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Faculty of Landscape and Society

Ecotourism development in Shangri-La, Yunnan province, China: The case of Tiger Leaping Gorge

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DECLARATION

I, Doriana Maltese, declare that this thesis is a result of my research investigations and findings.
Sources of information other that my own have been acknowledged and a reference list has
been appended. This work has not been previously submitted to any other university for award
of any type of academic degree.
Signature
Date

DEDICATION

I dedicate this work to my parents for their endless love, understand and support, and to all the people in Tiger Leaping Gorge for their great help and contributions to my research and thesis.

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Doing research on ecotourism in rural China has been a unique experience, one that was filled with challenges, excitement, frustration, and joy. During this process, I have not only learned more knowledge about ecotourism in rural China but have also grown personally through self-reflection and confrontation.

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ABSTRACT

Ecotourism was conceptualized initially in the West as an alternative to mass tourism and with an ecologically benign approach intended to benefit the host community but also to give higher quality experiences to tourists. In China, it was introduced only in the 1990s when green development alongside ecological awareness started to be promoted. It gradually expanded in different regions especially in destinations in southwestern China, which contains a global biodiversity hotspot and a rich cultural heritage. Based on the material gathered from two weeks of fieldwork, this thesis explores the impacts of ecotourism in the case study of Tiger Leaping Gorge, north-west Yunnan. The purpose of this research is to examine the economic, environmental, and socio-cultural impacts of ecotourism from local people's perspectives, as well as to examine residents' attitudes to ecotourism development. This study employed semi-structured questionnaires, informal discussions, text-chat interviews with key informants and observations in a mixed research methods approach. A theoretical approach of environmental justice, including elements of the community-based ecotourism approach were used when analysing the collected data. The research revealed that an official ecotourism plan was non-existent and that despite being within a UNESCO Heritage Site, there was no initiation of protected status in the area. Although ecotourism has brought some few favourable impacts, especially for the "rural economic elite" involved in tourism-related activities, on the other hand, the research also found several potential economic, environmental and sociocultural adverse effects. These suggest that ecotourism had not yet made a full contribution to local sustainable development and did not yet represent a different and better livelihood. Moreover, participation in planning and decision-making by the local people was absent, raising issues of distributive, recognition, procedural and capabilities justices. Nevertheless, local people in Tiger Leaping Gorge hold optimistic attitudes about ecotourism, which indicate its feasibility in the future. This thesis concludes that effective regulation and sound planning play a significant role in enabling a better understanding of ecotourism among the residents and its sustainability. Meanwhile, the importance of local people's active involvement at various levels of ecotourism development in ensuring ecotourism's success, in the long term, was also revealed. Many of the ecotourism characteristics espoused in the international ecotourism literature, did not find large applicability in China to date, hence the importance of firstly understanding the Chinese historical, environmental and socio-cultural contexts in which policymakers and tourism planners operate. The study concludes with some recommendations developed from suggestions by informants in the communities, tourists, as well as personal observations and ideas based upon the broader literature on ecotourism.

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LIST OF ABBREVIATIONS AND ACRONYMS

- CBET Community Based Eco Tourism
- CCP Chinese Communist Party
- DSTC Diging Shrangi-La Tourism Company

EJ Environmental Justice

EPA Environmental Protection Agency

EU European Union

GDP Gross Domestic Product

NEDP National Ecotourism Development Plan

NGO Non-Governmental Organization

RMB Renminbi (Chinese currency)

TIES The International Ecotourism Society Tourism

TLG Tiger Leaping Gorge

UGSA Upper Gorge Scenic Area

UN United Nations

UNCED United Nations Conference on Environment and Development

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

WHO World Health Organization

WTO World Trade Organization

WWF World Wildlife Fund

1. INTRODUCTION

"Once upon a time, where the River of Golden Sands rushes between the steep slopes and towering cliffs of two snow-capped mountains, a tiger came hurrying through the forest. Guided by the clatter of snapping twigs just ahead of them, a band of Naxi hunters followed in hot pursuit. Their prey rushed headlong downhill until it reached the bank of the turbulent river. There was no way to swim in that current and the hunters were drawing near. Summoning all its primordial strength, the tiger made a mighty leap of over thirty meters to the other side, scampered out of crossbow range, and successfully eluded the astonished hunters. After the hunters returned home to tell the tale, the local people began calling the place Tiger Leaping Gorge" (Goodman, 2019).

1.1 Background of the study

China is undergoing a tremendous economic transformation and opening which is the result of different policies and reforms taken since 1978 when the new "Open Door Policy" was announced. Since the reform and opening, especially since the "12th Five-Year Plan" (2011-2015), China's tourism industry has developed rapidly. Tourism has become an important part of the daily life of urban and rural residents and a new important growth point of the national economy. In 2015, revenue from inbound tourism to China reached 114 billion U.S. dollars, while in 2019, revenues from tourism had amounted to about 5.7 trillion yuan. The industry contributed 2.1 per cent to China's GDP and provided around 22.5 million jobs (Statista, 2020). The NEDP 2016-2025, estimates that the number of domestic tourists will exceed 7 billion in 2020 (Ndrc.gov.cn, 2016). The Chinese Government is thus focusing on the overall development of tourism resources in extremely poor areas to lift them out of poverty.

Indeed, tourism development in the western part of China has helped its provinces to catch up with the conditions of richer coastal areas, whose inhabitants will often travel right to the other side of the country (Wen & Clement, 2001, p.42-45). In fact, although the major population centres of China are in the east, the major outdoor tourism attractions lie in the west: the forests of Xishuangbanna in Yunnan, the deserts of Inner Mongolia and Xinjiang, the mountain grasslands of Tibet and Qinghai, the great peaks of the Himalayas, and the great rivers of Tibet, Yunnan and Sichuan. Yunnan, in particular, is famous for its cultural diversity and natural resources and has a long history of being a pioneer in developing sustainable tourism projects, compared to other western provinces of China since 1980 (Litzinger, 2016).

Nevertheless, such development of tourism has itself generated environmental and social side effects. From an environmental point of view, the impoverished local people, living in such ecologically vulnerable rural areas face, for example, high-intensity exploitation of natural resources such as minerals, timber, and water. On the other hand, with Yunnan being the home of 25 ethnic minorities, conflicts have arisen between traditional communities and new immigrants coming from different provinces. An additional social and economic issue is that the majority of the income generated through tourism business is taken by governmental agencies and private enterprises, resulting in a leakage of the tourism benefits and in the marginalization of the local people (Leksakundilok, 2004, p.26).

In order to tackle issues such as environmental degradation and rural poverty, the Central Government has promoted several sustainable development strategies since the 1990s, and in 2005 Xi Jinping's slogan "Clear waters and green mountains are as valuable as mountains of gold and silver" became the motto for China's green development and "ecological civilization" today. Most recently, both in the "13th Five-Year Plan" (2016-2020) and the Fourth Plenary Session of the 19th CCP Central Committee (2019), it is further stated that strong Government support is given for developing ecotourism and other forms of tourism such as cultural tourism, leisure tourism, and mountain tourism. The Chinese Government has, in fact, realised the importance of sustaining and protecting its environment and natural resources and has accepted the basic concept that tourism, and particularly ecotourism, can help preserve the integrity of natural systems while providing economic opportunities to local communities. The construction of "ecological civilization" (South China Morning Post, 2018) is thus a millennium plan for the sustainable development of the Chinese nation. In order to better explain the background of my research focus area, a brief overview will be provided about how Yunnan province became a place to promote ecotourism as a tool for poverty alleviation and sustainable development.

1.2 Tourism development in Yunnan

Since the founding of the People's Republic of China in 1949, Yunnan has been one of its poorer provinces and its counties in the Northwest are among the poorest in the nation. For this reason, it has been a focus of governmental financial plans to develop the area in any way possible. In the last decade, the provincial government has encouraged rapid tourism development as a means of financial growth; and at the same time, strategically promulgated an image of Yunnan as a province of attractive, exotic ethnic culture and a land of magnificent beauty with rare and fascinating wildlife.

From a cultural point of view, out of the 56 officially recognized minority nationalities in China, 25 have settlements in Yunnan, making up a significant portion of its population. From an ecological point of view, Yunnan has one of the most diverse ranges of plants and animals in the world. Northwest Yunnan in particular, has been recognized as one of the most important areas of ecological significance and has also become the focus and priority of many foreign organizations with the mission of ecological conservation, such as the Nature Conservancy of the Yunnan Great Rivers Project.

Therefore, Yunnan's ethnic cultures and natural physical beauty attract millions of domestic and foreign tourists every year. Tourism in Yunnan is, in fact, one of its five main pillar industries accounting for 12.5 per cent of the province's GDP. Moreover, the industry employs 1.45 million workers and lured 520,000 foreign and 24.2 million domestic tourists in the first five months of 2019 (China.org.cn, 2020).

However, while the region is currently enjoying ecologically intact conditions, there are ever-growing threats facing environmental conservation within the area. These include inappropriate infrastructure development; unsustainable foresting practices; over-collection of medicinal plants, mushrooms and firewood; poaching of wildlife and endangered species; overgrazing by livestock; expansion of agricultural onto steep and marginal lands; poor agricultural practices and techniques; increased expansion of tourism industry into project areas (Mitchell, 2003). It is for such issues that the provincial government has pushed for more sustainable, ethically, and environmentally responsible travel.

The first forum ever on Chinese ecotourism was held in Xishuangbanna in Yunnan Province in 1999. As a result, the Chinese Ecotourism Association was established, and the Declaration on Chinese Ecotourism promulgated. In the same year, the World Horticultural Exposition in Kunming (the capital city of the province) also brought more tourism to Yunnan than ever before. Yunnan province has also benefited from the state-led "The Tea and Horse Caravan Road Journey" developed during the "10th Five-Year Plan" period (2001-2005), which attracted many foreign and domestic tourists.

However, as mentioned before, tourism in Yunnan has also brought negative consequences for the environment and marginalized the interests of local people. In this regard, the adoption of the ecotourism method was decided on the basis of the connection between poverty and environmental degradation and attempted to secure the interests of local people through facilitating local

participation. However, it is noteworthy that ecotourism has not played a major role in reducing poverty, and normal tourism still takes a much larger part of the tourism business in Yunnan (Donaldson, 2007; Cho, 2011). Therefore, the main focus of this thesis is to assess the ecotourism development in the area of Tiger Leaping Gorge (hereafter TLG) as a tool for sustainable development. The assessment will be carried out through exploring local villagers' perceptions of economic, environmental and socio-cultural impacts and how they think ecotourism contributes to safeguarding their livelihoods and improving their standards of living.

1.3 Ecotourism

Over the last several decades the term "ecotourism" has been the subject of much thoughtful debates and discussions. It is beyond the scope of this study to examine the different interpretations of ecotourism but it can be stated that in general, all definitions of ecotourism aim to promote environmental conservation or ecological sustainability. This thesis, in particular, refers to the definition given by TIES "Ecotourism is responsible travel to natural areas that conserves the environment and improves the welfare of local people" (TIES, 2019) and the seven characteristics outlined by Honey: "Involves travel to natural destinations; minimizes impact; builds environmental awareness; provides direct financial benefits for conservation; provides financial benefits and empowerment for local people; respects local culture; supports human rights and democratic movements" (2008, p.29-31). As it can be seen, the main difference between ecotourism and other forms of nature-based tourism (nature tourism, wildlife tourism, adventure tourism), is that the former is a multidimensional concept that includes its benefits to both conservation and people in the host country, whereas the latter is defined solely by the recreational activities of the tourist.

One more important feature of ecotourism highlighted by several authors such as Hunter, (1995) and Ceballos-Lascurain (1993) is that the following groups of actors have to co-operate and stress the educational dimension: the tourists, the tourism companies, the authorities, and the local people. In multiple ecotourism studies, few benefits went to local people, served to enhance environmental protection, or saw the local participation overwhelmingly confined to low-skilled, low paid, often seasonal, employment. In other cases, also the gap between those who are engaged and those not involved in tourism in the community is likely to widen. Entus (2002), for example, describes how pre-existing divisions of power may be engendered or exacerbated, leading to the formation of new business elites, who represent a small fraction of the local community. It becomes clear that without a uniform definition, clear standards, and globally recognized certification programs, ecotourism might undergo a "greenwashing" phenomenon, where the term is used indiscriminately to describe

anything related to nature or unrelated to conventional tourism or even as a mere marketing label to attract tourists (Buckley, 2000; Honey, 2008).

1.3.1 Ecotourism in China

The endorsement of ecotourism by the UN through the designation of 2002 as the International Year of Ecotourism and the Québec Declaration on ecotourism in 2002, proves the internationalisation of an approach which is deeply embedded in Western cultural, economic and political processes. The ecotourism definition provided in the NEDP 2016-2025 is based on the concept of sustainable development, the principle of harmony between man and nature and on the premise of protecting the ecological environment. The term "Shēngtài lǚyóu" (ecological tourism) first appeared in the Chinese-language academic literature in the early 1990s (Wang, 1993). By evidence, there is a linguistic difference but also a conceptual discrepancy. It follows that the concept of "Shēngtài lǚyóu" has been understood and implemented differently in China compared to the western world. Although the two concepts share the same practical contexts (usually natural protected areas) there are still some differences. In the section that follows I briefly examine the main dissimilarities.

Ecotourism in the West took shape between the late 1970s and mid-1980s while in China it was introduced only in the 1990s. The concept "Shēngtài lǚyóu" spread very quickly, mainly thanks to the government's programs to develop remote and poorer areas in a sustainable manner, raise awareness on environmental protection and promote ecological civilization, as well as reduce emissions and other impacts directly related to the tourism industry (Ndrc.gov.cn, 2016). Another important difference relies on the type of tourists and their attitudes: in China, the length of stay is usually very short, Chinese tourists are more likely to travel in organised package tours and they learn about their destinations principally from newspapers and television, rather than their own investigations (Huang, Chen & Zhang, 2003). Another noticeable difference is that ecotourism in the West has been treated as a small-scale, small-group activity, and this feature is often advertised in the marketing materials of commercial ecotourism companies. This restriction, either in scale or in group size, does not seem to have been transferred into the Chinese concept of "Shēngtài lǚyóu". The ways in which nature is valued and the ways in which the relationship between humans and the natural environment are understood is also a peculiarity of the Chinese context, which will inevitably influence the implementation of ecotourism. In China, the traditional cultural perception, essentially an aesthetic one, is that nature can be improved by human artistic and architectural artefacts. As a result, it is commonplace that the icon scenic sites which form the attractions for "Shēngtài lǚyóu" will not only have historical connotations in art and literature, but also modern structures and sculptures which are intended to enhance the view. Interestingly, to Western eyes, many of these structures have the opposite effect. It can be concluded that there are some key differences as regards to nature and the scope, the type of tourists, the aesthetics and scale. It is, however, important to acknowledge that these differences have arisen because of the different cultural context and historical antecedents within China and the West. The crucial issue with Western envisaged ecotourism is that it can fail to recognise, or downplays, the fundamentally divergent values and interests between the promoters and targets of ecotourism as well as the political, cultural, historical and environmental Chinese context. Given the fundamental difference in how ecotourism is constructed in Chinese society, we can say that "Shēngtài lǚyóu" can be easily identified as ecotourism with "Chinese characteristics".

1.4 Research question and objectives

The overarching research question is: how does ecotourism in the case study of TLG benefit the local population from an environmental, socio-cultural and economic point of view?

In order to answer this main research question, specific objectives have been formulated, which will help to narrow down the scope of the study. The objectives to be examined will be the following:

- 1. Identify the key stakeholders involved in ecotourism.
- 2. Investigate key stakeholders' levels of understanding, participation, and expectations of ecotourism.
- 3. Explore the perceived ecotourism impacts on local populations from economic, environmental and socio-cultural perspectives.
- 4. Identify the factors that influence ecotourism's role in sustainable development.

The first objective of this study is to identify the key stakeholders in the participation of ecotourism in TLG. In order to do so, it is important first to define the term "stakeholder" in relation to ecotourism and to this specific case study. In the case study of TLG, the term "stakeholder" has to be applied to ecotourism and to activities conducted in natural environments. By focusing on ecotourism activities, and assuming that a stakeholder is any individual or group that is affected or may be affected by an organisation achieving its objectives -not necessarily contributing with financial resources-, the major stakeholders would be those in national, provincial and local governments, accommodation, transport companies and agencies, the local community, employees, tourists and NGOs. The key actors' analysis carried out by Primdahl et al. (2013) also identifies three main types of agents and their various roles: the "local community", the "manager" and the "public agency". This, in fact, will be

used as support for the identification of stakeholders in TLG.

The term "factors" will be used in this thesis to refer to existing structural barriers that prevent ecotourism projects from being successful: ethnic and linguistic difference, limited education and health services, geographical challenges and limited infrastructure (both in terms of transportation and information), and amount of government transparency and accountability. Some of these factors may not even be barriers but could be something that helps make for a successful project.

By focusing on the above research question and related objectives, this study aims at bringing in new data by covering recent tourism development in Yunnan, specifically in TLG. In fact, while there are some studies on the impact of ecotourism in other Chinese provinces, there has not been any study investigating the benefits of ecotourism in TLG in the last decade. The aim of this study, besides addressing the lack of empirical data, is also to analyse the chosen case study from a different perspective which will regard local people as the primary focus. To summarize, TLG in Yunnan is an appropriate place to do research for the following reasons:

- 1. TLG is recognized as one of the most famous scenic attractions for hiking in the world as well as one of the must-visit hiking itineraries in Yunnan recommended by many tour operators, travel agencies and guides.
- 2. TLG is part of the Three Parallel Rivers of Yunnan Protected Areas World Heritage Site since 2003, as it lies within the drainage basins of the upper reaches of the Yangtze (Jinsha), Lancang (Mekong) and Nujiang (Salween) rivers, in the Yunnan section of the Hengduan Mountains.
- 3. TLG is also part of The Yunnan Great Rivers Project (UNESCO World Heritage Centre, 2020), a far-reaching collaboration between the Chinese Government and the American based NGO "The Nature Conservancy" who aim at creating an integrating conservation and economic-development project in the northwest corner of Yunnan Province. By supporting ecotourism development, the Yunnan Great Rivers Project hopes to encourage the conservation of the region's biodiversity and cultural heritage and provide a sustainable alternative income source for the isolated local communities.
- 4. There are rich biodiversity and cultural elements from the ethnic minorities who have been living and prospering in this river valley for many generations in a handful of small hamlets. Their primary subsistence comes from grain production and tourists. Based on the cultures of ethnic minorities,

ethnic tourism has been flourishing through the commercialization of ethnic cultures. Thus, being ethnic tourism and ecotourism a fundamental money maker for the gorge and its inhabitants, analysing its role is instrumental for the future development of the area.

5. Environmental degradation in TLG has been identified as the primary issue by many researchers (Hayes, 2007; Su, 2002). Several researchers have also pointed out the potential negative impacts caused by ecotourism on the environment, but these are still to be assessed with more recent data.

1.5 Theoretical approach

The theoretical approach of the study will adopt "environmental justice" (EJ hereafter) theories and "community-based ecotourism approach" (CBET hereafter). The term EJ can be very broad and varied, people may have different understandings and approaches to the concepts depending on issues, situation and tactics. This is the definition given by the Environmental Protection Agency's Office of EJ: "The fair treatment and meaningful involvement of all people regardless of race, colour, national origin, or income with respect to the development. implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies" (EPA, 2020).

It can be observed that the term embraces two different concepts: justice and the environment. Along the years, theorists have defined justice in numerous ways. Social justice, in general, refers to the structural inequalities in the world along class, race, gender, institutional and other lines: inequalities of income, wealth, power, knowledge, health and opportunity, both within and between generations. In the case study of TLG people have the right to access their own lands, resources and agricultural, harvesting, grazing activities, livelihoods and thus survival. They also have the right to preserve their traditional sites and accumulated wisdom of their Dongba ritual culture. The term justice in the literature, also very often refers to the theories of John Rawls who defines it mainly in distributional terms (Rawls, 1971). However, as also pointed out by Schlosberg (2007) and Svarstad & Benjaminsen (2020), distributive theories of justice are not the only ones that should be applied to EJ. In fact, other essential elements to be added on top of the distributional theory of EJ are culture and identity recognition, capabilities theories and participatory theories both at an individual and group level. Hence, according to the distribution theories (Schlosberg, 2007), in the case study of TLG, economic benefits deriving from ecotourism should be fairly distributed among the members of the community.

From the point of view of recognition, rural communities have a vital role in environmental management and development because of their knowledge and traditional practices. In this sense, "State should recognize and duly support their identity, culture and interest and enable their effective participation in the achievement of sustainable development" (UNCED, 1992). As for capabilities and participatory theories (Schlosberg, 2007), I will try to investigate the degree of the local community participation capacity: local community should have the right and be in fact open to receive information, technology and fund, better education and training.

By researching on the impact of ecotourism in TLG, three main perspectives will be taken into consideration: economic, environmental, and socio-cultural. These three important dimensions of sustainability were defined by the United Nations Environmental Programme (UNEP) together with the World Tourism Organization (WTO) in their "Guide for Policy Makers" (2005). First, economic sustainability means generating prosperity at various levels of society and the viability of economic activities to be maintained in the long term. Also, it ensures that a major proportion of the benefits remain within the community (WWF International, 2001). Second, environmental sustainability entails conservation and management of resources, especially those that are not renewable or are precious in terms of life support. It requires action to minimize air, land and water pollution and to conserve biological diversity and natural heritage. The environmental discourse is of particular importance as the setting of the place is in a very remote natural area where rural residents along the years have been degrading and fragmenting the habitat (Hayes, 2007). Depletion of natural resources described by Hayes (2007) is thus caused by the same inhabitants as highly dependent on an agriculturally based economy at least until the early '80s. At the same time, the setting up of a natural reserve might limit the community power to utilize the resources, externalize the internal income of the local community, and cut down the community welfare, which can be seen as an environmental injustice. Third, social sustainability entails the respect of human rights and equal opportunities for all in society, plus an equitable distribution of benefits with a focus on alleviating poverty. In social sustainability there is also an emphasis on local communities' participation, maintaining and strengthening their life support systems, recognizing and respecting different cultures and avoiding any form of exploitation (WWF International, 2001).

Since literature review shows that many ecotourism projects entail a critical lack of community participation, which in many cases result in the failure of the project (He et al, 2008, Saayman & Giampiccoli, 2016), the participatory element of EJ will constitute the second theoretical approach of the study. In this regard, there is a community-based participatory approach namely CBET. The issue

of control and ownership over the local community's resources and the development of the ecotourism project is the fundamental principle of CBET. As argued by Tamir, "CBET participatory development process empowers local community members by building the skills, knowledge and confidence needed to take control over their land and resources" (2015, p.51). Very clearly, the concept of CBET is distinguished from other ecotourism ventures that are largely or even totally planned and managed by outside operators and generate no or very little benefits for local inhabitants. Consequently, CBET commits itself to reverse the top-down ecotourism development and management via empowering the community in economic, political, and social aspects. As a result, the three key issues of CBET are community, ecotourism, and conservation. Each of these issues is closely connected to the three aforementioned sustainability pillars promulgated by UNEP and WTO. Indeed, Mearns (2011) affirms that community links to social sustainability, ecotourism links to economic sustainability, and conservation links to environmental sustainability. Also, in the NEDP 2016-2025, it is advised to adopt a CBET approach by specifying the main stakeholders, the procedures and guarantee an equal distribution of the ecotourism benefits among the local residents. On top of this, the Chinese Government suggests that vocational programs and education for ecotourism are to be provided to the local community, by also improving the quality and employment skills of residents and enhancing their ability to participate in the development of ecotourism.

Despite its resonance with environmental problems, the concepts of CBET and especially EJ have not been taken up as a mobilizing discourse within Chinese civil society, although it has been increasingly discussed within academic research in China (Mah & Wang, 2017). Accordingly, the present study fills a gap in the literature by empirically investigating the local community perceived impacts of ecotourism through an EJ and CBET perspective.

2. METHODOLOGY

2.1 Study area

The research was conducted in TLG in northwest Yunnan Province, southwestern part of China (Figure 1) located at 27°13′00″N 100°09′00″E. TLG is a scenic canyon on the Jinsha River (Gold Sand River), the Chinese name for the Upper stretches of the Yangtze River which runs from the "Roof of the World", the Qinghai-Tibet Plateau, to the mountains and deep valleys of northwest Yunnan. It is sometimes grouped together with the Lancang (Upper Mekong) and Nu (Upper Salween) as the "Three Rivers" area, part of which makes up the Three Parallel Rivers of Yunnan. TLG starts at TLG Township of Shangri-La County (Diqing Prefecture) and stops at Daju village of Lijiang County. The river in this area cuts a 18 km long cleft between two of the biggest mountains in the province, as well as two officially established nature reserve since 1984: the 5590 meters Yulongshan (Jade Dragon Snow Mountain) on the east bank and the 5396 meters Habashan (Haba Snow Mountain) on the west bank. Its maximum depth is approximately 3790 meters from the river to mountain peak, for this reason, TLG is one of the deepest and most spectacular river canyons in the world.

The whole landscape of TLG is divided into three sections with a curving road of 25 km: the Upper section, the Middle section and the Lower section. This tripartition is not defined by altitude differences, but to meet local people's convenience and by the fact that the canyon naturally follows the course of Jinsha River. Upper TLG, 9 km away from TLG Township is renowned as the most turbulent Gorge where the Jinsha river soars into the canyon and is divided into two torrents by the giant Tiger Leaping rock. It is said that a tiger once jumped on the giant stone and then jumped to the opposite bank. It is in this section, that the official scenic area of TLG lies: a viewing platform accessible by a long staircase which leads to the famous stone on the side of the river. However, not many foreign tourists know about this area or come here as most of them are attracted by the hiking route in the high path. Indeed, most of the tourists coming to this area are Chinese, while many foreigners coming from all over the world will go hiking in the mountains. The Middle Gorge is 5 km from the Upper section and constitutes the most narrow and dangerous part of TLG, it is impressive for its steep, jagged precipices and the river billows raging with great fury. The Lower Gorge sees the Jinsha river flowing into with a slow and gentle stream. Here the visitor can see the fertile farmland and walkway on the shore as well as the river entering the wide Gorge from the narrow stone gate.

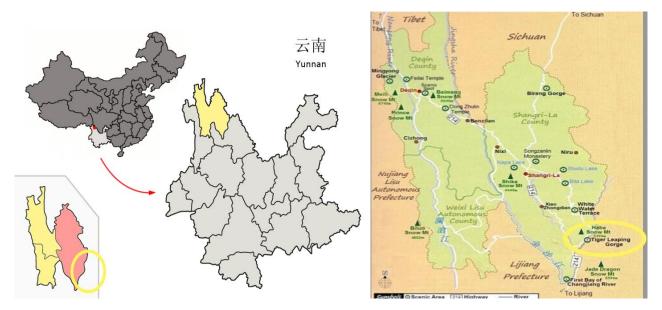


Figure 1 Map of Yunnan Province in China and Diqing Prefecture Attraction Map with TLG on the lower right

From an administrative point of view, TLG scenic area is under the government of Diqing Autonomous Prefecture, under which lies Zhongdian County, officially renamed "Shangri-La" County in 2001 (Kolås, 2008; Donaldson, 2007) and TLG Town (which has the same name as the scenic area).

TLG Town has eight administrative villages (Qiaotou, Changsheng, Yongsheng, Dongpo, Songhe, Venus, Baoshan, Hongqi) but for this particular research, the selected villages in TLG scenic area are the two administrative villages of Changsheng and Yongsheng which stretch from Upper Gorge to Lower Gorge. Changsheng administrative village comprises of nine villages: Upper Nuoyu, Middle Nuoyu, Lower Nuoyu, Heizan, Upper Changping, Lower Changping, Upper Lengdu, Lower Lengdu, Langba Mountain. The total number of people in Changsheng village is 1258, of which children account for 20%, old people (65-90) for 30% and young people (15-64) for 50%. The second administrative village is Yongsheng which comprises 7 villages: Yachajiao Group 1, Yachajiao Group 2, Yachajiao Group 3, Bendiwan, Walnut Garden Group 1, Walnut Garden Group 2, Walnut Garden Group 3. The total number of people in Yongsheng village is 1242, children account for 18% of the total, older persons for 32% and young persons for 50% (Diqing.gov.cn, 2020).

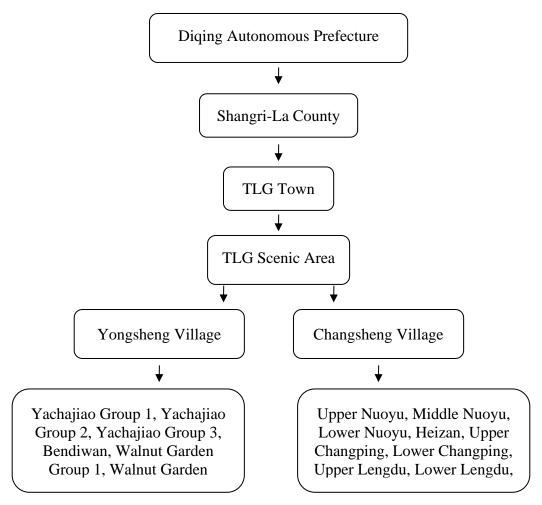


Figure 2 The administrative hierarchy governing Yongsheng and Changsheng villages

All these villages are situated in the mountains with an elevation between 1853 m (TLG Town) and approximately 3000 m, while the highest peak on the hiking route is at 2670m. As the study location stretches for 25 km up in the mountains from the Upper Gorge to the Lower Gorge, Halfway Hostel in Bendiwan village (Middle Gorge) was selected as the base for the fieldwork. Hence, I started data collection in Bendiwan village and descended slowly to the Gorge to explore the households at the bottom. In the following days I ascended again to Walnut Garden village (Lower Gorge), then went back on the road to reach TLG Towns (Upper Gorge) and ultimately ascended to explore Nuoyu and Yachajiao villages. In the last days of fieldwork, I returned to Bendiwan village to organize all the collected information and to spend the Chinese New Year's Eve with the guesthouse family.

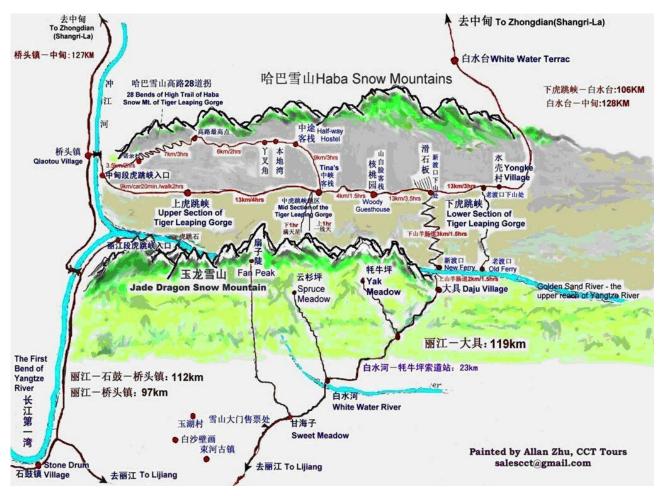


Figure 3 Tourist map of TLG

The data about population are from 2017, comprising 21276 for the total area of TLG Town (Baidu, 2020). There are nine ethnic groups, including Han, Yi, Dong, Naxi, Tibetan, Bai, Pumi, Miao, and Hui. It is a typical multi-ethnic mixed community, and ethnic minorities account for 82% of the town's total population (Baidu, 2020). The lifestyles and livelihoods of local people primarily depend on subsistence economy with a small percentage working in tourism-related activities. The majority of the interviewed households in all the villages consisted of people who had lived there since birth or even for many generations, however, some of the family members have moved to Shangri-La or Lijiang. Meanwhile, most of the younger people study in the nearest big city of Shangri-La.

2.2 Data collection methods

Unexpected event

Before explaining the detailed data collection methods used in this research, I should first point out the unexpected event that occurred during my fieldwork and which inevitably influenced the outcome of the whole research. Before starting my fieldwork, I hired a Chinese catering responsible for the translation from local dialect into English. My intended plan was to spend 1.5 months in the research

location: I would have started by conducting around 200 questionnaires, and only after the time needed (approximately two weeks), would I have started with the face-to-face semi-structured interviews. The fieldwork started on January 14th and unexpectedly ended on January 27th. On January 22nd international news about the severe outbreak of Novel Coronavirus (2019-nCoV) started to circulate and on January 26th, my research assistant suddenly decided to leave the fieldwork. By that time, I had managed to conduct only 80 questionnaires (including several difficulties, which will be explained later in the chapter), but no formal and detailed interviews had been made. Before leaving the field, I managed to collect personal contacts of some villagers who had previously filled out the questionnaires, in this way I decided to continue the work and conduct the interviews via WeChat, a Chinese messaging app. The tourist area of TLG was shut down on January 25th and all the main roads were blocked to the traffic. After only two weeks of fieldwork, on January 27th, I sadly had to return to the city of Kunming, where I then took a flight back to Italy, my home country.

My research aimed to investigate the impacts of ecotourism on local people, hence I needed to explore why and how rural ecotourism contributes to their lives, as well as the local people's own perceptions and impressions of "ecotourism". Given the exploratory nature of the research and the information I wanted to collect, a mixed methods research was adopted as an appropriate approach, which eventually provided a good level of complementarity (Johnson, Onwuegbuzie & Turner, 2007). First of all, quantitative methods with questionnaires were necessary to investigate objectives 2 and 3, which are respectively the roles of local people in their understanding, participation and expectations of ecotourism and the perceived ecotourism impacts on local population from an economic, environmental and socio-cultural perspective. Secondly, qualitative methods were necessary to enable me to discern similarities and differences. In fact, in order to gain a deeper understanding of the results from questionnaires, a comparative research design with interviews was employed to explore how different categories of people answered differently to the various statements. Other methods were employed to gather the data for this research, the following section will discuss and justify in detail each of the methods used:

1) Questionnaires

Questionnaires (see Appendix 1) were used to target villagers as the participants. Each questionnaire contained 25 statements requiring a response from 1 to 5 where 1 stands for "strongly disagree", 2 "disagree", 3 "neutral", 4 "agree" and 5 "strongly agree". The purposes of questionnaires were to generate detailed information about the perceptions, attitudes, behaviour and awareness of villagers towards ecotourism. The questionnaire was originally designed in English and for the convenient

distribution purpose to TLG residents, it was translated into simplified Chinese. Although I sought the advice of my local Chinese supervisor in framing the statements of the questionnaire and was cautious not to use any technical terms, it was still difficult for some indigenous people to understand some sentences, because of their lack of involvement in ecotourism activities or the low level of education. For this reason, in order to minimise the difficulties that some respondents were encountering with some statements, my research assistant helped to explain them by giving some daily life examples, according to their conceptions and receptiveness. The majority of respondents had a positive attitude towards my research and showed a willingness to fill in the questionnaires.

2) Informal walks and observations

Informal walks helped me to be able to understand the context within which ecotourism operates, within a broader perspective. On the day of my arrival, a walking tour of Bendiwan village was completed in order to familiarise myself with the location of residential areas, the number and types of businesses relevant to the ecotourism industry and the distribution of main tourists attractions. In the following days, these walks were still necessary to submit a higher number of questionnaires and to reach the selected villages along the Upper, Middle and Lower Gorge. Every day, my research assistant and I had to walk long distances to reach every household, following the trekking route for tourists, and it was on those occasions that I became tourist myselves. This provided me with opportunities to observe the activities of tourists, to listen to and take part in tourists' casual conversations. In this way, I could also observe the current impacts of ecotourism development in the TLG area and understand tourists' assertions more thoroughly. I also paid attention to factors such as transport networks, infrastructure and construction sites while walking in the communities. Observation was also very important while having informal discussions with the villagers, as facial and body expressions helped to reveal people's feelings and reactions towards questions and their willingness to participate (Denzin & Lincoln, 2003). The first objective, namely "Identify key stakeholders in the participation of ecotourism", was enhanced by such observations and informal discussions.

3) Informal interviews and discussions

Generally, depending on villagers' willingness and availability, informal interviews were conducted as conversational exchanges of questions after submitting questionnaires, either walking to and from villages, around the fire at night when most men and women had returned home from the day's labor or during the day at mealtimes. Informal interviews were aimed at gaining general information about the villagers' living standards and their attitudes towards the ecotourism industry. For the longest and

more relevant chats, a voice recorder was used, with the consent of respondents, to document these informal discussions more reliably.

4) Semi-structured interviews with tourists

In order to achieve the fourth objective, some semi-structured interviews with tourists were conducted (see Appendix 2). Due to my short-stay, only ten informal interviews of simple questions were conducted to obtain some general background information, such as where they come from, what attracted them to visit this area, and what they purchased. A voice recorder was utilised, with the consent of tourist respondents, to document these interviews. Moreover, a write up was made immediately after the interview sessions, in order to ensure the accuracy and reliability of the content of such interviews.

5) Instant messaging (text-chat) semi-structured interviews

Semi-structured interviews were chosen because they allow flexibility in data collection (Bryman, 2012), they facilitate adaptability of formulation of questions and terminology to suit the interviewee's background and educational level (Welman & Kruger, 2001), and they eliminate a level of rigidity that is common in structured interviews. A questionnaire and a flexible interview guide (see Appendix 3) were prepared beforehand, and only after analysing the questionnaires' results, I adjusted the interview questions accordingly by focusing on some specific aspects (see Appendix 4). However, because of the unexpected and abrupt termination of my fieldwork, I had to fall back on instant messaging semi-structured interviews, which I started once I returned home. Nineteen people's contacts were collected before leaving the fieldwork, though only twelve informants answered the questions I sent them. Some did not reply to my request or declined because they did not know how to answer.

6) Literature review

Realising that dependence on information gathered through questionnaires, interviews and observations would only have given a partial account of the subject, I collected secondary documents both in Chinese and English from promotional pamphlets, books, journals papers, academic articles, Government reports, NGOs, theses and maps. Firstly, these documents helped me to formulate research questions and methods. Secondly, all these documents were collected to have a better understanding of the current ecotourism development in China, and more specifically in northwest Yunnan. Thanks to these documents, useful information, such as ecotourism management activities, facilities and attractions were also gathered, giving additional valuable insights into ecotourism

development issues in the area. However, very few documented experiences were found for the specific area of TLG. Indeed, according to my investigation, the last research on a related topic was made in 2012, constituting a big gap in the literature.

7) Fieldwork diary

Reflection and introspection are important parts of the field research process (Bouma, 2000). I continually updated my research diary and field notes, which I used in the research to assist in reflecting on the ongoing research process, and as part of the data to be used in attempting to understand the ecotourism activities. In this diary, I recorded the process of approaching the field of research, daily meetings and logistics, experiences with my research assistant, observations on local villagers, local dynamics and reason for methodological decisions.

2.3 Sampling

The population to be sampled was people who live and work in this area. Due to specific cultural and geographical context, non-probability sampling was reasonable to help gather information and to achieve a representative data (Creswell, 2003). Participants were thus chosen based on convenience and availability (Babbie, 1992). An effort was made to capture the responses of both males and females, across a range of age categories and ethnicities. As opportunities arose, local residents were approached in the street and in residential areas and, after a verbal description of who I was as researcher, and what was being studied, they were asked if they would be willing to fill in a questionnaire.

The households on the 25 km long scenic area were far away from each other and I ended up walking for long distances, spending an entire day around each village. In the rare event that all the members of a household were present and available, I would ask all of them. In this case, people would rank themselves in terms of who could understand me most clearly and explain to others what I was trying to say. It was interesting to see the hierarchy shift when the people present changed. The oldest generation had the hardest time in understanding me, hence they would suggest that I talk to men or the youngest. Contrary to expectations, no key respondent was found, however, discussions with residents would sometimes reveal parental relationships or good knowledge among them, and this way I gained insights relevant for the future respondents. Meetings with governmental officials in TLG surprisingly occurred by chance or luck, and I could in fact interview some village heads while searching for new respondents on the way. The interviewed people on WeChat app comprised of guesthouse owners, students, tourist drivers, school teachers and employees at TLG Tourism

Company. All of them were village residents, and the age range of the participants was between 24 and 44 years-old.

2.4 Data analysis

Data analysis entailed reviewing and interpreting questionnaires' results, observations, and interview responses in light of the defined research objectives. In the first place, quantitative data analysis of the questionnaires' results was conducted using Microsoft Excel. A total of 25 statements were formulated to obtain results for Objective 2 and 3, which have been measured using a 5-point Likert-type agreement scale. Subsequently, residents' responses were categorized and then quantified for each question to enable response patterns to be identified. Furthermore, by the help of the statistical program Sigmaplot 14.0, some Chi-square tests were carried out between categorical variables (ethnicity, gender, age, family, education, work, involvement in tourism, language skills) and the responses given to the 25 statements. However, only those presenting significant p-value (P<0.05) and relevant to the argument were discussed in the Results Chapter. Diagrams were then generated to display similarities and differences among the respondents.

For qualitative data analysis, interviews with tourists were transcribed in Word during fieldwork and then coded afterwards. Moreover, according to relevant issues outlined from the results of the questionnaires, WeChat messaging app interviews were conducted for an in-depth understanding of some issues, further showing the complementarity benefit of mixed methods approaches. Relevant key concepts, categories and themes were highlighted to organise the discussion at a later stage. Transcribing the qualitative interviews with tourists did not consume as much time as expected. Similarly, WeChat interviews were easy to analyse as responses were copied-pasted on a Word file, resulting in substantial time and associated cost saving. Lastly, Chinese documents collected were also translated to provide context and aid in data interpretation.

2.5 Ethical considerations and reflection on research criteria

Especially as I collected data from indigenous people, and their perspectives were the main sources for my research, ethical issues needed to be considered carefully before I went to the field. First of all, the research problem I chose intends to benefit the population who was studied, rather than "further marginalize or disempower the study participants" (Creswell, 2009). Secondly, participation in the research was voluntary and no participant was unethically coerced to participate in the research against their will; rather they were informed of the purpose of the research and they made their

decisions on participation based on that information. The research participants had the right to withdraw at any time.

2.6 Limitations of the study

The whole research process was fascinating but also challenging. Any research activity is bound to encounter a range of challenges, some of them springing up as a surprise to the researcher, while others would have been predicted well in advance. The following listed limitations were encountered during the data collection and analysis stages. For each limitation, a solution, where found, is listed.

Translator

Language was one of the first important limitations during fieldwork: although I have studied Chinese for several years, I did not feel competent enough in interacting with local people on this specific topic. Furthermore, even though I was able to speak and understand Mandarin Chinese, local people mostly use local dialects rather than standard Chinese. I believed that to help improving the livelihoods of residents in rural communities, it is fundamental to be able to understand and speak the local language fluently. Thus, given my low budget, Liu Zhen, an employee at the Yunnan Institute of Finance Innovation, was hired on a voluntary basis to assist me in this research and to interact with local people. I carried out the majority of interviews with the help of Liu Zhen. The presence of my translator had both advantages and disadvantages. On the one hand, since I was not always aware of the cultural rituals necessary for discourse with Chinese, my translator was often able to rephrase too pointed a question into a form polite enough to ask or even embellish my words with suitably empathetic body language. The interpretation, therefore, was not purely linguistic. Finally, her support also gave me confidence as well as a great practical help. On the other hand, I have little doubt that my interviews, though mediated through another person, were faithful to my objectives. I was also aware that her presence could influence the participants' willingness to share their own views and especially the mediation had the potential of distorting responses. Before initiating the research, I took some time to familiarize the interpreter with the research topic as well as agreeing upon how to submit questionnaires and how to conduct some informal interviews right after the submission. All these were important procedures were intended to prevent misunderstandings (Bryman, 2012).

Having the ability to understand Mandarin Chinese, I could understand the interviews, influence the communication, and discover relevant or outstanding issues during the informal interviews, despite the presence of a translator. However, if the respondent was only able to speak dialect, some

difficulties would arise related to the understanding and communication which probably influenced the accuracy of my comprehension of the participants' perspectives. On top of this, these particular interviews were restrained by the translation quality, as Liu Zhen was not a professional translator and her English oral skills were sometimes not sufficient to provide me with all the required details. After the first three days, we took some time to understand how she could improve her translation work and how she could report in the most accurate way. To a certain extent, we eventually managed to maintain smooth communication and a discrete way to conduct interviews together.

Definitions and concepts

Another big challenge in conducting my research was assembling local villagers' definitions of the term "ecotourism", which is a western concept that has come about within the last two decades. Although a direct identifying question like "How would you define ecotourism?" was asked, many local villagers were unable to answer such questions, due to their low levels of education. The majority of old people, in particular, were illiterate. However, this does not mean local participants had no idea. Instead, this is mainly because local people had never thought about this definition before and says a lot about the current situation of ecotourism development in the area. Meanwhile, participants were also aware that they were not well educated, hence, they were not confident in providing me what they saw as a correct answer. When the participants had difficulty responding to these questions, they tended to politely decline to take part in the questionnaire. Before conducting my fieldwork, I was aware of that, so I tried to find a solution during the fieldwork, but with no success. In order to encourage the participants to express their ideas confidently, I would ask them to say anything they know about it and try to get them to come up with a definition first. In fact, I did not explain what I knew about the concepts, otherwise, my definition of ecotourism would have influenced the rest of the interview. Whenever necessary, I would also go back and interview them and explain what I meant or described it towards the end of the interview. Lastly, subjectivity was inevitable, not only in understanding participants' conceptions but also in my own observations, especially in the initial period of my research because it took time for me to get used to this specific cultural context.

Semi-structured interviews via WeChat messaging app

As explained before, my fieldwork was interrupted after only two weeks, hence I had no alternative but to collect personal WeChat contacts and interview them after returning home. Video call or phone call was also another option but, for the same reason as before, I did not feel confident to conduct interviews without a mediation. A three-person group chat with the selected respondent and my

translator was created in case of any language problem or clarification. In general, the research found that there were a certain number of participants who preferred to answer "Yes" or "No" to some questions. However, such answers rendered little data. Hence, I made efforts to encourage the participants to talk at length by reflecting on their own personal experience. For example, after asking a question like whether ecotourism has brought any benefits, the participants were further asked: "Why do you think so, could you give me an example that has happened in your daily life to illustrate this?". Some of the respondents could only answer "not sure" or "not clear" to some questions and this clearly had some serious limitations to an in-depth understanding of the issues. Using a messaging app for conducting interviews did not favour a successful follow up for certain questions: most of the participants only gave partial and unclear responses or did not answer, hence did not provide me with the details I needed. Other than the lack of depth, other disadvantages included the lack of information from body language.

Approaching local people

Another problem which occurred during the interviews was that some participants often drifted off to topics unrelated to the research. In that case, my translator and I had to politely interrupt and redirect the discussion back to the research topic. As for the willingness to fill in the questionnaires and answer some questions, the majority of local villagers were hospitable and kind. However, somebody was a bit reluctant or even asked if that could imply a monetary compensation. Building trustful relationships and rapport with local people was quite significant in smoothing the way for conducting interviews. Especially at the beginning where I were not confident enough in approaching people, I could perceive that many residents may not have felt comfortable in filling out the given questionnaire. Hence, I started by chatting with them casually, and when participants felt more relaxed and confident, I would then turn to ask them some questions. This familiarisation took a very long time during the first three or four days, hence I understood that I needed to speed up the process: despite the fear about the possible outcome of these changes I eventually succeeded and a larger number of respondents was achieved within a day.

For these reasons, it was difficult to achieve a sample larger than 80, because trust with participants was not always easy to build and honest self-representation was hard to ensure in a short time. There are also other reasons why the target of 200 questionnaires was impossible to achieve. First of all, I often ended up walking into empty households, probably because of farmers' involvement in agricultural practices far away from their farm when the interviews took place. However, where it was possible to find some people, the whole family would let the most knowledgeable person fill in

the questionnaire and the rest would just observe or entertain me with some tea and snacks. Indeed, it was extremely hard to include all the family members and I often failed in letting everybody join the questionnaire activity. Secondly, when two or more people within a household were convinced to take part, there was still a risk of glossing over the subject with similarly biased views as these family members seemed to have similar views to those expressed by the previously interviewed informants. Some persons were then intentionally not interviewed. Being flexible and open was found useful in doing research in this context, as was highlighted by Scheyvens & Nowak (2003). Meanwhile, persistence was also relevant and necessary in finding new respondents and finally in completing the research.

Reflection on methodology: involvement in tourism

The studied group was community residents, both involved and not involved in tourism, and they were asked the same questions. However, there were some respondents who could not understand some very simple concepts, especially people who were not working in tourism. During the data collection process, I first wondered whether to make this distinction: business owners would respond with respect to tourism's impact on their business specifically and residents about their personal impacts. As this would have implied reformulating a questionnaire at an already advanced stage, this option was excluded. Thus, I wondered whether to exclude people not involved in tourism, but then I would have had only feedbacks from people working in tourism, resulting in a smaller and not sufficiently representative sample. Some respondents even told me to avoid interviewing farmers as "they are not cultured". I finally thought that it would be too unfair and that both perspectives were interesting and useful to be explored, despite some biases.

Moreover, Chi-square tests have found to be not very effective as each variable contained very small numbers which undermined fair representativeness. Just to give an example in the variable of "ethnicity" only two respondents were of Lisu nationality, and this eventually influenced the outcome of the analysis, very often skewing on their side. Consequently, when analysing the significance among variables and statements, "ethnicity" and "jobs" were often found to be significant, because of the small number of the population within the variable. Also, chi-square tests revealed differences within the scale from 1 to 5. However, 1, 2 and 4, 5 were conceptually similar but the final result did not take into account such conceptual similarity resulting in an erroneous significance.

External events

In addition to the above problems, several other difficulties emerged in the process of doing this research. This research was conducted within a particular period of time, which was in the low season and over the Chinese New Year. When the Chinese New Year officially started, I was advised by many guesthouses' owners not to go to other houses and conduct interviews, as people, especially the older, would be annoyed. Moreover, during the peak season, due to a large number of tourists, environmental, social-cultural, and economic impacts brought by ecotourism can differ from those found at the time of this case study. Hence, the data collected only partially reflected that time period's impacts of ecotourism development, and the information obtained from tourists may limit the possibility to contribute to the provision of more comprehensive recommendations towards the management of ecotourism in the field site. Other external events, such as the unlucky Coronavirus outbreak and the unexpected sudden departure from the fieldwork, not only affected the study in terms of limiting the number of interviews (with the only possibility of doing them via WeChat) but also our emotional state. This resulted in having my translator suddenly leaving the fieldwork, and myself personally trying to come up with some fast solutions.

Confronting authoritarianism

China is a country in which it is difficult for anyone to do research, but particularly for foreigners. As argued by Sanders (2018), China is an authoritarian state where discourse runs from top-down, a country where people -at least people without a great deal of power- are unused to asking (or answering) questions. It is, moreover, a country where, despite nearly twenty years of reform and opening to the outside world, foreigners are treated simultaneously with a mixture of respect, friendliness, suspicion and resentment. Thus, for a village cadre or farmer to be confronted with questions by a foreigner is itself a very strange state-of-affairs. In an authoritarian society where there is a politically acceptable, official line on just about everything, it is likely that answering them will provoke a degree of anxiety unimaginable to those living in more pluralist regimes. This was the case even when I was not accompanied by my Chinese translator, but still more so when I was. In such circumstances, the establishment of relationships, of good "guanxi", is absolutely essential if the researcher is to elicit anything beyond the stock response. When my translator and I were able to develop trust in the villagers, the story often changed. This might explain why some questionnaires' results were often confuted by other qualitative results.

As argued by Sanders (2018), it is important to point out that official statistics cannot always be relied upon in China. Even though I did not rely on much statistical data, however, statements and data

provided by the Tourism Company or the village heads have been treated with extreme caution. Inaccurate reporting was also occurring and this might be explained by Muldavin (1996) as the "simple desire to please on the one hand and to make claims upon state resources for relief on the other". Even though this was not always the case, it was not possible to verify certain statements on all occasions.

Lastly, I did not have the freedom to interview whoever I wanted or to talk about anything I wanted, as also warned by many scholars I met prior to fieldwork. I then considerably restricted my interviews to village cadres and people I could trust (based on our personal feelings), as well as my interview's content. This consequently limited the sample and the information on the topic. Further, being a politically sensitive time in China, especially after the implementation of the new NGO Law in 2017, the Chinese Government has been more and more reluctant to welcome foreign visitors in specific areas of southwest China, especially if local minorities are to be involved. Fortunately, I did not meet any related obstacles during my fieldwork, supposedly because the way I framed my topic was seen under a positive lens.

Location conditions

Of course, as with all fieldwork in rural areas, there are some logistical problems of doing research in China. January in TLG is cold and windy, moreover, the poor road conditions and the sparsely distributed way local people live made it even more complicated. As a result, the sample sizes of the questionnaire survey were small, which might have influenced the validity of the generalization of the findings.

Attempted contact with an NGO

During my field research, I wanted to investigate the current situation of biodiversity conservation after tourism developed in the area and talk to representatives of The Nature Conservancy, an American NGO in charge of the "Three Parallel River" project. Despite the many emails I sent and calls I made, I have never received an answer from them, so no person of expertise could provide me with detailed information about the current environmental situation in TLG and its status as a protected UNESCO heritage site.

3. RESULTS

The first part of this chapter is devoted to presenting the development of the main industries in TLG and tourism in particular. From the second part onwards, the results for each objective outlined in the Introduction chapter will be presented. The second part identifies key stakeholders in the participation of ecotourism. The third section is meant to investigate local people's understanding of, participation in and expectations of ecotourism. The last section of the chapter is to explore the perceived impacts of ecotourism on the local population from three perspectives: economic, environmental, and socio-cultural, while also analysing the factors influencing ecotourism sustainable development. Whilst investigating these themes, only face to face informal interviews allowed to observe some voice, facial and body language cues which, where relevant, strengthen the respondents' statements; moreover, people interviewed via text-chat will be addressed as "Informants". Answers that were similar across the majority of respondents represent themes that help explain the general understanding of ecotourism in TLG. Due to the limitations encountered during fieldwork and non-probability sampling approach, responses from the 80 households interviewed are not necessarily representative of the larger TLG community but are very significant for answering the research questions posed in this thesis.

3.1 Industries in TLG

The main sources of income for the households surveyed were agricultural activities, mining, construction, tourism-related activities and migrant labor. No other specific data were available for a better understanding of the economic sectors in the area; indeed, these were conclusions taken from discussions with locals and personal observations.

Based on the discussions with villagers in TLG area, subsistence agriculture was the main production activity. Agricultural products were corn, bean, wheat, potato, mushroom, pumpkin, pear, peach, plum, orange, apricot, walnut. Moreover, there were some medical herbs such as Paris polyphylla and Bletilla striata, which could be harvested only every three years. Some crops were also used to feed the household's livestock: horses, mules, cows, pigs, chickens, ducks, goats. Some locals said that what they harvest had mostly a subsistence value rather than an economic value.

As for the mining sector, this has been operative since the 1980s, where mineral resources such as gold, copper, iron, tungsten, lead, beryllium, manganese, marble and silicon have been extracted ever since. The mining site of which I collected information during informal interviews was in Bendiwan

village where they were extracting tungsten. The mining situation in TLG was very unclear though: apparently the mines were closed since November 2018 (or even before) by a governmental order, but a few respondents informed me that they themselves were still working there or that some of their relatives were. In fact, mining has been an important economic source for many villagers: every year each individual was receiving approximately 100 RMB from the Government. Nevertheless, there were many people opposing such activities as they learned that mining would cause great damage to the mountains and vegetation -water and air pollution, mudslides, landslides- eventually harming the villagers' interests. I planned to get closer to the mining site in order to have a clearer idea of the situation but I did not know the exact location, and I was discouraged by many locals to do so. According to what the respondents told me, no one was allowed to enter the area and even local people would have needed a permit. Apart from the mining site of Bendiwan village in Middle Gorge, I could also notice that in the backside of TLG scenic area, a couple of mines were still active.

The construction industry was also another important sector where many local people between 25 and 44 years-old found employment both in villages and outside towns (Lijiang & Shangri-La). In fact, I could observe that many villagers were involved in the construction of private houses. One of the respondents, a 43 years-old male, mentioned that "Only 10% of people are relying on tourism here, the first income-generating activity is working outside the area and in the construction industry like building roads and houses". This information was not possible to be verified, but data and general perception proved that only a few people were actually involved in tourism.

3.1.1 Tourism Industry

The scenic area of TLG has been rated as an AAAA level tourist attraction in Shangri-La, the Chinese national rating system used by the Ministry of Culture and Tourism. The rating system has a maximum of five A, representing the most important and best-maintained tourist attractions in the People's Republic of China. TLG is an international key scenic spot, also part of the Three Parallel Rivers World Heritage Site, a UNESCO natural preservation area (UNESCO, 2020). Hence, the reasons for visiting the area are multiple, focusing on the mountainous scenery, biological diversity and ethnic culture. TLG main tourist attractions include the UGSA (Figure 4), the TLG hiking trail-part of the ancient Yunnan Tea Horse Road- (Figure 5), the 28 Switchbacks at 2680m, the Guanyin Waterfall and Temple (Figure 6), and the "Sky Ladder" in the Middle Gorge (Figure 7).



Figure 4 The UGSA



Figure 5 Hiking trail in Middle Gorge



Figure 6 Guanyin Temple



Figure 7 "Sky Ladder" in the Middle Gorge

From the mid-to-late 1980s TLG became a destination for trekking experience, catering almost entirely to Western backpackers. Beginning from the late 1990s, non-commercial family hospitality gradually transitioned to commercial tourism and developed rapidly (Zhu, 2012; Donaldson, 2007). In the 2000's pressure started to be put on the Gorge (Hayes, 2007) to increase its appeal to domestic tourists and more roads were blasted through its length to accommodate the tour bus travel preferred by Chinese tourists. Each farmhouse inn started to provide accommodation that met the standards of Western youth hostels. In TLG area, there were more than 30 guesthouses with different standards and a daily capacity of more than 2000 people (Baidu, 2020). However, the owners of these guesthouses only accounted for a small percentage, representing the "rural economic elite" (Zhu, 2012). Nonetheless, not all of them relied solely on the tourism industry but they were also engaged

and depended on farm work for food. As a 55 years-old guesthouse owner said: "Although my wife and I are running a guesthouse, we still depend on our harvest" (Personal communication, January 2020).

3.1.2 Ecotourism in TLG

Turning now to a more in-depth presentation of the ecotourism development in the study site, it has to be acknowledged that in more than 30 years of tourism development, no official ecotourism plan for the specific area of TLG has been made by the Government yet, and there were no signs or information panels mentioning ecotourism in the area. Furthermore, Diqing Shangri-La Tourism Company set up one official website in 2018 but was not updated at all in 2019 (http://www.ynhutiaoxia.com/). It was not until April 2020 that a new website both in Chinese and English was created containing information about the area (http://en.xgllhtx.cn/). The lack of an official ecotourism project could also explain why most of the interviewed villagers in the area did not have a clear idea of what ecotourism programs exist there, while they were more familiar with the traditional form of tourism.

Although there was no evidence of officially recognized ecotourism project in TLG, some individuals have started to think about it. Lower Nuoyu village head told me that he wanted to bring ecotourism in the village through a private plan, but with specific characteristics deriving from his personal interpretations of the concept. He planned to build a four-star hotel using stones and other local materials, taking advantage of the snow mountain scenery. Each family room will look like a whole house and the price of each room will be higher than 900 RMB per night. Based on this location and price, he thought that it will be a small-scale tourism attraction and will not cause too much environmental damage. Moreover, children will have the possibility to experience rural life by doing farm work with local people or help growing vegetables in the fields. This could apparently be considered a potential ecotourism project if it was not for the many contradictions emerging from our discussion in terms of the number of villagers informed, future involvement of local people, design of the projects and financial support. Lastly, there were also some outside companies providing tours in the area, such as Diqing Luosangjiangcuo Tourism and Commerce Co., Ltd. established in Shangri-La in 2015.

Ecotourism influence on people's lives

The earlier paragraph indicates that a real ecotourism plan has not been established yet and every villager had its own understanding of the concept. The next section, therefore, moves on to discuss

the influences of ecotourism development on local people daily lives. The responses will be grouped into four main themes which emerged from the respondents' interviews.

Income

The majority of the respondents stated that ecotourism will help increase the household economic income and the living standard. As reported by Informant 4, a Naxi 45 years-old female and elementary school teacher: "Tourism in Tiger Leaping Gorge has improved the living standards of the people in Tiger Leaping Gorge and has increased family economic income" (Personal communication, January 2020).

Interaction with tourists

Other respondents added that ecotourism might also favour the exchange with tourists as Informant 1, a Han 40 years-old female guesthouse owner said: "Ecotourism has a lot of influence on my life, such as increasing my income. At the same time, because of the communication with tourists from all over the world, my vision and mind are broader" (Personal communication, January 2020). Similarly, Informant 8, a Tibetan 50 years-old female guesthouse owner said: "Tiger leaping Gorge tourism enables me to earn a proper income, and at the same time I have met guests from all over the world. I also learned a lot from them" (Personal communication, January 2020).

Not satisfied

Regarding the satisfaction of the development of ecotourism in the area, most of the interviewed were not satisfied: Informant 1, a 40 years-old female guesthouse owner reported that: "I am not satisfied because the current development of ecotourism does not promote local development well" (Personal communication, January 2020) and also Informant 4 said: "I think there can be more facilities in the scenic area so that more people can get employment" (Personal communication, January 2020).

Sustainability

Some few respondents also showed a higher understanding of the sustainability that ecotourism has the potential to achieve. Informant 6, a Han 25 years-old male guesthouse owner who could also speak English said: "The development is very good, but it does not meet the concept of ecotourism and sustainable development, I am not satisfied" (Personal communication, January 2020). Informant 7, a Naxi 42 years-old male working in the local tourism company affirmed: "The current development has not yet entered the period of ecotourism, but still belongs to a semi-ecological tourism state. I hope that it will develop better in the future" (Personal communication, January 2020).

3.2 Key stakeholders in TLG

3.2.1 Local people

Being local people the main focus of this case study, demographic information was sought in order to give a better understanding of their background. Information included ethnicity, gender, age, family members, education level, work, involvement in tourism and language skills (Table 1).

Characteristics	n	%	Characteristics	n	%
Ethnicity			Work		
Han	41	51.25	Farmer	27	33.75
Naxi	30	37.5	Guesthouse owner	12	15
Tibetan	7	8.75	Student	11	13.75
Lisu	2	2.5	Teacher	5	6.25
			Unemployed	5	6.25
Gender			Freelancer	4	5
Male	40	50	Employee	3	3.75
Female	40	50	Driver	3	3.75
			Tourist guide	2	2.5
Age			Part-time job	2	2.5
15-24	14	17.5	Others	6	7.5
25-44	49	61.25			
45-64	15	18.75			
65-80	2	2.5			
Family members			Involved in tourism		
<3	4	5	No	51	63.75
3-5	50	62.5	Yes	29	36.25
5-7	18	22.5			
>7	8	10			
Education level			Language skills		
Primary	24	30	Dialect & Mandarin	64	80
Middle	20	25	Dialect	6	7.5
High	12	15	Mandarin & English	10	12.5
University	24	30			

Table 1 Demographics of the population sample (total N = 80)

Both genders were nearly equally represented and with regards to education, the demographic investigation revealed that the respondents with primary and middle school accounted for 55%, while respondents with high school or above degree occupied 45%. This indicates that the education level of the community residents was generally low with further disparities among men and women as shown in Figure 8.

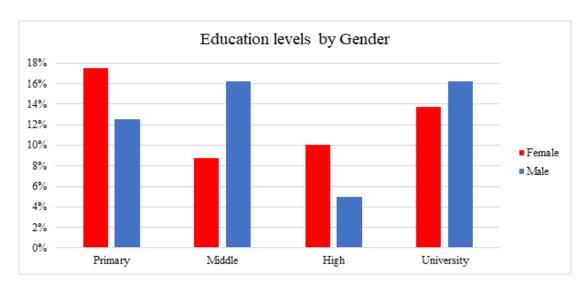


Figure 8 Education levels by Gender in TLG

Surprisingly, only 36% of the respondents engaged in tourism-related areas. Employment for those not working directly in tourism came from small-scale agriculture, small businesses, construction, teaching, carpentry; while most of the people involved in tourism were guesthouse owners and taxi drivers.

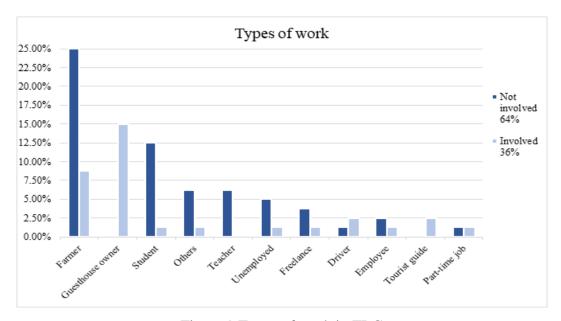


Figure 9 Types of work in TLG

3.2.2 DSTC

TLG has been managed by the "Diqing Shangri-La TLG Tourism Management Co.LTD" (DSTC) since 2008. As stated in the Diqing Government website (2020), they were committed to several aspects such as the construction and management of Shangri-La TLG Scenic Area, the protection of

cultural relics and intangible cultural heritage, sales of national costumes, arts and crafts, tourism product development, sales, catering services, air ticket booking, Scenic area ticket sales and many others (Diqing.gov.cn, 2020). The revenues earned from the tourism industry were handed into the DSTC, which was subordinate to the Shangri-La Tourism Group Co.Ltd, a state-owned business, Shangri-La Government and the Yunnan State-owned business. These institutions, in turn, will get a different share of the revenues deriving from tourism. The DSTC remained responsible for the distribution or management of all these earnings. The following diagram (Figure 10) shows the institutions involved in the tourism industry and their subordinate relationships.

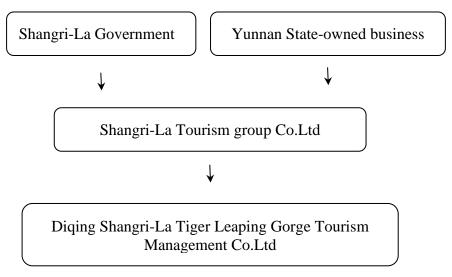


Figure 10 The management hierarchy governing TLG scenic area

3.2.3 Tourists

This section will focus on exploring tourists' origins, their expectations of ecotourism, and purposes for visiting, to assist in analysing ecotourism impacts in TLG. The following will start with illustrating the key tourist characteristics, which were identified by my interviews and own participant observation.

According to DSTC, the number of visitors in the Scenic Area in the past three years had increased considerably: 1.2 million in 2017, 1.35 million in 2018 and 1.42 million in 2019. However, these were data referring to the number of visitors in the UGSA, while the number of tourists in the hiking trail and related statistics were not available. It follows that the hiking TLG area and the UGSA presented two different kinds of tourists: in the first area tourists were backpackers from all over the world, whose main purpose was hiking. In the second area, all, or most of them were domestic tourists. For exemple, during the time of my visit no foreigner was found. It was curious to notice that the

ticket sold at the entrance of TLG ticket office was actually for the UGSA and was not actually required for the hiking trail. Also, the back of the entrance ticket showed the UGSA map, but no one was aware of it. At this regard, Informant 7 said: "Our company's management covers the whole area of TLG. However, most tourists like 80% only visit UGSA, and about 20% choose to hike. So, there is no map for hiking" (Personal communication, January 2020).

At the time of research, tourists included students, teachers, businesspeople, professional people, parents with children and the retired. The age range was between 20 and 60 years-old from EU (50%), North America (20%) and Asia (30%). Most tourists were identified as short-stay visitors, spending generally two days and one night but no more than three days. As a result, the average spending of the tourists was quite low; the balance of the expenditure was purchased for transportation, accommodation, meals and water. Further, like any other tourist attractions, tourism in TLG also had clear seasonal characteristics. Most visits occurred in the dry season (September, October, April, May) and associated with holiday periods, while during the winter there were fewer tourists.

Interviews were conducted only with tourists in the hiking trail, as the time spent in the UGSA was very little, merely intended to explore the development of that specific spot. Related to the varied understandings and expectations of ecotourism, the motivations behind tourists' visits were very similar. 80% of the respondents wanted to enjoy nature, plus there was a certain number of tourists whose purposes when visiting were bound up in doing exercise and hiking. 45% of tourists also highlighted the willingness to see a different part of China, its culture and wilderness specific to the region.

3.3 Local people's understanding, participation, and expectations of ecotourism

3.3.1 Local people's understanding of ecotourism

Not all the permanent residents of Yongsheng and Changsheng villages in TLG area were familiar with the term "ecotourism". In fact, as it has been discussed in the previous chapter, many participants could not explain clearly what "ecotourism" actually meant, and some admitted that they had never thought about this concept before. Informal interviews after questionnaires sessions revealed that many villagers, especially the older residents and the farmers, were not well-educated. Hence, people were not always confident in voicing their thoughts. Many villagers that were approached for submitting questionnaires declined to take part as they could not read or write. In that case, I explained that there was no need to write and I could also assist them in understanding each statement, but they

were still politely refusing. Even though local people were not confident in defining the term "ecotourism" fluently, some of them did do some thinking while filling the questionnaire and produced their own conceptualisations of the term.

Among those who responded, the perception of ecotourism was largely linked to a kind of tourism based on a good environment and helping to protect it. For example, Informant 4 reported that: "Ecotourism means paying more attention to the protection and development of the ecological environment in the development of tourism. The difference from general tourism is that we must develop tourism from the perspective of protecting the ecological environment" (Personal communication, January 2020). As Informant 4 was also a teacher, she might have been more familiar or already held some knowledge about it. Similarly, Informant 5, a 19 years-old female University student also considered ecotourism as an "Environmentally protective industry that allows the local people to enjoy a good living environment" (Personal communication, January 2020).

Some other respondents pointed out the economic benefits deriving from the ecotourism activity as Informant 1, a 40 years-old female guesthouse owner remarked: "Ecotourism is better than tourism, which benefits local people by selling local agricultural products and livestock" (Personal communication, January 2020). Informant 1, in fact, had some experiences in selling her own agriculture products hence the above interpretation of ecotourism.

One more definition of ecotourism relates it to the notion of authenticity as seen in an answer given by a Naxi male guesthouse owner: "Ecotourism is about to let people see what locals do, protect the environment, authentic life" (Personal communication, January 2020) as well as Informant 12, a male tourist bus driver: "Ecotourism means selling local food, if you buy food from outside is no more ecotourism, also it should be called original ecotourism" (Personal communication, January 2020).

A small number of participants, specifically tourism workers alluded to the notion of sustainability as Informant 7: "I think ecotourism can be seen from two aspects: from one hand ecotourism pays attention to both economic and environmental benefits, while traditional tourism tends to emphasize economic benefits and ignore environmental benefits. From the other hand, the development of ecotourism is sustainable. Traditional tourism ignores sustainable development" (Personal communication, January 2020). Informant 7 was an employee in the marketing department of DSTC, hence his working background might explain his detailed answer.

The last trend that can be highlighted is the concept of a better landscape. At this regard, Informant 3, a 28 years-old male taxi driver reported: "You can see a better scenery, not artificial, pure and natural" (Personal communication, January 2020) or as Informant 8 affirmed: "In my opinion, ecotourism is less artificial and mainly based on natural scenery, so guests can get an unusual experience" (Personal communication, January 2020).

Overall, the informants in this study described ecotourism as mainly based on a good and enjoyable environment. Yet, the few respondents with a higher level of education and tourism-related working experience showed a higher understanding of the concept as a sustainable form of tourism with environmental and economic benefits, while the socio-cultural aspect was not considered at all. Thus, it can be seen that the definition of ecotourism given in the Introduction chapter is quite different from the answers given above. Together these results provide important insights into local people's understanding of ecotourism hence helps to answer the second research question of the study. There is a lack of a unanimous comprehension of ecotourism, especially where the level of education was low. The next paragraph, therefore, moves on to discuss the level of local people's participation in ecotourism.

3.3.2 Local people's participation in ecotourism

Results from quantitative questionnaires show that above 80% of the local population had a good attitude towards ecotourism participation, with just small differences between people involved and not involved in tourism, which will be highlighted where relevant.

More specifically, almost 90% of the respondents claimed that they participated in every phase of the development of ecotourism -development, implementation, evaluation, discussion- and a small number was "unclear". These data, however, must be interpreted with caution because each phase was not investigated separately. Moreover, only 36.25% was involved in tourism, so additional uncertainty arises from 63.75% of the respondents who were not involved in tourism. It's possible that this result is due to the fact that most of the people did not have a clear idea about the meaning of ecotourism or explained it as merely environmental protection as the "Local people's understanding of ecotourism" paragraph shows. Hence, it might be that they interpreted the statement as being part of the environmental protection activity in the area, especially due to the promotion of the "ecological civilization" ideology of the CCP of China. Consequently, interviews were conducted in order to provide with further details about which phases were they able to be involved in. Surprisingly, the majority reported that was not involved, hence this finding contradicts the previous

quantitative result. Informant 7 even said that: "The development of ecotourism requires the strong support of the relevant government departments, not everyone can participate in it" (Personal communication, January 2020). The informant was working in the DSTC and was previously head of the village, hence his answer was very much influenced by his own working experience and previous connection with the local government.

Willingness to participate and the reasons

Despite the little knowledge that most of the population had about ecotourism, the majority of the population was optimistic that local ecotourism will have a bright future and highly supported its development in TLG. 88.75% of those surveyed reported that was willing to participate in making the policies and decisions for ecotourism development. The main reasons to participate were related to the possibility of increasing their household income, as Informant 1 said "I hope to make a contribution to my hometown and lead the local people to become richer because working in tourism can increase my and the other people's income" (Personal communication, January 2020). Informant 7 also reported: "I am engaged in individual tourism business because first of all, ecotourism can let more tourists know about our traditional culture and secondly because it can help families bring in a good income, thus it will help change our standard of living" (Personal communication, January 2020). Other few respondents agreed that ecotourism would promote the development and dissemination of their cultural heritage. The exchange with tourists was also emphasized by Informant 6: "I am willing to participate because on the one hand you can meet more people, understand more culture, and on the other hand, you can bring some income to the family" (Personal communication, January 2020). One final reason given by the respondents was the improvement of living standard, as Informant 5 affirmed: "Now people's living standards are constantly improving, people have more time and financial resources to travel, we have unique scenery, so I think it is still very promising to do tourism here" (Personal communication, January 2020). Similarly, Informant 9, a Naxi, 29 yearsold tour guide said: "I am willing to participate because it can drive our economic development and income, and at the same time can change the living standards of the surrounding people" (Personal communication, January 2020). Over half of those surveyed via text-chat was willing to engage in an independent tourism business (e.g. running a family hotel, restaurants, commodity, transportation) mainly because of economic benefits. People involved in tourism were more willing to be engaged than people not involved, which account 93% and 82% respectively. Similarly, 82% of the respondents were willing to work in ecotourism enterprises (e.g. green hotels, green travel agencies, ecological scenic spots).

Only a minority of the respondent was not willing to participate in ecotourism because they had no favourable conditions, resources, education and time. One guesthouse owner commented that: "I don't want to work in tourism because it put pressure on me and I do not make enough money out of it" (Personal communication, January 2020). Bendiwan head of the village instead stated that: "I just have a junior high school education, and I can't speak English. I don't have the ability to open a guesthouse" (Personal communication, January 2020). This answer revealed a certain attitude similar to many other respondents, where lower education and lack of language skills were considered obstacles to the participation in the tourism industry, hence much influencing the way tourism was put into practice in the village. In one case, Informant 10, a 23 years-old male working as a freelance in investment finance, thought that: "Tourism in China is too tightly controlled" (Personal communication, January 2020).

Perceived challenges and problems

Albeit the majority of the population was willing to participate in ecotourism related activities, there were however many challenges that local people encountered. The main problem was the lack of capital, sufficient knowledge, and techniques, which less than 50% of the population reported to have. At this regard, Informant 1 said: "I hope there are professional people to guide me to participate in ecotourism activities" (Personal communication, January 2020). Moreover, a Chi-square test in relation to the questionnaire statement "I have enough money to participate in Ecotourism development" found some disparities in the category of gender (Figure 11) with the following P-value: 0,024. Other respondents claimed that besides the language skills, they lacked managerial and operational skills, theory, and experience. In this respect, 85% of the local population expressed the need to receive more ecotourism business training. 91.25% of the population agreed that the Government could help and support residents to participate in developing tourism. A small number of participants, however, agreed that the development of ecotourism requires stronger support of relevant government departments.

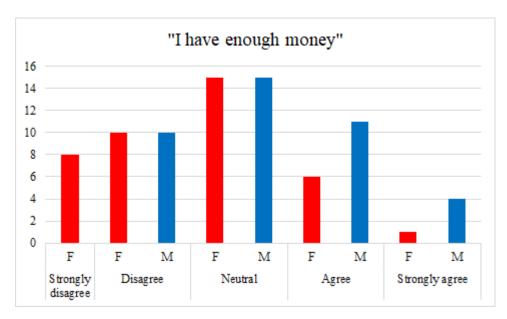


Figure 11 "I have enough money" related to Gender in TLG

3.3.3 Local people's expectations of ecotourism

Overall, 96% of people involved in tourism expressed the desire to receive more training while among the people not involved only 78% expressed the same. Many local people reported that there was no training in environmental education. A few people said that certain environmental training was provided -mostly as conferences and meetings- these included issues such as fire prevention, flood, collection of rubbish, deforestation, and mining pollution. However, these only happened a few times per year, or even once every few years (this information may vary from respondent to respondent). One Naxi teacher said that very few environmental protection classes were given in his primary school, and these were about Haba Mountain Heritage Site, also part of the Three Parallel Rivers protected area. Moreover, there was no collaboration among the local Government and external NGOs as also confirmed by Bendiwan head of the village: "At present, the government has not cooperated with any NGOs in education or marketing" (Personal communication, January 2020).

Only in Nuoyu village, informal discussions with villagers revealed that there were occasionally some "tourism training" on how to run a guesthouse. There were also government officials investigating whether there were families willing to support tourism development, but Informant 4 said: "They never did anything in practice" (Personal communication, 2020). It seemed in fact that people wanted to receive training, but there was little availability of them, and no one wanted to take responsibility for conducting them. Furthermore, informal discussions revealed that not everybody would attend the training; commenting on this Bendiwan village head said that: "The training is organized by the government, and each family sends only one representative to participate in the training" (Personal

communication, January 2020). Other people explained that they were usually too busy or not interested. Talking about this issue, Informant 7 said: "Training to the villagers is not the responsibility of the tourism management company, so I don't know about the training of the villagers" (Personal communication, January 2020).

3.4 Perceived ecotourism impacts on the local population

3.4.1 Economic impact

97.5% of the surveyed population agreed that ecotourism will promote local economic development, however, very few residents (36%) were involved in tourism-related activities. Tourism investments were found to have been adopted only by households with available cash and labor, whereas they remained inaccessible for the poor, small landowners who most needed a new source of income and used their land more exhaustively. Some interviews also revealed that social capital such as education, language ability, connection to family members in other parts of Yunnan/China, experience beyond the local community, also played a role in the engagement of local people in tourism investments. The people interviewed via text-chat were asked to indicate whether ecotourism will increase their economic earning. The majority of those who responded was not engaged in tourism and could not give a clear or satisfiable answer to the question. Whereas, the few interviewees involved in tourism stated that their household income increased and the living standard improved, as this well-known guesthouse owner said: "My family's income has improved a lot since I engaged in ecotourism. We built two houses ourselves" (Personal communication, January 2020). A small number of participants engaged in tourism, mostly guesthouse owners, commented that their original agricultural income was transformed into service-based income such as catering, accommodation, and chartered cars but did not replace it fully.

Job opportunities

92% of the respondents revealed a positive attitude, such as the belief that ecotourism will eventually increase employment opportunities and wellbeing for local residents, among which people involved were the most supportive. Some very few villagers in TLG individually sell agricultural products to tourists in the hiking area as an extra income source, such as Sichuan peppercorn, angelica, honey, buckwheat tea, walnuts, grape wine, fruits and dry fruits. However, the earned income is far lower than running a guesthouse. Commenting on the selling of agricultural products, one guesthouse owner said: "Some time ago there used to be people selling agricultural products, Chinese herbs or crafts like bamboo weaving and root carving by the roadside...then the number of tourists was too small,

and the situation changed" (Personal communication, January 2020). Another guesthouse owner had a similar view: "At present, the main crops we grow are corn, which can only be used to feed our livestock, without greater economic value" (Personal communication, January 2020).

The few tourism-related jobs which emerged were mainly seasonal part-time tourism operators such as porters (Figure 12), tour guides, wait staff, cooks, cleaners. In addition, because of the reported closure of the mining site, many people lost their jobs and as a guesthouse owner said: "People who lost their jobs have to go out for work, or farm and sell cattle at home. A small number of guesthouses also offer jobs to these people" (Personal communication, January 2020). Indeed, as there were many kinship relations in the villages, some guesthouse owners will recruit their relatives as casual and temporary labourers during the high season. Though, these job opportunities depend on the tourism seasonal trend and on each family guesthouse necessity. As a result, the majority of people in TLG was hoping that their village could develop more ecotourism business activities and they will be offered increased income from ecotourism development.



Figure 12 Wealthier tourists can pay to have themselves carried up and down the steps. From:http://www.highestbridges.com/wiki/index.php?title=Jinshajiang_Railway_Bridge_Hutiaoxia

One economic benefit deriving from ecotourism would be the selling of souvenirs or renting out traditional ethnic minorities' costumes to tourists, as would happen in many other ecotourism destinations in China such as in Jiuzhaigou valley (Sichuan province), Hetu town (Anhui province), Tengtou village (Zhejiang Province) and around the world. However, personal observations and interviews revealed that there were no people involved in this kind of activities. According to Bendiwan village head: "During the high season [...] some souvenirs, fruits and honey are sold. People who sell souvenirs gradually disappear in the off-season. Most of the people who sell

souvenirs are elderly people who often cannot use WeChat to collect money. The ethnic cultural items are mainly painted stones, which are too heavy to carry. There are too few tourists and low income from this, so there are gradually no people selling on the road" (Personal communication, January 2020). Informal discussions with villagers informed that the local Government in TLG has also put rules and restrictions on this. The lack of job opportunities for everybody forced many villagers to find employment in the nearest cities of Shangri-La and Lijiang, as also stated by Bendiwan village head, "Most of the young people go out for work and earn 4000 to 5000 RMB a month. These jobs will obviously generate more money than selling souvenirs, so in a way, many people are discouraged to do so" (Personal communication, January 2020).

Entrance fee

Before 2008 the tickets revenue of UGSA was all attributed to Tianjie Shen Chuan Company (Zhu, 2012), and the local community did not benefit from it. Therefore, the fair distribution of revenues of the entrance fees has become the focus of villagers' struggles since 2003. In 2006, after some mediations, the company began to share a small percentage of the total revenue and in 2008 the new DSTC allowed local villagers to participate in tourism employment in the UGSA. However, the interview conducted with Informant 7 informed that 40% of local people were employed, while the rest came from other regions of China. A note of caution is due here since informal discussions with one more employee at DSTC revealed that only 20% of residents were employed.

Interview with Informant 7, the representative of DSTC, revealed that the revenue coming from the entrance fee was used to pay employees' salaries, community compensation (300/400 RMB) and the rest had to be taxed by the Government. Hence, the entrance fee was not entirely attributed to local people, it was, in fact, the DSTC who decided how much was going to the local population. The 100 RMB difference was not related to the DSTC as villagers reported that was the revenue coming from the mining industry, further confirmed by Bendiwan village head.

Distribution of benefits

According to the survey, 51.25% of the population agrees that the revenue of ecotourism was well distributed among them, 28.75% was unclear and 20% disagrees. Text-chat interviews further revealed that both people engaged and not engaged in tourism were unclear or agree that the revenue was equally distributed. Among the few people who thought the opposite, Informant 4 commented that the distribution of benefits was very unfair, and she further stated that the Tibetan Yubeng village in Diqing prefecture should be taken as an example: the resources belonged to its inhabitants,

including the income generated by the guesthouses who equally distributed all the benefits to the community.

3.4.2 Environmental impact

Quality of the environment

Interviews with local people aimed at investigating the quality of the environment in term of air, land and water pollution. The general trend emerging from the written interviews was that, for the majority of the respondents, the quality of the environment was quite good, especially the air, with few changes compared to the past 15 years. As for the land and water, respondents reported a certain level of pollution due to the mining activities of the past years together with the road's construction. A guesthouse owner, in fact, said: "The water pollution is becoming more and more serious. Before people did not need to buy water bottles, they could directly drink the mountain spring water. Now the water in the mountains cannot be drunk directly" (Personal communication, January 2020). Other participants, even though they recognize a better natural environment than before, they were still requiring the government to improve it and strengthen the land management efforts. However, despite the positive comments, it was unclear whether the related improvement was due to the development of tourism or if it was due to the passing of years where modernisation and awareness campaigns (such as "Clear waters and green mountains are as valuable as mountains of gold and silver") also came up with better solutions.

Who should protect the environment?

Villagers were asked to indicate who should be responsible for the protection of natural resources. Most of the respondents agreed that everyone was responsible for the conservation and utilization of natural resources and everybody should care for the environment. Informant 5 commented: "I feel that everyone has an obligation to protect the environment and be responsible, starting from the little things around them and then trying to discharge pollutants to the designated place as much as possible" (Personal communication, January 2020). Likewise, Informant 10 stated: "Rural people don't know enough about these things, we should start with small things, and start with learning to deal with garbage" (Personal communication, January 2020). Other participants, such as Informant 6, identified other responsible subjects such as the Government and the Tourism Company: "Everyone, including Government, tourists, companies and local residents, should be responsible for the environment: Government should have clear policies and regulations, tourists have to consciously protect the environment, the related companies should adopt appropriate means, the local population should fulfil the obligation of protecting natural resources" (Personal communication, January 2020).

Commenting on the same argument, Informant 4 affirmed: "I believe that local environmental protection departments should take the responsibility of the protection and utilization of tourism resources, and should reasonably develop and utilize them" (Personal communication, January 2020). Informant 7 also suggested that: "The government should carry out more environmental protection policies, for example, banning deforestation, and restore the ecological environment after the closing of the mine. Environmental protection can't be achieved by individual efforts" (Personal communication, January 2020).

How to protect the environment?

86.25% of the local population agreed that ecotourism will protect the local natural environment like Informant 4 stated: "Ecotourism is beneficial to biodiversity and development of natural resources because it mainly develops tourism based on the protection of biological and original ecological resources" (Personal communication, January 2020). Moreover, the majority of the respondents identified different solutions in order to preserve biodiversity and natural heritage. For example: controlling emissions of pollutants, returning farmers to forest and grassland, tree-planting, water resource protection and better garbage disposal. The text-chat interviews showed an overall awareness of the environmental issues in TLG, as well as positive support for ecotourism as a mean to protect the ecosystem. Similarly, 96.25% supported the idea that ecotourism will improve residents' awareness of environmental protection.

Trash disposal

An environmental-related problem for which TLG area was suffering from was the inappropriate disposal of trash. According to Informant 7, "The garbage truck collects garbage on a regular basis, air and water pollution emissions are filtered and treated specifically" (Personal communication, January 2020). However, personal observation, interviews with villagers and tourists witnessed no evidence of garbage trucks and overall bad management of the waste disposal. First of all, regarding the trekking route, I could observe some rubbish along the trail like plastics and wrapped snacks. Secondly, while walking in the villages, I saw many "burning stations" (Figure 13) where trash was burned. This trash even included non-recyclable waste such as tires, glass, cans, cloths. Talking about recycling, one guesthouse owner said: "We will first sort the garbage and sell the garbage that can be reused to Lijiang while non-recyclable waste is incinerated" (Personal communication, January 2020). In particular, no specific instructions have been provided on how to dispose glass. Hence, without the garbage truck and active recycling, some options began to prevail, such as burying the glass in the forests.



Figure 13 Chimneys in Bendiwan village

Although recycling in TLG is not a common phenomenon, some households informed that by recycling plastic and cans they could get some little money (Figure 14). Still, recycling has not been promoted enough in TLG area, as also reported by many tourists: "They do not do any recycling, for example, many hostels use paper cups...why? [...] Use ceramic instead. [...] I am also very concerned about these plastic bottles" (Personal communication, January 2020). Another tourist commented: "Here there is no concern for recycling, do any of the local people understand the value of sustainability or even know what that is? I'm not sure if that's a thing and I think that if people were educated and knew the value of what they have in nature that would be great if they could build their tourism-based with that platform, that foundation. Hope it makes people's mind open" (Personal communication, January 2020). Based on these observations, some tourists would not define tourism in TLG as "authentic ecotourism" as an Irish tourist stated: "I wouldn't call this ecotourism, I will call it just tourism [...] I think that the impact on the land is going to be detrimental because is not being considered, the land has not been seen for its value but seen for its profitability" (Personal communication, January 2020).



Figure 14 Household recycling

Construction industry

Interviews with tourists informed that a new Resort (Figure 15) in Yachajiao village Upper Gorge was still under construction. I also went to explore the area and as there were no worker at the time of visiting, I could also inspect it more carefully. There were, in fact, high-level rooms equipped with a fireplace and all sorts of comforts, plus a big swimming pool outside. The main material used was wood, stone and a lot of concrete. However, it develops on the slopes of a hill where supposedly were farmers' crops before. Informal discussions with residents revealed that it was a private business project which was not intended to share the future economic benefits with the locals.



Figure 15 Construction of a tourist resort in Yachajiao village

Another concern about the unsustainable way of construction was the UGSA (Figure 16). According to Informant 7, the Scenic Area was developing very fast and it will be gradually transformed into an "ecotourism spot" in the future: "For example, we will consider to decorate the scenic spot using more local materials like stone and wood. If we use modern materials to build the scenic spot, it will not be consistent with the original landscape of TLG. We are even building an elevator for the convenience of tourists" (Personal communication, January 2020). When I went to explore the area, I could immediately notice the advanced development compared to the Middle and Lower Gorge. However, the materials used were not conceived in relation to the surroundings: there was a mix of materials such as metal, wood, glass, and concrete. Moreover, there were no signs or information panels about the local flora and fauna. A lot of rubbish down the scenic spot was also observed. In this respect, villagers commented that they were not informed about the changes occurring to the ecological environment, such as the construction of the elevator, intended to replace the 15 min walk staircase to the bottom.



Figure 16 The giant viewing platform in UGSA overlooking the famous Tiger Leaping rock From:http://www.highestbridges.com/wiki/index.php?title=Jinshajiang_Railway_Bridge_Hutiaoxia



Figure 17 Elevator under construction in UGSA From:http://www.highestbridges.com/wiki/index.php?title=Jinshajiang_Railway_Bridge_Hutiaoxi

Human and animal waste

Many rural areas of China still lacked a proper waste management structure to appropriately discard their organic waste, human and animal faecal matter, which usually ends up in the water system or in plain sight. Informal discussions with villagers revealed that many of them utilized human and livestock waste as fertilizers for their fields. One guesthouse owner, in fact, said: "Here human and animal defecation goes into a pipe directly to the fields to irrigate crops, so we do not use almost any fertilizers or pesticides" (Personal communication, January 2020). This was also confirmed by the Bendiwan village head who affirmed: "The villagers carry out simple sewage treatment by themselves, and the village will supervise that each month. If there is any pollution problem, they will be raised in a time and punished according to the village regulations" (Personal communication, January 2020).

Deforestation

Villagers reported that timber harvest has been banned by the Government for many years already probably since around 1998 and the Government started to implement measures to replace the wood with other alternative materials such as steel, stone, and resin tiles (Ynta.gov.cn, 2020). However, I could observe many households where a deposit of fresh firewood was set outside. In fact, locals depended heavily on wood and other sources of biomass for their daily cooking and heating needs. Most of the respondents affirmed that wood comes from dry or dead branches which they collect in the forests, as a guesthouse owner stated: "Most of the deadwood is picked up from the forests, but others still cut down trees. The wood used to build my guesthouse was taken from the forests" (Personal communication, January 2020). Further research should be undertaken to investigate whether the increase of tourists pose a demand on the consumption of wood which is used for construction, cooking and heating.

On top of this, many households were using stoves burning wood which contributes considerably to air pollution in homes and neighbourhoods (WHO, 2014). However, there was a general willingness to encourage afforestation to convert vast amounts of steeply sloping agricultural land to forest or grassland. I could also observe a sustainable wood-saving practice: many households use pellets - made with a small percentage of wood, corn's cores and other waste matter- as fuel in their stoves.

Alternative energy

Many solar cell panels were found on house roofs (Figure 18), which were not provided by the government but purchased privately. Moreover, photovoltaic power in TLG was not used for poverty alleviation, as happens in many rural and poor areas of China, but for self-use, as there was not enough surplus of electric quantity to be sold and no high tech smart grid technology has been installed in the area. Solar panels were used mainly to generate hot water, but no additional data were collected on how much of the energy is used for tourism, especially in the guesthouse. Bendiwan village head suggested promoting the use of solar energy to distribute and store energy in the future. The same village head informed that tap water was free of charge for the whole TLG area, electricity was very cheap (0.6 RMB per KWH) and no use of gas.



Figure 18 Solar panels on a household roof

One more alternative means of energy consumption used some years ago was Biogas. In fact, the last records on this were the dated end of 2006, where 65 households in TLG were equipped with biogas digesters (Baidu, 2020). Nonetheless, many villagers informed me that they were not using it anymore as it was not effective. Other reasons were lack of technical support and maintenance of the systems, lack of education and training.

Infrastructure development

83.75% of respondents agreed that ecotourism will improve local infrastructure. Personal observation witnessed that infrastructure development was already initiated for many years (Figure 19). One new Expressway was under construction, the only east-west expressway in northwestern Sichuan and northwestern Yunnan at that moment. The Expressway will have enormous benefits as it will allow more tourist to come in a more convenient way and it will also speed distances between far cities. For example, the journey from Lijiang (Yunnan) to Panzhihua (Sichuan) will be shortened from 6 hours to 2 hours. One more massive project was the Railway bridge, parallel to the Expressway bridge, which will connect southwestern Sichuan and northwestern Yunnan. Distance from Lijiang to Shangri-La will be only 139 km and the journey will be shortened to one hour only.



Figure 19 Construction of the Expressway bridge and Railway bridge over TLG



Figure 20 Aerial view of the two bridges in TLG From http://www.highestbridges.com/wiki/index.php?title=Jinshajiang_Railway_Bridge_Hutiaoxia

Although infrastructure development has facilitated the life of many villagers, especially the ones living in the Upper Gorge, the environment has not been given priority yet. Indeed, I personally observed tunnels built through the mountains, excavation activities and many dusty service roads zigzagging down the mountains to support the new projects. On top of this, was the severe scarring of a pristine landscape: some sections of the trek were dominated by construction traffic building and others hampered by power lines and pipes (Figure 21); resulting in an unpleasant experience for tourists. This was not only reported by the tourists but also from residents, as Informant 3 said: "The development of the scenic spot is unreasonable, for example, some hiking roads are built of cement and modern materials and cliffs are covered by concrete. This is not convenient and reasonable" (Personal communication, January 2020).



Figure 21 Pipes on the hiking trail

3.4.3 Socio-cultural impact

Ethnic minority culture

In TLG area, literature shows that there was a total of nine ethnic groups: Han, Yi, Dong, Naxi, Tibetan, Bai, Pumi, Miao, and Hui; hence a typical multi-ethnic mixed community. While submitting questionnaires and conducting informal interviews, I found out that the majority was actually Han, especially in Yongsheng administrative village, with some Naxi and Tibetan nationalities in Changsheng administrative village. The literature further shows that there has been a lot of interethnic relations between the Naxi and Han Chinese since the Ming Dynasty (Fei, 2017; Li & Zhang, 2019). In Bendiwan village, for example, Han people have settled down since more than three-four generations or even more, according to interviews. Many Han told me that the Naxi minority moved already many years ago to the close village of Baishuitai, a famous tourist attraction. Though, contrary to expectations, there was no evidence or promotion of traditional ethnic minority culture, as further confirmed by more than one informant: "Ethnic culture is not really characteristic here" (Personal communication, January 2020). As for ethnic minority languages, only a few people could speak Naxi or Lisu language. Similarly, there was no evidence of Naxi Dongba religion practice or in-depth knowledge.

Changes in traditional culture

People living in Upper, Middle and Lower Gorge have noticed some changes in the traditional cultures which will be presented briefly here. Most of the changes in traditional culture highlighted by local people regard clothing, dances, and songs. Traditional costumes have been replaced by modern clothes as more convenient, as further reported by Informant 11: "Because of the improvement of the quality of life and convenient transportation, I feel that the local culture is becoming weaker and we have lost some of the original traditional customs and will be more and more modern in all aspects" (Personal communication, January 2020). Indeed, in recent years,

tourism development also brought some changes in the traditional lifestyle of local people and migrant workers might have also brought things from the outside. The architecture, for example, has seen some traditional houses gradually built with modern reinforced concrete, or houses being built with a style not typical of the area. Traditional food has also been integrated with western food especially in guesthouses for tourists. Traditional vehicles included cattle and horses were gradually being replaced by cars.

Hence, there was a general perception that traditional culture has changed a lot in recent years, almost no villager was seen wearing traditional clothes, and if so, that was mainly for tourist organized performances (Figure 22). Some other respondents reported that they sometimes danced in the evening in the courtyard of their households, this could, in fact, depend on the community, either for a person's willingness to preserve the habit or merely as a tourist attraction. One guesthouse owner also informed that traditional activities and rituals were held occasionally, for example for marriages and festivals. One last consequence was the mixing of traditions and cultures coming from the different minorities in the area, which for some villagers was regarded as positive. I could also personally observe that there were many mixed marriages for example between Tibetan/Naxi and Han. Despite all these changes, 91.25% of the respondents believed that ecotourism would promote protection on local culture as well as improve local residents' awareness of local ethnic minority cultures.



Figure 22 Naxi dance performance

Communication and relations with tourists

97.5% agreed that ecotourism will facilitate the exchange of local and outside people. Local people gave very positive feedback on the interaction with tourists: they helped them to be more open-minded, bring in new culture and ideas. They were in fact considered "vehicles" of foreign culture transmission as Informant 6 said: "Tourists let us see the outside world from the mountains" (Personal communication, January 2020). This view was echoed by Informant 11, a 29 years-old freelance woman who said: "Tourists provide good advice on our business philosophy and management" (Personal communication, January 2020). However, both tourists and villagers have been interviewed upon the content of the interaction, which resulted for many in a very short communication, mostly concerning ordering food or asking for directions. However, one limitation was the language barrier as outlined by many respondents. One more interesting information regarding the relation with tourists was that villagers perceived foreign tourists to be more polite and civilised than Chinese tourists, who usually pollute the hiking trail with their garbage. While visiting the UGSA, I even came across a Chinese written sign headlined: "Civilized behaviour for Chinese tourists"; with some recommendations specifically for domestic tourists.

Community cohesion

Respondents were asked to indicate whether ecotourism could be beneficial to social development. Over half of those surveyed reported that ecotourism was not only beneficial but that will also enhance the cohesion of community capacity. This is another case where data contradicts informal interviews with mostly negative feedback. During informal discussions, many villagers reported that the community was quite individualistic, and everyone was looking at his own interest. Informant 4 explicitly referred to the increasing individualism by saying: "As there is more knowledge about how to make money, people become more selfish and less communicative. As ecotourism develops people are not as warm as before" (Personal communication, January 2020).

According to some guesthouse owners, some conflicts happened approximately 10 years ago between villagers and the tourism company. The dispute was about an unfair distribution of revenues by the DSTC. Eventually, villagers got allocated a higher compensation, still considered too low. Some villagers claimed that they worked a lot for the community by building roads and protecting the local environment, but they still did not get enough compensation. Informal discussions further revealed other kinds of conflicts nowadays related to tourism activities among guesthouse owners, such as copying each other "best products" and facilities and bus service monopoly. Another reported problem was that some guesthouse owners were building roads by themselves and with their own

resources, without any help by other villagers, even though the roads were benefiting the whole community as well as facilitating the transit of tourists.

3.4.4 Summary

Economic impacts	Environmental impacts	Social-cultural impacts		
Positive impacts	Positive impacts	Positive impacts		
-Increase of household income (for the few involved in tourism); -Distribution of economic revenues of entrance fees; -Improvement of the living standard; -Upgrade of local infrastructure.	-Good air quality; -Restrictions on logging, mining activities and forest fire prevention; -Promotion of environmental protection and improved quality of the living environment; -Improvement of local people's environmental protection consciousness.	-Integration of different ethnic minority cultures; -Exchange among local and tourists, cross-cultural encounters.		
Negative impacts	Negative impacts	Negative impacts		
-Not enough jobs opportunities for everyone; -Limited incomes earned from the ecotourism industry, especially during the low season; -No selling of souvenirs; -Unfair distribution.	-Water pollution due to mining; -Increase the amount of waste disposal also from some tourists; -Concreting of natural areas; -Potential for increase in a series of environmental problems via expanding infrastructure and other tourism-related infrastructure; -Lack of environmental training.	-Lack of ethnic minority promotion; -Changes in traditional ethnic minority customs; -Language barriers can inhibit effective communications between tourists and local residents; -Tendency to individualism.		

Table 2 Impacts of ecotourism identified by local participants

4. DISCUSSION

I found that ecotourism, as strictly defined in the literature review, did not exist in TLG. Moreover, there has been no initiation of "protected status" designation and no ecotourism development project has been implemented in the area. This chapter provides a discussion of the results from the field visits in relation to each objective and relating them to already existing literature. However, with a small sample size, caution must be applied, as the findings might not be generalisable.

4.1 Key stakeholders in the participation of ecotourism

Since a lack of proper ecotourism development has been revealed in TLG, the identification of stakeholders in TLG became rather the identification of the main subjects involved in the tourism industry. The following identification of stakeholders in TLG is also supported by the key actors' analysis made by Primdahl et al. (2013), which identifies the "local community", the "manager" and the "public agency" as the main subjects. Within TLG area, the local population has been putting growing pressure on the available natural resources, which has harmed the natural environment (Hayes, 2007). Hence, ecotourism, in this case, should be considered as an instrument which provides financial resources to manage the area more effectively and to increase the local population's standard of living (Ceballos-Lascuraín, 1996) so that the pressure on natural resources will slowly decrease. Amon the "local community", some villagers were in closer contact with tourists as they provided them with accommodation, food and transportation. The main subjects were the guesthouse owners, also recognized as the "rural economic elite": they allowed tourists to be in contact with nature and to stay in the protected areas for a specific period of time. Another important subject was the village head, hence the "manager", the person who will implement the decisions taken from the local Government and who will involve the whole population with training and workshops. One more subject involved was the DSTC, here identified as the "public agency", who controlled the entrance fees and managed the landscape. The last subjects involved were the tourists: with their economic power, they contributed to creating an alternative income, raise the environmental awareness of the local community and foster cultural and human exchange. External sectors, such as non-local companies, administrators of protected areas, NGOs, were not identified during the fieldwork.

4.2 Local people's understanding, participation, and expectations of ecotourism

Understanding

The vast majority of the permanent residents of Yongsheng and Changsheng villages in TLG revealed a lack of consensus over what exactly ecotourism constitutes. In general, therefore, the perception of ecotourism was largely linked to a kind of tourism based on a good environment. These results are likely to be related to a lack of protected area designation, official ecotourism plan and overall low level of education.

Participation

The Chinese Tourism Development Plan 2016-2025 states that "ecotourism not only focuses on environmental protection but also advocates for community participation, cooperation and sharing, which can significantly improve the economic benefits of local residents" (Ndrc.gov.cn, 2016). Contrary to expectations, this study revealed contradictory data concerning the level of participation of local people in the development of ecotourism. While quantitative data show that 90% of respondents participated in every phase of ecotourism activity, informal discussions and qualitative results showed an opposite outcome. Only the few village heads had the right to take part in some sort of decision-making process, whilst few indigenous people were informed after a new decision was made. At the time of reporting, few indigenous people were employed in DSTC which could reflect a suitable way to promote community participation, though not sufficient to achieve the aim of CBET. In accordance with the present results, previous studies have demonstrated that a lack of CBET is not unique to TLG but also in many other parks in China (Scheyvens 1999; Pu, Tian & Cheng, 2018; Gui, Fang & Liu, 2004; and Stone & Wall, 2004). It has been noted that participation can be a difficult and time-consuming process (Honey, 2008), especially in China where the power is centralised, and a top-down approach prevails. Some village cadres even cautioned that residents may not be able to make appropriate decisions. However, Boyd (2000) suggests that the risk associated with not providing such opportunities would outweigh potential costs.

Expectations

Given the very low numbers of people involved in tourism-related activities, many respondents expressed a desire for an increase in their income and that ecotourism development may be the mean for such aspiration. The majority of those who responded to this item also felt the need for more professional people to guide them in ecotourism activities as well as more specific ecotourism business training. Even though some few respondents from Nuoyu village reported initiatives of

"tourism training", this still represented an isolated case compared to the whole area of TLG, as such the interviewees demanded more Government support and help.

4.3 Perceived ecotourism impacts on local population from economic, environmental and sociocultural perspectives

4.3.1 Economic impact

The first direct economic impact of ecotourism is to provide an alternative source of income to people who, otherwise, would at least partially focus their efforts on the consumptive use of wildlife or other resource extraction (Campbell & Meletis, 2007). The creation of more job opportunities for local people is a positive economic benefit widely cited in the western ecotourism literature (Lindberg, 2000; and Weaver, 2001) and in the eastern literature (Fu, 2006; and Mu 2002). However, the results of this study show that tourism-related employment, entrepreneurship, and income have been limited and confined to a small number of residents. Aside from employment in guesthouses, tourism company or as a guide, cook, porter, driver and occasional small shop sales, employment and income from tourism have yet to materialize on a significant scale. Moreover, should ecotourism grow, and employment opportunities expand, it will be important for residents to have the requisite skills and knowledge to be able to fill positions. DSTC and local government have not developed training programs for local people yet, but they have been employing the majority of workers from distant regions, who may already possess the necessary skills and add to the loss of economic benefits from the local community.

One more reason related to the low level of employment in tourism was the lack of capital, much more highlighted by women (18 women out of 40) than men (10 out of 40); language skills, theory and experience. Despite this, one interesting finding was that over 90% of villagers held fairly optimistic perspectives about ecotourism's positive influences, and they were confident that ecotourism growth would eventually generate more benefits for their village and themselves. Similarly, the majority of the respondents agreed that Government can help and support local residents to participate in developing tourism. However, it is important to bear in mind the possible bias in these responses, as explained by Fletcher "people may answer according to a hegemonic discourse of 'public transcripts', or put differently – according to a disciplining form of governmentality, caused by fear of sanctions" (2010, p.5).

Entrance fee

Although interviews revealed that some compensation has varyingly been provided to residents in the form of lump-sum payment, electricity and water fees, this is relatively small compared with those famous nature-based ecotourism destinations in China, such as Jiuzhaigou and Mountain Huang. The problem of insufficient profit generated from ecotourism industries to local people is also highlighted by authors like Cater (2006), Hass (2003) and Wall (1997), as an important concern that can weaken ecotourism economic viability. What is curious about this result is that half of the population agreed that benefits were equally distributed while the rest was for the majority unclear. No details answers were given on the reasons for the unequal distribution, except a few respondents who stated that guesthouse owners should also contribute to their incomes. Taking an environmental justice perspective, the adoption of the following principle of burden and benefits' distribution would fit best: "a guaranteed minimum with variation above that minimum according to personal income and spending choices" (Bell, 2004).

4.3.2 Environmental impact

As stated by Honey, an important aspect of the mechanism of the entrance fee is that: "ecotourism provides direct financial benefits for conservation, helps raise funds for environmental protection, research, and education through a variety of mechanisms, including park entrance fees; tour company, hotel, airline, airport taxes; and voluntary contributions" (2008, p.30). This differs from the findings presented here as the entrance fees in TLG provided funds neither for conservation nor for scientific investigation, hence not fulfilling the above ecotourism principle. It is also to be acknowledged that villagers did not report this aspect while talking about entrance fees, whereas they expressed the desire that compensation will come more in the form of increased employment opportunities. This again reveals a low level of concern on conservation activities and understanding of what ecotourism really wants to achieve. The lack of environmental protection is also proved by the fact that DSTC and local government did not spend money on maintaining all the villages in TLG as clean and green (e.g. employing a large number of people planting trees, doing the cleaning, etc.). The careful environmental protection is also reflected in terms of testing the quality of air, water, and noise frequently; investigating the level of current public infrastructure development, the appropriateness of the usage of land and solid waste disposal systems. The aforementioned measures are useful to detect environmental problems early and to adopt necessary strategies efficiently. Yet, this kind of testing has not been done either as shown by the constant work of construction and mining industries in the area. In addition, no scientific research has been conducted and no NGO was cooperating with the management hierarchy. As a result, the lack of such measures is in contrast with the main

underlying guiding principle of ecotourism to create "harmonious coexistence of man and nature" (Ndrc.gov.cn, 2016).

Quality of the environment

Concerning the quality of the environment, both negative and positive aspects were observed and reported from villagers. The positive findings included roads improvement, human and animal waste disposal and adoption of alternative energy. Likewise, some environmental issues were highlighted by many respondents and village cadres such as trash disposal, water pollution, mining, construction activities and deforestation. Trash disposal, in particular, represented the primary concern for locals. In fact, local waste disposal practices of burying and burning waste were not equipped with necessary or functional devices for filtering its exhaust and were likely emitting undesirable and toxic compounds into the air and ground. Limited transportation and lack of proper roads in the mountains further complicated waste management. Hence, environmental advantages could not be highly recognized as the most distinctive benefit of ecotourism in TLG. Indeed, almost all the respondents justified their support for increased ecotourism in terms of future economic incentives rather than environmental benefits.

Insufficient environmental awareness

One fundamental characteristic of ecotourism is to build environmental awareness (Honey, 2008). Ecotourism, in fact, means education, for both tourists and residents of nearby communities. If the majority of villagers were aware of the negative effects of excavation industries and of the importance of protecting the environment, this was especially valid for people involved in tourism. The hope is that also local officials and other non-tourism workers will consider ecotourism as an environmental protection industry, and its development will be more beneficial than other industries that can cause a variety of pollution over time. These results reflect those of Pu et al (2018) who also found that the weak ecological awareness of the local people will cause an improper ecological behaviour such as directly dumping garbage into forests, burning, deforestation and other non-ecological behaviours. If this behaviour can be explained by a lack of environmental awareness, it is also necessary to strengthen the provision of more environmental training and more Government's support to improve the land management efforts. As for tourists, education opportunities were non-existent inside the Gorge. It is also noteworthy that DSTC did not provide local well-trained, multilingual guides with skills in natural and cultural history, environmental interpretation, ethical principles and effective communication, which usually help to discern a responsible CBET project. Only in April 2020, a new official website about TLG area was established with in-depth information about the place and hopefully, this will be the first step towards educational aims and better marketing. According to TIES, this information would help prepare the tourists "to learn about the places and people to be visited and to minimize their negative impacts while visiting sensitive environments and cultures" (TIES, 1992). Thus, the findings of this research do not confirm TIES' guidelines of a good ecotourism implementation nor the existence of a genuine CBET approach.

Local people's access to resources

Substantive ecotourism literature reveals that in many developing countries, ecotourism can deprive local people of practising their traditional activities, for example, extraction of natural resources may become illegal (Wall, 1997). This is the case in Khao Yai National Park of Thailand, the Royal Chitwan National Park of Nepal, Tortuguero National Park in Costa Rica, as well as Jianfengling and Diao Luoshan in Hainan province of China (Stone & Wall, 2004; Wall, 1997; Weaver, 1998). The problem of pursuing environmental conservation at the cost of local people's traditional use of natural resources, as brought by ecotourism, is also addressed by Tlhagale (2004), citing the Pilanesberg National Park in as an example. By comparison, as TLG has not been recognized as a protected area, tourism neither depleted local people's previous economic base nor resulted in reduced access to resources, except for some presumed reported ban on logging and mining. As suggested by Cater (1994), a crucial element of true participation practised by sustainable ecotourism should encompass local people's enjoyment of their own natural attractions. Though, it is important to notice that new private projects as the Resort in Yachajiao village and the Nuoyu village "ecotourism plan" might lead to some consequences that have not been further investigated, and follow up on local compensation must be taken into account in future research.

Tourists' ecological footprint

Respondents were also asked about the tourists' impact on the environment: the majority of tourists was identified as well behaved, with only a small number of participants mentioning social concerns lightly such as domestic tourists misbehaving themselves in terms of littering. As argued by Nolan (1997), increasing the cost of visitor fees might be an appropriate solution for better management, as also suggested by some tourists. However, higher use fees could be justifiable only if high-quality tourism experiences were provided. In fact, if accommodations will remain basic and educational opportunities few this might meet a high tourist dissatisfaction, as also noticed by some tourists in TLG. Likewise, Eagles (1998) argued that although "ecotourists" may be content with basic accommodations they instead demand high-quality experiences. Overall, the capacity of ecotourism in TLG to fulfil environmental sustainability in the future will, to a large degree, depend upon the

ability of managers to implement effective policies to regulate the number of tourists. Otherwise, the increasing number of tourists will eventually reduce ecotourism to uncontrolled mass tourism.

4.3.3 Socio-cultural impact

In TLG area, literature shows that there was a total of nine ethnic groups: Han, Yi, Dong, Naxi, Tibetan, Bai, Pumi, Miao and Hui (Baidu, 2020). However, quantitative results and on-site observation showed that the majority of the local population was Han-Chinese. With the development of economy and society, intermarriage between various ethnic groups has occurred, also housing, diet and cultural performances portrayed a quite diverse and inclusive community, potentially an attractive authentic cultural experience for tourists. Despite this, what is surprising is that there was no promotion of traditional ethnic minority culture by the Government.

Moving on now to consider what could be a possible option to promote traditional culture, the literature argues that selling local handicrafts and souvenirs is a widespread solution in ecotourism destinations (Lindberg, 1991). The findings of this study revealed that the sale of souvenirs has been banned by the government with a double effect: local people were losing a chance to earn additional income and tourists were losing a chance to learn more about the local culture. As it will be observed later in the chapter, TLG suffered from a low level of spending from tourists, which is however inherently difficult to achieve in any wilderness area (Wall, 1994). Nevertheless, providing tourists with opportunities and products to spend money locally, such as traditional or modern media, food concessions, and souvenirs, can help in this respect and also encourage tourists to return in the future (Lindberg, 1991). In this case, the study has been unable to demonstrate two principles of the "Québec Declaration on Ecotourism" (WTO, 2002). The first principle related to the socio-cultural aspect requires to "strengthen, nurture and encourage the community's ability to maintain and use traditional skills, particularly home-based arts and crafts, agricultural produce, traditional housing and landscaping that use local natural resources in a sustainable manner" (WTO, 2002, p.8). While the preservation of traditional housing was still present and highly appreciated by tourists, local handicrafts have not been promoted yet. The second socio-cultural principle in the Québec declaration is to "work actively with indigenous leaders and local communities to ensure that indigenous cultures and communities are depicted accurately and with respect, and that their staff and guests are well and accurately informed regarding local and indigenous sites, customs and history" (WTO, 2002, p.6). Staff and guests, in fact, were not provided with educational materials, which consequently precluded the possibility for visitors to learn about both place and people before and during the visit.

On the one hand, many authors (Garrett, 2005; Goss 2004; Mowforth & Munt 1998; Nelson, 2005) argue that the absence of on-site consumption of goods and services can avoid the unequal relationship of power between the visitor and the host, the commodification of local culture and the reinforcement of local stereotypes. On the other hand, this interpretation overlooks the fact that cancelling such opportunity might be equally detrimental to indigenous community and tourists under several aspects: loss of additional economic income, lack of cultural heritage's promotion and limited eco-experience for tourists. In this regard, worthy to mention is that selling souvenirs is obviously not the only means for transmission of local culture. Other means could be the opening of "cultural centres" where contents like traditional ecological knowledge, cultural practices, cultural norms, local cooking, dance, music, art, indigenous value and lifeways, festivals, celebrations and folklore can be immediately available to tourists. If there is no doubt that commodification of cultural elements and "staged authenticity" (MacCannell, 1973) are potential risks of any ecotourism destination; an effort must be made to find solutions for ethnic culture preservation and promotion.

Community cohesion

Despite the majority of respondents (81.25%) reported that ecotourism will enhance the cohesion of community capacity, informal discussion and interviews revealed that there was a lack of community cohesion, even though it was not always related to tourism-related issues. The majority of the informants pointed out that the community has generally an autocratic and/or self-interested leadership which lead to a loss of family unity and solidarity among villagers. During interviews and informal discussions, other informants pointed out that money was making people stingy and therefore harming community spirit. These findings might be explained by a lack of community participation which in this case can play an important role in community unity and social stability as also supported by the case study of Tang, Zhong & Cheng (2012). Similarly, as argued by Mbaiwa & Stronza (2010), the inequitable distribution of benefits within the community discourages participation and creates or worsens divisions. Other authors like King & Stewart (1996) state that pre-existing power differentials among local people and other groups might also be the reasons for such disharmony. It is important that policymakers consider different solutions to avoid community controversies. For example, Mbaiwa & Stronza (2010) reported that to mediate against the poor distribution of benefits in their villages, some communities have developed strategies to ensure that the households in each village have equal access to employment opportunities.

Communication with tourists

The majority of local residents had a good impression of ecotourism and tourists. Interviews with villagers showed that communications between the residents and tourists were rewarding for the villagers who could learn more from tourists especially in forms of social and psychological empowerment. As for tourists, even though they had a good impression on local people, they did not learn more about local people's lives and were not particularly interested in chatting with locals. However, it is also worth noting that a stronger desire of tourists to communicate with local people could also bring pressure or embarrassment to those residents who could not speak English, which then, could be detrimental to meaningful communications. This is because the dominant language among TLG locals was their own local dialect. According to Zhu (2012), the interaction between host and guest was very deep during the '90s, and tourists also played a key role in cultivating local farmers' ecological ideas, environmental awareness, aesthetic concepts, traditional culture awareness, and in guiding "ideas" to lift them out of poverty. However, personal observation and interviews with tourists revealed that there were less exchange and curiosity. Zhu (2012) explains that the previous in-depth interaction cannot be established in a rural tourism area dominated by mass tourism hence the contact between villagers and tourists would remain superficial. If it can be acknowledged that tourism in TLG did not disrupt the daily lives of residents, however, there were very few opportunities for tourists to interact. As previously mentioned, the sale of souvenirs might be one option which may serve the aim.

4.4 Key factors influencing ecotourism in relation to sustainable development

"Greenwashing"

In TLG, the general perception was that the term "ecotourism" was not only unclear but also often misused. For example, the project of the high-luxury Resort in Yachajiao did not really fit the concept of ecotourism and if this kind of projects expanded in the whole area of TLG without any strict regulations, they would reduce ecotourism to "eco-sell" tourism (Wight, 1993). To some extent, it can be said that some local officials did not always support the sustainable development of the environment consistently. In fact, it is very common in China that most local governments choose to invest in projects that are likely to provide a higher and more immediate return on investment than investments in environmental protection, hence most of them "will kneel down at the foot of profits and develop ecotourism projects that are not eco-friendly but profitable" (Pu et al., 2018, p.29). The DSTC also states in its website that they did support the development of ecotourism in the area of TLG by "expanding roads, improving infrastructure and at the same time protecting the ecology and developing forests" (Diqing.gov.cn, 2020). On the contrary, personal observation and interviews with

villagers revealed that the environmental concern was visible only on paper. Experts such as Gale & Hill (2016) and Honey (2008), would name this phenomenon as "greenwashing": the deliberate use of the "eco" label to attract clients and cover current unsustainable activities. This is actually a widespread phenomenon in the travel field all over the world, with references such as ecotour, ecotravel, eco vacation, ecologically sensitive adventures, eco(ad)ventures, eco-cruise, eco safari, eco expedition and, of course, ecotourism (Wight, 1993). This research finding also points to the need for local Government to formulate official definitions of ecotourism to inform legislation and policy. This would also prevent stakeholders from formulating their own definitions in pursuit of their interests.

Decline in tourist flow

According to villagers' comments, due to the small number of tourists in recent years and their short stay nature, the consumption level of tourists was quite low. Some guesthouse owners indeed pointed out that in the last few years, there has been a downturn in the tourism industry which has led to a decline in economic income. In this regard, Stronza argues that "the disruption of subsistence activities is not necessarily a problem in itself, but it becomes a problem when the flow of tourists is reduced, and people are left with no economic alternatives from which to sustain themselves" (2001, p.269). Unfortunately, this is a relatively common phenomenon for the tourism industry as it is especially prone to boom-bust cycles (Wood, 2002) and seasonal fluctuations.

Carrying capacity

Although the decrease in tourists' visits has brought some negative consequences for villagers, this would entail a positive impact on the quality of the natural environment. However, it is possible to hypothesise that these conditions were less likely to occur in peak season, where the average daily reception was not less than 80 people in a single guesthouse (Hui, 2018). In the long run, if it is not managed properly, the rapid expansion of tourism and tourist visits will have some detrimental effects on the environment, including congestion and pollution, which has already started to occur. The problem of carrying capacity has also been noticed by authors such as Croy & Hogh (2003), Stem, Lassoie, Lee & Deshler (2003) and Weaver (1998), as a drawback of ecotourism that can threaten environmental and socio-cultural sustainability. Further work needs to be done to establish whether the carrying capacity might be an issue during peak season and to assess its long-term effects.

External events

It is not only the seasonal nature of ecotourism but also the many external and locally uncontrollable forces, including weather, political factors (Norris, 1992), terrorist attack, diseases, virus (Agüera & Morales, 2016) which will influence the level of local people's employment, hence the economic sustainability of ecotourism development. At the time of writing, the outbreak of Covid-19 forced many guesthouse owners to close their inns to tourists (from January 2020) and no information has been given yet as to when they will be able to re-open again. Thus, the low number of tourists, low levels of spending and uncontrolled events were also challenges that will curtail the economic earnings for TLG area. However, the majority of respondents in TLG was not involved in tourism, and most of the people will see their daily lives untouched by such a phenomenon. A concern would arise for the future ecotourism development and for people who were still relying on tourism, who will face this phenomenon in a different way as directly affected by such loss.

CBET

CBET very clearly identifies with distributive and procedural justice (Svarstad & Benjaminsen, 2020), ethical relationships and equity. Tamir (2015) observes that the CBET participatory development process empowers local community members, and, as such, it should include community involvement; local control and equitable sharing of benefits (Koster, 2007). Evidence shows that community residents in TLG were not involved in planning processes, not even informed on the construction development of UGSA. In this case, for example, their traditional knowledge would be of significant help to conserve natural resources and promote harmonious development between ecological and social systems. Through cooperation and participation, indigenous people pass on their knowledge of resources as well as information about their traditional land-use practices. Moreover, multiple studies show that if the indigenous people are involved in decisions and participate in the management of protected areas, "they maintain a sense of control over their own relationship with their habitat: such a sense of control over their own fate may strengthen their cultural identity" (King & Stewart, 1996, p. 302).

According to Honey (2008), it is also important to consider gender equality while analysing a CBET approach. Findings show that the education level of the community residents in TLG was generally low for women (primary and high) and higher for men (university and middle). These disparities may arise from the gender division of labor in TLG, were clear and traditional gender roles were identified. Personal observations witnessed that all of the cooks employed in guesthouses were women, and it was also the women who cleaned, did the wash and made the beds. As argued by Reimer & Walter,

with the implementation of ecotourism project, gender roles might be intensified: "women might have a "double burden" of cooking and cleaning, first in the project, and then again at home after work" (2012, p.131). As for men, the majority of other paid work generated by the tourism development in TLG was taken up by them, acting as administrators, drivers, construction workers, porters, and furniture-makers. A full discussion of the discriminatory gender division of labor in TLG lies beyond the scope of this study, however, it is important to underline the importance of equal education opportunities for both genders. In such a way, all might be allowed equal resources and access in the development of ecotourism.

Infrastructure development

As argued by Beeton (1998), ecotourism can promote improvements in the quality of local facilities and infrastructure. Considering the massive expressway and railway infrastructure project in TLG, even though the project will promote the development of tourism and shorten long distances among cities, at the same time the many emerging negative environmental consequences (soil erosion, landslide probability, animal habitat modification, environmental and noise pollution, extended concrete pavements) cannot be disregarded. Writers like Weaver (2001) and Ceballos-Lascuraín (1993) suggest that the construction of physical buildings should be kept at a suitable level, in order to ensure the appropriate performance of tourism services, while not undermining the quality of the environment. Taking also the UGSA as an example, its expansion might as well have caused the removal of flora and fauna and its parking area, with cars and buses, might have produced fumes causing air and noise pollution.

Although the Government has devoted much time and money to the development of these two massive projects, little attention has been paid to the development of the Middle and Lower Gorge. These sections of the Gorge were quite left apart as also signalled by the numerous signs (Figure 23) and the rocks still lying on the main busy road which obviously discouraged tourists to enter the area. This information could be part of the reason that more group tourists only visited the UGSA. This also means that while infrastructure improves ecotourism, it will also increase the imbalance in the area. It could be argued that DSTC and local Government adopted a certain conservation ethic for which Middle and Lower Gorge had to be protected from any kind of human interference, however, the same DSTC reported in its website the conditions of the Gorge before its takeover in 2008: "due to insufficient investment and the previously neglected management, the scenic area environment appeared scattered, chaotic, and poor" (Diqing.gov.cn, 2020). Although evidence led to the hypothesis that resources were not being appropriately allocated, the previous supposition might be

worth considering further in the future. Moreover, in 2010, the DSTC planned to transform and upgrade TLG area to make it an internationally renowned tourist site. The area was then temporarily closed and comprehensive infrastructure construction was conducted. However, the only area that was developed was the UGSA.



Figure 23 Warning sign at the entrance of the Middle Gorge

Moreover, villagers in Middle and Lower Gorge reported that although the company collects tickets from visitors, it had not fulfilled the corresponding management and maintenance duties. Roads leading to the villages up in the mountains have been built by the villagers themselves, without any financial or technical help from either the Government or the Tourism Company. The trekking route also lacked basic protective nets resulting in a dangerous and unsafe path in some of its parts, as also reported by many tourists. Interview with a representative from DSTC revealed that construction began in 2020 and was expected to be completed in 2023. However, as for the year 2020, the main construction of the Upper TLG is the elevator project in UGSA and the widening of the road from Lower Gorge to Baishuitai (outside the area of TLG). The hope is that, given the plan of DSTC to develop Middle and Lower Gorge in the future, these will not be developed in the same unsustainable way as the Upper Gorge. It has to be acknowledged also that the lack of infrastructure development in the left behind Middle and Lower Gorge has caused an unequal and larger exposure to environmental hazards for its residents, with no authorities' intervention yet to safeguard their lives.

4.5 Environmental injustices in TLG

A relevant way to apply an environmental justice perspective to the case study of TLG would be in term of distributive, recognition, procedural and capabilities justice (Svarstad & Benjaminsen, 2020). For a more detailed analysis, each type of justice will be analysed separately with references to economic, environmental, and socio-cultural impacts.

Distributive justice

The main environmental issues in TLG were trash disposal, water pollution, mining and construction activities, deforestation, natural hazards causing rolling stones, mudslides, and landslides. Since villagers of TLG were the ones living and working in such environment, they were also the ones who shouldered the burdens of the above environmental issues and interventions, thus representing the recipients of justice and injustice. Correspondingly, the mining and construction companies, DSTC and local government were directly or indirectly responsible for such issues, and at the same time, they were benefitting from the deriving revenues and the entrance fees. These same actors also have the ability to pay to compensate the affected subjects for such environmental issues. Of course, "it is not only distribution of the direct environmental burden or benefits itself that can be at issue, but also other dimensions of distribution which interact with these" (Walker, 2012, p.46). Other dimensions include vulnerability, need and responsibility. As it has been reported in the previous paragraph, people living in the Middle and Lower Gorge were more vulnerable to environmental hazards than people living in the most developed part of the Upper Gorge and may also have less capacity to recover from them. Consequently, needs and responsibilities vary among population groups and this should be considered when benefits and burdens have to be distributed. In response to the question: "What there is to be distributed that might result from environmental interventions?" (Bell, 2004), equal distribution of revenues from tourism and equal infrastructure improvement is the logical answer.

Recognition justice

In TLG some social groups and individuals were poorly recognized compared to others, and this is seen as a justice dimension, as well as an underlying cause of unjust distribution. If we consider people living in Middle and Lower Gorge as the marginalized groups in terms of infrastructure development and environmental hazard exposition, it is also important and necessary to investigate how the "senses of justice" were expressed by and within themselves. Interviews with local people, in fact, revealed that the perspectives and interests of people affected by environmental interventions were not always homogeneous. Of course, recognition justice in China is understood differently from

villagers themselves as the result of a context of limited democratic space. In fact, capturing "senses of justice" in a top-down political culture might be challenging in an authoritarian state. Ethnographic methods and more time spent in TLG communities might have helped to establish the necessary level of trust and confidence in order to gain access to "hidden transcripts" (Scott, 1990). In all communities, there are inequalities which may be exacerbated by the introduction of a somewhat lucrative industry, in this case, tourism, to which not everybody will have access. According to recognition justice, marginalized groups also need to be listened to and their voices must be taken seriously by all the actors involved, including scholars and activists.

"Senses of justice" and "critical knowledge production"

The findings show that most of the villagers living in TLG area tended to subscribe to a narrative of ambivalence in multiple cases. They were sometimes disappointed that the DSTC and the Government have brought them scarce benefits, low educational opportunities, and low infrastructural support. Nevertheless, they also expressed positive views on the development of ecotourism in almost all aspects and the hope that the future would bring them more benefits. Hence, for a better and objective understanding of their views, a decolonial approach to recognition and to "senses of justice" (Svarstad & Benjaminsen, 2020, p.4) would allow their voices to be heard. Likewise, the "critical knowledge production" (Svarstad & Benjaminsen, 2020, p.4) is another fundamental aspect, representing the opportunity to conduct their own "critical knowledge production" and analysis of the situation. It the case of TLG, the majority of the local community did not have access to essential and independent information about actors responsible for environmental injustice, knowledge about consequences of particular environmental interventions, and capabilities to elaborate their own alternatives and strategies. They instead depended on information provided by other authorities. As it can be seen, "senses of justice" and "critical knowledge production" are important aspects to be considered when evaluating local people's perspectives and ambivalent positions that might arise.

Procedural justice

Procedural justice involves issues of decision-making and power (Svarstad & Benjaminsen, 2020). If we have to analyze the specific case of TLG through a lens that adopts an environmental justice and procedural approach, questions of public participation and involvement can be considered at stake as we have seen in CBET paragraph. The right to meaningful participation resonates with Schlosberg's argument that the global environmental justice movement should address not only distributional aspects of justice but also issues of recognition and participation (2004). Although in TLG questions

of public participation and involvement can be considered at stake, while analysing such issue it is important to consider that, in China, participation implies a top-down approach which undermines the principle of procedural justice. Consequently, when a new ecotourism project has to be implemented, it is very important to take into account the historical, political and cultural context; and ultimately identify the proper indigenous institutions and leaders with whom to work to ensure socio-cultural sustainability.

Capabilities justice

Schlosberg & Carruthers define capabilities justice as "the capacities necessary for people to function fully in the lives they choose for themselves" (2010, p.15). It must be acknowledged that very often there is a tendency to discuss capabilities in relation to communities that are viewed as homogenous groups. Thus, a one-sided focus in environmental justice on well-being at the level of communities and groups may ignore internal diversities. In this case, TLG has been an area traditionally inhabited by different ethnic minorities, hence, it is even more important to consider the community as dishomogeneous groups. Each of these groups has also different capacities and different needs in relation to tourism-related activities, which should be satisfied through the provision of more training, information and educational opportunities.

5. CONCLUSION

5.1 Conclusion

To sum up, this study explored and brought in the voices of local people to identify how ecotourism in the case study of TLG benefits them from environmental, socio-cultural and economic points of view. The positive benefits deriving from ecotourism included the increase of household income for the few involved in tourism, the distribution of economic revenues of entrance fees, the improvement of the living standard and an upgrade of local infrastructure. From an environmental point of view, the Government's background movement of "Clear waters and green mountains are as valuable as mountains of gold and silver", restrictions on logging, mining activities and forest fire prevention have improved the quality of the living environment and at the same time a general improvement of local people's environmental protection consciousness. The socio-cultural benefits deriving from ecotourism implied the integration of different ethnic minority cultures and a favourable exchange among locals and tourists. On the other hand, the research identified several potentially negative consequences of ecotourism to which attention needs to be paid. Although some few people shifted their economy from agriculture to tourism-related activities, most of the local villagers did not benefit much from the tourism industry. In fact, the income provided by ecotourism was not stable, nor sufficient to replace agriculture-based livelihood for many villagers. Therefore, it can be stated that ecotourism in the area of TLG did not yet represent a different and better livelihood for those employed in the sector than the opportunities offered to those local residents employed in the existing local livelihood alternatives such as construction, transportation, mining and agriculture. The environmental drawbacks included a lack of tourism-generated funds for conservation, water pollution, lack of appropriate waste disposal, concreting of natural areas, increase in a series of environmental problems due to the expansion of infrastructure and a lack of conservation knowledge. In addition to the aforementioned economic and environmental impacts, the socio-cultural negative impacts implied a lack of ethnic minority promotion, changes in traditional ethnic minority customs, language barriers, tensions in the form of competition and individualism among the villagers, and absence of educational opportunities for tourists. Thus, according to a strict definition which sees ecotourism tied to economic, environmental and socio-cultural sustainability, the case of TLG did not fully meet all the requirements to be recognized as "authentic ecotourism" (Honey, 2008, p.70). In spite of the existing and potential benefits of the ecotourism industry, it was evident that the disadvantageous influences of ecotourism in TLG outweighed its positive impacts. Nevertheless, the overwhelming pattern in interview responses and questionnaire results was optimism and supportive attitude, with most officials and residents showing confidence that tourism growth will eventually

generate economic benefits for TLG. Indeed, almost all the respondents justified their support for increased ecotourism in terms of future economic incentives rather than environmental benefits.

Most officials and local villagers interviewed recognized that development of ecotourism was at an early stage and they were also cognizant of some of the existing weaknesses and barriers that the development of ecotourism in TLG faced. The phenomenon of greenwashing in private initiatives was found as threatening the genuine development of ecotourism in TLG. Similarly, lack of concern on carrying capacity, the decline in tourist flow, the seasonal nature of the ecotourism industry and external events constituted other important factors undermining the development of ecotourism. Lack of genuine opportunities to take part in planning, implementing and decision-making processes regarding ecotourism was also highlighted, arising concerns for procedural and capabilities justices, hence a non-existent CBET approach. At this regard, policymakers should examine the extent to which participatory approaches, adapted to the Chinese socio-political context, can help build social capital and thus provide local communities with the capacities to translate ecotourism into broader and locally-sustained goals of conservation and development. Moreover, from a recognition justice perspective, by incorporating local voices and comparing across sites, scholars may be able to understand more clearly how ecotourism plays out in specific contexts while also synthesizing data for more general predictions. It follows that there is still abundant room for further progress in determining the effectiveness of local people's participation in ecotourism, as well as regarding locals as evaluators by analysing their senses of justice and critical knowledge production. Lastly, although infrastructure development in TLG has improved connections with the outside world with massive new projects, these have also caused negative environmental consequences and unsustainable construction. Further research should be then undertaken to investigate the future development of ecotourism in TLG, especially in the Middle and Lower gorge, whose inhabitants were found to be facing distributive justice issues.

5.2 Recommendations

In light of the study's findings, the following subsection will offer several suggestions that could enhance the capacity of ecotourism to generate more sustainable benefits for both villagers and TLG area, from a long term perspective. The following recommendations were drawn from tourists, informants' suggestions, and my personal interpretation of the challenges that the communities faced. These suggestions are for local officials, managers, and planners of future ecotourism development in TLG. Recommendations based on these findings are not only intended to help promote the successful development of ecotourism in TLG, but also throughout China.

Training

It was clearly observed in the field that local people in TLG area strongly supported ecotourism development; however, they were lacking certain skills in tourism management, marketing and business. Local villagers' effective involvement in the ecotourism industry can be achieved by identifying and strengthening their capabilities. For example, training programs to improve local people's language ability and tourism-related knowledge could be useful in facilitating their effective communication with tourists and enhancing their self-esteem and confidence. It is desirable if training programs can be provided for local people, rather than largely employing workers from other regions who already possess the necessary skills. Hence, in the context of contemporary China, enhancing capabilities justice is a means to support ecotourism and sustainable rural development, more generally.

Multi-participation and multi-disciplinary cooperation

Success is dependent on mobilising resources of all stakeholders (local people, DSTC, local government, private businesses, and tourists) to work together and learn through experience. It is only through such a collaborative, iterative process over an extended period that strategies will emerge for promoting ecotourism development that can produce economic, environmental and socio-cultural benefits for rural areas in western China. This shows the importance of the cooperation between different levels of people at the destination area in ensuring the successful implementation of ecotourism.

Environmental awareness

The DSTC, local government and researchers need to encourage the local community and generate awareness among them for the protection of natural habitat and explain the importance of ecotourism in this region. For conservation and protection, creating a network between DSTC, local government, external NGOs and local people can help, and of course, providing the local population with more environmental training throughout the year remains fundamental.

Marketing

Many tourists affirmed that they had a struggle in finding information, as no official website was set before April 2020 and pieces of information could only be found in travel blogs or forums. Moreover, they suggested a better and updated mapping system for the trekking route for distances and elevation details. Some other tourists suggested inserting the available guesthouses and inns in multiple online reservation websites. Hence, the DSTC marketing department should accelerate and push ecotourism

marketing information to attract more tourists and travellers and deliver them the appropriate enjoyment, such as the development of promotional materials.

Management

The definition of ecotourism in the context of TLG was understood by the local participants as a kind of environmentally protective industry able to bring in new economic benefits, while disregarding the socio-cultural dimensions, hence challenging the conventional conceptualisation of the term. Consequently, it is important to achieve a consensus over the meaning of ecotourism, how this should be developed and to start an official project which takes into account the multifaceted nature of ecotourism. Setting standards and certification are possible means for integrating norms of environmental and social justice in ecotourism projects. Moreover, if ecotourism is to achieve sustainability in the long term, the management of the numbers and behaviours of tourists should be strengthened. For example, the decision-makers should set up specific regulations to deal with the number of tourists, especially during the peak season. This is beneficial to maintain the village's environment in a sound condition, as well as to provide high-quality ecotourism experiences to tourists. Accordingly, this can promote tourists' satisfaction levels and encourage them to return in the future. The research also found that it is useful to reinforce prudent policies to control the expansion of infrastructure and other tourism-related physical buildings. Indeed, policymakers should give priority to the quality and environmental sensitivity of tourism-related infrastructure development rather than to the size of the infrastructure. Management in TLG should also imply an improvement of the accessibility and safety system in the hiking trail and the areas of Middle and Lower gorge.

Education

Ecological education must be strengthened, starting from children's pre-school stage through their primary, middle, high school and university stages. Not only students but also teachers should be trained and be given the means to invite ecological experts to give lectures. Lastly but not least, it must be ensured that education opportunities are equally available for both men and women in TLG area.

Strengthening tourism resources

At the time of writing, in TLG area there were only two main tourism products: sightseeing in UGSA and hiking experience. It follows that the development of diversified tourism products is imperative to bring tourists a better tourism experience. Strengthening the links between the tourist areas around

TLG will result in different combinations of tourism products hence attracting more tourists with the highest economic benefits for locals. Similarly, creating visitor centres or exhibition areas with posters of endangered wildlife, photographs of eco-activities and tree planting, project maps and brochures with additional conservation information, information on local ethnic culture and traditions can be of great attraction. Additionally, multilingual local guides trained on the local flora and fauna and able to explain religious festivals or how the agriculture system works are viable solutions for a better ecotourism supply.

To conclude, this study showed the importance of a multifaceted approach when implementing ecotourism, as well as more in-depth knowledge of the local context in understanding the nature of ecotourism and its impacts. For general guidance, the definitions and frameworks provided by TIES and Honey (2007) can be used as references, but to be effective and meaningful they should be adapted and developed to meet the historical, environmental and socio-cultural contexts of China. The expansion of EJ theories and CBET approaches to other contexts and countries should not employ a Western and universalist analytical framework but be decolonized to ensure context-sensitive planning and management of ecotourism. Hayes's words of his TLG research in 2007 continue to echo even today and still ask for more future investigation: "How ecotourism in Tiger Leaping Gorge plays out will have effects that will resonate around the world".

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7. APPENDIXES

Appendix 1 Questionnaire

Tiger Leaping Gorge Ecotourism - Questionnaire

Ethnicity	Han □	Naxi □	Tibetan □	Other □ (Please specify)		
Gender	F 🗆	M □				
Age	15-24 □	25-44 □	45-64 □	65-80 □		
Family members	Less than 3 □	3-5 □	5-7 □	7 🗆		
Education level	Non-formal □	Elementary	Junior High	Senior High	College	
Job						
Working in tourism	Yes □	No □ (Please specify)				
Language proficiency	Only speak dialect □	Can speak dialect and Can speak English □ Chinese □			k English □	

Every statement will be measured with a scale from 1 to 5 where 1 stands for "strongly disagree" and 5 "strongly agree"

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. I am optimistic that local Ecotourism has bright future	1	2	3	4	□ 5
2. I support Ecotourism development in TLG	1	2	3	□ 4	□ 5
3. I am willing to participate in making the policies and decisions for Ecotourism development	1	2	3	4	5
4. I participate in every phase of Ecotourism activity (development, implementation, evaluation, discussion)	1	2	3	□ 4	5

5. I am willing to engage in independent tourism business (e.g. running family hotel, restaurants, commodity, transportation)	1	2	3	4	5
6. I am willing to work in Ecotourism enterprises (e.g. green hotels, green travel agencies, ecological scenic spots)	1	2	3	□ 4	5
7. I need Ecotourism business training	□ 1	□ 2	□ 3	□ 4	□ 5
8. I have enough money to participate in Ecotourism development	1	2	3	□ 4	5
9. I have sufficient knowledge and techniques to participate in Ecotourism development	1	2	3	□ 4	5
10. The government can help and support residents to participate in developing tourism	1	2	3	□ 4	5
11. Ecotourism will promote local economic development	1	2	3	□ 4	□ 5
12. Ecotourism will increase my income	1	2	3	□ 4	□ 5
13. The revenue of ecotourism is well distributed among us	□ 1	2	□ 3	□ 4	□ 5
14. Ecotourism will increase employment opportunities for residents	1	2	3	4	5
15. Ecotourism will facilitate the exchange of local and outside people	1	2	3	□ 4	5
16. Ecotourism will promote ethnic unity	_ 1	2	3	□ 4	□ 5
17. Ecotourism will improve local infrastructure	□ 1	2	□ 3	□ 4	5
18. Ecotourism will increase the cost of living	1	2	3	□ 4	5
19. Ecotourism will disrupt daily lives for residents	1	2	□ 3	□ 4	□ 5
20. Ecotourism will promote protection on local culture	1	2	3	4	5

21. Ecotourism will improve residents' awareness of local ethnic minority cultures	1	2	3	4	5
22. Ecotourism will enhance the cohesion of community capacity	1	2	3	4	□ 5
23. Ecotourism will improve the wellbeing of residents	□ 1	2	3	□ 4	□ 5
24. Ecotourism will protect local natural environment	1	2	□ 3	□ 4	□ 5
25. Ecotourism will improve residents' awareness of protection environment	1	2	3	4	5

Appendix 2 Tourist interviews

- 1. Where are you from?
- 2. What is your occupation?
- 3. How old are you?
- 4. What's your travel plan in this area?
- 5. What is the purpose of your visitation or what attracted you to come here?
- 6. What is your impression about TLG and the villagers?
- 7. What kind of impact does Ecotourism have on ecosystem and indigenous people in this park?
- 8. How do you interact with the local people?
- 9. How is your spending in the area?
- 10. Are there any suggestions that you have for the future development of Ecotourism in TLG?

Appendix 3 Interview guide

The purpose of this study is to evaluate economic, socio-cultural and environmental impacts caused by Ecotourism in Tiger Leaping Gorge. Since Ecotourism has been regarded as having an instrumental role in the development of the area by many researchers, it is important to understand what indigenous people think about changes after Ecotourism development in this area. The following questions will lead a guide to interview and provide subjects for discussion.

BASIC INFORMATION

Ethnic group, Gender, Age, Family members, Education level, Job, Working in tourism yes/no, in what way, Language proficiency.

OBJECTIVE 1 & 2

- 1. How do you understand Ecotourism? Which is the difference with tourism?
- 2. Who are the stakeholders involved in the Ecotourism activities?
- 3. Do you work in ecotourism? How do you participate in it?
- 4. How does Ecotourism in TLG influence in your life?
- 5. What do you think about the current development of ecotourism in the area? Are you satisfied?
- 6. Are you involved in every phase of the project (planning, development, operation, evaluation)? Are there any challenges?
- 7. Is there any sort of education/training about Ecotourism (environmental protection, etc)? Who is implementing it?

OBJECTIVE 3

Economic impact

- 8. After engaging in ecotourism, which changes did you see in your main economic earning?
- 9. Do you get equal distribution of benefits from the Ecotourism activity

Environmental impact

- 10. How do you perceive the quality of the environment now (air, land, water pollution)?
- 11. Who do you think should be responsible of the protection of the natural resources? How to do that?
- 12. Do you think Ecotourism helps to preserve the biodiversity and the natural heritage? If yes, how? Socio-cultural impact
- 13. Did you experience any changes in your traditional culture (architecture, food, costume, religion, education, traditional knowledge, vehicle, trappings, daily necessities)?
- 14.Do you think ecotourism can help preserving the local traditional culture? If yes, how?
- 15. Which are the results of the communication with tourists? How do you perceive them?

OBJECTIVE 4 (Ask village head)

- 1. How do you look at the local ecotourism development?
- 2. Which are the factors impeding Ecotourism development in the area?
- 3. Which are the factors helping Ecotourism development in the area?
- 4.Do you have any suggestions about improvement of the Ecotourism development in the area?

Appendix 4 Text-chat interviews

BASIC INFORMATION

Ethnic group, Gender, Age, Family members, Education level, Job, Working in tourism yes/no (in what way), Language proficiency.

- 1. How do you understand Ecotourism? Which is the difference with Tourism?
- 2. Do you work in ecotourism? How do you participate in it?
- 3. Are you willing to engage in independent tourism business (e.g. running family hotel, restaurants, commodity, transportation)? Why?
- 4. Do you have sufficient knowledge and techniques to participate in Ecotourism development? What kind of knowledge do you need?
- 5. How does Ecotourism in TLG influence your life?
- 6. What do you think about the current development of ecotourism in the area? Are you satisfied?
- 7. Are you involved in every phase of the project (planning, development, implementation, evaluation, discussion)? Are there any challenges?
- 8. Is there any sort of education/training about Ecotourism (environmental protection, etc)? Who is implementing it?
- 9. After engaging in ecotourism, which changes did you see in your main economic earning?
- 10. Do you get equal distribution of benefits from the Ecotourism activity? If not, why?
- 11. How do you perceive the quality of the environment now (air, land, water pollution)?
- 12. Who do you think should be responsible of the protection of the natural resources? How to do that?
- 13. Do you think Ecotourism helps to preserve the biodiversity and the natural heritage? If yes, how and from which aspects do you think so?
- 14. Did you experience any changes in your traditional culture (architecture, food, costume, religion, education, traditional knowledge, vehicle, trappings, daily necessities)?
- 15. Does Ecotourism disrupt your daily lives? If yes, what do you need from the visits?
- 16.Do you think ecotourism can help preserving the local traditional culture? If yes, how and from which aspects do you think so?
- 17. Which are the results of the communication with tourists? How do you perceive them?