong School student in 2011, I did a research on Eco-resettlement project in Xinghai County. The Mekong School is an international organization based in Chiang Mai and their work focus on environmental protection in the Mekong region. Therefore, when I conducted my field research, I gained the support of a group of herders in terms of organizing the focus groups based on whom I had liaised with in my earlier research under Mekong School's support. I believe trustworthiness was achieved by my extended time living in the field sites and checking the content of my data after transcription with as many of my research participants as possible as recommended by Padgett (1998).

1.6.6 Data Analysis

A thematic data analysis is applied in this research as proposed by Braun and Clarke (2006). As my first stage, I took time to listen to all data recordings, before beginning the transcription process. Interviews with individual participants, focus groups and key informants were conducted in either Tibetan or Chinese language. I transcribed these recordings directly from Tibetan language into English language for the purpose of entering the next stage of coding of the data. Simultaneously, I transcribed my own thoughts and feelings which I had noted while conducted my field study.

Coding was conducted from first interview through the three field sites to represent different issues relating to this research. For example, I put the interviewing date, community name, county name and current status to conduct the comparison of

data analysis in the eco-resettlement community and two herding communities. I also added some informal interviews from 2013 when I working on the ecological immigrants with another of my research project. I further clarified the data with my interviewees by phone and in some instances arranged another interview with them to better clarify and expand on information that had been given.

The coding process enabled me to see the themes that emerged from the data; impact of mining, value of local deities and faith practices, rangeland degradation, the roles of traditional and modern herders and impact of government driven eco-resettlement projects. The interrelationship between themes soon became apparent, for example, rangeland degradation and mining activity; value of local deities, faith practices, mining and eco-resettlement projects and roles of herders. The maps and photographs became key evidences used to analyze the data arising within this interrelationship and added clarity to understand better the local ecological system of the Tibetan rangeland.

1.7 The organization of Thesis

This thesis consists of six chapters as follows. The first chapter introduces the research background, research questions, research objectives, research site and research methodology.

Chapter Two provides a theoretical background and literature review. Three concepts have been identified for this research – livelihood, property rights and local knowledge within a political ecology approach which are explored in this chapter.

Chapter Three is the first of three findings chapters. In Chapter Three, contrasting viewpoints of rangeland degradation are introduced. Specifically, the chapter introduces a brief historical background of Tibet and its political structures. Furthermore, it introduces the conservation policies in the Three Rivers Source areas. Also addressed are the mainstream view of rangeland degradation regarding the ‘overstocking’. An investigation of these issues has direct relevance to the first of the concepts guiding this research; livelihood. Former herders’ perspective in relation to

the Eco-resettlement project, their decisions to resettle, current lifestyle and future plans for their life in the urban area are explored.

Chapter Four focuses on the impacts of commercial mining in relation to local livelihood, livestock and environment. Firstly, I introduce the herders' daily life activities and past history and current living conditions of Rna Thang and Gser Thang pastoral areas. The historical changes on land property rights based on herders' rangeland management systems from common to private land are then explained. This is followed by personal accounts in relation to herders' perspectives on rangeland degradation as due, not to "overstocking", but the mining activities. Finally, the chapter connects religious beliefs of the herders with issues relating to environmental protection of the grassland ecosystem and presents the herders' viewpoint for future policy recommendations for the Eco-resettlement project.

Chapter Five makes further connections with how Tibetans' local knowledge related to their religious belief relates to protection of their environment. Specifically, worshiping of mountain and water deities as a religious belief to protecting the surrounding environments in their daily life is highlighted. In addition, local herders use such local knowledge and religious belief as a tool to negotiate with the local government and mining companies.

Chapter Six sums up significant findings of the study, discussing and debating in relation to the concepts and theories that guided this research. The thesis concludes with policy considerations and recommendations for further research.