Intangible Cultural Heritage and Biodiversity Conservation in Northwest Yunnan

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Abstract: Intangible Cultural Heritage (ICH) has been a topic of scientific inquiry for quite some time. Previous studies have mostly been focusing on the documentation, conservation and intellectual property rights issues, as well as its cultural significance. Areas where ICH is most abundant usually coincide with rich biodiversity, a hot topic in the current global village. However, very little attention has been paid to the roles and functions ICH plays on biodiversity conservation. This paper presents a case study of Northwest Yunnan, China, a culturally and ecologically diverse area. This area has been regarded as one of the 25 hotspots of global biodiversity. Based on preliminary cultural and biodiversity inventory data collected from two pilot sites in Northwest Yunnan, this research integrates the techniques in sociology, linguistic anthropology, ethno-semantics and conservation biology to explore the interaction mechanisms between ICH and biodiversity conservation. Rules governing ICH and biodiversity conservation will be analysed in detail, and potentials of ICH in relation to biodiversity conservation addressed. The relationship between cultural assets (including ethnic languages) and biodiversity conservation will also be explored, its implications for government policies suggested. It is hoped that this study will shed light on the issue of how to better protect our environment through implementing UNESCO's Convention for Safeguarding Intangible Cultural Heritage, and to help maintain ethnic culture and biodiversity conservation.

Key words: intangible cultural heritage; biodiversity conservation; linguistic cultural assets.

1. Introduction

The term “Intangible cultural heritage” (herein after referred to as ICH) was first coined in the 1990s following the ever-increasing attention paid to tangible heritage as a result of worldwide efforts to protect and conserve the human legacies, both tangible and intangible, across cultures. The 2003 UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage is a milestone in every aspect regarding the definition and scope of intangible cultural heritage and it sets the foundation for safeguarding, research, documentation, promotion of intangible cultural heritage. As is specified in the Convention, intangible cultural heritage means “the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity” (UNESCO, 2003)[2].

The definition serves as guideline for national governments in promulgating ICH inventory plans, documenting practices and writing laws and regulations, in addition to existing legislative and administrative frameworks, concerning intangible cultural heritage in their respective contexts and the achievements are, to date, fruitful, if not complete. Numerous state or privately sponsored programmes have been established and implemented ever since to address the message as is conveyed in the UNESCO Convention. A case in point is China which has 56 officially acknowledged nationalities, each of whom has a rich legacy of intangible cultural heritage yet to be explored and

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2 UNESCO (2003), Convention for the Safeguarding of the Intangible Cultural Heritage, UNESCO publication chap ter, Paris.

studied. China has passed a series of regulations and formulated strategies with respect to the conservation of its rich intangible cultural heritage. The strategies at national and provincial levels could be summarized in the following aspects: a) to carry out extensive inventories to obtain the state of ICH nationwide and this part of the task has been launched since the convention of UNESCO has been adopted and it is being implemented across the whole country involving multi-disciplinary and inter-departmental efforts; b) to promulgate laws and legislative regulations and to set guidelines for sustainable preservation, protection and promotion of intangible cultural heritage; b) to establish multi-layer organizational structure (national, provincial, prefecture, county) responsible for the preservation, protection and promotion of the intangible cultural heritage in China; c) to urgently survey and document the intangible cultural heritage in concrete means such as audio and visual collections; d) to make the national data base and archives of intangible cultural heritage; e) to establish a nation-wide inventory of the unique talents bearing the intangible cultural heritage and to take them under the state protection for ICH practices; f) to establish training programmes at both national and local levels of master-apprentice in the fields of oral heritage and traditions, especially in the regions where ICH is endangered as a result of economic development and dominant culture encroachment with the popularization of modern media such as TV programmes, internet and other electronic means; g) to improve vitality and sustainability of ICH through integration of conservation and marketing practices.

These strategies and efforts are indeed impressive in that they have brought to the forefront a topic which would otherwise be peripheral, say twenty years ago, compared to other areas of research among both administrative and academic communities. However, work done up to now can only be described as remaining at an initial stage of a field which is crucial to the livelihoods of a large percentage of people in China, especially when we take into account the fact that where ICH is abundant, people are still living in poverty and ICH is facing the danger of marginalization or even disappearance as a result of impacts of many factors, among which economic development and social transformation play key roles. Just like the situation in many parts of the world, ICH remains relatively unexplored in China and it calls for more in-depth exploration. If the practicality and reality sides of the target issue are taken into consideration, a lot of work done on ICH would be no other than researches for the sake of doing the research only. ICH, as one of the key elements representing human civilization and an important legacy of the mankind, asks for due treatment with regard to its role in preserving the more physical and tangible entities (i.e. biodiversity) and environment as a whole. This very role it serves, to an extent, could be described as establishing channels for human being to perceive and use the natural resources for livelihood and development of cultures in the process of human civilization.

In the academic community, intangible cultural heritage has been a topic of inquiry ever since its appearance as a discipline of research which traces its root in anthropological, sociological and linguistic endeavours in early 21st century. Wang Wenzhang (Wang, 2006) describes ICH as a platform with which different cultural, economic and social elements interact. Zhen Xinpei (Zhen, 2006) focuses on the present situation of ICH in China. There are other endeavours on ICH studies for decades, which could be summarized as mostly focusing on the inventory, documentation, conservation and intellectual property rights issues, as well as its cultural significance and this had been the trend across a time span of almost 70 years. It was only until the last decade or so that more efforts were made to explain the functions of ICH in relation to the livelihood of the human being. Much less attention had been paid to the roles and functions ICH plays on biodiversity conservation. On the global scale, areas where ICH is most abundant usually coincide with rich biodiversity and NW Yunnan in China is such an example (Xu and Wilkes, 2003). In those areas, the environment is relatively more vulnerable and the loss of ICH could trigger catastrophic loss of entire ecosystems. Unfortunately, the relationship between ICH and biodiversity is oftentimes overlooked when researches on ICH are conducted. The relationship between biodiversity and ICH presents a new scope of explaining how the physical world is the way as it is. Such a relationship is of crucial importance in an age where man's activities are imposing more and more impacts on the ecological environment and transforming the landscape on unprecedented pace. Over the last decade, there have been attempts to establish persuasive connection between the two (Johnson ed., 1992, Smith, 2001). However, most of these attempts have been focusing on interpreting traditional cultures in relation to their natural worlds, based on the so-called mainstream value systems and scientific

and unilateral interpretations which overlooked expressions of intangible culture within the indigenous communities (Kreps, 2003). Some recent research developments on this issue produce more and more evidence to acknowledge the vital role ICH plays in conserving or enhancing biodiversity, especially in areas where traditional cultures are still in active practice and the environment remains relatively intact (Johannes ed. 1991, Lansing et al. 1991).

As is elaborated previously, ICH is often discussed and studied from the conservation perspective. In reality, ICH should be regarded as part of a larger framework within which different social norms, value systems and development strategies interact in holistic ways to sustain a benign relationship between human being and the natural environment. And still, no conservation work is done for the sake of conservation. Today, traditional cultures and ecosystems have been disappearing at an alarming rate in every part of the world as a result of quickened pace of globalization, ever-increasing economic activities and the negligence of ICH by both locals and outsiders entering vulnerable and sensitive traditional societies which are totally not ready for this kind of encroachments. The loss is usually irreversible since, at times, ICH is not known to the general public at all before it is gone. Under such circumstances, how to preserve cultural and biological diversity has become major concern for human being and ICH stays at the center of the issue.

The interaction between ICH and biodiversity thus needs to be re-explored and readdressed. This paper presents a case study of Northwest Yunnan in China, a culturally and ecologically diverse area which has been regarded as one of the "25 hotspots of global biodiversity" (Myers et al, 1999). Based on preliminary cultural and biodiversity inventory data collected from two pilot sites in Northwest Yunnan, this research integrates the techniques in sociology, linguistic anthropology, ethno-semantics and conservation biology to explore the interaction mechanisms between ICH and biodiversity conservation. Rules governing ICH and biodiversity conservation will be analysed in detail, and potentials of ICH in relation to biodiversity conservation addressed. The relationship between cultural assets (including ethnic languages) and biodiversity conservation will also be explored, its implications for government policies suggested. It is hoped that this study will shed light on the issue of how to better protect our environment through implementing UNESCO's Convention for Safeguarding Intangible Cultural Heritage, and to help maintain ethnic culture and biodiversity conservation in the context of an economy in transformation as such found in contemporary China.

2. Ethno-Cultural-Biodiversity Context of Northwest Yunnan

Yunnan Province is amongst the most fascinating and diversified regions in China in terms of ethnic cultures, traditions and customs. It is home to 26 ethnic nationalities out of China's officially acknowledged 56 nationalities. Geographically, Northwest Yunnan extends from Dali, Lijiang, Deqing and Nujiang prefectures, bordering on Eastern Tibet and Sichuan in the north and Myanmar in the south. For millenniums, this region has been a hub of people migration and different cultures have long been in contacts with each other in this region which is topographically dominated by soaring mountain peaks and deep-cut valleys traversed by the Yangtze, Mekong, Salween and Irrawaddy rivers. The tiny alluvial plains or tablelands along these rivers and their tributaries are virtually the most inhabitable places where altogether 11 different nationalities establish their homes and develop enchanting cultures which have left rich legacies for the human being in his interaction with the environment. These 11 nationalities are mostly Tibeto-Burman and Han Chinese speaking peoples with (e.g. Han, Tibetan and Yi) or without (e.g. Bai, Pumi, Dulong, Nu) a written language (Ethnologue, 2009). This, however, does not affect the accumulation within each of these nationalities of well established cultural systems, part of which is acknowledged the present day as intangible cultural heritage. More often than not, this kind of knowledge systems is structured and transmitted from generation to generation through oral traditions, rituals and practices and continues to be enriched through people's adaptation to the environmental, social and economic changes during the migration and resettling down process. It still plays important roles in maintaining environment integrity and intactness in the fast transforming social, economic, ecological and cultural landscape of present day Yunnan province, if not of the whole China.

Much in accordance with the multiplicity of nationalities and cultures, NW Yunnan is a biodiversity critical region and part of the key biodiversity hotspot acknowledged by international communities, a fact could be easily

understood when Yunnan's geographical location is taken into consideration—the meeting place of three important eco-regions: mainland Southeast Asia, Southwest China and eastern Himalayans. There are more than 18,000 high plant species (51.6% of China's total) and 1,836 vertebrate species (54.8% of China's total). Among 15,000 seed plants found in Yunnan there are 151 rare and endangered plant species (42.6% of China's protected plants). Out of 335 China priority protected wild animals, Yunnan has 243 species, accounting for 72.5% of China's total, 15% of which are species endemic to Yunnan (Yang et al. 2004). UNESCO describes NW Yunnan as the "epicentre of Chinese biodiversity" in its inscription of "Three Parallel Rivers of Yunnan Protected Area". This inscription, however, emphasizes more on the natural landscape and ecosystems of the region than on the cultures, especially ICH, which are of crucial importance in maintaining a balanced integrity of ecosystems and biodiversity in the region.

ICH of the Tibeto-Burman peoples and the Han Chinese in NW Yunnan, China, may offer some clues in explaining a complicated issue such as is conveyed in the relationship between ICH and biodiversity conservation. Before any tenacious conclusion how ICH functions in biodiversity conservation in the context of NW Yunnan, China, let's first take some time to explore the scopes of ICH in this particular ethno-cultural-biodiversity region.

3. Scopes of ICH in the Context of Northwest Yunnan, China

As is mentioned above, the inhabitants of NW Yunnan are mainly Tibeto-Burman speaking peoples who have migrated to the area in successive waves over the last millenniums from their homelands in Northwest China (Shafer, 1966, Benedict, 1972, Fei, 1988, Bradley, 1997, Matisoff, 2003). Han Chinese people came relatively late, mostly within the last 600 years or so (Fei, 1988). Travelling through the rugged mountains and getting settled down on the small alluvial plains in the valleys, these peoples have learned to cope up with new the situations and have accumulated a rich legacy of cultures through which a harmonious relationship between human being and the natural environment has developed. At the center of such a relationship is the impact of ICH on biodiversity conservation. Among other things, the following six aspects are identified to summarize the scopes of ICH within their environment-specific contexts. They are: i) cultural practice; ii) concepts about environment in specific context, in this case, the ethnic communities perching on the alluvial plains along the valleys; iii) beliefs and customs related to environment in general, (e.g. the sacred forests concept of the Lisu and the sacred water and mountain worship of the Tibetans); iv) ideas about natural and society development at both specific and global levels; v) production strategies in relation to biodiversity; vi) ideas about nature production and finally, vii) biological zonation practices which are of crucial importance in managing the natural resources in a sustainable way (He, 2009).

It should be noted, however, ICH at this stage of discussion is used collectively to incorporate the mostly unwritten knowledge systems of the 11 nationalities that are culturally and linguistically related, all being classified as Tibeto-Burman and Han Chinese speaking peoples. ICH in this sense is more or less identical to indigenous knowledge systems and it is the basis for agriculture, health care, food preparation, education, natural-resources management and a host of other activities in rural communities (Warren 1991).

The explanation of these seven aspects itself could lead to a book-length discussion, but let's focus more specifically on the situation as is found in NW Yunnan. ICH in this region covers anything from daily living, production and worshipping practices to perception of society and environment and the conceptualization of an epistomology of the local people. Numerous Tibeto-Burman speaking communities along the great river valleys, across a time span of millenniums, have developed environment-specific cultural practices in their long process of migration and adaptation from homelands of unitary high plateau grasslands in northwest China to a region of soaring snow peaks and deep-cut valleys in southwest China. In order to sustain the livelihood, they need to have sufficient knowledge about the specific living environment with villages on the alluvial plains as economic and cultural centers and pristine forests, lush alpine meadows and shrubs nearby. The mountain-forest-village-meadows-rivers-lakes landscape constitutes a benign living environment and the wisdom underlying such ecological and cultural landscape is definitely what ICH is all about. And the exploitation of the natural resources within such a system is directed, adjusted and refined by commonly reached accords and norms among the community members. This could be exemplified by the local Tibetan idea of "scared mountain and water" worship when they define their

position in relation to the environment nearby. The culture developed out of such reverence toward the physical environment sets the guidelines for people to follow in their interaction with the environment. It could be argued that, across all communities in the region, there exists a system of natural resource exploitation and management and this system is adapted to suit the community needs at the local level and to meet the increasing challenges from the outside world. Paramount to this system is the maintenance of the harmony between human being and the natural environment. This probably reveals partly the secret that, after experiencing so many years' of human intervention, biodiversity still remains relatively intact, as is compared to many other regions of China.

However, only four (Tibetan, Yi, Naxi and Han) of these 11 nationalities have written language of some sort, making the preservation of the ICH among these nationalities rather difficult3. The intangibility of ICH in this region could be seen from the fact that the ICH is actually kept and practised in the 20 plus languagesspoken amongst the different communities in the area4. ICH is thus practiced and transmitted through oral tradition, folklores, common accords and etc, although it does find some concrete representation in more tangible forms such as unwritten village norms, customary laws, regulations and protocol concerning the use and management of biodiversity and natural resources in the whole region.

To obtain a clear picture of the functions ICH in relation to biodiversity conservation, fieldworks are conducted in two villages--Baihualing (BHL) and Hamagu (HMG). BHL is a village of mixed nationalities near Gaoligong Mountain National Nature Reserve. ICH there is most represented by the practices of 'sacred forests' system. HMG is a Tibetan Village in Shangrila County near Baima Snow Mountain National Nature Reserve, where ICH is pronounced through the non-timber forest products (NTFP) exploitation practices and bio-geographical zonation of landscapes.

4. ICH and Biodiversity Conservation Practices of Baihualing Village

Baihualing is a multi-ethnic village located in the southern part of the Gaoligongshan Mountain Range, now designated as a national nature reserve for its rich biological resources and different ecosystems. The six ethnic groups represented in the village are: Lisu, Han, Bai, Yi, Hui and Dai, with Lisu being the dominant group and other ethnic groups such as Jingpo, Nu and De'ang live nearby. The land of the village extends over two catchments: Zaotang and Manggang and the elevation ranges from 850 m to 2,000 m above sea level. The village is part of a larger area known among some as "ecosystem showcase" (CAS, 2004). In 2006, there were a total of 507 households with a population of 2,180. The economy is most agricultural, a large part being closely related to the use of forest-related resources such as fuelwood, medicinal herbs, mushroom, rattan and livestock fodder. Major crops include corn, paddy rice, sweet potato, fruits and vegetables. Livestock grazing is active for supplementary labour and at times, for meat production. Plant and wildlife species (some of which are key national protected species) are still in abundance in the forest nearby. Ethic language is in active use within each group, although literacy in Han Chinese language is relatively high among the younger generation as a result of extensive state education programs.Table 1 below shows the situation of ICH in Baihualing village.

Tab. 1 Scopes of ICH in Baihualing Village

Types of ICH in NW Yunnan	Presence in BHL	Representation in BHL
Cultural practices	+	A. Thematic folk dances and songs depicting relationship between man and nature; B. Sacred forest protection system; village
Concepts of environment in specific society	+	

3 The nationalities who have a written language are: Han Chinese, Tibetan, Naxi, Lisu and Yi. In the case of the Na xi, the written language is not in common use at all, and the written language for the Lisu was relatively invention devis ed by Western missionaries in the late 19th century.

4 The 11 nationalities are actually subdivided into more subgroups whose languages are mutually unintelligible at cert ain cases. Conservative estimation puts the number of languages spoken in the region at about 20. For more information c oncerning this, refer to Shafer (1966), Benedict (1972), Bradley (1997), Matisoff (2003).

Beliefs and customs related to environment in general	+	norms and customary laws governing the use of resources;
Ideas about development at local and global levels in specific society	+	C. Reverence to natural spirits;
Production strategies in relation to biodiversity	+	D. Mountains and rivers are the sources for livelihood;
Ideas about nature production	+	E. Village norms and customary laws governing the use of natural resources in sustainable way.
Bio-geographical zonation practice	-	

(Note: "+" indicates the presence of ICH in the village, "-" indicates the absence of specific ICH in the village)

Baihualing represents a typical village in the region with rich legacy of ICH and an exuberant biodiversity. There are numerous literatures on the ethnic cultures, traditions and languages of Baihualing and the region in general and the same is with the biodiversity situation for the area5. An biological and social assets inventory was done in 2001, making some references to the ICH existing in the village (Stotz, 2003). Very few in-depth studies, however, have been conducted to address the relationship between the ICH of the different ethnic groups and the biodiversity situation in the region. ICH in Baihualing represents a social ensemble of many different, complex and interdependent manifestations. The village has ICH covering almost all the ICH scopes specified in section 3. Among other things, the relationship between ICH and biodiversity is exemplified in the well-developed system of maintaining the so-called 'sacred forests'. These forests function as shelters, water and soil conservation habitats and provide natural resources for the livelihood of the people living in and near the forests. And it is not surprising that they are the haven for biodiversity. This system incorporates the cultural practices, concepts of environment in specific context, beliefs and customs related to environment in general, nature and society development ideas, production strategies in relation to biodiversity. Or in other words, it ranges anything from reverence to natural spirits, quest for harmony between human beings and forests and the sustainable exploitation of the resources nature could offer.

The reverence to natural spirits is a widely accepted belief among local people which finds its roots in the tradition of keeping sacred forest around village. Such forest is believed to have the power of establishing a bond between the people and their ancestors, a typical belief prevailing in almost all Tibeto-Burman peoples in Southeast Asia and Southwest China. For example, in the legends of the Lisu people in Baihualing village, forests, together with rivers, always form the essential part of tracing the routes back to their ancestry lands. The management of the forest and exploitation of the resources itself entails the conservation of the cultural traditions of the local peoples, thus constituting a whole set of ICH, represented in different forms amongst the different ethnic groups. For the Lisu, it is a "sacred forest system" ; for the Yi, a "forbidden forest system" and for the Han Chinese, a "*fengshui* forest system" .

At the center of the "sacred forest system" of the Lisu is the respect for the forest spirits which are believed to have the power maintaining the balance of the natural environment and the human society. The Yi "forbidden forest system" emphasizes the integrity of a peaceful resting place for the ancestors, whom the Yi people believe could bring good harvest and prosperity to village. While for the Han Chinese, the "fengshui forest" guarantees prosperity of individual households and the village as a whole. Whatever terms are used in a given context, there is always a similar management strategy, mostly unwritten, developed from the understanding of the environment by the local people. In the traditional beliefs of the people in Baihualing village, environment and people form an integral entity through which the two parties develop an interdependent relationship. Harmonious co-existence with

5 Refer to Sun Hongkai (2002, 2005), Dai Qingxia (2001, 2005) and Bradley (1997) for more information on the lan guages of the region; for information on ethnic cultures, refer to Huang (2007) for information about the cultures and cust oms of the ethnic people in northwest Yunnan; and for information describing the biodiversity situation in the region, refer to Li Jingwen (2006), Ma Keping (2005), Wang Mingdong (2001) and Yang Yuming (2008).

nature is what to follow in conducting daily living and production activities. ICH in this context is considered to be a social ensemble of many different, complex and interdependent manifestations which center upon the conservation and exploitation of the forest and resources and sustain the vitality of the society. A typical forest management norm in Baihualing village is shown below:

a. Forests are the sources of life for the village and they harbor the spirits of the ancestors;
b. Every member of the village should follow village environment protection protocol;
c. Logging should be regulated and cutting a single tree is allowed only when two young trees are planted;
d. Livestock grazing could be carried out without tramping damages and encroachment on understorey layers;
e. Fuelwood collecting is rationed according to the number of family members per household; excessive harvesting is not allowed;
f. NTFPs (medicinal herbs, mushrooms, wild vegetable, turpentine and other resources) can be collected in sustainable way; excessive collecting is not allowed;
g. No hunting is allowed in breeding season;
h. Understorey planting of cash crops can only be done in designated zones;
i. Vegetation regeneration fund is established for the benefit of all people;

This is one of the many village norms dealing with biological resources exploitation in Baihualing village. Such norms could be considered intangible knowledge system. And they are oftentimes voluntarily practised and observed by most community members and have been playing important roles in recent years as supplementary measures to the government laws and regulations related to biological resources management and exploitation. The intangibility of this knowledge repertoire, however, makes its legitimacy in biological conservation questionable, at least to some conventional scientists. Even for the general public, it is just "something out there", practised and used without the knowledge of the practitioners themselves. In a fast changing economic and ecological landscape as that of Northwestern Yunnan, or that of China as a whole, this kind of of ICH is disappearing as fast before most people realize its existence, not even to mention a due recognition to address its importance.

Briggs (2007) states the dynamism of economic activity ensures that knowledge must adapt to changing economic circumstances and opportunities. The last decades have witnessed the role of ICH plays in reshaping an ecological and economic landscape in transformation. The economy of Baihualing used to be based on agriculture and logging, both imposing major threats to biodiversity in the region due to lack of sustainable strategies. After the national logging ban of natural forest was issued in 1998, the traditional way of logging and livestock grazing gave way to the sustainable use of non-timber forest products (e.g. mushroom, herbs and cash crops), market oriented agriculture and development of eco-tourism. The concept of sustainable development is understood and accepted by more and more people in the community. There is a revival of traditional knowledge system once regarded unorthodoxy and it comes to the forefront to fill up the knowledge gap in a community where most people lack the standard schooling. The knowledge system is of great importance in coping with the rapidly changing ecological landscape. In Baihualing, annual cultural activities promoting ICH have been organized. Folk knowledge experts are consulted for better farming practices, use of medicinal herbs and development of cultural programs. To conserve ecological environment, promote ICH and develop local economy, the Farmer's Biodiversity and Conservation Association was established in 1995 in Baihualing village. This association takes as one of its chief responsibilities the documentation of ICH, especially the part closely related ecological conservation, and the promotion of ICH through eco-tourism programs. ICH has been exploited and served as guidelines in ecological awareness building, management of natural resources, farming practices and native tree species planting programs, all addressing the sustainable use biological resources and development of economy, construction and conservation of a good ecological environment.

5. ICH and Biodiversity Conservation Practices of Hamagu Village

Hamagu, a Tibetan village about 10 km away from Shangri-la county seat, is situated at the foothills of Shika Snow Mountain and on the northern shores of Napa Lake, an internationally famous wetland habitat for the critically endangered black-necked crane and other bird life. Altogether 39 households live in the village. Most people are

bilingual in Tibetan and a local form of Mandarin. Major sources of income are: farm products (highland barley), livestock raising, non-timber forest products collecting and more recently, eco-tourism (e.g. thematic trekking and bird watching). The villagers may not be familiar with terms such as water conservation, vegetation rehabilitation, sustainable development and ect., but they do know the real meaning of a good environment and what it holds for them. This tiny community has inherited a lot cultural legacies from their ancestors and developed over the years some forms of ICH to use and exploit natural resources found in the adjacent areas of the village. For example, in the local language, environment , plants and wildlife are usually beautified with poetic terms. A case in point is butterfly which is called "flower which can fly". Landscapes of the village, according to functions in relation to the village, are classified into wetlands, farmlands, dwellings, grazing land, snow mountain, alpine meadows and ravine areas. The use of each of these different categories is governed by unwritten rules observed by all the members of the village. This classification of landscapes could be described as a bio-geographical zonation system from which people in Hamagu village learn to manage the different landscapes and the resources they provide. It is a knowledge repertoire from which the villagers learn to make a harmonious living while at the same time keeping the environment intact. It is no surprise that the biodiversity in this region is one of the richest in the entire NW Yunnan. The ICH system, which centers upon the "sacred mountain and holy water" practice and observation, involves the following aspects: beliefs and customs related to environment in general, production strategies in relationship to biodiversity and bio-geographical zonation practices (See Table 2).

Table 2 Scopes of ICH in Hamagu Village

Types of ICH in NW Yunnan	Presence in HMG	Specific Forms in HMG
Cultural practices	+	Annual cultural events focusing on good relationship with nature;
Concepts of environment in specific society	+	B. Sacred mountain and water are the sources for good life
Beliefs and customs related to environment in general	+	C. Recent ecotourism strategies addressing both development and conservation;
Ideas about development at local and global levels in specific society	+	D. Environment carrying capacity concept;
Production strategies in relation to biodiversity	+	E. No trees, no water, no life
Ideas about nature production	+	F. Village zone (settlement, farmlands, orchards), forest and seasonal farmland zone, sacred sites, birdwatching zone, livestock grazing zone
Bio-geographical zonation practices	+	

(Note: "+" indicates the presence of ICH in the village, "-" indicates the absence of specific ICH in the village)

The concept of "sacred mountain and holy water" is a set of unwritten norms and beliefs which finds its root in the Tibetan traditions which hold reverence to mountains and waters and the plants, wildlife living in these domains. For people in Hamagu, mountains and lakes have spirits and are the sources for good life and a benign environment. They govern the "rules" of communication between human being and the natural world. The rules are oftentimes manifested through the exploitation of natural resources. For a long time, people in Hamagu have been practising these rules to manage the farmlands, wildness, lakes, woodlands, sacred sites and wildlife habitats.

Hamagu is mostly an agricultural society and the economy used to be based on timber harvesting, livestock grazing, non-timber forest products collecting and limited farming of highland barley. Timber was once harvested mostly for house construction and for the market at times. In stead of felling, like in many other places in NW Yunnan, thinning was used for for the regrowth of forest and a balanced demand and supply of timber. After the 1998 national logging ban on natural forest, people in Hamagu could no longer cut timber from the forest, except

for the collecting of fuelwood . Alternative income sources have to be sought to obtain cash to to the daily necessities. One of the alternatives is non-timber forest NTFP) products collecting. People in Hamagu have a rich knowledge on the NTFPs and ways to use them, usually expressed in the local Tibetan language. Mushrooms and medicinal herbs are the two most important types of NTFPs , both bringing large amount of cash income for the village. Based on the overall concept of "sacred mountain and holy water" and following the traditions passed down from ancestors, the 39 households had agreed upon the ways and the areas from which NTFPs could be collected.

In the last decade, Hamagu has been facing with challenge of economic development and conservation of traditional culture and environment. The ecological and cultural landscape of Shangri-la Basin where Hamagu is located is changing dramatically as a result rapid economic development programs. Some villages nearby quickly adopt themselves to the so-called new ways of development which undermine the balance between environment and economic development. Biodiversity in the region disappears at an alarming rate. Whether to develop the economy or to conserve the cultural traditions and natural environment or is there a way integrating the two are questions to which people in Hamagu are seeking answers. They have made a few attempts to address these issues. A recent move is to establish a ICH demonstration center and educate people the cultural traditions and knowledge of wildlife and plant species found in and near the village. Some initial efforts have been made to document the existing ICH. Another attempt is to organize thematic trekking trips for tour groups with special needs along the lake shores and across the mountains behind the village. During these trips, local guides from the village with knowledge on wildlife and plants and biodiversity in general explain to the tourists the cultures and traditions related to these wildlife and plants species. In fact, Napa Lake which lies in front of the village has been established as a key wetland nature reserve for protecting migrating birds staying for winter seasons. Although the village itself is not part of the nature reserve, the people have a strong sense of protecting the wildlife species and they have established a "village ecological nature reserve" and are most willingly happy to provide their knowledge on the wildlife and plant species to assist the national protection programs. The traditional landscape zonation system is readjusted to cope up the new challenges. Based on this system, the landscape of the village is divided into village zone (settlement, farmlands, orchards), forest and seasonal farmland zone, sacred sites, birdwatching zone, livestock grazing zone. The wetlands along the lake are designated as birdwatching zone, mountains behind the village are designated as thematic eco-tourism zone and the area around the village is designated as farming zone. Some traditional knowledge has been integrated into the management of these zones and is playing vital role in protecting the biodiversity in the area.

6. Discussion

Intangible cultural heritage, understood in the broader definition, includes intangible aspects of a particular culture of a region, often maintained by social customs, social values and traditions, customs and practices, aesthetic and spiritual beliefs, artistic expressions, language and other aspects of human activity. It is thus understandable that this heritage plays important roles in expressing the socioeconomic, ethnic, religious and philosophical values of a particular group of people. This heritage directly affects people's perception of the environment and their use of resources provided by the environment. Baihualing and Hamagu, one representing a mixed community of different nationalities (Lisu, Han, Bai, Yi, Hui and Dai, De'ang, Jingpo) and the other, one nationality (Tibetan), are two typical villages in NW Yunnan where biodiversity and production activities are interrelated and most people's livelihoods still depend directly on the natural resources they could obtain from the adjacent areas of the communities. The thorough understanding and due recognition of intangible cultural heritage has invaluable impacts on the existence of biodiversity, whose richness in turn enhances people's understanding of the natural environment around them.

In the dynamics of economic development and social transformation as is witnessed in China in the last decades, the long established relationship between intangible cultural heritage and biodiversity is facing with unprecedented challenges, one of which being the rapid disappearance of that part of intangible cultural heritage conveying knowledge of biodiversity. In certain areas, some initial efforts have been done to address this issue, just like what

is found in revival of ICH both Baihualing and Baihualing villages which have developed over hundreds of years a rich legacy and ICH of natural resources exploitation. In the case of Baihualing, it is found in “sacred forest and fengshui forest” practice and in Hamagu, it is expressed by the “sacred mountain and holy water” system. However, this knowledge system is mostly unwritten but kept in the the local languages and are just “out there”. Villages like Baihualing and Hamagu are totally unprepared to cope with the dynamics of economic development as is found in contemporary China.

It is thus of urgent necessity that ICH of such communities be re-evaluated and documented and integrated into the overall development planning programs.

7. Conclusion

The role intangible cultural heritage plays in biodiversity conservation has always been something attracting the attention of the academic community ever since both knowledge scopes became the focus of research in the last two decades following the rapid transformation of cultural and ecological landscapes around the world. The rural communities in NW Yunnan, like most other people in traditional societies, have a rich ICH which conveys knowledge about the nature and environment. A thorough study of the scopes and functions of this ICH in this particular region may offer some revealing solutions to problems resulted from the rapidly changing cultural and ecological landscapes in contemporary China. With more data from other areas, say, cultural, anthropological, ecological and linguistic, the seemingly vague connections between ICH and biodiversity may become clearer to researchers in the field.

However, due to data availability, the present research is too brief to be conclusive in presenting a whole picture, or even part of the picture of ICH and biodiversity. Further study is needed to describe the entire ICH domain of NW, although certain scopes of it have been discussed in this research. This study just caught a glimpse of the cosmos of ICH of two typical villages. With further and more in-depth study, the picture of the ICH and biodiversity conservation can become clearer to the research community. This research is not intended as an exhaustive study of the relationship between ICH and biodiversity, but a prelude to a series of research projects to be carried out, and thus can be regarded as a work in progress.

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