

Sustainable development of eco-friendly traditional lifestyle in rural ethnic minority areas in Yunnan(II)

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전화 02)380-7777 팩스 02)380-7799
<http://www.kei.re.kr>
인쇄 2013년 12월 26일
발행 2013년 12월 31일
출판등록 제17-254호
ISBN 978-89-8464-810-4 93530

서 언

중국 운남성 지역은 중국내에서도 높은 생물다양성과 다양한 소수 민족이 거주하는 지역으로 농업과 관광, 문화산업의 중심지로 거듭날 수 있는 다양한 잠재력을 지닌 지역으로 알려져 있습니다. 하지만 중국의 다른 지역에 비해 운남성 지역은 경제발전이 낮은 수준에 머물러 있습니다. 기존의 중국 정부의 개발정책은 성장을 위주로 한 사회적인 부의 창출을 목표로 하고 있습니다. 이러한 정책 하에서 운남성 지역은 무분별한 개발로 인하여 산림자원의 손실을 입었으나 부의 재분배에 있어서는 소외되었습니다.

최근 중국 정부의 정책은 과거의 성장위주 정책을 탈피하여 무분별한 개발보다는 성장과 발전의 균형 잡힌 접근을 달성하기 위해 노력하고 있으며 지속 가능한 발전에 대한 국제적인 노력에 동참하고 있습니다. 이러한 상황에서 본 연구는 운남성 소수민족의 환경 친화적인 전통생활 양식과 지식에 대한 연구를 통하여 농촌지역 및 도시지역 소외계층의 지속 가능한 경제 발전을 위해 초점을 맞춘 정책 대안을 제시하고 자칫 보전하고 활용되기 전에 사라질 수 있는 인류의 유산을 보전하고 활용하는데 도움이 될 것으로 판단됩니다.

본 연구결과가 나오기까지 본 연구를 맡아 수행한 한국환경정책평가연구원의 오일찬 박사, 이현우 박사, 강택구 박사, 제갈운 연구원 및 외부에서 함께 힘써주신 한동욱 박사, 이상우 박사, 박찬호 박사에게 감사를 드립니다.

2013년 12월

한국환경정책·평가연구원

원장 이 병 욱

국문 요약

본 보고서는 「동아시아 개도국의 녹색성장 전략 개발 및 보급」의 세부과제인 「운남성 소수민족의 생태친화적 전통생활방식의 지속가능한 발전방안(Ⅱ)」으로서 중국 운남성 사회과학원 전문가들의 원고를 영문 및 중문으로 수록하였다.

우선 운남성 소수민족의 사회, 경제, 문화에 관한 전체적인 개황을 소개하고 나시(The Naxi)족의 약용식물 이용과 사회과학적인 분석, 수자원 관리 등에 관한 내용 및 생태와 전통적인 생산 방법에 관하여 다루었고, 장족, 이족(Yi), 다이(Dai)족, 묘족으로 대표되는 소수민족 4대 전통의약 중 가장 널리 활용되는 이족의 전통 의학에 관한 내용 및 이족의 생태 개념과 전통적인 생활방식에 관한 내용을 수록하였다. 다이족의 친환경적인 전통생활 방식 및 수자원 관리에 관한 내용을 수록하였고, 백(Bai)족의 전통적인 염색법, 수공예품을 활용한 경제활동과 환경 친화적인 전통생활 방식에 관한 내용을 수록하였다. 또한 현재 중국의 운남성 개발 정책에 대한 소개와 문제점 등을 제시하였다. 마지막으로 운남성의 생태적인 생활에 대한 개념과 전통적인 생산방식에 대하여 다루었고, 현대적인 생활방식의 도입으로 인하여 발생하는 환경 파괴의 문제점과 전통적인 생태적 사고와 환경 친화적인 생활방식의 이점 등에 대하여 언급하였다.

주제어: 전통지식, 소수민족, 지속가능한 발전, 나시족, 이족, 백족

| 차례 |

제1장 · Introduction	9
제2장 · Case Study	10
1. The Yi Nationality's Ecological Concept and Traditional Lifestyles	10
1.1. Distribution of the Yi people and its economic development	10
1.2. Ecological Perspectives of the Yi people	12
1.3. The Yi Traditional Friendly Lifestyle and the Way of Production	14
1.4. Conclusion	34
2. The Bai Nationality's Traditional Environment-friendly lifestyle	36
2.1. The Concept of Harmony in the Worship of Benzhu of the Bai People	37
2.2. The Traditional Eco-Friendly Way of Life and Production of the Bai People	38
2.3. Conclusion	59
3. The Naxi Ecological Views and Traditional Lifestyle	60
3.1. Distribution and Economic--Social Development Status of the Naxi People	60
3.2. The ecological views and the traditional lifestyle ways of the Naxi people	66
3.3. The impacted factors of the Naxi people's eco-friendly lifestyles	79

3.4. Countermeasures	81
4. The Dai Nationality's Traditional Environment-friendly lifestyle	83
4.1. Ecological philosophy of the Dai people on rice farming	83
4.2. Ecological conservation under religious taboos	84
4.3. Traditional living and working style of the Dai people	88
4.4. Summary	106
제3장 · 국문 요약 및 결론	107
1. 개요	107
가. 운남성 농촌지역 소수민족의 사회 · 경제적 현황	107
나. 운남성 전통생활방식 내 환경보전과 발전의 관계 분석	108
다. 운남성 농촌지역 생태친화적 전통생활방식 현황	109
2. 사례연구	111
가. 이(Yi)족의 생태친화적 개념과 전통생활방식	111
나. 백(Bai)족의 생태적 개념과 전통생활방식	114
다. 나시(Naxi)족의 생태적 개념과 전통생활방식	116
라. 다이(Dai)족의 친환경적 전통생활방식	120
참고문헌	124
부록	133
Abstract	259

| Table |

〈Table 3-1〉 운남성 및 운남성 소수민족 자치구의 사회·경제적 현황 및 환경 개발
상황 비교 108

| Figure |

<Figure 1-1> The Yi's Torch	18
<Figure 1-2> The Yi's Traditional Costume	30
<Figure 1-3> The Yi's Costume	31
<Figure 1-4> Eagle pattern	33
<Figure 2-1> The Bai's dye products	41
<Figure 2-2> The Beliefs in Nature Godness called "Shu"	67
<Figure 2-3> In the Ancient City of Lijiang in natural "Pearl spring"	74
<Figure 2-4> Naxi people managed the well "Folk regulations and rules"	75
<Figure 2-5> Rivers in the Ancient Town in Lijiang	75
<Figure 2-6> Divine tree for sacrifice at Mangduo Natural Village, Gonglang Village Villagers' Commission, Weiyuan Town, Jinggu Dai and Yi Autonomous County	67
<Figure 2-7> The Dai's traditional food	104
<Figure 3-1> 이(Yi)족의 의복	113
<Figure 3-2> 훌치기염색 상품	115
<Figure 3-3> 자연신 "Shu"에 대한 숭배	117
<Figure 3-4> 리장의 고대도시 "Pearl spring"	118
<Figure 3-5> "민속 규정 및 규칙"에 따른 나시족의 우물 관리	118
<Figure 3-6> 다이족의 전통음식	122

| 제1장 · Introduction |

This report is the second result of 「Sustainable development of eco-friendly traditional lifestyle in rural ethnic minority areas in Yunnan」. Please refer to the introduction of the first report or chapter 3 of this report.

| 제2장 · Case Study |

1. The Yi Nationality's Ecological Concept and Traditional Lifestyles

The formation on national culture and that on the natural environment are interrelated. The formation and development of a lifestyle and the way of production are the result of people's practices of production for thousands of years and people's adaption as well as their mutual coordination with the ecological environment. Based on the interaction with the natural environment, the Yi people rely on natural resources and utilize them; consequently, they have formed a unique traditional lifestyle, which are reflected into understanding nature in a simple way, development and utilization of land, management and protection of forestry and utilization of plants. The unique traditional lifestyle and way of production also exist in the Yi people's religious faith, agricultural production, forestry management, medicine, diet, decoration, etiquette and custom. Although the Yi people's traditional lifestyle have the original brand of religious belief, but their traditional lifestyle and way of production have to be in a delicate balance with nature, which plays a positive role in objectively promoting the protection and management of the ecological environment, to conserve biological diversities.

1.1. Distribution of Yi people and its economic development

The Yi is one of China's most ancient ethnic groups with a large population among all ethnic minority groups in China. They are mainly distributed at the mountainous areas in the Wuliangshan mountain, Wumengshan mountain,

Liangshan mountain, with the Yi villages mainly located in the hillside. According to 2010 national census data, the Yi people have a population of 8,714,393, which accounts for 0.6538% of the total national population. They mainly live in Yunnan, Sichuan, Guizhou, Guangxi and other Provinces (autonomous regions), and they have different appellations, such as Nuosu, Nasu and Luowu, Misapo, Sani, Axi, etc. Yunnan is one of the main habitats of the Yi people, as the Yi are distributed almost throughout the province, mainly concentrated in the Chuxiong The Yi Nationality Autonomous Prefecture in Yunnan Province, Honghe Prefecture, Shilin County, Jiangcheng County, the Ninglang County, Weishan County, Nanjian County, Xundian County, Yuanjiang County, Xinping County, Yangbi County, Luquan County, Ninger County, Jingdong County, Jinggu County, Zhenyuan County, and Eshan County etc. The Yi ethnic minorities in Yunnan is the most populous ethnic minority group with a population of 5.028 million (2010), accounting for 10.94% of the total population of the province.

The process of establishing feudal landlord economy in the Yi villages was quite slow, due to the Qing dynasty's Yongzheng period, "Gaituguiliu reformation of the Tusi system" was incomplete, still remains of Tusi system in some areas. Moreover, most Yi people lived in the mountainous areas, which kept them backward and dominated by self-sufficient economy, as commodity economy was still undeveloped. According to the ethnic minority socio-historical information in the mid 1950s, prior to 1949, the areas, with 40% of the Yi people, could not develop their landlord economy. Before 1949, landlord economy had developed in a few regions, namely, cities near Kunming and Lufeng County, The Yimen County, Qujing Prefecture, Gejiu County, and Zhaotong Prefecture. In the late 19th century and early 20th century, the commercial ports and

railways were constructed and foreign goods have imported in the Yi people's areas. For example, by using the Yunnan-Vietnam railway and Bishi railway, the blue stone was imported in the Yi areas and this stone had an impact on the distribution of capitalism. At tin ore areas of Gejiu County, there had been a national capitalist industry.¹⁾ Most of the Yi people's areas were mainly based on agriculture, animal husbandry, supplemented by handcrafts and hunting to meet their own/basic needs. Since the establishment of the P. R. C, under governmental guidance and impact of the economic development, the market economy had begun to prosper in the Yi people's areas.

1.2. Ecological Perspectives of the Yi people

Located around the mountains and forestry, long accompanied by the natural environment from morning till evening, the Yi people had formed ecological perspectives on nature. The ecological concept has two aspects: on the one hand, after long association with nature, the Yi People summed up their experiences; on the other hand, the ecological concept was inextricably linked to their original religion.

In General, the Yi people's ecological views are as follows:

i) People are the product of nature, as nature came first. According to the Yi's mythology, a lot of mythologies were, "The Bamboo is the ancestors of the Yi people", "The tiger is the ancestors of the Yi people", "The eagle is the ancestors of the Yi people." They believed that they came from the animal, plants, water, and other natural objects.

ii) Harmony between human and nature

1) LI Yanliang: "Discussion on humanistic theory of the universe", Kunming: Yunnan Nationalities Press, 1993, p.93.

There is a symbiotic relationship between man and nature, according to Cosmic Humanism, which states that, the human and the celestial bodies are similar, and both of them have the Five Elements, forming the root of the human body. According to The Five Elements, water is the blood of the human, metal is the bone of the human, fire is the heart of the human, wood is the tendon of the human, soil is the flesh of the human. There is the moon in the sky and people have the eyes. There is wind in the sky and people have breath. There is thunder in the sky, and people have voice. Sunny in the sky, people can be joyful. Cloudy in the sky, people can be angry. There are 48 thousand stars in the sky and people have 38 thousand hair. Days around 360 degrees, human beings have 360 bones. There are Elements is the North and South, East, West, Center of the sky. There are 5 Elements on the earth. They are metal, wood, water, fire and earth. Five elements of human being are heart, liver, lung, kidney and spleen. The Yi people believe that human and the universe are the same, and it is intrinsically closely related; therefore, being kind to nature is the way to treat yourself.

iii) The Yi people's reverence for nature. According to the widespread belief of the Yi's original religion, everything has a spirit of nature; although the low productivity or the face of fortunes or misfortunes had been brought by nature, people could not give a reasonable explanation. They want to get divine blessings through religious beliefs and appropriate sacrifices. The original religion of the Yi blended naturism, totemism, and ancestor worship. They sacrifice to the heaven, the earth, mountains, water, stone and other natural Gods to pray for the protection of nature, and they believed it could have a blood relation or protect native animals and plants as national totem worship. Thus these can improve the relationship between people and nature, gain the courage to

overcome the difficulties and divine.

At present, the Yi have been widespread, and their main belief is original religion, thus forming a simple ecological view that permeates people's lives in harmonious relationships between human and nature.

1.3. The Yi Traditional Friendly Lifestyle and the Way of Production

1.3.1. Agriculture activities and developments

a. The development of agricultural practices

The Yi people at different areas in Yunnan, due to the differences in geographic location, have different farming practices; the main methods of production include: nomadic way, slash-and-burn way, dry farming way by backhoes, paddy field rice farming by plow. Currently, the Yi people who reside in the Alpine region are dominated by dry farming, while the Yi nationality at lower altitudes is mainly based on rice farming. In the ancient time, the main means of the Yi's livelihood were hunting and sedentary farming, and the Yi people dominated by nomadic way of production, supplemented by slash-and-burn agricultural practices.

Later on, along with the increase in population, slash-and-burn farming became the main form of agricultural practice until the Liberation. As in the Chuxiong Yi area, some of the Yi people in the mountainous regions still continued through slash-and-burn method in the sixties to seventies of the 20th century. The process of slash-and-burn method mainly include four phases, slash-burn-sowing-harvest; that is, they select a piece of smooth hills, cut trees until branches become dried the Yi, ignite the weeds and plant corn seeds ,and wait for the harvest. Such farming practices are simple but the harvests are

unstable.

Slash-and-burn method has some impact on the ecological environment, but the Yi did not cut down the trees without restriction and burned mountains, but took the form of rotational farming. In the process of burning, the fire cannot be controlled, so they have to pay great attention to choosing the location, which keeps many areas as still good ecological environment before the ending of the slash-and-burn life. Long-standing of slash-and-burn cultivation includes two methods of crop rotation such as Suzuo village of Yuanjiang County in Yunnan Province; one is irrotational slash-and-burn cultivation and the other is short-term rotational slash-and-burn cultivation. The main characteristic of irrotational slash-and-burn cultivation is to the Yield only one crop a year; short-term fallow is seven or eight years, and long-term fallow is more than 10 years. While short-term rotational slash-and-burn cultivation refers to the implementation of a slash- and- burn cultivation, peasants can cultivate two years continuously; after that, the term of fallow is seven or eight years to more than ten years. In a place far away from the villages to take irrotational slash-and-burn cultivation, the fields take “short-term rotational slash-and-burn cultivation” near the village. So that the Yi people can take full advantage of the organic matter of burning ashes, and they could also make the land recuperate on a long fallow period, restore soil fertility and vegetation. However, in the new era, the central government strongly controls the way of slash-and-burn cultivation. Therefore, the government makes this form of agriculture disappear in the Yi people’s areas under the national policy support; so, they start dry farming and rice farming.

Now, the Yi people who live in the mountains and Alpine areas are mainly dominated by dry farming, where the land is barren. The Yi areas in Northeast of Yunnan, especially in Alpine areas, 30% of lands become fallow lands within

a year. During Ming and Qing dynasties, corn and potatoes were gradually introduced to areas inhabited by the Yi people. These crops are able to adapt to the natural environment quickly, and the Yields are high. Since then, in order to alleviate the pressures of population growth, the Yi people began to reduce the cultivation of traditional crops like buckwheat, and irrotational cultivation shifted to rotational cultivation. In 1952, according to the land statistics of Chuxiong Prefecture, fallow lands accounted for 11.66% of the dry lands.²⁾ Corresponding to the rotation cultivation, crop intercropping, interplanting and mixed cropping acreage have expanded. Buckwheat and oats, sweet buckwheat and wheat, barley, corn and wheat, rice and wheat, corn and peas, broad beans, rapeseed and maize are the most common ways of rotation in the Yi areas.

With the migration, the Yi people live in flatland areas, dominated by backhoes dry farming based on absorbing other people's experiences in agricultural production and the progressive development of rice agriculture. Take the case of Zhiju village in Zhonghe Town, which belongs to Yongren County of Chuxiong Prefecture in Yunnan Province, located in the middle reaches of the Jinsha River. In the long process of historical development, they experienced four phases: livestock- shifting -backhoe-plough, which has been transitioned from dry farming to rice farming.³⁾ 40%-60% of arable land is paddy filed, which is mainly based on rice cultivation.

From the perspective of crops, the period of slash-and-burn farming is relatively backward; buckwheat is very important food for the Yi people. As the method of production progressed, the Yi people have been influenced by

2) Record on Chuxiong Yi Nationality Autonomous Prefecture ,160th, p. Volume III,p.160.

3) Chen Lanxiang.Flower Festival and Game Pack--From Dry Farming to Rice Farming Ritual Theme .Journal of Chuxiong Normal College, 2001,16 (1): 66.

stereo-climate in the mountainous areas. Also, many types of crops can be planted. In intermediate altitude areas, the crops widely planted such as rice and wheat, corn, rapeseed, tobacco and other crops. In low altitude areas and part of the River Valley, double-harvest rice and tropical crops have been planted; in the areas above 2000 meters sea level high, the main crops are potatoes, buckwheat, oats, corn, mixed legume. Apart from food crops, cash crops are canola, peanut, Sesame, hemp, sunflower, pepper and vegetables such as Chinese cabbage, with garlic sprouts, fennel, cabbage, onion, cauliflower, pumpkin, cucumbers, and other vegetables are also grown.⁴⁾

b. Agricultural experiences

In the long term, the Yi people have summarized many experiences in agricultural production, which are of great significance in the guidance of agricultural production and promoting agricultural development, which is still widespread among the Yi people.⁵⁾

i) Farmyard manure

The Yi people have the tradition of utilizing farmyard manure. Farmyard manure is not only associated with increased soil fertility, but also crops grew well. However, the tradition does not cause soil compaction, but more and more fertile. They utilize the manures of pigs, chickens, and cattle as fertilizer. They also collect some leaves that are placed in pit latrines. Moreover, they collected some dead wood rot leaf burning into ashes and put them on top of the soil

4) Lai Yi, Yan Huoqi. Study on Biodiversity of Yi Nationality's Traditional Mountain Farming Wisdom. *China's Agricultural History*, 2009, (4): 38.

5) Wang Mingdong. Ecological Study on the Culture of Yi. *Journal of Yunnan Normal University*, 2002, 34 (5):.

to increase the fertility of the soil. Some people also collected residual products of animals such as cattle's bones that are burned and crushed down, and people used them to grow vegetables, which can make the vegetables grow much better. In addition, the Yi people generally live in half way up the mountain where the rain water can make dead twigs and withered leaves in the mountains. Also, sewage water of villages flows into the field with dead organics. Finally, the materials can increase the fertility of the soil.

The Yi also have a field called "Thunder Field (Leixiangtian)." When it rains, rain water can flow into the fields along the ditch. The Yi people can plant rice by digging a trench around the fields. Therefore, we can say that even though the Yi people utilize nature, they incur no damage to nature.⁶⁾

ii) Improving soil quality

Nowadays, the Yi farmers of the Yiliang County, in Northeast Yunnan, usually exploit black sand, smash it into the ground and let it slowly weather; on the one hand, it can improve the quality of the soils.⁷⁾

iii) Water irrigation

The Yi farmers in Eshan in Yunnan province can sense the water sources accurately by the conditions in the mountains, such as the color of construction, soil and rock formations, and so on. The Yi farmers of Luquan County in Yunnan, can find the best position to drill well by observing the mosquito activity. It is said that if one often sees a group of flying mosquitoes five or six feet off

6) Wang Mingdong. Ecological Study on the Culture of Yi. Journal of Yunnan Normal University, 2002, 34 (5):.

7) The Yi, A Brief History of Writing Groups: A Brief History of the Yi. Yunnan People's Publishing House, 1987.

the ground, then they can drill wells.⁸⁾

iv) Agricultural proverbs

Farming sayings are spread in the Yi people's areas. The Yi people summed up the experiences of the agricultural production in the long term and arranged them in agricultural production activities. A saying spread in the Luquan area goes, "Parents died early is a bad thing, but crops planted early is a good thing"; a proverb spread in the Jingdong area goes "early planted and old rice, late planted and yield bran"; in the Mouding area, a proverb goes like "summer solstice busy, ignition seedling, head to a look, errors has three line"; in the Jingdong and Chuxiong area, a proverb goes "When summer begins, it time for planting corns, in the middle of summer, it time for planting seedling; when the end of heat, it is time for planting common buckwheat; when Autumn is coming, it is time for planting wheat; when the cold dews is coming, it is time for planting beans".

v) Experiences of phenology

Phenology of the Yi people have been accumulated based on rich knowledge, as the Yi are good at determining the seasons by the growth of plants and animals. The Yi farmers in the Wuding County believe that water-melon shoots to wrap three seeds of buckwheat is the best time for sowing buckwheat. Farmers in the Luquan County have mastered a set of phenology experiences; it is said that when one kind of bird sings, it is good time for planting seedlings and transporting manures; when locust flying and ants coming out, it is time for

8) The Yi, A Brief History of Writing Groups: A Brief History of the Yi.Yunnan People's Publishing House, 1987, p. 196-197.

planting corns; trees in Panzhihua blossom, it is time for getting the seedlings; earthworms or Hornets buzzing, it is time for planting broad beans; when frogs call out once, it is time for planting seedlings, and when they call out twice, it is time for plant buckwheat, and when they call out three times, it is time for planting corns. Moreover, the Yi in the Jingdong County also have similar experiences.⁹⁾

At present, the Yi people have been innovating their eco-friendly ways of production, gradually combining traditional experiences and modern science & technology, such as the science of planting, breeding, improving low yield field, planting tea, tobacco, vegetables, improving processing techniques, establishing demonstration bases and parks, setting up cooperation organizations, developing modern agriculture.

1.3.2. The management and conservation of forest trees

The Yi's worship of trees and the subsequent belief that trees have a soul and destroy the Ying trees will be punished played a huge role in forest protection. The Yi people created a splendid culture in social practices in their daily life for a long time. Their management of forest trees is divided into different types of gods; forests, water, the implementation of measures such as closing the achievement of trees to recuperate, achieving a harmonious coexistence of man and the forest.

a. Worship and protection of Sacred Forestry, Sacred Trees

9) The Yi, A Brief History of Writing Groups: A Brief History of the Yi. Yunnan People's Publishing House, 1987, p. 196-197.

In the Yi villages, there are Sacred Forestry (Long Shulin) or the Sacred trees (Nagarjuna) which mostly compose of pine and chestnut trees. Grand Festival is held every year by worshippers. At this time, animals (e.g. dragon) and flourishing have close relationship with the Yi nationality's mythology. The spread of that the Yi people are the offspring of the dragon. Dragon stands for mother, and dragon stands for heroes. The worship Longshu is great cultural significance to the Yi.

Chengjiang County, the Yi sacrifice to the pine trees on the third day of the third lunar month. The Yi people in Chengjiang County believe that they have blood relationship with the pine trees, and that the pine trees are their ancestors. Local people of each village have a sacred mountain, known as the "site-minzhi", which stands tall pines and chestnut trees. On March 3rd of the Lunar Calendar every year, the village elders led the men over the age of 12 to worship pines. They take a branch of pine or chestnut trees and put them under the Sacred Mountain for blessings. The pines and chestnut trees near the Sacred Mountains cannot be damaged or cut down; if one disobeys the rule, he/she will be punished.

In the Mile County in Yunnan, there is a village called Gaodian Village, which had a sea of about 500 acres of sacred trees called "Longshulin"-there are Dragons in the Forestry, with an altar at the peak of the Sacred Mountain. Each year, the local Yi people celebrate the festival and worship the dragons. Dragon tree must be a chestnut tree in the Longlinshu, and there was a dragon tree which called "Longshu", which is so thick that it takes three people to put their arms around it. When the tree died naturally, the local Yi people chose another Longshu, which takes one person to put his arms/her arms around it. People called it as "Baichishu." Activities like grazing and fighting are not allowed in

this place.

Most Longshu in the Yi village are pine trees in Chuxiong. Take Tanhuashan' Yi people as an example; every year, the local villagers gather around a big pine tree for worship during late spring and early summer.

On the south bank of the Honghe River, the local Yi people worship oak trees as Longshu. On the day of Cattle in the first month of the Lunar New Year, the whole village held ceremonies to worship, with the villagers slaughtering pigs and cattle for sacrifice. The Yi new-born boys had to prepare a red rooster, a pot of sugar wine and glutinous rice and dish to the Longshu for sacrifice. The Yi people believe that the new-born boy is the gift from Longshu, and they celebrate the birth of the new-born boys by sacrificing. On that day, the head of each family will gather under Longshu and have meal together. Before meal, they have to celebrate in the ceremony of "Catching leopard" and pray to the Longshu for blessing to the domestic animals. After the meal, it is time for praying for Bearing Children, where the male villagers, especially young boys, have to kneel down under Longshu. An old man with dignity, called longtou, will spread pettitoes for babies and rice& cotton seeds for harvest. Finally, the men will take everything which they received from the ceremony home and put it on the altar. Normally, cutting or disbranching is not allowed, and women were forbidden from entering the Dragon trees.¹⁰⁾

In addition, in the Mile County of Honghe Prefecture, in Yunnan, in the 3rd lunar month, the local Yi people worship sacred trees. The local people worship the "Mizhi" (near a piece of wood) in the 7th lunar month. The Yi people in Yuxi worship the sacred trees in the 2nd lunar month, for good weather,

10) Yang Fuwang, Ma Li. Tree Worship and the Reproductive Culture of Yi. Journal of Yunnan Normal University, 2002, 34 (1): 109.

and for the safe and sound for the families and domestic animals.

b. Conservation forestry to protect the headwaters of rivers

The Yi-Chinese Education Scriptures say, “The trees on the mountain cannot be cut.” They believe that forests are the source of water, no trees, no water”. The Yi people believe that forests are the source of water, and trees are the precondition for water. The Yi people believe that forestry is the source of water, it is the life of gains, so they put importance on water management and protection of forests. The period of Emperor Guangxun, in Xiaotanzi village, Weishan County, the Yi people have set memorial arch for conservation forestry. The Tablet says, “banned cutting trees, banned livestock, or one will be fined 100 tael.” In Lazamie Village in Dyao County, the local Yi people call trees near water or rivers as Sacred Forestry for source of water; if not, there will be no water at all, or the local people will suffer from flood. This is the way people will be punished.¹¹⁾

c. Forest Conservation

For Forest Conservation, closing hillside is another form of the Yi's management of forests. This hillside has often sealing period which is a period for growth, breeding of animals and plants. Therefore, this allow to preserve biodiversity and plants. In Lazamie village of Dayao County, Chuxiong Prefecture, the local villagers set the period from rainy days to the beginning of summer as time for forest conservation. The Yi people believe that, during

11) Qi Yifeng. Yi Used Local Knowledge Experiences in Managing Forests—Xiang Zimidi village in Dayao County in Chuxiong Prefecture of Yunnan Province. *Forestry and Society*, 2003, (2): 14.

the time for budding, they cannot enter into the forests to cut trees and animals are also prevented from accessing damaged trees. The Yi people respect the law of growth of trees, and they believe that if forests are too thick, air circulation would not be smooth, which can cause the trees grow slowly; therefore, during closing times, people will choose to cut down dead wood to promote the growth of trees, or use them as supplementary fuel at home. Close-off is widespread in the Yi villages; this is a sign of respect for nature.

d. Fuel forest

The Yi people live in hillside; it is cold, and so the demand for fuel wood forest is large. To this end, different regions according to the situation on the ground take a different approach to the management of the Yi fuel forest. Lazamie village sets every October to the next February as time for firewood, because at this time firewood has less moisture content. In addition, they did not cut all trees; they cut down two trees and keep one tree; they cut old branches and keep new branches". And they prohibited cutting of pine trees because the pine trees are hard to grow again.¹²⁾ In addition, in some villages, the local people just cut down bushes or just chose to cut down dead wood or hybrid, since these trees grow faster, and the growth cycle is short.

1.3.3. Utilize fire

The Yi revere fire, which is reflected in every aspect of their lives, and they still retain the integrity of the fire ceremony.

12) Qi Yifeng. Yi Used Local Knowledge Experiences in Managing Forests—Xiang Zimidi village in Dayao County in Chuxiong Prefecture of Yunnan Province. *Forestry and Society*, 2003, (2): 15.

a. Fireplace

Almost every household has a fireplace; for them, fireplace is a very sacred place. People can warm themselves by the fireplace; you can boil water and do cooking. The author visited the Yi areas of Ninglang County; each family welcomes the guests by making tea and roasting potatoes by the fireplace. There is an iron tripod on the fireplace or pot rock according to the legend after the fire-fiend died. His corps had been divided into three parts, and make tree graves to bury marked with three stones, which are Pot Stone-Guozhuangshi. So the fireplace represents the fear of God. the Yi people discuss things next to the fireplace. Take the Yi people in Luquan County as an example; the villagers discuss important matter such as cultivating the land or planting matter next to the fireplace, convened by the village elders in the family of parents; they lit the fireplace with wine and grain before they started to negotiate. They believe it will bring God's blessings.¹³⁾

In addition, prior to the Torch Festival, every Yi family begins to have the ceremony of sacrifice by the fireplace and chants to eulogize the merits of the fire God: "Spring opens up wasteland, He burnt wasteland into fertile land; in summer, the buds have been eaten by bad worms. He can get rid of bad worms. Fire accompanies with people at night. The fire god makes families gather together by fireplace; Fire is a clothing fire, flames warm, fire is the soul of man." Then, they trace back the history of fire and express good wishes: "We are here to worship fire; we hope the fire never goes out; the fire is like sun and moon; if fire god can come to my house, everything will go well with

13) Chen Yongxiang. Fire Worship of the Yi Nationality. Journal of Chuxiong Normal University, 2002, 17 (2), 58.

us. This fully shows the fire in the production plays an important role in the life of the people, and fire is fully integrated into people's daily life.¹⁴⁾ This



<Figure 1-1> Yi's Torch

b. Fire and life etiquettes

Fire has close relationships with the Yi people through the whole life, from births to death. The Yi people in Yunnan boy's Rite of Coming of Age (wearing pants ceremony) is held by the fireplace. First, his mother will heat a stone in the fireplace, then sprinkle with a scoop of cold water. Hot stone sent out steam, the new pants will go around the hot steam indicating that the boy reaches manhood. Finally, she get rid of the bad luck, get blessings from the fireplace god.¹⁵⁾ In Ninglang, during the marriage ceremony, the bride must have a farewell ceremony to the fireplace. From the discussion of marriage, the bride

14) Yang Fuquan, Zheng.The Fireplace: the Confusion between the Spiritual World JJ.Today People, 2002, (8): 35.

15) Chen Yongxiang.Fire Worship of the Yi Nationality.Journal of Chuxiong Normal University, 2002,17 (2),:58.

formally became a member of the groom's family. The bride is held at the fireplace. Fire serves as a medium and "witness".¹⁶⁾ During the funeral, the most important thing was cremated, and they think it can burn Fire Devil to death, which still remained in the body of the deceased, and the deceased can reach the heaven soon. At the funeral, the deceased was to be cremated by fire, and the families and relatives paid homage to the dead deceased.

c. Fire-related festivals and rituals

i) The Torch Festival

Torch Festival is for worshiping the fire, which is held in every June. On this day, the Yi people slaughter animals to their ancestors, light a torch at night, and fume smoking to the corner of the house and pigsties. They also go to the fields to lighten the fields and perform sacrificial activities. They believe that, by doing so, they can eradicate diseases and insect pests, and they can show worship for good health and harvest in the coming year. At last, they sing and dance around the torch to celebrate the festival.

ii) Axi worship fire

Axi is one branch of the Yi nationality; each year, they hold sacrificial fire ceremony in early February, which is famously known as "Mudengsulu". According to the legend, the ancestors went out hunting and suffered from heaven rain, and when the rain put out the fire, they suffered from cold and darkness. In order to get rid of troubles, one of ancestors called Mudeng spent 3 days and 3 nights to utilize a stick on a turd to twirl round and round to

16) Chen Yongxiang. Fire Worship of the Yi Nationality. Journal of Chuxiong Normal University, 2002, 17 (2), 58.

make fire, and finally, in early February, people got warm again. Therefore, the Axi people held sacrificial fire ceremony to commemorate the ancient Mudeng who invented the “drilling wood to make fire”. On this day, chaired by Bimo sacrificial fire, people dress themselves as their ancestors, and with yellow, white, black, red and earth colors in drawing out into the five animals, natural phenomena, such as patterns, bark, leaves, and grass cover your head or groin After everything is ready, Bimo will worship under Longshu and imitate drilling wood to make fire. After that, people carrying fire god walk around and bring new fire to every household.

d) The Yi medicines

The Yi medicines have a long history, originated from the primitive society period. The early ancestors of the Yi people lived in areas with dense forests, which were rich in biological resources, and therefore, made them develop intuitive awareness on the flora and fauna. In the case of backward productive way, the Yi people constantly battled with nature and gradually accumulated the experiences of using plants.

The Yi people have fully developed and utilized the medicinal value of plants. At present, there are 871 written prescriptions: 47 kinds of flower medicines, 128 kinds of fruit medicines, 48 kinds of bark medicines, 23 kinds of fungi medicines, 37 kinds of plant-parasitic medicines, 27 kinds of resin medicines, and 44 kind of edible vegetable.¹⁷⁾ For example, they utilize *swertia oblique* stem which belongs to the *gentianaceae* which is used to test spastic abdominal

17) Chi-ling, Ruo Da. *Traditional Medicines of Chinese Ethnic Minorities*. Inner Mongolia Publishing House of Science and Technology (2003).

pain for children. The Yi people utilize *Marsdenia tenacissima* to treat lung diseases as well as cancer; They use *Erigeron* flowers for treating traumatic injury, rheumatic pain, pain in the stomach and hemiplegia. They use *Psammosilene tunicoides* which the root of Carnation plants to treat analgesic, anti-inflammatory and antibacterial. They use radish plants belt for treating rheumatoid arthritis and traumatic injury.

In modern times, with the advent of the Yi medicine, painstaking research and medical workers, the Yi medicines have made great achievements. The most famous is the Yi doctor named Qu Huanzhang who has made Yunnan Baiyao according to the Yi people's experiences in healing traumas and developed traditional therapy, which is renowned at home and abroad. In addition, the development of "Kunming Shanhaitang in the early 1980, in recent years the development and production of "Yunnan Breviscapini Injection", "Sanchinoside Injection" and "The Yi-Xin-Kang Capsule" are benefiting from extensive excavation of The Yi medicine culture. Yunnan Panlongyunhai produce famous medicine called "Shen Yan Ling Capsule" by the Yi medicines, and "Paiduyangyan Capsule". Chuxiong Hospital of Traditional Chinese Medicine produced new medicine called "Yangweijiedu Capsule", "Lidanjiedu Capsule" and "Cervical Capsule". Yunnan Baiyao Company produced a capsule called "Shenyanling Capsule". Yunnan Institute of Materia Medica produced a medicine called "Zhongtongxiao Spraying Agent" and so on. All of them are achievements of the Yi traditional medicine conducted by modern technology.¹⁸⁾

1.3.4. Costume

18) Jian Gu, Zhen Liu. Development Status of Study on Plant Medicine of the Yi People of China. Chinese Journal of folk medicine, (2003): 249.

a. Dress black

The Yi costumes advocate black, which has a close relationship with the Yi's natural environment. The Yi people live in the mountains or the mid-levels of around 2,000 meters, and they live above 3,000 meters in North part of Zhaotong Prefecture, Zhenxiong County. In the Yi areas, there are a lot of mountains, of which only less than 5% is basin land, which is sporadically dotted the mountain;¹⁹⁾ The Yi people's residence is located in the Ailao mountains, Wumeng Shan and Liangshan areas in mountains and jungles, where rivers run. The Yi people believe that "green" is "black", as black dress embodies the cognition of the Yi people on the surrounding natural environment.



<Figure 1-2> Yi's Traditional Costume

b. Tiger pattern

The Yi people considered themselves to be descendants of the Tiger clan, Wu Ding, whom the Yi claimed to as "luoluo" (Tiger), men claiming to be 'luoluopo"(Male Tiger), a woman claiming to be "Luoluo Mo""(female tiger).

19) Zhang Jian, Xiao Guorong. Eco-aesthetic View of Yi Dress. Arts Observation 2011, (10): 114.

Proverbs in Wuding and Dayao Counties go, "If one has been dead like tiger; if one tiger died like flower died."²⁰⁾ So, the Yi dress is decorated with Tiger pattern. As in the suburbs of Kunming, the Yi people prepare the tiger-head shoes for newborn babies, head caps and tiger head underneath the garment covering the chest and abdomen. In Wuding, the Yi people usually wear tiger-head shoes, tiger-head Hat. In Mouding, Nanhua, also have the old Yi wearing tiger-head shoes, children wearing tiger custom apron. In addition, the Yi women lap baby wrapped on her back with a tiger pattern.

The Yi nationality with a tiger pattern to decorate garments, one for the Yi people believe that they are the sons of the Tiger, if they wears tigers, express their reverence for ancestors and memories. Second, the Tigers are fierce animals. The Yi people and tigers belong to one family, so they can have the blessing of the Tiger. The Yi people decorate themselves in tiger patterns and also show their harmonious relationships with the Yi people. They hope they can get courage from the animals.

1.3.5. Food and animal protection

In the Yi people's conception, many kinds of animals are totems, which have close ties with them and can protect them. It is not allowed to eat these animals. In some part of Yongren and Dayao, the Yi people are still not allowed to eat cattle, frogs, snakes, dogs, horses and so on.²¹⁾

In addition, the Yi people prohibit killing and eating dogs. According to the

20) Zhang Jian, Xiao Guorong. Eco-aesthetic View of Yi Dress. *Arts Observation* 2011, (10): 114.

21) Yang Puwang, Wu Qianxi. Study on Ecological Protection of Yi People's Primitive Religion Significance. *Journal of Chuxiong*, 2006, 21 (5): 31.

myth of grain origin, the seed clings to dog's tail from being washed away brought into the room, and the dogs of the Yi has special significance. Above all people should respect the dog and express thanks to the dog. After that, the person can eat to taste a fresh delicacy rice festival food after harvest. In Chuxiong, the Yi people have to feed a dog on the new year's Eve, because people believe that the dog brings the grace of grain. The Yi households determine whether or not to choose an auspicious day in the Spring Festival, "sheep" and "cow", the first month of the first year of the Tiger "driving cattle" will plow on a cattle drive, wine, meat and rice to feed cattle, for cattle a year of hard work.²²⁾

At the same time, these animals are closely linked to the Yi, so hunting is strictly prohibited.



<Figure 1-3> Yi's Costume

22) Li Yunfeng , Li Zixian, Yang Fuwang.[Mei Ge] Cultural Interpretation.Yunnan University Press, 2007 Edition,,p.7.



<Figure 1-4> Eagle pattern

1.3.6. Village-site selection

The Wuliangshan Mountain, Wumengshan Mountain, and Liangshan Mountain of the Yi belong to the mountainous areas, mid-levels, flat strip of villages situated in the hillside, in a sunny side. There is a proverb that goes, "the Yi Shepherd in the highland, lived in the middle of hills, and cultivated the land at the lowland. ", which explains how the Yi people selected good village sites. Half of the hillside is warm in winter and cool in summer, and the climate is moderate. People up the mountains can collect and hunt, and downhill can be cultivated as farmland. This is an option for the Yi people who fully understand the natural environment. Mountain forest is to be close to nature, conducive to communicating with natural spirits, in order to achieve harmony

with nature.

1.4. Conclusion

In case productivity and technology are not that good, the Yi people become more dependent on nature, although some of the traditional ways of life have a strong religious overtone. However, their respect for nature, goodness/kindness to nature, formed on the environment-friendly and productive way, continue to this day.

But this environment-friendly and productive way is based primarily on religion, bound by religious and traditional practices, rather than a scientific initiative in environmental awareness. According to a national forest survey on the awareness of the legal system in Shuangbai County in the Yi areas, only 24.1% know the state forestry legal system, with the majority of respondents knowledge level being not high/low, accounting for 75.9%.²³⁾ If we achieve long-term sustainable development in environment-friendly and productive way, we must have a certain system based on original and clear specifications.

Moreover, currently, both agriculture and forestry industry are highly extensive modes of production, which cannot keep up with the local economic development. In the long run, if the Yi people want to achieve sustainable development, ecological friendly mode of production and ecological friendly lifestyle must be used to develop the local economy. If the local economy gets improved, the local people will put more energy and money into protecting the natural environment. Therefore, in the Yi area, the Yi people have to change

23) Yang Aihua Wu.Weifan. National Forestry Legal System on Shuangbai County in Areas Inhabited by the Yi.Forest Inventory and Planning, 2010,35 (1): 74.

the production relationship from extensive mode to intensive mode in order to promote ecological and economic development. They have to achieve comprehensive exploitation and continue to maintain the tradition of using farmyard manure, for cultivating the fertility of the land, in order to achieve the combining of exploitation and conservation. According to the different circumstances of different regions, the Yi people can plant some cash crops like forest and fruit, not only to achieve ecological conservation but also to increase people's incomes. On the basis of traditional way of protecting forest, the local people should afforest in an organized and systematic way and carry out the motto, "who invests, who manages and who benefits", and to establish certain management systems and scientific way of afforestation.

The traditional life and productive way of inheritance allow to to promote the sustainable development of eco-friendly traditional life and productive way of the Yi; a combination of ecological protection of the traditional and the modern civilization and a combination of proper protection and rational development.

2. The Bai Nationality's Traditional Environment-friendly lifestyle

The Bai people is an ethnic group living in the southwest borderland of China. According to China's national census in 2010, there are 1,933,510 individuals of the Bai ethnic group living in China, 80% of whom reside in the Yunnan province, mainly in the areas around the Erhai lake of Dali Bai Autonomous Prefecture, and in Heqing, Eryuan, Jianchuan and Lanping Bai and Pumi Autonomous County of Nujiang Prefecture. There are also a few Bai people living in areas like Lijiang, Baoshan, Kunming City, Nanhua County and Yuanjiang Hani and the Yi Autonomous County and additionally in areas like Bijie of Guizhou province, Liangshan of Sichuan province and Sangzhi of Hunan province. The Bai people call themselves "Baipzix", "Baipnid" or "Baip'ho".²⁴⁾

The Bai people can be divided into three major branches called "Minjia", "Lemo" and "Lama" (also called the "Lama people"). Those who are now living in Dali are mostly of the Minjia branch, with the largest population, whose level of social development is no different from that of the Han people. The Bai people living around the Nujiang and Lancangjiang Rivers are called Lama people, concentrated in Lanping Bai and Pumi Autonomous County. The Lemo people are a branch of the Bai people living around the Nujiang River in Nujiang Prefecture; they have the lowest level of social development and are concentrated in Lushui County of Nujiang Prefecture. Because of the differences in languages and traditions, the level of ethnic identity between the Minjia branch and the other branches is relatively low.

In the settlements of the Bai people, there is a favorable natural condition

24) Lee Zuanxu, Yang Yingxin : Bai culture observatory , Yunnan nationalities publishing house, 1999(1).

with a mild climate and fertile lands. Over 90% of the Bai people engage in agriculture. During the period of a relative backwardness in the agricultural production, the high dependence of the agriculture on the natural condition made the Bai people pin the hopes on some mysterious forces, forming the "Worship of Benzhu". The Worship of Benzhu implies a kind of awe and anticipation of nature and has penetrated deeply into the various aspects of life and production of the Bai living life.

2.1. The Concept of Harmony in the Worship of Benzhu of the Bai People

The worship of Benzhu is the unique folk religion popular in the areas of the Bai people, originated from nature worship during the prehistoric times. The word "Benzhu" means the "lords/gods of the local land". In Bai language, the gods are called "Wuseng" or "Wusengni", which signifies "our lords", who are the "gods of villages" of the Bai communities. The Bai people, as an ethnic group of peasants, are centered around Erhai lake. During the long period of agricultural production, due to the lack of scientific knowledge, the ancient Bai people could not understand the natural phenomena that maintain their lives and their agricultural production, and considered them as gifts from some sort of mysterious forces. In the religious form, this kind of mysterious forces are attached to the Benzhu gods. After a long evolution, the worship has not only combined the concept of primitive religions like nature worship, the totem worship and the ancestor worship, but has also assimilated the elements of Buddhism, Taoism and Confucianism, forming its own independent system of faith. Despite its superstitious elements, the worship of the Benzhu gods contains a profound concept of harmony.

The concept of harmony can be expressed in two forms. The first one is the reverence and admiration for nature. The Bai people believe the nature is the origin of all things and human beings are the products of nature. Nature and human beings can be seen as an organic whole. That is the reason why the Bai people worship some natural phenomena or natural objects as Benzhu gods, for example, the heaven, the earth, the sun, the moon, the mountains, the waters, the rocks and the trees. They believe that only by being harmonious with nature and organizing their lives and productive activities in accordance with the laws of nature, can human beings survive and reproduce. The second form is that the Bai people believe that all things in nature have their own spirit. So they worship the animals, plants and non-living objects as Benzhu gods. As time goes on, a connection comes into being between the Bai people and these natural objects, producing the Bai idea of proactively protecting these things in their subconscious.

The concept of harmony of the Bai people that teaches to follow nature, to protect nature and to treat all things kindly has penetrated into various aspects of the daily life and production of the people, including the customs of clothing, meals, houses, agricultural activities, the protection of the forest ecosystems and the protection of the water resources.

2.2. The Traditional Eco-Friendly Way of Life and Production of the Bai People

2.2.1. The Tie-dye Process

The tie-dye process is a unique dyeing technique of the Bai people. The Bai people use the tie-dyed cloth to make clothes, curtains, tablecloths and other

household items which are very popular and widely welcomed among the people. The tie-dye is a nature-based process that makes use of the natural resources for the life purpose, achieving a harmonious relationship between nature and humans. This harmonious relationship is mainly expressed in the aspects of the raw materials, the production techniques and the patterns of the tie-dye process.

a. The Raw Materials of the Tie-dye

In Dali, “the hometown of Bai tie-dye process”, the tie-dye process uses mainly cotton calico or cotton blended fabrics as its raw materials. These two kinds of fabrics are of natural origins and are not irritated. They are highly breathable, sweat-absorbent, comfortable and soft.

The main raw materials for the dyeing process are originated from the indigo solutions of natural plants such as isatis roots, indigo plants, and mugworts, among which the isatis roots are mostly used. The isatis root (*radix isatidis*) is a kind of medicine, whose efficacies are detoxification and anti-inflammatory. The isatis roots which the Bai people used for dyeing are wild previously. But now, the Bai people start the artificial cultivation of the plant with the increase in demands. Currently, there are about 6 to 7 hectares of plantations around Dali city. The fabric dyed by isatis roots has a simple and elegant color, which is durable and does not irritate the skin. Once discarded, the clothes made of this kind of eco-friendly tie-dyed fabric. The clothes will decompose after two years in the ground automatically, compliant with the characteristics of the treatment ecology, which will neither make heavier the burden on the environment nor have negative effects on the environment.²⁵).

b. The Production Techniques of the Tie-dye

The Bai tie-dyes are mainly handmade, whose procedures are designing, drafting, jointing bars, dipping, drying, stitching, rinsing and the entire examination, among which jointing bars and dipping are the key parts. First, it is necessary to print patterns on the chosen tie-dyed fabric. Different people in different regions prefer different patterns, which vary from geometric figures to animals and plants. Once the patterns are chosen, they will be sewn tightly onto the fabric like pimples by being winkled, folded, rolled, extruded, rolled and pulled. And then, the fabric will be put into the water of dye made from the isatis roots, dipped repeatedly. Then, the borders of the patterns will be stained gradually by the dye. The more frequently the fabric is dipped, the deeper the color will be forming at last a multilayer halo pattern with the pattern as the center. While the parts of the line bundle seam patterns are not able to be disseminated, their color will be still white. The final step is to take out the fabric, dry it, remove the stitches and press the fabric. And after several times of rinsing and entire examinations, a piece of tie-dyed cloth will be completed. Because the tie-dye is sewn all by hand, the tightness and the density vary among different kinds of tie-dye cloth, creating different shades of colors, which offers somewhat distinctive flavor.²⁶⁾

25) Zhou Yuhua ,Shen Dekun : Dali bai tie-dye ecosystem clothing enlightenment to Chinese development ecological clothing , The Chinese market, 2010, (28) : 143.

26) Wang Hongwei : tie-dye ,Bai folk living fossil , tourism, 2007, (7) : 80-83. Zhao Chen, Jiang Qun : Clear water gives lotus—the concept of Dali bai nationality traditional tie-dye art "in a natural for this" , Art theory, 2010, (9) : 198. Zhou Yuhua ,Shen Dekun : Dali bai tie-dye ecosystem clothing enlightenment to Chinese development ecological clothing , The Chinese market, 2010, (28) : 143-144.

c. The Naturalness of the Patterns

The Bai people love nature and life, so their patterns of the tie-dye cloth are mostly from their own daily life and the surrounding natural environment. Among the patterns, we can find common geometric figures, the images of the Cangshan Mountain and the Erhai Lake, the white clouds, the images of the Three Pagodas of Dali, images of flowers, birds, fishes and insects, and the picturesqueness of the daily life.



<Figure 2-1> Bai's dye products

2.2.2. Houses and Buildings

The most typical forms of Bai dwellings in Yunnan are the “three houses with one screen wall”, the “four houses with five patios” and the “two houses with one penthouse”. The “house” in these terms are the three-bay two-storey houses, with the main house in the upper storey while in the lower one the main room and two bedrooms on two sides. The main room has the six-lattice door and

each of the bedrooms has its own single door. The “three houses with one screen wall” is a construction unit formed by three layers of two-storey houses. A courtyard surrounded by three houses and a screen wall with flowers and trees planted in it. In the middle stands the main room, higher than the other rooms of the two sides. Between the main room and the side houses, there is an intersection corner patio, combining three courtyards with a big one and two small ones; so, it is also called the “triple yards”. And the “four houses with five patios” has no screen wall but is surrounded by the four houses of four corners, the same as the Beijing courtyards. What is unique is that the four corners between the houses each form the “corner patios”, plus the middle courtyard, forming the “five patios”. The Bai people usually locate their kitchens in the penthouses near the corner patios and the main door in the northeast corner patio. The “two houses with one penthouse” is also called “two rooms on two sides”, which consists of two houses with integral sides. Generally, the main house faces the east and the penthouses the south; these houses with the screen wall and the enclosures form a courtyard. There is a corner patio at the intersection. For the two sides without house, the one opposite to the main room is for the screen wall and the other faced to the penthouse is for the enclosures (or the simple houses for livestock stables and kitchens). All the elements above form a triple yard or a quadruple yard. When building their dwellings, the Dali Bai people use their cleverness and intelligence, with the full account of natural factors, making their houses integrate from inside to outside with nature.

The integration can firstly be seen from the outside part of the houses. The grey tiles and white walls with many exterior decorative patterns make the house like a vivid landscape painting by adding radiance and beauty to the surrounding landscapes.

Second, from the point of view of housing layout and structure, it also gives a full consideration to the natural factors to set the house.

i) Take Dali city for example. Besides the restriction of the urban planning of the city streets, the civilian houses are mostly facing the east, with the Dali located in the north to south of the Hengduan mountains of broom mountain form the characteristics of the valley bazi. In addition, Dali, cranes, and Er source where the Bai lived is located in the foothills and the gentle slope zone between the southwest and west wind blowing all year round. Therefore, the area is a good way to avoid the wind blows to the house.

ii) Under the main room of the house of the Bai people is located a corridor, which, on one hand, can play a role of offering shades and preventing sunlight; on the other hand, the wind of the area of Dali is strong and the amount of rain is large. The strong wind can easily blow the raindrops into the house, specifically the wind that comes from the east bank of the Erhai lake, which can blow the rain (called as the "lake crossing rain") much deeper into the house. The corridor then can prevent the rain from coming in and keep the indoor place dry. In ordinary days, people can also work or have feasts in the corridor.

iii) The screen wall that plays a very important role in the civilian house of the Bai people is lower than the main room, which not only blocks the line of sight of the main house, but also improves the brightness of the inner house, as the screen wall is generally painted white which will bring the sunlight into the house as the sun rises every day.

iv) The Bai houses all use tiles to cover the rooftops, and in order to avoid the strong winds blowing off the tiles, the Bai people use a kind of thin slate called “fire sealing stone” to build the “fire sealing eaves”, to seal the house’s backward eaves and the overhanging part of the gable.

v) Earthquake has happened many times in the history of Erhai, so they adopt beam and column structure in building houses. The construction members are linked by tenon and mortise to make it more flexible and to enhance the shock effect. To be specific, the followings are the main building techniques. First, although their houses often have two floors, the height of their houses is low on the whole to decrease the amplitude of shaking so that the house would not collapse easily. Second, there are five pillars to enhance the stress on the joint of beams and pillars and to aggregate columns on the framework; this means two memorial archways share the same pillar to reinforce the frameworks to strengthen anti-seismic ability. Third, the connection between mortise and tenon is very rigorous. Fourth, string fang is a kind of seismic components using the whole root straight wood brace whose section is about 5 x 12 cm. It passes through the mortise of the wood and gets a row of columns in series. With different locations, there are different appellations and uses, such as “passing through the fang”, “passing through three fangs”, “the three hoops” and “foot fang” and so on. As a result, there are three hoops on the roof and foot fang on the floor of a building, passing through three fangs and fang between beams and pillars. The entire roof truss hoops like a birdcage which enhances its seismic performance.²⁷⁾.

27) Gao Dengrong : The analysis of the residential culture of bai , Yunnan national university journal (Philosophy and social sciences) , 1993,54-55. Xue Zujun : The influence of natural

Third, on the building materials of the Bai residences, the Bai people use stones including marble, granite and pebbles to build their houses. There is a folk proverb which says, "Dali has three treasures, the one is the cobblestone walls which will never fall", which fully shows that the Bai people are good at using natural materials for their daily life and production.

2.2.3. Agricultural Traditions and Customs of Feeding Back and Protecting Nature

The Bai people, as an ethnic group of peasants centered in the area around the Erhai Lake, practice the worship of the land as a nature worship. In present days, the Benzhu gods that most of the Bai people believe originate from the prehistoric worship of the "god of harvests", namely the "god of land". Lately, this worship has gradually developed into a syncretic faith of the patron god. The Bai people appreciate all that the land bestows upon them, which leads to a series of traditions such as sacrifices of the land and feedback to nature.

a. Spring Sacrifice

After the end of the transplant of rice seedlings which is called "Close the door of seedlings", the elders of the Bai people will choose a good day to offer sacrifice to the god of land, namely the "Spring Sacrifice". The spring sacrifice is one of the agricultural activities of the Bai people. During the celebration of the spring sacrifice, the elderly people will talk about the farming work, telling the stories of the ancient and present time, play the rattle sticks and sing the

ecological environment on the style of Bai dwelling houses.. Journal of Dali University, 2004,3 (2) : 6-7.

songs of Benzhu gods. The young people of the village wake up early and prepare instruments and food for the sacrifice. When the preparation is finished, the elders burn the incense and place the offerings, begin the sacrifice, praying for good weather and abundant harvests. After the “Father Field and Mother Earth”, “God King of Five Crops”, “Great King of Six Domestic Animals” have enjoyed the offerings, the seniors will sit on the ground and the men and women sit in their sides, then the feast starts.²⁸⁾.

b. The Epistemic Festival

In many Bai villages, there are temples built for the Mother Earth, where every year, after the rice is mature, will take place the Epistemic Festival, which signifies “to taste the newly harvested rice”. Before the sundown, people take the cooked rice, meat, eggs and wine to the fields, to offer these to the “Father Field and Mother Earth”, giving the harvests back to the earth.

c. Sacrifice to the Land

Every year, the Bai people living in the area of Heqing will make sacrifice to the land. On the eighth day of the twelfth lunar month, the peasants will for the last time dig up the nursery bed for growing seedlings. Before the digging, they sing the “Blessing Song”, sprinkling plant ash and artemisia annual grass over the seedling nursery, then cover evenly 100 stems of dry seedlings upon it. The plant ash stands for making a bed for the field, while the artemisia annual grass stands for the quilt covering the land, and the dry seedlings are the “food” given to the land. After the song, people will enter the field and dig it up;

28) Yang Yufan: Folk activities of the Bai nationality Spring Sacrifice, Journal of yunnan, 2011.

then they will flat the seedlings, irrigate the “protecting water” and insert four white chestnut branches on the four corners of the field, called “green shed”, which stands for the houses of the seedlings. After all the processes, the field has a house, guilt, food, so it can enjoy the festival and the new year. From the ninth to the sixteenth day of the twelfth lunar month, the peasants will do the weeding, top dressing and irrigation for their fields, prune the fruit trees and make scaffoldings to prevent the frost. These processes stand for “dressing and grooming” the trees, in order to sweep away the old and to start afresh for the new year. On the sixteenth day of the twelfth lunar month, when every family’s farming work comes to the end, all the villagers will hold torches, under the leadership of the “Chief Singer”, singing and dancing, and inspect all their fields. From the twenty-fourth day to the twenty-seventh day, all the families will perform the cleaning work and they will collect the garbage into piles and burn them. At night, the ashes from the garbage piles will be spread into the fields, symbolizing the offering of the “yearly food” to the land. Only after this step, the activity of the “sacrifice to the land” can reach its end.²⁹⁾

d. Festival of Mother Earth

The Dali Bai people worship and sacrifice to the earth every year, forming a “Festival of Mother Earth”, whose most typical form can be found in Heqing. On every 15th day of the third lunar month, the Heqing Bai people celebrate the “Festival of Mother Earth” in the Dongshan Temple. The whole celebration of the festival can be divided into five parts: the Feats Praise, the Pray for Good Harvests, the Sacrifice to the Plough, the Tournament of Treasures, and the

29) Zhang Hongyu : Folk customs and environmental protection , School Journal of Wuzhou Normal College in Guangxi, 2001,17 (1) :20.

Sacrifice to the Land.³⁰). Besides the Festival of Mother Earth, in most of Dali Bai people's villages, elder women also gather for the "Lotus Gathering" (or "Gathering of Old Mothers", "Gathering of Mothers", "Gathering of Religious Vegetarian Old Ladies", etc.). On the eighth day of the tenth lunar month or the fifteenth day of the seventh lunar month, the elder women will gather in the temples of Benzhu gods or the temples for Bodhisattva Avalokitesvara (Kuan Yin) to hold the sacrifice to Father Field and Mother Earth. They will chant together the Canon of Mother Earth, to show their gratitude towards Mother Earth for the harvests and pray to Mother Earth to bless the crops grow better.³¹).

2.2.4. The Protection of the Bai People to the Forest

a. The View of Forest in Bai Tradition

i) The View of Forest in Nature Worship: The worship of woods and trees is a kind of nature worship, which has objectively formed a view of forest. For example, the Lemo people living in Nujiang worship heaven and rocks. The trees and grass are prohibited to be destroyed in the worship places. Additionally, the Lemo people have reverence and admiration for the mountain forests even to the trees near the villages.

ii) The Environmental Behaviors in Life Rituals: The Bai people believe that the trees have their spirit, connecting the life of trees to that of the people. The Bai people in the mountainous areas, from their birth to death, will plant trees

30) Zhang Hongyu : Folk customs and environmental protection , School Journal of Wuzhou Normal College in Guangxi, 2001,17 (1) :21.

31) Guan Yanbo : Various gods idea reflected in farming ritual in Yunnan. Ethnic Studies in Guizhou, 2004, (4) : 101.

on every moment/occasion of their important life event, calling them as the “event” trees. The Bai people can be called a people of lifetime afforestation.³²⁾ On the day of birth, naming, entering school, graduation, beginning a career, marriage and death of a man, people plant trees to express their hopes and memories.

iii) Traditional Festivals: The Bai people have also traditional festivals concerning trees planting and forestation activities, such as the Respect-for-the-aged Day, the Spring Planting Day, the Embroidery Day, the Wicker Planting Day, the Colors Decoration Day. On the first day of every festival, people will go into the mountains to collect young plants and ask for saplings of various flowers and trees, in order to plant them. When the seventh month of the lunar calendar comes, people will successively close the mountains, prohibiting cutting trees and grazing.³³⁾

iv) Taking the Godmother

When a baby is born in a Heqing Bai family, the parents will take a tree as the “godmother” of their child, to pray the child to grow up healthy and be free from diseases and disasters. After taking the godmother, the tree will be considered as a member of the family. The family members need to loosen the soil, fertilize and kill pests for the tree. On the birthday of the child, the whole family will plant a tree of the same specie beside the “godmother” tree as the “child tree”. These trees will be strictly protected and prohibited to be

32) Zhang Hongyu : Folk customs and environmental protection , School Journal of Wuzhou Normal College in Guangxi,2001,17 (1) : 21.

33) Dali daily",1983.From : Lee Zuanxu, Yang Yingxin : Bai culture observatory , Yunnan nationalities publishing house, 1999(1) :636

cut or harmed.³⁴).

v)The Planting of Happiness

On the wedding day, people must plant trees and flowers all around the house, that is called “planting happiness”. When it is finished, the wedding ceremony can begin. After the ceremony, in the sound of the singing songs, the newlywed couple each takes his/her friends to go to the barren mountains and slopes near the village, planting some fruit trees, called planting “children trees”. Only after the “children trees” begin to grow, will the new couple live together.³⁵).

b. Relevant Rules

Since the ancient times, the Bai people have attached great importance to the protection of the forest; for instance, in Jianchuan County, the forests are divided into two kinds of forests: the public mountainous forests and forests belonging to different families, both of which are watched by specialized forest rangers that are given a pint of wheat and a pint of rice as the salary.³⁶).

In present days, there still exist ancient stone tablets in the Bai settlements as the witnesses of the ecological treatment and awareness of the Bai people. In the Benzhu temple of Diaocao village in southern suburbs of Dali city, there

34) Zhang Hongyu : Folk customs and environmental protection , School Journal of Wuzhou Normal College in Guangxi,2001,17 (1) : 23.

35) Zhang Hongyu : Folk customs and environmental protection , School Journal of Wuzhou Normal College in Guangxi,2001,17 (1) :23.

36) Lee Zuanxu, Yang Yingxin : Bai culture observatory , Yunnan nationalities publishing house,1999(1):636.

is a stone tablet built during the era of Emperor Guangxu of the Qing dynasty (1875~1908). The inscription carved on the tablet at first elaborates the relationship among water source, forestry, agriculture and animal husbandry. Second, it sets some forest protection measures; for example, when cutting trees, the parent tree must be left. If the forest ranger finds that someone has illegally logged a pine lumber, one must kill a sheep to offer a feast to the whole village. If one spoils the young forest when stocking the livestock, one must be punished.³⁷⁾ In the Benzhu temple of Dadian Village, Liuhe Township, Heqing County, there also stands a ranger tablet of the era of Emperor Daoguang of the Qing dynasty (1821~1850). On this tablet, the inscription tells the principle of enclosing the hill for natural afforestation and living on the mountain, and it sets the specific measures for rotation grazing in four seasons, as well as punishments for the violators.³⁸⁾ Another example is a stone tablet of Lianqu Village, Yousuo Township, Eryuan County, whose inscription describes the regulations and measures set by the squires and villagers about planting and protecting pines. The mountain located behind the village is called Red Mountain, which was previously “Full of trees with shades, in the distance, densely wooded and possessed of a rugged beauty”; but in the early 18th century, it was “with a bare and stripped appearance after the trees being cut by axes”. “So the elders and young people gathered and held a meeting together. At last they decided that in the sixth lunar month of the eighth year of Emperor Guangxu (1882), every household must offer a worker to plant the pine seeds whose amount is over five pecks. For every household, the workload is about

37) Lee Zuanxu, Yang Yingxin : Bai culture observatory , Yunnan nationalities publishing house, 1999(1):636.

38) Lee Zuanxu, Yang Yingxin : Bai culture observatory , Yunnan nationalities publishing house, 1999(1):636.

twenty.” And, in order to avoid the unscrupulous cut the trees illegally and unauthorizedly in the future, “the measures are set”.³⁹⁾ The Laojun Mountain in the west part of Jianchuan County was considered as “The origin of all mountains in Yunnan province and an important place of the whole department”, but it was occupied by the military candidate of the imperial provincial examination Yan Ren and others, who “cut all the woods in the mountain and set fire on the mountain to burn everything to the ground”, which led to the depletion of water, causing it “hard to plant crops”. And the tribute student of the Imperial Academy accused Yan Ren and others in order to take the mountain. The magistrate of Jianchuan Department at that time heard the case and considered that as to Laojun Mountain, “not only can’t be occupied by Yan Ren and others, but also even Jianchuan Department takes it as its private property”. For that reason, the department decided to set regulations for the public mountain, “carve them on stones and comply with them forever”, and sent rangers to the mountain. Meanwhile, the local authorities decided to make all people know that “Laojun Mountain is the original mountain of our department, relating to the water source for the agriculture, it is necessary to protect it together”, “After the prohibition is set, everyone must follow the rules to protect the public mountain. Anyone who dares to occupy or cut trees unauthorizedly or take the illegal occupation, the rangers are allowed to seize and hand the violator over to the local government in order to judge and punish him without any forgiveness”. Finally, the Bai made the seven protection and regulations of the mountain, such as stop cutting living trees in climbing out of the water source place, Forbidden setting fire to the mountain. The

39) Duan Jinlu, Zhang Xilu: Dali ancient name tablet. Kunming: Yunnan Nationalities Publishing House, 2000.

forbidden children's tree' The forbidden dig and cut roots' The forbidden villages stepped across the assault' Forbidden to sell wood. In addition, early bai daughters often become a monk with in-laws to home village to chop wood.⁴⁰⁾

In order to put an end to this kind of behavior, the home village set rules, for example : "If you continue to make mistakes, your family will be prosecuted", to the people who set fire to the mountain also be prosecuted together.⁴¹⁾

People of the Bai nationality have also developed a variety of rural rules to protect the forest, such as the rules of "new Ren Li Xiang Bei" provide: axe into the forest, the root of the king road. The Bai people can cut a forest without feeling guilty. If they cut a tree, the penalty shall be given a heavier. Thus, the nationality does not allow to cut down bamboo from the mountain.⁴²⁾. Jianchuan "protection Gong Shan inscription" said: "the search for the state to Laojun Mountain pulse, plant water, the suitable for preservation, for their own benefit to an arbitrary penetration capacity, foot, with million surname life source.⁴³⁾" In order to forbid people from cutting the pine which is so important to them, they should use different cutting tools to avoid different punishments. For example, "two free silver two axes to cut, knife cut fine silver five. " The regulations of Tiejia Country, Fengyu Xiang, Eryuan County also provides : "Planting trees on the hill is expected to grow into useful timber." "The Bai can only cut crawl pine in pine trees. If they cut foliage, people will be fined

40) Duan Jinlu, Zhang Xilu: Dali ancient name tablet. Kunming: Yunnan Nationalities Publishing House, 2000(501-502).

41) Zhang, Zhang Xilu: Heqing inscriptions collection ,Dali:Seminar in Nanzhao Bai Autonomous Dali history ,2001.

42) Life village Bai culture. Qinghai daily, October 8, 2010.

43) Life village Bai culture. Qinghai daily, October 8, 2010.

five silver." "If you find someone setting the mountain on fire, he or she will be fined five silver." There are also other village rules : "Prohibit the collection tree tip."⁴⁴⁾ "Ban Tong Song." "When the pine slope produces grain, people can only take the pine nuts. If he or she complains with local rules, he or she will catch up and fine grain."⁴⁵⁾

The regulations of Tiejia Country, Fengyu Xiang, Eryuan County also provides for that : "If people find stealing and cutting the boom Liuci, he or she will fine five silver. "

The forest environmental awareness in the Bai village still has far-reaching influence, as respecting nature, protecting the forest, worshipping trees still run through the people's production and life.

2.2.5. Worship and protection of water

The farming of Bai nationality has a long history and recognizes the importance of water for agricultural production. In the conditions of low social development and imperfect water conservancy facilities, the water year determines the crop harvest. If water is sufficient, so is the agricultural harvest; the shortage of rain, the crops fail; but when water is too abundant, flood kicks in easily. So, people think that water has a natural power, and therefore, they fear water. And the Bai generally believe that water created the ancestor and the creation, with a strong fecundity; so the Bai people's worship of water also embodies reproductive worship.

44) Zhang, Zhang Xilu: Heqing inscriptions collection ,, Dali : Seminar in Nanzhao Bai Autonomous Dali history, 2001(234)

45) "Five series of ethnic problems" Editor group of Yunnan Province : The investigation of social and historical of Bai. Kunming : Yunnan people's Publishing House, 1991(102).

The Bai People attach importance to water and thus, a series of folk activities is formed as well. For example, the villagers of the Bai in Heqing County set lunar December 26th as the Water Clean Festival. On this day, the villagers will go together to clean the mountain spring, brooks, ponds, wells and so on thoroughly. They will also reinforce the leaking and collapsed embankment etc. When the work is finished, they will make an inspection tour of these places and share their working achievements, existing problems and remedial measures about cleaning water by singing.⁴⁶⁾ In addition, in order to control and release flood, the Bai people in Heqing have a custom of digging Dilong for the arrival of a new life. Dilong is a warning device of flood control, which is made of stone. It is round and high enough to let you squat and burrow below, extending from the inside river bank to the outside. At the entrance of the hole to Dilong, a wood making cattle head was put there, whose "mouth" is open widely. Inside, there is a cavity for normal discharge. The "tongue" of the cattle is the normal water level and at the root of the "tongue", there is a hole for flood detention with a reed whistle device. When water level exceeds the safety line, floods pour out automatically from the hole and toggle the reed whistle device. This will also connect to the circle on the "nose" of the cattle and send out the roar of the cattle to warn the villagers of the dangers. So as to avoid the jam of Dilong, when a new baby reaches one month old every year, his father and the men in his family will again inspect Dilong thoroughly. At the end of each year, the people will get together to clean Dilong and change the reed whistle for a new life was born in their families.⁴⁷⁾

46) Zhang Hongyu :Folk customs and environmental protection , School Journal of Wuzhou Normal College in Guangxi,2001,17 (1) :23.

47) Zhang Hongyu:Folk customs and environmental protection ,School Journal of Wuzhou Normal College in Guangxi,2001,17 (1) :24.

Nowadays, a number of Bai people's villages still retain some of the primitive ways of agriculture. The villagers will go to the Temple of the Dragon King or go to thank the dragon king by the edge of the water, which is also called "thanks to the water" in the good years after planting.⁴⁸⁾ Some Bai people in JianChuan county still keep this custom; the day before wedding, the newlyweds will go to warm or special bathhouses to have a bath or drink water for the purpose of praying for many children.⁴⁹⁾ In addition, the Bai children educate to protect water resources and to avoid pollution and waste from a young age. Moreover, a lot of village regulations are made to restrict the villagers; not littering into the rivers and the valleys, not spiting or peeing into the water, not washing clothes, killing chickens or slaughtering pigs at the fountains. The regulations also prevent to cut down trees around the water source, and the violators will be punished.

2.2.6. The development and utilization of the medicinal resources in the Bai people area

The Bai people mostly live in the Dali Bai Autonomous Prefecture, where the geographical environment is complicated. It has superior natural conditions for six climate zones from the North Temperate Zone to the South Subtropical Zone all belonging to it. In the territory, there are mountains up and down, lush forests, rivers and sufficient sunshine and moderate rainfall, which provide extremely advantageous growing conditions for a variety of medicinal animals and plants. The distribution area of medicinal plant and animal resources is

48) Li Fujun :The water worship and farming culture of the Bai, Journal of Yunnan Normal University, 2004,36 (4) :11.

49) Li Fujun :The water worship and farming culture of the Bai, Journal of Yunnan Normal University, 2004,36 (4) :10.

about 32 million mu, which accounts for 75% of the total area of the state.

The Bai people have realized the properties of some medicinal animals and plants in the production and living practice and used them to cure diseases. In Nanzhao period, the Bai people have known that bezoar and musk are all expensive medicines. Since then, the Bai people have often used hot spring to treat diseases, and this tradition is still very popular in the Erhai region today. In addition, in 1966, a pagoda, which was built in Dabao 7th Year (AD 1155) on the Flaming Mountain of Erhai County, was destroyed. And a box filled of Buddhist scriptures and medicinal materials was found in it. An identification by the relevant government found about 30 species of medicinal materials, such as gold foil, coral, agate, pearls, dried ginger, sandalwood, Piper longum Linn, Amomum tsaoko, Areca catechu, Cinnamomum camphora, rosin, cubeb, peach kernel, Lima bean, lenti etc. In 1978, the Cultural Relics Department also found cinnabar, aloes, sandalwood, musk, corals, gold foil, mica, clams, rosin and other medicinal materials when the four towers of Dali Chongsheng Temple were under reconstruction.

In addition, the rich medicinal material resources also prompted the development of medicinal material trade. The Erhai region where the Bai people live in groups has various kinds of medical resources. And the Erhai region is located in the thoroughfare of the ancient Silk Road, which is the only route that merchants must come by. The products in the neighboring China and India Peninsula and Sichuan, including medicines, have been brought into this region earlier. This has made the Erhai region a medicinal material distribution center. Medicinal material trade is one of the biggest commodity trades in the "March Street", which was formed during the Nanzhao Period.

2.2.7. Animals protection

The Bai people have gotten into a good habit of protecting animals, for their living residence has a variety of ecological environments surrounded by water and mountains. In the process of getting along with animals for a long time and being influenced by animal worship, they gradually formed this habit. For example, the Bai people think it is auspicious if swallows come to nest at home. Therefore, when the house is under construction, the Bai will pound a few pieces of wood slabs in the upper part of the corridor, which will provide a convenient place for swallows to rest. The Bai people never hurt the swallows. They believe the swallow is a member of the family and harming the swallow is like harm their children. Up until now, the festival of praying to the bird is still practiced in some mountain areas in Dali heqing. Every year, before or after the Tomb-Sweeping day, the Bai people will fry the flowers of grain and oat and spread them to the birds to eat. Then, they will hold a grand sacrifice ceremony. On some local ancient tablets, there are the provisions of "forbidden to kill the spring birds". And spring is the season for birds to breed, which promotes the sustainable development of the birds. The Bai people have made a tradition for fishing after they lived in this place. However, regularly prohibiting fishing is advantageous for the fish and shrimp to have a good rest.

The Bai people particularly cherish their hard working cattle. At the beginning of the spring ploughing or on the first day of spring, in many regions and villages, an activity will be held to pray the cow god in order to thank the cattle in the New Year for their hard work. Meanwhile, it also wishes that the people can have a good harvest in the new year.⁵⁰.

50) Edited by Wei Qingzheng : The dictionary of religion and mythology in all ethnic groups in China, the Bai nationality Beijing: Academic Press, 1990(703-704).

2.2.8. Proper exploitation of mineral

There are many minerals in the Bai residential areas, but the Bai people do not advocate mining of mineral due to ecological reasons. This is because mining causes a certain impact on the surrounded environment, and brought great disasters to the people because of the mineral mining.

For example, “the Closed factory permanently ban tablets within the 2km Valley where perform sands mining in Dali City. People washed sands for getting glod, and gold rush people finally dispersed. The consequences of gold mining deteriorated the natural environment. Another example is that minining destroyed surface water and it was affected farmland by flooding. If people continue mining, then the floodplain of the river gradually became the sandbar. After that, if the rain too large to flood over all field, it would cause a great disaster. As a result, the local Bai people suggest that the government should stop gold mining to carry out prohibit regulation.⁵¹⁾

2.3. Conclusion

The ecological concepts of abiding and protecting nature control people’s behaviors, form the unique style of production and life; and the ecological concepts will have a positive effect on adapting to the environment, utilizing resources for sustainable development. Although the environment was damaged due to some misjudgments in the course of history, and the style of production and life has been changed during the course of integrating with other cultures,

51) Duan Jinlu, Zhang Xilu: Ancient name tablet of Dali. Kunming: Yunnan Nationalities Publishing House, 2000.

their religious beliefs and the spontaneous ecological consciousness have been deeply ingrained into their conscious and still play an important role in modern society.

3. Naxi Ecological Views and Traditional Lifestyle

3.1. Distribution and Economic-Social Development Status of Naxi People

3.1.1. Distribution of the Naxi

The Naxi people live in the junction of Yunnan, Sichuan and Tibet Hengduan Mountains Region, backed by the Qinghai-Tibet plateau, Yunnan-Guizhou plateau-oriented. There are the Nujiang, Lancang, Jinsha River, Jade Dragon Snow Mountain, Haba Snow Mountain, Meili Snow Mountain, Baimang Snow Mountain, Gongga Snow Mountain and other famous mountains. The height of the peaks reached at round 5,000 meters, and some even more than 6,000 meters. The canyons are deep and enormous having relatively height differences. Naxi settlements are at an altitude of 2,700 meters, and the unique landscapes makes the climate, vegetation, soil and the whole natural system present a vertical variation, with 3 types of climate: cold, warm and hot. In the highland, the average temperature is 5.5° . In the valley of Jinshajiang River, the average temperature is 14.5° . In the flatland in Lijiang⁵²⁾ and basins in the Lugu Lake, the average temperature is 12.6° . Annual rainfall is 800 mm to 1,034 mm. According to the fifth national census, in 2000, Naxi population is 308,839 who live in northwestern Yunnan, mostly in Lijiang , and the rest distributed in other cities and counties in Yunnan Province and Sichuan Province. There were a few located in Mangkang County of Tibet Autonomous Region. In the original Lijiang Naxi Autonomous County (it is divided into Gucheng District, Yulong Naxi Autonomous County in 2002), there were 201, 066 people, accounting for 58% of the county's population and 68.5% of the total population of the Naxi people in China. There are 8,725 Naxi people in Sichuan Province,

52) In 2000, Lijiang City was Called Lijiang Prefecture.

mainly in the Liangshan Yi Autonomous Prefecture, Panzhihua City and Ganzi Tibetan Autonomous Prefecture.

3.1.2. Present situation of socio-economic development

The Naxi people are mainly engaged in agriculture, with farming population accounting for 85% in Lijiang. The important pillar of the rural economy is animal husbandry. Historically, in Lijiang, the Naxi traditional handicrafts such as copper and leather had been quite advanced, and the products were sold throughout different places of Yunnan, Sichuan and Tibet. Prior to the 1950s, Lijiang was located in fort of Ancient Tea Horse Road. Commerce and Industry of Lijiang Ancient Town had emerged, known as "Zangke". Naxi traders with lots of properties had developed industries in Tibet and India which promoted the Yunnan-Sichuan-Tibet business exchanges and friendship between the peoples of the region.

The flatland and the valley areas are the main grain producing areas that produce wheat, rice, corn, canola, barley, beans, broad beans, soybeans, peas, chick peas, white kidney beans and alpine plants including buckwheat, oats, barley, potatoes, and cannabis. In the valley areas, there are peanuts, sugar cane, cotton, cash crops; including lacquer, walnut, chestnut, mulberry, pepper, and bamboo. Flue-cured tobacco planting has also developed along with fruit varieties of peaches, plums, walnut, apple, pear, persimmon, pomegranate, plum, apricot, orange, citron, and so on.

In the Naxi areas, animal husbandry is the mainstay of the rural economy; farmers keep cattle, pigs, sheep, horses, mules and so on. In the mountainous areas, animal husbandry takes up a large proportion of, with each family having

a sheep flock. The mule as a commodity is sold in “July Mule Fair”, and “Lijiang Horses” are famous for their small size but are known for their vigorousness, going through dangerous paths for tens of miles without sweat, which is hailed as one of the three treasures of Yunnan. Many men engaged in the caravan, and caravans are the Naxi people’s primary means of transportation for commodity exchange.

a. Agriculture have achieved great development

Before the 1950s, 90% of the Naxi people were engaged in agriculture. At present, in Lijiang Ancient Town District and Yulong County, 85% of the population is engaged in agriculture. But agricultural output value has changed dramatically. Before the founding of the People's Republic of China in 1949, in Naxi areas, the economy presented uneven levels of development. In Yongning of Ninglang County, the productivity of agriculture developed much slowly. The production tools were iron tools and traditional wooden hoes. Cultivated lands were divided into four types: paddy fields, irrigated land, dry land and garden plot. Apart from the garden plots and some irrigated -land that were carried out based on fixed cultivation style, most of the lands were carried out under the system of crop rotation and fallow land, and uplands were carried out based on the primitive way of slash-and-burn. After People's Republic of China was established, particularly after the reform and opening-up and joint contract responsibility system was carried out, which mobilized the Naxi farmers ' enthusiasm for production, food production and farmers ' per capita income have increased relatively quickly.

b. Prosperity and development of diversified market economy

From the late 1950s until the “Cultural Revolution” has ended, the Naxi areas and other places cancelled private traders and individual pedlars and formed situation of State-owned business and marketing cooperatives operated, which had hindered the development of commodity economy and market fairs. After the reform and opening up, the Party and the central government carried out commercial system in which state-run commerce leads and multiple sectors of the economy exist side by side. Diversification, the coexistence of multiple distribution channels of socialist commodity economy recovery, reorganized the supply and marketing cooperatives, which reopened the original fair trade. In Lijiang, the local traditional fairs such as, “Dragon King Fair” held in March annually, “Mules and Horses Fair” held in July annually, and other large scale livestock, agricultural and industrial products fairs have promoted the development of local agriculture and industry.

c. Ecological environment continues to be improved

After the founding of People's Republic of China in 1949, in order to support economic development in the Mainland, centered on Lijiang in the upper reaches of the Yangtze River, and gradually became an important lumber production base in Yunnan Province. Forest enterprises had also been established in Lijiang. In later decades, in Lijiang, not only the state-owned forest industry business in the territory greatly increased the amount of timber felling, but also the local people's deforestation has greatly increased since 1958. After 1995, according to the new National Policy, on the one hand, forest conservation was carried out along with the reorganization of forest industry business, helping them to achieve industrial transformation as soon as possible and the government called for withdrawal of forest felling. On the other hand, the new national policy

proposes to the national and provincial environmental inputs, implementation of major environmental protection projects. Among the masses, ecological knowledge was greatly popularized, by all means in order to summon Naxi traditional zoology moral values and conservation of traditional knowledge. In Lijiang, the forest cover improved from 40.3% in 1995 to 52.5% in 2005, and Lijiang became an important ecological protective screen for the middle and lower reaches of the Yangtze River. After years' of eco-environmental protection efforts, Lijiang received the honor of "Global Excellent City in Human Settlements".

d. Lijiang becomes "Three World Heritage Sites" with rapid development of tourism and cultural industries

In 1986, Lijiang Ancient Town was identified as State-level Historical and Cultural City. On December 4, 1997, UNESCO granted Lijiang Ancient Town the title, "World Cultural Heritage"; On July 2, 2003, "Yunnan Three Parallel Rivers of Yunnan (the Jinsha River, the Lancang River and the Nujiang River)" was inscribed on the World Heritage List as a natural property at the 27th session of the UNESCO's World Heritage Committee. Lijiang was located as the center of the region of the Three Parallel Rivers. On October 15 2003, the collection of Lijiang Dongba Classics was listed by the UNESCO as "Memory of the World List". Lijiang, with three world heritage sites, has become a unique place of "World Heritage Sites", whose world-class reputation has greatly promoted Lijiang's Tourism and cultural industries.⁵³).

On the development of green industries, Lijiang's development path is also

53) 王君正：《建设生态文明发展生态产业》，载《光明日报》2009年2月18日。

quite distinctive, and the path selected the ecological civilization construction and green industry development path. Then, the two paths have positive interaction. Lijiang is rich in natural resources, with its ecological environment being renowned as “Jade Mountains and Golden Rivers”, “Highland Water City”. However, in the late of 1950s, under the influences of rigid development thinking, such as large-scale of steel production and “Wood production propelled by economic growth”, the ecological environment of Lijiang suffered major damage. Eco-environmental degradation directly restricted the development of agriculture and tourism and other key industries. The Naxi people had learned a lesson from this painful experience and subsequently combined the national policy of construction of “ecological screen” in the upper reaches of the Yangtze River for organic integration of construction of ecological corridors and the development of green eco-industrialization. On the one hand, in order to increase the protection of forest resources, scientists build a scientific and efficient ecological security system for rare and precious wild animals and plants. Under the guidance of this idea, an initiative of “eco-industrialization of ecological construction, industry development” approach was carried out. Also, scientists focus on the development of the featured cash timbers, forest chemical industry and biomass energy industry, and they have accelerated the development of the important industries, such as featured economic forest, medicinal herbs, mushroom, forest and ecological tourism. Thus, they has achieved ecological environmental protection and resources cycle uses, ecological construction and industry development and the organic system of forestation and enriching people.⁵⁴).

54) Wang Junzhrng. Constructing Ecology Civilization, Development of Ecological Industry, Guangming Daily, February 18, 2009.

3.2. The ecological views and the traditional lifestyle ways of the Naxi people

The Naxi people believe that man and nature are brothers, which is the religious and philosophical foundation of ecological ethics of the Naxi people and nature "in debt" and "pay" concept that humans are nature's grace should be appreciated and rewarded, and man should be kind to nature. To reflect the Naxi people's survive also depends on the balance of nature; nature is not dependent on humans; it is humans who need to depend on nature to survive. The Naxi people have their own God called "Shu", which has similarities with the alien Dragon God. Therefore, the Naxi people have the custom of conserving the community ecology and reflecting on the multiculturalism of Naxi nationality ecological ethics.

3.2.1. The Concept on "Nature" and "Man" are Half-brothers

Dongba Religion is a kind of primitive religion, which originated from early witchcraft culture, later inoculated some factors of the Bon religion of Tibetans, some shaman (Shamanism) culture of "peripheral cultures of the Himalayas" and the Tibetan Buddhist culture, taking hieroglyphics classics as a carrier to form a unique primitive religion form with complex ritual systems. Although the content of the Dongba culture is complex, like the other primitive religions, the main contents of the Dongba include nature worship, totemism and ancestor worship, ghost worship; among these, nature or nature worship is very obvious.



<Figure 2-2> The Beliefs in Nature Godness called “Shu”

The cosmology of Dongba religion embodied the unity of man and nature with the body of prominent thought, that man and nature are from the single source, and that there is a common source of origin. According to Dongba religion, the sun, the moon, the stars, the sky, mountains, rivers, grasses, trees, birds, insects, beasts and fishes originated from the eggs, which regarded the man and nature as a living, unrelated material entities. This is one of the original ideological roots of the ancestors of the Naxi nature and ecology of the ideological roots of the natural and ecological views.

According to the Dongba religion, human beings and nature are “half brother”.

This old saying was full of meanings and wisdoms which included a lot of accumulated contemplations and survival experiences after long-term struggles accompanied by nature as well as sufferings from the wind, rain and snow. This is in everything man and nature will initially be viewed as Homo-life concept to be made clearer for further explanation of the close relationship between the man and nature.

In the long term of dependence on nature, the Naxi ancestors improved the level of their consciousness, which was from nature worship to awareness of the dialectic relationship between man and nature. Under the domination of the animist views, they generalized a supernatural numen called "Shu" and formed a large-scale worship rituals to "Shu." "Shu" controlled the mountains, forests, rivers, lakes as well as all kinds of wild animals. In Dongba mythology, there are many legends about "The Origin of Shu", which posits that "Nature" and "Man" are half-brothers. According to the Dongba Scripture, "Man" is called as "Jing" or "Chong", who is in charge of planting the crops and pasturing livestock while his brother "Shu" is charge of mountains, canyons, wells, streams, flowers, trees and all wild animals. At the very beginning, the two brothers had very harmonious relationships; however, humans began to be greedy and to steal nature's belongings by force or trickery, such as deforestation in the mountains, large-scale hunting, and polluting the rivers. Humans had done evil things to offend "Shu", which resulted in disharmony with each other. Nature had done revenge on human beings and humans suffered a lot. Later on, human beings realized that they had suffered from those disasters because they had mistreated his brother: nature. After that, human beings asked the patriarch of the Dongba religion to mediate. At last, human beings and nature made some agreements, such as; humans could utilize some lands, but could not overdo;

they could cut some trees but could not overdo; they can hunt some wild animals if the domestic animals were not enough, but not too much; human beings could not pollute the rivers. In this context, humans and nature could become good brothers again.

A considerable number of Dongba Scriptures, especially those belonging to the sacrificial nature spirit "Shu" in the Dongba rituals, reveal all about the Naxi people' natural careful attitude are to treat to life.

According to "Worship Shu•Introduction to the Ceremony", it says that "humans live in the vast land, by hook or by crook, they ate inedible things, they killed red deer of toxic ghost, they killed ghosts and red bull, they killed snakes, they killed frogs on the stones and eat the meat, they hunted in the mountain with dogs, and caught fishes in the forest. They burnt the mountains with fire, cut down trees and poked through the bottom of the big lakes. People did not know whom they could not fight, they fought with "Shu". Therefore, "Shu" sent toxic ghosts to the world to punish humans."⁵⁵⁾

According to "Worship Wind•Altar Sutra", "People cannot wash clothes and other stuff in the spring of "Shu" named as Limeishuxuru (which belongs to nature god). People cannot pick wild flowers in the white highland. It is not allowed to pull down and break off the old twigs and branches in the snow mountain. It is not allowed to cut down big trees in the nine-big-mountains. It is not allowed to cut down the green bamboos. In the forest, it is not allowed to cut down trees and destroy forests."⁵⁶⁾

According to a Dongba Scripture named "Suppress Ghost•Altar Sutra", it says

55) He Shicheng, Li Jingsheng. Containing the Complete Works of Naxi Dongba Classics (revisions), The Dongba Cultural Institute Publishing.

56) Ibidem

that “We lived in the villages and did not allow the forest to be damaged; live on the earth, and never let the grass were damaged; live nearby the water, the ponds were not allowed to be damaged, live in a tree, never let the branches damaged. Even if we hunted, we never shoot small red tigers. We have never caught little white cranes never pry large rocks, never cut down trees, never poke the bottom of the lake. When we are hunting, we never let the deer and mules become frightened. When we do farming, we are not to pollute the rivers. When we arrived in the snow mountain, we are not to break off the twigs and branches. When we arrived in pines trees, we will not utilize the trees to build houses. We will not cut down green bamboos and get too much forest products .”⁵⁷⁾

Based on the concept that humans and nature are brothers, there is an important, large-scale ritual for worshipping nature god “Shu” known as “Shugu.” There are a lot of scriptures on this ritual. According to J.F.Rock’s “On the Naxi people’s Shu and Related Rituals”, there are 116 kinds of scriptures, which illustrate how the Shu (nature) and humans live in harmony and how not to offend “Shu”. The ritual has great impact on the Naxi people’s productive activities and social life, as well as ecological morality.

In many Dongba Scriptures on the relationships between humans and nature (Shu) are illustrated such wisdom views that humans and nature are brothers, and that they are dependent on each other. Only by maintaining such a fraternal equilibrium between human beings and nature can humans benefit from nature. If humans destroy the harmonious relationships of interdependence, this was tantamount to hurting brotherhood, and it will face the revenge of nature. This

57) Ibidem.

is the valuable experiences and profound knowledge that the Naxi ancestors derived from the long life practices. On the cognitive basis of this reason, the Naxi folk have had a set of customary laws of protecting the nature. The specific restrictions treated as the behavior of nature. Common prohibition in the Dongba religion: no slaughter of animals in the source of rivers to keep blood from getting polluted; Not free to discard dead animals in the wild; Not free to dig quarries; No dirty objects are allowed to be washed in the water area; Commit no nuisance in the sources of the rivers, destroying forest or burning vegetation, for land reclamation is prohibited. The beginning of the summer days is crucial period for the growth of plants and animals; therefore, for a long period of time after the beginning of summer, logging and hunting are prohibited. It can be seen that the source of traditional culture of primitive religion was shortage of positive social functions.

3.2.2. Concept of “getting into debts” and “getting out of debts” on Nature

Dongba culture reflects the relationship between man and nature as well as the feeling of man’s awe of nature, which is not only reflected through the rituals but also through the concepts of “getting into debts” and “getting out of debts”. Dongba religion believes that, for survival, people utilize the materials from nature, such as logging, cutting grasses, picking flowers, getting stones, placer mining, hunting, fishing, drawing water, collecting wild honey from high rock and even using some twigs and stones for sacrificial rite; all of these are taken from nature and owing to nature. Obviously, the Naxi people regarded nature as the boon of survival because nature nurtured man and man owe a lot to

nature. According to Dongba Scripture, “release souls from purgatory, grazing and yaks, the owner of horses and sheep light and animal gods.” It says that when the deceased goes to the heaven, he/she has to pay for the debts of valleys, flowing water, trees, roads, bridges, fields, ditches and other debts.” ““Have you been to graze sheep on the ranch, where you've been riding a horse, where using hoes to dig the clods, where carrying the shining ax to chop firewood, where you use buckets to get water in the valley, where you have to take to repay indebtedness of wood and water. Beyond that, the places have been such as road, bridge, dam, valleys, the small ditch, forest area, grazing pasture, lake, cliff.”⁵⁸⁾

These debts need to be paid through sacrificial rites. From the traditional thinking of owing to nature and appreciation of nature, we can understand that the significance of the Naxi people's sacrificial rituals for showing guilt to the spirits of nature when they Naxi people were building a house, chopping a stone and cutting a tree. From this concept and custom, we can see that the Naxi ancient people regarded nature as life entity just like a human. Thus, humans must respect nature, protect nature and not overdo. From this concept, we can see that the Naxi ancient people regarded everything on earth as life entity. By such a personification of nature, man and nature are regarded as life entity, which plays a very important role in keeping the harmonious and longstanding relationship between man and nature and creating a good environment.

The British historian Arnold Toynbee (Arnold Joseph Toynbee, 1899-1975) points out: "In the universe, everything has dignity; it is this sense of existences.

58) Ibidem.

In other words, animate and inanimate objects are dignified. Earth, air, water, rock, spring, river, sea, all of them have dignity. If there were a violation of its dignity, would be tantamount to a violation of our own dignity.⁵⁹⁾

Both the concept of Dongba culture and the points of the western scholar reflect that humans should respect nature. Moreover, humans and everything in the universe are equal; both of them belong to the universe. Although humans boast that they are the owner of everything, their survival depends on the ecological balance of nature. Nature is not dependent on humans, while the survival of humans has to depend on nature. Dongba culture, as reflected in the concept of respect for things of the natural world, certainly stems from the natural religion of ancient animist beliefs. But this reverence for nature has positive meanings; at any time, humans have to have an equal attitude towards nature, and they should be fully aware of the truth that human survival is dependent on nature. The concept of "getting into the debt" is in favor of the constraint overexploitation, which embodies the Naxi people's wisdom derived from the daily production activities and social life.

3.2.3. Customs of Ecological Protection in Naxi Communities

For a long time, in Dongba mythology "Nature" and "Man" have been considered half-brothers, which is the principle of co-existence between man and nature for the Naxi people. This principle results in all kinds of laws or rules to prohibit certain behaviors which benefit the natural environment and people's daily lives. The form of customary laws or folk regulations restricts the productive activities and utilization of the natural world. Many institutional

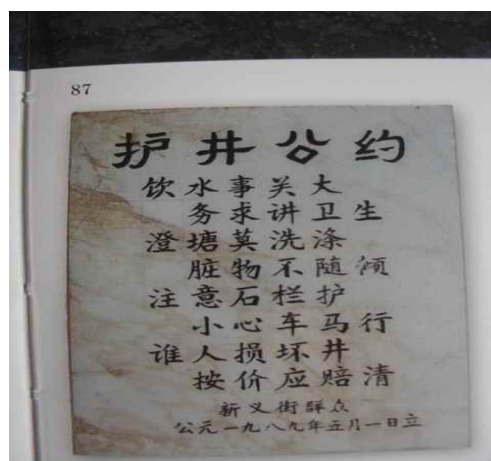
59) Arnold J. Toynbee, Daisaku Ikeda. *The Prospects of the 21st Century*, translated by Xun Chunsheng, International Cultural Publishing Company, 1984, P. 429.

measures and customs for protection of mountains, rivers, springs and wild animals can trace their root to this basic concept of nature.

The Naxi people treat nature in the way the traditional common law has been sublimated to a moral value. In the eyes of the Naxi people, keeping clean of rivers and protecting mountains and forests are the social morality that everyone must comply with. In the past, Lijiang, as concentrated areas of the Naxi people, had many folk regulations for protection of mountains, forests and rivers. Moreover, each village chose the old man with noble character and high prestige to form presbytery, which was for urging the villagers to complete these folk regulations. In the past, many villages not only had an administrative system but also folk organizations, such as “presbytery”, in order to supervise the folk regulations. Below, the author will give you a few cases of the practices of the Naxi community to protect the ecological environment.

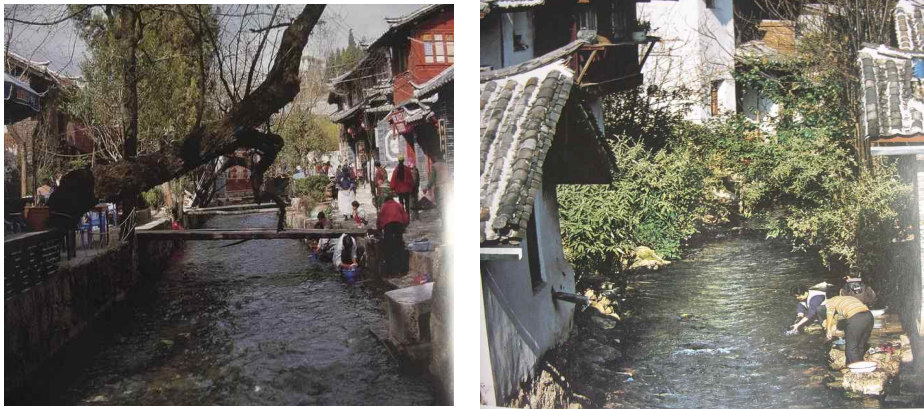


<Figure 2-3> In the Ancient City of Lijiang in natural “Pearl spring”



<Figure 2-4> Naxi people managed the well “Folk regulations and rules”

The Naxi people adopt the way of civil societies and folk regulations to manage the natural resources. The Naxi people believe in the ecological concept of Dongba nature god “Shu” and in accordance with the management regulation of the local government, most villages have civil societies such as “presbytery” and “the old society”, which make regulations for resources management. Before 1950s, in Yuhu village in Lijiang, there was “the old society”; “the old(laomin)” was the old and distinguished people in the village; “the old” was voted every three years. The election was held during the Torch Festival; “the old” was voted in public and normally elected between 8 to more than 10 persons. If an elected was found not to be fit for the position, he could not be elected in the next election. “The old society” was responsible for making folk regulations, for judging a fight, for mediating civil disputes, for supervision. “The old society” manage the mountain, and take care of seedlings in the fields and mountains and against deforestation, the behavior of destruction of crops, in violation of village regulations. The violators will be punished by “The old society”.



<Figure 2-5> Rivers in the the Ancient Town in Lijiang

If the villagers need timbers to build houses, they had to apply for it through the “The old Society.” After being approved by the “The Old Society”, they would be supervised by rangers called “Jugua” in the Naxi language. It was not allowed to cut too much timbers. Even if the local people needed to make bed of the timbers in the wedding, they had to apply for it through “The old Society.” They could cut down the trees only after the approval by “The Old Society.” The beginning of the summer days were crucial period for the growth of plants and animals; therefore, for a long period of time after the beginning of summer, logging, and hunting and collecting leaves of trees were prohibited. After the prohibited period, the villagers were allowed to collect dry leaves of trees in the mountains. However, according to the folk regulations, each household could only send one to two people to collect dry leaves. The people from the “The Old Society” supervised in the mountains. They enforced the regulations strictly and most of them were very strict with their relatives. They served for the villagers without any pay. The members of the “The Old Society” could appoint rangers (Jugua) for management of the mountains; they were very

cautious and conscientious and had a strong sense of responsibility. Once they found the villagers were against the local regulations, they would punish them on the spot or report to the “The Old Society”. “The Old Society” would punish the violators in accordance with the seriousness of the cases. Even the relatives of the head of the village were not exempt from punishment. The Naxi villages are generally equipped with special supervisors for managing the mountains, which is an important measure to protect ecological resources in community organizations. In the Naxi language, “rangers” are known as “Jugua”, which means the person who manages the mountains, which is an important measure to protect ecological resources in community organizations. Therefore, the local villagers are very cautious to select and appoint the rangers. Normally, the villagers elect the rangers who can be fair and just in handling affairs. Prior to the 1950s, some villages specifically asked outsiders to serve as rangers; for example, some villagers in Longquan Administrative Village (Shuhe Old Town) invited Tibetans to become rangers; on the other hand, they had long term trade cooperation in the history as an outsider. Then, they could avoid the restriction of the complex of relatives relationship.

Communal organizations play an active role for the protection of collective mountains, land and the rivers. The traditional ecological ethics also benefit a lot for the ecological environment in the villages. In the past, there were a lot of taboos such as: one cannot cut the trees around the rivers, cannot pollute the source of water, cannot wash dirty things in the upper reaches of the river, cannot pour dirt into ditches, cannot overgraze and cut down the trees excessively, cannot make one’s livestock to destroy the crops of others, cannot cut big trees and young trees at random, cannot bring the trees home which had been blown down. Among these taboos, there are some factors of

superstition, but closely mixed with social ethics and ethical values, which played a considerable role in the protection of the ecological environment of the villages. Until now, the eco-environmental protection has been very closely related with the villagers committees, the rangers team, the elderly committees, and women's organizations.

The Naxi parents caution their children earnestly not to do anything to pollute the environment. Between 1950s and 1960s, the habitants normally carried drinking water from the rivers, because a few people threw garbage into the river. There are a lot fish in the Black Dragon Pool, and some of them swim from the pool to the river of The Old Town, but no one catches them. No matter who disobeys the regulations, he will be punished without exemption. Due to thousands of years of traditional ecological ethics, Lijiang has the beautiful scenery: the green mountains, blue water, with each household having flowers and flowing water. Until the early in the 1950s, Lijiang has also maintained a total land area of 73% forest and 12.8% of the grass, with the forest coverage rate up to 53.7%. All this has inseparable relationships with the Naxi people's traditional ecological ethics.

3.3. The impacted factors of Naxi people's eco-friendly lifestyles

3.3.1. Challengings from rapid increase of population activities

Faculty of Environmental Sciences at Peking University has done an ecological footprint model. They did research on the ecological footprint in Lijiang from 1949-2001, and the result showed that Lijiang County's (Lijiang County had been divided into Gucheng District and Yulong County) per capita ecological footprint had an ascending trend. In 2001, the ecological footprint increased 4.6 times

compared to 1949. It means that the original situation of ecological surplus had been changed a lot, while eco-environmental pressure had been increasing. If we keep the current pace of development, the ecological footprint of Lijiang will be increasing, and by 2015, it will surpass per capita carrying capacity of the environment and create unsustainable development.⁶⁰⁾

At present, in Lijiang, the local people can feel lacking and decreasing of water resources, and the inhabitants in the city and in the flatland areas believe that climatic warming is the major reason for the glacier retreat on Yulong Mountain, China. Black Dragon Pool spring has been stop-period, continuing decline in water level in the flat land area of Lijiang. According to a research from Kunming University of Science and Technology, the per capita water resources of Lijiang basin as the political, economic and cultural center of Lijiang City, is only 1200 cubic meters, which is below the average level for the City, Provincial and National levels. There are several reasons for the water scarcity; first, as a fast-growing tourist population, it is seeing an increased demand for water resources; second, it is the difference between municipal water and irrigation water of the surrounding rural communities; third, it is glacier retreat on Yulong Mountain, some important springs of glacial melt replenishment base, such as Qingxi spring group, San Shuhe, Longquan Temple. Even though water interceptions have never happened in the history of Lijiang, nowadays, water interceptions happen from time to time.⁶¹⁾

60) Jiang Yiyi. Vulnerable Ecological Region in Northwest Yunnan and Prediction of Dynamic Change of Ecological Footprints (In *lijiangnaxizuzhixian*, Yunnan Province as an Example., *Journal of Ecology*, December 2005.

61) Tan Naiyuan. The Sustainable Use of Water Resources Guarantee System Research and Practice, Master thesis, Sichuan University, March 2005.

3.3.2. Traditional knowledge disappear

Traditional knowledge on the utilization of community resources and environmental protection needs to be enhanced carrying forward again and combined with contemporary scientific ecological protection. The Naxi traditional and rational wisdom view of ecology and community-based resource management has declined with the changing society and culture. It is necessary to strengthen the original folk regulations and folk rules. It is also necessary to combine the essence of traditional ecological concept and ecological protection of contemporary science in order to form a new concept of ecological protection.

3.3.3. More and more projects into Naxi communities

The projects of industrial development require rigorous and careful consideration of impacts on the environment in areas inhabited mainly by the Naxi. A lot of the Naxi people are gathered nearby Jinshajiang River, which has plenty of water resources. Therefore, there are currently many national hydropower construction projects going on. The implementation of the “clean energy” projects, at the same time, also needs more meticulous research on the environmental carrying capacity and more detailed studies on the relationships between the construction of power station and local geology, hydrology and mountains.

3.4. Countermeasures

3.4.1. Improving environmental awareness in the Naxi communities

Most of the Naxi people are gathered in Lijiang, which is the center area of World Heritage Site-Three Parallel Rivers Region and area of world renowned biodiversities. The government has to realize that the splendid biodiversity resources have been passed down by their Naxi ancestors for generations, through hard-work and culture produced by such kind of valuable treasures for the country and the world, which are vital for the ecological conservation downstream of Yangtze River and socio-economic development and national security. However, these heavy responsibilities cannot be shouldered just by the local people. Therefore, it is extremely necessary for the central government to strengthen the efforts of the local government and to promote a mechanism for ecological compensation. At the national level, the social average profit standards make sure that the operators of public welfare forests and commercial forests get equal benefits, which can make the local people and local government who are in the important ecological regions have strong sense of responsibility to protect the environment. By protecting the environment, they can have both the development in the economy and for themselves. Then the local people can lead a happy life as others, which can change the current irrational system arrangement that current policy is that protection means restrictions, no profit, and sacrifice.⁶²⁾.

62) Na Qi ,Li Shibi. The Road of Lijiang, Beijing Red Flag Publishing House, 2009.

3.4.2. Actively seek the national support in terms of ecological construction

The Lijiang local government can utilize opportunities that Lijiang is enlisted in the typical areas of 18 of the country's reform and opening up, declaration on Biodiversity Conservation in Northwest Yunnan Province. summing up 30 years' experiences on ecological construction and social economic development seek the national support in terms of fund and policy in the ecological construction, get more support in the ecological compensations and make more efforts in the ecological system researches and make sure to improve the living standard of the local people and improve the ecological environment.

3.4.3. Exploring in an effective way on ecological construction and protection

In order to combines the Eighteenth National Congress' spirit of the construction of ecological civilization, it is necessary to keep the original eco-friendly lifestyle and make it play a role in the protection the environment. At the same time, it is important to design projects that are conducive to the Naxi community, and socially and economically sustainable. The process of rapid urbanization and development of the tourism industry, promote socio-economic and environmental harmonious development of Naxi communities. In addition, Lijiang is a famous eco-cultural tourist spot; therefore, in the development of industrial projects, the local government should prevent heavy pollution industry such as electrolytic aluminum industry.

4. The Dai Nationality's Traditional Environment-friendly lifestyle

The Dai is one of the minority groups in China known as the Bai ethnic group. The Dai people inhabit most of Yunnan Province, mainly in prefectures and counties like Xishuangbanna, Dehong, Gengma, Menglian, Yuanjiang, Xinping, Jinping, Jinggu and Shuangjiang. The 6th population census carried out in 2010 showed 1,261,311 people in this group. The Dai people have been thriving throughout the generations in the valleys amongst the Nu River, Lantsang River, Jinsha River, Mount Nu, Mount Yunling and Mount Gaoligong situated in a subtropical belt with an average altitude between 500 meters and 1,300 meters, and an average annual temperature of approximately 21 degrees Celsius.

The Dai people believe in Theravada Buddhism. Through ages of practicing, they have developed an environmentally-friendly style for farming, water management, architectural buildings, herb and resource development, and cuisines, which has enhanced the sustainable development and utilization of resources, and maintained the ecological environment in the Dai communities.

4.1. Ecological philosophy of Dai people on rice farming

The Dai people boast a long history of rice farming, and through the long history of working and living experience, they have developed their own ways and philosophy of coexisting with nature.

The Dai people believe that “forest to be the father, land to be the mother, and the rice between the sky and earth to be supreme”, and prioritize things in nature in an order- “forest, water, land, grains and then humans”, indicating that “only with forest there will be water, only with water there will be field, only with field there will be grains, and only with grains there will be human

lives". Such a philosophy not only reflects the Dai people's rice farming experience, but also shows their unsophisticated ecological values.

First, the Dai people view all things in nature to be interdependent on each other: water depending on the woods, land depending on water, grains depending on land, humans depending on grains, and woods again depending on the mountains, thereby forming a huge, closely correlated ecological chain. Second, the Dai people believe that all things in the world are equal and nature creates everything to have its own values, so humans shall not attempt to control everything in the natural world. Finally, in the ecological values of the Dai people, human lives rank behind natural objects like woods and water, suggesting only with nature's token can humans exist. To sum up, in the minds of the Dai people, humans are the products of nature and are equal with, not superior to, other products of nature; therefore, they shall seek to live in harmony with nature, respect nature and adapt to nature in order to maintain their own existence and development. Such an ecological philosophy is found in two aspects of the Dai people: First, the Dai agriculture is anchored on rice, whose farming is closely related to water, and their primitive worships and Buddhism faith are combined to create the need and respect for nature, for without nature's tokens, humans cannot hope to live; Second, the various taboos in their religious beliefs also restrict the acts of the Dai people, filling their hearts with awe for nature.

4.2. Ecological conservation under religious taboos

The religious faith of the Dai people originated from primitive religions. Buddhism was introduced from the 6th through 8th centuries, and gradually

merged with the local primitive religions. Rites and taboos of the two different religions have restricted human behaviors and led them to live in harmony with nature, and eventually developed into habits.

4.2.1. Worship for “Long” forest and protection of woods

In their primitive religions, the Dai people believe that “everything has souls.” It is not only humans who have souls; trees, rice, sky, earth, water, rocks, villages and homes also have their respective souls. They believe the gods, ghosts and souls of nature control the harvest of grains and people’s blessings, so everything in nature that is closely correlated to people’s life which is worshiped by the people, hence the Dai people worship souls, nature, gods and totems. Different faiths have different taboos that require humans to protect the plants and animals such as woods and birds. The “Long” forest worship is the most prominent among the Dai people.

“Long” is a Dai word that means “forest” and “Long forest”, which indicates a place where the gods live. In every Dai village, there is a parcel of woods named “Long forest” dedicated to the Long god and Mong god. A ceremony offering sacrifices to the gods is held every year in the villages to pray for good harvest, health and security.

By worshiping the Long woods, the Dai people are worshiping their ancestors in essence, a fact which is deeply connected to the agriculture of the Dai people. First, the Dai people have collected and hunted for food from the woods for a long time; and second, their rice farming agriculture is dependent on water whose source is also the woods. The forest is therefore essential to their existence.

Believing that every tree in the Long forest has its own soul, the Dai people

do not allow climbing or cutting trees for unjustifiable reasons, and even go so far as to prohibit collection of the twigs, leaves and fruits blown off by the wind. The classic book of the Dai people, Tusi Jingyan (The Chief's Warnings), once warned "not to cut the tress or building houses on the Long mountains, otherwise the ghosts, gods and Buddha will be offended". Various village rules are made to punish woods/tree cuttings, requiring the violator to plant seven new trees and offer two chickens and one jin of alcohol for every tree that is cut, or offer a big livestock like cattle and even get expelled from the village for serious offenses.



<Figure 2-6> Divine tree for sacrifice at Mangduo Natural Village, Gonglang Village Villagers' Commission, Weiyuan Town, Jinggu Dai and Yi Autonomous County

In addition, the Dai people also view tree planting as a very important undertaking. *Ficus altissima* trees are particularly regarded as divine trees in

many areas inhabited by the Dai people, and a ceremony shall be held when such trees are planted, while a Tree Planting Song shall be sung, which goes like this: "This is doing good deeds for the people, providing passers with shelter and praying for the blessings from the gods. The road gods, earth gods, do not panic, or misunderstand, for the pure trees are planted along the village and by the wells. Planting trees is to build virtues and pray for peace. Peaceful trees, grow, grow fast at the nurturing of the dews, grow strong cuddled by sunshine." The importance attached to planting trees shows the respect that the Dai people have for nature as well.

4.2.2. Ecological protection of Buddhist values for universal equality

The Theravada Buddhism which the Dai people believe in views all lives to be equal, and regards humans to be equal to, not superior to, all things in the universe. Humans shall therefore respect and live in peace with nature. Theravada Buddhism believes that humans live in the cycles of death and life, and therefore, prohibits killings while requiring people to watch their language and behaviors, and live in equality with everything in nature.

Generally speaking, the religion exercises its divine force to limit the human damages on nature and strikes awe into the hearts of people who attempt to hag trees and kill animals, which has objectively preserved nature and shows the Dai people's ecological natural values in religious rites.

4.3. Traditional living and working style of Dai people

4.3.1. Site and layout of villages

Most of the Dai villages are close to the mountains, water and woods, with rivers in front and flat land alongside. According to the 80-year-old Dao Wenjun of Manfen Village, Mengman Town, Mengla County, the Dai people choose the sites of their villages near woods in order to collect water from the woods and protect against flooding with the woods, to be close to rivers for washing, to have sunshine in order to expel the coldness of the mist, to have trees for sheltering, roads to connect to other villages and land to grow rice. The ancient scroll of the Dai, History of the Village God and Meng God, also mentions that the Dai people would choose a parcel of forest with high trees to be their protection god and a place where the village and Meng gods live. The village is then built on the flat terrain close to the parcel.

Inside the Dai villages, the core, gates, Long woods, buildings and temples are distributed in a planned fashion. Being the soul and the life of the village, the village core is usually located at the heart of the village, with huge rocks and trees as the mark. There are usually four village gates made up of one crossbar tied on two stakes located at the four roads leading out of the village. Situated mostly alongside the main road of the village, the village fane is where the villagers worship the spirits and gods, while the Buddhist temple is usually located at the end of the village. The Long woods are mostly scattered at the periphery of the village. Such a layout provides a space for peaceful coexistence between not only humans and nature, but also the gods and ghosts.

4.3.2. Bamboo-made Dai buildings

The bamboo buildings are the most characteristic folk architecture of the Dai people. Living in a subtropical region with humid climate, hot and rainy weather, and flush woods, the Dai people leverage the abundant bamboo resources to build their homes since bamboos will not erode even after being soaked for a long time in the water, and are therefore very suitable for the local climate. The homes are entirely made of bamboos, including the columns, girders, floors, doors and windows. Such an architectural feature is both easy to repair and can protect against earthquakes.

The bamboo buildings of the Dai people usually stand alone with a bamboo-fenced yard to grow fruits, while the place outside the yard is planted with trees or dug into fish ponds as a natural barrier with the outside, creating a peaceful landscape with the surrounding environment. Of stilt style, these buildings feature short, herringbone-shaped ridge of double-eaved roof structure that could both shade from the sun and drain the frequent rain from the roof. The bamboo buildings are usually of two floors, with the upper floor for humans and the lower one for livestock and sundries. The lower floor facilitates ventilating, expelling the dampness, keeping the building dry and preventing the attacks from floods, besides protecting from the snakes and beasts. There are two rooms on the upper floor, the inner one being the bedroom or “Huangnuan” as is natively called, and the outer one being “Nahuang” or the living room that features a stove for cooking, warming and treating guests. The rooms are also separated by bamboos to allow the wind to go through the clearances in the bamboos and cool off. Outside the living room, there are expansive balcony and porch used to store tools and do housework.

Due to the socioeconomic growth and initiative for environmental protection, the traditional bamboo-made buildings are rarely seen now/these days, and they have been replaced by wood, brick and concrete-made houses whose building materials are mostly purchased from outside. The traditional two-floor stilt style and double-eaved roof structure are, however, still maintained.

4.3.3. Development of Dai people's agricultural activities

a. Philosophy of natural farming

Historically, the Dai people have focused on farming, with a long history of rice farming tradition. Based on long-term practices, the Dai people have created a unique farming culture in which humans are in fine tune with the natural settings. Such a cultural system derives from the agricultural philosophy of the Dai people who are dependent on nature, respectful of nature and follow the natural laws, and show strong natural farming awareness. Such awareness is mainly shown in the following aspects:

- i) No fertilizers: In their long history of rice farming, the Dai people would not use any fertilizers. They farm in the following ways: ① the Dai people had enough land, a small population and good natural conditions, thus sufficient grains, before the democratic reform; ② take Xishuangbanna for instance, people used to harvest once every year before growing the double-harvest rice, so that the land would have a long time to recover; and during this period, farmers would drive swine and cattle into the field not only to feed the livestock but also fertilize the land with their manure. The frogs and earthworms in the earth also help improve the soil structure;

③ in addition, farmers will drive their cattle into the field after harvesting the rice to trample the straws and roots which, together with the cattle's manure, turn into fertilizer. Such a popular practice is employed by the Dai people to enhance the fertility of the field; and ④ mostly located at a flat terrain higher than the water field, the Dai villages often had no toilets in the past, so the human manure would be washed into the field with the rains, thus enhancing fertility of the field as well.

- ii) Transplanted seedlings: "Transplanting" is a characteristic way of farming among the Dai people, in which the seedlings are planted in the field for about 20 days before official planting, and then relocated to larger paddy fields after removing the fiber and pointy leaves. Such a practice could make the seedlings stronger against drought, grow bigger and yield more, and represents the Dai people's wisdom of adjusting to nature. The areas where the Dai people live, such as Xishuangbanna, usually feature distinguished rainy and dry seasons, and the planting season coincides with the dry season, therefore, prompting the application of "transplanting" since most of the fields do not yet have water in such seasons. The seedlings would have to be transplanted after the natural conditions allow so.
- iii) Response to diseases and pests: The Dai people generally refrain from using pesticides to control pests or diseases, but instead use natural forces to control. The Dai areas used to have such a scene a couple of months after the rice seedlings had been planted prior to the 1960s: women carried dozens of little ducks in baskets to the fields, and then let the ducks roam the fields while they did their farming work until evening when they carried the ducks home again. The Dai people mainly resort to the natural

enemies and the ducks to eliminate the pests, and would scatter the plant ash or skins of the “Sanya fruits” in the fields when there is large-scale pest menace.

b. Impacts of modern economy on the Dai agriculture

More and more the Dai people began to grow double-harvest rice since the 1950s-1970s, so the rest period for the field shortened. And, as forests became damaged, natural fertilizers for the fields got reduced, so the Dai people also began to use fertilizers and pesticides. But, generally under the support of the party policies, the Dai people built irrigation works, reclaimed land, expanded the farm size and founded farming cooperatives. Scientific and technological tools, such as seed selection, farming machinery and professional guidance, are applied on the basis of the “natural farming” philosophy to improve the yield. Multiple crops like coffee and nuts are introduced as well. Agricultural industrialization platforms are built to supplement and enrich farming.

A very obvious problem is happening in the Dai region however; that is, the growing of rubber trees is exerting direct impacts on farming. The Dai region began to grow rubber trees since the 1950s~1960s due to the strategic need of national economic development, and the farming size expanded afterwards under the encouragement of the national and regional governments. The size in Xishuangbanna, for instance, grew to 1.33 million mu by 1990. The Dai people realized the huge economic benefits brought by the rubber in the process and continued to expand the growing size under the force of interests. By 2011, the Xishuangbanna prefecture was growing 4.3106 million mu of rubber, and harvesting 2.2 million mu, and the rubber sector contributed significantly to the local fiscal revenue. Due to the high economic yield for rubber growing that

also consumes more labor force, people cut back on rice farming. At present, many the Dai people in Xishuangbanna are leasing their paddy fields to nonlocal people to grow bananas, while they themselves focus on the rubber. The rubber trees are also replacing the natural ecological communities and completely reshaping the local ecological conditions and microclimate.

Such transformation of farming style has also exerted impacts on the living style of the Dai people. When rice growing was the main focus, there were abundant herbs and wild vegetables in the forests for people to collect, and the Dai people always had a piece of land by their yard, some as big as 5 or 6 mu, to grow vegetables. Now however, there are fewer and fewer vegetables available in the woods and people have to go farther to collect. The land used to grow vegetables near the house is also reduced by a significant extent.

4.3.4. Management of water resource

We would automatically think of water whenever the Dai group is mentioned, since it is a group closely related to water. A series of village rules and regulations for water management were developed very early in the development history of the Dai.

a. Well management

The Dai people are extremely particular about water hygiene. Although their houses are built along the rivers, they get their drinking water from the wells which are found in nearly every village. Their wells are generally built at the end of the villages, mostly at the entrance of the mountain bamboo forest, or the place with abundant woods. One or several big *Ficus hookeriana* trees are

located by the wells, so as to prevent human or animal contamination of the water.

The Dai people follow strict procedures to dig a well. They first dig a sample well, then observe for one year to learn the changes of water quality through the four seasons, and eventually ask a well-respected senior or an experienced person to taste and determine whether to build the well officially after confirming the quality. The wells are fenced to prevent livestock from approaching the water. In addition, an exquisite, mirror-inlaid lid is built over the well to hold off wild birds and beasts. Drinking water and washing water are usually separated. A shared water fetching tool, such as a wooden long-handle holder or a wooden water holder tied onto a long bamboo pole, is provided so that the water will not be contaminated by individual family's water buckets. Moreover, the village forbids women washing clothes or vegetables by the well, men feeding livestock water by the well, or kids playing near it.

Besides, the wells are usually managed by special personnel, generally the village chief who shall clean the well, and remove the wastes by the well, and the bugs and lichen in the well.

The foregoing facts show the respect and protection the Dai people offer for water. Although some Dai villages now have access to tap water as their living conditions improve, and water can no longer be dug out in some areas using the traditional method due to the drop of water level, the Dai people have kept their attitude of treasuring water. Wells are still the main source of water in some remote the Dai villages. In villages fully equipped with modern water facilities, wells are also kept for people to fetch water for laundry and as a traditional legacy of water preservation. Certain villages have preserved their wells as a kind of tourism resource to call on tourists to cherish water.

b. Irrigation management

The traditional saying, “it takes a thousand channels to build the Meng”, fully demonstrates the importance of irrigation works. Given the close relationship between rice and water, the Dai people have historically attached significant value to the development of irrigation works, and developed an intact, sophisticated irrigation system that encompasses the irrigation management system, channel development and water sharing regimes.

- i) Irrigation management system: A case in point, Xishuangbanna developed a sophisticated irrigation management hierarchy early in history, in which personnel were dedicated to irrigation management in the directly reigned Xuanwei and Gemeng, and down to the “Houxi” and villages. In addition, every channel featured a “Banmenlong” (irrigation officer in charge) and “Banmennan” (deputy irrigation officer in charge) to manage the water affairs in the area where the channel provided irrigation. In every village where the channel passed through, there was a “Banmenman” (irrigation officer) that managed the water affairs of the respective village and reported to the officers and deputy officers in charge. Two irrigation officers will be selected, usually from the starting and end villages of the channel, to coordinate the work of the officers and deputy officers in charge and ensure justice. They are mainly responsible for mobilizing, monitoring channel development, checking the channels, portioning the water and maintaining water regulations.

As new circumstances arise with the development of reservoirs, a new set of vertical management systems has been developed now, with prefectures and cities having their irrigation bureaus and towns (townships)

with their irrigation management stations. The Menghan Town, for example, has set up two offices to manage and maintain reservoirs and channels, respectively. Meanwhile, each administrative village, natural village and village group has its dedicated irrigation management officer to manage the irrigation work and report to their superior leadership, thus forming a vertical management system.

- ii) Channel construction: Each year, the regional council will give orders for remodeling and building channels and then send inspectors to consult with the chiefs of each village, mobilize the villagers and dispatch the tasks to each village and family. Once a channel is finished, a worshipping ceremony will be held and water will be released to test the quality of the channel completed. A bamboo raft is usually placed in the channel to flow with the water and wherever it is blocked, the place is not built as required and so has to be rebuilt with punishment. Sometimes, a bundle of grass is used instead in the same manner. Both easy and convenient, such a way of testing is drawn according to the experience they summoned living in such natural environment, and performs well in testing the angularity and flatness of the channels.
- iii) Water sharing regime: Due to the varying distance of the farming fields from the channels and their differing heights, a unique water sharing regime is developed through a long period of practice to share the water in a fair way. Generally, the irrigation management officer will calculate the amount of water needed for each parcel of field according to the amount, distance and height of the fields each family owns, and then place a water controlling device, a piece of wood with different openings, a bamboo canister or bamboo sections with varying openings, at the joint

between the channel and the fields. The Dai people have also created a wooden taper-shaped water sharing tool that is thick at the top and thin at the bottom, with size declining according to the degrees (Jin, Liang, Fen and Li) carved on it, such as Jin above 50 Na (12.5Mu), Liang at 30 Na and Qian at 20 Na. The irrigation management officer will share the water strictly in accordance with the water sharing tool. Any violation will be punished. Today, with the development of modern irrigation facilities, the channels and water sharing methods are more convenient and modern, although the general philosophy remains the same.

4.3.5. Water-splashing Festival

Viewed as the New Year by the Dai people, the water-splashing festival marks one of the most important traditional festivals for the Dai, generally held for 3~4 days in the middle of June of the Dai calendar. As an event to pray for blessings and dispel calamities, the water-splashing festival carries certain cultural significance. In Xishuangbanna, the first day of the festival is called the "Grain Day", equivalent to the New Year's Eve, to send off the old. On this day, people would clean up their houses, prepare food, and the young people would dress up early in the morning, go to the mountains to pick flowers and fetch water to clean the temple, otherwise known as "to bathe the Buddha". Once the temple is cleaned, people begin splashing water and wishing each other happiness and peace. The second day of the festival is called an "empty day", a day belonging neither to the previous year, nor to the new year. The third day is called "Maipayawanma" or the New Year's Day, the first day of the next year. According to the legend, the spirits carry the new calendar to

the world on this day, hence the name “the Dawn of the King of Days.”

Along with the development of folk-custom tourism in recent years, the Dai region is also developing festive folk-custom tourism. On each water-splashing festival, for instance, many tourists would flock here from home and abroad to share the joys with the Dai people. The festival is accompanied by various other events like bag throwing, dragon boat racing, elephant feet dance, peacock dance and flying lanterns among others to express people’s wishes for a beautiful life.

4.3.6. Dai medicine

The Dai medicine is one of the ancient traditional medicines in China. For survival and racial reproduction, the Dai people have accumulated invaluable medical knowledge in their thousands years of development, productive practice and in the process of fighting with diseases. According to "Pattra leaf records, the Dai medicine has 2,500 years of history.

The formation and development of the Dai medicine can be summarized as the following three points: first, in their daily life and production, the Dai people gradually understand the relationships between man and nature, accumulate experiences on plants, animals, minerals and so on, and gradually categorize them in line with their respective utility and odor through the process of practice - understanding - re-practice - re-thinking; meanwhile, in order to adapt to the harsh climate, the ancestor of the Dai people often cook plants or animal organs which are able to dispel winter cold and summer heat, plants or animal organs with prophylactic utility as medical tea and drink it. Step by step, they learned about basic health knowledge, and later on, the knowledge is widely spread

and deeply rooted in the masses of the Dai people. Second, the Dai medicine also incorporates a portion of traditional Chinese herbal medicine theory and knowledge. Third, ancient Indian medical theoretical knowledge is introduced in the Dai society through the spread of Theravada Buddhism, and gradually integrates into the Dai medicine, which results in a unique Dai medicine with distinctive ethnical and local characteristics.

The Dai medicine takes full advantage of surrounding flora and fauna, forming unique drug experience. As most of the areas the Dai people resided are tropical and subtropical rainforest climate with perennial high weather and frequent rain, there are abundant plants resources, much of which can be used as medicine due to the well-protected natural vegetation.

Plants used in the Dai medicine includes: Magahehan, Majing, Maman and so on. In the medicine book "Danlanyueyangdang" of "Pattra leaf records", thousands of prescription are recorded, the medicinal herbs most in use include various animal skin, bone, hair, muscle, brain, blood; flower, grass, bark, root, juice, pip, even mushroom grow in the forest, while white ant eggs, scoliid slough, and some of the minerals (such as borax) are useful medicines in treating fracture, rheumatism, paralysis, diarrhea, convulsion and various inflammation. In Dehong, the second largest residence area of the Dai people, the folk medicinal plants, animals and minerals most in use are up to 600 species. The ways the Dai medicine use the medicine include : smash the medicine and drink the juice or apply the juice externally; or simmer the medicine then drink it; or dry the medicine under the sun, then grind the medicine as powder, use the powder of medicine to compound pills and creams; or apply the medicine for suffocating in combination with bath, together with acupuncture, massage and other therapies.

Although the Dai medicine has its own fundamental theories on physiology and pathology, the development of the Dai medicine, like all other medicinal systems of ethnic minorities in China, is inseparable from the impact of "witchcraft" while the Dai people cannot completely escape the control of harsh natural environment, and while medicine cannot effectively treat various diseases. For instance, there is a folk convention that divining has to be performed first, followed by doctor's diagnoses and medication.

4.3.7. Firewood planting

In order to meet the demand of wood in daily life, the Dai people plant firewood forest with conscious in addition to the holy dragon forest and grave forest. Although there is lush forest in the subtropical regions where the Dai people resided, they never conduct deforestation, even they would like to plant a fast-growing tree species *Cassia siamea* in the courtyard or around the village as the fuel for daily life and production.

The Dai people collect seeds of *Cassia siamea* during March and April each year; when rainy season comes in May and June, they sow the seeds into burned slope land or intercrop with dry land crops; the slope land they selected is generally abut on village for easy transportation. The *Cassia siamea* can grow up to around 1 meter within that very year; there will be a weeding once a year. Within 4 or 5 years, when the tree would be around 15 meters high and the trunk diameter around 10~15 cm, the Dai people will log the tree for the first time; they will cut the trunk and branches as fuel and leave a 1 meter high stump. The left stump can sprout up to 3~5 new branches within that very year, and within 3 years, the tree can grow up to 8~10 meters high with

5~8 cm thick in trunk diameter; then people can harvest the wood for the second time; by this analogy, the tree can be harvested once every three years for more than 100 years. The yield (of wood) of this type of artificial forest can reach up to 50 cubic meters / ha (yield of every three years).

The combustion of this fuel wood is good and the average annual fuel wood consumption of the local rural population is only 1~1.5 cubic meters; thus, 0.1 hectare of *Cassia siamea* can meet the fuel wood consumption demand of one person for 1 year.

4.3.8. Funeral convention

Each Dai village has a "grave forest", which is the place for burying the deceased. The Dai people believe that the grave forest is the abode of the ghost, so the trees of the forest is strictly protected. People are not allowed to walk around at will or do logging, therefore, the forest is very lush. This helps modulate the climate and protect the environment objectively.

Although the Dai people mainly practice burial, they did not built cemetery/mounds; they only built a small mound surrounded by bamboo fences. The Dai people believe that people are born of nature and will return to nature; a few years later, the mound would disappear, and you will see green meadow and lush mountain rather than graves.

4.3.9. Diet convention

The Dai diet has very distinctive ethnic and geographical characteristics which adapt to their environment. The Dai diet understands and utilizes the attributes of surrounding flora and fauna and incorporates these knowledge into their daily

diet, which helps overcome the hot and humid climate. This shows their active utilization of nature and can be manifested as following:

a. Bamboo tube rice

The Dai people take sticky rice as their staple food; they develop the way of cooking sticky rice in the bamboo tube in accordance with their environment. They first open one end of a bamboo tube, fill it with rice and water, and then jam the open end of the bamboo tube with fresh leaves; finally, the stuffed bamboo tube is grilled over fire until the surface of the bamboo tube turns black. The bamboo tube rice is served after people gash the bamboo tube and take the rice out. The Dai people used to have bamboo tube rice when they do some time-consuming business, such as working in the farm or visiting friends.

b. Sour flavor

The Dai people like to eat sour food, and the most common sour foods for them include the following: sour pickles, bamboo shoots pickle, common flowering quince fruit(Fructus Chaenomelis), tree tomato, lemon, etc. Sour food not only helps dispel the summer heat, but also promotes sterilization and digestion in subtropical area.

c. Hot flavor

The Dai people favor fresh chili, and they will add some chili when they cook various dishes. Fresh chili helps expel sweat, cool human body and resist moisture in hot humid weather.

d. Bitter flavor

The most distinctive bitter dish is the so-called “sa-pie”, one of the most favorite dishes in the Dai society. In the Dai language, “sa” means sour salad, and “sa-pie”, together means a mixture of un-digested forage dross, gastric juice and bile (of cattle) left in the small intestine (of cattle), which is close to the stomach (of cattle). In addition, the Dai people also eat bitter gourd, bitter bamboo shoots etc. They believe that bitter food can relieve internal and external heat.

e. Spicy condiments

Condiments is a very important part of the Dai diet. There are big coriander, small coriander, *Nepeta cataria*, spicery grass, lemongrass, mint, etc. In addition, the Dai people also eat *Houttuynia cordata* Thunb, with the medical effect of relieving internal heat or fever.



<Figure 2-7> Dai's traditional food

f. Special Food

Insects and insect eggs, such as bamboo worm, pupae, ant eggs, etc. are also very much favored by the Dai people, as these foods are good protein supplement.

4.3.10. Technics of Dai Brocade

The Dai brocade is a kind of folk arts and crafts that has been handed down to this very day among the Dai people. There are cotton brocade and silk brocade. The Dai brocade is an ancient handmade textile craft, and its pattern design is done by skilled textile techniques; most of the Dai brocade is monochromatic textile. It depends on latitudinal thread to form pattern, and the intertexture of pattern is very rigorous. Usually, the Dai women tie the pattern plate with lots of strings, and then start weaving with hand and foot. This procedures are repeated step by step, and then, beautiful Dai brocade is finalized. Early in the Tang and Song dynasties, the Dai people who lived in Xishuangbanna area already mastered the spinning and weaving technology which use of ceiba as the raw material. During the Hongwu (1368~1398 A.D) and Wanli(1573~1620 A.D) regime of Ming Dynasty, the Dai people were able to weave "silk curtain" and "velvet brocade" as a tribute.

The Dai brocade is famous for its sophisticated skill, unique design, gorgeous color as well as solid and durable quality. There are a variety of exotic patterns, rare animals, flower and geometric patterns and so on. The colors and decorative patterns have a specific meaning; red and green colors are for commemorating their ancestors, while peacock design symbolizes good luck, and elephant design symbolizes good harvest and so on.

But the development of the Dai brocade is also confronted by the impact of modern textile industry, as many locals are now used to buying ready-made textile products. The Dai brocade is very narrow with generally 40-60 cm breadth due to the limit of traditional processing skill; therefore, it is usually used for making scarves and decorations only, as it is difficult to develop the Dai brocade for other purposes, and cannot meet the needs of modern market and life. And the production of the Dai brocade is a time-consuming work; it takes 3 days to weave a scarf, which can be sold at mere 50 Yuan, which greatly discourages the enthusiasm of the weaver. The market is not prosperous with low profit, thus many young people do not want to learn the skills; nowadays, fewer and fewer people know how to weave the Dai brocade. This historic, handmade Dai brocade is facing possible extinction. In 2008, the Dai brocade technique was approved by the State Council to be included in the second batch of the national intangible cultural heritage list, which brought new development opportunity for it. Meanwhile, the local government is also actively investing in promoting the protection and development of the Dai brocade; for instance, Xishuangbanna prefecture culture center opened training courses in Manluandian village (it is named as the Dai brocade village by Xishuangbanna prefecture) for teaching the Dai brocade techniques. Several outstanding and influential artists with expertise in the Dai brocade, such as Yu Jinhai and Yu Eshuai, were invited as teacher to teach the Dai brocade techniques. Young people who are interested in are accepted without any charge, and both the trainers and the trainees can receive subsidies as compensation for their farming.

Today, the Dai brocade techniques have been developed and improved on the basis of respecting the tradition, in addition to the Dai skirt, bag, bed sheet, quilt cover, curtain and towels. The Dai brocade is also used for making screen,

cushions and other articles. However, we should pay enough attention to the protection of the traditional Dai brocade skill.

4.4. Summary

The Dai people have believed for generations that human is a product of nature, and people depend on nature to survive. The Dai people worship forest and water, as forests and water are the source of life. The "holy dragon forest" worship, "water" worship, other natural worship, and Buddhism belief of the Dai people, as well as various taboos that originate from the above worships make the Dai people hold the attitude of both respect and awe towards nature. This attitude runs through the people's production and life, such as the village construction, housing, the pattern of villages and houses, well construction, irrigation, diet and many other aspects; in this way, a coexistence between man and nature is formed, which promotes the protection of the natural environment. Currently, the emergence of various problems, such as sharp drop in forest areas, water pollution, etc., under the context of social development challenge how we can make harmonious inosculation of our production, life and nature. Although there are continuous impacts of foreign culture and economic development, the Dai people keep constant innovation of their production and life, as they inosculate traditional experience of practice and modern science. The combination of experience and science make the Dai people maintain balance with nature in the process of maintaining tradition and adapting to the modern society and adhering to sustainable development.

| 제3장 · 국문 요약 및 결론 |

1. 개요

가. 운남성 농촌지역 소수민족의 사회·경제적 현황

1) 농촌지역의 특징

운남성 농촌지역은 대부분 국경지역의 산악지대로 2010년 중국정부의 조사 결과에 따르면 총 인구 4,610만 명 중 1/3이 소수민족이며, 운남성의 관할 구역은 16개의 구와 자치구, 29개의 소수민족 자치구와 지방자치단체로 구성되어 있다. 각 소수민족은 각기 다른 지역에서 거주하며, 서로 상이한 경작 방법과 거주형식을 보유하고 있으며 높은 생물다양성과 더불어 중국내에서 다양한 문화를 형성하고 있는 지역이다.

2). 사회·경제적 발전 현황

운남성 지역은 정부의 지속적인 지원으로 절대 빈곤층은 감소하였으나, 중국 전체와 비교하였을 때 평균 이하의 경제력을 보유하고 있으며, 운남성 전체적인 경제 상황과 비교하였을 때, 소수민족의 경제력은 현저히 낮은 상황이다.

운남성 지역은 중국 내에서도 운남성 외의 타 지역으로 인구 유출이 적은 지역이나 소수민족들이 경제적인 빈곤에 의하여 운남성의 타 지역으로의 유출이 심해지는 상황이고, 운남성 전체 지역과 비교하였을 때 소수민족 자치구역의 평균 GDP가 3,292元 낮으며 반면 수입을 농업에 의존하는 비율은 소수민족 자치구역이 높은 상황이다.

중국 정부의 「제11차 5개년 계획」의 시행 중 운남성 소수민족 자치구의 산림자원이 많이 사라지게 되었고, 이로 인하여 소수민족의 경제적인 빈곤이 가중되었다.

〈Table 3-1〉 운남성 및 운남성 소수민족 자치구의 사회·경제적 현황 및 환경 개발
상황 비교

Indicator	Yunnan			Yunnan autonomous region of ethnic minority		
	2006	2010	2010 to 2006 increase (%)	2006	2010	2010 to 2006 increase (%)
The population of ethnic minority (10thousand)	4,483.0	4,601.6	2.6	2,228.4	2,260.1	1.4
The total population (10thousand)	1,518.4	1,533.7	1.0	1,229.5	1,255.1	2.0
The average GDP (Yuan/person)	8,937.5	15,698.0	75.6	6,866.7	12,406.2	80.7
The average net income by farmer (Yuan/person)	2,251.0	4,026.0	78.9	1,920.0	3,501.0	82.3
The cover rate of forest (%)	49.9	47.5	-4.8	56.3	62.1	10.3

Source: 《The Year Statistic Book 2007 in Yunnan》 and 《The Year Statistic Book 2011 in Yunnan》

3) 운남성 지역 환경보호 현황

운남성 전체 녹지의 비율은 지속적으로 감소하였으나 운남성 자치구 내의 소수민족 거주 지역은 계속해서 증가하였다. 「제11차 5개년 계획」 기간 동안 산업발전을 목표로 한 무분별한 벌채와 지역개발로 인하여 환경 훼손이 심각한 상황이다.

나. 운남성 전통생활방식 내 환경보전과 발전의 관계 분석

과거에 시행되었던 중국 정부의 개간 사업으로 인하여 삼림파괴와 그와는 반대

되는 현재의 녹지보전을 위한 토지 폐쇄 등의 정책 시행으로 전통적인 방식의 농업을 위한 토지가 감소하여 소수민족의 빈곤 악화되는 상황이 발생하였다. 특히 1990년대 담배 재배를 위한 무분별한 벌채 시행하여 산사태, 기근 등의 자연재해가 발생하였고 이로 인한 소수민족의 빈곤 악화 가중되었으며, 높은 문맹률로 인한 전통 농업과 정부 정책의 조화를 이루기 위한 교육의 어려움과 인구의 지속적인 증가로 인한 토지 부족 및 빈곤이 가중되었다.

다. 운남성 농촌지역 생태친화적 전통생활방식 현황

1) 식용 및 약용식물의 활용

가) 식용식물

운남성은 생물다양성의 보고로 105종류의 숲에서 17,000종의 수목이 서식하며 이 중 식용식물은 8가지 군으로 소수민족은 1,000여 종의 식용 작물을 활용한다.

나) 약용식물

운남성의 소수민족은 약 3,000종 정도의 약용 작물을 재배하여 활용하며, 장(Zhuang)족, 이(Yi)족, 다이(Dai)족, 묘족은 중국 소수민족 4대 전통의약을 대표하며 이외의 소수민족들도 각각 약초를 이용한 의술과 약재술을 발달시켜 왔다. 특히 중국 정부는 운남성 고산지대의 약초를 중요한 농업 산업 품목으로 육성하기 위한 정책을 시행중이다.

2) 신성한 숲, 신성한 나무에 대한 경배와 숲의 보전

운남성 소수민족은 주변의 나무와 숲을 신성시며, 각기 그 명칭은 다르지만 주변의 자연을 신성시 한다는 공통점이 존재한다. 신성한 숲, 나무는 각각 ① 마을의 수호자, ② 신성의 발현 또는 그 영역, ③ 조상의 매장지로서의 기능과 의미를 지닌다. 각 소수민족은 각기 다른 숭배 방식과 의식, 금기사항 등을 숭배한다.

3) 화전경작

운남성 산악 지역에 정착한 몇몇 소수민족들이 사용하던 경작방법으로 운남성 지방자치단체가 자연 숲 보호 프로젝트를 실시하여(1998), 경사 25도 이상의 훼손된 농토를 숲으로 조성하고 경사 25도 이상의 지역에서 화전 농업을 금지하였다.

4) 농촌지역의 재생에너지 활용

운남성은 지형의 96%가 산지이고, 인구의 3/5가 산악지대 거주함에 따라 주요 에너지원으로 나무를 이용한다. 인구증가 및 경제개발로 인한 삼림 훼손과 대기오염 증가로 인하여 중국 정부는 환경보전을 위하여 바이오가스 연료와 빨감 절약형 난로, 태양열 온수난로 사용을 권장하며, 특히 다이(Dai)족은 농지 주변에 철목 숲을 조성하여 빨감으로 사용한다.

5) 생태친화적 전통생활방식 내에서 지속가능한 발전을 위한 요소들

가) 가치

운남성 소수민족은 자연에 대한 종교적인 믿음을 부여하고 숭배하며 물질 지상주의가 만연한 21세기에 자연과 인간의 공존 측면에서 실질적인 의미를 부여한다.

나) 시장의 발견

운남성의 94%는 고산지대이고, 전체 토지 중에 경사 15도 미만 지형 22%, 경사 15도이상 25도 미만인 지형은 38%, 경사 25도 이상인 지형이 40%를 차지하므로 작물의 경작에만 생활을 의존하는 것 보다는 농업, 수렵, 가축의 사육 등이 결합된 생산 방식의 선택이 불가피하다. 이러한 노동력의 분화가 이루어지지 않는 생산구조로 인하여 비교우위 및 규모의 경제 실현에 대한 현실적인 어려움이 있다.

다) 인구 증가

운남성은 저고도의 기후, 문순기수, 산악지역의 기후가 혼합된 형태의 기후로 인하여 작물의 재배 시 적응성을 우선으로 하고, 작물도 각 고도의 기후에 맞는 여러 변종 품종을 재배한다. 이러한 생산방식은 인구 증가에 따른 수요의 증가에 적합하지 않아 소수민족의 인구 증가가 이루어짐에 따라 생산성이 높은 단일작물을 재배하는 방식의 경작으로 대체되었다. 하지만 단일품종의 대량재배 형식으로 경작방법이 변화하면서 전통적인 방식의 경작방법이 점차 소멸되어 가고 있는 상황이다.

2. 사례연구

가. 이(Yi)족의 생태친화적 개념과 전통생활방식

1) 이족 현황

이족은 중국내에서도 가장 오래된 소수민족 중 하나로 2010년 중국 정부의 조사 자료에 따르면 8,714,393명으로 중국 전체 인구의 0.6538%를 차지한다. 이족은 주로 산허리 부근에 군락을 형성하고 거주한다.

가) 전통의학

이족은 장(Zhuang)족, 다이(Dai)족, 묘족과 함께 중국 소수민족 4대 전통의약을 대표하는 전통지식을 보유하고 있으며, 생활공간 주변의 식물자원으로부터 추출한 약용성분에 대한 풍부한 지식을 보유하고 있다.

871가지의 처방전을 보유하고, 47가지의 꽃을 이용한 약, 128가지의 과일을 이용한 약, 48가지의 나무껍질을 이용한 약, 23가지의 균류를 이용한 약, 37가지의 식물 기생생물을 이용한 약, 27가지의 식물 수지를 이용한 약, 44가지의 식용식물을 이용한 약에 관한 전통지식을 보유 및 활용하고 있다.

나) 생산활동

이족의 주요 생산 활동은 농업이며, 경작방법은 화전 경작법을 사용한다. 이족의 화전 경작법은 ① Slash, ② Burn, ③ Sowing, ④ Harvest의 4단계로 구성되어 있으며, 토양의 재생능력을 높이기 위해 검은 모래를 농토에 뿌려 이 모래가 풍화 작용에 의하여 토양 안으로 스며들도록 하여 토양의 질을 높이고 생산성을 늘린다.

이족의 농부들은 모기를 관찰하여 수로의 활용을 결정하며 이는 주변의 생물들을 관찰함으로써 기후를 예측하여 이를 농사에 활용하는 Phenology(생물기후학)을 전통적으로 활용하는 것이다.

다) 생태적 개념

이족은 나무를 신성시하고 나무를 헤칠 경우 벌을 받는다는 가장 기본적인 개념에 의해 자연자원을 보전한다. 특히 숲, 물 등을 각자 다른 신으로 신성시하며 자연과 조화를 이루는 생활방식을 추구한다.

2) 이(Yi)족의 생태계보전

이족은 주요 거주 공간인 산허리의 폐쇄성으로 인하여 주변 동·식물의 성장, 번식 등의 기간에 구분을 두어 생활공간 주변의 생물다양성 보전과 훼손된 숲의 회복을 가능하도록 주변 생태계를 보전한다.

3) 이(Yi)족의 생활상

이족의 상징은 횃불이며 공동체 내의 행사와 장식 등에 횃불을 사용한다.

이족의 전통의상은 검은색으로 대표되며 이것은 이족과 자연환경의 관계와 밀접한 관련이 있는데, 생활지역인 고도 2,000m 지역의 산에서는 약 5%의 토지만인 분지이며 산 곳곳에 산발적으로 분포하여 녹색과 검은색의 전통의상을 입으며 “검은색”이 주변 자연환경에 대한 이족의 개념을 구현한다는 믿음을 보유하고

있다.

이족의 토템은 호랑이이며, 동물들로부터 용기를 얻고 호랑이에 대한 숭배의 의미로 의복에 호랑이 무늬를 사용한다.



〈Figure 3-1〉 이(Yi)족의 의복

4) 결론

이족의 친환경적인 생활방식은 종교적인 믿음에 기초를 두고 있으며, 현재도 지속적으로 유지되고 있으나 이러한 생활방식은 현대의 생산방식이나 경제적인 구조에는 적합하지 않다. 따라서 장기적인 관점에서 이족이 지속적인 발전을 이루기 위해서는 친환경적인 생산방식과 생활방식이 지역경제를 발전시킬 수 있어야 하며, 이를 위하여 이족 사람들의 경제발전과 친환경적 생활방식의 유지 및 자연보전에 대한 개념이 변화하여야 한다. 이러한 개념의 변화를 통하여 지역 경제가 우선 발전해야 하며 이를 통하여 축적된 부를 이용하여 다시 주변 환경을 보전하는 전략을 추구한다.

나. 백(Bai)족의 생태적 개념과 전통생활방식

1) 백족 현황

백족은 중국 남서부의 국경지역에 거주하는 소수민족으로 2010년 중국 정부의 조사 결과에 의하면 1,933,510명의 백족이 중국에 거주하며, 백족의 90% 이상이 농업에 종사한다.

백족은 자연과의 조화를 추구하며 자연을 따르고, 보호하며, 주변 모든 사물에 친절함을 베푸는 것이 환경에 대한 기본개념이고, 이는 의복과 음식, 주거 공간, 농업 활동 등에 녹아 있으며 이를 통하여 숲의 생태계와 수자원의 보전을 추구한다.

2) 백족 주거방식

백족의 전통적인 주거형태는 “三坊一照壁”, “四合五井天”, “两房一耳”이며, 이는 3면의 생활공간과 1면의 벽으로 구성되어 있는 건축 양식이다. 백족은 소수민족 중 가장 먼저 한족의 문화를 받아들인 민족으로 이러한 건축 양식은 11개 민족의 문화가 융합된 건축양식이며, 백족의 건물 외관 장식은 친환경적인 생활방식의 영향을 반영한다.

3) 백족 농업방식

백족은 자연에 대한 숭배를 바탕으로 하는 개념에 따라 농업과 생산 활동을 진행하였으며 자연의 생산물과 동·식물, 수자원을 관리한다.

4) 백족의 친환경적 전통 생산방식

백족은 의복의 염색을 위하여 전통적으로 흘치기염색법(Tie-dye Process)를 사용하였으며, *Baphicacanthus cusia* (Acanthaceae)의 잎, *Isatis*

tinctoria(Radix isatidis(대청))의 뿌리를 주로 사용한다. 과거에는 *Isatis tinctoria*의 뿌리를 자연에서 채취하여 얻는 것으로 사용하였으나 최근에 홀치기 염색을 산업화하여 *Isatis tinctoria*를 산에서 재배하여 사용한다. 홀치기염색으로 제작되는 제품은 대부분 수작업으로 이루어지며 백족 거주 지역에서 가내수공업 형태의 소형 공장 등에서 주로 생산한다.



〈Figure 3-2〉 홀치기염색 상품

5) 결론

백족의 자연을 보호하는 생태적인 개념은 백족 사람들의 행동에 영향을 미쳤고, 환경에 적응하고 자원을 활용하며 지속가능한 발전에 유용한 생활방식 및 생산방식을 형성하였다. 하지만 현재 외부 문화의 유입으로 인하여 전통적인 생활방식이 점차 사라지고 백족의 생활방식이 변화하고 있지만 백족 과거의 생태적인 개념은 현재까지 백족의 의식에 큰 영향을 미치고 있으며, 상그리라 지역과 마찬가지로 전통적인 생활방식과 주변 환경을 활용한 관광 상품의 개발을 통하여 지역 경제를 발전시키고 이를 통한 자연 보호를 추구하기 위한 노력 진행중이다.

다. 나시(Naxi)족의 생태적 개념과 전통생활방식

1) 나시족의 경제·사회적 발전 현황

나시족은 평균 고도가 5,000m, 높게는 6,000m인 산악지역에 거주하며 보통 고도 2,700m 지역에 거주지를 구성하여 거주한다. 나시족의 거주지역인 고도 2,700m 지역은 독특한 지형으로 구성되어 있으며, 이 지형으로 인하여 기후와 식생, 토양 등의 주변 환경에 영향을 미치고 춥고, 따뜻하고, 더운 세 가지의 기후대가 존재한다.

2000년에 중국정부가 실시한 조사에 따르면 중국내의 나시족은 308,839명이며 주로 운남성의 북서부에 거주하고 대부분이 리장 지역에 거주한다.

나시족 대부분은 농업에 종사하며, 리장 지역 인구의 85%가 농업에 종사하는 걸로 조사되었고, 가축 사육도 주요 경제 활동이다.

과거 나시족의 구리 수공업품과 가죽 제품은 매우 발달하였고, 고대 리장 지역의 "Zangke"라는 도시에서 티벳, 인도와 무역을 진행하였고 이는 운남-시츄-티벳 지역의 무역거래 관계를 구성하였다. 1950년대 이전에 리장 지역의 나시족은 90% 이상이 농업에 종사하였으며, 토양에 따라 경작지를 4가지 유형으로 구분하여 윤작을 하였고, 고도가 높은 지역에서는 화전을 진행하는 등 농업의 발전을 이루었다. 하지만 1950년대 '문화혁명' 이후 개인 무역상들은 권리를 상실하고 국가가 관리하는 무역만 허가하였고, 1949년 현 중국정부가 탄생한 이후로 리장 지역에서 산업을 위한 국가 주도의 목재 벌채가 이루어졌고 이에 따라 나시족이 숲에서 이탈하는 상황 발생하였다.

2) 나시족의 생태적 관점과 전통생활방식

나시족은 인간과 자연은 이복형제라는 믿음을 가지고 있으며 이것은 나시족의 종교적 생태적 개념의 근본이다.



〈Figure 3-3〉 자연신 “Shu” 에 대한 숭배

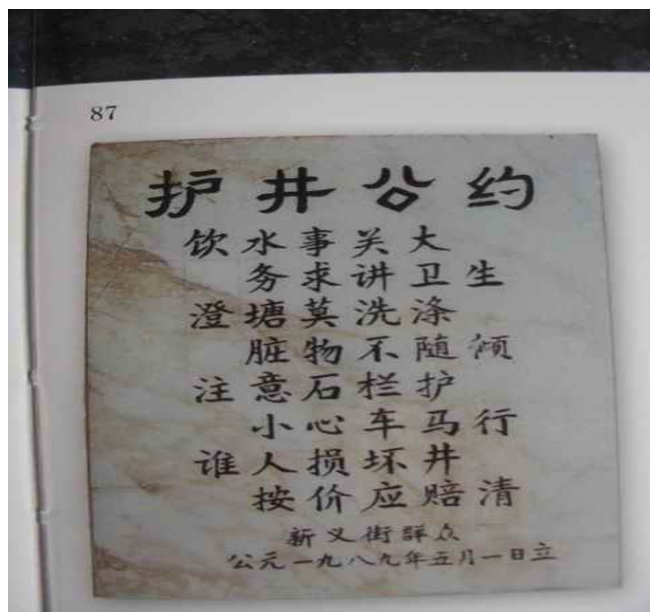
나시족은 ‘동파(Dongba)’ 라 불리는 종교를 믿으며 샤먼에 의해 전해지며 동파는 원시종교의 무당으로 세습되고 애니미즘, 영혼불멸, 조상숭배 등을 믿는다. 나시족의 생태계 보호에 관한 관습은 인간과 자연이 이복형제라는 신화에서 시작되며, 이것은 인간과 자연의 공존을 의미한다.

나시족은 도덕적인 기준에 의해 제시되는 전통적 관습법에 의해 자연을 대하고 특히 리장 지역의 나시족은 숲과 나무 그리고 물의 관리에 있어 특별한 관리인을 두는 것은 아니지만 장로회와 같은 지역별 기구를 조직하여 운영한다. 나시족은 자연자원을 도시공동체와 지역 규범을 통해 관리하고, 나시족 부모들은 자식들에게 자연을 훼손하는 어떠한 행동도 하지 않도록 교육하며 이러한 생태계에 대한

개념을 통하여 나시족이 가장 많이 모여 있는 리장 지역은 아름다운 경관을 보유하고 있다.



〈Figure 3-4〉 리장의 고대도시 “Pearl spring”



〈Figure 3-5〉 “민속 규정 및 규칙” 에 따른 나시족의 우물 관리

3) 나시족 생태친화적 전통생활방식에 영향을 주는 요인들

가) 급격한 인구증가

베이징 대학의 환경과학 연구진에 의하면, 1949~2001년에 이루어진 리장 지역의 생태발자국 모델(ecological footprint model)에 따르면 2001년의 생태발자국(ecological footprint)은 1949년에 비하여 4.6배 증가하였고 이것은 잉여 생태계가 급격하게 변화한 것을 의미하고 생태계가 압박을 받는 것을 의미 - 현재 상태의 개발을 지속할 경우 생태계가 받는 압박은 2015년까지 증가할 것으로 예상되며 이 경우 환경이 수용할 수 있는 인당 지속가능한 개발 능력을 초과할 것으로 예상되었다.

나) 전통지식의 소멸

과거에 사용되던 생태계보호를 위한 전통지식이 현대의 과학적 생태계 보호 방법과 결합되어 사라져 가고 있다.

다) 산업 발전을 위한 프로젝트의 증가

나시족이 집중적으로 모여 사는 Jinshajiang 강 유역은 수자원이 풍부한 지역으로 이 지역의 수자원을 활용하기 위한 프로젝트들이 다수 시행 또는 시행 예정으로 이는 생태계 보전에 영향을 미친다.

4) 결론

대부분의 나시족은 생물다양성과 수자원이 풍부한 리장 지역에 밀집해 거주하고 있으므로 이 지역을 보호해야할 책임이 나시족에게 있다는 인식을 향상시켜야 하며, 국가의 지원을 적극적으로 요구하여 생태적인 계획 구축 및 보호에 효과적인 방법을 모색해야 한다.

라. 다이(Dai)족의 친환경적 전통생활방식

1) 현황

다이족은 2010년 중국정부에서 시행한 조사에서 1,261,311명이 운남성에 거주하는 것으로 조사. 다이족은 고도 500~1,300m 지역에서 주로 거주하며 이 지역은 연평균 21도의 기온을 유지. 다이족은 남방 불교를 믿으며 이를 반영하여 농업, 수자원의 이용, 건축물, 약재와 자원의 개발, 그리고 음식까지 친환경적인 생활방식을 유지하고 있다.

2) 다이족의 쌀 경작에 있어서 생태적 철학

다이족은 오랜 역사에 걸쳐 쌀을 경작하였으며, 이러한 경험을 통하여 자연과 공존하는 방법을 터득하였다. 다이족은 자연의 모든 것이 상호관계로 연결되어있다고 믿으며, 물은 나무에 땅은 물에 곡물은 땅에 인간은 곡물에 의존하며 다시 땅은 산에 의존한다는 생태계 사슬의 개념, 모든 사물은 평등하며 자연의 그 가치를 스스로 창조한다는 개념, 마지막으로 생태계 가치에서 인간은 나무, 물 등의 자연물질의 뒤에서 생존한다는 개념을 바탕으로 자연과 공존한다.

3) 종교적 금기 하에서 생태적 보전

“긴(Long) 숲과 나무의 보전: 다이족은 나무, 쌀, 하늘, 땅, 물, 바위, 마을 그리고 집 등 모든 것은 영혼을 가지고 있다고 믿으며 다이족의 언어로 “Long”은 숲을 의미하며 “Long Forest”는 신이 사는 숲을 의미한다. “Long Forest”에 사는 모든 나무에는 각각 영혼이 있어 나무에 오르거나 벌목하는 것은 금지한다.

4) 다이족의 전통생활방식

가) 건축양식

다이족은 과거에 건축물에 대나무를 많이 활용하였으며 대나무 담장을 세우고

뜰 안에 연못을 설치하거나 물고기를 말리는 용도로 활용하였으나 최근에는 환경 보호 개념의 성장으로 인하여 대나무를 활용한 건축물이 드물어졌다.

나) 농업

다이족은 과거부터 농사를 주요 생업으로 하였으며 특히 쌀이 주요 경작물이었다. 전통적인 경작방식에서 다이족은 쌀농사에 거름을 전혀 사용하지 않으며 씨를 미리 뿌려 20일 정도 성장시켜 옮겨 심는 “이앙법”을 사용하였다.

다이족은 농사를 지을 때 해충이나 질병을 제어하기 위해 농약을 사용하는 것을 자제하였다.

다) 수자원 관리

다이족은 강을 따라 마을을 구성하며 마을 인근에 우물을 설치하여 식수로 사용하였고, 보통 우물은 마을 건설 마지막에 설치하며 산의 초입에 있는 대나무 숲 입구나 숲 근처에 설치하였다.

‘시수양반나’ 지역의 다이족은 농사와 관계된 관개에 관한 전통지식을 일찍이 터득하여 사용하였고, 독자적인 달력을 활용하며 이 달력은 계절을 봄, 여름, 겨울의 세 계절로 구분하며 다이족의 중요한 축제 중에 하나로 6월 중순경에 3~4일 동안 물 뿌리기 축제를 하며, 이 때 물을 맞으면 행운이 온다고 믿었다.

라) 의학

다이족의 의학 관련 지식은 중국내에서 가장 고대의 전통적인 지식으로 2,500년의 역사를 지닌 것으로 알려져 있다. 다이족의 의학에 대한 지식은 ① 일상생활에 밀접한 생산물, ② 중국의 전통 한방의학이론과의 융합, ③ 고대인의 의학 관련 지식은 남방불교의 전파와 함께 다이족에게 흡수되었으며 변형되었다는 세 가지 내용으로 요약할 수 있다.

마) 연료

다이족은 일상 생활에 사용하는 땔감을 얻기 위하여 땔감 나무숲을 따로 구성하여 이곳에서 땔감을 채취하여 사용한다. 땔감숲의 나무는 4~5년을 기른 후 나무의 키가 15m, 두께가 10~15cm 이상인 나무를 땔감으로 사용한다.

바) 장례 및 식생활

다이족은 사람은 자연에서 태어나고 자연으로 돌아간다는 개념을 가지고 있으며 장례는 매장이나 지위에 따른 묘자리를 구분하여 사용한다.

식생활의 경우 다이족이 거주하는 지역의 덥고 습한 기후를 이겨낼 수 있도록 죽통밥, 신맛, 매운맛, 쓴맛, 매운 양념 등을 활용하는 전통음식을 바탕으로 구성되며 대나무 벌레의 알, 개미의 알 등은 다이족 사람들이 좋아하는 단백질 공급원이다.



〈Figure 3-6〉 다이족의 전통음식

사) 직조기술

다이족은 전통적인 양단(Brocade) 기술을 보유하고 있으며 이는 정교한 기술과 독특한 문양(희귀 동물, 꽃, 기하학적 모양), 아름다운 색상과 단단하고 튼튼한 특징을 보유하고 있으나 현대적인 직물 산업의 영향을 받아 이를 활용한 제품이나 전통기술 보유자들이 점차 사라져 가는 상황이다.

5) 결론

다이족은 사람은 자연의 생산물이며, 사람이 생존하기 위해서는 자연에 의지해야 한다는 개념을 바탕으로 생활하며 숲과 물이 생명의 근원이라 여기며 경배한다.

“성스러운 용의 숲”, 물, 다른 자연에 대한 경배 등으로 인하여 다이족은 많은 금기가 있으며 이 금기들은 다이족의 생산방식, 건축방식, 주거, 우물 건설, 관개 등에 영향을 미치고 주변 환경보전을 촉진한다.

현대 문물의 도입으로 전통생활 방식을 유지하고 환경을 보전하는데 많은 문제가 발생하지만 과거 전통지식을 바탕으로 하는 경험과 과학의 결합은 다이족 사람들이 전통을 유지하고 현대 과학에 적응해 가는 동안 자연과 공존에 균형을 유지할 수 있도록 하고 지속가능한 발전을 가능하도록 한다.

| 참고 문헌 |

| 중문 자료 |

- 罗鹏, 裴盛基, 许建初. 云南的圣境及其在环境和生物多样性保护中的意义. 山地学报, 2001, (8).
- 邱道持. 西部地区人地关系与西部大开发. 重庆大学学报(社会科学版), 2001, (3).
- 祝怀新. 环境教育的理论与实践. 北京:中国环境科学出版社, 2005.
- 陈开琦, 唐军. 我国自然资源法律保护问题研究. 社会科学研究, 2007, (6).
- 廖国强. 朴素而深邃:南方少数民族生态伦理观探析. 广西民族学院学报(哲学社会科学版), 2006, (3).
- 朱慧贤, 高昆谊. 云南民族文化与生物多样性的保护探析. 商场现代化, 2008, (5).
- 管彦波. 云南稻作源流史. 北京:民族出版社, 2005.
- 陈永香. 论彝族的土地祭祀. 民间文化, 2000, (Z2).
- 杨士杰. 论云南少数民族的生产方式与生态保护. 云南民族大学学报(哲学社会科学版), 2006, (9).
- 吴兆录. 西双版纳勐养自然保护区布朗族龙山传统的生态研究. 生态学杂志, 1997, (3).
- 邹莉, 谢宗强, 欧晓昆. 云南省香格里拉大峡谷藏族神山在自然保护中的意义. 生物多样性, 2005, (1).
- 郭家骥. 云南少数民族的生态文化与可持续发展. 云南社会科学, 2001, (4).
- 郑晓云. 傣族的水文化与可持续发展. 思想战线, 2005, (6).
- 桑才让. 藏族传统的生态观与藏区生态保护和建设. 中央民族大学学报(哲学社会科学版), 2003, (1).
- 李祥福, 杨迎潮. 论哈尼族生态观的特色及嬗变. 昆明理工大学学报(社会科学版), 2007, (10).
- 臧国书, 李艳萍. 论罗平布依族禁忌习俗中的生态功能. 曲靖师范学院学报, 2004, (2).
- 董怀平. 佤族传统生态观的当代解读. 思想战线, 2006, (6).
- 段士林. 佤族节日文化保护与开发的思考. 云南师范大学学报, 2006, (2).
- 杨立新, 赵燕强, 裴盛基. 纳西族东巴文化与生物多样性保护. 林业调查规划, 2008, (4).
- 罗剑. 论现代化进程对民族传统文化的景响——织金县茶店乡红艳村布依族传统文化调查. 贵

- 州社会科学, 2007, (12).
- 王玉波. 中国社会生活方式转型取向. 社会学研究, 1995, (4).
- 王彦斌, 钱宁. 现代化过程中西部贫困地区少数民族的生活方式——对云南几个少数民族村寨的调查分析. 云南行政学院学报, 2004, (2).
- 毛佑全. 哈尼族崇土心态透视. 农业文化研究, 2006, (9)
- 张玲, 胡孔峰, 杨静. 浅谈民族文化教育削弱对校园文化的影响及对策. 信阳农业高等专科学校学报, 1996, (9).
- 陈瑜. 西部地区人口素质对生态环境的影响. 人口与经济, 2001, (10).
- 刘新有, 史正涛, 唐姣艳. 民族文化变迁对生态环境保护的影响——以云南为例. 生态经济, 2007, (5).
- 蒋颖荣, 李湘云, 李本书. 云南少数民族地区生态危机的伦理思考. 云南师范大学(哲学社会科学版), 2005, (5).
- 孔令锋, 黄乾. 科学发展观视角下的中国可持续发展阶段性与政府作用. 社会科学研究, 2007, (2).
- 殷国禹. 哲学视野中的云南文化. 昆明: 云南民族出版社, 2006.
- 周鸿. 人类生态学. 北京: 高等教育出版社, 2001.
- 王民. 环境意识及测评方法研究. 北京: 中国环境科学出版社, 1999.
- 张羽. 白马雪山自然保护区生物多样性及其保护对策. 林业调查规划, 2002, (3).
- 于贵忠. 贵州少数民族地区环境保护法律问题. 贵州社会科学, 2007, (3).
- 马志荣, 朱玲. 西部民族地区人口、资源、环境与社会协调发展. 西部文丛, 2004, (8).
- 张树安. 科学发展观与民族地区人口可持续发展——以云南地区为例. 经济问题探索, 2006, (9).
- 王希恩. 论中国少数民族传统文化现状及其走向. 民族研究, 2000, (6).
- 杜万平. 完善西部区域生态补偿机制的建议. 中国人口·资源与环境, 2001, (3).
- 何颖. 从传统到现代: 西南民族地区社会文化变迁的规律. 学术论坛, 2006, (10).
- 王凤. 公众参与环保行为机理研究. 北京: 中国环境科学出版社, 2008.
- 吴治荣. 发展普洱绿色生态经济. 云南科技管理, 2008, (3).
- 张晓丽. 论我国生态经济发展的路径. 商业现代化, 2008, (7).

- 朱慧贤. 生态农业视野中的新平花腰傣耕作方式评析——以水稻耕作方式为例. 安徽农业科学, 2008, (15).
- 许建初, 安迪, 钱洁主编:《中国西南民族社区资源管理的变化动态》, 2004年版
- 罗南疆, 赵希:高原情怀 大山精神 云南大跨越的精神坐标, 云南网, <http://www.yunnan.cn>, 2011.11.28.
- 石安州:现代化进程中少数民族传统知识的法律保护, 中国论文下载中心, <http://www.studa.net/faxuelilun/0801>, 2008.01.15.
- 李跃辉:云南传统知识直面商业化挑战, 云南知识产权网, 2009.8.3.
- 《新农村建设与生态环境保护》, 豆丁网, <http://www.docin.com/p-235001017.html>.
- 环保法修订工作深入推进 建绿色GDP指标体系, 全球节能环保网, <http://www.gesep.com>, 2012.5.31.
- 施本植:《云南应率先实行“绿GDP”核算模式》, 云南网, <http://www.yunnan.cn>, 2010.03.04.
- 王金南, 於方, 蒋洪强, 邹首民, 过孝民:《建立中国绿色GDP核算体系:机遇 挑战与对策》, 《环境经济》, 2005.5.
- 《彝族简史》编写组.彝族简史.云南人民出版社, 1987年版.
- 中国科学院民族研究所, 云南少数民族社会历史调查组编.彝族简史.1963年.
- 李廷良.宇宙人文论初探.昆明:云南人民出版社, 1993年版.
- 李云峰, 李子贤, 杨甫旺.[梅葛]的文化学解读.云南大学出版社, 2007年版.
- 李本书.民族生态伦理观念的批判与重建.北京大学学报(社会科学版), 2005, (3):55-59.
- 郭家骥.云南少数民族的生态文化与可持续发展.云南社会科学, 2001, (4) : 51-56.
- 王明东.彝族生态文化探析.云南师范大学学报, 2002,34 (5) : 119-122.
- 张榆琴, 李学坤.从云南彝族的生态伦理看消费主义.经济研究导刊, 2012, (10) : 139-140.
- 杨甫旺, 伍茜溪.试论彝族原始宗教对生态保护的意义.楚雄师范学院学报, 2006,21 (5) : 29-33.
- 马建荣.论彝族择居的文化根源.楚雄师范学院学报, 2003,18 (2) : 51-53.
- 米吾作, 陈晓莉.试论彝族传统文化中的生态伦理理念.毕节学院学报, 2006, (6) : 22-26.
- 王俊.彝族原始宗教信仰中的生态伦理观研究——以楚雄州大姚县彝族原始宗教信仰田野调查

- 为例.毕节学院学报, 2009,27 (11) : 29-34.
- 马军.论彝族文化习俗中的生态经济观.生态经济, 2001, (8) : 79-81.
- 戴波, 蒙睿.云南彝族多样性图腾崇拜及生态学意义.云南师范大学学报, 2004,36 (5) : 12-16.
- 杞银凤.彝族利用乡土知识管理森林的经验——云南省楚雄州大姚县县华乡子米地村案例研究.林业与社会, 2003, (2) : 14-16.
- 张建, 肖国荣.彝族服饰的生态审美观.美术观察, 2011, (10) : 114.
- 王水乔.近代云南彝族社会经济发展不平衡性探析.思想战线, 2007,33 (4) : 133-134.
- 赖毅,严火其.彝族传统山地农作的生物多样性智慧研究.中国农史, 2009, (4) : 36-43.
- 江应樑:《傣族史》, 四川民族出版社, 1983年版.
- 《傣族简史》编写组, 《傣族简史》修订本编写组:《傣族简史》, 民族出版社, 2009年版.
- 艾菊红:《水之意蕴——傣族水文化研究》, 中国社会科学出版社, 2010年版°
- 高立士:《西双版纳傣族传统水利灌溉及其社会意义初探》, 云南民族学院学报(哲学社会科学版), 1994, (3) : 28-31.88.
- 郭家骥:《西双版纳傣族的水文化:传统与变迁——景洪市勐罕镇曼远村案例研究》, 民族研究, 2006 (2) : 57-65,109.
- 王文光, 方利敏:《傣族稻作文化中的宗教因素初探》, 云南师范大学学报(哲学社会科学版), 2006,38 (3) : 203-207.
- 刘亚朝:《德宏傣族民间的饮食文化》, 云南民族大学学报(哲学社会科学版), 2007,24 (5) : 54-58.
- 白兴发:傣族生态文化略述.思茅师范高等专科学校学报, 2003,19 (4) : 27-30.
- 阎莉:傣族“竜林”文化的生态意蕴.自然辩证法研究, 2011,27 (2) : 78-84.
- 廖国强:中国少数民族生态观对可持续发展的借鉴和启示.云南民族学院学报(哲学社会科学版), 2001,18 (5) : 160-164.
- 《白族简史》编写组:白族简史.云南人民出版社, 1988.
- 李缵绪, 杨应新:白族文化大观, 云南民族出版社, 1999.
- 《民族问题五种丛书》云南省编辑组:白族社会历史调查.昆明:云南人民出版社, 1983.
- 《民族问题五种丛书》云南省编辑组:白族社会历史调查.昆明:云南人民出版社, 1991°

- 段金录, 张锡禄.大理历代名碑.昆明:云南民族出版社, 2000.
- 张了, 张锡禄:鹤庆碑刻辑录., 大理:大理白族自治州南诏史研讨会, 2001
- 周钰华, 沈德坤:大理白族扎染服装生态性对中国发展生态服装的启示, 中国市场, 2010, (28) :143-144.
- 赵琛, 蒋群:清水出芙蓉——大理白族传统扎染艺术“以自然为本”的理念.美术大观, 2010, (9) :198.
- 王洪伟:扎染, 白族民俗的活化石.旅游, 2007, (7) :80-83.
- 高登荣:试析白族的居住文化, 云南民族学院学报(哲学社会科学版), 1993,54-57.
- 薛祖军:自然生态环境对白族地区民居建筑形式的影响.大理学院学报, 2004,3 (2) :5-7,13.
- 章虹宇:民俗与环保, 广西梧州师范高等专科学校学报, 2001,17 (1) :20-24.
- 章虹宇:白族地母节.民俗研究, 1990, (3) :53-54.
- 李福军:白族水崇拜与农耕文化, 云南师范大学学报, 2004,36 (4) :9-12.
- 管彦波:云南稻作农耕祭祀中所反映出来的各种神灵观念.贵州民族研究, 2004, (4) :98-107.
- 李艳君:碑刻中的白族习惯法.大理学院学报, 2011,10 (7) :56-61.
- 杨士杰:论云南少数民族的生产方式与生态保护.云南民族大学学报(哲学社会科学版), 2006,23 (5) :119-122.
- 何燕霞:白族本主崇拜中的和谐观.重庆科技学院学报(社会科学版), 2010 (14) :119-121.
- 何燕霞:白族本主崇拜中和谐思想的现代启示. 重庆科技学院学报(社会科学版), 2010 (5) :33-35.
- 李本书:善待自然:少数民族伦理的生态意蕴.北京师范大学学报(社会科学版), 2005(4):89-95.
- 杨宗亮.云南壮族的自然崇拜及其对生态保护的意义.民族文化研究, 2005,22 (2) :53-56.
- 邹绿柳, 刀志灵, 龙春林.滇东南壮族社区森林资源管理分析.植物资源与环境学报, 2009,18 (1) :67-73.
- 龙符.云南壮族的“牛崇拜”与“牛图腾”文化.文山师范高等专科学校学报, 2009,22 (3) :

19-23.

龙纪峰, 安勇.滇东南壮族传统服饰的艺术特征.文山学院学报, 2010,23 (2) : 11-16.

赵时俊, 王明富.云南文山壮族原生宗教探析.文山师范高等专科学校学报, 2009,22 (4) : 32-35.

何正廷.壮族的“竜”崇拜及其“天人合一”的生态文化. 文山师范高等专科学校学报,2005,18(3):201-205.

王柏灿.壮族饮食文化与壮族医药.中国民族民间医药杂志, 2004, (5) .

孙敏娜.云南文山壮族背带的结构和式样.大众文艺, 2012, (17) .

| 영문 자료 |

Chinese Academy of Sciences Institute of Yunnan Minority Social History Research Group. 1963. A Brief History of the Yi.

Compiling group of "Bai". 1988. Brief history of the bai. Yunnan people's publishing house.

Dai Bo, Meng Rui. 2004. Totem Worship of Yi Nationality in Yunnan Diversity and Ecological Significance. Journal of Yunnan Normal University, 36(5): 12-16.

Duan Jinlu, Zhang Xilu. 2000. Ancient name tablet of Dali. Kunming: Yunnan Nationalities Publishing House.

"Five books" of ethnic problems by Yunnan Province group editor. 1983. The survey of social history of Bai. Kunming:Yunnan people's publishing house.

"Five books" of ethnic problems by Yunnan Province group editor. 1991. The survey of social history of Bai. Kunming:Yunnan people's publishing house.

Gao Dengrong. 1993. The analysis of the residential culture of bai , Yunnan national university journal(Philosophy and social sciences), 54-57.

Guan Yanbo. 2004. Various gods idea reflected in farming ritual in Yunnan. Ethnic Studies in Guizhou. 4: 98-107.

Guo Jiaji. 2001. Ecological Culture and the Sustainable Development of Yunnan Minority Nationalities. Social science in Yunnan, 4: 51-56.

He Yanxia. 2010. The concept of harmonious in worship of Benzhu of Bai. Journal of

- chongqing institute of technology (social science edition), 14: 119-121.
- He. 2010. The modern enlightenment of harmonious thought of worship of Benzhu. Journal of chongqing institute of technology (social science edition), 5: 33-35.
- Lai Yi, Yan Huoqi. 2009. Study on Biodiversity of Yi Nationality's Traditional Mountain Farming Wisdom. China's Agricultural History, 4: 36-43.
- Lee Zuanxu, Yang Yingxin. 1999. Bai culture observatory, Yunnan nationalities publishing house.
- Li Benshu. 2005. Be kind to nature: Ecological implications of Minority Ethics. Journal of Beijing normal university (social science edition), 4: 89-95.
- Li. 2005. Criticism and Reconstruction of Nationality Ecological Ethics. Journal of Peking University (Social Science Edition), 3: 55-59.
- Li Fujun. 2004. The water worship and farming culture of the Bai. Journal of Yunnan Normal University, 36(4): 9-12.
- Li Yanjun. 2011. Tombstone in the common law of the Bai. Journal of Dali University, 10(7):56-61.
- Li Yanliang. 1993. Discussion on Humanistic Theory of the Universe. Kunming: Yunnan People's Publishing House.
- Li Yunfeng and Li Zixian, Yang Fuwang. 2007. Cultural Interpretation. Yunnan University Press.
- Ma Jianrong. 2003. On the Cultural Root of Yi People's Choice of Domicile. Journal of Chuxiong Normal University, 18(2): 51-53.
- Ma Jun. 2001. Comment on Yi people's Cultural Practices of Ecological Economy Outlook. Ecological economics, 8: 79-81.
- Mi Wuzuo, Chen Xiaol. 2006. Discussion on the Ecological Ethics Idea of Yi Nationality's Traditional Culture. Journal of Bijie University, 6: 22-26.
- Mong Yang Fu, Wu Qian XI. 2006. On the Significance of Ecological Protection of Yi People's Primitive Religion. Journal of Chuxiong Normal University, 21(5): 29-33.
- Qi Yin feng. 2003. Yi Forest--the Experience of Using Indigenous Knowledge

- Management in Chuxiong Prefecture in Dayao County of Case study. *Forestry and Society*, 2: 14-16.
- The Yi. 1987. *A Brief History of Writing Groups: A Brief History of the Yi*. Yunnan People's Publishing House.
- Wang Hongwei. 2007. Tie-dye, Bai folk living fossil, tourism. 7: 80-83.
- Wang Junxue. 2009. On the Ecological Ethics in the Yi People's Primitive Religion - with Chuxiong Yi People's Primitive Religion in Dayao County Fieldwork as an Example. *Journal of Bijie University*, 27(11): 29-34.
- Wang Mingdong. 2002. Analysis on the Ecological Culture of the Yi Nationality. *Journal of Yunnan Normal University*, 34(5): 119-122.
- Wang Shuiqiao. 2007. The Modern Socio-economic Analysis on Unbalanced Development of the Yi Nationality in Yunnan. *The Ideological Front*, 33(4): 133-134.
- Xue Zujun. 2004. The influence of natural ecological environment on the style of Bai dwelling houses. *Journal of Dali University*, 3(2): 5-7, 13.
- Yang Shijie. theory of yunnan minority mode of production and ecological protection. *Journal of yunnan university for nationalities, Philosophy and social sciences*.
- Zhang Hongyu. 2001. Folk customs and environmental protection. *School Journal of Wuzhou Normal College in Guangxi*, 17(1): 20-24.
- Zhang Hongyu. 1990. The mother day of Bai. *Folklore Studies*, 3: 53-54.
- Zhang Jian, Xiao Guorong. 2011. Eco-aesthetic View of Yi Dress. *Art watch*, 2011, 10: 114.
- Zhang Yuqin and Li Xuekun. 2012. From the Eco-ethical Consumerism of the Yi Nationality in Yunnan. *Economic Research Guide*, (10): 139-140.
- Zhang, Zhang Xilu. 2001. Heqing inscriptions collection. Dali: Seminar in Nanzhao Bai Autonomous Dali history.
- Zhao Chen, Jiang Qun. 2010. Clear water gives lotus—the concept of Dali bai nationality traditional tie-dye art "in a natural for this". *Art theory*, (9) : 198.
- Zhou Yuhua ,Shen Dekun. 2010. Dali bai tie-dye ecosystem clothing enlightenment to

Chinese development ecological clothing. The Chinese market, (28) : 143-144.

〈부록〉

운남성 소수민족의 생태친화적
전통생활방식의 지속가능한
발전방안(Ⅱ) 중문보고서

| 第一章 · 导论 |

1. 徒論

一. 背景

云南省（简称滇）地处中国西南边陲°东西横跨864.9公里，南北纵距990公里，总面积39.4万平方公里，占全国总面积的4.1%，居全国第8位°全省山区°半山区面积占94%，坝区占6%，耕地面积4,200多万亩，人均占有耕地1亩左右，是多民族的边疆山区省°东面与贵州省°广西壮族自治区为邻，东北面以金沙江为界与四川省隔江相望，西北面紧靠西藏自治区；西面与缅甸接壤；南面和老挝°越南毗邻，边境线长4,060公里°其中，中缅边界1997公里，中老边界710公里，中越边界1,353公里°全省8个边境州市的25个边境县市，与3个邻国的6个省°邦32个县市°镇接壤，其中11个县市与邻国城镇隔江隔界相望°自古以来就是中国通向东南亚°南亚的门户，战略地位十分重要°

云南位于青藏高原南延地带°西部为横断山脉及其他山脉，东部属云贵高原，南部为中低山谷平地°全省地势西北高，东南低，形成明显的阶梯：滇西北的中甸海拔3,385米，滇中的昆明海拔1887米，滇南的河口海拔仅76.4米°在云南辽阔的山地和高原上，镶嵌着大小不一°形态各异的山间盆地，俗称“坝子”，有的成群成带分布；有的孤立分散；有的呈一定方向排列，成为城镇所在地及农业生产的主要基地°全省有1平方公里以上小坝子1440多个，其中100平方公里以上的坝子49个，面积最大的陆良坝子，面积达772平方公里°云南境内河川湖泊纵横，分属澜沧江°金沙江°怒江°红河°珠江°伊洛瓦底江等六大水系，共有河流600多条，加上40多个天然湖泊，构成了山岭纵横，水系交织，谷纵渊深，湖泊棋布的特色°湖泊主要有滇池°抚仙湖°杞麓湖°洱海°泸沽湖°程海°在滇西一带还散布有火山湖，如双海°青海；冰斗积水而成的有当珠湖°楚干错湖等°区域内地势°地貌°山脉

走向、河流分布等差异极大,构成了一个个复杂多样的生态环境。

云南是我国少数民族最多的省份。在中华民族大家庭的56个民族云南均有,居住在云南的少数民族人口占全国少数民族人口的13.54%。全省少数民族人口占总人口的33.53%。少数民族自治地方土地面积27.6万平方公里,占全省总土地面积的70.2%。全省人口在5,000人以上的少数民族有25个。其中,人口超过100万的民族有5个,即彝族、白族、哈尼族、傣族、壮族;人口超过10万不到100万的民族有9个,即苗族、傈僳族、回族、拉祜族、佤族、纳西族、瑶族、景颇族、藏族;人口超过1万不到10万的民族有8个,即布朗族、布依族、普米族、阿昌族、怒族、基诺族、德昂族、蒙古族;人口超过5,000人,不足1万人的民族有3个,即水族、满族、独龙族。此外还有佤族、土族、土家族、侗族等世居民族。少数民族分布随地理环境、地形地貌的变化,呈现各民族立体分布。各民族分布为大杂居与小聚居交错,以村寨为聚居点,也有少数村寨多民族杂居。人口较多的民族当中,多数人口相对集中在几个地区,少数人口分散在各地,全省没有单一的民族地、县。如彝族多数相对集中在楚雄彝族自治州、红河哈尼族彝族自治州的一些县,以及哀牢山、无量山和小凉山地区,其他分散在各地,全省绝大多数县都有彝族居住。藏族、怒族、傈僳族、独龙族、纳西族、普米族等主要分布在滇西北高原地区,白族主要分布在滇西地区,傣族、景颇族、拉祜族、布朗族、佤族等主要分布在滇西南地区,哈尼族主要分布在滇南地区,壮族、苗族、瑶族等主要分布在滇东南地区。

云南丰富多样的生态环境,造就了丰富、复杂的生物多样性,而生活于其中的云南各民族,为适应这种多样性,便创造和发展出了丰富多样生产生活方式,形成了与生态环境和生物多样性相互依存、紧密联系的民族文化多样性。正因为自然与文化在不同的空间、不同的区域内实现了相互依存、互相适应以至高度融合,才使云南的生态环境多样性、生物多样性和民族文化多样性资源得以持续发展数千年而延续至今。

从人地关系的角度看,少数民族地区只有吸收本民族在千百年实践基础上总结出来的人与自然界和谐发展、尊重自然的理念与知识,摒弃阻碍地区生物多样性不协

调的思想和行为，认识 and 了解当地的自然资源并遵循自然规律，严格控制人口增长，吸收外来先进文化，合理利用土地等自然资源，形成了环境友好型传统生产生活方式。

从可持续发展的角度看，尽管在工业化、现代化和城镇化浪潮的冲击和人口快速增长的压力下，少数民族追求经济利益，放弃传统民族文化与生态价值的倾向明显，云南各民族传统的生物多样性保护日趋淡化。但是，面向未来，在可持续发展成为全球共识，成为科学发展观和建设节约型社会指导思想的大背景下，云南少数民族对生物多样性保护必将与现代化科学技术相结合形成环境友好型生产生活方式，正在成为云南农村民族地区继续走可持续发展道路的关键，也是解决当前环境退化和全球环境问题的重要手段，值得总结和发展。

云南各个民族对环境和生物多样性保护所形成的民族信仰、传统认知和技术以及传统生产生活方式在当地环境与生物多样性的保护中具有十分重要的地位，是开展此课题研究的价值所在。

二. 研究目的和意义

不同的发展观有不同的发展目标、发展战略和发展道路，也会得到不同的发展结果。近代资本主义工业化过程中提出的单纯经济增长的片面发展观，结果造成了经济增长和环境、社会发展之间的紧张关系，造成产业结构、经济结构的畸形发展。本世纪60年代以来，西方工业发达国家面临着单纯经济增长的片面发展观带来的难以解决的能源、资源和环境问题，就开始探索新的发展观。直到80年代中期，才提出了经济、社会和环境协调发展的可持续发展观，较好地克服了经济发展与环境、社会发展之间的矛盾。

中国通过30多年来的改革和发展，十几亿人温饱问题得到了解决，并且初步达到小康水平。在新的发展阶段，对环境保护和扶贫开发提出了比温饱阶段更高的要求，过去那种不惜牺牲环境作为代价解决温饱问题的发展观念和政策，需要有相应的调整。为此，云南同全国一样，把科学发展观确定为经济社会环境可持续发展的

指导思想,用科学发展观指导环境保护和扶贫以及与扶贫相关的环境政策的制定和调整。科学发展观对环境保护提出的新要求是:环境保护不是为了保护而保护,而是以人为本,放在改善人的生产和生活环境质量的基础上开展环境保护工作。科学发展观对扶贫提出的要求是:可持续扶贫要建立良好的脱贫基础,扶贫项目应是对环境友好的可持续的扶贫。具体讲,科学发展观的核心是坚持可持续发展的理念,统筹人与自然和谐发展,处理好经济建设、人口增长与资源利用、生态环境保护的关系,推动全社会走上生产发展、生活富裕、生态良好的文明发展道路。

一是科学发展观尤其突出强调的是发展,发展经济、消除贫困是实现可持续发展的一项必不可少的条件,特别是对云南这样一个经济相对落后和生态环境相对脆弱的省份,发展尤为重要。贫困是导致生态恶化的根源,生态恶化又更加剧了贫困。只有发展才能为解决生态危机提供必要的物质基础,也才能最终摆脱贫困。

二是科学发展观实质上就是对发展做出理性的限制,不以牺牲后代的利益为代价来满足当代人的利益,并努力为子孙后代留下更大的发展空间和更多的发展机会。要求人们在做出各种发展抉择时,要有长远眼光和历史责任感,自觉约束和规范自身的行为,在努力实现经济发展的同时,确保人们长远的和整体的利益不受损害。可持续发展的重要标志是资源的永续利用和良好生态环境。对不可再生资源要尽力提高使用效率,减少浪费;对可再生的生物等资源,应在保护的基础上加以利用,是当前和未来产业主要的物质基础,同时,更重要的是依靠新科技,不断开辟新资源,使人类的物质生产有永续的资源保障。因此,保护好人类赖以生存与发展的自然环境与自然资源,防止环境的污染和生态的破坏,是云南持续发展的一项战略性任务。

三是科学发展观是一种全方位的发展观,它首先要求每一个人都能正确认识和对待人与自然的关系,用可持续发展的思想更新观念,规范自身的行为,改变以往的生产方式和消费方式,并使其成为普遍的、自觉的行动。因此,鼓励和引导贫困地区广大农民的参与,提供贫困人口获得自我发展的机会,并减缓贫困地区人口对资源和环境的压力,是有效实施可持续发展战略的基础和前提。

四是科学发展观始终把控制人口、节约资源、保护环境放在重要战略位置。在加强对我国人口多、人均资源少和环境保护压力大的国情意识的基础上，强化经济效益、社会效益和环境效益相统一的效益意识，强化节约资源、保护生态和资源循环利用的可持续发展意识。

科学发展观所要求的公平、协调、和谐发展，是云南环保与扶贫追求的目标，也是环境发展和扶贫协调发展的方向。

进入21世纪，中国政府提出全面建设小康社会的战略目标。全面建设小康社会提出了社会全面协调发展的要求，即小康社会不仅是经济发展和物质生活的提高，而是物质、政治、精神和生态共同发展的社会，体现在推动整个社会走上经济发展、生活富裕、生态良好的可持续发展道路。全面小康社会建设的一个重要特征就是生态环境得到改善。云南农村全面建成小康社会的根本所在是农村经济社会发展、人居环境优美和生态环境良好。没有生态环境良好状态的农村小康，不能称作全面的农村小康社会。生态文明建设是全面建设小康社会的重要内容。要树立保护生态环境就是保护生产力、改善生态环境就是发展生产力的思想，把生态环境建设放在更加突出的位置。这就要求云南省在建设小康社会过程中关注云南省的环境保护与扶贫问题。如何利用云南少数民族地区环境友好型传统生产生活方式形成的传统知识，使之成为保护生态环境和开发具有市场前景的特色农产品以及度假旅游体验旅游目的地，具有十分重要的现实和理论意义。

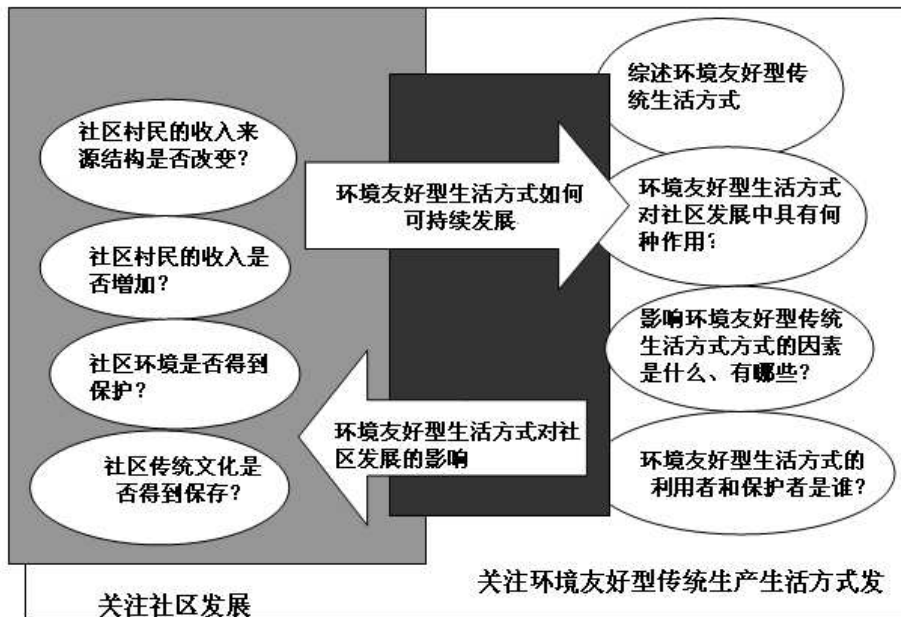
三. 研究方法

1) 研究框架

21世纪的头二十年是云南省社会整体富裕发展的新发展期，也是以和谐的方式发展社会经济和推动人口、资源和环境发展的极其重要的历史时期。在这一新的发展期，云南省的环保和扶贫均面临机遇和挑战。与此同时，也对云南省的社会经济和可持续发展的可持续发展提出了更高要求。

为了完成研究小组制定的这些任务：1) 综述云南省农村地区和少数民族的社会经济状况；2) 选择社区并且综述分析其传统生活方式和传统知识；3) 确认可持续资源利用和管理的制约条件，尤其是在农村地区，并且讨论有关可持续发展和促进农村地区福利事业的对策建议；指出促进云南少数民族环境友好型传统生活方式可持续发展的途径。本研究拟采用的研究框架如下所示（见图1）。

〈图 1-1〉“云南农村地区传统生产生活方式”研究框架



2) 研究方法

该研究涉及了自然科学、社会科学和经济学，除此之外还涉及以下的研究方法：

- ① 收集二手资料包括云南省少数民族自治县的统计数据和其他资料.
- ② 调查和回顾云南省少数民族的传统生产生活方式并且在传统生产生活方式的概念、模式和原则等框架下形成相应的指标、环境保护和传统的知识、少数民族文化方面展开研究. 本研究至少包含云南的哈尼族、藏族、布朗族、独龙族和纳西族的传统生活方式五个案例研究.
- ③ 运用视觉人类学方法记录云南的哈尼族、藏族、布朗族、独龙族、纳西族、彝族、傣族、白族、壮族等传统生活方式；设计以有关传统生活方式点的当地价值观、环境和文化取向为重点的调查问卷，并通过对调查问卷的分析建立监测少数民族社区传统生活方式演变的数据库.
- ④ 在被选取的具有传统生活方式表现的少数民族中运用参与式农村评估和跟踪评估研究方法. 拟采取与核心知情人面谈传统生活方式可持续发展的核心问题的方式，在这些少数民族社区中运用跟踪评估研究方法，科学选取不同的少数民族群体，定期核实其环境友好型传统生活方式的变化。本研究小组成员还将运用参与式农村评估分析环境友好型传统生活方式的可持续发展对社区发展和环境保护的影响。特别关注不同年龄段特别是老年男性和女性对环境友好型生产生活方式的看法.

四. 预期成果和推广应用

- 1) 该形成云南农村地区传统生活方式可持续发展的研究报告
- 2) 将云南少数民族传统生活方式在促进环境保护和社区发展方面的和谐道路传播和扩展到云南省甚至中国其他相关社区.

1. 云南生态环境多样性和生物多样性

一. 生态环境多样性

1) 地形地貌多样性

云南地处低纬度高原，地理位置特殊，地形极为复杂，全省整个地势西北高、东南低，从西北向东南倾斜，自北向南呈阶梯状逐级下降，大体上西北部是高山深谷的横断山区，属于青藏高原的南延部分，平均海拔在3,000米以上，东部是云贵高原，平均海拔在2,000米以上，南部和西南部地区，地势渐趋和缓，河谷开阔，一般海拔在800~1,000米，个别地区下降至500米以下，是云南省主要的热带、亚热带地区。海拔相差很大，最高点为滇藏交界的德钦县怒山山脉梅里雪山主峰卡格博峰，海拔6740m；最低点在与越南交界的河口县境内南溪河与红河汇合处，海拔仅76.4m。两地直线距离约900千米，高低相差6,000多米。全省从南到北，平均每千米海拔升高6米。这种复杂多样的自然地理条件，使云南拥有盆地、河谷、丘陵、山地、低山、中山、高山、高原等多种地形，拥有分布广泛的河谷地貌、喀斯特地貌，一定面积分布的冰川地貌、冰缘地貌、风化重力地貌，以及颇具观赏价值的火山、泉华、钙华、丹霞、石林、土林、砂林等多种特殊地貌⁶³⁾。

2) 气候多样性

云南气候资源丰富，独具“低纬高原气候”特色，是我国光辐射资源最丰富和日照时间较长区域，云南省气候资源分别属于北热带、南亚热带、中亚热带、北亚热带、南温带、中温带、高原气候等7个气候类型区，基本特点是年温差小、日温差大，干湿季节分明，气温随地势高低呈垂直变化异常明显。除河谷地带和南部低海拔少数地区外，大部份地区夏无酷暑，最热月平均气温20~25℃；省内除北部少数高寒山区外，多数地区冬无严寒，最冷月平均气温大多在8~10℃以上。在高山峡谷区，从谷底到山顶，由于海拔上升而产生“一山分四季、十里不同天”的气候差异，适宜多种植物的生长。

63) 云南省环境保护局编：《云南省生态环境现状调查研究》，云南科技出版社2004年版，第7页。

3) 水文多样性

云南有大小河流 600余条, 分属伊洛瓦底江、怒江、澜沧江、金沙江、红河、珠江等 6大水系。云南还是国内著名的淡水湖泊区, 有大小淡水湖泊 40多个。此外, 还有“潭”“箐”“塘”等泉水上千个, 大小瀑布500多处。云南地处长江、珠江、红河、怒江、澜沧江和伊洛瓦底江等六大国际国内水系的源头或上游, 是全国乃至东南亚地区的重要生态屏障, 处于全国生态功能区划中的“水源涵养功能区”的核心区、“土壤保持生态功能区”的重点区域和“生物多样性保护生态功能区”的关键区。

4) 土壤多样性

云南土壤类型丰富多样, 共有7个土纲, 14个亚纲, 18个土类, 35个亚类, 占全国土类的30%。地带性土壤中以砖红壤、红壤系列的土类为主, 占全省土壤面积的56.4%, 故云南有“红土高原”“红土地”之称。土壤垂直分布明显, 并有水平地带与垂直地带交错分布的现象。大部分土壤的光、热、水条件较好, 为植被多样性提供了适宜的土壤资源。在干热河谷和高寒山区, 由于光、热、水诸因子配合不协调, 常成为发挥土壤潜力的制约因素, 但经改造后可利用⁶⁴⁾。

二. 生物多样性

云南特殊的地理位置和气候条件, 造就了云南具有丰富的生物多样性资源, 几乎集中了从热带、亚热带至温带甚至寒带的所有品种。云南享有“植物王国”“动物王国”“香料王国”“花卉之乡”“药物宝库”和“生物资源基因库”等美称。全国约3万种高等植物中, 云南有274科、2,076属、1.7万种, 热带、亚热带的高等植物约1万种, 中草药2000多种, 香料植物69科, 约400种, 有2100多种观赏植物, 其中花卉植物1500种以上, 森林面积27,265.9万亩, 占林地面积的73.41% (居全国第3

64) 云南省环境保护局编:《云南省生态环境现状调查研究》, 云南科技出版社2004年版, 第10页。

位)，森林覆盖率52.93%，比全国高1倍多；全省活立木总蓄积量17.12亿m³，居全国第2位。拥有脊椎动物1737种，昆虫1.3万种，分别占全国种数的58.9%和52%。脊椎动物中鸟类有793种，兽类300种，鱼类366种，爬行类143种，两栖类102种，分别占全国的63.7%、51.1%、45.7%、37.6%、46.4%。鱼类中有5科40属249种为云南特有。鸟兽类中有46种为国家一级保护动物，154种为二级保护动物。药用植物、食用植物等种质资源极其丰富，分别达5,000种和400种。

云南是中国四大重点林区之一，全省共有自然保护区162个，其中国家级自然保护区16个，省级自然保护区44个。自然保护区面积295.56万公顷，其中国家级自然保护区面积14.27万公顷，省级自然保护区面积88.31万公顷。

2. 云南的少数民族分布及农业生产系统特点

云南省5000人以上的世居少数民族25个，其中，与境外同一民族毗邻而居的少数民族16个，特有少数民族15个，人口较少民族8个。根据2010年全国第六次人口普查数据，云南省总人口为4610万人，其中，少数民族人口1533.7万人，占总人口的33.37%，是全国世居少数民族最多的省份之一。云南省有8个民族自治州、29个民族自治县，民族自治地方共有78个县（市），国土面积占云南省总面积的70.2%，人口占云南省总人口的49.3%，还先后建立了197个民族乡（现有149个），是全国民族自治地方最多的省份。云南省有8个边境州（市），其中5个是民族自治州。少数民族人口最多的三个民族是彝族、哈尼族和白族，分别占全省总人口的10.9%、3.5%和3.4%（见表1）。

云南有25个边境县（市），其中22个是民族自治县或民族自治地方县（市）。2010年，边境县（市）总人口664.13万人，占云南省总人口的14.45%，其中少数民族人口388.52万人，占边境县总人口的58.5%，占云南省少数民族人口的25.33%。2010年，云南省少数民族人口比例占30%以上的建制村有6,999个，辖68490个自然村，总人口1,577.59万人，其中少数民族人口1,210.56万人，占总人口的76.74%。

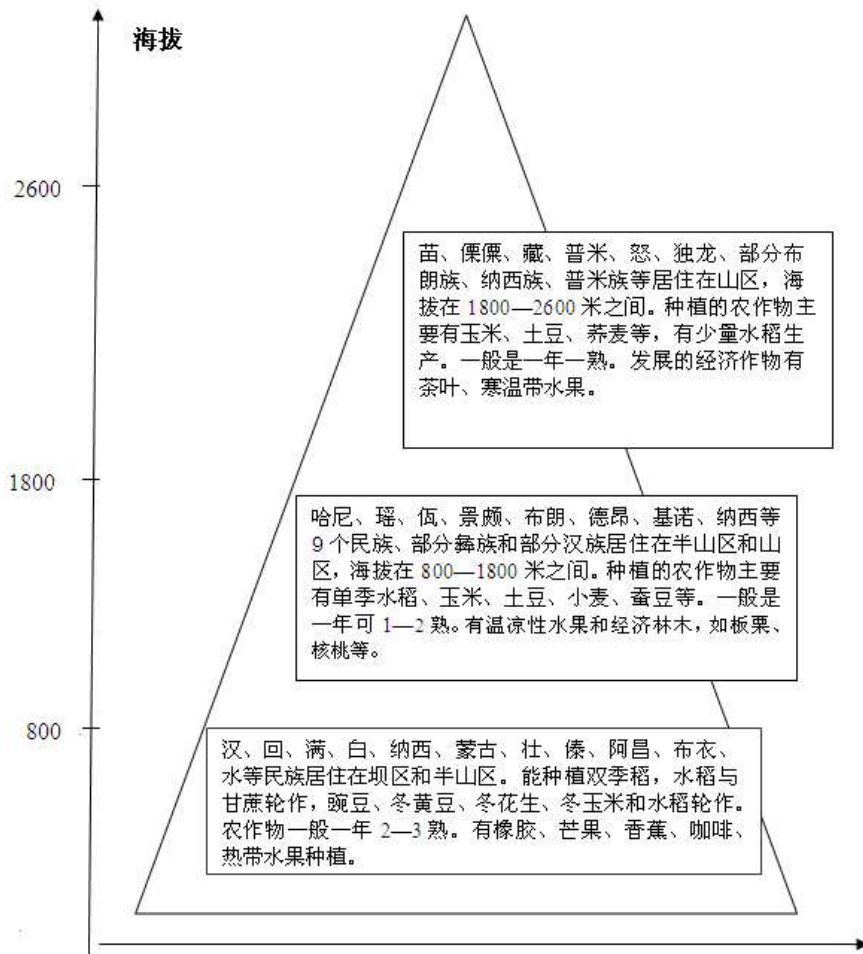
〈表 1-1〉云南2010年各民族人口数(계속)

单位：万人

民族	人口数	占总人口的比重 (%)	主要集聚地	民族	人口数	占总人口的比重 (%)	主要集聚地
全省	4601.6	100.0		藏族	14.3	0.3	迪庆州、丽江市
汉族	3066.2	66.6	全省	景颇族	14.2	0.3	德宏州
彝族	503.3	10.9	楚雄、红河、文山、丽江、迪庆	布朗族	11.7	0.3	西双版纳州
白族	156.3	3.4	大理州	普米族	4.2	0.1	丽江市、怒江州
哈尼族	163.1	3.5	红河州、普洱市	怒族	3.2	0.1	怒江州
壮族	121.6	2.6	文山州	阿昌族	3.8	0.1	德宏州
傣族	122.4	2.7	德宏州、西双版纳州	布依族	5.9	0.1	曲靖市
苗族	120.4	2.6	文山州、红河州、昭通市	基诺族	2.3		西双版纳州
傈僳族	66.8	1.5	怒江州、丽江市、迪庆州	德昂族	2.0		德宏州、临沧市

民族	人口数	占总人口的比重 (%)	主要集聚地	民族	人口数	占总人口的比重 (%)	主要集聚地
回族	69.9	1.5	分布各省	蒙古族	2.3		玉溪市
拉祜族	47.6	1.0	普洱市、临沧市	独龙族	0.6		怒江州
佤族	40.1	0.9	普洱市、临沧市	满族	1.4		昆明市、曲靖市、玉溪市
纳西族	31.0	0.7	丽江市、迪庆州	水族	1.1		曲靖市
瑶族	22.0	0.5	红河州、文山州	其他	3.7	0.1	全省

출처: 数据来源: 《2011年云南统计年鉴2011》



<图 1-2> 云南少数民族分布与农业生产规律图

在云南独特的生态环境和生物多样性下，形成了垂直‘立体’多样的民族分布和生产生活方式。坝区地势平坦，土壤肥沃，气候温和，常有河流蜿蜒其中，是稻作农业和城镇和工商业发达地区。主要居住着汉、回、满、白、纳西、蒙古、壮、傣、阿昌、布衣、水等民族。半山区气候凉爽，坡度较缓，农业生产以玉米和旱稻

为主，并饲养黄牛和山羊。主要居住着哈尼、瑶、佤、景颇、布朗、德昂、基诺等8个民族和部分彝族。高山区海拔较高，气候冷凉，坡度较陡，农业生产以玉米、马铃薯、青稞、荞子为主，并兼营畜牧业，盛产山货药材。主要居住着苗、傣、藏、普米、怒、独龙等6个民族和部分彝族。

云南少数民族一般的分布及农业生产的规律是（见图2）：汉、回、满、白、纳西、蒙古、壮、傣、阿昌、布衣、水等民族居住在坝区和半山区，海拔800米以下，种植方式是双季水稻，水稻与经济作物轮作（豌豆、冬黄豆、冬花生），玉米和水稻轮作，另有橡胶、咖啡、热带水果种植等；哈尼、瑶、佤、景颇、布朗、德昂、基诺、纳西等9个民族、部分彝族和部分汉族居住在半山区和山区，海拔在800~1,800米之间，主要种植单季水稻、玉米、小麦、土豆、荞麦，一般一年可1—2熟；拉祜族、彝族、藏族、布朗族、德昂族、佤族、普米族、苗族、傣族、怒族、独龙族等居住在海拔1,800以至2,600米的区域，主要种植玉米，土豆、蚕豆、麦子，荞子等，一般是二年三熟。

3. 云南少数民族地区经济社会发展现状

一. 民族地区综合实力逐步提升，自我发展能力不断增强

“2006~2010年”期间云南省不断加大财政转移支付和资源整合力度，在民族地区集中力量实施了一批基础设施、特色产业和社会事业发展等项目，取得显著成效，民族地区呈现出整体实力提升的良好发展态势（见表2）。

二. 农村基础设施进一步完善，人民生活水平不断提高

2010年，民族自治地方完成农村固定资产投资332.12亿元，是2005年的6.5倍，有效改善了民族地区农村的交通、水利、通信等基础设施条件。2010年，民族自治地方7,360个建制村中，通自来水村数6,909个，通公路村数7,295个，通电话村数7,155个，通电村数7,331个，分别占建制村总数的93.9%、99.1%、97.2%、99.6%。

城镇化率达27.3%，比2005年提高3.8个百分点。同时通过实施整村推进，培育特色种养殖业等产业工程，民族地区群众的生产生活条件得到进一步改善，人民生活水平明显提高。2010年，民族自治地方农民人均纯收入3501元，“2006~2010年”期间年均增长11.18%，高于云南省平均水平1.26个百分点；25个边境县农民人均纯收入3114元，“2006~2010年”期间年均增长12.51%，高于云南省平均水平2.59个百分点。

三. 社会事业长足发展，民生显著改善

2010年末，民族自治地方有医院、卫生院1217个，医疗机构床位70911张，卫生机构人员7.58万人。有普通高等院校11所，在校生5.58万人，比2005年增长99.29%。有普通中学1151所，在校生121.4万人，比2005年增长4.2%。有中等职业学校143所，在校生18.87万人，比2005年增长259.43%。有小学8049所，在校生197.66万人。教育经费支出166.6亿元，与2005年相比增长194.2%。云南省出版发行有14个民族18个文种的各类图书、12个民族19种文字的报纸和2个刊物。有46个广播电台（站）用15种少数民族语言广播，9个电视台（站）用彝语、傣语、哈尼语、藏语等语种制作、播放电视节目。先后分4批命名了824名非物质文化遗产代表性传承人，公布省级民族传统文化保护区56个。2010年，民族自治地方城镇居民最低生活保障支出从2005年的3.1亿元增加到9.12亿元，农村居民最低生活保障支出从2005年的0.03亿元增加到19.52亿元，新型农村合作医疗费用支出22.98亿元，新农合参合率达95.98%。

四. 二、三产业发展较快，经济结构不断优化

“2006~2010年”期间，民族地区和边境地区经济结构调整成效突出，第二、第三产业发展较快。2010年，民族自治地方实现全部工业增加值908.1亿元，2007年至2010年年均增长13.68%；25个边境县（市）实现全部工业增加值159.8亿元，2007年至2010年年均增长20%，高于云南省5.95个百分点。民族自治地方三次产业结构比

重从2005年的27.44:37.83:34.73调整为2010年的22.26:40.96:36.78° 25个边境县(市)三次产业结构比重从2005年的34.46:24.68:40.86调整为2010年的27.48:33.82:38.7; 民族自治地方进出口贸易总额达39.07亿美元° 旅游业保持良好发展势头, 2010年, 民族自治地方旅游人数达7092万人次, 其中: 国际旅游人数248万人次, 国内旅游人数6844万人次; 国际旅游收入达9.86亿美元, 国内旅游收入达472.06亿元.

五. 集中力量解决特殊困难, 扶贫攻坚取得成效

民族地区通过实施兴边富民工程、扶持人口较少民族发展、扶持特困民族和散居民族发展, 以及对拉祜族支系苦聪人, 布朗族支系莽人、克木人, 彝族支系僂人, 白族支系勒墨人, 瑶族支系山瑶等特殊贫困群体集中力量进行重点扶持, 实施了一大批与群众生产生活密切相关的项目° 民族自治地方贫困人口从2006年的380.23万人减少到2010年的181.51万人; 边境县(市)贫困人口从2006年的140.4万人减少到2010年的64.51万人.

3.6 大力加强民族工作, 各民族大团结的良好局面不断巩固和发展

云南省委、省政府始终坚持把加强民族工作、加强民族团结作为云南省工作的前提和基础, 不断加强党的民族理论、民族政策、民族法律法规和民族知识的宣传教育, 使“汉族离不开少数民族, 少数民族离不开汉族, 各少数民族之间也相互离不开”的思想深入人心; 建立健全维护民族团结的长效机制, 把问题解决在基层, 矛盾纠纷化解在萌芽状态° 2010年, 民族团结目标管理责任制已延伸到云南省1,335个乡镇(镇)、9,929个村(居)委会及社区、2,810个宗教活动场所、205个企业和33个农场° 各族人民倍加珍惜和自觉维护团结、稳定、发展的大好局面° 多年来, 云南省没有发生因民族问题引发的重大群体性事件, 进一步巩固和发展了民族团结、边境安宁、社会和谐、经济社会快速发展的良好局面.

六. 贫困面大, 贫困程度深

云南省78个民族自治地方县有56个是扶贫工作重点县, 2010年, 民族自治地方贫困人口181.51万人, 贫困发生率9.5%, 高于全省平均水平0.9个百分点; 25个边境县(市)贫困人口64.51万人, 贫困发生率12.1%, 高于全省平均水平3.5个百分点。2010年, 全省少数民族人口比例占30%以上的建制村农民人均纯收入2,267元, 比全省平均水平低1685元。农民人均纯收入在785元以下的深度贫困人口中, 少数民族有105.21万人, 占全省深度贫困总人口的68.59%。云南省特有的景颇、佤、拉祜、傣等民族, 贫困人口占本民族人口的50%以上。

七. 发展不平衡, 发展差距继续拉大

2010年, 民族自治地方人均生产总值12364元, 分别比全省和全国低3387元、17,384元, 与2005年相比, 差距分别扩大了1440元、9,288元; 农民人均纯收入3,501元, 分别比全省和全国低451元、2,418元, 与2005年相比, 差距分别扩大了237元、991元; 民族自治地方财政自给率仅为25.55%, 低于全省12.57个百分点; 边境县(市) 财政自给率仅为18.06%, 低于全省20.06个百分点。

八. 基础设施薄弱, 社会事业发展滞后

民族地区基础设施建设起步晚、起点低, 社会事业发展滞后, 基本公共服务体系不完善, 社会保障覆盖面窄。2010年, 云南省少数民族人口比例占30%以上的6,999个建制村中, 有80个不通电, 365个不通电话, 382个不通公路, 1,836个无安全饮用水, 274个没有村卫生室, 1,644个没有文化室; 所辖的68,490个自然村中, 有1,916个不通电, 6,072个不通电话, 8,618个不能有效接收广播电视, 8,963个不通公路, 22,123个无安全饮用水, 2,789个丧失生存条件需要搬迁。3,090个列入国家或省级自然保护区的少数民族聚居自然村中享受补偿政策的只有1,175个。民族地区社会保障

体系处于起步阶段，应保未保的现象仍然突出。

九. 生产力水平低，自我发展能力弱

民族地区产业结构单一，90%以上的劳动力从事传统农业生产，农民家庭收入主要来源于传统种养业，生产粗放，应用科技能力低，抵御自然灾害能力弱，农田有效灌溉率仅为27.8%^①。另外，劳动者受教育程度低，农户当家理财能力弱^②。据第六次全国人口普查，全省平均受教育年限为7.6年，云南省25个世居少数民族中，有19个民族人均受教育年限低于全省平均水平，其中苗族、瑶族、傈僳族、拉祜族、德昂族5个民族人均受教育年限还不到6年。

4. 云南农村少数民族地区生活方式概述

云南丰富多样的生态环境，造就了丰富、复杂的生物多样性，而生活于其中的云南各民族，为适应这种多样性，便创造和发展出了丰富多样生产生活方式，形成了与生态环境和生物多样性相互依存、紧密联系的民族文化。

一. 宗教信仰

云南26个民族都有自己的宗教信仰，各民族信奉的宗教种类较多，有佛教、道教、伊斯兰教、天主教、基督教和原始宗教。

西双版纳、德宏、思茅、临沧和保山等州（市）的傣、布朗、德昂和阿昌等族及部分佤族信仰巴利语经典系佛教，又称南传上座部佛教，俗称小乘佛教，信徒100多万人。

迪庆、丽江、怒江等州（市）的藏族和部分纳西族、普米族信仰藏语经典系佛教，亦称藏传佛教，俗称喇嘛教，信徒20万多人。

昆明、大理、保山、玉溪、红河、楚雄、曲靖、临沧和昭通等市（州）的部分

汉族、白族、纳西族信仰汉语经典系佛教，简称大乘佛教，俗称汉地佛教或汉传佛教，信徒150万多人。云南是全国唯一的佛教三大部派汇聚并存在的边远地区。

伊斯兰教除主要为回族信仰外，还有部分傣族、白族、藏族、壮族群众信仰，信教人数62万多人。

道教主要为昆明、大理、保山、临沧、昭通、丽江等市（州）的汉、彝、白、纳西、瑶等民族的部分群众所信仰，信徒23万多人。

天主教主要为昆明、昭通、红河、文山、大理、丽江、曲靖、迪庆和德宏等市（州）的汉、苗、彝、白、怒、傈僳和景颇等民族的部分群众所信仰，信徒8万余人。

基督教主要为昆明、滇西交通沿线和昭通、楚雄、怒江、德宏、保山、临沧、曲靖、思茅等州（市）的汉、傈僳、彝、苗、拉祜、景颇、哈尼、佤、独龙等民族的部分群众所信仰，信徒53万余人。

二. 崇拜大自然

1) “天人合一”观

人地关系是人类系统与自然环境间的相互作用。人地关系中的“人”是指人类，包括个体的人和人类社会两方面；“地”是指地理环境。人地关系协调的本质是妥善解决社会总需求与环境承载力之间的矛盾。目前，我国人地关系态势是资源需求日益增长、承载力损失逐年加大、人地关系矛盾日趋尖锐。而在不同生产类型的经济社区内生活的少数民族，经过千百年的实践，总结出大量求得生存和发展的思想和经验，它们对于民族地区的自然生态保护是非常有利的。

纳西族认为：“人与自然是相互依存、同存共荣的兄弟关系”。在其纳西族传统文化百科全书的《东巴经》中，把山林川泽、风雨雷电、鱼虫鸟兽等人类赖以生存的自然环境称为“署”，而“署”与人类的祖先本是同父异母的兄弟。兄弟和睦相处，保持一个和谐的生态环境，人与“署”才能共存共兴。

傣族认为,人是自然的产物,“森林是父亲,大地是母亲”。森林和大地孕育了傣族人民和傣族文化。其次,傣族认为自己的祖先神——猎神沙罗是在森林和芭蕉林里诞生,而本民族歌曲也是鸟雀和水送的歌。因而在傣族民歌中,常用花草树叶比喻衣服,星云日月比喻装饰品,麀子马鹿和雀鸟比喻伙伴。而对于自然界中生存的众多生命来说,人只是自然大家庭中的一员,既不是老大,更不是主人,而是自然大家庭中的小兄弟。因而要与自然像亲人般和谐相处,善待森林、水源和一切生灵。

生活在哀牢山的哈尼族对森林有一份特殊的依恋,称森林为“亲亲的阿妈”。哈尼族创造了辉煌的梯田稻作文化,他们将水视为命根子,并把水亲切地称为“亲亲的水娘”。对哈尼族来讲,大自然中林和水同样重要,都是可亲可敬的阿妈。

大地具有非凡的繁殖能力,生长着大量供人类赖以生存的粮食、瓜果、麻类、牧草、林木,给人类提供了衣食之源。因而很多少数民族则通过虔诚的祭拜报答大地的恩惠。比如,苗族称赖以生存的土地为“田公地母”,生活在泸沽湖畔的摩梭人称大地为“大地母亲”,而壮族则称土地为“地母”。

可见,在许多少数民族观念中,大自然是人类的亲人和伙伴,具有持续生存和健康发展的神圣权利。无论是图腾崇拜的传统文化,还是千百年来形成的生活习俗,对促进当地生物多样性的保护都起到了很多积极的作用。[6]因而在民族文化的思想中,人们早已形成了协调人类系统与自然系统间的相互作用的认识。云南民族文化多样性和自然生态系统的生物多样性形成了有机交融,构成了一幅人与自然和谐的画面。

2) 崇拜土地

土地是人们赖以生存的物质基础。云南省是典型的山区省份,土地利用率低,耕地所占比重较低,限制了农业生产的发展。如何才能利用有限的土地,创造出可供人们生产生活的物质资料,但又不破坏自然环境,是各民族传统文化中都要考虑的重要内容。生活在云南的各少数民族对土地孕育万物的神秘性具有异常特殊的感

情，对土地的保护意识在各民族的文化中占有举足轻重的地位。

大部分民族都认为，农业生产的丰歉取决于土地神的意志，虫旱灾害的发生多是因地神不高兴或要求未能满足所致，故不时要祭献取悦地神，祈求丰收和消除灾害。

彝族自古就有崇拜土地的传统。他们认为，粮食、瓜果、麻类、花草和树木都是由地下长出，但它们有时又遭到病虫的伤害，这些都是由土地神所致。在彝族的土地祭祀仪式中，用猪、羊、鸡作祭品，烧香祈祷，求地神保佑五谷丰登。其次，在祭祀方式上还采用血祭，彝族认为有血液洒过或埋过尸体的地方，庄稼或植物长势茂盛，获得丰产，就以为土地神是喜欢喝血或吃肉，于是就以人或牲、禽的血或肉来祭祀。

哈尼族认为，土地之神管着大地。因而哈尼族认为稻田有田神，在栽种季节的“开秧门”活动中，祭田神是头等大事。大多数哈尼族地区，每逢举行农业祭祀，都要给土地神“咪玛”共祭，认为大地神咪玛不仅养育世间万物，而且提供人类衣食住行的来源。[7]其次，哈尼族对土地神的崇拜，还体现在选择寨址、建房地基和村社居住区域时都要祭祀土地神。

白族称地神为“天的王子”或是“地母”，它管理地上的庄稼。在白族地区，每年都有固定的“地母节”，届时家家户户献祭祈祷，祈求地母保佑庄稼长得更好，感谢地母使大家获得了丰收。傣族每逢农历正月十三或十五日去田间土地神，用松树枝插在祭土地神处，备酒、饭、粑粑，烧香磕头，求土地神保佑庄稼正常生长，求雀鸟莫要糟蹋庄稼，祈求风调雨顺，盼望五谷丰登，六畜兴旺。

阿昌族称地神为“担当”，通常在撒种前画一对元宝于秧田中祭祀。阿昌族认为祭祀后，种子受地母的保护，鸟虫老鼠不敢来吃种子。另外，阿昌族还把与地母神具有相同神威和职能的神称为“土主”，祭祀时将抹着鸡血和插着几根鸡毛的竹篱笆树立于秧田中，借土主之神威降服疾病、害虫，避免损害秧苗的病虫害。

苗族把土地尊称为“田公地母”，摩梭人称大地为“大地母亲”，壮族把土地称为“地母”。[5]此外，布依族、藏族、傣族、拉祜族、佤族等众民族文化中都有关于对土地的崇拜和神化，原因大部分都是为了不惹怒神灵，生产或其他活动之前都要举行

一些仪式来祭土地，以求得神的许可和保佑，获得好收成。

3) 崇拜“神山”与“神树”

在云南，许多少数民族村落的社稷通常称为“竜山”“神树”或“鬼林”。人们将村寨周围某些地段(山、树林等)视为禁地，认为是祖先、神灵或鬼怪亡灵栖息场所，并对之十分崇敬，制定具体的村规民约和禁忌措施而加以维护。由于对神林的崇拜而产生的禁忌，客观上保护了自然生态环境。

传说彝族祖先在森林里生活，到处是野兽，只得树立很多树桩把寨子围起来，在寨内烧起火堆来防御野兽侵袭，后来部分树桩复活，彝族就把其崇拜为神树。神树对人们有贡献，于是历代相传，作为村寨的守护神加以祭祀，龙树林也因此得到严格的保护。彝族的传统民族文化不仅是对森林的崇拜，而且是在森林和人的关系基础上形成的思想意识，对森林保护和自然生态环境保护起到了重要作用。

布朗族认为人是生活在由无生命物质、生命物质、人和神等组成的自然整体之中。神是威严的，保护着人和人的财产。因此，在建立村寨时，都要在附近选择一片生长较好的原始森林给神居住，即为龙山森林。布朗族还认为，龙山森林里的所有物体都是神或神的伴侣，禁止在龙山森林中进行狩猎、采集和其它有损害的活动，被追猎的动物，如果逃进龙山森林，人们就放弃追猎。由于对神林的崇拜而产生的禁忌，客观上保护了自然生态环境。

藏族通常选择村寨周围高大挺拔的山体或传说中曾有高僧游历过的山脉作为神山。神山上的一草一木、一鸟一兽都是山神的财产，伤害了它们就会触怒神灵而降下灾难；而保护好它们就会获得山神的保佑，为自己和村寨带来幸福。出于这种畏惧和崇敬心理，一旦某座山峰被封作神山，藏族就会自觉地保护神山的植被和动物，神山也因此成为一个区别于周围环境的特殊地理单元而具有了丰富的生态学内涵。只要有藏族居住的地方就会有神山，各村各社的神山彼此相连，构成了一个庞大的神山体系，成为生物多样性的主要载体。[11]神山上禁止采伐、狩猎、开荒耕种，保

存了相对稳定的生存环境，为许多生物提供了栖息地和天然避难所。

普米族堪称是“森林的朋友”，凡是有普米族居住的地方，周围必定有大片保护完好的森林。这就使得每一个普米族村寨都是一个人与自然互为朋友、和谐共处的乐园。普米族有一个独特的习俗，就是孩子出生后，都要将其拜寄给一棵粗壮的大树或某种强悍、灵敏的动物，以求得人与动植物的相互保佑，并希望人像动植物一样生机勃勃、强壮敏捷。从此这个孩子及其家人，就与这棵树形成了相互支撑、相互保佑的关系，村中任何人看见树旁边的栅栏，就没有人再动这棵树。每个人、每个家庭、每个村寨以至整个民族都有自己的神山神树，才使普米族聚居地区的森林得到了较好的保护。

在云南各少数民族大多都把森林当作自己的祖先，或是森林辅佐人类战胜一次次天灾人祸。森林孕育了人类，也孕育了人类的文明。各少数民族没有忘记森林的恩情，以感恩崇拜的方式表达感激之情。

4) 崇拜“神水”与“圣湖（泉）”

云南省境内的金沙江水系、澜沧江水系、红河水系、怒江水系等纵横交错，为形成各民族多姿多彩的水文化提供了天然条件。生活在云南的各少数民族都有崇敬水的文化传统，这些传统在今天水环境保护中仍然具有重要的价值。

傣族认为，天空和大地都起源于水，而且认为人类生命的一半也是由水创造，因此水是无比伟大和圣洁的。傣族原始宗教信仰的是万物有灵，认为宇宙里每种物质都有灵魂，奔流不息的水也拥有自己的生命和灵魂，水是一种具有生命的圣洁物质。傣族热爱水、崇拜水，主要为了让水给自己带来好运，同时也是为了在遇到伤害的时候获得保护。今天傣族社会里仍然存在不少关于崇拜水的活动以及与水有关的祭祀。例如，当一个新生命诞生的时候，人们会用洁净的清水给这个婴儿行洗礼；而当某个人去世了，人们也会用洁净的清水去擦洗他的尸体，这包含傣族信仰人是来源于水，并且最后也将回归到水的哲理。又如，傣族在挖水井的时候，要

建盖一座漂亮的房子去保护水井，人们认为水井里有神，必须为它盖一座好房子，井里的水才会又满又甜，这在很大程度上表明了对水的崇拜。

藏族认为，圣湖的湖底有龙宫，是龙的居所。藏族还认为，龙存在于江河、湖泊中，有喜怒之情，湖中各种生灵皆属龙族，不可冒犯。[14]在日常生活中，只要触犯了水中神灵，就会不可避免地带来风湿病、皮肤病等疾病。一方面，举行各种宗教活动来取悦神灵。另一方面又恪守种种禁忌，如祭祀神山圣湖的前夜男人不接触女人；不食鱼、蛙等水中生灵；不往泉水里扔脏物和带血之物等。[14]由于种种禁忌的存在，圣湖实际上成了一个个自然保护区，在这个区域内，因为避免了人为的破坏性活动，所以草木茂盛，动植物种类繁多。

生活在哀牢山区的哈尼族，在每年最隆重的农业祭祀节日“苦扎扎”期间都要专门祭祀水神。“苦扎扎”祭水神时，由宗教人士“咪谷”在泉井边杀一只白鸡，摆上松枝、锥栗叶、米饭等供品，祈求水神保护梯田和人畜，祈求风调雨顺、水量均匀，泉水长流不息。哈尼族水崇拜，源于哈尼族梯田农业对水的依赖与需求，利用宗教祭祀强化了人们对水资源的敬畏、保护和珍惜意识。

布依人聚居的村寨必然有泉水的源头，布依人称为“龙潭”。布依族人民对水的崇拜重点体现在两个方面。“一种是对水的种种力量的崇拜，一种是对掌管水与雨的神灵的崇拜”。对第二种神灵的崇拜最具客观功效，他们定期对神灵施行仪式，祈求“赐予雨水及其神秘力量或消除水患”。也正因为对神秘力量的崇拜，最终才会产生出司水的神——“龙”，对龙居住的地方——“龙潭”产生出种种禁忌习俗。如不能在龙潭旁边洗衣服；洗过衣服的污水不能倒进河流中或龙潭里，否则会亵渎水之神灵；不能把水泼在火塘中的铁三脚架上；不然烫伤了水灵，会让外出者遭受报复。水煮沸后不能继续煮，要赶快端下。布依族笃信人的疾病如化脓、腰折、头痛、腹泻、流眼泪都是冒犯水灵所致。布依族有关对水的禁忌习俗虽然源于对水灵的崇拜，但起到了保护环境和水资源的客观功效。

还有，壮族、德昂族、布朗族、阿昌族等少数民族不仅认为水与生产生活关系密切，而且认为水对人的身体健康至关重要。水可以驱邪治病，有洁身健体的神力。

对水的崇拜是云南所有民族宗教信仰的基本内容之一，水成为云南各民族普遍崇拜的对象。

5) 崇拜动物

水田稻作民族对牛有一份特殊的挚爱之情。这种感情在布依族、哈尼族等民族的敬牛习俗中得到充分体现。在布依族、壮族的“牛王节”，所有的耕牛都休息，各家要用苦丁茶、紫泉酒、五色糯米饭喂牛，有的还用圣洁的枫香树叶泡水给牛洗澡。凡生了小水牛的哈尼族人家，必须给牛吃糯米饭，举行“牛然伙鸟扎”仪式。通过这种仪式，既表达对生育小牛的母牛的谢意，又祈求小牛健康生长。

普米族《洪水滔天》神话说龙子青蛙救了普米族的祖先，故普米人“不打青蛙”。壮族，每年农历正月所过的青蛙节，也源于雷神之子青蛙为久旱的人类向雷神求情降雨的传说。拉祜族认为谷种是狗尾巴带来的，所以对狗十分爱护，不打狗，不吃狗肉。德昂族认为是牛教会了本民族种五谷，因对牛十分尊敬。德昂族每年打下新米时，第一口新米必须先给牛吃。布朗族崇拜竹鼠，因为布朗族认为竹鼠代表祖先或祖先的灵魂，不能打，更不能吃。

佤族将动物视为自己亲密的伙伴：“人类钻出葫芦，百鸟是人类的朋友；人类踏上大地，百兽是人类的伙伴” [17]佤族在每年一度的新米节上要敬谷魂、敬牛和敬狗，其内涵也为感恩。佤族有崇拜大象的节日“贡象节”，佤族会对大象祈祷：“大象啊大象，你是百兽之王，是阿佤人的福星，我们敬你爱你！愿你与阿佤山同在，永不离开！”。在佤族神话中还有关于老鼠救人的故事，所以佤族对于老鼠去吃撒在地上的谷粒并不介意。

纳西族传统狩猎的对象主要是熊、狼、獐子、野猪等，而虎、蛇、蛙、龟等是严格禁止捕猎的。纳西族认为虎代表正义、威猛，是神的化身，蛇、蛙、龟等是人的朋友，这两者都是不能伤害的，否则会带来灾难。另外，即使是可捕猎的野兽，如果怀孕或幼小也是不能打的，特别是对怀孕的母兽是严格禁猎的。这些禁猎传统对野

生动物的物种多样性保护起到了重要的作用。

除了上述民族对动物的崇拜之外，云南少数民族中还有各种各样对动物的崇拜°如彝族对老虎、牛、羊、鸡等进行动物崇拜°白族对鸡、龙、蛇、海螺、熊、猴子等动物进行崇拜°纳西族对老虎、豹子、猴子、蛇、老鹰等动物进行崇拜°怒族对老虎、熊、蛇、老鼠、鸟等动物进行崇拜°傈僳族对老虎、猴子、鱼、蛇、蜜蜂、鸟等动物进行崇拜°还有，傣族对龙、老虎、牛、狮子等动物进行崇拜。

经过民族世代代的生产生活，少数民族已经和动物之间建立起了相互协调、和谐发展的关系，不仅产生了众多的动物崇拜的民族文化，而且这些民族文化从客观上来说保护了当地的动物物种和种群的多样性。

6) 崇拜石头

人们脚下的大地，是泥土和石头，是万物之母°云南少数民族有石崇拜°如彝族的锅庄石崇拜，彝族人民认为锅庄石等是圣物，认为支撑锅的三块石头附有神灵，具有灵性，能保佑村社与家庭、保佑人民能有幸福安康的生活，并且还具有辟邪镇鬼的作用，所以崇拜锅庄石°每日三餐前都要真诚地祭祀锅庄石，在锅庄石上供有少许食物，以示祝祷°不管是家里的锅庄石还是山上见到的锅庄石都不允许玩耍，不准跨越或踩踏，平常对锅庄石也是倍加崇敬。

三. 植物资源的开发利用

云南少数民族在长期的生产实践中，因地制宜驯化、培育了大量的适应不同地形、气候、海拔、土壤和水利条件的水稻、小麦、大麦、玉米、荞麦等农作物，药用植物，食用植物°到目前为止，云南发现3种野生稻：普通野生稻、药用野生稻和疣粒野生稻°编目保存的稻种资源份数达5,128份，其中籼水稻2329份，粳米稻1,622份，籼陆稻73份°小麦有4个种和一个亚种，分别是普通小麦种、密穗小麦种、圆锥小麦种和硬粒小麦种°大麦有1个种、2个亚种°已收集到地方性玉米资源

1,863份°发现荞麦野生种和变种9个,还有许多栽培的荞麦资源°此外,云南的粮食作物种质资源还有高粱、谷子、黍和稷等,其中高粱种质资源已收集到198份;谷子资源已收集到97份;黍和稷各有6份收集入库⁶⁵⁾。

在复杂多样的生态环境下,云南各民族发展了丰富多样的混农林系统°据中国科学院昆明植物研究所、西双版纳热带植物园和云南省林业科学院的调查,云南各地各民族经营管理的混农林系统共计有4大类、11个亚类、82型和220个组合°此外,西双版纳傣族铁刀木林、庭园、高黎贡山地区的黄栌薪炭林系统等,都是极具地方特色的由当地少数民族群众创造和发展的农业生态系统类型⁶⁶⁾。

到目前为止,开发利用食用植物资源有八类1,000多种°1)淀粉糖料:橡子、薯芋、百合、人参果、芭蕉芋等;2)野生食用菌:鸡枞、香菌,木耳、松茸、羊肚菌、青菌等数十种;3)油脂类:油茶、油瓜、腰果等;4)野生水果:猕猴桃、橄榄、多衣果等;5)饮料:野生茶,金银花等;6)食用香料:草果、八角、木姜子等;7)蜜源植物:间接食用蜂蜜、竹虫等;8)森林蔬菜:竹笋、香椿、蕨果、刺老包、灰条菜等°如:西双版纳州、普洱的竹笋,文山的草果、八角,成为主要外销商品,已成为农户收入的重要来源。

开发利用的药用植物°云南的药用植物资源十分丰富°据不完全统计,有3,000多种,常用的有300多种°滇西的高黎贡山保护区内就有药用植物1,000多种,如虫楼、虫草、茯苓、灵脂、天麻、云连、木香、石斛,白芨、贝母等°滇西北的药用植物就有2,000多种°名物中外的云南白药,其主药成份就是云南虫楼,治疗疟疾的特效药青蒿素也是用云南的草药青蒿提取的°目前,云南省政府把中药材产业作为云南高原特色农业产业进行培植,三七、天麻、红豆杉、石斛、当归等药用植物被大规模种植。

65) 云南省环境保护局编:《云南省生态环境现状调查研究》,云南科技出版社2004年版,第69-71页。

66) 参见云南省环境保护局编:《云南省生态环境现状调查研究》,云南科技出版社2004年版,第71页。

四. 农村可再生能源的开发利用

云南地处中国的西南部，是山区、民族和边疆三位一体的省份，96%的国土面积是山区，3/5的人口居住在山区。长期以来，云南农村的生产生活能源80~90%依靠薪柴，大量采伐和使用薪柴，不仅破坏当地自然生态环境，也造成大量污染，严重影响了经济发展和人民生活水平的提高。更为严重的是，随着人口增加和社会经济发展，越来越多的山区村民获得薪柴越来越困难。山区村民为了获得基本所需的生产和生活能源不得不砍伐森林，从而导致山区村民赖以生产生活的生态环境退化。

为了解决这一问题，云南开发利用农村可再生能源的方式主要有两种：一是大力发展沼气和推广使用节柴灶。从20世纪90年代初期，云南开始在农村，特别是山区农村大力发展沼气和推广节柴省煤灶。到2010年底，累计推广户用沼气池260多万户和推广节柴省煤灶600万户，推广太阳能热水器10万平米，节约标准煤400万吨，年减排二氧化碳800万吨。二是种植薪炭林。傣族有长期利用和种植铁刀木薪炭林的良好习俗，他们家家户户都种有自己的薪炭林，不仅在房屋周围种，而且还用混农撒播的方式专门种。铁刀木薪炭林与旱地农作物混种，三年成林，每年可以采集薪柴，每年每公顷可获薪材40方左右。以3年为轮伐期，可持续利用50年以上。

五. 建筑

典型的有傣族的干栏式楼房；哈尼族的“蘑菇房”；彝族的土掌房；藏族的碉楼；纳西族和永宁摩梭人的井干式木楞房；土木结构瓦房及其庭院；白族的“三坊一照壁”“四合五天进”民居院落；傈僳族的“千脚落地”干栏式楼房；怒族的石片顶房等。此外，还有五大宗教各具特色、风格迥异的宗教寺院建筑。

六. 民族服饰

云南各民族都有自己服饰的基本形制，但同一民族的不同支系或同一个民族居住的地域不同，服饰也有差异。仅云南彝族服饰，可区别的就有近百种⁶⁷⁾。云南有26种民族，上百种民族支系。因此，云南民族服饰之种类、形制、色调之丰富多彩，为我国各省区所罕见⁶⁷⁾，除非亲临实地地亲眼观察，用语言很难形容出来。

七. 节日

云南各民族都有自己独特的节日，一般每个民族都有几个，多则十几个，故全省各民族节日不下二三百种。全年12个月，从岁首到年终，月月都有节日⁶⁷⁾。著名的有白族三月街、傣族泼水节、彝族火把节、怒族鲜花节、傈僳族“阔时”节和纳西族“三朵”节等。

八. 民族歌舞

云南各民族都有自己独特的数种以至数十种歌舞文化，总数当在三四百种以上⁶⁷⁾。著名的如彝族的大三弦舞；傣族的象脚鼓舞；拉祜族的摆舞；藏族的锅庄舞、茶会歌、弦子舞、热巴舞；纳西族的东巴乐舞、丽江古乐；白族的曲艺大本曲、戏剧吹腔、霸王鞭舞；彝族的三跺脚；傈僳族的摆时舞、四声部无伴奏合唱；普米族的琵琶调；怒族的达比亚乐舞等等。

九. 传统饮食

云南少数民族的食物上取山珍海味，下拾山毛野菜为原料，都是无污染、无残毒的绿色食品，再加上烹调方式独特，每个民族都有自己数种以至数十种美味佳肴，形成纪委丰富多样的饮食文化⁶⁷⁾。著名的有藏族的酥油茶、青稞酒、糌粑；白族的乳

67) 参见林奎：《云南民族文化资源的开发、利用与保护》，中共云南省委宣传部编：《走向21世纪的云南民族文化》，云南人民出版社1999年版，第361页。

扇、生皮、冻鱼、砂锅鱼、三道菜、八大碗；彝族的坨坨肉；傣族的烤乳猪、杵酒；怒族的石板粑粑；佤族的水酒以及自成体系的傣族饮食风味等。

十. 民族体育活动

在长期的生产生活实践中，云南少数民族出于强身健体、自娱自乐的人类本性的需要，创造了许多因地制宜、因陋就简而又特色鲜明的体育活动。著名的有彝族、拉祜族等民族的打陀螺，傣族、壮族的赛龙舟，傣族的武术，苗族的射弩，佤族的摔跤，哈尼族的荡秋千，白族的舞龙，基诺族的跳竹竿，壮族的抢花炮，傣族的“上刀山，下火海”，哈尼族、拉祜族的荡磨秋，藏族的赛马，独龙族的掷梭镖等。

十一. 民族工艺品

云南各民族在长期的生产生活实践中，因地制宜、就地取材，利用草本、竹、藤、土、石、棉、毛、金、银、锡、铝，还有动物皮革、羽毛、兽骨、兽牙、兽角、海贝、珊瑚、玛瑙、碧玉、绿松石等原料，创作、制造除了丰富多样、异彩纷呈的民族工艺品，建水紫陶工艺品和永胜瓷器工艺品，石屏等地的乌铜工艺品，阿昌族、白族、纳西族的铁制工艺品，个旧的锡制工艺品，鹤庆新华村白族的银制工艺品，剑川白族木雕，迪庆奔子栏藏族木制工艺品，傣族、基诺族、彝族、拉祜族的棉纺织工艺品，纳西族、傣族的手工造纸，白族的大理石工艺品，腾冲的玉石工艺品以及多个民族精美的草编、竹编、藤编工艺品等。这些工艺品从从日常生活需要的杯盘碗盏、桌椅板凳、衣服铺盖，到美饰人体所需要的耳环、项链、手镯、戒指、腰箍、腿箍，到仅供美学观赏的花瓶、书画，再到敬天娱神的宗教用品等，舞步应有尽有。充分反映了各民族艺人适应环境、美化生活的智慧和匠心。其中的许多工艺品，无论从创意、造型、制作等方面来看，都堪称是工艺美术方面的精品，具有巨大的开发利用价值。

十二. 传统医药

云南少数民族在于自然界在于自然界相适应以求生存的实践中，为治疗各种伤痛疾病，为使产后妇女能尽快恢复劳动，为保持健康的体魄，为使老人能够延年益寿等目的，通过千百年来长期的探索与实践，总结与提高，发现了多种多样治病强身的纯天然药物并发明了多种治疗方法，与各民族的传统文化和各民族所处的自然环境紧密联系在一起，形成了多样化的民族医疗体系。各民族都有自己的本民族医生和药师，大都采用山区药用植物治疗，一般村民也熟知一些周围的草药和常用单方验方，自采，自治，自用以保障自己的安全。迪庆藏族自治州，各乡村都有自己的民族藏医，用藏药治病，州还有自己的“藏医院”，不仅用藏药治病，还用藏文开处方，生产藏药有特殊疗效，在治疗现代病（心脑血管疾病）有独到之处，所生产的七十味真珠丸远销海内外。楚雄的彝医药也比较发达，彝医可用植物药就有1100多种。瑶族常用植物药浴对风湿病及皮肤病有特殊疗效。正是这种多样性的民族医疗体系，保障了少数民族群众在长期缺乏现代西方医学和医疗条件的情况下，得以正常地生存和繁衍下来。目前，民族经济学和医学专家调查整理并经国家医疗管理部门鉴定认可的自成体系的主要有藏医学、傣医学、苗医学、彝医学、瑶医学等，但尚未系统调查整理的其他民族的医学文化还有很多，是一个有待深入发掘的民族文化多样性宝库。

十三. 风俗习惯

风俗习惯指的是一个民族在衣食住行、婚丧嫁娶、生老病死和待人接物等方面广泛流行的喜好、风习、礼仪、禁忌等。风俗习惯是在民族形成发展过程中逐渐形成的，与各民族所处的生态环境、生产方式、宗教信仰和心理素质有着不可分割的关系。尽管不同民族有某些风俗习惯可能相似、相近甚至相同，但通常是每个民族都有其特殊的风俗习惯。即使同一民族不同支系或同一民族不同区域风俗习惯的差异，云南25个少数民族的风俗习惯不下百种。

5. 影响传统生产生活方式可持续发展的因素

生产方式是指生活在某一特定的自然和社会环境中的人们为了获得维持其生存所必须的物质资源所采取的一切方式，也是人们在生产过程中形成的人与自然和人与人之间的相互关系的总和^①。生产方式是人类社会赖以存在和发展的基础，而人类社会的历史，归根结底是生产方式更替的历史。

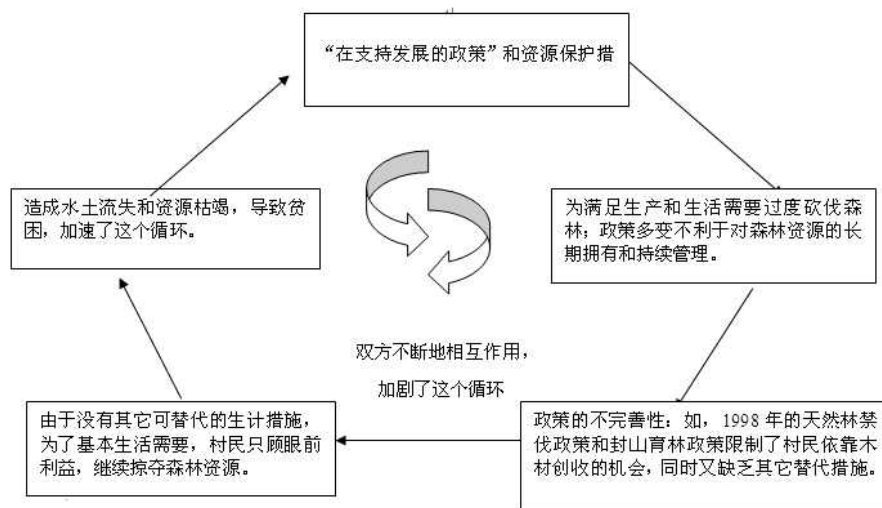
生产方式的更替，推动着人类向前发展，也在不同的生产方式间划分出了传统与现代的差别，虽然“传统”和“现代”都是一个相对的概念，但是普遍存在的观点都认为：与以追求市场化、集约化、产业化、智能化和信息化为特征的现代农业生产相比，传统的农业生产方式，乃至传统的生活方式是比较强调对环境的保护和合理利用的，比如说，传统的农耕很少使用化肥、农药，生产出的粮食不仅少有有害物质，而且口感更好^②。总的来说，传统的生产生活方式是环境友好型的^③。但是在环境保护意识如此高涨的时代，传统的生产生活方式却没有得到推广和重视，而且在慢慢消失，其中的原因值得学者和研究人员进行关注和研究。

一. 政府在开发与保护中的政策博弈

在人类发展的长河中，开发与保护是一把双刃剑，开发过度必然威胁到环境保护，过度强调环境保护又会影响开发^④。找到开发与保护的结合点是实现人类可持续发展的关键^⑤。寻找结合点应坚持的基本原则是：在保护中进行开发，在开发中注重保护^⑥。但是，就一个具体的社区，特别是少数民族地区的社区，要处理好开发与保护的关系问题不是一件容易的事，经常会陷入两难的境地。

一些少数民族社区传统的“轮耕”方式与政府推广体系，环境保护的政策并存^⑦。在实行封山育林和退耕还林政策及人口增加的情况下，可利用的资源日益减少，而传统“轮耕”方式仍在沿用^⑧。但土地的休耕期越来越短，因而土地的生产力不断下降，导致农民开垦更多荒地，加大对环境的影响^⑨。少数民族的贫困农户因其受正规教育

的机会很难，很难获得以书本为媒介的农技知识。妇女尤其如此，一般来说，她们获得教育的机会比男人少，然而她们却承担着很大一部分生产和保护生态环境的活动。经过我们多年研究，发现一个社区在处理开发与保护的关系时，在国家宏观政策、科学技术发展和市场经济发展的作用下，一般会出现四种两难的境地。



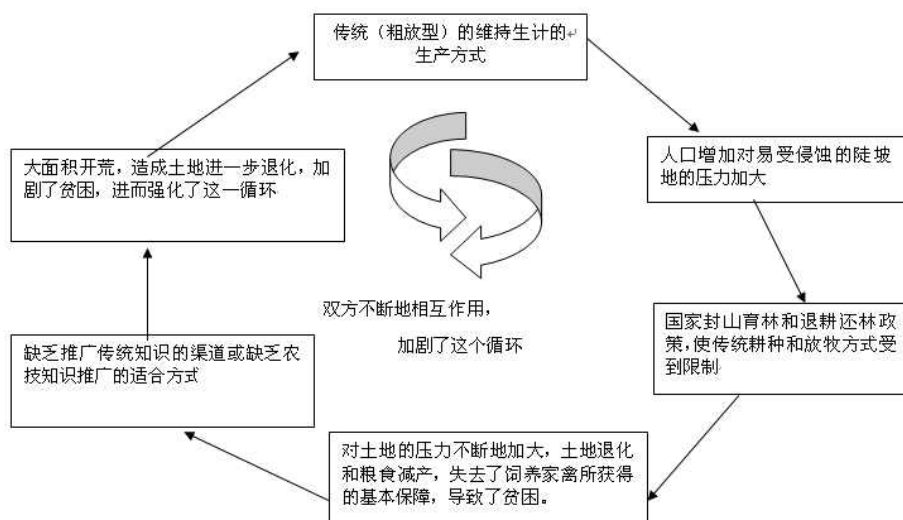
〈图 1-3〉 第一种是政策多变和矛盾导致环境退化与贫困

在反贫困与保护生态环境过程中经常出现了政策多变，且发展政策和保护政策同时并行实施的矛盾所导致社区很难处理好开发与保护关系，上面这个图反映了政策在支持创收活动与环境保护措施之间是如何不断地变换，难以达到社区可持续性的资源管理和发展的。

50年代，“大炼钢铁”加速了森林的破坏。80年代初实行的农村家庭联产承包责任制致使农民大面积开荒，这一方面增加了粮食产量，另一方面也造成生态环境尤其是森林资源迅速退化和减少。大规模毁林开荒引起了水土流失并导致土壤肥力下降。随后，政策发生转变，从注重经济的增长转向环境保护，政府出台了“禁伐”天然

林保护和退耕还林等政策，使村民林业的收入锐减，而且封山育林后，由于放牧地的丧失，村民的家禽饲养量也大幅度减少，从而使其失去了一个重要的收入来源。

受政策多变及当前注重环境保护措施的影响，村民们往往只顾眼前利益而不关心长远的发展，因此他们的生计措施往往都是短期的对自然资源采取掠夺性的而不是长期的可持续性的措施，因而环境退化和贫困仍在继续。



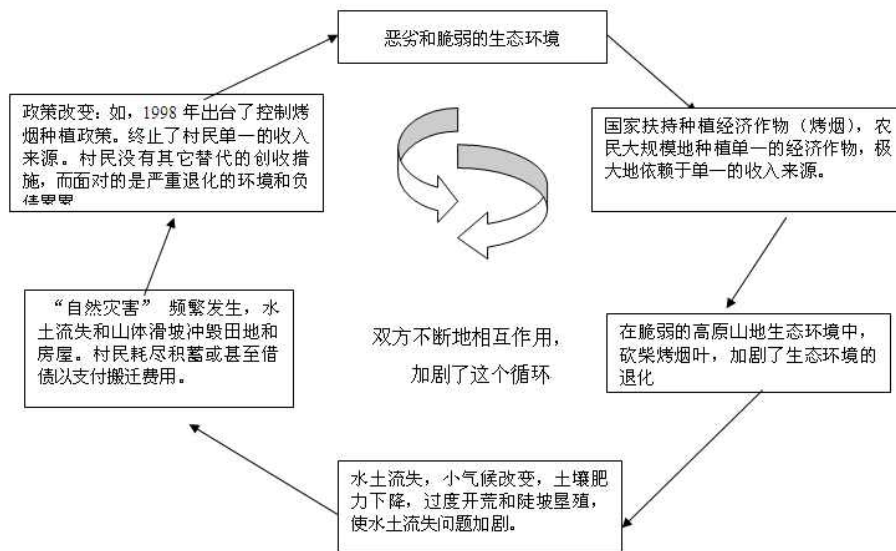
〈图 1-4〉 第二种是“传统的”与“政府的”发展策略并存

该循环图显示，一个社区在处理开发与保护过程中会出现“传统”的农耕方式和生计手段与促进环境保护的目标发生矛盾，两者相互抵触，加深了贫困，加剧了环境退化。

云南省的一些少数民族仍在沿用传统的农耕和生计方式。这些传统的生活、生计方式在维持生计和保护本民族文化方面起着重要的作用。例如，传统的轮耕方式，随着人口的增加，一方面土地的轮歇期越来越短，另一方面不断开垦的荒地面积也越来越大，最终导致水土流失和土壤的肥力下降。

国家实施的森林和草地政策使传统方式利用的土地减少。与此同时，传播现代农

技知识的方式又使少数民族妇女和贫困农户难以获得这些知识。而探讨如何将传统知识与现代技术有机地融合的工作也开展得不够。因此，传统生计方式和国家环境管理政策之间的冲突使环境退化与贫困形成了一个复合体。



〈图 1-5〉第三种是作物推广，环境退化和“自然灾害”

该循环图表明，“自然灾害”（山体滑坡特别是洪害和水土流失）不仅是一种自然现象，它也可能是人为因素的结果。90年代中期，云南大规模种植烤烟极大地导致了环境的退化。1998年政府为了保护环境，对烤烟种植实行了控制，大部分农民没有可替代的措施，又重新面临返贫的危险。与此同时，依靠脆弱的生态环境和陡坡种植等发展活动又加重了水土流失。一些村庄侵蚀沟越变越大，村民的房屋也不断受到威胁。为了搬迁，农民耗尽了当年种植烟叶积攒下来的少量积蓄，有的甚至负债累累。因此他们陷入了极端脆弱的境地。在十年的时间里，以环境严重退化为代价，虽然村民们增加了收入，而现在他们必须再次面对唯一可以赖以生存的而又已经严重退化的环境。而且他们现在必须依赖的自然资源更少了，这使得他们更

加难以摆脱贫困，他们需要花更多的时间和精力才能简单地满足基本的生存需要。

二. 价值观念

在与环境互动的生存繁衍过程中，云南的少数民族形成了万物有灵的宗教信仰和敬畏自然的价值观。例如藏族的神山崇拜文化认为：动、植物都是有生命的，狩猎、砍树是杀生行为，要进行严格的控制。不能乱砍滥伐。砍了不该砍的树，打了不该打的鸟，会有报应。在这种观念的影响下，藏族地区绝大多数的山脉都被赋予了神性而成为受人尊崇的神山（郭家骥，2001）。根据藏族的习俗，每年农历正月初一到正月十五期间，所有的藏族都要种树，意为延年益寿。藏族万物有灵的宗教观念和对树木重视使得很少有藏族愿意当木匠，因为万物有灵而且灵魂会相互转化，今生做木匠在死后会受到他砍伐的树木的报应（郭家骥，2001）。

全民信仰南传佛教的傣族则是通过总结正反两方面的经验教训形成了自己的生态文化观（郭家骥，2001），比如说傣族人民认为佛、经书、佛爷、佛塔和大青树是傣族最尊重的五样东西，被认为是神树的大青树无人敢去砍。在傣族的传统信仰里，与人的生存最为密切的树、田、山、水都有各自的神灵。人必须与神灵和谐相处，才能在神灵的保佑下繁衍生息。

从上述的例子看出，传统的民族宗教信仰是通过自然神灵说来规范人与自然的互动，强调双方的和谐共处，良性互动。这样的观点和看法即使是在21世纪的今天都有其现实应用价值。改革开放以来，外来的消费主义，金钱至上思想冲击了传统的价值观念，直接影响其生产生活方式。

三. 市场发展

随着商品生产和商品经济不断发展，社会经济欠发达的广大少数民族地区自给自足的自然经济结构和经济活动发生了较大的变化。发达地区从事第三产业的个体户、流动商贩和其他采购员等大量涌入，打破了少数民族传统社会人与自然和谐相

处的格局，扰乱了他们周而复始、自在安详的生活秩序。长期以来，一些少数民族群众的生产生活方式是以刀耕火种的农业为主，采集和渔猎为辅。[22]而随着社会的发展，为了减轻人口增长的压力，少数民族农耕生产往往以种粮为主，不断开垦荒地，大量使用化肥和农药，增加粮食产量，获取经济收入，生产方式逐步向精耕细作的农耕生产进行转变，迫使他们放弃或者部分放弃传统民族生态价值观，削弱了善待环境和生态系统的思想。

在云南的总土地面积中，山地和高原约占94%，盆地和宽谷占6%，平均海拔2000米以上，全省倾斜度在15度以下的平坝、缓坡地只占总土地面积的22%，15度至25度的坡地占38%，超过25度的陡坡占40%。地理环境的特征使得生活在云南的很多少数民族选择了与中原农耕文化有巨大差异的农-猎-牧/渔结合的生产生活方式，而且农-猎-牧/渔结合的生产方式社会分工程度较低，不能将有限的劳动力集中，难以形成有竞争力的优势产业，且单一产业内的技术水平也无法提高。因此，传统的生产方式在某种程度上已经不适应当前市场经济发展需要。反过来，市场经济发展要求改变传统的生产方式。

从集市的形成和增加方面来看，交换的发展首先促进了社会分工。社会分工的细化，导致了专业化生产的发展，使得原来自给自足的农-猎-牧/渔的生产方式被打破，一些传统的生产生活方式由于无法和专业化生产竞争而被放弃，比如说传统的造纸工艺、传统的纺织工艺。其次，互通有无的交换使人们追求拥有新奇的工业化产品，迫使自己生产出更多的剩余产品进行交换，为提高生产力，采用了现代农业的新技术、引进了改良高产的新品种，随即农药、化肥等化学产品随之普及，一些传统作物品种和传统的耕作方法也因此被放弃。

随着交换发展到一定阶段，商品经济的萌芽悄然出现。商品经济阶段的生产已经不是为了维持生存，而是为了追求利润最大化，追求财富/资本的积累和商品扩大再生产。在经济利益的驱使下，资源的开发和开采以超过正常自然更新的速度进

行, 经济发展了, 收入增加了, 市场扩大了, 唯一被牺牲的是传统的人与自然和谐互动的生产生活方式。

四. 人口增加

为了生产出满足不断人口增加的物质需要, 单位面积产量偏低的传统生产方式逐渐被精耕细作, 产出更高的现代农业生产所取代。比如云南气候兼具低纬气候、季风气候、山原气候的特点, 气候的区域差异和垂直变化十分明显, 呈现“北边炎热南边凉”、“一山分四季, 十里不同天”的“立体气候”的特色。为了适应这样的地理气候特点, 云南的各个少数民族在选择作物品种, 并不是以产量高为主要目标, 而是根据地理气候的特点将不同的品种栽种在不同地块上, 仅云南元阳县, 就有180多个水稻品种, 当地的少数民族一般都是根据不同的海拔、气候和土壤类型选择栽种不同的水稻品种。多样化的作物品种从产量上是很难与汉族地区单一品种的高产出媲美, 因此往往被认为是落后的表现而被产量高的单一改良品种所取代。另外一方面, 人口的增加对林业资源、特别是木材的利用也急剧上升, 轮歇周期越来越短, 轮歇范围越来越大最后导致所有轮歇地都成为永久的固定耕地, 从而造成森林资源的锐减。在我们调查过的一些哈尼族地区, 由于人口膨胀的压力, 许多本来应作为水源林的地方也被开垦种上农作物, 也使原本协调的梯田生态系统出现了不平衡。薪柴消耗、建材业消耗、工矿业冶炼需求使得大量原始森林慢慢消失, 逐渐被人工林所代替。

人口的增加推动了城市化的进程, 传统的生产生活方式因此改变。人口的增长带来了众多的劳动力, 使得大规模的农田开垦和水利工程得以开展, 规模化的作物种植成为现实, 交通建设和工业化项目的实施, 推动内地和边疆之间的商品交换和资源的开发, 传统生产生活方式逐渐被取代。

五. 外来文化的冲击

对于某一个特定的民族来说，民族文化是本民族特殊的精神财富。它在每个民族生存繁衍、自身发展的历史长河中的基础性地位不容代替，它是一个特定民族的精神支柱。民族文化是本民族区别于外民族的根本特质，这个特质若是消失了或者被外族成功的入侵和改变了，那么这个民族的精神支柱即告消亡。改革开放30年来，毫无疑问给中国的经济、文化、政治等带来了翻天覆地的变化，物质资料的丰富使中国人摆脱了百年来的贫穷生活，但开放带来的外来文化对本地民族文化中的传统文学、经济发展和生活方式产生了愈来愈大的影响。一方面，外来文化丰富了语言词汇，密切了民族地区与世界的交流，促进了科技的进步；另一方面，也造成对民族传统文化的冲击。例如，民族地区追求经济利益的最大化，对耗费大量钱财、人力、物力对本民族传统文化资源进行保护，缺乏应有的重视和必要的投入，甚至任其自生自灭，导致越来越多的民族传统工艺失传、民族语言消亡、民族建筑和服饰汉化或西化等一系列恶果。许多人特别是青年人不同程度地接收了外来生活方式与文化艺术形式，盲目崇拜外来文化，而轻视本地区、本民族的文化。

6. 促进少数民族地区传统生产生活方式持续发展的对策建议

随着社会经济的发展，人口不断增加，全球化趋势和主流文化对少数民族传统文化的冲击不断增加，人们的价值观念也在发生改变⁹。要实现传统生产生活方式的可持续发展，应采取有效措施，保护民族传统文化的多样性，并利用这些多样性的传统文化对生态环境进行有效管理和保护。

一. 依法加强对环境和生物多样性的保护

自然环境是人类生存和发展的基础，而人类的生存和发展是文化产生和发展的前提⁹。[29]每个民族在一定地理环境中，适应不同的生态环境，改造和利用不同的

自然资源时产生了不同的生产方式和生活方式,便逐渐形成了各具特色的民族文化意识。而环境意识是依据各民族中对自然环境整体性的认识,认为人与自然是协调发展、互利共生的关系,而传统民族文化中“天人合一”“人与自然和谐相处”等思想正验证了这一环境意识的存在,一旦民族居住的自然环境遭到破坏,其民族文化也必将遭受严重破坏,甚至导致民族文化彻底消失。因此,要对云南民族文化中环境与生物多样性意识进行普及和弘扬,就必须对各民族传统文化进行保护,进而必须对各民族文化产生的基础——环境与生物多样性进行保护。首先应该认真贯彻执行环境与生物多样性保护有关的政策和法规,如《森林法》、《野生动物保护法》等,建立和完善生物多样性保护政策、法制体系,对于国家、省、州所颁布的立法和条例须严格执行,这是生物多样性保护的重要保证。借助法律的力量,强制人类活动遵循自然生态规律,调节和解决人们在发展经济和保护环境过程中发生的各种矛盾。建立合理有效的奖罚机制,促进少数民族群众主动管理或积极参与,发挥民族生态文化对保护生态系统多样性、物种多样性和遗传多样性的特殊功能和作用。

二. 完善民族地区教育体制, 加强对环境与生物多样性知识的宣传

要提高民族地区的人口素质,最根本的措施是发展教育。要完善民族地区教育体制,首先,应加强义务教育,认真贯彻《中华人民共和国义务教育法》,有针对性地发展职业教育。一方面应加大教育投入,另一方面应多渠道筹集和吸引各类社会资金办学,使政府教育投入更有效地向民族地区学生倾斜。其次,应进一步在中小学教育中增加少数民族优秀传统文化的内容,从小培养学生热爱乡土、民族和本地区优秀传统文化意识。最后,要提高民族群众的环境意识,就必须进行环境教育,提高其保护环境意识与能力。只有从环境意识到环境保护能力进行全方位提升,才能长期有效地实施环境保护,促进自然环境的良性循环。

环境与生物多样性保护成功与否,取决于当地广大民族群众对当地自然资源的保护和持续利用。因此,加强宣传教育能力建设显得很重要。首先应利用广播、电

视等各种宣传手段，针对少数民族不同的宗教信仰和民族传统节日，对少数民族地区开展环境与生物多样性保护基本知识和重要性宣传。其次，收集和整理本民族的传统歌谣、传说、诗歌和文献，把传统民族文化中对环境与生物多样性保护资料编辑成册，并针对不同年龄段、不同文化基础的少数民族群众进行多层次宣传教育。通过宣传教育，一是提高他们对本民族文化中环境与生物多样性意识的了解和认识。二是学习传统文化中保护生物多样性的方法和技术，并运用于生活和生产实践中，从而使优秀的传统少数民族文化的优良传统得以继承和发扬，进而促进本民族文化中环境与生物多样性意识的提高。

三. 做好少数民族传统知识的调查和记录

从自然科学和社会科学两方面，对云南农村少数民族地区自然资源利用及其相关宗教信仰、传统知识文化进行调查和记录。通过调研和资料收集，记录不同少数民族对农、林、牧等自然资源和土地利用方式、资源管理的不同模式、传统的生态观和与资源管理相关的宗教信仰等。发现和记录环境友好型传统生产生活方式案例，记录当地少数民族如何运用传统知识文化对资源进行可持续利用，特别是面对主流文化和商业化的影响，当地社区如何进行适应和调整的，以及发展中存在的问题和困难，了解传统知识文化在商品化过程中存在的问题和不同利益群体对这些问题看法和意见。

通过调查记录，研究人员和各少数民族地区对本民族的传统知识文化有了深入认识和分析，其产生的调查报告既成为传统知识传承的一部分，又为今后探讨传统生产生活方式的可持续发展提供参考。

四. 进一步完善保护少数民族传统知识的法律法规

关注少数民族传统知识，运用法律手段保护少数民族传统知识是时代赋予我们的使命。文化权是一个民族拥有自己民族文化得到保持、保护与发展的权力，对于

衡量民族平等及一个民族的生存与发展，民族之间的互相尊重与团结都有十分重要的意义。云南省于2000年9月率先实施了《云南省少数民族民间传统文化保护条例》，对民族传统文化的保护起到极大的保障和推动作用。

针对法律法规的不足，应从根本上对现行法律制度进行修正完善，积极借鉴国外和国际组织对民族民间文化法律保护的成功经验。从立法上明确知识产权保护与行政保护的关系，民族民间传统文化权利主体代表人、传承人、收集整理人的法律地位，以及地方政府保护职责、权限和方法。在对少数民族传统知识保护中，充分考虑当地普通少数民族的利益，突出本民族对传统知识文化传承和保护的主体性和重要性。在民族工艺品的开发过程中，要注意保障当地社区成员的知情权和保证社区成员从产品价值链中获得利益。

四. 实施环境友好型社区建设工程

以科学发展观为指导，以建设环境友好型、资源节约型社会为目的，坚持“在保护中开发，在开发中保护”的方针，开展环境友好型社区建设，既是推动当地经济发展，大力发展生态农业和绿色产业，又是注重环境保护，以少数民族自主参与的模式推动当地社区资源的可持续利用与管理的现实需要。为此，云南开始实施环境友好型社区建设工程。主要内容是：

一是树立生态文明观。在尊重少数民族传统知识的基础上，将其中体现环境保护和可持续资源利用管理的传统知识与科学发展观的主流思想相融合，通过宣传培训逐步形成当地的生态文明观。既增强当地少数民族自主保护环境的主体意识，又以当地人的语言和理解对主流文化进行本土诠释。

二是以社区共管的模式进行资源的可持续利用与管理。在当地村民、政府相关部门、企业、学校等多方利益群体的参与下，共同讨论和制定出对当地资源利用和保护的管理办法与条例，以当地社区为主进行环境保护和资源利用。在共管模式中，村民在环境保护中是主要角色，协助当地环保部门开展工作。当地政府也应尊

重村民，而不是将其视为环境破坏者，盲目进行管制^①。将环境友好型传统生产生活方式的成功经验在社区间进行宣传和交流。

三是发展生态农业，寻求适合当地发展的绿色产业^②。以可持续发展为核心，促进生态与经济的平衡与发展，将农业安全与人类健康列为首位^③。注重农业生产过程中废弃物的减量化甚至零排放；循环使用，最终要作无害化处理；注意合理使用化肥、农药、地膜，并对残留物作无害化处理；对畜禽粪便进行无害化处理和有效利用；倡导有机、绿色、无公害食品的生产。

四是加强林业生态环境保护和建设。云南少数民族地区多是森林资源丰富地区，加强当地森林保护和林业建设有着重要意义。加大天然林保护工程力度，积极稳妥地推进退耕还林还草工作，充分考虑对失地农民的补偿；搞好薪柴林的替代培育工作，减缓森林压力；鼓励当地可持续地开发非木材林产品，如：药材、野生菌等。

五是政府各部门应加强协作，提高农村能源投资效益^④。利用优势，因地制宜开发农村新能源。

五. 建立生态补偿机制，推动生态环境保护公众参与

民族传统文化的保护与地方经济发展有着密不可分的联系。民族地区资源开发和经济发展必然会冲击民族传统文化、影响环境和生物多样性保护。因此，应建立生态补偿机制，促使民族群众收入得到保障，提高他们长期保护环境与生物多样性的积极性，最终保护和传承民族文化中环境与生物多样性保护意识^⑤。按照公平合理的一般原则，生态补偿机制主要包括国家补偿、社会补偿和自我补偿三个层次。从三个不同层次对直接或间接从事生态环境保护的个人和组织进行的补偿。因此，政府应发挥宏观主导作用，把保护少数民族传统生态文化与生物多样性保护有机结合起来，使少数民族地区群众在生态保护中得到合理补偿，绝不能破坏生态环境而盲目追求经济发展。

民族群众独有传统知识使其可以认识生态系统平衡、协调的规律性，并据此主动和创造性地调整与自然环境的关系。其次，民族群众既是环境污染破坏的直接受害者，也是环境的污染者，环境质量的高低直接关系到他们的生存利益。因此，民族群众是环境保护公众参与诸要素中最具推动力和约束力的因素，民族群众能否主动承担责任，直接关系到环境保护的成效。建立生态环境保护公众参与，必须站在生态系统整体高度，坚持对生态系统平衡、稳定、协调发挥积极作用的所有物种生存、发展利益高于一切的道德信念，将平等地关心自然万物。运用民族文化对环境和生物多样性的保护意识，自觉履行保护它们的责任和义务，努力实现人和自然的协调发展。

| 第二章 · Case Study |

1. 纳西族生态观与传统生产生活方式

一. 纳西族分布及经济社会发展现状

1) 纳西族分布

纳西族居住在滇、川、藏交界的横断山脉地区，背靠青藏高原，面向云贵高原。境内有怒江、澜沧江、金沙江、玉龙雪山、哈巴雪山、梅里雪山、白芒雪山、贡嘎山等名山大川，山体与峡谷并列，顶峰海拔常在5000米以上，个别甚至超过6000米，峡谷深切，相对高差极大。纳西族居住区平均海拔2700米，独特的地貌因素，使得气候、植被、土壤乃至整个自然综合体都呈明显的垂直变化，气候有寒、温、热3种类型。高寒山区平均气温为5.4℃，金沙江河谷为14.5℃，丽江坝区和泸沽湖盆地为12.6℃；年降雨量为800毫米~1034毫米。据全国第五次人口普查，2000年全国纳西族人口为308 839人，其中云南省295 464人，绝大部分居住在滇西北地区，其中以丽江地区⁶⁸⁾居多，其余分布在云南省其他县市和四川省盐源、盐边、木里、德荣等县，也有少数分布在西藏自治区芒康县。原丽江纳西族自治县（2002年分设丽江市主城区和玉龙纳西族自治县）有201,066人，占全县总人口的58%，占全国纳西族总人口的68.5%。四川省纳西族有8725人，主要分布在凉山彝族自治州攀枝花市和甘孜藏族自治州。

1) 经济社会发展现状

纳西族的主要人口皆从事农业，至今丽江市的农业人口仍占85%，畜牧业是纳西族农村经济的重要支柱。历史上，丽江纳西族的铜、皮革等传统手工业比较发达，

68) 2000年时丽江市尚称之为“丽江地区”。

产品远销滇川藏各地。20世纪50年代以前，位于“茶马古道”要塞的丽江古城的工商业还异军突起，一批被称为“藏客”、资产雄厚的纳西族商人在西藏、印度等地发展实业，推动了滇川藏地区各民族之间的商贸交流和友谊。

纳西族地区的坝区与河谷区是主要的产粮区，主产小麦、水稻、玉米、油菜、大麦，豆类有蚕豆、黄豆、豌豆、鸡豆、白芸豆等；高山作物有荞麦、燕麦、青稞、土豆、大麻等；河谷区有花生、甘蔗、棉花等；经济作物有楸木、漆树、核桃、板栗、桑树、花椒、竹子等，现烤烟种植也有较大发展；水果品种有桃、李、梨、柿、核桃、苹果、梅、杏、石榴、桔子、香橼等。

畜牧业是纳西族地区农村经济的重要支柱，农户都普遍饲养牛、马、骡、猪、羊等，山区农户的畜牧业比重大，各户都有羊群。骡马主要作为商品在“七月骡马会”上出售，“丽江马”以“质小而体健，上高山，履危径，虽数十里不知湍汗”而蜚声海内，被誉为云南三宝之一。不少男子从事马帮业，马帮是各民族进行商品交换的主要运输工具。

一) 农业获得了巨大的发展

20世纪50年代前，纳西族90%以上的人口从事农业，至今丽江市古城区和玉龙县的农业人口仍占85%。但是农业产值却发生了巨大变化。中华人民共和国成立前，各地纳西族的农业发展水平不平衡。在处于地主经济地区的丽江等地，农业生产力的发展水平与邻近的汉族、白族差不多。在宁蒗县永宁等地，生产力发展较缓慢。生产工具除使用铁制农具外，还辅以传统的木锄。耕地分为水田、水浇地、旱地和园地4种，除园地与部分水浇地实行固定耕作外，大部分土地实行轮作与休耕制，山地则施行原始的刀耕火种。中华人民共和国建立后，特别是改革开放实行联产承包责任制后，调动了广大纳西族农民的生产积极性，粮食产量和农民人均收入均有较快提高。2003年丽江市分为古城区、玉龙县后，玉龙县当年粮食总产量突破99.86万吨，农民人均纯收入1250元；古城区粮食产量达38.712万吨，农民人均收入1861元。2010年，丽江市城镇居民家庭人均可支配收入达到15521元，比1995年（9290元）增加了6231元，年平均增长3.7%；农村居民人均纯收入为3421元，比1995年（1459

元)增加1962元,年平均增长6.3%.

二) 多样化市场经济繁荣发展

20世纪50年代后期直到“文化大革命”结束,纳西族地区和其他地方一样,一度曾取消了集市贸易和私人商贩、个体商贩等,形成了只有国营商业和供销合作社经营的局面,阻碍了商品经济和集市贸易的发展。改革开放后,党和政府在商业上实行了以国营商业和合作商业为主导的多种经济形式、多种经营方式、多种流通渠道并存的社会主义商品经济,恢复整顿了供销合作社,恢复开放了原有的集市贸易。丽江还恢复了一些地方传统的交易大会,如每年定期举办的“三月龙王会”“七月骡马会”“正月十五棒棒会”等大型的牲畜、农副产品和工业品交流大会,促进了地方工农业的发展。

三) 生态环境不断改善

中华人民共和国成立后,为了支援内地的经济建设,以丽江为中心的长江上游地区,逐渐成为云南省重要的木材生产基地,省、地、县三级森工企业也先后在丽江成立。在之后几十年时间里,不仅丽江境内国有森工企业的木材采伐量大增,而且民间的乱砍滥伐现象也自1958年后日趋严重。1995年以后,根据国家新的政策,一方面封山育林,一方面整顿森工企业,帮助他们实现尽早转产,同时要求采伐人员撤出林区,封存斧锯;另一方面,积极争取国家和省的环保投入,实施重点环保项目。在群众中则大力普及科普生态知识,通过各种方式重唤纳西族传统优良的生态道德观念和生态保护的传统知识。2005年,丽江市森林覆盖率从1995年的40.3%提高到52.5%,丽江成为长江中下游地区重要的生态屏障。丽江市多年在生态环境保护方面的努力,也使它获得了“全球人居环境优秀城市”的荣誉。

四) 成为“三个世界遗产地”,旅游和文化产业迅速发展

丽江古城于1986年被确定为国家级历史文化名城。1997年12月4日,联合国教科文组织授予丽江古城“世界文化遗产”的称号;2003年7月2日,第27届世界遗产大会正式表决通过云南“三江(金沙江、澜沧江、怒江)并流”列入“世界自然遗产”名录,丽江位于“三江并流”的核心区域。2003年10月15日,丽江市收藏的东巴古籍又被联

联合国教科文组织列入“世界记忆名录”。丽江从此成为有三项世界遗产桂冠、举世无双的“世界遗产地”⁶⁹⁾。这些世界级声誉极大地推动了丽江纳西族地区的旅游和文化产业。

在绿色生态产业的发展上,丽江的发展路径也颇富有特色,主动选择了生态文明建设与绿色生态产业发展的良性互动之路⁶⁹⁾。丽江等纳西族地区自然资源丰富,生态环境优美,曾有“玉璧金川”“高原水城”等美誉。但是20世纪50年代后的一段时期里,在大炼钢铁、“木头经济挂帅”等僵化的发展思路影响下,丽江的生态环境遭到了较大的破坏。而生态环境质量下降,直接制约了纳西族地区农业、旅游业等重点产业的发展。纳西族人痛定思痛,同时也结合国家对纳西族地区构建长江上游“生态屏障”的发展要求,将生态走廊建设与绿色生态产业发展有机整合起来。一方面加大对森林资源特别是野生珍稀动植物的保护力度,努力构建科学高效的生态安全体系。另一方面,在科学论证规划的基础上,通过对生态资源的合理开发利用来促进对生态环境的有效保护。在此思路的指导下,主动选择了“生态建设产业化、产业发展生态化”的工作方针⁶⁹⁾。在生态产业中,重点发展特色经济林产业、林化及生物质能源产业,农、畜、药材等产业中具有较强生态和市场价值的动植物种养殖业及其加工业,加快发展了特色经济林、中药材、食用菌和森林生态旅游等重点产业项目,实现了生态环境保护与资源循环利用、生态建设与产业发展、兴林与富民的有机统一⁶⁹⁾。

二. 云南纳西族的生态观及传统生产生活方式

纳西族认为人和自然是兄弟,这也是纳西族生态伦理观的宗教和哲学基础,并有对自然界“欠债”和“还债”的观念,认为人得到大自然的恩惠应感激和回报,须善待大自然⁶⁹⁾。反映了纳西人的生存状态亦取决于大自然的生态平衡,自然界不依赖于人类,而人类则需要依赖于大自然才能生存。纳西族还有本土的“署神”信仰与外来的龙神信仰的差异和整合;同时还具有社区生态保护习俗;反映了纳西族生态伦理观中的多元

69) 王君正:《建设生态文明发展生态产业》,载《光明日报》2009年2月18日。

文化因素.

1) 人与自然是同父异母之兄弟”的观念

东巴教最初是纳西人从早期的巫术文化基础上发展而来的一种原始宗教形态, 后来融合了以藏族为信仰者主体的本教和“喜马拉雅周边文化带”一些萨满 (Shamanism) 文化、藏传佛教文化等因素, 形成一种有卷帙浩繁的象形文字经典为载体, 有繁复的仪式体系而独具特色的古代宗教形态. 虽然东巴教文化内容纷繁复杂, 但原始宗教的自然崇拜、图腾崇拜、祖先崇拜、灵物崇拜、鬼魂崇拜等内容仍然是它的主要内容, 其中的自然和自然神 (或精灵) 崇拜思想非常突出.



〈图 2-1〉纳西族自然神“署”



〈图 2-2〉纳西族自然神“署”



〈图 2-3〉纳西族自然神“署”



〈图 2-4〉老东巴祭纳西族自然神“署”

东巴教的宇宙观和生命观中，体现了突出的人与大自然同体合一的思想，认为大自然和人是同出一源的，有共同的出处来历^①。如东巴教认为大自然界的日月星辰山川草木鸟兽虫鱼以及人的生命最初皆起源于蛋卵，将大自然和人视为有生命血缘关系的物质实体^②。这是纳西先民自然观和生态观最原初的思想根源之一。

继而，东巴教认为人类与大自然是“同父异母的兄弟”。这一饱蕴智慧而含义深沉的人与自然观不知包含了多少纳西先民在漫漫岁月中的苦思冥想和在与大自然朝夕相处中得出的生存经验，以及从与大自然相处的风沙雨雪的磨难中得到的领悟^③。这无疑是在最初将人与自然万物视为同源生命体的观念上进一步产生出的更为明了的人与自然密切关系之解释。

在长期依赖于大自然的生产生活实践中，纳西先民的自然崇拜意识上升到了对人与自然之间关系的辩证认识，在泛灵观的支配下，概括出一个作为整个自然界化身的超自然精灵“署”，并形成了规模庞大的“祭署”仪式。“署”是东巴教中的大自然之精灵，司掌着山林河湖和所有的野生动物^④。东巴经神话《署的来历》等很多讲述人与署的神话传说中说，人类与署原是同父异母的兄弟，人类在东巴经中称为“精”或“崇”，他能掌管的是盘田种庄稼、放牧家畜等；而他的兄弟“署”则司掌着山川峡

谷、井泉溪流、树木花草和所有的野生动物。人与自然这两兄弟最初各司其职，和睦相处。但后来人类日益变得贪婪起来，开始向大自然兄弟巧取豪夺，在山上乱砍滥伐，滥捕野兽，污染河流水源。其对自然界种种恶劣的行为冒犯了署，结果人类与自然这两兄弟闹翻了脸，人类遭到大自然的报复，灾难频繁。后来，人类意识到是自己虐待自然这个兄弟而遭了灭顶之灾，便请东巴教祖师东巴世罗请大鹏鸟等神灵调解，最后人类与自然两兄弟约法三章：人类可以适当开垦一些山地，砍伐一些木料和柴薪，但不可过量；在家畜不足食用的情况下，人类可以适当狩猎一些野兽，但不可过多；人类不能污染泉溪河湖。在此前提下，人类与自然这两兄弟又重续旧好。

相当多的东巴经，特别是属于祭自然神“署”之仪式的东巴经中，都突出地反映了纳西先民小心翼翼地对待自然环境的生活态度，下面仅举数例观之。

东巴经《祭署·仪式概说》中说：“居住在辽阔大地上的人类，为了一点吃食，不择手段，食人类不得食用的东西，将毒鬼的红鹿杀掉，把灰鬼的红色野牛杀掉，把树上的蛇儿杀死，把石头上的青蛙杀死，食其肉，到山上去放狗打猎，到山箐中去拿鱼；放火把大山烧掉，把大树砍倒，把大湖的底戳通。人们不知道可以不可以和谁争斗，偏偏去和署族结仇争斗。于是署族将毒与灰鬼施放到人们中间来⁷⁰⁾。”

《大祭风·开坛经》中说：“不到利美署许汝（自然神“署”类之一）的泉水里去洗衣服和其它破烂的东西，不到白色的高原上采摘山花和野花。到了雪山上，不随便去攀折长斑纹的古老的树木；走到9座大山上，不随便去砍伐大树，划白色的房头板。到了大山箐里，不随便去砍绿色的竹子，到了森林里，不去毁坏大片小片的森林，不去砍伐大大小小的树木⁷¹⁾。”

东巴经《压呆鬼·开坛经》中说：“我们住在村子里，不曾让山林受到损坏，住在大地上，不曾让青草受到损坏，住在水边，不曾让水塘受到损坏，住在树上，不

70) 和土成释经、李静生译、王世英校，载《纳西东巴古籍译注全集》（校对稿），东巴文化研究所编印。

71) 和开祥释经、和宝林译、习煜华校，同上。

曾让树枝受到损坏。即使打猎，也不射杀小红虎，不对白云深处的小白鹤下扣子，不撬大石头堆，不砍大树，不捅湖底。放牧不让里美斯许汝（署类）正在吃草的鹿和山驴受到惊吓。干庄稼活不去破坏署神里美肯术的大河水源；到白云缭绕的雪山上，也不曾折断攀满青藤的树枝；来到松树林里，不曾划开杉树来做盖房顶的房板；不曾砍大箐沟的青竹；不曾获取过多的山货⁷²⁾。”

基于上述认为人与自然是兄弟的观念，在东巴教中产生了一个祭大自然神“署”的仪式，称为“署古”，是东巴教中一个规模宏大的仪式，属于这一仪式的东巴经很多，从美籍奥地利学者洛克（J.F.Rock）所撰写的《纳西人的“纳伽”（署）崇拜及其相关仪式》一书中看，就有116种。这些经典阐释的主题都是人如何与大自然神“署”和睦相处，不得罪“署”。这一仪式对纳西族的生产活动和社会生活、生态道德观等有很大的影响。

在不少反映人与“署”即人与自然关系的东巴古籍作品中，均反映了纳西先民的这样一种理智认识：人与大自然之间的关系犹如兄弟相依互存，人与自然只有保持这种兄弟似的均衡关系，人类才能得益于自然。如果破坏这种相互依存的谐和关系，对大自然巧取豪夺，那无异于伤了兄弟之情，就会遭致自然的报复。这是纳西先民在漫长的生产生活实践中得出的宝贵经验和深刻的认识。在这种理智的认知基础上，纳西族民间产生了一整套保护自然生态的习惯法，以此规范制约着人们对待自然界的行。东巴经中常见的禁律有：不得在水源之地杀牲宰兽，以免让污血秽水污染水源；不得随意丢弃死禽死畜于野外；不得随意挖土采石；不得在生活用水区洗涤污物；不得在水源旁大小便；不得滥搞毁林开荒。立夏是自然界植物动物生长发育的关键时期，因此，立夏过后相当长一段时期内禁止砍树和狩猎。由此可见，作为传统文化重要源头的原始宗教是不乏积极的社会功能作用的。

2) 对自然界“欠债”和“还债”的观念

东巴文化中所反映的人与自然观的又一反映是人对大自然的敬畏之情，除了反映

72) 和土成释经、和庆元译、王世英校，同上。

在各种礼俗中外，比较集中的还有一个向自然“欠债”与“还债”的观念。东巴教认为，人们为了自己的生存，使用大自然所拥有的物质，如伐木，割草，摘花，炸石头，淘金，打猎，捕鱼，汲水，取高岩上的野蜂蜜，甚至使用一些树枝和石头等用于祭祀礼仪，都是取自大自然，是欠了大自然的债，如东巴经《超度放牧牦牛，马和绵羊的人·燃灯和迎接畜神》中说：“死者上去时，偿还会抚育他（她）的树木，流水，山谷，道路，桥梁，田坝，沟渠等的欠债。”“你曾去放牧绵羊的牧场上，你曾骑着马跑的地方，用脚踩过的地方，用手折过青枝的地方，用锄挖过土块的地方，扛着利斧砍过柴的地方，用木桶提过水的山谷里，这些地方你都要一一偿还木头和流水的欠债。除此之外，你曾走过的大路小路，跨过的大桥小桥，横穿过的大坝小坝，翻越过的高坡低谷，跨越过的大沟小沟，横穿过的大小森林地带，放牧过的大小牧场，横渡过的黄绿湖海，坐过的高崖低崖，也都一一去偿还他们的欠债⁷³⁾。”

显然，纳西人把自然视为人一生赖以生存的恩惠之源，是大自然抚育了人类，人的一辈子欠着大自然的很多债。这些债要通过举行祭祀大自然神灵的仪式来“还债”。从这种敬畏自然，感恩自然的传统思想中，可以领会到为什么纳西人过去盖一幢房子，劈一块石头，砍一棵树，都要举行一个向自然种种精灵告罪的仪式之风俗的意义。从这现代人看去可能会觉得迂腐的观念和习俗中，反映了纳西先民是将大自然的一切都视为像人一样的生命体，因此要尊重它，呵护它，不能过分盘剥它的观念，从这种生态观念中，可以看出纳西先民将自然界万物也视为一种有尊严性的生命体的思想。正是靠了这种将大自然拟人化，将人与自然一视同仁地看待的“生命一体化”观念，纳西人所居住的地域才长期保持了人与自然和谐，生态环境良好的人居环境。

英国历史学家汤因比 (Arnold Joseph Toynbee, 1899-1975年) 指出：“宇宙全体，还有其中的万物都有尊严性，它是这种意义上的存在。就是说，自然界的无

73) 和云彩释经、和发源译、和力民校，同上。

生物和无机物也都有尊严性。大地、空气、水、岩石、泉、河流、海，这一切都有尊严性。如果人侵犯了它的尊严性，就等于侵犯了我们本身的尊严性⁷⁴⁾。”

东巴文化中所反映的观念与西方这位大学者的论点，都反映了一种应该尊重和礼敬自然界的主张，从中可以看到这么一种基本的观点：人和宇宙间的万物是平等的，都是宇宙间的一分子，尽管人类自诩为万物的灵长，但人类的生存状态亦取决于大自然界的生态平衡，自然界不依赖于人类，而人类则需要依赖于大自然才能生存。东巴文化中所反映的敬重自然界万物的观念固然产生于古代自然宗教的泛灵信仰，但这种敬畏自然的思想至今仍有它非常积极的意义，人类在任何时候，都要以一种平等的心态对待大自然，特别是要充分意识到人类的生存是依赖于自然界这个道理。东巴文化中人对自然界“欠债”的观念有利于约束人对自然界的开发行为，凝聚着纳西先民从人在自然界的生存经验中总结出的朴素而充满真理性的非凡智慧。

3) 纳西族社区的生态保护习俗

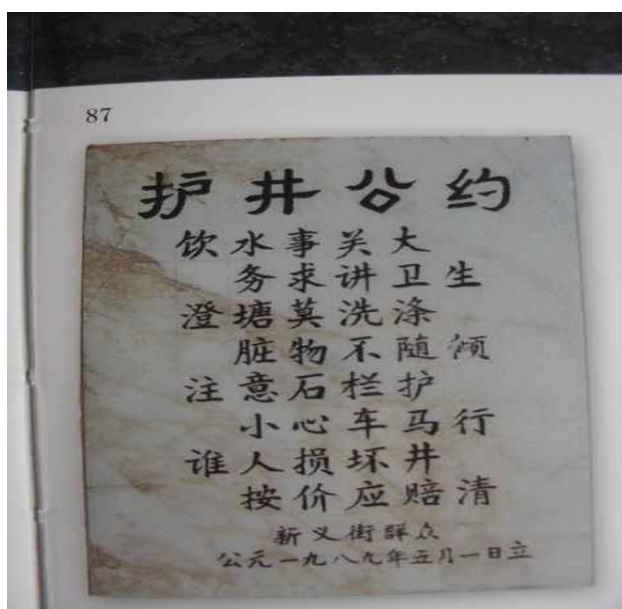
长期以来，东巴教这种将人与自然视为兄弟的观念（或教义）成为一种纳西人与大自然相处的准则，并由此产生出种种有益于自然生态环境和人们日常生活的社会禁律，它或以习惯法的形式，或以乡规民约的方式，规范和制约着人们开发利用自然界的生产活动。可以说，纳西族社区很多保护山林水泉及野生动物的制度性措施和习俗，最早可以追溯到东巴教这种基本的自然观中。

纳西族民间善待自然的传统习惯法已升华为一种道德观念。在纳西人的观念中，保持水源河流清洁、爱护山林是每个人都必须履行的社会公德。过去，纳西族主要聚居区丽江不仅各乡各村都有保护山林水源的乡规民约，而且，各村寨推选德高望重的老人组成长老会，督促乡规民约的实施。下面笔者举几个自己调查到的个案来看纳西社区保护生态环境的习俗。

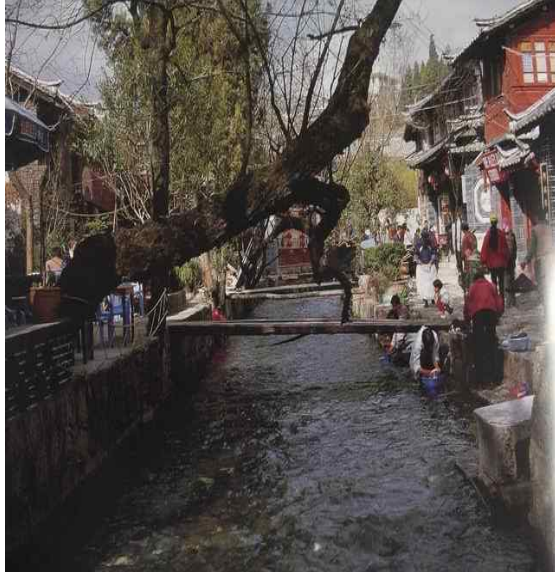
74) 汤因比、池田大作：《展望二十一世纪》，荀春生等译，国际文化出版公司1984年版，第429页。



〈图 2-5〉丽江古城内的天然“珍珠泉”



〈图 2-6〉纳西族管理水井的“乡规民约”



〈图 2-7〉丽江纳西族就地使用小河水



〈图 2-8〉丽江纳西族就地使用小河水

纳西族采用民间组织和乡规民约管理自然资源。纳西族在信奉东巴自然神“署”生态观和按照政府规定管理自然资源的同时，大部分村寨普遍有类似“长老会”“老民会”等的民间组织，制定乡规民约对资源资源进行管理。如20世纪50年代前，丽江市白沙乡玉湖村传统的村民长老组织叫“老民会”，“老民”是对入选者的称呼，选为“老民”的一般都是在村中深孚众望的老人，每三年选一次，选举时间是在农历六月火把节期间，召开村民大会公开选举，一般选七八人至十多人。不称职者在下届就不选。“老民会”负责制定全村的村规民约，并负责评判事端，调解民事纠纷，监督选出或由“老民会”指定的管山员和看苗员看管好公山和田地，如有乱砍滥伐、破坏庄稼等违犯村规民约者，由“老民会”依村规民约惩罚。

村民起房盖屋需木料，首先要向“老民会”提出申请，经“老民会”批准后，由村里的管山员监督砍伐，绝对不许多砍。甚至结婚时要做床的木料也要经“老民会”批准后才能按指定数砍伐。立夏是自然界植物动物生长发育的关键时期，因此，立夏期间要封山，封山期间禁止砍树、狩猎和拉松毛。封山期结束后，允许村民拉松毛，但按照村规民约，每户只能来一至二个人，这主要是用来防止劳力多的人家多来人拉松毛，使劳力少的家户吃亏。“老民”们亲自坐镇山路上监督。执法如山，很多“老民”对亲友也不留情面。这些公众选出的“老民”都是义务地为村里服务，不收取任何报酬。由村民选出或由“老民会”任命的看苗员、管山员对自己份内的工作也相当负责，每天都兢兢业业地看苗，管水，巡山，一发现违犯村规民约的就当场处罚或上报“老民会”，由“老民会”对肇事者视情节轻重处罚，即使是地方上的村长、保甲长等头面人物的亲属犯了村规民约，也一视同仁地处罚，因此村中正气很盛，保持了良好的生态环境。

纳西族村寨一般都设有专门的“管山员”，这是社区组织在保护生态资源方面的重要举措。在纳西语中，管山员被称为“居瓜”，意思是“管理山的人”。管山员对保护好社区山林资源有举足轻重的作用，因此，各村在选举和任命管山员时十分慎重。村民多推举能秉公办事、性情耿直、铁面无私的人担任管山员。20世纪50年代以前，有的乡村还专门请外地人来担任这一角色，如丽江市白沙乡龙泉行政村（今属于丽

江市古城区束河镇)有的村子还专门请外来的藏族人担任管山员,这除了历史上藏族与该村有长期的贸易合作之外,还基于考虑到外来人亲属关系单纯,在管山过程中不会受到原住民那样复杂的亲属关系的制约。

村社组织所发挥的积极作用对保护集体山林、水源和村民的田地起了很大的作用,除此之外,村民们世代传承的传统生态道德观念也使村子的生态环境受益不浅。过去,村民们有很多禁忌,如不能砍伐水源林,不能污染水源,不能在饮用水沟上游洗涤脏物,不能倒脏物于水沟中,不能砍伐和放牧过度而使山上露红土,不能叫自己的牲畜毁坏别人的庄稼,不能随意砍大树和幼树,连被风刮倒的大树也不能随意砍回家。在这些禁忌习俗中虽然有一些宗教迷信因素,但它是与社会伦理道德观念混融在一起的,客观上对保护村子的生态环境起了相当大的作用。迄今,生态环境保护得好坏的都与各社区的村民委员会、护林小组、老人会、妇女组织等的发挥作用好坏与否密切相关。

纳西族少年儿童自小就由上辈人谆谆告诫,不得做任何污染破坏自然环境的事。丽江古城居民在五六十年代都直接在河里挑水饮用,因为很少有人会往河里扔弃污秽物品。黑龙潭游鱼如梭,有不少甚至游到古城的河沟里,但也没人抓捕。如果有谁触犯保护水源山林的乡规民约,不管其来头多大,都要受罚。

正是由于有了这种相沿千百年的民族传统生态道德观,丽江才赢得那一片青山绿水,才有家家流水、户户花圃的自然和谐美景。直至20世纪50年代早期,丽江还保持了全部土地面积中有73%的林地和12.8%的草山草坡,森林覆盖率达53.7%。这一切与纳西族的生态伦理观是分不开的。

三. 影响云南纳西族环境友好型生产生活方式可持续发展的因素

1) 当前纳西族地区迅速增加的人口活动挑战环境的承载能力

北京大学环境学院的蒋依依运用生态足迹模型,对原丽江市1949~2001年的生态足迹进行了计算,结果表明丽江市(今古城区和玉龙县)人均生态足迹呈整体上升

趋势，人均生态足迹增长4.6倍，意味着不断增长的消费水平，改变了丽江县（今古城区和玉龙县）的生态盈余状态，生态环境的压力日益加强，如果保持现有的发展速度，丽江县的人均生态足迹将不断增长，并在2015年超过人均生态承载力，使发展进入不可持续状态⁷⁵⁾。

当前，人们在丽江城区和离城区近的坝区最能观察和感受到的是水资源的减少，如玉龙雪山冰川主要受全球气候转暖的影响而产生的持续收缩，黑龙潭泉水连年断流的周期缩短，清溪泉群出水量逐年减少，丽江坝区水位持续下降。根据昆明理工大学的研究，作为丽江市政治、经济和文化中心的丽江坝，人均水资源只有1200立方米，低于全市、全省和全国的平均水平。缺水的原因一是高速增长旅游人口的用水需求；二是城市生活用水与周边社区农业灌溉用水的矛盾；三是由于玉龙雪山冰川的缩小，一些长期靠冰川融水补给的重要泉群，如清溪泉群、三束河、龙泉寺、玉柱擎天、俄吉等，历史上从未发生过断流现象，但现在却时有断流发生⁷⁶⁾。

2) 社区传统的资源使用和环境保护知识需要重新弘扬并和当代生态保护科学相结合

纳西族传统智慧理性的生态观和社区资源管理方式随着社会文化的变迁而衰落，过去非常有利于社区资源管理的乡规民约需要加强。并将传统生态观的精华与当代的生态保护科学相结合，形成新的生态保护观念。

3) 纳西族地区的工业发展项目需要严谨缜密地考量对环境的影响

云南纳西族聚居地在金沙江边，是水能富集的地区，因此，近年来国家在这些地区的水电建设项目较多。在实施这“清洁能源”工程的同时，也需要更多地对环境承载

75) 蒋依依等：“滇西北生态脆弱区生态足迹动态变化与预测研究（以云南省丽江纳西族自治县为例）”，《生态学》，2005年12月。

76) 谭乃元：《水资源可持续利用保障体系的研究与实践（丽江拉市海高原湿地保护与开发利用）》，硕士学位论文，四川大学，2005年3月。

力进行严谨缜密的调查研究，对本地的地质、水文、山体等和电站建设之间的关系进行更加细致的研究。

四. 促进云南纳西族传统生产生活方式可持续发展的对策建议

1) 提高纳西族社区环境生态环境认识

纳西族的主要聚居区处于世界自然遗产地“三江并流”核心地带和国际著名的滇西北生物多样性富集地的区域，国家应该认识到这些地区丰富的生物多样性资源，是本地民众祖祖辈辈，通过自己的文化和辛劳的工作，为国家和世界留下的宝贵财富，对长江下游的生态涵养和经济社会发展和安全至关重要⁷⁷。而这些任重道远的保护工作，仅仅凭本地群众和政府之力是难以做到的，国家应该加强扶持力度，推进生态补偿机制的实施⁷⁸。从国家层面的制度设计上，要按照社会平均利润的标准，实现经营者在经营公益林和商品林、在保护和發展方面的无差别待遇，要让处于生态重要区域的地方政府和人民可以通过生态建设和保护，实现自身的发展，过上与其它地区人民一样的幸福生活，而不是现行的“保护就是限制，保护就意味着没有收益，保护就意味着牺牲”的不合理的制度安排⁷⁷⁾。

2) 积极争取国家在生态建设方面的支持力度

应借丽江被列为全国18个改革开放典型地区，以及云南省滇西北生物多样性保护工程重点区域的有利时机，进一步总结丽江30年生态建设与社会经济发展有机统一方面的成功经验，积极争取国家在生态保护方面的政策和资金支持，尤其是获得更多的生态补偿方面的转移支付支持，从而加大当地的生态系统研究，并确实改善广大农村生态环境和改善居民的生产生活条件⁷⁹。

3) 应积极鼓励当地社区探索有效的生态建设与保护的有效途径

77) 纳麒、李世碧主编：《丽江之路》，北京，红旗出版社，2009年。

结合十八大建设生态文明精神，在继续保持纳西族原有的环境友好型生产生活方式的同时，要设计有利于纳西族社区经济社会可持续发展和环境保护工程，发挥原有的环境友好型生产生活方式的作用，在快速城镇化和旅游业快速发展过程中，促进纳西族社区的社会经济与环境和谐发展，一方面减少对森林生态系统的压力，另一方面提升社区的传统生态文化价值，实现社会经济生态系统的可持续发展^①。此外，丽江这样的生态文化旅游名胜地，在发展工业项目时，比如应杜绝类似电解铝这样国家环保部列为重污染的产业。

2. 彝族生态观及传统生产生活方式

民族文化的形成与自然环境是一种相互影响的关系。任何一个民族生产生活方式的形成和发展，都是人民在千百年来的生产生活实践中与自然生态环境相互适应、相互协调的产物。彝族的生存和发展深受自然环境的影响。彝族在与周围环境相互作用的基础上，依赖自然、利用自然，形成了自己独特的传统生产生活方式，这主要体现在对自然的朴素认识、对土地的开发利用、对林业的管理和保护、对植物的利用等方面，而这也贯穿于彝族人民的宗教信仰、农业生产、林业管理、医药、饮食、装饰、礼仪等习俗中。虽然，彝族人民的传统生产生活方式有着原始宗教信仰的烙印，但这种方式微妙地平衡着他们与自然的关系，客观上对于生态环境的保护和管理、对于保护生物多样性具有积极的推动作用。

一. 彝族分布及经济发展状况

彝族是中国最古老的民族之一，是我国少数民族中人口较多的民族，主要分布在无量山、乌蒙山、凉山等山间丛林中，属于山区、半山区，村寨多坐落在山腰的平缓地带。2010年全国人口普查数据显示，全国彝族人口有871.4393万人，占全国人口的0.6538%，主要分布于云南、四川、贵州、广西等省（区）内，有诺苏、纳苏、罗武、米撒泼、撒尼、阿细等不同的称谓。云南是彝族的主要聚居地之一，全省几乎都有彝族分布，主要集中在云南的楚雄彝族自治州、红河哈尼族彝族自治州、石林、江城、宁蒍、巍山、南涧、寻甸、元江、新平、漾濞、禄劝、宁洱、景东、景谷、镇沅、峨山等地。彝族也是云南少数民族中人口最多的民族，拥有人口502.8万（2010年数据），占全省总人口的10.94%。

彝族地区的封建地主经济确立过程较为缓慢，是由于自清代雍正时期开始的“改土归流”不彻底，一些地区仍存留着土司制度。再加上彝族大多居住在高寒山区，生存环境差异，导致彝族的社会生产力长期处于落后状态，并且自给自足的经济占主导地位，大部分地区商品经济极不发达。据20世纪50年代中国少数民族社会历史

调查所提供的资料表明,迄至1949年前,占彝族人口40%的彝族地区,地主经济发展是很不充分的。一直到1949年前,只有很少的彝族地区具有较为发达的地主经济,即昆明附近及禄丰、易门、曲靖、个旧、昭通等城市。19世纪末20世纪初,随着商埠的开辟,外国商品的大量涌入,在滇越铁路和个碧石铁路沿线彝族地区,已有资本主义因素。在个旧锡矿,出现了民族资本主义工业⁷⁸⁾。大部分彝族地区以农业、畜牧业为主,辅以手工业和狩猎等满足自身的需求。新中国成立以后,在政府的引导以及经济发展的冲击下,彝族地区市场经济才逐渐地繁荣起来。

二. 彝族的生态观

彝族依山傍林,长期与自然朝夕相处,思想观念中形成了与自然和谐相处的生态观。这种生态观包括两个方面,一方面是在与自然的长期相处中,总结出的经验;另一方面与其原始宗教信仰密不可分。

总的来说,彝族人的生态观主要有:

(1) 人是自然的产物,自然至上。

彝族世代流传的神话中有众多“竹生人”“虎生人”“鹰生人”的神话,他们认为自己来源于动物、植物、水等自然物。

(2) 天人一体

人与自然存在共生关系,如《宇宙人文论》中指出:“人体和天体相仿,同样具有‘五行’的变化,形成人体的根本。‘五行’中水是人的血;金是人的骨;火是人的心;木是人的筋;土是人的肉⁷⁹⁾。”“天上有明,人就有一对眼睛;天上有风,人就有人有气;天会鸣雷,人会说话;天有晴朗,人有喜乐;天有阴霾,人有心怒;……天有星辰八万四千颗,人有头发八万四千根;天有周围三百六十度,人的骨头三百六十节⁸⁰⁾。”天的‘五行’是天南、天北、天东、天西和天中,地的‘五行’是金木水火土,

78) 王水乔.近代云南彝族社会经济发展不平衡性探析.思想战线, 2007,33(4):133.

79) 李廷良.宇宙人文论初探.昆明:云南人民出版社,1993年版,第96页。

80) 同上,第106页。

人的‘五行’是肝肺肾心脾⁸¹⁾。彝族认为人与宇宙是同样的，有着内在的密切关系，所以善待自然就是善待自己。

(3) 彝族人民敬畏自然

彝族普遍信仰原始宗教，他们认为自然界的万物都是有灵魂的，而在生产力低下，面对自然界带来的福祸，人们无法给予合理的解释，所以就寄希望以宗教信仰和相应的祭祀活动获得神灵的保佑。彝族的原始宗教信仰主要融合了自然崇拜、图腾崇拜和祖先崇拜。他们通过祭祀天、地、山、水、石等自然神来祈求大自然的保护，并且将他们认为与自己有着血缘关系或者能够保护本民族的动物和植物作为民族图腾加以崇拜，拉近自己与自然的关系，获得战胜困难的勇气和庇佑。

目前，在彝族分布的广大地区，主要信仰原始宗教，由此形成的朴素生态观贯穿于人们的生产生活中，形成了人与自然的和谐相处。

三. 云南彝族传统友好型生产生活方式

1) 农业活动及发展

一) 农业耕作方式的发展

云南不同地区的彝族，由于所处地理位置的不同，农作方式也存在差异，但概括起来主要包括游牧、刀耕火种、以锄耕为主要劳作方式的旱地农耕、以犁耕为主要劳作方式的水田稻作农耕四种方式。目前居住在高山地区的彝族以旱地农耕为主，居住在海拔较低的平坝地区的彝族以稻作农耕为主。

早期，彝族从采集狩猎逐步转向定居农耕时期，以游牧和刀耕火种为主要的生计方式，并且以游牧为主，以刀耕火种的农作方式为辅。

后来伴随着人口的增多，刀耕火种成为农作的主要方式，这种方式一直到解放初期仍存在。如在楚雄的彝族地区以及一些居住在高寒地区的彝族，一直将刀耕火种的方式持续到20世纪六七十年代。刀耕火种主要包括砍伐——焚烧——播种——收获

81) 王水乔.近代云南彝族社会经济发展不平衡性探析.思想战线, 2007,33(4):133.

四个阶段,即选择一片较为平坦的山地,将树木砍掉,等到树枝干燥以后,连同杂草一起点燃,然后将包谷种子等种下,等待收获。这种农作方式较为简单,收成不稳定。刀耕火种对于生态环境有一定的影响,但是彝族并不是无节制地砍树烧山,而是采取土地轮歇的形式,并且在烧山的过程中为了避免火势无法控制,非常注重地点的选择,这使得很多地区在结束刀耕火种生活前维持了较好的生态环境。如云南元江县彝族村落山苏作村,其长期存在的刀耕火种采取“无轮作刀耕火种”和“短期轮作刀耕火种”两种轮作方式。“无轮作刀耕火种”,其轮歇特点是一块土地只种一季作物(不复种)便抛荒,休闲期短则七八年,长则十余年;“短期轮作刀耕火种”则是指执行一次“刀耕火种”后,可以连续耕种两年,然后再休闲七八年至十余年的刀耕火种方式⁸²⁾。在离村寨较远的地方采取“无轮作刀耕火种”,在村子附近的地块采取“短期轮作刀耕火种”。这样既可以充分利用燃烧的灰所具有的有机质等,也可以让土地在长期的休耕期内休养生息,恢复土地肥力和植被。但是,在新时期国家大力限制刀耕火种,也使得这种农业方式在彝族地区逐渐消失,在国家的政策扶持下,开始旱作及稻作农业。

现在居住在山区和高寒地区的彝族人民主要是以旱作农业为主,那里土地较为贫瘠。如滇东北的彝族地区,尤其是一些高寒地区,轮歇地占一年播种面积的30%⁸³⁾。明清时期,玉米和马铃薯等逐渐引进到彝族地区,这些作物适应自然环境的能力非常强,并且产量很高。自此,彝族人民为了减轻人口增长带来的压力,开始减少传统作物荞麦的种植,由轮歇栽培逐渐向连作轮作方式转变。至1952年楚雄州土地统计时,轮歇地仅占旱地面积的11.66%⁸⁴⁾。与轮作方式相应的,作物间作、套作和混作等的种植面积不断扩大。如苦荞与燕麦,甜荞与小麦、大麦,玉米与小麦,水稻与小麦,玉米与豌豆、蚕豆,油菜与玉米等都是彝族地区较为常见的轮作方式。

82) 尹绍亭.人与森林——生态人类学视野中的刀耕火种 [M].昆明:云南教育出版社,2000,第58-59页。

83) 王水乔.近代云南彝族社会经济发展不平衡性探析.思想战线,2007,33(4):134.

84) 《楚雄彝族自治州志》第三卷,第160页。

随着彝族的迁徙，居住在平坝地区的彝族人民，在以锄耕为主的旱地农业基础上，吸收其他民族的农业生产经验中，逐步发展稻作农业。如云南省楚雄州永仁县中和镇的直苴村，地处金沙江中游的河谷坝子，在长期的历史发展过程中，经历了畜牧——游耕——锄耕——犁耕转变，已经由旱作农耕过渡到稻作农耕⁸⁵⁾。处在滇南地区的一些彝族水田面积占到耕地面积的40%~60%，也以种植水稻为主。

从农作物的角度来将，在农业生产方式较为落后的刀耕火种时期，荞麦是彝族人民非常重要的粮食。而随着生产方式的进步，彝族受居住地山区立体气候的影响，可以种植的农作物种类越来越多。多数中海拔地区广泛种植稻麦、玉米、油菜、烤烟等作物，低海拔及部分河谷地区则种植双季稻和热带作物，海拔2000米以上的高寒山区则以洋芋、荞子、燕麦、玉米、杂豆类作物为主。除粮食作物外，油菜、花生、芝麻、大麻、向日葵、花椒等经济作物和青菜、白菜、大葱、蒜苗、茴香、包菜、花菜、南瓜、黄瓜等蔬菜品种也都有种植⁸⁶⁾。

二) 农业经验

彝族在长期的农业生产中总结了许多经验，这对于指导农业生产和促进农业发展有重要的意义，这些经验至今还广泛存在于彝族人们中。

① 农家肥

滇南一带的彝族有使用农家肥的传统，农家肥不仅使土壤肥力增加，庄稼长势良好，而且不会造成土壤板结，而是越来越肥。他们除了用猪、鸡、牲口等的粪便作为肥料；还会采集一些嫩叶放入茅厕中，使其经过一段时间成为肥料；还会收集一些枯枝烂叶燃烧成灰覆盖在土壤之上，来增加土壤的肥力；有的人家还会将猪、牛等牲口的骨头收集起来焚烧碾碎，用来种植蔬菜。这样长出来的庄稼和蔬菜等，颗粒饱满，营养丰富。另外，彝族一般居住在半山腰，上面是山林，下面是田地，这样雨水就会顺势将山林中腐烂的枯枝烂叶以及村内的污水冲入下面的田里，补充土

85) 陈兰香.插花节与赛装节——从旱作到稻作的农耕祭祀主题.楚雄师专学报, 2001,16 (1) : 66.

86) 赖毅,严火其.彝族传统山地农作的生物多样性智慧研究.中国农史, 2009, (4) : 38.

壤肥力⁸⁷。彝族还有一种田称为“雷响田”，人们在田地周围开挖沟渠，一旦下雨，雨水顺沟流入田里，便可栽种稻谷⁸⁸。因此，他们利用自然，但没有破坏自然⁸⁷。

② 改良土壤

今天滇东北彝良一带的彝族农民，会将开采出的黑沙石敲碎撒到地里，让它慢慢地风化，一方面改良土壤，一方面增加肥料⁸⁸。

③ 饮水灌溉

云南峨山一带的彝族农民，能够根据山地的形势、地层的构造、土壤和岩石的颜色等情况，准确地判断出水源所地。云南禄劝一带的彝族农民，更能从观察蚊虫活动情况中，找到打井的最好位置⁸⁹。据说，如果见到有一群蚊虫经常在离地五六尺的空中飞舞，那么其下面就可以打井⁸⁹。

④ 农业谚语

流传在彝族地区的农业谚语，是彝族人民在长期的农业生产中总结出的经验，并以此来安排农业生产活动。如流传在禄劝地区的“父母早死不好，庄稼栽早好”，流传在景东地区的“早栽谷，晚栽糠”，流传在牟定地区的“夏至忙忙，点火栽秧，头要一望，误了三行”，以及流传在景东和楚雄地区的“立夏包谷小满秧，处暑甜荞白露菜，秋分麦子寒露豆”等。

⑤ 物候学经验

彝族人还积累了丰富的物候学知识，他们善于根据动植物的生长情况来判断季节时令⁹⁰。云南武定一带彝族农民认为，水冬瓜的嫩芽能包住三颗荞子的时候是播种荞子的最好时节⁹⁰。禄劝一带彝族农民则掌握了一套物候的经验，据说“背背箩”鸟一叫，就要撒秧运粪；蝗虫飞蚂蚁出，就要大力种包谷；攀枝花树开花，“鸟露”鸟一叫，就赶快栽秧；蚯蚓出现或马蜂嗡嗡作响，就种蚕豆；“水中青蛙叫一声栽秧，叫二声点荞子，叫三声点包谷”⁹⁰。景东彝族地区也流传着与此类似的经验⁹⁰。

87) 王明东.彝族生态文化探析.云南师范大学学报, 2002,34 (5) : 121.

88) 《彝族简史》编写组.彝族简史.云南人民出版社, 1987年版, 第196.

89) 《彝族简史》编写组.彝族简史.云南人民出版社, 1987年版, 第196-197页

90) 《彝族简史》编写组.彝族简史.云南人民出版社, 1987年版, 第196-197页.

目前，彝族人民不断创新其环境友好型生产生活方式，逐步将传统经验与现代科学技术相结合，开展科学种植、养殖，改造中低产田，种植茶叶、烟叶、蔬菜等，提高深加工技术，建立示范基地和园区，成立合作组织，发展现代农业。

2) 林木的管理与保护

彝族崇拜树木，认为树木是有灵魂的，破坏树木会受到惩罚，这种纯朴的生态观客观上对森林的保护起到了巨大的作用。这是彝族人民在长期地生产、生活和社会实践中创造出来的灿烂的文化。他们对森林的管理中将树木分为神林、水源林等不同类型，实行封山育林等措施实现树木的休养生息，实现一种人与森林的和谐相处。

一) 神林、神树的崇拜和保护

在彝族的村寨都有神林（龙树林）或神树（龙树），多为松树和栗树，但在不同的地区也有其他的树种，至今每年都会举行盛大的祭祀活动，祈求风调雨顺、人畜兴旺。这与彝族龙崇拜具有密切的关系，在彝族的神话传说中，流传着龙生彝族、龙代表母亲、龙代表英雄等多种说法，从而祭祀龙树对彝族来说具有重要的文化意义。

如云南澄江彝族在我国农历3月3日祭祀松树。澄江的彝族人民认为他们与松树具有血缘关系，松树是他们的始祖。当地的彝族每个村寨都有一片神圣的山林，称为“民址”，里面长着高大的松树和栗树。每年的农历3月3日，村中的长者带领12岁以上的男性祭祀松树。祭祀的人折一松枝或者是栗树枝插在松树下祈福。“民址”附近的松树和栗树，严禁损坏和砍伐，否则后受到惩罚。

云南弥勒县下高甸村彝族阿哲人村舍前面的一座山上有一片约500亩的“龙树林”，山顶设有祭坛，每年在那里举行祭龙活动。龙树林里的龙树必须是栗树，下高甸村的“龙树”原为一棵三人合围大的栗树，自然枯死后，另选了一棵树龄较轻，一人抱的锥栗树，当地叫“摆尺树”，龙树林里面禁止放牧和打架。

楚雄彝族村寨内的龙树多为松树，如县华山彝族每年春末夏初的属龙日，全村彝民聚到一棵茎高叶茂的大松树下祭祀。

而红河南岸彝族的龙树则是橡树。每年正月属牛日，全村集体举行祭祀仪式，杀猪宰鸡献祭。头年本村所生男孩户要备一只红公鸡，一壶糖酒及糯米饭、菜送到龙树下献祭。彝族人认为，所得之子，系龙树神所赐，献祭以示报喜。全村每户来一人在龙树下，会餐前要举行赶豹仪式，祈求龙树神保佑全村六畜平安。会餐结束后，便举行求子仪式，男性村民，特别是小伙子齐跪龙树下，由“龙头”将祭龙树神时装在芦苇筒内的代表儿子的猪蹄和代表五谷的米、棉籽、松毛等物种抛撒，接得猪蹄的认为当年有福得子，得到米、棉籽的认为当年五谷能获得丰收。最后，众男子将所接到的物种兜着跑回家，妇人用簸箕接收后，连同接回的芦苇筒插在供桌上。平时，任何人不准砍伐或折龙树枝，妇女不准进龙树林⁹¹⁾。

除此之外，云南红河州弥勒县彝族在我国农历3月祭树，农历7月祭“密枝”（附近的一片树木）；云南玉溪彝族在我国农历2月第一个属牛日祭“树神”以祈求风调雨顺，人畜平安等。

二) 水源林的保护

《彝汉教育经典》上说：“山上长的树，菁中成的林，亦不可滥伐。有树才有水，无树水源枯⁹²⁾。”彝族人认为森林是水的源泉，而水是粮食的生命，所以彝族特别重视对于水源林的管理和保护。如巍山小潭子村后山小龙潭就立有光绪年间的水源林保护碑，“禁砍树木，禁放牲畜，倘敢故违，罚银壹佰⁹³⁾”。再如楚雄大姚县县华乡的拉乍咩村将生长在河边和水源点附近的树木都叫水源林，并且禁止人们砍伐，否则水源林将不会出水或者发生洪涝灾害，使人们受到惩罚⁹⁴⁾。

91) 杨甫旺,马胤.彝族树崇拜与生殖文化.云南师范大学学报,2002,34(1):109.

92) 彝汉教育经典.云南省社科院楚雄彝族文化研究所编.

93) 云南巍山彝族社会历史调查.昆明:云南人民出版社,1986.

94) 杞银凤.彝族利用乡土知识管理森林的经验——云南省楚雄州大姚县县华乡子米地村案例研究.林业与社会, 2003, (2) : 14.

三) 封山育林

封山育林, 是彝族人民管理森林的另一种形式, 通常封山的时期是动植物生长繁育的时期, 所以这很好的保护了生物多样性和动植物的休养生息. 如楚雄大姚县县华乡子米地村的拉乍咩村, 将每年的雨水至立夏这段时间定为育林期, 他们认为这段时期是树木发芽的时期, 所以人们不能进去修枝理叶, 也严防牲畜进入破坏树木⁹⁵⁾. 这是彝族人民尊重树木生长规律的选择, 并且他们认为山林如果长的太密, 空气流通不顺畅, 会导致树木生长缓慢, 并且质量下降, 所以, 封山育林时期, 人们会选择性的砍伐枯木, 收集地上的枯枝落叶, 这样既促进树木的生长, 也可以补充家里的燃料⁹⁶⁾. 封山育林在彝族村寨普遍存在, 这是人们尊重自然的一种体现.

四) 薪炭林

彝族居住在半山腰, 气候微寒, 所以对于薪炭林的需求量较大⁹⁶⁾. 为此, 不同地区的彝族根据当地的实际情况采取不同的方式管理薪炭林⁹⁶⁾. 楚雄大姚县县华乡子米地村的拉乍咩村将每年农历的10月至次年2月定为砍柴时间, 因为这段时间的柴木含水量较少, 柴禾耐烧, 而且这个时间砍了容易再生长. 另外, 他们砍柴并不是连片地砍伐, 而是有选择地“砍两棵, 留一棵; 砍老枝, 留嫩枝”. 并且他们严禁砍伐松树, 因为松树被砍后很难再生长出来⁹⁶⁾. 除此之外, 有些村寨在村寨周边种植薪炭林, 或者只是又选择地砍伐枯木或者杂树丛, 这类树种生长较快, 生长周期较短.

3) 火的利用

彝族是一个崇敬火的民族, 在彝族中广为流传着对火的崇拜, 这也体现在他们生活中的方方面面, 而且至今仍保留着祭火的完整仪式等.

95) 杞银凤. 彝族利用乡土知识管理森林的经验——云南省楚雄州大姚县县华乡子米地村案例研究. 林业与社会, 2003, (2) : 15.

96) 杞银凤. 彝族利用乡土知识管理森林的经验——云南省楚雄州大姚县县华乡子米地村案例研究. 林业与社会, 2003, (2) : 15.

一) 火塘

几乎每个彝族人的家中都会有火塘，火塘对于他们来说，是非常神圣的地方⁹⁷。火塘可以用来烤火取暖，可以烧水做饭，同时也可以会客。笔者曾到宁蒗小凉山彝族地区，每到一户人家，主人都热情的迎接围坐在火塘边，然后一边煮茶一边烤洋芋来招待⁹⁸。彝族火塘上有铁三脚架或锅庄石，传说彝族的火神阿衣迭古死后尸体被砍成三段，在三个地方火化立了三个坟，用三个石头作为标记，就是锅庄石。所以火塘也代表了对火神的敬畏。彝族人们商议事情等都是在火塘边，如云南禄劝县一带的彝族，每年商议开垦土地、播种等相关的农作大事，都要由村中的长者召集各户家长，到长老家的火塘边，点燃火塘，用酒和谷子等先祭过火塘后，才开始商议。他们认为这样会得到火神的保佑⁹⁷。

另外，云南彝族于火把节前在每家火塘边举行祭火神的仪式，咏诵祭火词。祭火词首先颂扬火的功德：“春天来开荒，荒地你烧熟；夏天虫吃苗，恶虫你烧死。火伴行人走，火伴家人坐；火是衣食火，火光多热乎，火是人魂窝。”然后追述火的来历，最后表示对火的殷切祝愿：“今天来祭火，火光永不灭，火光明朗朗，火光像日月；火神藏家中，人畜得安宁⁹⁸。”这充分展现了火在彝族人的生产生活中发挥的重要作用，而火也完全融入到了彝族人的日常生活中。

97) 陈永香.论彝族的火崇拜.楚雄师范学院学报, 2002,17 (2) : 58.

98) 杨福泉, 郑晓云.火塘:方寸之间的灵性世界.今日民族, 2002, (8) : 35.



<图 2-9> 火炬之光

二) 人生礼仪与火

火贯穿于彝族人的整个人生，从出生、成人礼、婚礼和最后的丧礼，无不与火密切相连⁹⁹。云南小凉山彝族男孩的成年礼，即穿裤子仪式就是在火塘边举行，母亲先把一块石头在火塘里烧热，然后洒一瓢凉水，把新裤子放在热石发出的蒸汽上转一圈，给男孩穿上，表明男孩成年，除去晦气，得到火塘神的庇佑⁹⁹。宁蒗彝族在结婚的仪式上，新娘必须举行向火塘的告别仪式，新娘的“魂”才能从娘家转入夫家，新娘才算是夫家的正式家庭成员¹⁰⁰。从议婚到新娘正式成为夫家成员，都是在火塘边举行，火起到一种中介与“证人”的作用¹⁰⁰。而彝族举办丧礼，最主要的就是火葬，他们认为这样火会将滞留在死者身体内的魔鬼烧死，更快地到达阴间¹⁰⁰。葬礼时，要在葬棚外面点燃火堆，死者的家人在火旁与死者做最后的道别。

三) 与火相关的节日及祭祀

99) 陈永香.论彝族的火崇拜.楚雄师范学院学报, 2002,17 (2) : 57.

100) 陈永香.论彝族的火崇拜.楚雄师范学院学报, 2002,17 (2) : 57.

① 火把节

火把节实际上是祭火，在每年的六月二十四举行。火把节这一天，彝族人们要宰杀牲畜祭祖，晚上点燃火把，将家里的房角和圈养牲畜的地方熏一遍，还要到田地里“照田”，并举行祭祀活动。他们认为这样就会铲除疾病和害虫，保佑来年身体健康，农业丰收。最后围着火把唱歌、跳舞，欢度节日。

② 阿细祭火

彝族的阿细支系在每年的二月初三会举行隆重的祭火仪式，他们称为“木邓赛禄”。传说中，阿细的先民外出狩猎时正遇下雨，雨水将他们所带的火种熄灭，人们陷入了黑暗与寒冷之中。先民木邓为了使人们摆脱困境，用一根木棍在一棵朽木上不停地旋转，转了三天三夜，终于在二月初三这天钻出了火星，使人们又得到了温暖。所以阿细人在这一天举行祭祀，以此来纪念先民木邓发明了“钻木取火”。祭火由毕摩主持，这一天，人们将自己装饰成先人的模样，以黄、白、黑、红和泥土五种颜色在身上绘制出动物、自然现象等各种图案，并用树皮、树叶、野草等遮蔽自己的头部或者下身。一切准备就绪后，毕摩在龙树下举行祭祀，并模仿钻木取火。之后，人们抬着火神走街串巷，将新的火种送到家家户户。

4) 彝族医药

彝族医药历史悠久，起源于原始社会时期。那个时期早期彝族先民居住的地区森林密布，生物资源丰富，这使他们对于动植物拥有直观的认识。在生产生活方式落后的情况下，彝族先民不断地与自然抗争，逐步积累起了运用植物的经验。

彝族人民充分开发、利用植物的药用价值，目前有文字记载的植物方药有871种，其中花类药47种，果类药128种，树皮类药48种，菌属药物23种，植物寄生类药37种，树脂类药27种，菜食类药44种¹⁰¹⁾。例如他们运用龙胆科植物斜茎獐牙菜在彝族民间用于治疗小儿痉挛性腹痛；运用通光藤治疗气管炎和癌症；运用灯盏花治

101) 奇玲, 罗达. 中国少数民族传统医学大系. 内蒙古科技出版社2000(3).

疗跌打损伤、风湿疼痛、胃疼和偏瘫等；运用石竹科植物金铁锁的根部来镇痛、抗炎和抑菌等；运用萝藦科植物断带参，治疗风湿关节炎及跌打损伤等。

在近代，随着一些彝族医药典籍的问世，以及医药工作者的潜心研究，彝族医药取得了很大的成就。其中最为著名的就是彝医曲焕章根据彝族人民医治外伤的经验研制而成的“云南白药”，享誉海内外。另外，20世纪80年代初开发研制的“昆明山海棠”，近年来开发生产的“云南灯盏花注射液”“三七皂甙注射液”“彝心康胶囊”都是获益于对彝族医药文化的深入挖掘。云南盘龙云海药业生产的“排毒养颜胶囊”，楚雄州中医院研制的彝族新药“养胃解毒胶囊”“利胆解毒胶毒”“颈椎胶囊”，云南白药厂用彝药研制的“肾炎灵胶囊”，云南省药物研究所用彝药为主研制成的治疗跌打损伤、风湿关节炎的“肿痛消擦剂”等，都是彝族医药应用现代科技手段所得到的成果¹⁰²⁾。

5) 服饰

一) 服饰尚黑

彝族的服饰崇尚黑色，这与彝族所处的自然环境有密切的关系。彝族多居住于海拔2,000米左右的山区或半山区，北部昭通、镇雄和大小凉山的彝族山区，海拔高度有的在3,000米以上，彝区山地分布集中，面积广大，到处皆山，仅有总面积不到5%的山间小盆地一个个孤立、分散地点缀在群山之中¹⁰³⁾；另外彝族居住地处在哀牢山、乌蒙山和凉山地带，高山丛林，河流奔腾不息。彝族人认为“青”即是黑色，服饰“尚黑”体现了彝族人对外边自然环境的认知。

102) 顾健,刘振.彝族植物药的发展现状研究.中国民族民间医药杂志,2003(5):249.

103) 张建,肖国荣.彝族服饰的生态审美观.美术观察,2011,(10):114.



〈图 2-10〉马赛服装

二) 虎图案

彝族自认为是虎族的后裔，武定一带彝族自称“罗罗”(虎族)，男人自称“罗罗颇”(公虎)，女人自称“罗罗摩”(母虎)；武定、大姚等县还流传着“人死一只虎，虎死一只花”的谚语¹⁰⁴⁾。所以彝族服饰上多以虎图案作为装饰。如昆明近郊的彝族，为刚

出生的婴儿准备虎头鞋、虎头帽和虎头兜肚；楚雄、武定的彝族幼儿时多穿虎头鞋、戴虎头帽；牟定、南华等县的彝族也有老人穿虎头鞋，孩子戴虎头兜肚的习俗。另外，彝族妇女的腰带和背小孩的裹背上也多有虎图案。

彝族用虎的图案来装饰服饰，一是因为彝族认为他们是虎的子孙，将虎穿到身上，表达对祖先的敬重和怀念；二是虎是凶猛的动物，彝族人认为虎是一家，那么就可以得到老虎的庇佑。这种以动物来装饰服饰的方式，也展现了彝族人与自然同为一体，同时也以这种方式希望从动物那里得到勇气，穿虎皮显虎威。



〈图 2-11〉楚雄彝族

6) 饮食与动物保护

彝族人的观念中，多种动物都是其民族图腾，与他们有密切的血缘关系，并保护着他们。所以在平时的饮食中，彝族禁食这些图腾崇拜物。如永仁、大姚部分彝族俚语现今仍禁食水牛、青蛙、蛇、狗、马等肉类¹⁰⁴⁾。

另外，彝族平时禁止杀狗、吃狗肉。在彝族的谷物起源神话中，谷种因粘在狗尾巴上才免被洪水冲走，带到了人间，所以狗对于彝族有特殊意义。在粮食收获后

104) 张建，肖国荣.彝族服饰的生态审美观.美术观察，2011，（10）：114.

105) 杨甫旺，伍茜溪.试论彝族原始宗教对生态保护的意义.楚雄师范学院学报，2006,21（5）：31.

举行的尝新米节中，都要先敬狗，表达对狗的感谢，然后人才能吃° 楚雄地区的彝族除夕之夜也要先喂狗，感谢狗带来的五谷之恩¹⁰⁶。马游彝族在春节时各户根据吉凶情况择日“出羊”和“出牛”，正月第一个属虎日“驾牛”，将犁让牛驾上，用酒、肉、饭喂牛，犁牛人给牛叩头，感谢牛一年的辛勤劳作¹⁰⁷。

同时，这些与彝族密切相关的动物，严禁捕杀。



〈图 2-12〉宁蒍小凉山彝族地区房屋墙上随处可见的鹰图案

7) 寨址选择

彝族主要分布在无量山、乌蒙山、凉山等山间丛林中，属于山区、半山区，村寨

106) 李云峰，李子贤，杨甫旺. [梅葛]的文化学解读. 云南大学出版社，2007年版，第7页.

107) 李云峰，李子贤，杨甫旺. [梅葛]的文化学解读. 云南大学出版社，2007年版，第7页.

多坐落在山腰的平缓地带，处于向阳面，流传在禄劝县坎邓村的谚语“上面宜牧，中间宜居，下面宜耕¹⁰⁸⁾”很好地解释了彝族是如何选择寨址的。半山坡冬暖夏凉，气候适中，人们上山可以采集、狩猎，下山可以耕种农田。这是彝族人民充分认识自然环境的一种选择。依山傍林也是为了亲近大自然，有利于和自然界的神灵沟通，达到一种和谐相处的目的。

四. 总结

在生产力和科技水平较差的情况下，彝族人们对自然的依赖度较大，虽然部分传统生产生活方式有很强的宗教色彩，但其尊重自然、善待自然，客观上形成了环境友好型生产生活方式，并一直延续至今。

但这种环境友好型生产生活方式主要是建立了宗教信仰的基础上，受到宗教和传统习俗的约束，而不是一种科学的主动的环保意识，没有形成规范的、系统化的制度体系，影响范围有限。如根据对双柏县彝族地区关于国家林业法律制度认知度的调查显示，对国家林业法律制度比较了解的只占24.1%，大部分被调查对象的知晓程度并不高，占75.9%¹⁰⁹⁾。伴随着人们认识自然的能力越来越强和外来文化的冲击，传统的约束力可能会逐渐减小，所以，如果要实现环境友好型生产生活方式的长期可持续发展，必须在原有基础上建立一定的制度，形成明确的规范。

另外，目前彝族地区的农业、林业生产等粗放型程度较高，这已经逐渐跟不上当地经济发展的步伐，从长远来看，如果要实现生态友好型生产生活方式的可持续发展，必须发展当地经济，人们经济水平提高了，才会投入更多的精力、财力保护自然环境，而不至于以牺牲环境为代价获取经济的发展。所以，彝族地区的生产方式等必须由粗放型向集约型转变，促进生态经济的发展。如建设山水林田路综合开发生态系统，并且继续保持使用农家肥的传统，培养土地肥力，达到利用与养护相结合；另外可以根据不同地区的不同情况，适当开展经济林果建设，不仅实现生态养

108) 马军.论彝族文化习俗中的生态经济观.生态经济, 2001, (8) : 79.

109) 杨爱华, 吴位凡.国家林业法律制度对双柏县彝族地区的影响.林业调查规划, 2010,35 (1) : 74.

护，而且可以增加人民收入；并且在传统的保护森林的基础上，有组织、有计划地组织植树造林，实行“谁投资、谁管理，谁受益”，并建立一定的管理体系，实现科学绿化。

总的来说，要在继承传统生产生活方式中合理的部分，将传统的生态保护与现代社会文明相结合，适度保护与合理开发相结合，才能促进彝族生态友好型传统生产生活方式的可持续发展。

3. 傣族的环境友好型传统生产生活方式

傣族在民族识别以前又被称作摆夷族，是中国少数民族之一^①。散居于云南的大部分地方，主要集中在云南省的西双版纳、德宏、耿马、孟连、元江、新平、金平、景谷、双江等州县^②。据2010年第六次人口普查数据显示，人口有1,261,311人^③。世代繁衍生息在怒江、澜沧江、金沙江以及怒山、云岭、高黎贡山纵横交错间的河谷平坝中，身处亚热带地区，平均海拔在500~1,300米之间，年平均气温在21℃左右。

傣族信仰小乘佛教^④。傣族在长期的生产生活实践中，形成了环境友好型农耕方式、水利管理形式、建筑形式、开发药用植物和资源方式、傣族饮食风味等，促进傣族社区的资源持续开发利用和保护了生态环境。

一. 傣族稻作农业下的生态观

傣族稻作农业历史悠久，在长期的生产生活实践中，傣族人形成了自己与自然相处的方式和生态观。

傣族人认为“森林是父亲，大地是母亲，天地间谷子至高无上”，自然界万物在傣族人心中的顺序是“林、水、田、粮、人”，“有了森林才会有水，有了水才会有田地，有了田地才会有粮食，有了粮食才会有人的生命”^⑤。这不仅是傣族人从事稻作农业的体会，也体现了傣族人朴素的生态观。

首先，傣族人将自然界的万物都看作是相互依赖的，水依赖于森林，田地依赖于水，粮食依赖于田地，而人依赖于粮食，森林依赖于山，这样就形成了一个庞大的生态链，一环连一环，息息相关^⑥。其次，傣族人认为世间万物都是平等的，自然界创造的每一样事物都有自身存在的价值，人是这样，山水也是，所以人不能企图掌握自然界的万物^⑦。最后，在傣族的生态观中，人的生命是排在林、水等自然物的后面，有了自然的赠与，人类才能生存^⑧。总的来说，在傣族人的观念中，人是自然的产物，与其他自然物是同等的，人不能凌驾于自然之上，而必须寻求与自然的和谐

相处，尊重自然，适应自然，才能维持自身的生存和发展。

傣族的这种生态观体现为两个方面：一，傣族人是一个以种植水稻为核心的稻作民族，农业种植对水的需要，以及原始崇拜和佛教信仰的结合，使傣族人的生态观一方面是对自然的需要和尊重，没有自然的馈赠，傣族人就无法繁衍生息；另一方面，宗教信仰产生的很多禁忌也制约着傣族人的行为，使人们对自然存在着敬畏。

二. 宗教禁忌下的生态保护

傣族的宗教信仰始于原始宗教，公元6~8世纪，佛教传入，为了融入当地，在长期的发展过程中，逐渐的与原始宗教融合⁹。两种宗教下有不同的习俗和禁忌，限制和引导着人们与自然和谐相处，也逐渐的形成了一种习惯。

1) 竜林崇拜及对树木的保护

在傣族人的原始信仰中，相信“万物有灵”，不仅人有多个灵魂，树也有树魂，谷有谷魂，天有天神，地有土地神，水有水神，石有石神，寨有寨神，家有家神等。他们认为自然界的神、鬼、魂掌握着粮食的丰歉和人们的祸福，因此这些与人们生产生活息息相关的自然万物都是傣族人民崇拜的对象⁹。由此，形成了傣族人的灵魂崇拜、自然崇拜、神灵崇拜和图腾崇拜等，不同的信仰有不同的禁忌，这在客观上要求人们保护包括水、山、森林、鸟等在内的植物和动物等⁹。而作为水源地的竜林崇拜表现的最为突出。

“竜”是傣语音，本意为森林，“竜林”的意思是神林，指“神”居住的地方¹¹⁰⁾。傣族的每个村寨都有一片森林划定为“竜林”，是寨神和勐神居住的地方⁹。每年，村寨都要举行祭祀，祈求寨神保护五谷丰登，人们平安健康等。

傣族人对竜林的崇拜实质上是祖先崇拜，与傣族农业有着密切的关系，主要源于两点：一是采集狩猎是傣族历史上很重要的一个时期，而森林正是傣族人采集狩猎

110) 阎莉：傣族“竜林”文化探析. 贵州民族研究，2010，（6）：66.

食物的重要场所，在傣族人看来，森林提供给他们食物，使其生存；二是稻作农业决定了水的重要性，而森林是水的根源，所以森林是人类生存的根本所在。

傣族人认为竜林的每一棵树都是有灵魂的，所以禁止人们随意进入攀爬、砍伐，即使是被风吹下来的枯树枝叶和果子等都禁止采集，让其自行腐烂。傣族的经典书《土司警言》曾出现这样的告示“不能砍伐竜山的树木，不能在竜山上建房，否则会触犯鬼魂、神灵和佛¹¹¹⁾。并且订立各种村规民约等来限制人们砍伐森林，如砍伐树木要受到惩罚，轻者砍一棵树要罚种七棵树、赔两只鸡、一斤酒，重者罚耕牛等大牲畜或者开除户籍¹¹²⁾。



〈图 2-13〉景谷傣族彝族自治县威远镇公榔村民委员会芒朵自然村——祭祀神树

111) 1) 吴建勤：傣族的山林崇拜及其对生态保护的客观意义，《湖北民族学院学报（哲社版）》2006

112) 刀国栋：傣族历史文化漫谈，民族出版社，1992年版，第40页。

另外，傣族人对于种树也格外看重¹¹³。很多傣族地区视大青树为神树，在栽种时要举行一定的仪式，演唱《栽树歌》：“这是为了人们做好事，供过路人乘凉，祈求神灵保佑。请路神、地神不要惊慌，不要误解，圣洁的树，栽在寨子边，种在水井旁，种树是积德，植树祈平安。吉祥的树，在露水的哺育下快成长，在阳光的爱抚下快粗壮¹¹³。”对于植树的重视，在另一个方面体现了傣族对自然的尊重。

2) 万物平等的佛教观念对于生态的保护

傣族信仰的南传上座部佛教认为众生平等，人类与世间万物都是平等的，人类不能凌驾于自然之上，要尊重自然，与自然和平相处，并相信人是生与死、死与生的轮回，在戒律中规定禁止杀生等，这都要求人民规范自己的言行，与自然万物平等相处。

总的来说，宗教以神圣的力量限制人们对自然的破坏，并且让人们对于砍伐树木、杀害生灵等有一种心灵上的敬畏，这在客观上保护了自然，也是傣族人民生态自然观在宗教习俗上的一种体现。

三. 傣族传统生产生活方式

1) 村寨选址及布局

傣族的村寨多依山傍水，背靠山林，村寨前有河水，旁边有可以开垦的平坝¹¹⁴。对此，勐腊县勐满镇曼粉村80高龄的刀文俊老人说，傣族在选寨址时，要靠近山林以便到山林中采集和防御洪水，要靠近小溪以便洗漱，要有阳光以便冲破浓雾的寒气，要有树林以便乘凉，要有道路以便和其他村寨联系，要有土地以便开垦稻田¹¹⁴。傣族古文献《谈寨神勐神的来历》也讲到，傣族建寨时，要先选一片树木高大的森林，作为寨和勐的保护神——寨神和勐神的居住场所，之后在这片森林附近

113) 尹绍亭、唐立等编：《中国云南德宏傣文古籍编目》，云南人民出版社，2002年版，第57页。

114) 吴兆录：《山环水绕傣家寨·生命世界》，2007，(7)：40-41。

平坦的地方建立村寨¹¹⁵⁾。

傣族村寨中，寨心、寨门、竜林、民居、佛庙等有规划的分布。寨心一般在村寨的中心，以巨石和树木等为标志，是村寨的灵魂和生命；寨门在村寨通往外面的路口，通常有东西南北四道门，以两根木柱上端绑上一根横木构成；寨神庙一般在村寨的主路旁，是村民祭祀神灵的场所；佛寺在村口或者是村尾；竜林分布在村寨的外围¹¹⁶⁾。这不仅形成了人与自然和谐相处的空间，也与自然界的神灵、鬼魂等和谐共存。

2) 傣族竹楼

竹楼是傣族最具特色的民居。傣族聚居地地处亚热带地区，气候潮湿，闷热多雨，而且丛林茂盛，所以人民就地取材，运用当地盛产的竹子建造竹楼，由于竹子具有在水中长期浸泡而不被腐蚀的特征，适合当地的气候。竹楼整体都是用竹子建造，包括柱、梁、地板、门、窗等，以竹篾等栓扎，方便修葺房屋，也利于防震。

傣族竹楼多为独立院落，以竹栅栏作为院墙，院内多栽种花果林木等，院墙外栽种林木或者挖掘鱼塘，这样形成一个天然的屏障，不仅将院落与外面隔离，而且形成院落与周围环境和谐共存的景象。竹楼是干栏式建筑，屋脊较短，呈人字形，采用重檐式构造，这样既能遮阳，在傣族多雨地区，也便于排水，避免屋顶储存过多的积水。竹楼一般是分两层，上层住人，下层圈养牲畜、堆放杂物等。竹楼下层是悬空的，便于通风，有利于防潮、保持竹楼的干爽和避免洪水的侵袭；另一方面也有利于防御虫蛇、野兽等。竹楼分为里外两间，里面那间作为卧室，傣族人称为“黄暖”；外屋为“那晃”，相当于客厅，设有火塘，用来做饭、取暖和接待客人。屋与屋之间也是以竹子间隔，风可以从竹子的间隙中通过，能够很好的减缓炎热，使人感觉非常凉爽。在堂屋的外面有阳台和前廊，比较开阔，用来存放水罐等家用工

115) 祜巴勐：论傣族诗歌，岩温胆译，云南民间文艺出版社1981年版，第109-110页。

116) 杨庆：西双版纳傣族传统村寨的保护与开发，云南民族学院学报（哲学社会科学版），2001,18(6)：50。

具，也是傣族妇女做家务活的地方。

目前，随着社会经济的发展和生态保护的需要，传统的竹楼已经非常少见，取而代之的是以木头、砖木、砖混材料为主的房子，建筑材料基本是购买，但仍然保持着傣族上下两层的“干栏式”和“屋顶歇山式”的构造等。

3) 傣族农耕活动的发展

一) 自然农法思想

傣族历来以农耕为主，有着悠久的稻谷种植传统。在长期的生产实践中，傣族人通过与其所处的自然环境的相互调适，创造了一套独具特色的农耕文化。这一文化体系渗透着傣族人依靠自然，尊重自然，遵循自然法则的农耕理念，具有深厚的自然农法思想。这种思想主要表现在以下几点：

① 不施肥

傣族人在长期的稻作农耕中，不喜欢施肥。而是采取以下方式从事农耕：一，傣族在民主改革以前，土地多，人口少，而且当地自然条件好，粮食足够生活；二，以西双版纳为例，在没有种植双季稻之前，都是一年种一季，这样土地就有长时间的休耕期，在这段时间，农家就会将猪牛等赶到地里，这样不仅很好地养殖了牲畜，而且牲畜的粪便就成为土地的肥料。并且土壤中的田鸡、蚯蚓等也有改善土壤结构的作用。三，除此之外，稻田收割后，农民也会将牛赶到地里，以牛来踩踏谷草和谷草根，牛的粪便以及踩烂的谷草都变成肥料。这是傣族广为流传的“牛踏田”，以此来增加土壤的肥力。四，傣族的村寨大多在平坝，一般是在水田的高处，而且原来没有专门的厕所，下雨的时候，雨水会将粪便等污水冲到水田中，增加水田的肥力¹¹⁷⁾。

② 寄秧

117) 参见王文光，方利敏：傣族稻作文化中的宗教因素初探，云南师范大学学报（哲学社会科学版），2006,38（3）：203-207。参见阎莉，张春玲：傣族自然农法思想探析，中国农史，2008，（2）：41-47。

“寄秧”是傣族非常有特色的一种农业种植方式，是在正式栽秧之前，先将秧苗在田间长20天左右，之后拔起去掉须根和尖叶移植到犁好的有水的大田里。经过这样栽种的秧苗具有抗旱性，而且长得肥壮，产量高。而这也是傣族人民发挥聪明才智，适应自然的一种表现。傣族居住的地区，如西双版纳等，早雨季节分明，需要插秧时，恰好是旱季，多数田地中还没有水，所以就采用“寄秧”，等有水以后再移栽。自然条件不允许栽秧的情况下，就采取“寄秧”的方式应对困难，然后再在自然条件允许的情况下，进行移栽。

③ 应对病虫害

傣族人一般不用农药等防御病虫害，而是以自然的力量——以物克物的方式来抑制。20世纪60年代以前，稻谷种植一两个月之后，傣族居住区时常能够看到这样一幅画面：妇女们肩挎竹篮，竹篮里放十几只小鸭，到达田地后，小鸭被放出来，随意穿梭于田间地头，妇女们则开始干自己的农活，等到傍晚回家时，她们再将小鸭放入竹篮，带回家。在傣族人的观念中，主要是运用自然界的天敌和放入田地中的鸭子来消灭害虫，即使是出现大面积的病虫害，也只是将草木灰或者“三埡果”的果皮撒入田中来抑制。

二) 现代经济对于傣族农耕的冲击

20世纪50-70年代以来，越来越多的傣族人民开始种植双季稻，土地的休耕期变短，而且由于部分森林遭到破坏，灌溉农田的水中的天然肥料减少，傣族人们也开始逐渐地使用化肥和农药。但总体上来说，在党的领导和政策扶持下，傣族人们兴修水利，开垦荒地，扩大种植面积，成立农村合作社等，在继承“自然农法”思想的基础上采用科学技术手段种田，如选用良种，开展农业机械化。在专业技术人员的指导下科学施肥，粮食产量稳步提升。并且引入种植多种经济作物，如咖啡、坚果等，建立农业产业化基地，补充和丰富农业种植。

但在傣族地区，现在非常凸显的一个问题是橡胶的种植对农耕造成直接地冲击。20世纪50-60年代，为了国民经济发展战略需要，傣族地区开始种植橡胶，而后在

国家和地区政府的鼓励下，橡胶林面积大规模扩大¹¹⁸。如到1990年西双版纳种植面积发展到了133万亩¹¹⁹。在这个过程中，傣族人民也逐渐认识到了橡胶所带来的巨大经济利益，在利益的驱使下，人民开始认真学习橡胶种植技术，并且逐步扩大橡胶的种植面积¹²⁰。到2011年，西双版纳州橡胶种植面积达到431.06万亩，开割220万亩，在当地的财政收入中起着举足轻重的作用¹²¹。橡胶种植抢占了劳动力，而且由于经济利益高，人们逐渐减少了水稻的种植¹²²。目前，很多西双版纳的傣族将水田出租给外地来的人种植香蕉，收取地租，自己一心一意管理橡胶¹²³。橡胶林代替了天然生态群落彻底改变了当地的生态条件和小气候。

这种生产方式的转变，对于傣族的生活方式也产生影响¹²⁴。早期还是以水稻种植为主的时候，山上森林中拥有众多的药材和野生蔬菜供人们采集，傣族人家庭院旁边几乎都有一块田地种植蔬菜，有些农户可以达到5-6亩¹²⁵。而现在森林中可供人们采集的物种越来越少，而且需要到更远的地方才能找到，房子周围用来种植蔬菜的田地也已大幅度缩减。

4) 水资源管理

提起傣族，我们必然会想到水，傣族是一个与水关系非常密切的民族，所以在傣族的发展过程中很早就形成了一系列的管理水资源的村规民约和规章制度等。

一) 水井管理

傣族人非常讲究饮水卫生，虽然依河而居，但是他们的饮用水确是井水，所以傣族几乎每个村寨都有水井¹²⁶。他们的水井一般设在村头或者村尾，多是在山箐的入口，或者树木繁茂的地方，最常见的是水井旁边都有一棵或者几棵长势良好的大青树，¹¹⁸⁾ 这样为了避免水质受到人畜的污染。

傣族挖井要经过严格的程序，要先挖一个井坯，观察一年，了解水质在一年四季中的变化情况，最后请德高望重的老人或者是有经验的人来品尝，鉴定水质，确认

118) 艾菊红：傣族水井及其文化意蕴浅探，内蒙古大学艺术学院学报，2005,2 (2) : 51.

水质好后才能继续建造。傣族的水井要用篱笆等围起，防止牲畜等接近水源。另外，水井都要修建漂亮美观的井盖，并且在井盖上镶嵌上镜子，这样就能阻挡飞禽走兽等污染水源。饮用水和洗涤用水一般要分开，并且有公用的舀水工具，如长柄木瓢等或者是将木瓢系在一个长竹竿上，避免各家的木桶污染了水质。另外，还禁止妇女在水井边洗衣服、洗菜，禁止男人在井边饮牲畜，也不让小孩到井边玩耍。除此之外，傣族的水井有专门的人员管理，原来是寨子的头人，现在一般是村长。他们负责定期地清理水井，除掉水井边的杂物或者水井里的虫子、青苔等。

这些都体现了傣族人对于水的崇敬和对水源的保护。虽然目前随着生活条件的改善，部分傣族村寨已经有了自来水，而且随着水位线的降低，有一些地方按照原来的方式已经打不出水，但傣族人珍视水的观念仍然存留着。目前在一些偏远的傣族村寨中，水井仍然是饮用水的主要来源。而对于一些现代饮用水设施已经较为完备的村寨，也保留着水井，人们有时会到水井打水用来洗衣等，并且为了将保护水源的优良传统传承下去，有些村寨将水井作为一项旅游资源加以保护，呼吁人们珍惜水资源。

二) 水利管理

俗语有云“建勐需要千条沟”，充分体现了水利的重要性。考虑到水稻与水的密切关系，傣族历来非常重视水利事业的发展，很早就形成了一套完整严密的水利灌溉系统，主要包括水利灌溉管理系统、水沟建设、分水制度等。

① 水利灌溉管理系统

以西双版纳为例，历史上很早就拥有了一套自上而下的，完善的水利管理系统。上自召片领直辖的宣慰司署、各勐司署，下至各个火西¹¹⁹⁾，村寨，都设有专人管理水利事务。另外每条沟也都设有“板闷龙”（即正水利总管）和“板闷因”（副水利总管）各一人，管理本沟灌溉区的水利事务。水沟经过的每一个村又设一人“板闷曼”

119) “火西”是20世纪50年代前西双版纳傣族地区的一级基层政权机构，每个火西由几个自然村社组成，一般为三五个，多的有七八个。

(即水利员), 受正副水利官领导, 管理本村的水利事务. 并从各村的水利员中选出两人协助正副水利总管的工作, 一般选择沟开头的村寨和沟尾部的村寨, 这样可以相互照应, 便于公平. 他们主要负责动员、监督水沟建设, 检查水渠, 分配水量, 维护水规等¹²⁰).

目前, 随着水库等的建设, 出现了新的形势, 也伴随着形成了一套新的垂直管理体系. 建立逐级管理机构, 州市成立了水利局, 乡(镇)成立了水利管理站[°]. 例如勐罕镇, 镇水利管理站设立了两个办公室分别管理水库和水沟的修护和保养等[°]. 另每个行政村、自然村、村小组都设有专门的水利管理员管理水利工作, 按行政级别受上一级领导¹²¹), 形成新的垂直管理系统.

② 水沟建设

每年, 召片领议事厅先下达整修水沟的命令, 然后派监督员到各村寨与头人共同商议, 动员群众, 将任务划分到各村各寨、每家每户. 水沟修好以后, 先举行祭祀仪式, 然后放水检验沟渠的完成质量. 通常是将一个竹筏放入水中, 顺水漂流, 在哪里收到阻挡, 就表示那里的质量完成不合格, 给予惩罚, 并责令重修[°]. 也有些为了简单, 就抓一把草之类的放入水中漂流, 在哪里受到堵塞, 就责令重修[°]. 这种检测方法既简单又方便, 是傣族人民根据所处的自然环境总结出的经验, 对检测水沟的弯曲度和平整度等有很好的效果.

③ 分水制度

由于田地距离水沟有远有近, 而且田地有高有低, 为了保证田地都能公平地分到水, 傣族在长期的生产实践中有一套独特的分水制度. 一般都是由水利管理员根据各家田地的多少、远近和高低, 计算出每块田所需要的水量, 然后在水沟和田地的接口处, 安置一个可以控制水量的“测量器”, 有些是在木头上砍开不同大小的开口, 有些是放置一个竹筒, 在竹节上凿开不同大小的孔来控制水量的大小[°]. 傣族人

120) 参见高立士: 西双版纳傣族传统水利灌溉及其社会意义初探, 云南民族学院学报(哲学社会科学版), 1994, (3): 28-31, 88.

121) 参见郭家骥: 西双版纳傣族的水文化: 传统与变迁——景洪市勐罕镇曼远村案例研究, 民族研究, 2006 (2): 64-65.

民创造了一种分水器，木质，呈圆锥形，下粗上小，按照其所刻的斤、两、分、厘的度数，呈台阶状逐渐递减，如50纳（12.5亩）以上分“斤”、30纳分“两”、20纳分“钱”¹²²⁾。水利管理员严格按照分水器分水，如果有人敢违背这种规则，就会受到惩罚。

目前，随着现代水利设施的建设，水渠的建设和分水方法更加现代化和便捷化，但是总体思想仍与传统的管理体系相同。

5) 泼水节

泼水节是傣族的新年，是傣族最为重要的传统节日之一，一般是在傣历六月中旬举行，为期三至四天。泼水节包含着祈福消灾等文化意义。在西双版纳，泼水节的第一天为“麦日”，傣语称“宛多尚罕”，相当于农历的除夕，意为送旧。这一天，人们要将房屋打扫干净，准备年饭等；并且青年人一大早上就穿上节日的盛装，到山上去采摘鲜花和枝叶，并且担来清水，到佛寺为佛洗尘，称为“浴佛”。浴佛结束后，人们就开始互相泼水，并且互相祝福吉祥等。节日的第二天成为“恼日”，“恼”是空的意思，因此也称“空日”，这一天不属于旧一年，也不属于新一年。节日的第三天称为“麦帕雅晚玛”，是傣族的“元旦”，新年的第一天，据称这一天是麦帕雅晚玛的英灵带着新历返回人间之日，也称为“日子之王来临¹²³⁾。”

目前，民俗旅游的发展，傣族地区也逐步的开发节日民俗旅游。如每年泼水节期间，会有众多的国内外的游客聚集到西双版纳与傣族人民一起感受节日的快乐。在节日期间还有各种活动，泼水、丢包、龙舟竞赛、象脚舞、孔雀舞、放孔明灯等，以此来表达人们对美好生活的期望。

6) 傣族医药

122) 艾菊红：水之意蕴——傣族水文化研究，中国社会科学出版社，2010年版，第45-46页。纳是傣族计量田地面积的单位，斤、两是傣族分水时测水流量大小的度量单位。

123) 岩罕应：西双版纳泼水节趣谈，上海人大，2011，（5）：55。

傣药是我国古老的传统医药之一¹²⁴。傣族人民在千百年的发展中，为了生存和繁衍后代，在长期地生产生活实践中，在与病魔作斗争的过程中，积累了非常宝贵的医药遗产¹²⁴。《贝叶经》中记载，傣族的医药具有2500年的历史。

傣族医药的形成和发展，归结起来主要有三个方面：一是傣族人民在生产生活中，通过实践——认识——再实践——再认识，逐步认识了人与自然、人与疾病的关系，积累了关于植物、动物、矿物等的使用经验，逐渐可以根据它们的气味和效用等进行分类，认识趋向理性化；另外为了适应恶劣的气候环境，傣族先民根据不同的季节、气候，常把一些御寒、解暑、可预防疾病的动、植物的叶、皮用来做衣御寒，煎煮当茶饮，从而产生了保健知识，这一演变过程深深地植根于民众之中¹²⁴。二是吸收了一部分中医药学的理论知识¹²⁴。三是南传上座部佛教作为传播媒介将古印度医学理论知识传入傣族社会，融入到了傣族的医药中，逐步形成了独具民族特色和地方特点的傣族医药。

傣族医药充分利用周边的植物和动物等，形成了自身独特的药物经验¹²⁴。由于傣族居住的地区大多是热带、亚热带雨林气候，中年高温多雨，自然植被保持得较为完好，植物资源丰富，可以入药的植物非常多¹²⁴。傣药中用到的植物类药主要有：麻嘎、喝罕、麻景、麻芒、牙勇、哥麻口拉、哥丹、牙竹麻、埋嘎筛等¹²⁴。《贝叶经》里的药书《旦兰约雅当当》中也记载着上千种药方，常用药剂有自然界各种动物的皮、骨、毛、筋、脑、血；植物中的花、草、树皮、根、须、汁、核，包括生长在森林里的菌子、白蚂蚁卵、土屎蜂的壳和部分矿物（如硼砂）都是治病的好药，可有效治疗骨折、风湿、瘫痪、痢疾、吐血、抽风及各种炎症¹²⁴。在第二大傣族分布区德宏，常用的民间药用植物、动物、矿物也多达600余种，傣医或者直接捣取汁液内服外敷，或单方独剂煨服，或晒干研粉，配制成药丸、药膏，或药物熏蒸与洗浴结合，再配以针灸、推拿等疗法。

虽然傣族医学有自己的关于生理、病理的医学基础理论，但是，在傣族没有完全

124) 岩温扁, 征鹏. 贝叶经——傣族文化的宝藏[A]. 贝叶文化论[C]. 云南人民出版社, 1990.

逃离恶劣自然环境的控制，不能有效治疗各种疾病的时候，傣医的发展同所有其他少数民族的医学一样，脱离不了“巫术”这一神秘力量的影响。如傣族一些地区有行医前问卦的习俗，然后才看病用药，甚至巫师也可以直接给人看病。

7) 薪炭林的种植

傣族除了受神灵保护的竜林和坟林以外，为了满足生活需要，有意识地种植薪柴林。虽然在亚热带的傣族地区，森林茂盛，但傣族人从不乱砍乱伐，而是在院落或者村寨周围种植一种称为“铁木刀”的速生树，作为生产生活的燃料。

傣族人每年3、4月份采集种子，5、6月份雨季来临时把种子播撒入烧垦后的土地，或与旱地作物混播；种植地一般选择紧靠村寨、便于运输的坡地，播种当年幼树长高至1米左右，每年进行一次除草，但不间苗，4~5年后，当树高15米左右，树干胸径10-15厘米时，进行第一次采伐利用，采伐的方法是在离地面1米高处将树伐倒，取树干及树枝作燃料。留下的树桩当年再萌发出新枝，这种从树枝上萌发的新枝多大3-5条，三年后长度可达8-10米，直径5-8厘米，此时又可以进行第二次采伐利用，如此类推，每年隔三年采伐一次，可持续利用百年以上，这类人工林地的薪林产量可达50立方米/公顷（每三年一次采伐产量）。由于这种薪材燃烧性能良好，当地农村人口平均年消费燃料仅1-1.5立方米左右，每人种植面积仅0.1公顷左右即能够轮流采伐利用¹²⁵⁾。

8) 丧葬习俗

傣族的每个村寨都有一片森林为“坟林”，是安葬死者的地方。傣族人认为坟林是亡者灵魂的居处，所以林中的树木受到严格的保护，禁止人们随意进出砍伐，所以森林中的树木长的非常繁茂。这在客观上起到调节气候，保护环境的作用。

傣族虽然主要实行土葬，但死者的墓地并不留坟堆，而是仅堆一小土堆，周围插

125) 艾菊红：水之意蕴——傣族水文化研究，中国社会科学出版社，2010年，第78-79页。

上竹围栏，傣族认为，人生于自然复归于自然，几年以后，土坟堆复归原貌，再也看不出坟头，有的只是一片绿色的草地山林¹²⁶⁾。

9) 饮食习惯

傣族的饮食非常具有民族和地域特色，以适应所处环境为出发点，充分认识和利用周边的动植物属性，将其吸收到自己的饮食中对于他们克服湿热的气候非常有帮助^o。这是他们主动利用自然的一种表现^o。主要表现在几下几点：

① 竹筒饭

糯米饭是傣族的主食，人民根据所处的环境，创造出以竹筒煮饭^o。将一节竹筒的一端打通，将米和水灌入，用新鲜叶子等将口堵住，然后放在火上烤，直到竹子烤焦米饭就熟透了。用刀将竹子划开，就可以食用。傣族人在外出劳作或者是走亲访友时，需要较长时间的，在野外就地取材就可以做。

② 酸

傣族人喜欢吃酸，通常吃的酸味食物主要有：酸腌菜、酸笋、酸木瓜、树番茄、柠檬等，这在亚热带地区，不仅有解暑解热的作用，而且能够杀菌、助消化。

③ 辣

傣族多食新鲜辣椒，在烹调多种食物的时候都会放些辣椒，这可以帮助人们排汗降温，抵御潮湿。

④ 苦

苦，最具特色的是傣族人非常喜爱的食物“撒撒”，撒是酸味凉拌的意思，撒撒是黄牛小肠接近胃部的一段里尚未消化完全的草料渣滓及胃液胆汁等的混合物¹²⁷⁾。除此之外，傣族人还多食用苦瓜、苦笋等苦味食物，他们认为苦味食物有去火消热的功效。

126) 何斯强：生态环境对西南少数民族丧葬习俗的影响，思想战线，1999，(6)：54。

127) 刘亚朝：德宏傣族民间的饮食文化，云南民族大学学报（哲学社会科学版），2007,24（5）：56。

⑤ 辛香作料

作料是傣族食物非常重要的一部分，主要有大芫荽、小芫荽、荆芥、香料草、香茅草、薄荷等，另外傣族人还食用鱼腥草，在医学上具有清热解毒的作用。



⑥ 特殊食物

昆虫和昆虫卵等也是傣族人非常喜爱的食物，如竹蛆、蜂蛹、蚂蚁蛋、花蜘蛛等，这能很好的补充蛋白质。

10) 傣锦工艺

傣族的织锦，是流传在傣族群众中的一种民间工艺品，有棉布织锦和丝绸织锦之分。傣锦是一种古老的手工纺织工艺，图案的设计是通过熟练的纺织技巧创造出来的，多是单色面，用纬线起花，花纹的组织非常严谨。织造时傣族妇女将花纹组织用一根根细绳系在“纹板”(花本)上，用手担脚蹬的动作使经线形成上下两层后开始投纬，如此反复循环便可织成十分漂亮的傣锦。西双版纳傣族早在唐宋时期便掌握

了用木棉絮纺线、织布的技术。明洪武、万历年间，已能用手工织出“丝幔帐”“绒锦”作为贡品进贡。

傣锦织工精巧、图案别致、色彩艳丽、坚牢耐用。图案有各种珍禽异兽、奇花异卉和几何图案等。每一种图案的色彩、纹样都有特定的含义，如红绿颜色是为了纪念祖先；孔雀图案象征吉祥；大象图案象征五谷丰登等。

但傣锦现在也面临现代纺织业的冲击，许多当地人都开始习惯买现成的纺织用品。因为受传统工艺的限制，傣锦的幅面很窄，一般只有40到60厘米，除了做围巾、装饰品外，很难有其他用途，不适应现代市场及生活的需求，急需改进工艺。而且织一条围巾一般需要3天左右，只能卖约50元，这也极大地挫伤了织锦者的积极性。市场不繁荣，利润低，很多年轻人不愿意学，导致现在会织傣锦的人越来越少。这一历史悠久的、全手工的、面临失传的傣族手工织锦面临着失传的危机。2008年傣族织锦技艺经国务院批准列入第二批国家级非物质文化遗产名录，力图寻求发展机遇。另外政府也积极采取措施促进傣锦的保护和发展，如版纳州文化馆在傣锦的几个村寨如曼乱点村（被西双版纳州命名为傣族织锦之乡）开设培训班即传习所，选取一些优秀的、有影响的傣锦艺人如玉金海、玉娥甩等当老师，组织一批有兴趣的年轻人学习。学习者不仅不需要交学费，还能领到误工补贴，当然教授技艺的人也会获得补贴。

今天，傣锦工艺在继承传统的基础上得到了发展和提高，除了制作筒裙、挎包、床单、被面、窗帘、手巾外，还设计制作出了傣锦屏风、沙发垫等新品种。但保护传统的傣锦技艺应引起我们每个人的重视。

四. 总结

世世代代的傣族人的思想观念中都认为人是自然的产物，人依赖于自然而生存。傣族人崇拜森林和水，将森林和水作为生存的根源，傣族人的“竜林”崇拜、“水”崇拜和其他自然崇拜、佛教信仰等，以及由此而形成的各种禁忌，使傣族人对自然抱有尊敬和敬畏两种心态。这种态度也贯穿在人们的生产生活之中，如建寨、建房、村寨和房屋的格局、建造水井、农业灌溉、饮食等多个方面，形成了一种适应自然、与自然和谐并存的相处方式，客观上保护了自然环境。

目前社会发展大潮下涌现的种种问题，如森林面积锐减、水污染等，都让我们深思，如何才能使我们的生产生活与自然达到一种共融的状态。傣族人在外来文化和经济发展的冲击下，在不断地创新其生产生活方式，在继承传统的经验习俗基础上，融入了现代科学，将经验与科学相结合，使自身与自然的相处在保持传统和适应现代社会中寻求到一种平衡，坚持可持续发展。

4. 白族环境友好型传统生产生活方式

白族是中国西南边疆一个少数民族^①。据2010年人口普查数据统计, 全国白族人口有1,933,510人, 80%分布在云南省, 主要集中在云南省大理白族自治州的洱海地区和鹤庆、洱源、剑川等地以及怒江兰坪白族普米族自治县, 丽江地区、保山地区、昆明市、南华县、元江哈尼族彝族自治县等地也有少量分布^②。另外贵州毕节、四川凉山、湖南桑植县等地亦有分布。白族自称“Baipzi”(白子)、“Baipnid”(白人)、“Baipho”(白家)¹²⁸⁾。白族分为“民家”“勒墨”“拉马(又称那马人)”三个支系, 分布在大理州的白族人大多数为民家人, 社会发展程度与云南汉人无异, 人数也最多; 分布在怒江州澜沧江两岸的白族人称为拉马人, 主要集中在怒江兰坪白族普米族自治县; 分布在怒江州怒江两岸的白族人称为勒墨人, 社会发展程度最低, 主要集中在怒江州泸水县^③。由于语言和习俗方面的差异, 民家人和其他支系之间相互的族群认同程度比较低。

白族聚居地, 自然条件优越, 气候温和, 土地肥沃, 百分之九十以上的人口从事农业生产。在农业生产技术较为落后的时期, 农业生产对自然的依赖性较大, 白族人将希望寄托在某种神秘的力量上, 形成本主崇拜。本主崇拜蕴含着白族人们对于自然的一种敬畏和期待, 并深入到生产生活的方方面面。

一. 白族本主崇拜里的和谐观

本主崇拜是白族地区盛行的特有民间宗教信仰, 最初产生于原始社会时期的自然崇拜。“本主”, 即“本境之主”, 白语称之为“武僧”、“武僧尼”, 意为“我们的主人”, 是白族乡村的“村社保护神”。白族是以洱海为中心发展起来的农耕民族。在长期的农耕生活中, 由于缺乏科学知识, 古代白族先民不能理解各种维系他们生产生活的自然现象, 认为是某种神秘力量的恩赐, 在宗教信仰中, 这种神秘力量就被寄托在了本主神身上。后来经过长期的演变, 它不仅集自然崇拜、图腾崇拜、

128) 李缙绪, 杨应新: 白族文化大观, 云南民族出版社, 1999年版, 第1页。

祖先崇拜的原始宗教观念于一身，而且吸收了佛教、道教、儒教的成份，形成了自身独立的体系。虽然白族本主崇拜具有一定的迷信色彩，但是蕴含着深刻的和谐观。

主要表现为：一是敬畏自然，白族人民认为大自然是万物之源，人是自然界的产物，人与自然是一个有机整体，因而把一部分自然现象或自然物当作本主而加以崇拜，如对天、地、日、月、山、水、石、树等的崇拜。他们认为只有顺应自然、按照大自然的规律来安排自己的生产和生活，才能生存、繁衍下来。二是白族人民认为自然界的万物都有灵魂，他们把对自己生产生活有贡献的动植物和非生物等都作为本主加以崇拜，久而久之，它们便和白族人民之间形成了深厚的感情，使白族人民在潜意识中有主动保护它们的观念。

白族人这种遵循自然、保护自然、善待万物的和谐观念渗到了生产生活的各个方面，包括衣、食、住、农耕活动、森林生态保护、水源保护等。

二. 白族传统的生产生活方式

1) 扎染工艺

扎染是白族独具特色的一种染布工艺。白族人用扎染布制成衣服、门帘、桌布等多种生活用品，受到人们的广泛欢迎。扎染是以自然为本，将自然资源为生活所用，达到了一种自然与人水乳交融，这主要表现在扎染的原料、扎染的制作工艺和扎染的图案等方面。

一) 扎染原料

在“白族扎染之乡”的大理，扎染主要是用棉白布或者是棉麻混纺布为原料，这种布料纯天然不刺激，不含化纤等化学物质，透气性好，易于吸汗，并且舒适柔软。

染布的主要原料都是取自天然植物板蓝根、寥蓝、艾蒿等的蓝靛溶液，其中板蓝根使用得最多。板蓝根是一种药材，具有清热、解毒、消炎等功效。以前，白族染布用的板蓝根都是野生的，现在伴随着需求量的增大，开始人工种植，目前在大理周

城有六七公顷板蓝根种植园¹²⁹。用板蓝根染出的布料颜色古朴、典雅，不易褪色，并且不刺激皮肤¹³⁰。扎染布这种环保布料制成的服装丢弃后，在地下两年后会自动分解，符合处理生态学特性，不会加重环境负担，更不会对环境带来不良影响¹²⁹。

二) 制作工艺

白族扎染主要是手工制作，主要程序有设计、上稿、扎缝、浸染、晒干、拆线、漂洗、整检等工序，其中扎缝和浸染是关键¹³⁰。扎染首先要在选好的布料上印上图案，不同的地区或者不同的制作人偏好的图案不同，有几何图形，也有动植物，然后采用撮皱、折叠、翻卷、挤揪等方法将图案缝紧，成疙瘩状；然后放入板蓝根等植物泡出的染料水中，反复浸染，花纹边界受到染料渐染呈现自然晕色，每多浸染一次，颜色就会更深一些，形成以图案为中心的多层晕纹，但是被线扎缝的图案部分由于无法受到浸染，呈现白色；最后取出晾干、拆线熨平，再经过多次漂洗整检，扎染布就完成了¹³⁰。因为是手工扎缝，所以由于针脚的疏密和松紧程度不同，出现的晕纹颜色深浅不一，却具有更加独特的韵味¹³⁰。

三) 图案的自然性

白族人热爱自然，热爱生活¹³⁰。所以他们制作扎染布的图案多选取于自身的生活和周边的自然环境，有常见的几何图案，有苍山洱海、白云、三塔、花鸟鱼虫等自然事物，也有丰富多彩的民俗风情等，多达1,000多种。

129) 周钰华，沈德坤：大理白族扎染服装生态性对中国发展生态服装的启示，中国市场，2010，(28)：143。

130) 参见王洪伟：扎染，白族民俗的活化石，旅游，2007，(7)：80-83。赵琛，蒋群：清水出芙蓉——大理白族传统扎染艺术“以自然为本”的理念，艺术理论，2010，(9)：198。周钰华，沈德坤：大理白族扎染服装生态性对中国发展生态服装的启示，中国市场，2010，(28)：143-144。



2) 住宅建筑

云南白族的民居最典型的是“三坊一照壁”“四合五井天”“两房一耳”。“坊”指的是两层的三开间的房屋，正房在上层，下层有堂屋和左右两边两间卧室，堂屋用六扇的格子门，两边卧室也各设单扇门。“三坊一照壁”由三间两层组成一个建筑单元，即由三栋带厦的房屋和照壁围成一个院落，庭院中种植花木。正中为主房，比两边房屋高，在主房和两边房屋相交处各有一个漏角天井，组合成一大二小的三个院落，所以又称“三合院”。而“四合五井天”是不设照壁，由四面四坊组成，如同北京的四合院一样的形式，但独具特色的是，四坊之间的四角形成四个“漏角天井”，再加上中间的院子，形成“五井”。白族通常将厨房设在漏角天井的耳房中，将大门设在东北角的天井。“两房一耳”又被称为两向两房，即由两方带厦的房屋组成，一般正房向东，耳房向南，和相对的照壁与围墙组成院落。在两房相交处有一个漏角天井，没有房屋的两边，多以正房相对的一边做照壁，耳房相对的一边做围墙（或盖简易房子作畜厩和厨房），组成三合院或四合院。大理白族在建造民居的时候，运用聪明才智，充分考虑了自然因素，所以其民居从内到外都与自然融为一体。

首先从民居的外部来说，青瓦白墙，而且民居外部有很多装饰性的图案，使整栋房屋犹如一幅生动的山水画，与周围的山水交相辉映。

其次，从房屋的布局和构造来看，也充分考虑了自然因素来进行设置^①。一，如大理除了城市街道受规划限制外，民居大多都是坐西向东，这与大理地处由北向南的横断山脉帚形山系形成的山谷坝子的特点有关，依山傍水；另外白族居住的大理‘鹤庆’洱源等地，处在山麓之间的缓坡地带，常年吹西南风和西风，坐西向东可以很好地避免风吹到屋内^②。二，白族的“坊”正房下面设有走廊，这一方面可以起到遮阳的作用，另一方面，大理地区风大多雨，风容易将雨吹到屋内，尤其是来自洱海东岸的风，吹进来的飘雨（人称“过海雨”）深度很大，所以走廊能够起到挡雨的作用，保持屋内干燥，平时人们也可以在走廊上宴客‘做活’，非常方便^③。三，白族民居中非常重要的照壁比正房低，这不仅不会阻挡正房的视线，而且照壁一般被粉刷成白色，每天太阳升起的时候，照壁能够将照射过来的太阳光反射到屋内，提高屋内的亮度^④。四，白族民居都使用瓦覆盖屋顶，并且为了防止大风将瓦吹掉，采用“封火檐”，即用当地一种称为“封火石”的薄石板，将房屋后檐和山墙的外悬部分封住^⑤。五，洱海地区在历史上曾发生过多次大地震，所以白族在建造房屋时，采用梁柱式结构，各构件之间用榫卯相连接，这样整体更具灵活性，增强抗震效果^⑥。具体来说，主要应用了以下建房技巧：①虽然大理白族民居通常为两层，但是房子整体高度较低，这样在地震时就可以减小晃动的幅度，不易被震倒^⑦。②构架大多采用五柱落地及合柱^⑧。五柱落地是每一榀架都有5根柱子落地，柱多则梁短，增强了梁柱接榫处的受力度；合柱即是在两坊相交处合用一根柱子，增强各坊房屋构架之间的关系，来增加抗震能力^⑨。③榫卯之间连接非常严谨^⑩。④串枋使用断面约为5×12厘米的整根笔直木枋，穿过木柱的对穿榫眼，将一排柱子串联起来的一种抗震构件，并根据所在位置不同，有“穿枋”“三间穿”“三间箍”“地脚枋”等不同的称呼和用途^⑪。由此一来，一栋房屋屋顶上有三间箍，屋地下有地脚枋，梁柱之间有三间穿和穿枋，整个屋架箍得如同鸟笼一般，抗震性能自然增强了¹³¹。

再次，从白族民居的建材考虑，白族充分利用石头来建房子，包括大理石‘麻

石、鹅卵石等。民间有谚语说“大理有三宝，鹅卵石砌墙不会倒”，这充分显示了白族善于利用自然来为生产生活服务。

3) 回馈、保护自然的农耕习俗

洱海地区白族是农耕民族，对于土地的崇拜属于自然崇拜。现在大多白族信仰的本主，就来源于原始社会对于“社神”的信仰，也就是“土地神”，到后期逐渐发展，成为融合多元化的保护神。白族人民对于土地给予的一切充满感激，这也形成了一系列的祭祀土地的农耕习俗，回报自然。

① 春社

在“关秧门”即栽秧结束后，白族的老人会选择一个好日子祭祀土地神，即“春社”。春社是白族农事活动的内容之一，在春社活动中，老人们谈论农事、说古道今，打霸王鞭、唱大本曲等。村寨里的年轻人一早就要准备祭祀用的工具和食物，待一切准备好后，老人们点上香火，摆上供品，开始祭祀土地，并祈祷保佑风调雨顺、五谷丰登。待“田公地母”“五谷神王”“六畜大王”这些“土神”们“享祭”过后，老人们才席地而坐，男女“分席”，慢慢吃喝¹³²⁾。

② 尝新节

白族的很多村寨都盖有地母庙，每年都会在稻谷成熟后举行“尝新节”，意为尝新米，在傍晚太阳落山前，将煮好的米饭、肉、鸡蛋、酒等端到地头，祭祀“田公地母”，回馈大地。

③ 酬地活动

每年，鹤庆地区的白族都会举行世代相传的“酬地”活动。腊月初八这天，农户最后一次翻挖育秧的秧田。在翻挖之前唱《祝福歌》，并且边唱边给秧田撒上一层草木灰、青蒿草，再均匀盖上头年留下来的一百株干秧苗。草木灰表示给大地铺床，

131) 高登荣：试析白族的居住文化，云南民族学院学报（哲学社会科学版），1993,54-55.薛祖军：自然生态环境对白族地区民居建筑形式的影响.大理学院学报，2004,3（2）：6-7.

132) 杨玉藩：白族民俗活动 春社，云南日报，2011年11月18日。

青蒿象征被子，干秧苗象征食品。唱完歌，下田翻挖，平整秧田，放满保田水，在田边四角插四根白栗枝叶，称青棚，象征秧田的住房。这样田地有了住房，被褥，食品，就可以欢度年节了。腊月初九至十六日，农户为自家的田地除草，追肥，灌水，为果树修剪败叶残枝，搭棚遮霜，表示为大地“梳妆打扮”，送旧迎新，喜迎新年。十六日，各家的农事告一段落后，全村人各持一把火炬，在“歌头”的带领下，载歌载舞，巡视所有田地一遍。腊月二十四至二十七日，各家打扫卫生，将垃圾堆成一堆焚烧，并在夜里将焚烧的灰撒到各家的地里，象征给大地献“年食”。这样，酬地活动才结束¹³³⁾。

④ 地母节

大理白族地区每年都会祭祀土地，形成了“地母节”，而祭祀活动又以鹤庆最为典型。每年农历的三月十五，鹤庆白族在东山庙举办“地母节”，活动分为颂功，乞丰，祭犁，赛宝，酬地五个项目¹³⁴⁾。除了地母节外，大理白族的大多数村子都有由老年妇女组成的“莲池会”（或称“老妈妈会”“妈妈会”“斋太会”等），于每年农历十月初八或七月十五，在本主庙或观音庙主持祭田公地母，集体念《地母经》感谢地母使大家获得了丰收，祈求地母保佑庄稼长得更好¹³⁵⁾。

4) 白族对于森林的保护

一) 风俗中的森林观

① 自然崇拜中的森林观

树木崇拜是自然崇拜的一种，客观上形成了一种森林生态观。如怒江州的勒墨人有天崇拜，山石崇拜等宗教信仰。祭祀天，或者是祭祀山石的地点，所有的草木等都禁止破坏。另外，勒墨人对山林甚至是村寨边的树木都存有敬畏之心。

② 人生礼仪中的环保行为

133) 章虹宇：民俗与环保，广西梧州师范高等专科学校学报，2001,17（1）：20.

134) 章虹宇：民俗与环保，广西梧州师范高等专科学校学报，2001,17（1）：21.

135) 管彦波：云南稻作农耕祭祀中所反映出来的各种神灵观念. 贵州民族研究，2004，（4）：101.

白族人认为树是有灵魂的，将树的生命与人的生命联系在一起。鹤庆县山区的白族，从人生下直至老死，其间每一生命转折期都要种树，称“同年”树，堪称终生植树造林的民族¹³⁶⁾。孩子出生、命名、上学、毕业、工作、结婚、去世，各个阶段都要植树来表达期盼和怀念。

③ 传统节日

而且白族还拥有众多以植树造林为主要活动的传统节日，如敬老节、植春节、绣山节、插柳节、缀彩节等。每逢节日的头一天，人们就去山上采集好各种木苗，到各家挖讨各种花卉树苗，准备种植。进入农历七月，各地便相继封山，禁止任何人进山采伐、放牧¹³⁷⁾。

④ 拜干妈

鹤庆白族家里有小孩出生，家长就会为其选一棵树作为干妈，以祈求保佑孩子健康成长，无病无灾。认干妈后，这棵树就是家庭中的一员，平时家人要给树松土、施肥、除害虫等。在孩子生日的当天，全家人还要到干妈树旁种植同属的树苗，成为“子孙树”，并且要对这些树严格保护，禁止砍伐和毁害¹³⁸⁾。

⑤ 种喜

新人成亲之日，得在两家的房前屋后遍种花草，称“种喜”。 “种喜”结束，方拜堂举行典礼。典礼后，在青年的歌唱声中，一对新人各带上自己的伙伴，到村寨的荒山荒坡上，各种一片果树，称植“子孙树”。待“子孙树”成活后，新人才开始同居生活¹³⁹⁾。

二) 相关规则

白族人自古就非常重视保护森林，如剑川县把森林分为公山林和家族林两种，都

136) 章虹宇：民俗与环保，广西梧州师范高等专科学校学报，2001,17（1）：21.

137) 见《大理报》，1983年11月17日。转引自：李纘绪，杨应新：白族文化大观，云南民族出版社，1999年版，第636页。

138) 章虹宇：民俗与环保，广西梧州师范高等专科学校学报，2001,17（1）：23.

139) 章虹宇：民俗与环保，广西梧州师范高等专科学校学报，2001,17（1）：23.

专门派有护林员常年居住林区守护，每家给米麦各一升，作为护林费¹⁴⁰⁾。

至今在多处白族聚居地仍存留有一些古碑，见证着白族人善待、保护森林的生态意识。如大理市南郊吊草村本主庙中就有一块立于光绪年间的护林碑，碑文首先阐述森林与水源、林业与农牧业的关系，接着规定一些护林措施，如伐树要留母树；护林者如发现有人盗伐一棵成材松树，必须罚盗者杀一只羊，请全村人吃一顿饭；放牲口糟蹋了幼林，要予以处罚¹⁴¹⁾。鹤庆县六和乡大甸村本主庙也有一块立于道光年间的护林碑。碑文讲封山育林，如何靠山吃山的道理，并对春夏秋冬在林区轮流放牧做了具体规定，违者予以处罚¹⁴²⁾。再如洱源县右所乡莲曲村的一块石碑，叙述了该村土庶栽种松树的缘由及保护松树的章程。该村村后有曰红山，以前“树木荫翳，望之蔚然而深秀者也”，可是到了道光年间，“斧斤伐之之后日，每不见其濯濯乎”。“于是村中父老子弟，共相商议，竟于光绪八年六月内，按户出夫，栽种松子，共有五斗有零之数，每家合有二十余工矣。”为避免日后无良之徒擅自砍伐，“于是定为章程”¹⁴³⁾。剑川西部的老君山是“全滇山祖，合州要地”，但却被武生颜仁等占据，“廷山砍伐，纵火烧空”，其结果导致水源枯竭，“栽种维艰”。而贡生赵有兰为争夺老君山，将颜仁等控告在案。时任剑川州正堂金审理此案，认为老君山“是不唯颜仁等不得占，即剑川州不得而私也”，为此，决定将公山应禁条规，“勒石永遵”，并派人看守。同时使士民人等知悉：“老君山为合州来脉，栽种水源所关，统宜共为保全”。“自示禁之后，务遵律纪条规保全公山，如敢私占公山及任意砍伐、过界侵踏等弊，许看山人等扭禀，以便究治，绝不姑宽。”最后制定了七条保护公山的条规，其中包括：禁岩场出水源头处砍伐活树、禁放火烧山、禁砍伐童树、禁挖砍树根、禁各村不得过界侵踏、禁贩卖木料¹⁴⁴⁾。除此之外，早先白族出家的女儿常常会带夫家人到娘家村寨来砍柴，为了杜绝这种行为，娘家村落订立规定，如“仍

140) 李纘绪，杨应新：白族文化大观，云南民族出版社，1999年版，第636页。

141) 李纘绪，杨应新：白族文化大观，云南民族出版社，1999年版，第636页。

142) 李纘绪，杨应新：白族文化大观，云南民族出版社，1999年版，第636页。

143) 段金录，张锡禄：大理历代名碑，昆明：云南民族出版社，2000。

144) 段金录，张锡禄：大理历代名碑。昆明：云南民族出版社，2000，第501-502页。

蹈前辙者，将其后亲禀报入官”，对于防火烧山者也一起禀报¹⁴⁵⁾。

白族人民还制定有各种乡规民约来保护林木。如《新仁里乡规碑》规定“山林：斧斤时入，王道之本。近有非时入山，肆行砍伐，害田苗而不顾，甚至盗砍面山，徒为己便，忍伐童松，实属味良！此后如有故犯者，定即从重公罚。禁日后，犹不准砍竹下山¹⁴⁶⁾。”剑川《保护公山碑记》说：“查老君山为合州来脉，栽种水源所矣，统宜共为保全，为自己受用之地，安容任意侵踏，以败万姓养命之源¹⁴⁷⁾。”为了禁止人们随意砍伐对其非常重要的松树，还针对砍伐工具的不同而进行不同的惩罚，如“斧砍者罚银贰两，刀砍者罚银五钱”¹⁴⁸⁾。洱源县凤羽乡铁甲村乡规也有规定：“山地栽松，期成材木”“遇有松园，只得抓取松毛，倘盗刊（砍）枝叶，罚银五两”“查获放火烧山，罚银五两”这样的乡规民约还有：“禁采树尖”¹⁴⁹⁾“凡童松宜禁砍伐”“凡松坡随粮，只许各取松子，如常乱取，不遵乡规者，山主拿获，以粮累之”¹⁵⁰⁾。

白族人民除了认识到森林有涵养水源、调节气候等作用以外，还意识到森林能够稳固堤岸，防御洪水等作用，对此在洱源县凤羽乡铁甲村的乡规中还规定：“查获盗刊河埂柳茨，罚银五两”¹⁵¹⁾。

至今，这种森林环保意识在白族村寨中仍然影响深远，尊重自然，保护森林，崇拜树木的思想仍然贯穿于人们的生产生活中。

5) 白族对水的崇拜与保护

白族农耕历史悠久，深知水对于农业生产的重要性。在社会发展程度较低，水利

145) 张了，张锡禄：鹤庆碑刻辑录，大理：大理白族自治州南诏史研讨会，2001

146) 白族的村落文化生活.青海日报，2010年10月8日。

147) 白族的村落文化生活.青海日报，2010年10月8日。

148) 张了，张锡禄：鹤庆碑刻辑录，大理：大理白族自治州南诏史研讨会，2001，第232页。

149) 张了，张锡禄：鹤庆碑刻辑录，大理：大理白族自治州南诏史研讨会，2001，第234页

150) 《民族问题五种丛书》云南省编辑组：白族社会历史调查.昆明：云南人民出版社，1991，第102页。

151) 段金录，张锡禄：大理历代名碑.昆明：云南民族出版社，2000，第537页。

设施都不完善的情况下, 水的年景好坏决定着农作物的丰歉。水充分, 那么农业丰收; 雨水不足, 那么农作物欠收, 而且水量过大, 则容易形成洪灾等, 所以人们认为水是有自然威力的, 因此祈水、畏水。并且白族普遍认为水创造了其祖先和万物, 具有强大的繁殖力, 白族人对水的崇拜也体现了其生殖崇拜。

白族人对水的重视也形成了一系列的民俗活动, 如鹤庆的白族村寨将每年腊月二十六定为白族的净水节, 这一天, 人们一起将山泉、河沟、水塘、水井等彻底清洗一遍, 加固漏塌的堤岸等, 劳作完后, 载歌载舞将全村的塘、泉、河、沟巡视一遍, 以歌唱的形式诉说净水的工作成绩、存在的问题、补救措施, 并表彰惜水、护水的好人好事¹⁵²⁾。另外, 为了防洪、泄洪, 鹤庆白族人们有添丁挖地龙的习俗。地龙是一种预警防洪装置, 以石砌成, 高可容人蹲钻, 圆形, 从河堤内延伸至堤外。地龙洞口安置木雕的牛头, “牛”口大张, 内有空洞供平时泄水, “牛舌”为正常水位线, “舌”根留泄洪孔, 有簧哨装置。遇水位超过安全线, 洪水自动从泄洪孔中涌出, 带动簧哨装置, 通连“牛鼻”的圆孔传出牛吼之声, 向人们“报警”, 传送“险情”讯息。为了防止地龙堵塞, 每年家里新生小孩满月的时候, 其父亲和家里的男性就会将地龙完整地检查一遍。在每年年底, 全年有新生小孩的家庭要一起再将地龙清理一遍, 并更换簧哨¹⁵³⁾。

目前仍保留原始农耕的一些白族村寨, 在风调雨顺之年种植完毕之后, 都要到“龙王庙”或水源边谢“龙王”, 也称“谢水”¹⁵⁴⁾。另有在剑川的一些白族, 新婚夫妇在结婚的前一天, 都要到温暖或者是专门的洗浴场所洗浴、饮水, 祈求多子多福¹⁵⁵⁾。

除此之外, 至今白族自孩子小时, 就教育孩子要保护水源, 不得污染和浪费。还制定了很多村规民约等来限制人们, 如不得将垃圾污水倒入河沟中, 不得向水中吐痰、大小便, 不得在泉水边洗衣服或者杀猪宰鸡等, 严禁砍伐水源处的树木等, 违反者都要受到惩罚。

152) 章虹宇: 民俗与环保, 广西梧州师范高等专科学校学报, 2001,17 (1) : 23.

153) 章虹宇: 民俗与环保, 广西梧州师范高等专科学校学报, 2001,17 (1) : 24.

154) 李福军: 白族水崇拜与农耕文化, 云南师范大学学报, 2004,36 (4) : 11.

155) 李福军: 白族水崇拜与农耕文化, 云南师范大学学报, 2004,36 (4) : 10.

6) 白族地区药材资源开发利用

白族的主要聚居地大理白族自治州境内地理环境复杂多变，具有北温带至亚热带6个气候带的优越自然条件，境内山脉起伏，森林茂密，河流纵横，日光充足，雨量适中，各种药用动植物的生长繁殖条件极为优越。药用动植物资源分布面积约为3,200万亩，占全州总面积的75%。

白族在生产生活实践中，很早就认识到一些动植物的药用属性，并用来治疗疾病。南诏时期，白族人们已知牛黄、麝香为名贵药品。并从那时起，白族常以温泉疗疾，此种传统在今天的洱海区域仍很流行。另外，在1966年，洱海县火焰山一座建于大宝七年（西元1155年）的佛塔被毁，塔内发现有装满佛经和药材的箱子。后经有关部门鉴别，有金箔、珊瑚、玛瑙、珍珠、乾姜、檀香、蕲拔、草果、槟榔、樟木子、松香、蕲澄茄、桃仁、胡豆、扁豆等，计约30种。1978年，文物部门在维修大理崇圣寺4寻塔时，亦发现了朱砂、沉香、檀香、麝香、珊瑚、金箔、云母、香蛤、松香等药材。

除此之外，药材资源丰富也促使药材交易的发展，白族群居在洱海区域，医药资源丰富，加之这里位于“蜀身毒道”的要冲，自古以来就是商族往返的必经通道。与之相邻的中印半岛、蜀地的商品，包括药材等很早就进入该地区，使得这里成了药材的集散地。而形成于南诏时期的“三月街”，药材就是其交易的大宗商品之一。

7) 保护动物

白族居住地多依山面水，生态环境多样，在与动物的长期相处过程中，以及受动物崇拜的影响，养成了一种爱护动物的习惯。如白族人认为燕子来到家中落户，是吉祥之意，所以在建房子的时候，都会在走廊的上方钉几块小木板，方便燕子筑巢；而且从不伤害燕子，他们认为燕子是家庭的成员，伤害燕子就如同伤害自己的骨肉。至今在大理鹤庆的一些山区，还保留着“祭鸟节”。时间在每年的清明前后，

白族人们要在这一天炒荞粒花、燕麦粒花撒给鸟吃，并举行隆重的祭祀。在当地一些存留的古碑上，也有“禁打春鸟”的规定。而春季正好是鸟类繁殖的季节，这在客观上促进了鸟类的持续发展。另外白族临水而居，有较长的捕鱼传统，但会定期的封海育鱼，有利于鱼虾的休养生息。

白族人民也格外珍惜辛勤劳作的耕牛，在许多地区春耕开始或者立春当天，以地区或村社为单位，举行祭牛神、祈丰收的“打春牛”活动，也称为“田家乐”，感谢耕牛在新的一年里仍然为群众奉献，辛勤劳作，也祝愿新一年能有好的收成¹⁵⁶⁾。

8) 适度开发矿产

白族居住地区多有矿产，矿产开采必定会对环境造成一定的影响，因此，白族人出于对生态的重视，不主张大肆开采矿产。如《封闭双马槽厂永禁碑记》中记载在大理市凤仪镇北汤天村村东2km的河谷中，即双马槽一带有金沙矿的分布。由于矿产开采，给人们带来了很大的灾难，一是“有金之日报纳金课，后金沙淘尽，淘金之人散去，所报金课，贻害州民”，二是这里是水的源头之一，矿产开采破坏了地表水系，以至于大水淹没良田，如果继续开采，那么“则河沟淤阻，田地渐成沙洲，垅亩尽为荒壤。”且“又恐霖雨泛涨，淹没闾州，害深祸大”。因此，当地的白族人建议政府关闭金矿，政府规定永远禁止开采，如有违反擅自开采者，抓捕治罪¹⁵⁷⁾。

三. 总结

白族遵循自然、保护自然的生态观念，规范和制约着白族人们的行为，形成了白族独具特色的生产生活方式，对于白族适应环境、利用资源、持续发展具有积极的作用。虽然在历史的进程中，也曾在某些时段出现过因错误观念指

156) 魏庆征等主编：中国各民族宗教与神话大词典·白族 北京：学苑出版社，1990，703-704.

157) 段金录，张锡禄.大理历代名碑.昆明：云南民族出版社，2000.

导，造成环境破坏，并且在外来文化强有力的冲击下，在与其他民族融合的过程中，生产生活方式发生了些许改变，但这种由宗教信仰以及自发产生的生态意识已经在白族地区根深蒂固，在现代社会仍然发挥着重要的作用。

5. 云南壮族的生态观及传统生产生活方式

壮族(旧称僮族), 是中国人口最多的少数民族, 主要分布在广西、云南、广东和贵州等省区。云南壮族居于东经 $100^{\circ}04' \sim 106^{\circ}11'$, 北纬 $21^{\circ}45' \sim 27^{\circ}51'$ 之间的广大区域, 东起富宁县剥隘镇南廷村, 西至丽江县龙蟠乡新联村, 南起勐腊县瑶区乡沙仁村, 北抵宁蒗县拉伯乡加泽村。在全省17个地、州、市, 127个县(市)皆有分布, 大部分集中在滇东南的文山壮族苗族自治州。2011年云南省第六次全国人口普查统计, 壮族人口为121.5万, 在云南各少数民族中位居第5位。

云南壮族源于古代越人。越人是我古代南方最大的一个族系, 有于越、闽越、东瓯越、扬越、山越、滇越、南越、夜郎、西瓯越、骆越等。“越人”为这个族群的族称, 是在春秋时吴、越建国后采用的。一部分云南的越人后裔, 东汉至隋代称为濮或僚, 唐宋时期多称僚, 元明清至民国称侬人、沙人、土僚、仲家等。1958年至1965年称为僮族, 由于“僮”字在历史上有多种记法, 读音也不一致, 含义也不是非常清楚, 容易引起误会, 1965年经国务院批准把僮族改为壮族。云南壮族是古滇越、骆越和鸠僚人的后裔, 与越南的侬族、热衣、岱族是跨境而居的同一民族, 与中国的侗、布依、傣及东南亚的泰、老、掸等民族同属百越族群系统。

云南壮族主要分为三大支系, 即侬、沙、土, 他们一直自称濮侬、濮雅衣、濮傣(濮岱)等。云南壮族三大支系中, 侬人主要居住在广南、砚山、文山、马关、西畴、麻栗坡、河口、屏边等地; 沙人主要居住在广南、富宁、邱北、禄劝、巧家、宣威、会泽、泸西、元阳、金平、勐腊等地; 土僚主要居住在砚山、文山、马关、个旧、蒙自、弥勒等地。

云南壮族主要居住在南盘江流域、右江流域、红河流域以及金沙江流域的坝子、河谷盆地及半山区。坝区如广南坝、丘北坝、八宝坝等, 生存环境较为优越, 如广南坝海拔在1300米左右, 气候温和, 年均降雨量约1600毫米, 无霜期300天左右。全年分旱雨两季, 雨旱分明, 水热同季, 土层肥厚, 水源好, 十分有利于稻米的生长发育。河谷盆地以师宗县五龙乡为典型, 这些地区海拔在737米~1,120米之间,

属暖热区，热量充足，最高日气温可达36°~39°，年温差小，昼夜温差大，空气湿度大。雨量充沛，雨热同季，粮食作物以水稻为主。少部分壮族人住在半山区。这些地区也是在河谷地区，但山势陡峻，水田不多，粮食作物以玉米、杂粮为主。

一. 壮族的生态观

壮族是一个稻作民族。由于所处地理环境较为优越，有利于水稻的生长，这给壮族人民的生存提供了一定的保障。对于壮族人民来说，这是自然界的恩赐。另一方面，水稻种植对于土地、水的需求很大，在生产力较为落后的时期，水稻生产经常受自然界风雨雷电等的影响，因此，壮族人民产生了对自然物的各种祭祀活动，希望与自然和谐相处。

另外，壮族信仰原始宗教，相信万物有灵，山水树木花草土石莫不有灵。人通过祭祀与神沟通交流，以求得神灵的佑护。壮族的这种宗教观，是特定的自然地理环境与其特定的生产、生活方式和各种社会、文化因素长期互动的结果。这也奠定了壮族对大自然的敬畏、尊重和崇拜的心理意识，也制约和规范了他们的生产、生活方式，从而形成了一种善待自然的生态观。

二. 云南壮族的传统生产生活方式

云南壮族在与自然相处的过程中，形成了一系列独特的生产生活方式和风俗习惯，将其丰富的生态伦理思想践行到生产生活的方方面面，如农业生产、森林和水源的利用与保护、饮食、服装、建筑等。

1) 云南壮族的农业习俗

壮族是最早发现并种植水稻的民族之一，在壮族居住区考古发现有上万年历史的稻壳碳化物和古人用来加工稻谷、为稻谷脱壳的石臼，证明了这一点。壮族将赖以生存的稻田称为“那”，在长期的劳动实践中，壮族人民创造并发展了丰富的“那”文化，形成了一些风俗习惯。

一) 地母崇拜

广南壮族各个村寨均立有庙宇供奉地母和土地神，年年祭祀，颂经祈祷；而在广南文庙内则保存有一面“象耕”石刻，刻画大象牵犁在肥沃的土地上耕作，旁边是和风吹拂的树枝和花草，还有美丽的云朵在辽阔的天空飘动的图腾。著名历史学家万国瑜先生说：“壮人是古越人的后裔。云南东南部的侬人、沙人和僚人，也是壮语族的支系，古为句町部族。”在我国古代的历史文献中，“乘象”和“象耕”曾是越人最典型的文化特征之一，如司马迁的《史记》把滇越称之为“乘象国”；袁康著的《越绝书》即有关于“象耕鸟田”的载录；唐樊绰的《蛮书》更讲：“开南已南养象，大于水牛，一家数头养之，代牛耕也”。又讲：“象大于水牛，土俗养象以耕田，仍烧其粪。”在壮（泰）民族的传统观念中，地母即乘象仙女，由她统管大地，生养万物，教人耕田种地。因此，在壮族地区多有地母崇拜和祭祀活动。

二) 农耕祭祀

对生产和生活用土的地方进行祭祀是云南壮族地区普遍流传的农耕习俗。在师宗县黑尔壮族乡，壮语称祭祀田公地母为“根宛纳”，于正月第一个属猪日举行。这天早上必须吃粑粑掺野菜。饭后，户主肩扛板锄，手持3炷香，到自己田边水口填土，插香，之后返回家中，杀鸡祭祀田公地母和五谷尊神。中午，各户户主手持彩色纸旗到寨心集中，由村长、族长率领众头人，巡视本村山界、地界、田界。此外，师宗县五龙乡、会泽县等壮族地区也有祭祀田地的活动。

三) 生产工具

壮族先民在耕作的过程中，由于生产本身的需要，生产工具的制作不断的更新与发展，在实用性的基础上逐渐注入了美观的愿望。这其中首推双肩石斧和大石铲最为典型。石铲制作规整，通体磨制光滑，棱角分明。凡铲的两侧，不论是曲线还是弧线，都对称协调，适应沼泽地与水田的劳作。在很多稻作地区的各大遗址中，发现有大量多而精美的石铲有规律的摆放在一起。可见石铲由于本身在水田耕作中的

重要性，而被用于祈求丰饶的祭祀活动之中，从而演化为祭祀的神器。除石铲外，其他有特色的工具也在不断的变化和发展，这些工具的制作大多适应了壮族地区多山多水，田块较小的特点。如踏犁、踩耙、手耙、磨耙、摘刀、手镰、泥磨、船型打谷桶、高脚仓、水车等等。

2) 壮族对森林的保护

在云南省，大多数少数民族，如傣族、布朗族、基诺族、纳西族、佤族、彝族、哈尼族、白族、傈僳族、独龙族等，均有将村寨附近某些地段（山、树林等）划为禁地加以崇拜，并制定具体的禁忌措施加以维护的传统。聚居在云南的壮族也有此传统。

壮族先民以种植水稻维系生存，种水稻不能缺少水源。先民们认为，是森林古树为人们带来赖以维持生产生活的水。因此，壮族先民把无形的风、雷、霜、雪、始祖布洛陀等神灵，都封在村落和稻田四周的古树山林上，一代接一代地对神山、神树履行祭祀仪式。由此，壮族人民有意无意间遵循着一条朴实的真理：有树林才有水，有水才能种稻，有稻才能活人，人必须保护树林。这一观念长期规范和指导着壮族人民的生产生活。以至于到了21世纪，云南文山州的数百个壮族村落，每个村都有自己崇拜、祭祀的“神山”“神树”“神林”。

他们以林中的大树作为村舍的保护神，称为“竜树”，“竜树”周围的森林被视为“竜林”，“竜林”覆盖的山坡被称为“竜山”。竜山是神灵居住的地方，竜山里的万物都是神灵的化身，破坏它们就会触怒神灵而带来灾难，而保护好它们则会得到神灵的保佑，村寨才会繁荣，村民才能安康。所以，竜山上的树不许任何人砍伐，禁止扔污物和置葬。在云南壮乡，著名的竜山有“博宏僚”（老君山）和“博吉金”（九龙山）。壮族人认为“竜”的圣洁能免除疾病、瘟疫、预防自然灾害；有“竜”环抱的村寨人能健康长寿，百姓衣食无忧；“竜”中长年流淌的清泉，是从事稻作生产的首要条件；他们按照“竜”中的物候变化进行播种、薅锄、收割、贮藏等农事活动。同

时，云南壮族年年祭祀“竜”，并以之作为村社发展的精神支柱和本民族群体团结的纽带。这种全民爱护森林、保护生态、美化生活环境，与自然和谐相处的美好风尚，本质是古朴的天人合一的生态文化理念。

并且，长期以来，壮族人民还制定并形成了一整套关于森林保护的乡规民约，并使之深入人心。乡规民约规定：非祭祀节日禁止进入“竜山”；严禁偷砍盗伐“竜山”树木，甚至不得拾取山中的一草一木；违反规定者将受到宗族的严厉惩罚。乡规民约也对其他森林类型，如风景林和水土保持林等集体林以及农户自留山森林的保护起着重要的约束作用。

这种约定对于当地植被类型保护、植物物种多样性和地区性环境保护等有十分重要的意义。如云南省马关县卢差冲村壮族社区中一座“龙山”融入农田景观中，成为农业生态系统的一个组成部分，起到保持水土、保护水源和调节地方小气候的作用，是良性农业生态环境的重要维持因素；另一座喀斯特山地类型的“龙山”融入社区人居环境，犹如一把巨大的绿伞，起到防风和调节小气候的作用，同时也具有保持水土和美化社区人居环境的生态功能。

3) 壮族的水文化

水是生命之源，人类的生活离不开水，特别是壮族以稻作生产为主要的生产方式更离不开水，因此，壮族对水形成了较为特殊的认知和体验。“壮族住水头”，在壮族人的观念里，水皆有水神所掌管，人们必须取之有度，用之得法，不可滥用，否则就会受到水神的惩罚，造成水旱灾害，故民间有“近水不得枉用水”之说，进而形成了独具特色的水崇拜文化。

壮族的水崇拜大多都和特定的河流、溪水有直接的联系，他们所崇拜的水神基本上是其生存所依赖的特定的河流和溪水，由此还形成了一定的祭祀习俗。如富宁、广南、西畴等县的壮族，每年除夕夜守岁，待雄鸡啼叫第一声时，要到河边或者水井边挑水，并将几枚铜钱丢入水中，祭祀水神；每年农历三月属龙日这天太阳出山

时，还要由寨中有威望的老人带头，男女青年抬着煮熟的全鸡、全鸭、腊肉、五色糯米饭、酒等供品，到村旁的水边祭祀水神。众人面水而立，老人点香祈祷，感谢水神对村民保佑，祈求水神在新的一年里继续保佑村民。壮族家中老人去世，送葬前，其家人要用篮子装逝世者的衣裳，到河边溪旁祭拜，向水神通报死者的去向，祈求水神在阴间继续给死者提供方便。壮族认为龙住在水中，是能生水和降雨的神，所以，每遇旱灾，就要举行祭龙王的活动。龙王神又称水龙潭神。一些传说中开渠造福人民之首领可能成为龙王，被人们祭祀。

4) 壮族村寨地址的选择

壮族及其先民，素来注重村落环境的选择。他们建造村落，或选在河流大转弯，地面较宽广的平地；或选在大河与小河交汇处，河面宽阔，水流缓慢的地方；或选依山傍水、背山面水、山腰坡边的地方。由于壮人选这样的环境建村落，所以许多村寨有“村前一曲水，村后万重山”之美。体现了壮族选择优秀环境建立村落的文化观念。因此壮族乡村，多以围墙绕村，绿树成荫，而每一村前，都有一棵或几棵大榕树，以此象征人畜两旺。村落房屋建筑，也讲究布局，互相间隔为宜。

5) 壮族的民居

壮族称居住的房屋为“干栏”。“干”是上面之意；“栏”是房屋。“干栏”，即房屋有上层下层的意思。壮族的干栏式建筑，史书也有记载。《魏书·僚传》载：“依树积木，以居其上，名曰干栏。”宋《太平寰宇记》也载：“人栖其上，牛、羊、犬、豕蓄其下。”这种住房形式，宜于潮湿多雨，夏日酷热，地势不平的南方山坡地。广西的瑶、苗、侗诸族，也有一部分人家居住干栏，但壮族的干栏建筑较有代表性。壮族的整个干栏建筑，设计巧妙，用料精致，工艺颇高。壮族的这种房屋建筑，建在村寨的山腰，层层叠叠，鳞次栉比，十分壮观。

6) 壮族的服饰

千百年来,勤劳智慧的壮族人民在长期的历史发展中,创造了具有民族特色的文化艺术,特别是靠“那”而穿的服饰文化,其妇女传统服饰仍然保持“椎髻”“短衣”“左衽”“穿胸”“桶裙”“著尾”等款式,具有色彩深沉,图案古朴,工艺精美的鲜明民族特点。壮族各支系,因不同的经济基础、生活环境、风俗习惯,以及不同的审美观念,其传统服饰也存在一定的差异。

一) 壮族服装颜色

深青(蓝)色是滇东南壮族传统服饰的一种主色调,也是壮族传统服饰图纹的主要色彩。这种色素是从一种称为蓼蓝草的植物叶子中经浸泡加工提炼而成的,因其颜色呈深蓝(青)色,俗称“蓝靛”。用这种蓝靛浸染出来的布料(染料中还要加入碱水、茶水、酒、蛋清等原料,起到稀释作用并增强色素的附着力),又称蓝靛布,其色调沉着、稳重。服饰图纹应用蓝靛布配以红、绿、白等颜色,具有色彩清新亮丽的特点。壮族服饰色彩流行的青色,与人们对于深青色的心理感受及生活环境有着密切关系。人们穿着深蓝(青)色的服装,具有与大自然中的绿色和蓝色和谐统一的效果。

除深青这一主色调之外,在衣裤襟边镶绣花边。其花边用的色布或线有红、绿、黄、白、黑等颜色。绣花的底布颜色,一是白色和其他浅灰色,二是深青色的蓝靛布。绣在白色和其他浅灰色上的,用红、黄、绿、黑色布或色线,绣在蓝靛布上的,用红、绿、黄、白色布或色线。这种在衣裤襟边镶绣花边的方法,使深青色的服饰主色调增添了色彩的变化,避免了全身服饰色调单一呆板的式样,丰富了服饰的色调,具有良好的装饰效果,给人以清丽、素静、秀美和丰富的美感。

二) 服饰图纹的构成

服饰上的图纹主要由彩色线、图案和刺绣工艺等要素构成。壮族的传统服饰图纹在单色布料(青紫色或者深蓝色)上缝制而成,然后用彩色丝线或绒线在成衣上刺绣各种图案纹样作为装饰。这些装饰的图案纹样大多织绣在服装最引人注目的部位,

增强和丰富服饰的美感。图纹装饰的题材和内容十分丰富，自然界中的花草树木、行云流水、鸟兽虫鱼以及铜鼓上的图案和其它象征性符号，无所不有。构成有三角形、四方形、长方形、菱形、齿状形、碟状形和带状形等。因装饰部位的不同，其图纹和工艺亦不尽相同，其中有桃花、刺绣和织锦之分。

服饰图纹中非常重要的一个是蛙图案。在壮族世居的生态环境中，蛙与壮族的生产生活联系是最密切的，壮族的先民认为蛙可以对农业生产和人的繁衍发挥重要的作用，进而赋予它们特殊的神力，并对蛙顶礼膜拜。因此，壮族人民将蛙的形象装饰在衣服上，最多的是背小孩子的背带上。背带是文山壮族最主要的育儿用品，传统背带是由女方家庭的母亲缝制，作为陪嫁品送给出嫁的女儿，寄托了早生贵子、孩子平安的美好祝愿。用背带背孩子便于劳动，所以背带在壮族地区是常见之物，妇女对背带的绣制可谓重视至极，妇女的刺绣水平也在背带上得到最好的体现。背带上绣的青蛙有公母之分，将青蛙绣在背带上，一是祈求繁衍生殖，二是将公母青蛙作为图腾崇拜，三是祈求风调雨顺、五谷丰登。

三) 壮族服装蕴含着深刻的农耕思想

滇东南壮族传统服饰及图纹体现了稻作文明的思想感情和审美观念。壮族服饰是“那”文化的具体体现，其服饰承载着“鸟耕之田”的审美感情和观念。壮族善于农耕，是水稻种植的最早发明者。越人，亦称“尾濮”“著尾”是侬人衣著的一大特色，也是壮族“雒田”思想、观念、情感的物化形态。侬人服饰的对襟衣下摆宽、脚边圆、左右两侧向上翘，以示鸟翅，下穿百褶长裙收束扣于臀部，状如鸟尾。上穿短衣，下着长裙，这种短衣紧胸能够充分展现人体形状之美，短衣与长裙形成面积大小分割，产生形的节奏变化，加上图案装饰，以显示美观。其服饰还出现了“牛耕田”的稻作观念和审美感情。如广南的侬人，其佩戴花头帕两端竖露于外，视之如牛角，表现出侬人像牛一样的勤劳、厚实的观念，这是牛崇拜的审美体现，是稻作文明的延伸。而居住在马关边境一带的侬人，其头帕下垂饰有坠纛，帕两头梳成细穗，缀以彩绒，视之如稻穗，憧憬着丰收和美好未来。居住在文山、砚山的搭头土僚妇女

下穿青色细褶裙，裙下半部装饰有“田畴”图纹，以示占有田畴的标志。

7) 壮族医药

云南壮族地区多为平坝邻水地带，海拔在737-1120米之间，最高日气温可达36~39℃，年温差小，昼夜温差大，空气湿度大，多为亚热带气候。在云南壮族主要聚居地文山壮族苗族自治州，资源丰富，植物约1727种，包括华盖木、樟、楠、红椿、香木莲等珍稀物种76科300多种，野生动物有豹、野猪、岩羊、蛤蚧、穿山甲、猫头鹰、长尾雉等40多种，矿产资源11类40余种。

壮族人民在与自然抗争的过程中，也逐步认识到了身边丰富的植物资源的药用价值，并运用来治病和抵御灾害。这种经验通过口传身授，沿用至今。但在中草药知识已较为普及的今天，壮族医药文化中的某些植物仍没有被其他民族认识和利用。例如，马兜铃科的躲蛇生(*Aristolochia tuberosa*)在壮族人民中家喻户晓，妇孺皆知，不仅知其形态特征和药性，而且还熟悉其物候、生境、气味等，因此，在壮族人民中早已有其土名，称之为“兰金代”，其意为衣服口袋中的金子。因该种植物是治疗急性腹痛的急救药，但植物学家正确认识该种植物的历史仅有十几年。诸如此类的例子还有许多，这些植物在壮族人民当中有名有姓，但在植物学家的眼前却感到陌生。此外，有一些植物学家较为熟悉的植物，在壮族医药文化中常发现它的新用途，例如，壮族人民在治疗跌打损伤但无伤口时用石竹科的王不留行(*Vaccaria segetalis*)和唇形科的活血丹(*Glechoma longituba*)，如有伤口时则用菊科的刀口药消炎，如流血不止则用蚌壳族科金毛狗的毛止血。壮族人民对一些较常用的药用植物，诸如觉科的牛膝、伞形科的川芎、菊科的泽兰和川滇紫苑等，常在房前屋后栽培。

除此之外，壮族聚居的文山苗族壮族自治州还是知名的三七之乡，全世界90%以上的三七中药资源均分布于此，李时珍在《本草纲目》中称之为“金不换”，被誉为“人参之王”，现代研究证明，三七具有活血化瘀、降低血粘度、抗疲劳、抗衰老

抗肿瘤、消炎镇痛、抗病毒等多种显著功效，不仅作为临床常用药物备受青睐，由此形成的医药产业已推动了当地社会经济的发展。

8) 壮族饮食习俗

一) 适度索取的生态饮食观念

壮族是以稻作生产为主的民族，在物质生活方面形成了以大米为中心的饮食文化。并且壮族饮食存在很多禁忌，客观上也起到了保护动物的作用。如云南西畴县的壮族禁止用牛马驴狗肉祭神，一般也不宰杀食用大牲畜，肉食的猪、鸡、鸭、鹅、鱼虾、昆虫等，多是稻谷的转化物。另外还有“吃狗肉，名声臭”；“吃黄鳝，大猫馋”等说法，蛇也是不能吃的，因为蛇被认为是龙的化身，是神灵。壮族主要从事农耕，一般不打猎，狩猎文明在壮族生活中仅表现为渔猎的遗留：捕鱼虾，吃昆虫。不少飞禽走兽、山珍海味是被禁止食用的。

二) 利用植物给米饭着色——“五色饭”

五色饭，又称花色饭、花糯米饭、五彩糯米饭、五色糯米饭等，是壮族三月三节庆食物。壮族人民利用天然植物红兰草、黄花、枫叶、紫番藤的根茎或花叶捣烂，取汁分别浸泡糯米（留一份不浸泡，保持原色），然后蒸熟而成，分别呈现红、黄、黑、紫、白诸色。彩色饭的色彩原料，不仅起着色的作用，也起到调味的作用，不同的色饭有不同的香味。

9) 火塘习俗

火，对于人类而言意义非常巨大，因此产生了对火的崇拜。壮族民间习俗认为，火塘是家中火神居住的地方，所以，火塘中的火种要长期保留，不能熄灭，否则就意味着火神出走；人尤其是妇女不能从火塘上跨过；也不能对火塘吐痰，否则就是亵渎火神，将遭到火神的惩罚，口生毒疮。乔迁新居之日，主人家要在旧房屋神龛

前祭祀，请祖先神和火神搬到新屋居住。然后，将神龛上的香炉和火塘中的火种搬入新屋，用旧屋火塘的火种点燃新屋火塘中的干柴，生一堆大火，以示火神还在，预示生活像火一样红。

师宗县黑尔、高良、五龙乡的壮族每年正月初四日要举行赶火星活动。这天全寨人集中在寨子中央，以挂竹刀的草绳拦在通往寨外的各个路口，青少年手持栎树枝跟在布摩（壮族祭司）后面。布摩一手提刀，一手抱公鸡。每到一户，先从火塘里拾一块火炭放入盆内，念驱火星咒语以灭火。手持树枝的人一面舞打一面喊，从家内赶出家外，主妇随之端起熄过火炭的水盆泼出门外。挨户赶毕，最后赶到河边沙滩，再供祭火星神和山神。

三. 总结

现在，随着人口的迅速增长和科技的巨大进步和广泛应用，极大的提高了人类对财富的追逐，但对人类生存的环境也造成了破坏性的影响。如空气污染、土壤污染、水源污染、森林破坏、水土流失等造成了大量生物的灭绝。如何使人与自然的协调发展、和谐发展成为我们关注的焦点。壮族对自然的认识和处理方式，无疑为我们重新思考人与自然的关系，改变价值观念和生活方式，纠正人类中心主义的做法，重构人与自然的关系提供了一种范例。

壮族的大地万物各有其道、相生相亲和相互依存的生态观念，以自然崇拜、图腾崇拜为内涵和以禁忌及习惯法规为约束机制的特征，并且与其民族的耕作方式相适应，其主旨在于追求人与自然的平衡和和谐关系，主张人类要珍惜自然，利用和开发要适度，保持自然生态的平衡。壮族把人看作是自然界的一部分，人并不比其他生物优越，相反，人同自然是一个有机的整体，人不能凌驾于自然之上，而应当与自然和谐相处，应敬畏自然，尊重自然。

但是，壮族这种生态保护的行为，试图通过取消或减少人类改造自然的实践活动，以维持原始的自然生态平衡，这就形成人类发展的惰性。实际上，在壮族地区

特别是那些偏远山区，一些源于自然崇拜的迷信思想仍存在，这种植根于崇拜自然心理上的迷信思想，在很大程度上不利于科学与教育的普及与推广，进而影响到壮族的现代化进程。因此，在壮族地区生态建设过程中，应根据壮族地区独特的地理环境，针对壮族地区的生态现状，广泛吸收现代科学知识与技术，确立从被动地敬畏自然到主动的顺应自然的自然观，尤其要使那些在壮族本土产生、符合壮族文化传统的村规民约具有科学的内容。

Abstract

Sustainable Development of Eco-Friendly Traditional Lifestyle in Rural Ethnic Minority Areas in Yunnan(II)

This report contains the manuscripts of China's Yunnan Academy of Social Sciences experts in Chinese and English as Sustainable Development Measures of Eco-Friendly Traditional Lifestyles of Ethnic Minorities in Yunnan Province (II), which is a detailed task of Development of Green-Growth Strategies of Developing Countries in East Asia.

This report introduces an overview of the society, economy and culture of ethnic minorities in Yunnan Province. Also, the report addresses the Naxi people's medicinal plant (herb) use and social and scientific analysis, the details of water resources management and ecosystem and traditional production methods. This report examines the details of ecological concept and traditional ways of life of the Yi people, as well as the Yi's traditional medicine, which is the most widely used among top four traditional medicines of ethnic minorities represented by Jiang, the Yi, the Dai and Mau people. This report investigates the Dai people's eco-friendly traditional lifestyles and water resources management and also examines the Bai people's economic activities using traditional dyeing method and handicraft and eco-friendly traditional way of life. Lastly, this report addresses the concept of ecological life and traditional production method in Yunnan Province. In addition, the environmental destruction problems taking place, due to the introduction of modern lifestyle, and the advantages of traditional ecological thinking and

eco-friendly lifestyles are addressed. And, the introduction and problems of the current development policy of China's Yunnan Province are presented in this report.

Keyword : Traditional knowledge, Ethnic minorities, Sustainable development, Naxi, Yi, Bai