

European Investment Bank Loan
Sustainable Management Project of Rare
Forest in Hubei Province

Social Effect Evaluation Report

Academy of Forest Inventory and Planning,

State Forestry Bureau

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1 Project Overview

1.1 Project Background

Hubei Province lies in the central China and the middle branch of Yangtze River. It's also the location of some large hydro-junction projects such as the Three Gorges, Gezhouba and Danjiangkou, which enjoys significant strategic role. Hubei locates in the transition terrain from the second step to the third step. It has diverse geomorphic types 56% of mountainous region, 24% of hills and 20% of plain and lake area. The vegetation of Hubei province shows the transition from temperate zone to subtropical. It's one of the biological resource-abundant regions in China. Shenlongjia is well-known as the "Forest Sea of Central China" and the "Natural Zoo and Botanical Garden". Hubei province enjoys rich forest resources as a result of its diverse natural environment. These forest resources play an extremely important role in the sustainable development of economy and society and the improvement and protection of ecological environment of Hubei province and even the Yangtze River Basin. According to statistics from the sixth review of the continuous forest resource inventory of Hubei Province, the total land area of Hubei province is 18.59 million HAs, with 7.1386 HAs of forest land. The forest coverage rate

is 38.4% (including 3.48% of shrubbery coverage of rocky mountain in karst area). The stock volume of standing trees is 313.2469 million m³ while the forest stock volume achieves 286.5297 million m³. When it's difficult to expand the forest area, the way to maintain both ecological security and timber security is to carry out sustainable forest management so as to increase forest productivity and quality, nurturing a forest ecosystem of multiple resources, functions and benefits in order to gradually meet the multi-faceted demands on forest of the national growing economy and society, which will promote the establishment of the forest certification system.

Currently, the background of national financial crisis, climate change, ecological crisis and resource and energy crisis has greatly affected the sustainable development of global economy and society. China as a large developing country that plays an important role in accelerating the industrialization and urbanization also faces above severe challenges and new situations such as domestic restructuring and domestic demand expansion. Hence the Party Central Committee and the State Council established five strategic plans relating to the society, politics, economy, culture, and ecology. As the basis and support for the ecological civilization construction—one of five strategies, the forestry has formed the development path

of modern forestry, ecological civilization and scientific development. Especially after President Hu Jintao put forward the goal—"by the year of 2020, the forest area will increase 40 million HAs compared with that of 2005 while the forest stock volume will increase 1.3 billion m³ compared with that of 2005" (hereinafter referred to as the "two increases") at the UN summit on climate change, the forest operation is not only a measure for forest resource cultivation, modern forestry development and ecological civilization construction, but also a significant guarantee for achieving the "two increases" and living up to our commitment on the global climate. Therefore, the sustainable forest management has been upgraded to an unprecedented position and become the top priority of China's forestry work.

1.2 Project Construction Content and Scale

According to the site conditions, land use in the project area, relying on the resources around the dominant tree species, the total project construction area is 6,206.45 HAs, with 3,876.44 HAs of new afforestation, 2,330.01 HAs of tending forest and 11 converted or expanded nurseries (36.7 HAs). Necessary subsidiary facilities are also built.

(1) Afforestation Project

During the construction period, the total planned area of

afforestation and tending forest is 6206.45 HAs. Where:

①New Afforestation

Through developing standing forest land suitable for rare tree species, open forest land and suitable land for forest in the commodity forest area, the total afforestation area will achieve 3876.45 HAs.

②Forest Tending

Select promising forest stand for cultivation among existing young and middle aged forests for forest tending. Improve the forest stand structure and growth environment, accelerate the growth of forest stand, increase the forest productivity and realize the healthy management of the forest through tending measures. The total tending forest area will reach 2330.01 HAs.

(2) Construction of Nursery Stock Production Base

11 nurseries are converted or expanded in the 11 counties (cities) of the project, with an area of 36.7 HAs. Necessary subsidiary facilities are also built.

(3) Construction of Infrastructure and Supporting Facilities

Build simple maintenance and management room, with the area of 4000 m²; construct new forest road, with the length of 507.90 km; maintain 1,841 km of forest road; carry out water supply and sewerage work, with the length of 11 km; maintain 596 km of fire

lane; and equip 81 sets of forest fire prevention equipment, 29 sets of forest pest control equipment, a set of management information system and 121 sets of production tools and equipment.

(4) Construction of Sustainable Forest Management Capacity

This includes domestic and overseas training of managers and staff involved in the forest management project, technical consultation, project promotion as well as preparation of necessary office equipment, software and communication equipment needed for forest management. Carry out forest certification work through the project implementation.

1.3 Project Construction Objective

The goal is to accelerate the development of sustainable management of rare forest in Hubei Province, strengthen tending management of young and middle aged rare forests, fully improve forest management standards and quality, speed up the development and enhance the efficiency of rare tree species in Hubei province. Combining the construction plan for national strategic timber reserve bases and making use of foreign capital, establish a production system of timber and economic products by combining multiple tree and timber as well as integrating short-term, medium-term and long-term period so as to play a demonstration role for the comprehensive development of rare tree species and the construction of national strategic timber

reserve bases. Main objectives are:

(1) Focusing on the strategic deployment of the "Five Expectations for Hubei Province" construction, accelerate rare forest base construction and forest tending in Hubei Province in accordance with the general requirements of "Competition Improves Quality While Upgrading Increases Efficiency", further promote "Green Jingchu" plan, and fully improve sustainable management of rare forest, which fully indicate the special ecological position of Hubei Province in China.

(2) In the course of project construction and operation, it's advised to introduce international advanced and mature theories and management technologies for rare tree species cultivation and sustainable forest management, explore sustainable rare forest management models in line with China's national conditions, strengthen work relating to publicity, training and pilot project, as well as encourage and promote forest certification.

(3) Accelerate the development of tending bases of rare forest in Hubei province. Though the project implementation, there will be 6206.45 HAs of rare forest, where: 3876.44 HAs of new afforestation and 2330.01 HAs of young and middle aged tending forest. After the construction is completed, the forest area of Hubei province will increase from 7,139,000 HAs to 7,142,876.44 HAs, with the forest coverage increasing 0.02%.

(4) Optimize the structure of tree and timber species, establishing a production system of timber and economic products by combining multiple tree and timber as well as integrating short-term, medium-term and long-term period, enhance the ability against market risks, improve the stability of forest ecosystem and ensure healthy, sustainable and long-term development of forestry.

(5) Effectively strengthen the ability of forest to cope with climate changes and the protection of biodiversity within the project area, realize the rapid growth of forest resources in Hubei province, and greatly improve the quality and unit area productivity of standing forest. The carbon sink capacity of the forest gets increased, which will greatly improve regional ecological environment.

(6) The aim of the project is to enhance the protection and development of rare tree species in Hubei Province and make effort to make Hubei Province as a national model of integrating comprehensive development and utilization of rare tree species and construction of national strategic reserve timber production base.

(7) The project also promotes the sustainable management of rare forest and increases farmers' employment and income within the project area. It's expected to achieve revenue of 1.956 billion RMB yuan, which will benefit 3,474 households with 13,895 famers. The average annual income of forest workers will

increase 1,500 RMB yuan.

2 Social Effect Evaluation Process and Method

2.1 Social Effect Evaluation Process

2.1.1 Pre-preparation

(1) Establish social effect evaluation team, formulate a project plan and clarify the organization, responsibility, work schedule, methods and requirement, the proposed consultation objects and methods, evaluation report and other items.

(2) The project implementation announcement will be published online or posted within the project area so as to make the project public.

(3) Prepare social effect evaluation questionnaires and relating forms to collect relevant information, data and public comments at the village level.

(4) Collect national and provincial regulations, policies and documents relating to forestry development, collect relevant information and data through official websites, refer to the library, local chronicles, yearbook, etc.

(5) Propose project social effect evaluation training

manual.

2.1.2 Social Evaluation Training for Investigators

In early September 2014, the project team selected representative survey sites according to the actual situation and carry out social effect evaluation training for relevant personnel in 11 cities (districts, counties) including Xian' an district, Tongshan county, Tongcheng county, Chibi city, Dawu county, Xiaonan district, Yingshan county, Zaoyang city, Xiangcheng district, Changyang county and Badong county in accordance with the social effect evaluation training manual. The training includes the purpose, process and main instruments of the participatory rural appraisal method; the content and methodology of the social effect evaluation; semi-structured interviews, questionnaire surveys and field surveys; collecting and analyzing information and data needed for social effect evaluation.

2.1.3 Field Survey

Due to limited time and effort involved in the investigation, the social effect evaluation team carried out field investigation the according to the plan and required typical sampling method. Based on factors such as the size of the project area, afforestation area, farmers' enthusiasm in participating in the project, the team selected representative personnel among 11 counties/towns to conduct field investigation. During the

field investigation, the social effect evaluation team sent out 140 sample forms of village level and got 128 forms back, with the recovery rate of 91.43%. The team also sent out 1,100 family sample survey forms and collected 1,046 forms, with the recovery rate of 95.09%. The team interviewed with 178 village cadres, organized 130 village meetings and held 20 seminars with cadres of the project. In addition, the social effect evaluation team collected first-hand or second-hand data and information across towns and villages of project cities (districts, counties).

The investigation and consultation activities carried out by the social effect evaluation team include:

(1) The investigation carried out in relevant units of districts and cities in Hubei province mainly aims at promoting the project, exchanging and negotiating with various direct stakeholders in order to learn more about their attitude to the project implementation, the project operation and management mode and suggestions on ensuring the smooth implementation of the project.

(2) Conduct initial evaluation through interviews and referring to the forestry reference documents.

(3) Collect, sort out and analyze relevant data and information on population and resource.

(4) Interview with leaders of villages and towns and collect socio-economic data of selected pilot towns

.

(5) Hold village meeting, conduct interviews and surveys with village cadres and peasant households, and carry out village-level resource investigation.

2.1.4 Data Analysis and Report Preparation

Materials collected from this evaluation:

(1) Field research materials such as questionnaire, interviews, seminars, resource map of the project area and various image data.

(2) Background materials associated with the project and project preparation reports at all levels, such as project proposals and project feasibility study report and so on.

(3) Official statistical information, such as statistical yearbooks of all levels of governments, statistical bulletins, the "12th Five Year" economic and social plans and relevant policy documents of all levels of governments.

(4) Local Chronicles

The evaluation team used the latest statistics and information being officially released when applying relative references. All statistical figures at village-level should apply first-hand information collected from field survey as much as possible in order to ensure objectivity and accuracy of the data. Analysis and discussion on relevant issues should comprehensively consider ideas and suggestions from the main

stakeholder groups, project management organization and project owners so as to ensure the comprehensive and objective result.

Record, sort out, analyze and compare the first-hand and second-hand data and information collected by the social effect evaluation team so as to make relevant conclusions and write the social effect evaluation report.

2.2 Social Effect Evaluation Method

According to requirements of European Investment Bank and the project needs, the social evaluation process of this project adopts the public participatory method. Data is collected through open interviews, group interviews, public consultation, community resource investigation and resources map. Promote the project among related government sectors, villages and farmers through posted bulletins, leaflets, broadcasting, online information announcement, public questionnaires, meetings of various scale and visiting local forestry and relevant administrative sectors within the project area in order to let more people understand the purpose, aim, content and operation procedure and ensure that different interest groups and different types of peasant households within the project area will equally and actively volunteer to participate in the project so as to guarantee the smooth implementation of the project.

2.2.1 Cadre Seminar

The social evaluation team carried out county-level cadre seminar. Participants include directors of sectors such as county governments, the national development and reform commission, bureau of finance, the forestry bureau, the agriculture bureau, the supervisory bureau, the land and resources bureau, the women's federations, the ethnic and religious committee, the auditing bureau and the poverty relief office. The content of the conference is to introduce the basic project content and project implementation procedure to main government leaders and relevant directors of county sectors and listen to ideas and suggestion on the project implementation in order to gain the support of relevant sectors.

2.2.2 Village Meeting

In key project villages, the social evaluation team held village meetings and carried out village-level consultation focusing on main stakeholder groups. In order to involve more villagers in the consultation, the social evaluation team took various forms and held village meetings at the time and place convenient for villagers so as to get more peasant households involved. The village meeting was hosted by the village cadres. The social evaluation team introduced and explained the project content, implementation requirements and procedures, relevant expectations and suggestion were introduced and explained. The

village meeting and village-level consultation drew special attention to the benefit insurance of poor households, minorities and women, especially to ideas and appeals of vulnerable groups.

2.2.3 Questionnaire

Based on field surveys, the social evaluation team conducted questionnaire survey on major stakeholders. The questionnaire respondents included village and family. The content of the questionnaire covers social, economic, cultural and family situations of different interest groups and their attitudes of participating in the project. The questionnaire also paid particular attention to let vulnerable groups such as women, ethnic minorities and the poor households to express their opinions. The social evaluation team adopted the random sampling approach and collected 1,046 individual questionnaire forms of 128 villages in 11 cities (districts, counties) in total.

2.2.4 Village-level Survey and Peasant Household Interview

The social evaluation focused on village-level survey and peasant household interview. Learn the stakeholders within the village and the effect of the project through interview with village cadres. Collect socio-economic data in order to fill in the village-level socio-economic data sheets. Select participants of the group interview according to the score rank of the rich and poor level of peasant households. Learn the

utilization of forest land, forest tending and land utilization model through land resource investigation.

Within the key project area, the social evaluation team conducted peasant household interview. The interview objects include a certain proportion of women, ethnic minorities and poor households. Low-income, middle-income and high-income households also accounted for corresponding proportions. The peasant household interviews were carried out after the village meeting. The interview would be randomly carried out in peasants' house or other suitable places. Learn and understand the behavior of peasants in forest production, resource management and livelihood characteristics through peasant household surveys.

2.3 Analysis and Conclusion of the Project Social Effect Evaluation Questionnaire Result

2.3.1 Analysis of the Questionnaire Result

Please refer to table 2-1 for the questionnaire analysis result of the project social effect evaluation. Main ideas and suggestions on the afforestation from the peasant households within the project area include:

95.32% of peasant households are very willing or willing to participate in this project. 4.68% of peasant households don't care either way. No one opposes the implementation of the project.

86.99% of peasant households think that the project will have large or very large meaning to the local and regional socio-economic development and ecological environment construction.

(3) 99.81% of peasant households think that the project can bring positive effect on peasants and local development. They think the project implementation will improve the ecological environment, promote the forest resource restoration, increase local employment and improve peasants' income.

(4) 1.1% of peasant households think that the implementation of the project will limit local production, damage local customs and bring other adverse effects.

(5) Respondents generally agreed that the implementation of this project won't have negative effect on local ethnic minorities but can help them increase income, promote equality between women and men and advance the development of ethnic minority areas.

(6) Most peasants think that the key to the implementation of this project is to improve ecological environment and promote ecological balance. Governments at all levels should vigorously provide support to ensure the timely readiness of funds. The difficulty of the implementation is peasants' inadequate understanding of the nature of the project, land dispute due to insufficient concentration of land and immature afforestation

techniques. The biggest obstacle is the management difficulty and technology weakness, which will limit production and reduce crop yield.

(7) Peasants' expectation and suggestions are their interests can be taken into account during the implementation of the project, such as improving economic income and making them get real benefit. They hope that the government can solve problems and difficulties occurred during the project implementation process and provide technical training and support in afforestation and management. They also expect some economic compensation caused by the afforestation as well as the development of forestry economy and forestry tourism.

Table 2-1 Table of Social Effect Evaluation Questionnaire Survey Result

Major issue	Category	Number of people	Percentage
1. How much do you know about European Investment Bank Forest Loan project?	Know very well	174	16.60%
	Know	568	54.30%
	Know a little	190	18.20%
	Know little	83	7.90%
2. If you know this project, how do you get to know? (multiple choice)	Informed by county cadres or staff of forest department	739	70.65%
	Broadcasting, TV	79	7.55%
	Newspaper	13	1.24%
	Internet	30	2.87%
	Informed by other people	203	19.41%
	Other	5	0.48%
3. What do you care most about the project content? (multiple choice)	Newly-planted ecological forest	784	74.95%
	Newly-planted economic forest	513	49.04%

	Transformation of low-production ecological forest	351	33.56%
	Transformation of low-production economic forest	146	13.96%
	Forest pest control	82	7.84%
	Infrastructure construction of forest fire prevention	233	22.28%
4. How do you think is the significance of the project to the economic development and ecological construction of the village/county/city?	Great	388	37.09%
	Much	522	49.90%
	A little	21	2.01%
	It depends	112	10.71%
	None	3	0.29%
5. Would you like to participate in the project?	Totally like	342	32.70%
	Yes	655	62.62%
	Whatever	49	4.68%
	No	0	0.00%
6. Do you think will the project bring opportunities to your family or local development?	Yes	969	92.60%
	No	14	1.30%
	It depends	24	2.30%
	Have no idea	39	3.80%
7. What benefits do you think will the project bring to your family or your village? (multiple choice)	Restore forest resources	691	66.06%
	Improve ecological environment	897	85.76%
	Increase income	713	68.16%
	Increase employment	448	42.83%
	Other	2	0.19%
8.6. Do you think will the project bring some negative impact on your family or local development?	Yes	11	1.10%
	No	917	87.70%
	It depends	33	3.20%
	Have no idea	85	8.10%
9. Which operation and management form will you accept for participating in this project?	Enterprise	116	11.09%
	Joint cooperation of large households	196	18.74%
	Joint-stock cooperation	106	10.13%
	Other	94	8.99%
	Quit	534	51.05%

2.3.2 Summary

(1) The project area is suitable to develop afforestation with favorable natural conditions and rich land resources. Governments at all levels show great support, peasants show active participation while special groups such as women are willing to participate in the implementation of the project.

(2) The project will increase forest coverage and bring benefit to people, which are of great importance in enlarging forest area in Hubei province, improving the ecological environment, and promoting local socio-economic sustainable development.

(3) The implementation of this project can improve the living environment of residents in the project area, provide jobs for local residents, widen approaches to become rich, increase revenue, and promote equality of nationality and equality between women and men so as to further advance the construction of new socialist countryside. During the project implementation process, peasants will get corresponding technical training and guidance which will help to improve their forestry cultivation and management skills.

(4) The potential negative effects brought by the project mainly include limiting agricultural production and damaging local customs. The project area mostly locates in barren hills and wasteland. According to the actual situation of the project

area, the principle focuses on key and appropriate development zones. Scientific afforestation plan and layout will be established to ensure that local food production and meet peasants' demand on production and living. This project employs villagers as seasonal workers or long-term workers. Workers' daily life such as food and accommodation can be resolved at home or nearby villages, which will not damage to local customs. Therefore, peasants believe that the negative effect brought by the project can be avoided.

(5) In the course of project implementation, certificate of forest tenure right work should be strengthened so as to make the right of forestland use and circulation clear. Relevant sectors should also strengthen the supervision and management of contractors during the operation period so as to put an end to unpaid salaries and bonuses of workers and avoid social issues and conflicts.

To sum up, the project will strictly execute national and local laws and regulations, formulate and seriously implement each project management system, strengthen management and supervision of the whole construction process and focus on biodiversity protection and stable ecological system. Corresponding measures will also be taken to avoid or minimize negative effects. There are no natural or economic factors that will force residents to move out from the project area. Hence

considering from ecological benefit, social benefit, economic benefit and public wishes, the project is in line with local economic and social development needs, which will increase local forest coverage and the forest coverage of Hubei province, facilitate soil and water conservation and climate regulation, enhance ecological and living environment, improve women's family position, help peasants and minorities increase income and improve life quality, adjust industry structure of project cities (districts, counties) and accelerate regional economic development. The project is in accordance with the guiding ideology of the "12th Five Year" plan, which will highlight the key role of forestry in the coordinating the development of population, resources and environment, the important role of forestry in bringing benefits to peasants and increasing peasants' income as well as the special effect of forestry in coping with climate changes and enhancing carbon sink capacity. It indicates ecological, economic and social functions of forestry in detail. Therefore, there will be large positive social effect of the project and the project is feasible.

3 Analysis of the Basic Socio-economic Situation of the Project Area

3.1 Basic Socio-economic Situation in Hubei Province

3.1.1 Natural Geographic Condition

(1) Geographical Location

Hubei province is located in the in the middle part of the People's Republic of China, crossing $108^{\circ} 21' 42'$ east longitude to $116^{\circ} 07' 50'$ east longitude, $29^{\circ} 01' 53'$ north latitude to $33^{\circ} 6' 47'$ north latitude. It lies west of Anhui province, north of Jiangxi province and Hunan province, east of Chongqing province, southeast of Shaanxi province and south of Henan province. The length from east to west is about 740 km while the width from north to south is about 470 km. The total land area of Hubei Province is 185,900 km², accounting for 1.94% of the total land area of China.

(2) Topography

Hubei province locates in the transition zone from the second step to the third step, with the three sides risen, flat middle part, south part open and north part of incomplete basin. The diverse landforms include mountains, hills, and down lands and plains, respectively accounting for 56%, 24% and 20% of the total area of Hubei province. There's huge terrain height difference. The "Ridge of Central China"—Shennong Peak of the

summit of Shennongjia locates in the west, with the height of 3,105 m. The ground elevation near Tanjiayuan in Jianli County in the eastern plain is zero. Jiangnan Plain lies in the south central part, linking up Dongting Lake Plain in Hunan province into a single stretch. The terrain is flat with fertile soil. The altitude of most areas is lower than 35m except for hills at the outside edge of the plains.

(3) Climate

Hubei is located in the subtropical zone. Most areas in Hubei province are humid subtropical monsoon climate except for high mountains. There're sufficient light, adequate heat, long frost-free period and abundant rainfall, with hot rainy season. Total solar radiation in most area of the province is 85~114 kcal/cm. The annual average temperature of the province is 15~17°C. Most areas are cold in winter and hot in summer, with changeable temperature in spring and rapid temperature drop in autumn. The geographical distribution of rainfall decreases from south to north. The rainfall of southwest can reach 1400 mm to 1600 mm while the northwest can be as low as 800 mm to 1000 mm. There are significant seasonal changes in precipitation distribution, abundant in summer and rare in winter. The rainfall of Hubei province in summer is between 300 mm and 700 mm. The rainfall in winter is between 30 mm and 190 mm.

(4) The Land

The total land area in 2012 is 18.5889 million HAs, with 3.8999 million HAs of farmland, 598,700 HAs of garden and 5.8604 million HAs of forest land and 75,800 HAs of grassland.

(5) The Hydrology

Apart from mainstreams Yangtze River and Han River, Hubei province have 4,228 rivers with the length above 5 km and 1,193 small and medium rivers. The total length of all rivers is 59,200 km, with 41 rivers above 100 km. The Yangtze River flows through 26 cities and counties from the west to the east in Hubei province. It starts from the river mouth of Bianyu Creek in Badong County in the west and flows out the province at Huangbin River in the east. The total flow length is 1,041 km. Hubei province is well known as "Province with Hundreds of Lakes". Lakes are mainly distributed in the Jiangnan Plain. There're over 800 lakes with the area of more than one hundred acre. The total area of lakes in Hubei province is 2983.5 km².

3.1.2 Population Division

According to the data of Statistics Department of Hubei Province, till the end of 2013, the resident population is 57.99 million, increasing 200 thousand compared with 57.79 million in 2012, with the increase rate of 0.35%. The male population is 29.7199 million, accounting for 51.25% of the total population. The female population is 28.2701 million, accounting for 48.75% of the total population. Population of working-age between 15~64

years old reaches 43.6867 million, accounting for 75.33% of the total population in the province. From 2000 to 2013, the natural population growth rate remains below 5%.

3.1.3 Economic Development

Hubei Province achieved regional gross domestic product (GDP) of 2466.849 billion RMB yuan in 2013, increasing 10.1% over the previous year calculated at the comparable price, which is 2.4% higher than the national average level. Where: the first industry increased 309.816 billion RMB yuan, with the growth point of 4.7%; the secondary industry increased 1,217.156 RMB yuan, with the growth point of 11.3%; the tertiary industry increased 939.877 billion RMB yuan, with the growth point of 10%.

3.1.4 Forestry Overview

(1) Forest vegetation

Hubei province belongs to subtropical evergreen broadleaved forest region, which is the transition zone from the southeastern hills to high hills and plateaus in northwest and southwest of China. The forest vegetation changes from north subtropical evergreen and deciduous mixed forest to the mid-subtropical evergreen broad-leaved forest. Evergreen broad-leaved forest mainly includes phoebe, and castanopsis and lithocarpus glaber. Broadleaved deciduous forest mainly includes quercus, fagus longipetiolata and polar-birch forest. Evergreen and deciduous broad-leaved mixed forest mainly

includes *cyclobalanopsis multinervis* and *liquidambar formosana*. Coniferous and broad-leaved mixed forest mainly includes *pinus massoniana*/*quercus*—*liquidambar formosana* mixed forest and *cunninghamia lanceolata*—*quercus* mixed forest. Coniferous forest mainly includes *pinus massoniana*, *pinus armandii*, *cunninghamia lanceolata* and *sabina chinensis*. In addition, the unique and rare plant species such as *metasequoia glyptostroboides*, *davidia involucrata*, *tetracentron sinensis* and *cercidiphyllum japonicum* have been formed due to the natural barrier of Shennongjia in the mountainous area of western Hubei, complex topography, big altitude difference and little effect of the fourth glacier.

(2) The Present Situation of Forest Resource

Per the Second class survey of forest resources in Hubei Province, the total forest area of Hubei province is 9.8314 million HAs, covering 52.9% of the land area. Among which 7.2712 million HAs are forest land, 78,100 HAs are open forest land, 1.951 million HAs are shrubwood, 168,900 HAs are immature forest and 332,000 HAs of suitable land for forest. The total stock volume of standing forest is 348.4021 million HAs. The total volume of plantation is 348.4021 million 立方米. The forest coverage of Hubei province is 45.1%.

3.2 Basic Socio-economic Situation of the Sample Area

3.2.1 Sample Area

The project area covers 11 cities (districts, counties) including Xian'an district, Tongshan county, Tongcheng county, Chibi city, Dawu county, Xiaonan district, Yingshan county, Zaoyang city, Xiangcheng district, Changyang county and Badong county.

The social effect evaluation team adopts sample survey of typical regions to learn the socio-economic situation of the project area. Towns and villages being investigated include 128 villages, forest farms and cooperatives of 11 cities (districts, counties).

3.2.2 Population of Sample Area

There're 197,272 permanent residents in 128 sample villages, including 107,304 men and 89,968 women. There're 113,533 labor forces with 61,939 men and 51,594 women. There're 64,647 permanent labor forces, including 34,339 men and 30,308 women.

Please refer to table 3-1 for the population of sample area.

Table 3-1 Population of Sample Area

County/ city/district	Town	Administrative village	Permanent residents	Male	Female	Labor force	Male	Female	Perennial labor of the village	Male	Female
			197272	107304	89968	113533	61939	51594	64647	34339	30308
Zaoyang City	Xiongji Town	Monkey King Mountain Tea Plantation	160	96	64	80	42	38	50	30	20
		Zhongwan Village	1001	584	417	420	260	160	360	220	140
		beauty spot	385	201	184	156	87	69	120	50	70
Tongshan County	Tongyang Town	Shanhuixia Village	2118	1115	1003	1169	685	484	880	484	396
		Zhaixia Village	1760	792	968	1056	475	581	850	382	468
		Maotian Village	2782	1531	1251	1120	616	504	920	506	414
		Changlinshan Forest Farm	56	48	8	56	48	8	48	43	5
	Chuangwang Town	Liujialing Village	2585	1680	905	890	534	356	510	281	229
		Gaohu Village	723	396	327	502	270	232	478	260	218
		Guidun Village	1809	995	814	771	424	347	590	324	266
		Menglongling Forest Farm	58	35	23	58	35	23	58	35	23
		Gaohu Forest Farm	20	15	5	20	15	5	12	10	2
	Xiapu Village	Outang Village	1370	754	616	790	434	356	682	375	307
		Xiaopu Village	2657	1461	1196	826	454	372	712	392	320
		Qiaokou Village	1540	847	693	980	500	480	720	395	325
		Beishan Village	380	283	97	220	168	52	186	146	40
		North Mountain Forest Farm	96	70	26	76	58	18	70	55	15
		Tongshan Shihuan Farming and Breeding Special Cooperatives	10	5	5	10	5	5	10	5	5

		Tongshan Dachengshan Ecological Cultivation Special Cooperatives	5	5	0	5	5	0	5	5	0
Yanxia Town		Changzhou Village	1760	968	792	725	398	327	532	293	239
		Gangang Village	2060	1133	927	1235	679	556	1035	569	466
		New Land Agriculture and Forestry Development Co., Ltd	46	40	6	46	40	6	46	40	6
		Jiaqi Cooperatives	6	5	1	6	5	1	6	5	1
Honggang Town		Pantian Village	2361	1299	1062	1660	913	747	415	228	187
		Shadian Village	2800	1540	1260	916	504	412	733	403	330
		Guoyuan Village	1754	965	789	840	462	378	672	370	302
		Liuju Village	1305	718	587	536	295	241	371	205	166
		Taipingshan Forest Farm	38	33	5	38	33	5	34	31	3
		Yipanqiu Forest Farm	102	54	48	37	27	10	37	27	10
Huangshapu Town		Yuantou Village	2340	1287	1053	1404	772	632	985	541	444
		Damushan Village	1400	770	630	764	420	344	668	367	301
		Damu Mountain Forest Farm	91	85	6	91	85	6	91	85	6
Jiugongshan Town		Chengxu Village	3010	1806	1204	1957	1174	783	893	536	357
		Linbao Company	35	28	7	35	28	7	35	28	7
Dafan Town		Xiayang Village	2750	1513	1237	781	430	351	621	313	308
		Dakeng Village	1954	1075	879	1074	591	483	859	472	387
		Jikoushan Village	555	305	250	251	138	113	202	111	91
		Jikoushan Forest Farm	39	29	10	39	29	10	35	33	2
Xian'an District	Maqiao Town	Renwo Village	1560	782	778	1372	687	685	871	436	435
	Guihua	Baisha Village	1258	628	630	1080	541	539	679	335	344

	Town										
	Gaoqiao Town	Liuzhen Village	1650	821	829	1482	738	744	1022	505	517
	Hesheng Town	Taolin Village	1820	912	908	1358	682	676	777	391	386
	Xiangyang Lake Town	Guangdongfan Village	1580	796	784	1293	650	643	798	389	409
	Henggou Town	Libuqiao Village	2600	1312	1288	2001	1005	996	1180	601	579
	Damu Town	Jinjishan Village	2085	1060	1025	1286	652	634	798	401	397
	Shuangxiqiao Town	Jingtou Village	806	410	396	605	300	305	321	164	157
		Yangbu Village	1285	645	640	946	476	470	614	311	303
		Maosi Village	2820	1480	1340	1983	1081	902	1208	585	623
	Damu Town	Taohuajian Village	2520	1265	1255	1880	980	900	1007	485	522
	Tingsi Town	Changshou Village	1620	806	814	1160	586	574	603	300	303
Yingsha n County	Shitouju Town	Liuju Village	520	290	230	280	170	110	120	30	90
		Kuqu Village	1240	690	550	820	480	340	160	70	90
		Tiantang Village	760	450	310	480	280	200	30	10	20
	Wujiashan Forest Farm	Wujiashan Village	520	235	285	430	300	130	210	160	50
	Yingjiasha n Forest Farm	Dahechong Village	291	198	93	174	110	64	112	62	50
Dawu	Fengdian	Dongchong Village	1046	528	518	612	309	303	197	184	13

County	Town											
	Lunwang	Huchong Village	2106	1105	1001	1374	874	500	830	395	435	
	Town	Bayi Village	2515	1308	1207	1264	651	613	832	726	106	
	Yangping											
	Town	Xinzhai Village	1230	651	579	680	392	288	212	86	126	
Fangfan												
Town	Wusi Village	2085	1146	939	875	437	438	280	126	154		
Xiaonan District	Pengxing											
	Town	Pengxing Village	2304	1406	898	1118	615	503	390	117	273	
	Zhuhu Town	Qunyi Village	616	314	302	269	140	129	137	55	82	
Zhuhu Farm	Sicha Village	528	269	259	231	118	113	115	46	69		
Chibi City	Zhonghuopu	Langqiao Village	2569	1336	1233	1543	832	711	1237	657	580	
	Town	Nanshan Village	2438	1265	1173	1602	863	739	1286	683	603	
	Magang											
	Office	Lianhuatang Village	1980	1007	973	1120	570	550	1120	570	550	
	Guantangyi	Town	Shiquan Village	2079	1400	679	987	587	400	340	180	160
			Quankou Village	2161	1161	1000	850	480	370	300	120	180
			Xiwan Village	3068	1700	1368	1130	630	500	630	300	330
	Guantang	forest farm	Banqishan Village	1207	587	620	710	351	359	180	100	80
			Zhongxinping Village	1033	501	532	150	100	50	150	100	50
	Shenshan	Town	Xihu Village	8400	5400	3000	3200	1500	1700	1200	400	800
			Fenghuang Village	1540	836	704	800	300	500	300	100	200
State-owned Lushui Forest		State-owned Lushui Forest Farm	405	257	148	108	38	70	30	13	17	

	Farm										
	Yujiqiao Village	Daling Village	2003	1053	950	1309	700	609	950	300	650
		Yuxingshan Village	1971	1125	846	805	405	400	385	235	150
	Xindian Town	Guanshiao Village	2580	1410	1170	1700	980	720	380	210	170
Xiangcheng District	Yinji Town	Baiyun Village	1960	1040	920	1150	670	480	840	510	330
		Yaoan Village	2080	1048	1032	1316	710	606	672	325	347
		Fenghuang Village	2080	1048	1032	1320	702	618	684	343	341
		Yinji Village	1960	1040	920	1150	670	480	828	487	341
		Jiangdang Village	2080	1048	1032	1327	718	609	662	304	358
		Qinglong Village	1880	937	943	1218	610	608	704	354	350
		Xiaochong Village	2080	1048	1032	1348	746	602	684	343	341
	Tuanxi Office	Yingpan Village	1960	1040	920	1150	670	480	840	510	330
	Pangong Office	Shuiwa Village	1865	927	938	1218	610	608	694	368	326
		Shijiawan Village	1960	1040	920	1150	670	480	840	510	330
	Wolong Town	Tuanjie Village	1880	937	943	1201	598	603	704	354	350
		Longzhong Village	1960	1040	920	1150	670	480	819	483	336
		Qingnian Village	1874	934	940	1209	623	586	704	354	350
		Hulimudian Village	1873	930	943	1218	610	608	700	358	342
Oumiao Town	Xiongiao Village	1739	874	865	1058	620	438	758	344	414	
Changyang County	Moshi Town	Huangjingzhuang Village	1815	980	835	1216	650	566	315	180	135
		Liujintan Village	1765	982	783	1304	753	551	853	532	321
	Longzhoupi	State-owned Guan Ping Forest Farm	101	57	44	77	59	18	27	16	11

	ng Town										
	Langping Village	Maping Village	3758	2200	1558	2132	1116	1016	1980	1000	980
Tongche ng County	Huanglong Forest Farm	Huanglong Forest Farm	732	425	307	312	240	72	167	130	37
	Huangpao Forest Farm	Huangpao Forest Farm	360	210	150	240	180	60	130	110	20
	Antlers Mountain	Antlers Mountain	899	490	409	430	310	120	210	160	50
	Yuegu Forest Farm	Yuegu Forest Farm	332	195	137	215	146	69	50	35	15
	Tanghu Town	Shigang Village	1837	1000	837	1201	625	576	620	356	264
	Tanghu Town	Langhe Village	2683	1480	1203	1750	980	770	592	326	266
	Maishi Town	Zhushu Village	2020	1100	920	1110	600	510	520	240	280
	Tanghu Town	Tulong Village	2735	1560	1175	1470	750	720	482	282	200
	Tanghu Town	Liangting Village	3225	1838	1387	1900	1300	600	760	425	335
	Tanghu Town	Baisha Village	1865	920	945	1230	674	556	662	320	342

	Tanghu Town	Shiping Village	2536	1365	1171	1727	1167	560	658	396	262
	Maishi Town	Chenduan Village	2446	1289	1157	1380	702	678	630	330	300
	Maishi Town	Lengduan Village	2763	1500	1263	1700	900	800	480	280	200
	Maishi Town	Heduan Village	1760	910	850	1000	580	420	420	220	200
	Maishi Town	Jiufang Village	2048	1210	838	1248	700	548	510	280	230
	Sizhuang Village	Qingshui Village	2680	1400	1280	1720	900	820	650	360	290
	Daping Town	Liping Village	1430	850	580	658	450	208	358	250	108
	Shinan Town	Huating Village	2218	1200	1018	1650	850	800	360	200	160
Badong County	Yesanguan Town	Longping Village	553	285	268	405	205	200	371	192	179
		Puping Village	860	518	342	615	300	315	533	297	236
		Mashaping Village	1008	545	463	620	423	197	483	254	229
	Qingtaiping Town	Huangtuxi Village	558	293	265	309	171	138	193	112	81
		Hetaoping Village	569	315	254	373	218	155	213	121	92
		Zhuyuanping Village	897	492	405	493	255	238	270	151	119
		Tizikou Village	647	367	280	439	225	214	239	120	119
		Baijiuping Village	898	527	371	419	227	192	179	97	82
		Liaoyeping Village	920	513	407	494	262	232	256	149	107
		Maocaoping Village	826	363	463	582	243	339	364	142	222

	Qingguoshan Village	756	416	340	345	198	147	224	118	106
	Shanshuwan Village	1095	555	540	949	472	477	713	353	360
	Songlinwan Village	813	383	430	542	260	282	342	164	178
	Wangjiacao Village	913	529	384	388	223	165	178	101	77

3.2.3 Employment of the Sample Field

There're 46,350 households in the sample area. 7,661 households totally rely on agriculture, forestry and animal husbandry. Other residents are migrant workers. There're 868 households specializing in afforestation, accounting for 1.87% of the total households within the project area. 22,704 households engage in the forestry in their part time. They also develop other business except for forestry. There're 47,665 migrant workers within the sample area, mainly engaging in service and construction industry. Please refer to table 3-2 for resident employment.

Table 3-2 Table of Resident Employment of the Project Area

County/city/district	Sample village	Total number of households (household)	Totally depend on farming, forestry and animal husbandry (household)	Part-time engaged in forestry (household)	Operation area (HA)	Forestry specialized household (household)	Operation area (HA)	Net income of rural resident (RMB yuan)	Migrant worker (person)	Average monthly payment of migrant worker (RMB yuan)	Major occupation
	Total	46350	7661	22704	30078	868	8177		47665		
Zaoyang City	Monkey King	39	2					3000	30	3200	Architecture

	Mountain Tea Plantation										, other
	Zhongwan Village	268						5485	58	3500	Service, architecture
	beauty spot	103	103	25	627	25	627	8500	40	3000	Architecture
Tongshan County	Shanhuixia Village	465	12	8	110			4630	104	2660	Service
	Zhaixia Village	367						4680	103	2850	Service
	Maotian Village	577						4780	135	2870	Service
	Changlinshan Forest Farm	55		55	2097			25600			
	Liujialing Village	590				10		4370	691	2130	Service
	Gaohu Village	176						4201	318		
	Guidun Village	380						4580	336	2610	Service, other
	Menglongling Forest Farm	28	28	28	2221			21000			
	Gaohu Forest Farm	16	16	16	300			18100			
	Outang Village	324				2	100	3480	203	2650	Service
	Xiaopu Village	530		2	160			4560	437	2700	Service, architecture
Qiaokou Village	380					1	127	3490	247	2650	Service, architecture
Beishan Village	81						3550	106	2700	Service,	

										architecture
North Mountain Forest Farm	85	85	85	1303			20000	40	2650	Service, architecture
Tongshan Shihuan Farming and Breeding Special Cooperatives	5				5	93	4660			
Tongshan Dachengshan Ecological Cultivation Special Cooperatives	5				5	120	4500			
Changzhou Village	425				1	333	4680	270	2600	Service
Gangang Village	433				1	133	4600	515	2750	Service, architecture
New Land Agriculture and Forestry Development Co., Ltd	46	46					24000			
Jiaqi Cooperatives	6				6	133	23650			
Pantian Village	613	429	408	835	3	233	4750	618	2840	Service

Shadian Village	527	360	3	433	3	433	5216	330	2637	Service
Guoyuan Village	545	436	436	2386	1	233	3850	492	2640	Service
Liuju Village	259	207	181	1224	4	612	4300	259	2680	Service
Taipingshan Forest Farm	35	35	35	1770			21200			Service, architecture
Yipanqiu Forest Farm	80	28	28	1538			19600			
Yuantou Village	512						4560	324	2100	Service, architecture
Damushan Village	316				1	87	4470	212	2730	Service
Damu Mountain Forest Farm	82	82	82	1983			23200			
Chengxu Village	727						5480	512	2650	Service, architecture
Linbao Company	35	35			35	567	26100			
Xiayang Village	640				1	133	4960	195	2950	Service
Dakeng Village	535	1			1	77	4650	217	2650	Service
Jikoushan Village	139	139	139	285			4750	98	2750	Service
Jikoushan Forest Farm	29	29			29	1924	18000			
Xian'an District	Renwo Village	382	32	298		18	5000	365	4000	Service, architecture
	Baisha Village	312	42	258		12	5000	285	4000	Service, architecture

	Liuzhen Village	412	48	341		23		5000	335	4000	Service, architecture
	Taolin Village	452	63	365		24		5000	396	4000	Service, architecture
	Guangdongfan Village	423	78	327		18		5000	385	4000	Service, architecture
	Maosi Village	512	86	426	30	20	23	5000	765	3500	Service, architecture
	Libuqiao Village	485	60	320	33	20	13		920	5000	Service, architecture
	Jinjishan Village	356	45	293	40	18	20		460		
	Jingtou Village	198	30	156	27	12	13	5000	183	4000	Service, architecture
	Yangbu Village	246	43	191	33	12	20	5200	332	4000	Service, architecture
	Taohuajian Village	426	75	329	23	22	51	5000	873	4000	Service, architecture
	Changshou Village	401	76	300		25		5000	443	4000	Service, architecture
Yingshan County	Liuju Village	146	0	30	180	13	160	2600	140		Service, architecture
	Kuqu Village	178	0	160	1000			3500	450	3000	Service, architecture
	Wujiashan Village	125						2000	220	4000	Service, architecture

	Dahechong Village	76	50	35	67	20	200	2500	65	3000	Service, architecture
	Tiantang Village	245	5	245	467			2390	255	3200	Service, architecture
Dawu County	Dongchong Village	260				2	14	4860	197		Service, architecture
	Huchong Village	477		284	516	9	65	4360	830		Service, architecture
	Bayi Village	577				5	49	5151	826		Service, architecture
	Xinzhai Village	276	158	248	347			5107	298	3800	Service, architecture
	Wusi Village	450	5	6	27			4650	516	3600	Service, architecture
Xiaonan District	Pengxing Village	631						10200	728	5000	Architecture
	Qunyi Village	154		13	21	8	31	9066	132	6000	Service, architecture
	Sicha Village	132	23	3	1	3	3	8099	116	6000	Architecture
Chibi City	Langqiao Village	660	243	16	69	3	58	7845	374	2400	Service
	Nanshan Village	494	276	105	115	5	69	7428	388		
	Lianhuatang Village	435	20	20	53	20	40		230	3000	
	Shiquan Village	516		16	247	8	133	5000	1200	2000	Service, architecture

	Quankou Village	502		20	320	12	233	5000	1200	2000	Service, architecture
	Xiwan Village	737		15	187	10	133	5000	1200	2000	Service, architecture
	Banqishan Village	230	23	215	163				439	2000	Architecture
	Zhongxinping Village	216									
	Xihu Village	300	2			1	27	13000	80	3000	Service, architecture
	Fenghuang Village	330	80	10	67	2	133	12000	7000	3000	Service, architecture
	State-owned Lushui Forest Farm	138	138					6000	200	3000	Service, architecture
	Daling Village	402	63	53	87	10	35	8450	814	3000	Service, architecture
	Yuxingshan Village	451	451	451	302			7000	524	2800	Service, architecture
	Guanshiao Village	605		500		3		4000	1320	3000	Service, architecture
Xiangcheng District	Baiyun Village	620		589	31	20	8	25000	328	3500	Service, architecture
	Yaoan Village	635	48	620	59	10	11	25000	432	3500	Service, architecture
	Yingpan Village	620		589		10		25000	328	3500	Service,

										architecture
Fenghuang Village	635		620	59	30	11	25000	860	3500	Service, architecture
Qingnian Village	510	59	433	45	18	20	25000	500	3500	Service, architecture
Yinji Village	620		589	33	10	8	25000	328	3500	Service, architecture
Hulimudian Village	510	59	433		18		25000	900	3500	Service, architecture
Shuiwa Village	510	59	433		18		25000	500	3500	Service, architecture
Jiangdang Village	635	48	620	59	10	11	25000	432	3500	Service, architecture
Tuanjie Village	510	59	433		18		25000	900	3500	Service, architecture
Longzhong Village	620			33		8	25000	328	3500	Service, architecture
Qinglong Village	510	59	433		18		25000	900	3500	Service, architecture
Xiaochong Village	635	48	620	59	10	11	25000	860	3500	Service, architecture
Xiongmao Village	502	50	423	49	12	18	25000	744	3500	Service, architecture
Shijiawan Village	620		589	31	20	8	25000	208	3500	Service, architecture
Changyang County	Huangjingzhuan	556	32	556	933		4443	870	2500	Service,

	g Village										architecture
	Liujintan Village	548	258	548				2960	451	2550	Service, architecture
	State-owned Guan Ping Forest Farm	27	25						50	1500	Service, architecture
	Maping Village	1099	1060	720	229	104	124	3333	1120	3000	Service, architecture
Tongcheng County	Huanglong Forest Farm	183	112	71	2187			17600	280	2600	Service, architecture
	Huangpao Forest Farm	150	80	70	1364			18600	150	2700	Service
	Antlers Mountain	211	34	177	2173			17800	310	2600	Service, architecture
	Yuegu Forest Farm	86	36	36	967			17500	120	2650	Service, architecture
	Shigang Village	460	63	397							
	Langhe Village	536	126	410							
	Zhushu Village	505	58	450							
	Tulong Village	620	75	545							
	Liangting Village	645	64	581							
	Baisha Village	466	56	410							
	Shiping Village	598	156	442							
Chenduan Village	508	81	427								

	Lengduan Village	497	98	399							
	Heduan Village	425	36	389							
	Jiufang Village	502	76	426							
	Qingshui Village	576	56	520							
	Liping Village	32	20	10		1			517	2800	
	Huating Village	480	180			1	224	18000	460	3700	Service, architecture, business
Badong County	Longping Village	159						1900	34	3500	Service, architecture
	Puping Village	254						3300	82	3200	Service, architecture
	Mashaping Village	296						4300	137	3700	Service, architecture
	Huangtuxi Village	86	8	12	4	5	3	5649	116	3024	Architecture, other
	Hetaoping Village	215	11	8	3	3	5	6603	160	2978	Architecture, other
	Zhuyuanping Village	356	10	6	2	4	3	5787	223	2076	Architecture, other
	Tizikou Village	156	6	15	4	2	67	5847	200	3162	Architecture, other
	Baijiuping Village	324	5	12	5	3	8	6327	240	2293	Architecture, other

Liaoyeping Village	278	6	18	3	5	5	5783	238	2968	Architecture , other
Maocaoping Village	183	8	5	5	3	8	5765	218	3268	Architecture , other
Qingguoshan Village	214	21	15	20	12	33	5932	121	2090	Architecture , other
Shanshuwan Village	205	12	8	9	5	67	5184	236	2552	Architecture , other
Songlinwan Village	198	8	12	10	3	13	11805	200	3317	Architecture , other
Wangjiacao Village	218	7	5	8	3	10	5669	210	2233	Architecture , other

3.2.4 Farmland and Forestland of the Sample Area

There're abundant farmland and forestland. The area of farmland is 15,076 HAs, with 7,740 HAs of paddy field and 7,336 HAs of upland field, respectively accounting for 51.33% and 48.67%. The area of forest land is 85,869 HAs. There is large area of barren hills and grasslands. The project should actively develop barren hills and grasslands as the project implementation base except for making use of existing land. Please refer to table 3-3 for land-use and land-ownership types.

Table 3-3 Table of Land-use and Land-ownership Type of the Project Area
Unit:HA

County/city/district	Sample village	Area of Farmland (HA)	Paddy field (HA)	Upland field (HA)	Area of Forestland (HA)	State-owned (HA)	Collective (HA)
Zaoyang	Monkey King Mountain Tea Plantation	27	12	15	80		80
	Zhongwan Village	210	180	30	667		667
	beauty spot	60	53	6	627		627
Tongshan County	Shanhuixia Village	61	45	16	706		706
	Zhaixia Village	81	64	17	288		288
	Maotian Village	95	70	25	253		253
	Changlinshan Forest Farm	0	0	0	2078		2078
	Liujialing Village	122	74	48	988	7	981
	Gaohu Village	32	22	11	573	0	573
	Guidun Village	59	34	25	932	0	932
	Menglongling Forest Farm	0	0	0	2096	0	2096

	Gaohu Forest Farm	0	0	0	253	253	0
	Outang Village	65	24	42	1349	0	1349
	Xiaopu Village	141	57	85	984	0	984
	Qiaokou Village	52	31	21	1045	0	1045
	Beishan Village	19	7	12	130	0	130
	North Mountain Forest Farm	0	0	0	1245	1245	0
	Tongshan Shihuan Farming and Breeding Special Cooperatives	0	0	0	933	0	933
	Tongshan Dachengshan Ecological Cultivation Special Cooperatives	0	0	0	120	0	120
	Changzhou Village	6	1	5	748	0	748
	Gangang Village	41	28	13	576	0	576
	New Land Agriculture and Forestry Development Co., Ltd	0	0	0	333	0	333
	Jiaqi Cooperatives	0	0	0	133	0	133
	Pantian Village	99	46	54	1044	0	1044
	Shadian Village	109	48	61	1005	0	1005
	Guoyuan Village	40	14	26	2781	0	2781
	Liuju Village	65	26	39	1484	0	1484
	Taipingshan Forest Farm	0	0	0	1770	1770	0
	Yipanqiu Forest Farm	0	0	0	1538	1538	0
	Yuantou Village	77	36	41	1111	0	1111
	Damushan Village	34	10	23	782	0	782
	Damu Mountain Forest Farm	0	0	0	1976	1976	0
	Chengxu Village	93	73	20	1545	0	1545
	Linbao Company	0	0	0	567	0	567
	Xiayang Village	83	48	35	685	0	685
	Dakeng Village	126	45	81	395	0	395
	Jikoushan Village	43	18	25	225	0	225
	Jikoushan Forest Farm	0	0	0	1841	1841	0
Xian'an District	Renwo Village	5	2	3	147	0	147
	Baisha Village	4	2	2	127	0	127
	Liuzhen Village	4	2	3	140	0	140

	Taolin Village	5	2	4	143	0	143
	Guangdongfan Village	4	2	2	133	0	133
	Maosi Village	8	2	6	160	0	160
	Libuqiao Village	9	2	7	133	0	133
	Jinjishan Village	7	2	5	140	0	140
	Jingtou Village	6	1	5	160	0	160
	Yangbu Village	7	2	6	153	0	153
	Taohuajian Village	7	2	5	140	0	140
	Changshou Village	6	2	4	140	0	140
Yingshan County	Liuju Village	0	0	0	373	0	373
	Kuqu Village	200	67	133	200	0	200
	Wujiashan Village	36	25	11	2233	2233	0
	Dahechong Village	25	19	5	200	0	200
	Tiantang Village	60	31	29	667	0	667
Dawu County	Dongchong Village	41	20	21	133	0	133
	Huchong Village	80	55	24	137	0	137
	Bayi Village	91	63	28	163	0	163
	Xinzhai Village	51	26	25	347	0	347
	Wusi Village	208	87	121	73	0	73
Xiaonan District	Pengxing Village	107	107	0	0	0	0
	Qunyi Village	95	67	29	8	0	8
	Sicha Village	152	121	30	1	0	1
Chibi	Langqiao Village	362	189	173	710	0	710
	Nanshan Village	239	180	60	884	0	884
	Lianhuatang Village	198	171	27	533	0	533
	Shiquan Village	292	274	18	800	0	800
	Quankou Village	213	173	40	500	0	500
	Xiwan Village	188	140	48	600	0	600
	Banqishan Village	73	70	3	733	0	733
	Zhongxinping Village	34	8	27	828	0	828
	Xihu Village	333	200	133	267	0	267
	Fenghuang Village	400	333	67	200	0	200
	State-owned Lushui Forest Farm	0	0	0	1067	1067	0
	Daling Village	327	187	140	453	0	453
	Yuxingshan Village	153	120	33	4	0	4
	Guanshiao Village	295	218	77	0	0	0
Xiangcheng District	Baiyun Village	392	176	216	160	0	160
	Yaoan Village	0	0	0	0	0	0
	Yingpan Village	392	176	216	160	0	160
	Fenghuang Village	370	180	190	299	0	299

	Qingnian Village	194	0	194	318	0	318
	Yinji Village	392	176	216	160	0	160
	Hulimudian Village	351	157	194	318	0	318
	Shuiwa Village	351	157	194	318	0	318
	Jiangdang Village	370	180	190	299	0	299
	Tuanjie Village	351	157	194	318	0	318
	Longzhong Village	392	176	216	160	0	160
	Qinglong Village	351	157	194	318	0	318
	Xiaochong Village	370	180	190	299	0	299
	Xiongmiao Village	334	167	168	185	0	185
	Shijiawan Village	392	176	216	160	0	160
Changyang County	Huangjingzhuang Village	147	39	107	131	0	131
	Liujintan Village	164	2	162	1953	0	1953
	State-owned Guan Ping Forest Farm	14	4	10	718	718	0
	Maping Village	641	0	641	1907	1875	32
Tongcheng County	Huanglong Forest Farm	3	1	2	2187	2187	0
	Huangpao Forest Farm	15	2	13	1351	1351	0
	Antlers Mountain	31	14	17	2142	280	1862
	Yuegu Forest Farm	0	0	0	967	967	0
	Shigang Village	90	66	24	237	0	0
	Langhe Village	110	82	28	593	0	0
	Zhushu Village	105	65	40	527	0	0
	Tulong Village	146	106	40	202	0	0
	Liangting Village	190	123	67	380	0	0
	Baisha Village	163	108	55	427	0	0
	Shiping Village	197	140	57	1667	0	0
	Chenduan Village	80	66	21	133	0	0
	Lengduan Village	113	73	40	687	0	0
	Heduan Village	92	65	27	433	0	0
	Jiufang Village	79	63	17	353	0	0
	Qingshui Village	147	125	25	533	0	0
	Liping Village	111	82	29	824	0	0
	Huating Village	156	119	37	224	0	224
Badong County	Longping Village	68	9	44	315	0	315
	Puping Village	153	10	111	1284	0	1284
	Mashaping Village	155	122	33	528	0	528
	Huangtuxi Village	54	0	54	682	0	682
	Hetaoping Village	44	0	44	608	0	608
	Zhuyuanping Village	98	0	98	748	0	748
	Tizikou Village	43	0	43	503	0	503

Baijiuping Village	73	0	73	907	0	907
Liaoyeping Village	71	0	71	689	0	689
Maocaoping Village	60	0	60	5303	0	5303
Qingguoshan Village	93	0	93	673	0	673
Shanshuwan Village	95	0	95	780	0	780
Songlinwan Village	69	0	69	535	0	535
Wangjiacao Village	71	0	71	559	0	559

3.3 Resident Education of the Sample Field

Regarding the education level, within the sample area, most residents are at junior high school level, accounting for 39.38% of the total residents; some residents are at primary school or beyond primary school level, accounting for 36.20%; a small group of residents are at senior high school or technical secondary school level, accounting for 19.70%; a few residents are at junior college or undergraduate level, accounting for 4.66%; only several residents are at graduate or above level, accounting for 0.06% of the total residents. Please refer to table 3-4 for resident education level.

Table 3-4 Table of Resident Education of the Project area

County/city/district	Sample village	Primary school and beyond	Junior high school	Senior high school/technical secondary school	Junior college/undergraduate	Graduate and above
	SUM	55437	60294	30170	7131	93
	Proportion	36.20%	39.38%	19.70%	4.66%	0.06%
Zaoyang	Monkey King Mountain Tea Plantation	76	70	6	8	
	Zhongwan Village	20	8	3		
	beauty spot	56	205	118	5	1
Tongshan County	Shanhuixia Village	356	1271	424	67	
	Zhaixia Village	641	701	404	14	
	Maotian Village	1252	634	872	24	
	Changlinshan Forest Farm	4	41	9	2	
	Liujialing Village	1513	682	329	61	
	Gaohu Village	88	570	60	5	
	Guidun Village	755	609	431	14	
	Menglongling Forest Farm	5	21	31	1	
	Gaohu Forest Farm	6	4	6	4	
	Outang Village	616	411	327	16	
	Xiaopu Village	1195	796	632	34	
	Qiaokou Village	658	410	456	16	
	Beishan Village	170	113	89	8	
	North Mountain Forest Farm		15	64	17	
	Tongshan Shihuan Farming and Breeding Special Cooperatives		10			
Tongshan Dachengshan Ecological Cultivation Special Cooperatives			3	1	1	

	Changzhou Village	873	490	275	122	
	Gangang Village	412	566	1025	57	
	New Land Agriculture and Forestry Development Co., Ltd		15	26	5	
	Jiaqi Cooperatives	2	1	2	1	
	Pantian Village	649	1449	242	58	
	Shadian Village	1120	1556	104	20	
	Guoyuan Village	876	525	310	43	
	Liuju Village	653	501	96	55	
	Taipingshan Forest Farm	0	0	30	8	
	Yipanqiu Forest Farm	40	43	16	3	
	Yuantou Village	1101	731	436	72	
	Damushan Village	751	611	36	2	
	Damu Mountain Forest Farm	24	24	37	6	
	Chengxu Village	576	601	1785	48	
	Linbao Company		11	16	8	
	Xiayang Village	1210	511	986	43	
	Dakeng Village	854	515	564	21	
	Jikoushan Village	264	243	35	13	
	Jikoushan Forest Farm	5	29	5		
Xian'an District	Renwo Village	994	232	198	136	
	Baisha Village	688	256	198	116	
	Liuzhen Village	1029	264	232	125	
	Taolin Village	1157	258	220	185	
	Guangdongfan Village	967	232	186	195	
	Maosi Village	1800	462	302	256	
	Libuqiao Village	1800	324	290	186	
	Jinjishan Village	1420	287	200	178	
	Jingtou Village	505	126	127	48	
	Yangbu Village	713	170	167	235	
	Taohuajian Village	1676	370	468	106	
	Changshou Village	1195	165	140	120	
Yingshan County	Liuju Village	424	105	35	6	
	Kuqu Village	791	260	150	39	
	Wujiashan Village	115	205	164	36	

	Dahechong Village	164	103	20	5	
	Tiantang Village	489	156	65	50	
Dawu County	Dongchong Village	269	641	92	44	
	Huchong Village	732	850	330	190	4
	Bayi Village	919	1060	390	101	
	Xinzhai Village	822	215	177	16	
	Wusi Village	1555	278	213	39	
Xiaonan District	Pengxing Village	460	1153	460	231	
	Qunyi Village	110	320	186		
	Sicha Village	105	264	159		
Chibi	Langqiao Village	387	1442	684	56	
	Nanshan Village	508	1546	321	63	
	Lianhuatang Village					
	Shiquan Village					
	Quankou Village					
	Xiwan Village	353	1500	1200	15	
	Banqishan Village	743	434	30		
	Zhongxinping Village					
	Xihu Village					
	Fenghuang Village		13000	170	25	
	State-owned Lushui Forest Farm	52	309	42	2	
	Daling Village	27	400	418	110	10
	Yuxingshan Village	976	480	150	100	
	Guanshiao Village	780	570	790	440	
Xiangcheng District	Baiyun Village	480	508	344	142	4
	Yaoan Village	425	537	315	71	4
	Yingpan Village	480	580	344	142	4
	Fenghuang Village	425	537	315	71	4
	Qingnian Village	402	377	286	148	5
	Yinji Village	480	508	344	142	4
	Hulimudian Village	402	377	286	148	5
	Shuiwa Village	402	377	286	148	5
	Jiangdang Village	425	537	315	71	4
	Tuanjie Village	402	377	286	148	5
	Longzhong Village	480	508	344	142	4
	Qinglong Village	402	377	286	148	5
	Xiaochong Village	425	537	315	71	4
	Xiong-miao Village	401	372	285	146	3
	Shijiawan Village	480	508	344	142	4
Changyang	Huangjingzhuang	686	1088	106	35	

County	Village					
	Liujintan Village	158	723	661	223	
	State-owned Guan Ping Forest Farm	86	6	6	3	
	Maping Village	1150	1993	466	139	10
Tongcheng County	Huanglong Forest Farm	326	321	73	12	
	Huangpao Forest Farm	69	210	74	7	
	Antlers Mountain	483	230	170	15	1
	Yuegu Forest Farm	115	180	21	16	
	Shigang Village					
	Langhe Village					
	Zhushu Village					
	Tulong Village					
	Liangting Village					
	Baisha Village					
	Shiping Village					
	Chenduan Village					
	Lengduan Village					
	Heduan Village					
	Jiufang Village					
	Qingshui Village					
	Liping Village	523	556	334	17	
	Huating Village	1165	520	310	220	3
Badong County	Longping Village	140	300	102	11	
	Puping Village	220	471	159	10	
	Mashaping Village	255	541	190	22	
	Huangtuxi Village	12	65	21	3	
	Hetaoping Village	144	180	240	5	
	Zhuyuanping Village	239	278	370	10	
	Tizikou Village	162	203	270	12	
	Baijiuping Village	218	285	380	15	
	Liaoyeping Village	199	300	400	21	
	Maocaoping Village	178	269	359	20	
	Qingguoshan Village	155	246	328	27	
	Shanshuan Village	260	345	460	30	
	Songlinwan Village	210	248	331	24	
Wangjiacao Village	227	286	382	18		

3.4 Infrastructure Construction of the Sample Area

Regarding the infrastructure construction, the project area has completed the construction of village roads, electricity facilities and water supply facilities, which can meet the villagers' demands on water, electricity and transportation. Please refer to table 3-5 for the infrastructure construction.

Table 3-5 Table of Infrastructure Construction of the Project Area

County/city/ district	Sample village	Road	Electricity	Clean drinking water
Zaoyang City	Monkey King Mountain Tea Plantation	Village road	Electricity available for each household	Well water
	Zhongwan Village	Village road	Electricity available for each household	Well water
	Beauty spot	Village road	Electricity available for each household	Well water
Tongshan County	Shanhuixia Village	Village road	Electricity available for each household	Tap-water
	Zhaixia Village	Village road	Electricity available for each household	Tap-water
	Maotian Village	Village road	Electricity available for each household	Tap-water
	Changlinshan Forest Farm	Village road	Electricity available for each household	Tap-water
	Liujialing Village	Village road	Electricity available for each household	Tap-water
	Gaohu Village	Village road	Electricity available for each household	Tap-water
	Guidun Village	Village road	Electricity available for each household	Tap-water
	Menglongling Forest Farm	Village road	Electricity available for each household	Tap-water
	Gaohu Forest Farm	Village road	Electricity available for each household	Tap-water
	Outang Village	Village road	Electricity available for each household	Tap-water

Xiaopu Village	Village road	Electricity available for each household	Tap-water
Qiaokou Village	Village road	Electricity available for each household	Tap-water
Beishan Village	Village road	Electricity available for each household	Tap-water
North Mountain Forest Farm	Village road	Electricity available for each household	Tap-water
Tongshan Shihuan Farming and Breeding Special Cooperatives	Village road	Electricity available for each household	Tap-water
Tongshan Dachengshan Ecological Cultivation Special Cooperatives	Village road	Electricity available for each household	Tap-water
Changzhou Village	Village road	Electricity available for each household	Tap-water
Gangang Village	Village road	Electricity available for each household	Tap-water
New Land Agriculture and Forestry Development Co., Ltd	Village road	Electricity available for each household	Tap-water
Jiaqi Cooperatives	Village road	Electricity available for each household	Tap-water
Pantian Village	Village road	Electricity available for each household	Tap-water
Shadian Village	Village road	Electricity available for each household	Tap-water
Guoyuan Village	Village road	Electricity available for each household	Tap-water
Liuju Village	Village road	Electricity available for each household	Tap-water
Taipingshan Forest Farm	Village road	Electricity available for each household	Tap-water
Yipanqiu Forest Farm	Village road	Electricity available for each household	Tap-water
Yuantou Village	Village road	Electricity available for each household	Tap-water
Damushan Village	Village	Electricity available	Tap-water

		road	for each household	
	Damu Mountain Forest Farm	Village road	Electricity available for each household	Tap-water
	Chengxu Village	Village road	Electricity available for each household	Tap-water
	Linbao Company	Village road	Electricity available for each household	Tap-water
	Xiayang Village	Village road	Electricity available for each household	Tap-water
	Dakeng Village	Village road	Electricity available for each household	Tap-water
	Jikoushan Village	Village road	Electricity available for each household	Tap-water
	Jikoushan Forest Farm	Village road	Electricity available for each household	Tap-water
Xian'an District	Renwo Village	Village road	Electricity available for each household	Tap-water
	Baisha Village	Village road	Electricity available for each household	Tap-water
	Liuzhen Village	Village road	Electricity available for each household	Tap-water
	Taolin Village	Village road	Electricity available for each household	Tap-water
	Guangdongfan Village	Village road	Electricity available for each household	Tap-water
	Maosi Village	Village road	Electricity available for each household	Tap-water
	Libuqiao Village	Village road	Electricity available for each household	Tap-water
	Jinjishan Village	Village road	Electricity available for each household	Tap-water
	Jingtou Village	Village road	Electricity available for each household	Well water
	Yangbu Village	Village road	Electricity available for each household	Well water
	Taohujian Village	Village road	Electricity available for each household	Tap-water
	Changshou Village	Village road	Electricity available for each household	Tap-water
Yingshan County	Liuju Village	Village road	Electricity available for each household	Tap-water
	Kuqu Village	Village road	Electricity available for each household	Tap-water
	Wujiashan	Village	Electricity available	Tap-water

	Village	road	for each household	
	Dahechong Village	Village road	Electricity available for each household	Tap-water
	Tiantang Village	Village road	Electricity available for each household	Tap-water
Dawu County	Dongchong Village	Village road	Electricity available for each household	Tap-water
	Huchong Village	Village road	Electricity available for each household	Tap-water
	Bayi Village	Village road	Electricity available for each household	Tap-water
	Xinzhai Village	Village road	Electricity available for each household	Tap-water
	Wusi Village	Village road	Electricity available for each household	Well water
Xiaonan District	Pengxing Village	Village road	Electricity available for each household	Well water
	Qunyi Village	Village road	Electricity available for each household	Tap-water
	Sicha Village	Village road	Electricity available for each household	Well water
Chibi	Langqiao Village	Village road	Electricity available for each household	Well water
	Nanshan Village	Village road	Electricity available for each household	Well water
	Lianhuatang Village	Village road	Electricity available for each household	Tap-water
	Shiquan Village	Village road	Electricity available for each household	Tap-water
	Quankou Village	Village road	Electricity available for each household	Tap-water
	Xiwan Village	Village road	Electricity available for each household	Tap-water
	Banqishan Village	Village road	Electricity available for each household	Tap-water
	Zhongxinping Village	Village road	Electricity available for each household	Tap-water
	Xihu Village	Village road	Electricity available for each household	Tap-water
	Fenghuang Village	Village road	Electricity available for each household	Tap-water
	State-owned Lushui Forest Farm	Village road	Electricity available for each household	Tap-water, well water

	Daling Village	Village road	Electricity available for each household	Tap-water
	Yuxingshan Village	Village road	Electricity available for each household	Tap-water
	Guanshiao Village	Village road	Electricity available for each household	Tap-water
Xiangcheng District	Baiyun Village	Village road	Electricity available for each household	Tap-water
	Yaoan Village	Village road	Electricity available for each household	Tap-water
	Yingpan Village	Village road	Electricity available for each household	Tap-water
	Fenghuang Village	Village road	Electricity available for each household	Tap-water
	Qingnian Village	Village road	Electricity available for each household	Tap-water
	Yinji Village	Village road	Electricity available for each household	Tap-water
	Hulimudian Village	Village road	Electricity available for each household	Tap-water
	Shuiwa Village	Village road	Electricity available for each household	Tap-water
	Jiangdang Village	Village road	Electricity available for each household	Tap-water
	Tuanjie Village	Village road	Electricity available for each household	Tap-water
	Longzhong Village	Village road	Electricity available for each household	Tap-water
	Qinglong Village	Village road	Electricity available for each household	Tap-water
	Xiaochong Village	Village road	Electricity available for each household	Tap-water
	Xiongmiao Village	Village road	Electricity available for each household	Tap-water
Shijiawan Village	Village road	Electricity available for each household	Tap-water	
Changyang County	Huangjingzhuang Village	Village road	Electricity available for each household	Tap-water
	Liujintan Village	Village road	Electricity available for each household	Tap-water
	State-owned Guan Ping Forest Farm	Village road	Electricity available for each household	Tap-water
	Maping Village	Village road	Electricity available for each household	Well water

Tongcheng County	Huanglong Forest Farm	Village road	Electricity available for each household	Tap-water, well water
	Huangpao Forest Farm	Village road	Electricity available for each household	Tap-water, well water
	Antlers Mountain	Village road	Electricity available for each household	Tap-water, well water
	Yuegu Forest Farm	Village road	Electricity available for each household	Well water
	Shigang Village	Village road	Electricity available for each household	Well water
	Langhe Village	Village road	Electricity available for each household	Well water
	Zhushu Village	Village road	Electricity available for each household	Well water
	Tulong Village	Village road	Electricity available for each household	Well water
	Liangting Village	Village road	Electricity available for each household	Well water
	Baisha Village	Village road	Electricity available for each household	Well water
	Shiping Village	Village road	Electricity available for each household	Well water
	Chenduan Village	Village road	Electricity available for each household	Well water
	Lengduan Village	Village road	Electricity available for each household	Well water
	Heduan Village	Village road	Electricity available for each household	Well water
	Lengduan Village	Village road	Electricity available for each household	Well water
	Heduan Village	Village road	Electricity available for each household	Well water
	Jiufang Village	Village road	Electricity available for each household	Well water
	Qingshui Village	Village road	Electricity available for each household	Well water
	Liping Village	Village road	Electricity available for each household	Well water
	Huating Village	Village road	Electricity available for each household	Well water
Badong County	Monkey King Mountain Tea Plantation	Village road	Electricity available for each household	Well water
	Zhongwan Village	Village	Electricity available	Well water

	road	for each household	
beauty spot	Village road	Electricity available for each household	Well water
Shanhuixia Village	Village road	Electricity available for each household	Tap-water
Longping Village	Village road	Electricity available for each household	Tap-water
Puping Village	Village road	Electricity available for each household	Tap-water
Mashaping Village	Village road	Electricity available for each household	Tap-water
Huangtuxi Village	Village road	Electricity available for each household	Well water
Hetaoping Village	Village road	Electricity available for each household	Well water
Zhuyuanping Village	Village road	Electricity available for each household	Well water
Tizikou Village	Village road	Electricity available for each household	Well water
Baijiuping Village	Village road	Electricity available for each household	Well water
Liaoyeping Village	Village road	Electricity available for each household	Well water
Maocaoping Village	Village road	Electricity available for each household	Well water
Qingguoshan Village	Village road	Electricity available for each household	Well water
Shanshuwan Village	Village road	Electricity available for each household	Well water
Songlinwan Village	Village road	Electricity available for each household	Well water
Wangjiacao Village	Village road	Electricity available for each household	Well water

3.5 Poverty of the Sample Area

Regarding the poverty of local residents, most households are middle income households. There're only a few poor households. But only quite a few

Table 3-6 Table of Poverty of the Project Area

County/city /district	Sample village	Poor household	Middle-income household	Rich household
Zaoyang	Monkey King Mountain Tea Plantation	30.77%	69.23%	0.00%
	Zhongwan Village	11.19%	63.43%	13.06%
	beauty spot	28.16%	71.84%	0.00%
Tongshan County	Shanhuixia Village	13.98%	78.06%	7.96%
	Zhaixia Village	29.97%	64.58%	5.45%
	Maotian Village	19.06%	78.16%	2.77%
	Changlinshan Forest Farm	10.91%	83.64%	5.45%
	Liujialing Village	35.76%	60.68%	3.56%
	Gaohu Village	19.89%	75.00%	5.11%
	Guidun Village	37.37%	57.11%	5.53%
	Menglongling Forest Farm	35.71%	53.57%	10.71%
	Gaohu Forest Farm	18.75%	68.75%	12.50%
	Outang Village	40.12%	55.25%	4.63%
	Xiaopu Village	39.62%	57.36%	3.02%
	Qiaokou Village	31.58%	60.53%	7.89%
	Beishan Village	34.57%	61.73%	3.70%
	North Mountain Forest Farm	14.12%	82.35%	3.53%
	Tongshan Shihuan Farming and Breeding Special Cooperatives	0.00%	100.00%	0.00%
	Tongshan Dachengshan Ecological Cultivation Special Cooperatives	0.00%	100.00%	0.00%
	Changzhou Village	37.88%	57.41%	4.71%
	Gangang Village	44.34%	49.42%	6.24%
	New Land Agriculture and Forestry Development Co., Ltd	6.52%	89.13%	4.35%
	Jiaqi Cooperatives	16.67%	66.67%	16.67%
	Pantian Village	15.66%	81.40%	2.94%
	Shadian Village	29.60%	67.36%	3.04%
	Guoyuan Village	39.63%	58.90%	1.47%
	Liuju Village	15.83%	81.47%	2.70%
	Taipingshan Forest Farm	14.29%	85.71%	0.00%
	Yipanqiu Forest Farm	23.75%	76.25%	0.00%
	Yuantou Village	20.70%	73.83%	5.47%
	Damushan Village	34.81%	59.81%	5.38%
	Damu Mountain Forest Farm	30.49%	67.07%	2.44%
	Chengxu Village	29.71%	59.15%	11.14%
Linbao Company	2.86%	88.57%	8.57%	
Xiayang Village	37.50%	56.09%	6.41%	
Dakeng Village	40.19%	57.38%	2.43%	

	Jikoushan Village	22.30%	71.94%	5.76%
	Jikoushan Forest Farm	10.34%	82.76%	6.90%
Xian'an District	Renwo Village	1.05%	80.10%	18.85%
	Baisha Village	0.96%	77.24%	21.79%
	Liuzhen Village	1.21%	78.88%	19.90%
	Taolin Village	0.88%	76.33%	22.79%
	Guangdongfan Village	0.71%	77.54%	21.75%
	Maosi Village	3.91%	86.33%	9.77%
	Libuqiao Village	1.24%	92.16%	6.60%
	Jinjishan Village	2.25%	83.71%	14.04%
	Jingtou Village	4.04%	88.38%	7.58%
	Yangbu Village	8.13%	70.73%	21.14%
	Taohuajian Village	1.41%	90.61%	7.98%
	Changshou Village	2.00%	85.54%	12.47%
	Yingshan County	Liuju Village	16.44%	54.79%
Kuqu Village		11.24%	83.15%	5.62%
Wujiashan Village		8.00%	80.00%	12.00%
Dahechong Village		31.58%	64.47%	3.95%
Tiantang Village		20.41%	75.51%	4.08%
Dawu County	Dongchong Village	23.46%	63.85%	12.69%
	Huchong Village	27.46%	61.43%	11.11%
	Bayi Village	28.60%	63.26%	8.15%
	Xinzhai Village	4.35%	80.07%	15.58%
	Wusi Village	11.33%	60.89%	27.78%
Xiaonan District	Pengxing Village	4.91%	83.99%	11.09%
	Qunyi Village			
	Sicha Village			
Chibi	Langqiao Village	5.15%	74.85%	20.00%
	Nanshan Village	11.54%	85.63%	2.83%
	Lianhuatang Village	15.40%	75.40%	9.20%
	Shiquan Village	4.84%	85.27%	9.88%
	Quankou Village	5.98%	83.67%	10.36%
	Xiwan Village	5.16%	85.48%	9.36%
	Banqishan Village	14.78%	83.04%	2.17%
	Zhongxinping Village			
	Xihu Village			
	Fenghuang Village			
	State-owned Lushui Forest Farm	2.90%	94.93%	2.17%
	Daling Village	13.93%	65.42%	20.65%
	Yuxingshan Village	0.00%	96.23%	3.77%
	Guanshiao Village	34.71%	57.02%	8.26%
Xiangcheng District	Baiyun Village	1.29%	50.00%	48.71%
	Yaoan Village	0.00%	0.00%	0.00%

	Yingpan Village	1.29%	50.00%	48.71%
	Fenghuang Village	1.10%	48.82%	50.08%
	Qingnian Village	1.96%	50.98%	47.06%
	Yinji Village	1.29%	50.00%	48.71%
	Hulimudian Village	1.96%	50.98%	47.06%
	Shuiwa Village	1.96%	50.98%	47.06%
	Jiangdang Village	1.10%	48.82%	50.08%
	Tuanjie Village	1.96%	50.98%	47.06%
	Longzhong Village	1.29%	50.00%	48.71%
	Qinglong Village	1.96%	50.98%	47.06%
	Xiaochong Village	1.10%	48.82%	50.08%
	Xiongmao Village	1.39%	48.80%	49.80%
	Shijiawan Village	1.29%	50.00%	48.71%
Changyang County	Huangjingzhuang Village	19.60%	74.10%	6.29%
	Liujintan Village	12.41%	82.66%	4.93%
	State-owned Guan Ping Forest Farm	18.52%	74.07%	7.41%
	Maping Village	11.10%	78.71%	10.19%
Tongcheng County	Huanglong Forest Farm	32.50%	64.30%	3.20%
	Huangpao Forest Farm	28.60%	68.30%	3.10%
	Antlers Mountain	37.60%	58.70%	3.70%
	Yuegu Forest Farm	38.90%	57.60%	3.50%
	Shigang Village	32.60%	64.40%	3%
	Langhe Village	35.40%	60.70%	3.90%
	Zhushu Village			
	Tulong Village			
	Liangting Village			
	Baisha Village			
	Shiping Village			
	Chenduan Village			
	Lengduan Village			
	Heduan Village			
	Jiufang Village			
	Qingshui Village			
	Liping Village	32%	60%	8%
	Huating Village	20.00%	70.00%	10.00%
	Badong County	Longping Village	19.97%	77.08%
Puping Village		20.86%	78.02%	1.12%
Mashaping Village		18.17%	78.66%	3.17%
Huangtuxi Village		24.55%	73.48%	1.97%
Hetaoping Village		20.04%	79.96%	0.00%
Zhuyuanping Village		18.84%	78.04%	3.12%
Tizikou Village		27.51%	69.71%	2.78%
Baijiuping Village		15.03%	83.52%	1.45%

	Liaoyeping Village	22.39%	76.09%	1.52%
	Maocaoping Village	24.33%	72.64%	3.03%
	Qingguoshan Village	25.79%	70.24%	3.97%
	Shanshuwan Village	25.39%	73.06%	1.55%
	Songlinwan Village	17.71%	79.95%	2.34%
	Wangjiacao Village	27.38%	71.08%	1.53%

3.6 Residents' Participation in the Afforestation of the Sample Area

Seen from residents' participation in the afforestation, women of two villages have no right to use forest land, accounting for 1.56% of total village amount. 有 Men and women in 126 villages are willing to participate in the afforestation, accounting for 98.43% of the total village amount. Men and women of 120 villages are willing to join the technical training, accounting for 93.75% of the total village amount of the sample area. But women in Monkey King Mountain Forest Farm, Zhongwan Village, Tiantang Village, Langqiao Village, Maosi Village, Banqishan Village and Zhongxinping Village are not been guaranteed to have rights in using the forest land, participating in the afforestation and joining the technical training. At the era where women have more rights and gender equality is highly promoted, both women and men should have relevant rights in participating in the afforestation activities. Women's right should be further strengthened. Please refer to table 3-7 for residents' participation in the

afforestation.

**Table 3-7 Table of Residents' Participation in the
Afforestation of the Project Area**

County/city /district	Sample village	Who owns the forest land Right of use	Who would like to participate in the afforestation	Who would like to participate in the technical training
Zaoyang City	Monkey King Mountain Tea Plantation	Men and women	Men and women	Men
	Zhongwan Village	Men	Men and women	Men and women
	beauty spot	Men and women	Men and women	Men and women
Tongshan County	Shanhuixia Village	Men and women	Men and women	Men and women
	Zhaixia Village	Men and women	Men and women	Men and women
	Maotian Village	Men and women	Men and women	Men and women
	Changlinshan Forest Farm	Men and women	Men and women	Men and women
	Liujialing Village	Men and women	Men and women	Men and women
	Gaohu Village			
	Guidun Village	Men and women	Men and women	Men and women
	Menglongling Forest Farm	Men and women	Men and women	Men and women
	Gaohu Forest Farm	Men and women	Men and women	Men and women
	Outang Village	Men and women	Men and women	Men and women
	Xiaopu Village	Men and women	Men and women	Men and women
	Qiaokou Village	Men and women	Men and women	Men and women
	Beishan Village	Men and women	Men and women	Men and women
	North Mountain Forest Farm	Men and women	Men and women	Men and women
	Tongshan Shihuan Farming and Breeding Special Cooperatives	Men and women	Men and women	Men and women
	Dachengshan Ecological Cultivation Special Cooperatives	Men and women	Men and women	Men and women
	Changzhou Village	Men and women	Men and women	Men and women
	Gangang Village	Men and women	Men and women	Men and women
	New Land Agriculture and Forestry Development Co., Ltd	Men and women	Men and women	Men and women
	Jiaqi Cooperatives	Men and women	Men and women	Men and women
	Pantian Village	Men and women	Men and women	Men and women
Shadian Village	Men and women	Men and women	Men and women	
Guoyuan Village	Men and women	Men and women	Men and women	
Liuju Village	Men and women	Men and women	Men and women	
Taipingshan Forest Farm	Men and women	Men and women	Men and women	

	Yipanqiu Forest Farm	Men and women	Men and women	Men and women
	Yuantou Village	Men and women	Men and women	Men and women
	Damushan Village	Men and women	Men and women	Men and women
	Damu Mountain Forest Farm	Men and women	Men and women	Men and women
	Chengxu Village	Men and women	Men and women	Men and women
	Linbao Company	Men and women	Men and women	Men and women
	Xiayang Village	Men and women	Men and women	Men and women
	Dakeng Village	Men and women	Men and women	Men and women
	Jikoushan Village	Men and women	Men and women	Men and women
	Jikoushan Forest Farm	Men and women	Men and women	Men and women
Xian'an District	Renwo Village	Men and women	Men and women	Men and women
	Baisha Village	Men and women	Men and women	Men and women
	Liuzhen Village	Men and women	Men and women	Men and women
	Taolin Village	Men and women	Men and women	Men and women
	Guangdongfan Village	Men and women	Men and women	Men and women
	Maosi Village	Men and women	Men and women	Men
	Libuqiao Village	Men and women	Men and women	Men and women
	Jinjishan Village	Men and women	Men and women	Men and women
	Jingtou Village	Men and women	Men and women	Men and women
	Yangbu Village	Men and women	Men and women	Men and women
	Taohuajian Village	Men and women	Men and women	Men and women
Yingshan County	Changshou Village	Men and women	Men and women	Men and women
	Liuju Village	Men and women	Men and women	Men and women
	Kuqu Village	Men and women	Men and women	Men and women
	Wujiashan Village			
	Dahechong Village			
Dawu County	Tiantang Village	Men and women	Men and women	Men
	Dongchong Village	Men and women	Men and women	Men and women
	Huchong Village	Men and women	Men and women	Men and women
	Bayi Village	Men and women	Men and women	Men and women
	Xinzhai Village	Men and women	Men and women	Men and women
Xiaonan District	Wusi Village	Men and women	Men and women	Men and women
	Pengxing Village	Men and women	Men and women	Men
	Qunyi Village	Men and women	Men and women	Men and women
Chibi City	Sicha Village	Men and women	Men and women	Men and women
	Langqiao Village	Men and women	Men and women	Men
	Nanshan Village	Men and women	Men and women	Men and women
	Lianhuatang Village	Men and women	Men and women	Men and women
	Shiquan Village	Men and women	Men and women	Men and women
	Quankou Village	Men and women	Men and women	Men and women
	Xiwan Village	Men and women	Men and women	Men and women
	Banqishan Village	Men and women	Men	Men
Zhongxinping Village	Men	Men	Men	

	Xihu Village	Men and women	Men and women	Men and women
	Fenghuang Village			
	State-owned Lushui Forest Farm	Men and women	Men and women	Men and women
	Daling Village	Men and women	Men and women	Men and women
	Yuxingshan Village	Men and women	Men and women	Men and women
	Guanshiao Village	Men and women	Men and women	Men and women
Xiangcheng District	Baiyun Village	Men and women	Men and women	Men and women
	Yaoan Village			
	Yingpan Village	Men and women	Men and women	Men and women
	Fenghuang Village	Men and women	Men and women	Men and women
	Qingnian Village	Men and women	Men and women	Men and women
	Yinji Village	Men and women	Men and women	Men and women
	Hulimudian Village	Men and women	Men and women	Men and women
	Shuiwa Village	Men and women	Men and women	Men and women
	Jiangdang Village	Men and women	Men and women	Men and women
	Tuanjie Village	Men and women	Men and women	Men and women
	Longzhong Village	Men and women	Men and women	Men and women
	Qinglong Village	Men and women	Men and women	Men and women
	Xiaochong Village	Men and women	Men and women	Men and women
	Xiongmiao Village	Men and women	Men and women	Men and women
	Shijiawan Village	Men and women	Men and women	Men and women
Changyang County	Huangjingzhuang Village	Men and women	Men and women	Men and women
	Liujintan Village	Men and women	Men and women	Men and women
	State-owned Guan Ping Forest Farm	Men and women	Men and women	Women
	Maping Village	Men and women	Men and women	Men and women
Tongcheng County	Huanglong Forest Farm	Men and women	Men and women	Men and women
	Huangpao Forest Farm	Men and women	Men and women	Men and women
	Antlers Mountain	Men and women	Men and women	Men and women
	Yuegu Forest Farm	Men and women	Men and women	Men and women
	Shigang Village	Men and women	Men and women	Men and women
	Langhe Village	Men and women	Men and women	Men and women
	Zhushu Village	Men and women	Men and women	Men and women
	Tulong Village	Men and women	Men and women	Men and women
	Liangting Village	Men and women	Men and women	Men and women
	Baisha Village	Men and women	Men and women	Men and women
	Shiping Village	Men and women	Men and women	Men and women
	Chenduan Village	Men and women	Men and women	Men and women
	Lengduan Village	Men and women	Men and women	Men and women
	Heduan Village	Men and women	Men and women	Men and women
	Jiufang Village	Men and women	Men and women	Men and women
	Qingshui Village	Men and women	Men and women	Men and women
	Liping Village	Men and women	Men and women	Men and women
Huating Village	Men and women	Men and women	Men and women	

Badong County	Longping Village	Men and women	Men and women	Men and women
	Puping Village	Men and women	Men and women	Men and women
	Mashaping Village	Men and women	Men and women	Men and women
	Huangtuxi Village	Men and women	Men and women	Men and women
	Hetaoping Village	Men and women	Men and women	Men and women
	Zhuyuanping Village	Men and women	Men and women	Men and women
	Tizikou Village	Men and women	Men and women	Men and women
	Baijiuping Village	Men and women	Men and women	Men and women
	Liaoyeping Village	Men and women	Men and women	Men and women
	Maocaoping Village	Men and women	Men and women	Men and women
	Qingguoshan Village	Men and women	Men and women	Men and women
	Shanshuwan Village	Men and women	Men and women	Men and women
	Songlinwan Village	Men and women	Men and women	Men and women
	Wangjiacao Village	Men and women	Men and women	Men and women

4 The Definition and Identification of Project Stakeholders

After analyzing the results of interviews and surveys, all categories of direct stakeholders of this project are: peasant households, village-level organizations, ethnic minorities and women. Indirect stakeholders include: people's governments of project counties, forestry bureau and other relevant government sectors.

4.1 Peasant Household

Peasants' main income source is crop production, followed by the income of migrant workers. Peasants' forestry production mainly includes spontaneous piecemeal afforestation. The afforestation activities are mainly organized by family members. Only large afforestation households will employ rural spare labor force.

In this project, peasants are direct executor and direct beneficiaries. Through investigation and field visits, the social effect evaluation team found that the majority of the residents are willing to hand over their land to implement the project and accept the management mode after leaning the project details though they have no experience in afforestation. They have positive attitude that the project will help to improve the ecological environment and bring them economic gains.

In the sample investigation, peasants whose family income in 2013 is less than 20,000 RMB yuan account for 46%, indicating the low level of local economy. Hence peasants are expecting to increase family income and are very willing to be involved in the project. For poor peasants, they only have small land area, with insufficient forest resource and labor force or little special farming techniques and skills. It's almost impossible for them to independently engage in forestry management. They prefer to work as seasonal worker and participate in the project under the guidance of relevant executors. For most medium peasants, they own a certain area of land and forest resources as well as a certain economic foundation. They prefer to increase income and improve life quality through participating in the project so as to have high initiative. For rich peasants, they already have strong economic capacity and have some status in the village or town. They have large area of land and forest land through contracting and gained rich experience and afforestation technology in operation and management under the support of local forestry department. It's more feasible for them to participate in afforestation activities and gain more profits. Please refer to table 4-1 for the project effect on peasant households.

Table 4-1 Table of the Project Effect on Peasant Household

Peasant household	Positive effect	Negative effect	Summary
Poor household	Provide employment	Limited	Danger of being

Peasant household	Positive effect	Negative effect	Summary
	opportunities and improve living standard.	participation opportunities due to limited land and labor force.	marginalized
Middle-income household	Strengthen infrastructure construction and improve production and living standard. There's more positive effect.	The forest maintenance and management will be strengthened, which will alter traditional forest utilization patterns.	Major beneficiaries
Rich household	Has already contracted large area of barren hills and waste land and has strong participation ability. There will be significant effect.	No	Key beneficiaries

The social effect evaluation team concluded from field surveys and questionnaires, that peasants hold positive attitude toward the sustainable management project of rare forest. They welcome and would like to participate in it. 51.1% of all peasants have no specific requirements on project management mode. 18.7% select the integration of large afforestation households. 11.1% select the enterprise mode. Other peasants select joint stock cooperative mode or other modes. The direct beneficiaries are peasants who carry out the afforestation. Peasants who did not participate in the project can also become indirect beneficiaries by working as by seasonal or permanent worker.

4.2 Village-level Organization

Village-level organizations as the grass-roots organization, is the supervisor and beneficiary of the project and bridges the communication between forestry authorities and forest peasants. The implementation of the project is conducive to collective irrigation systems, transportation, communication, construction and improvement of public facilities such as electricity and drinking water.

4.3 Minorities

Within the project area, Both Badong county and Changyang county belong to Tujia autonomous county, accounting for 18% of the total project area. Minorities and Han nationality enjoy equal participation opportunities and same project benefit. The project will give priority to the willingness of ethnic minorities. The project can provide employment opportunities for minorities, increase their income revenue, promote socio-economic development in ethnic minority areas and narrow the wealth gap between minorities and Han nationality while provide more opportunities for minorities and Han nationality to work, operate and manage together and promote the cultural exchange and communication between them, which will enhance the national unity and harmonious development.

4.4 Women

Women's family and social responsibility, opportunities and methods for women to participate in the project and rights and interests of women all affect the enthusiasm of their participation in the project. Among sample peasants, regarding questions such as "who owns the woodland", "who would like to participate in afforestation in the family" and "who will participate in afforestation technical training", there are two women who has no right to use the woodland, there are two women in the village who're unwilling to participate in the afforestation and there are seven women in the village who're reluctant to participate in afforestation technical training. These findings indicate that gender differences still exist in some places. Women's rights are not fully guaranteed. Women's status in the family and in society remains to be further improved. The implementation of this project will bring women multifaceted interests. On one hand, it will provide women or women's family members with employment opportunities and help them increase family income, especially for women in poor area. The project can help them reduce economic pressure and spirit pressure caused by economic pressure. On the other hand, the project will construct irrigation facilities and the other basic supporting facilities, which will improve public facility conditions within the community and allow women to be engaged

in various livestock farming so as to ease family life expenditure pressure and improve the status of women in the family.

4.5 Peoples' Government at the County Level

County-level governments organize peasants to participate in the afforestation through laws and policies in European Investment Bank Special Loan for Forestry. County level governments are the subject of project loans, mainly acting as the organizer and coordinator. County-level forestry sectors are subsidiary organization of the county government. The county government has the duty to urge its subsidiary forestry sectors to carry out relevant works and monitor the quality of their work.

4.6 County Forestry Department

Each county forestry bureau is the subject of project implementation and responsible for the general design of the project, project implementation, supervision, annual construction design, technical guidance, annual check acceptance and completion acceptance. It's also responsible for the formulation, implementation and supervision of project management method and forest management rules. County forestry bureau is the organizer and manager of the project implementation, is the communicator and coordinator between the

project and peasants. It's the main functional organization during the preparation period and the collaborating organization during the implementation period. During the project implementation process, the county forestry bureau will provide forestry public services such as technical training, technical consultation and technical services, promote forestry science and technology, and support peasants involved in the project with pre-production, production and post-production services.

4.7 Other County Government Sector

County Development and Reform Commission is the macro-policy making sector. It's responsible for the project approval, adjustment approval and implementation supervision and communication with relevant provincial sectors, national authorities and the European Investment Bank. County department of finance is responsible for credit lending, the readiness of funds, financial supervision, debt management, debt service, as well as communicating with provincial authorities, national authorities and the European Investment Bank. The Women's Federation at the county level should provide detailed information about woman in the village when the Bureau of Forestry selects project villages. The WF is also responsible for combing projects executed by WF and the European Investment Bank Special Loan Project for Forestry and mobilizing women's

participation in the project together with the Bureau of Forestry. Poverty Relief Offices at the county level should provide detailed information relating to poverty-relief and combine the poverty-relief projects executed by PRO and the European Investment Bank Special Loan Project for Forestry so as to fulfill its responsibility of poverty relief with forestry sectors. Bureau of Agriculture at the county level should provide relevant land utilization information when the Bureau of Forestry selects project villages.

People's governments at the county and village level are the most grass-roots political organizations in China. They will primarily assist the people's governments at the county level to organize peasants to participate in cooperative afforestation activities. When the Bureau of Forestry selects project villages, people's governments at the county and village level should provide detailed information about administrative villages, combine projects executed by them and the European Investment Bank Special Loan Project for Forestry, mobilize villages to be involved in the project, as well as supervise the implementation quality of the project.

5. Laws, Regulations and Policy Framework

5.1 Relevant Laws

- (1) Constitution of the People's Republic of China 1982;
- (2) Forestry Law of the People's Republic of China 1998;
- (3) The of Land Administration of the People's Republic of China 2004;
- (4) Labor Law of the People's Republic of China 1994;
- (5) Law of the People's Republic of China on the Protection of Disabled Persons, 1990;
- (6) Law of the People's Republic of China on the Protection of Minors, 2006;
- (7) Law of the People's Republic of China on the Protection of Rights and Interests of Women, 2005;
- (8) Production Safety Law of the People's Republic of China, 2002;
- (9) Law of the People's Republic of China on the Protection of Wildlife, 1988;
- (10) Law of the People's Republic of China on Water and Soil Conservation, 1991.

5.2 Relevant Regulations

- (1) Regulation on the Implementation of the Forestry Law of the People's Republic of China, by Decree No. 278 of the State Council in 2000;

(2) Regulations of the People's Republic of China on Nature Reserves, by Decree No. 167 of the State Council in 1994;

(3) Regulations of the People's Republic of China on Wild Plants Protection, by Decree No. 204 of the State Council in 1996;

(4) Regulations on the Protection of Basic Farm, by Decree No. 257 of the State Council in 1998;

(5) Regulations on Forest Pest Control, the State Forestry Bureau, 1989;

(6) Detailed Rules for the Implementation of the Water Pollution Prevention and Control Law of the People's Republic of China, by Decree No. 284 of the State Council in 2000.

(7) Regulations of Hubei Province on the Nature Reserves of Forest and Wildlife, by Decree No. 249 of the People's Government of Hubei Province in 2003.

5.3 Relevant Policies

(1) The Twelfth Five-Year Plan for National Economic and Social Development of the People's Republic of China 2011;

(2) The "Twelve-Five" Plan for Forestry Development 2011;

(3) The Twelfth Five-Year Plan for Economic and Social Development of Hubei Province 2011;

(4) The Decision of the CPC Central Committee and the State Council on Accelerating the Development of Forestry, Document 9, CPC Central Committee, 2003;

(5) China's National Program to Address Climate Change, 2007;

(6) General Plan for National Land Utilization 1997—2010, 2007.

5.4 Relevant Governmental Regulations and Documents

(1) Notice on Further Strengthening the Administrative Management of National Nature Reserves, by Decree No. 111 of State Council in 1998;

(2) The National Program for Ecological Environment Protection, Document 28, the State Council, 2000;

(3) Opinions of the State Council on Strengthening Major Environmental Protection Work, Document 785, State Bureau of Environmental Protection, 1997;

(4) The Provisional Administrative Measures on the Afforestation Quality, 2001;

(5) Index of the Bureau of Forestry on Project Construction Land, 1996.

(6) Request of the National Development and Reform Commission (NDRC) on the Use of the EIB Framework Loan Plan for Forestry (No. 2060, Foreign Capital, NDRC [2011])

(7) Notice on Issuance of the Request of National Development and Reform Commission on the use of the EIB Framework Loan Plan for Forestry (No. 396, Foreign Capital, NDRC [2012])

(8) Notice on Implementing the Preliminary Work of European

Investment Bank Loan Sustainable Forest Management
Demonstration Project (No. 43, Finance Office of Forestry
Department, [2009])

Major Findings of Project Social Effect Evaluation

6.1 Basic Information of Project Stakeholders

6.1.1 Basic Information of Investigation Objects

Basic information of project beneficiaries: men account for 82% while women account for 18%. Investigation objects are peasants between 19 to 65 years old. Peasants between 40 to 50 years old are the most, accounting for 41.80%. Peasants between 50 to 60 years old are the second most, accounting for 36.60%. Peasants between 30 to 40 years old account for 17.60% while peasants between 19 to 30 years old account for 4.00%.

Regarding the education, most peasants are at junior high school level, accounting for 47.90%. The second most peasants are at primary school level, accounting for 23.10%. Peasants with education background of junior college/undergraduate account for 3.40%.

Regarding religious belief, 91.50% of total peasants have no religious belief. 3.50% of them believe local religion while 1.70% of them believe other religion.

Regarding the occupation, 82.70% of peasants are engaged in farming. 10.40% of them are workers. 1.50% of them are entrepreneurs while 5.4% of them are employees or engaged in other occupations.

Regarding the nationality of peasants being interviewed,

83.80% are with Han nationality while 16.20% belong to Tujia ethnic group. Please refer to table 6-1 for basic information of investigation objects.

Table 6-1 Table of Basic Situation of the Peasant Household

Variable	Subitem	Percentage	Variable	Subitem	Percentage
Education level	Primary school and beyond	23.10%	Gender	Men	82.00%
	Junior high school	47.90%		Women	18.00%
	Senior high school/technical secondary school	25.00%	Religious belief	Buddhism	1.50%
	Junior college/undergraduate	3.40%		Islamism	
	Graduate and above	0.50%		Christianism	1.80%
Age	19-30 years old	4.00%	Local religion	Local religion	3.50%
	30-40 years old	17.60%		Other religion	1.70%
	40-50 years old	41.80%		Irreligious	91.50%
	50-65 years old	36.60%	Occupation	Farmer	82.70%
Marital status	Married	94.70%		Worker	10.40%
	Unmarried	2.70%		Entrepreneur	1.50%
	Divorced	0.60%		Employee	0.70%
	Widowed	2.00%	Other	4.70%	
Nationality	Han	83.80%			
	Tujia	16.20%			

6.1.2 Family Economic Condition of Investigation Objects

(1) Family Income

For the family basic economic condition, peasant households with 3 to 4 permanent residents are the most usual case,

accounting for 58.40%. The proportion of peasant households with 7 permanent residents is quite low, only accounting for 4.40%. The family income of peasant households in 2013 mostly ranges from 10,000 to 20,000 RMB yuan and 20,000 to 50,000 RMB yuan, respectively accounting for 29.10% and 40.20%. Households with the family annual income less than 5,000 RMB yuan account for 3.30%. The family expenditure of peasant households in 2013 ranges from 10,000 to 20,000 RMB yuan and 20,000 to 50,000 RMB yuan, respectively accounting for 38.50% and 26.60%. Households with the family expenditure less than 2,000 RMB yuan and more than 50,000 RMB yuan are few, respectively accounting for 1.50% and 3.10%. Please refer to table 6-2 for family income.

Table 6-2 Table of Basic Economic Condition of Peasant Household

Variable	Subitem	Percentage
Permanent residents	1-2 persons	8.40%
	3-4 persons	58.40%
	5-6 persons	28.70%
	more than 7 persons	4.40%
Family income of 2013	Less than 5,000 RMB yuan	3.30%
	5,000-8,000 RMB yuan	4.60%
	8,000-10,000 RMB yuan	9.00%
	10,000-20,000 RMB yuan	29.10%
	20,000-50,000 RMB yuan	40.20%
	More than 50,000 RMB yuan	14.00%
	Family expenditure of 2013	Less than 2,000 RMB yuan
2,000-5,000 RMB yuan		9.70%

	5,000–10,000 RMB yuan	20.40%
	10,000–20,000 RMB yuan	38.50%
	20,000–50,000 RMB yuan	26.60%
	More than 50,000 RMB yuan	3.10%

(2) Family Living Standard, Family Income and Expenditure

Family income of peasant households in the project is mainly gained from migrant work. Crop farming income accounts for the dominate position of the family income. Only a few households earn family income from breeding.

The main family daily expenses are food, education, clothes and productive expenditure. The expenditure on transportation, health care, daily life excluding food and clothes, social engagement and elder caring only accounts for a very little part.

6.2 Knowledge and Attitude of Stakeholders toward the Project

The forestry sectors promote the project through broadcasting, network, distributing leaflets and other media forms. The forestry sectors promote the project through broadcasting, network, distributing leaflets and other media forms. Peasants have a basic understanding of the project, which indicates the effectiveness of project promotion and lays a foundation for the smooth implementation of project. Peasants

mainly pay close attention to newly-planted timber forest and newly-planted economic forest. The majority of peasants think that the implementation will have great significance to local social economic development and ecological environment construction and help to increase employment and peasants' income so that they're very willing to participate in the project.

6.3 Analysis of Expected Social Benefits of the Project

6.3.1 Possible Positive Effect

Most of peasant households and women within the project area think there will be more positive effect and very little negative effect. Seen from stakeholders, 92% of peasant households think there will be positive effect. Please refer to table 6-3 for details.

Table 6-3 Positive Effect Evaluation of Project Stakeholders

Stakeholder	Positive effect			
	Yes	No	It depends	Have no idea
Peasant household	92%	0%	3%	5%
Women	96%	0%	0%	4%

For households and women, the largest positive effect is income increase, followed by ecological environment improvement, forest restoration and employment increase.

6.3.2 Possible Negative Effect

According to the investigation, 84% of peasant households don't think that there will be any negative effect brought by the project, 2% of peasant households think that the project will

bring a certain degree of negative effect, and 14% of peasant households don't know if the project will bring negative effect. Please refer to table 6-4 for details.

Table 6-4 Negative Effect Evaluation of Project Stakeholders

Stakeholder	Negative effect			
	Yes	No	It depends	Have no idea
Peasant household	2%	84%	9%	5%
Women	4%	89%	0%	7%

Most stakeholders don't think the project will bring any negative effect. According to the investigation result, some peasant households and women think the negative effect that may be brought is limiting production and the damage to local customs.

6.4 Operation and Management Method that're Accepted by Peasant Households

In terms of management mode, 51.1% of total peasants have no specific requirements, 18.7% peasants select the integration of large afforestation households, 11.1% of peasants select enterprises and the rest of peasants select join-stock partnership and other ways of cooperation.

6.5 Conditions for Forestry Development in the Project Area

From interviews of the social effect evaluation team, general development plans of each project village have already included forestry development. There're existing forestry

companies, forestry cooperatives, forestry workers, mainly working for Bureau of Forestry, village committee and forest peasants. There're cases of wildlife damaging crops and occasionally hurting people or livestock in some villages.

Seedlings need for afforestation of sample villages are basically provided by government for free. Some sample villages purchase from other places. Most peasants think the quality of afforestation seedlings is good. Some peasants think that the quality is not so good. During the afforestation process, no accident has occurred. Sample villages also get technical services in afforestation technology, tending and pest control provided by township governments and forestry sectors. Each village has suitable land for afforestation which can conduct scale operation and has sufficient labor force for afforestation. Poor, middle-income, wealthy households and women are highly motivated to be involved in the project and believe that the project implementation will bring them a fair chance and real benefits, improve the ecological environment and their family income as well as solve difficulties and problems such as children's education. It will also help to increase job opportunities and ease the employment problem by allowing many migrant workers to participate in the afforestation project at home or near home.

7 Identification and Control of Project Risk

7.1 Risk Identification and Control of Beneficiaries

7.1.1 Risk Identification of Beneficiaries

(1) Peasants in the project area are not only beneficiaries, but also major participants and subjects of project implementation. Peasants' education level, thoughts, ideas, knowledge and attitude to the project are critical to the smooth implementation of the project. During interviews, village cadres and peasants are most concerned about the economic benefits brought by the project so that their household income can be increased and their standard of living will get improved. In the course of project implementation, there will be certain conflicts between eco-efficiency goals of the project and economic income expected by peasants.

(2) For poor peasants, due to limited land and labor, there is obvious difference compared with rich peasants in opportunities and ability to participate in the project. In respect of minorities, they have profound feelings toward their traditions, living areas and natural resources. They have unique social, custom and cultural characteristics. Judging from the evaluation results, poor peasants and minority communities have few land or forest resources and limited financial capacity and social capital, they have weak or even no investment capacity. Therefore, they have weak participation ability and tend to be

marginalized in the decision-making process.

7.1.2 Risk Control of Beneficiaries

(1) In project implementation and operations process in the, strictly comply with national and place related legal regulations, and established vulnerable groups interests guarantees supervision system, by County Project Office delegate related personnel is responsible for supervision, for vulnerable groups exists of potential risk, do prevention work, put an end to has discrimination women, and poverty personnel, and minority of event occurred, and arrears season workers, and long-term workers wage and bonus of event occurred.

(2) For vulnerable groups, let them autonomously choose whether to participate in the project, or choose approaches to participate in the project. Do not force them to participate in afforestation projects. For poor households, they may prefer to do seasonal work rather than contracting forest land. In this way, they cannot only get a work with smaller risk and good payment, but also avoid pressure of repayment. Compared with being migrant workers, they are more willing to participate in afforestation work in their hometowns in order to get payment and improve living standard.

(3) Establish project cooperative organizations so that vulnerable groups can have more opportunities to participate in the project through such cooperative organizations. Give the

proper preferential policies for vulnerable groups when selecting households and issuing loans. Take the initiative to invite representatives of poor households, women and minorities during the consultation process. Listen more to their voices and prioritize their willingness.

(4) Strengthen and attach importance to the training for peasants, especially for poor peasants and women in afforestation skill in different stages of the project. Carry out training courses with various forms and content according to the different demands so as to allow them participate in the project in multiple approaches and improve economic revenues.

(5) In the course of project implementation, unique cultural practices of minorities should be specially protected. During the design and construction of forest road, try to cover poor areas and minority areas so as to provide job opportunities for local peasants, promote local economic development and narrow the gap between poor areas and rich areas.

(6) The project should take care of economic interests of peasants so as to increase their enthusiasm in participating in the project while focusing on eco-efficiency.

7.2 Identification and Control of Management Risk

7.2.1 Identification of Management Risk

Economic indicators of the project are the average level measured according to normal production operation and existing

management modes and experience. Project areas belong to different towns and villages with large geographical span and natural geographic conditions. There' re also differences in land types. The output and quality of products will not only be affected by natural disasters and market changes, but also be affected by the organization, post-afforestation management, schedule and experience and quality of management staff. All above will cause high cost to operation so as to affect the income and profit.

7.2.2 Control of Management Risk

(1) Governmental sectors should effectively play the role as the organizer and coordinator. Strengthen the organization and leadership of the project to ensure smooth implementation of the project. Authorities should strengthen supervision and management of the whole operation process and establish efficient operation and management mechanism.

(2) Develop scientific and reasonable operating management measures in order to ensure that the project is strictly implemented as planned design and content. Carry out comprehensive survey, research and management risk evaluation to the project area so as to forecast possible adverse factors and the main existing regions. Conduct control to key areas and links, implement accountability or on-duty target system and combine management quality and effectiveness with bonus and

individual interests.

7.3 Identification and Control of Natural Risk

7.3.1 Identification of Natural Risk

Forestry production is very easily to be affected by natural disasters, including forest fires, pests and climate disasters, etc. Please refer to table 7-1 for natural risk analysis.

Table 7-1 Table of Natural Risk Analysis

Factor	Risk Analysis	Degree of Risk
Fire	There is no condition for natural fire or man-made fires. After the implementation of the project, the forest fire prevention system will be constructed in the project area. Hence there's little chance of a massive fire.	General
Diseases & Insect Pests	Large possibility of diseases and insect pests. But with the establishment of a sound system of plant diseases and insect pests and monitoring network. The disaster can be accurately forecasted so as to timely prevented and treated in order to ensure the health of the forest.	General
Drought	Hubei is well known as the "Province with Hundreds of Lakes", with most areas belonging to the subtropical monsoon climate. There's abundant rainfall, with hot rainy season. There're many rivers and lakes within the project area. After the implementation of the project, a complete irrigation system will be established. Hence there will be no risk of drought.	No
Chilling Injury	Most areas of Hubei belong to subtropical humid monsoon climate, with sufficient light and heat. There is a long frost-free period. The total solar radiation in most of the province is 85~114 kcal/cm, the annual average temperature is 15~17°C. There is no risk of chilling injury.	No

7.3.2 Control of Natural Risk

(1) Strengthen promotion, improve public awareness of fire prevention, establish village-level fire protection information system and increase efforts to deal with cases of forest fires. Based on the principle of protection first and prevention-focused, formulate the forest maintenance and management system and take positive and effective measures of

forest fire prevention.

(2) Develop integrated management plans for pest control, improve forecasting capacity of forest pest, carry out strict quarantine system, and strictly prohibit using sick seedlings or seedlings carried insects, or seedlings from areas that have has major epidemic outbreak. Conduct seedling registration system for trees, regulate seedlings production and sales behavior from "seedlings production license", "seedlings quality test card" and "seedlings production operating card". Reduce and avoid pest and diseases of plants through scientific afforestation approaches.

7.4 Identification and Control of Policy Risk

Judging from the national strategy, there will be no change to policies of ecological protection, environment protection, social and economic sustainable development. After the reform of forest system, forest land ownership policies will remain unchanged for quite a long time, so the policy risk is quite minimal.

This implementation of the project will mainly focus on the ecological benefits of the forest while bringing economic and social benefits. It will also protect and improve ecological environment, guarantee regional land and ecological security, ensure stable increase of crops and improve local survival environment. The project is in line with national ecological

construction plans and policies. It also complies with strategic goals of the Decision of the CPC Central Committee and the State Council on Accelerating the Development of Forestry, the National Plan for Ecological Environment Construction, and the Twelfth Five-Year Plan for National Economic and Social Development of the People's Republic of China. It also meets requirements of promoting the integrated landscaping construction stated in the "Twelfth Five-Year Plan for Forestry Development", that is vigorously develop landscaping in cities and villages according to requirements of garden city, forest suburb, tree-lined road and courtyard peasants' house while advancing afforestation on barren hills and urban and rural landscaping. Combining new rural construction, carry out greening work for village roads, courtyard and house surroundings and widely plant trees of rare species and economic fruit forest so as to integrate the improvement of rural living environment and the income increase of peasants.

7.5 Identification and Control of Market Risk

7.5.1 Identification of Market Risk

For the smooth implementation and repayment of the project, it's critical to guarantee some profits during the operation period. Regarding the project cost, the price of raw materials and labor force may rise, which will affect the operating profit. Regarding the demand, although this project used conservative

low price measuring, but must meet necessary market demands. This project uses rare species with high value for afforestation. But the growth period is long; there is risk for products to keep lasting advantage and competitiveness. In addition, there may also be unforeseen factors affecting product output and price, thus will damage the economic benefit.

7.5.2 Control of Market Risk

(1) The project uses conservative price estimation, there is rising space for actual sales. The project select rare timer species with product high value and large market share. Even if the price of raw material rises, it may lead the rising product prices so as to ensure profit.

(2) Develop a comprehensive marketing plan and scientific marketing strategy, strictly follow the progress of implementation, foresee the negative factors, develop preventive measures, and immediately start preparatory program when issues occurs so as to minimize the investment loss.

7.6 Identification and Control of Repayment Risk

7.6.1 Identification of Repayment Risk

Loans of the project are obtained and repaid by the government. Seen from the government, the Ministry of Finance, as a loan unit, is responsible for obtaining loans from the European Investment Bank, and then lending loans to Department of Finance of Hubei Province. Then the provincial Department of

Finance lends loans to the municipal Department of Finance. The municipal Department of Finance lends loans to the county government. Then the county government lends loans to loans to the project owners to implement afforestation through county finance sectors. Each county government acts as the debtor and is responsible for the timely repayment of debt. The repayment should be paid in euro while the loans are issued in RMB yuan. The foreign exchange risk will be taken by the project owner per the actual amount. There is no repayment risk for the operator of the forest land. But the loan commitment object is finance department at the county level. If the debt cannot be paid in time due to project risks, there will be repayment risks for loan enlending subjects.

7.6.2 Control of Repayment Risk

(1) Develop detailed loan repayment plans. Loans will be obtained and repaid by the county government. The county government and finance department will provide the letter of commitment of loan repayment guarantee so as to ensure a clear debtor-creditor relationship. Establish project loan reserves in accordance with the relevant provisions of the finance department.

(2) Conduct market research, expand sales channels, ensure profit as much as possible during the operation period in order to reduce loan risk.

7.7 Identification and Control of Reserve Risk

There will be no national or provincial protected areas within the project area. There will be no direct influence and damage to protected areas. But at the intersection of the project area and protected areas, there will be changes in surrounding landscape of protected areas due to land use and vegetation changes of the project area. Therefore, the project plan of the intersection of protected areas and the project area should take the development plan and needs of protected areas. Select appropriate afforestation model to carry out deployment and design so as to promote the sustainable development of surrounding ecological environment of protected areas.

7.8 Identification and Control of Migration Risk

There will be no such risk because there is no immigrant or removal of any form.

7.9 Overall Analysis

In accordance with the requirement of national and local laws, regulations and policies, after identifying the different stakeholders, gathering the project effect, risk and control as well as integrated analysis of social evaluation results from field surveys, the social effect evaluation team has made below conclusions regarding the European Investment Bank Loan—Sustainable Development Project of Rare Forest in Hubei

Province:

(1) The purpose and content of the project are in line with policies of using foreign capital required by the government of China, policies of climate changes, ecological construction and forestry industry development in China, national and local plans for economic and social development, as well as the goal of developing forestry of people's livelihood and ecological forestry, which will integrate ecological, economic and social benefits of forestry.

(2) The project will increase forest coverage and contribute to the protection and restoration of existing vegetation so as to better the local reasonable forest structure and strengthen ecological protection. It can promote local biodiversity and ecological stability and lead the forestry to a sustainable development path of promoting economic through forestry and cultivating forest based on developed economy.

(3) The project will build cultivation bases of rare tree species with industrial, ecological, landscaping and cultural features according to the principle of suitable land for suitable trees and relying on the advantage of rare tree species resources. It will fully mobilize the afforestation enthusiasm of social power and peasants, which will not only improve ecological environment and living environment of the project area, but also increase local employment and ease employment

pressure so as to help local peasants get rid of poverty and increase family income as well as enhance their life quality.

(4) The implementation of this project has received strong support from governments at all levels and relevant sectors in Hubei province. Beneficiary groups and stakeholders welcome the project, which will lay a solid foundation for the smooth implementation of the project.

8. Suggestions on Project Design and Implementation

8.1 Participatory Consultation

The purpose of participatory consultation is to ensure that communities and peasants participate in the sustainable management project of rare and high quality timber forest voluntarily, avoid or reduce social conflicts and possible risks that may arise during project operation period according to the requirement of European Investment Bank Loan project, and develop measures to avoid impact on peasants' utilization of resources and guarantee the smooth implementation of the project.

8.1.1 Clarify the Purpose of Participatory Consultation

(1) Ensure that stakeholders of the project is volunteered to participate in the project;

(2) Avoid the social risk of the project as project interventions may cause possible social conflicts and develop countermeasures to prevent risks and conflicts with relevant stakeholders;

(3) Ensure that poor households, women, ethnic minorities and other groups in the project area have equitable opportunities to participate in the project;

(4) Design scientific technology plans for the project through consultations with peasants, including the selection of

the most appropriate tree species, afforestation models and model design, post-afforestation forest land contracting arrangements and follow-up maintenance plans;

(5) Participatory consultations is beneficial to build and improve peasants' consciousness of the protection of forestland resources and improve their management commitment and management skills of forest resources, which is essential to ensure the long-term influence of the project.

8.1.2 Further Improve the Mechanisms of Participatory Consultative Mechanism

Means such as discussions, questionnaires, interviews and feedback will strengthen the communication between government departments associated with the project and the stakeholders. It makes people willing to participate in the project design, implementation, management and evaluation process. To hold regular meetings of project consultation progress , to listen to the observations and recommendations of the Government and the relevant departments in time, and to constantly improve the project implementation plan, to present the problems arising during project implementation and formulating contingency plans for settlement.

8.2 Participatory Design

Participatory design's main aim is to guarantee the farmers' voluntary participation. On the premise of full understanding

of project information, stakeholders in the project area on the premise of full understanding of project information, and make decisions on whether to participate in the project, as well as matters related to project implementation. The project has designed the participatory manual of European Investment Bank Loan Sustainable Management of Rare Forest in Hubei Province (please refer to table 8-1), which is convenient for participants to fully understand the requirements, conditions, and steps involved in the project.

Table 8-1 Participatory Manual of the Project

Steps	Major activities/tasks	Methods and tools being used	Output	Major participants
Step1: Promote and mobilize peasants to capply for participating in the project	1. Project office promotes the project trough design and release leaflets and other approaches and channels. 2. Design application forms and send release these forms through village cadres. 3. Organization village meetings and introduce project-related content and information.	1.Village meeting. 2.Release promotion brochure.	Villager, including women and poor households get to learn the project information.	1.Department of Forestry at the county level. 2. Forestry technical staff at county/township level involved in the project design. 3. Village cadres, villagers.
Step2: Consultation with relevant stakeholders	1. Collect application forms and clarify forms per the ownership of the land. 2. Consult with peasants regarding below items: Select afforestation tree species, afforestation model, seedling production and supply and post-afforestation tending, resource utilization limit and compensation plan, training and technical services. 3. On-site design of project activities. 4. Confirm the afforestation area, discuss afforestation model and method.	1.Design team organizes team consultation . 2. Different representati ves of peasant households participate in consultation seminar. 3.Field investigation.	1.List of project participation. 2. Compensation meassures agreed with peasants on tree species, models, maintenance and resource utilization limit. 3. Plots agreed agter consultation.	1.Project representative: forestry technical staff at the county/township level. 2.Project participant: Land contractor. 3. Peasant households that may be affected by resource utilization limit. 4.Township (town) cadres, village cadres.

Step3: Sign the project participation agreement	<ol style="list-style-type: none"> 1. Design the project agreement and consult with peasants. 2. Peasants and village committee sign the agreement. 3. Publish the list of peasants participating in the project and introduce agreed project content and result after consultation. 	<ol style="list-style-type: none"> 1. Peasant agree to participate in the consultation seminar. 2. Village meeting, post publicly. 	<ol style="list-style-type: none"> 1. Sign project participation contract with peasants. 2. All peasants are aware of the consultation result and project information. 	<ol style="list-style-type: none"> 1. Peasants participating in the project. 2. Village cadres, as the contractor of project area under collective management. 3. Representatives of county forestry department.
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8.2.1 Major Steps of Participatory Design

(1) Promotion and Mobilization and Peasants' application: in the preparation phase, the project office at the county level prepare paper, audio, video, and other media promotion materials to carry out promotion and mobilization through bulletin boards, chalkboard, radio, television, releasing leaflets and other forms for at least a week. Organize village meetings, introduce project-related content and distribute project application form.

(2) Consult with relevant stakeholders: analyze and identify peasants who may participate in the project and propose peasant list according to application forms. Consult with peasant households on afforestation tree species, afforestation model, post-planting maintenance and management and technical training. Confirm the afforested area, model, method, etc. The main objective is to ensure that peasants are fully aware of the project and make voluntary decisions to be involved in the project.

(3) Sign the project agreement: sign agreement with

participating peasants or village committee involved in the project, publish participation list of peasants and the consultation results.

8.2.2 Major Requirements of Participatory Design

(1) During the construction design of the project, it's suggested to adhere to principles of acting according to local conditions, suitable land for suitable tree species, strengthening the integration of ecological, economic and social benefits.

(2) Ensure information openness and transparency, give opportunities to express various views on the agreement and set aside enough time for communities and peasants to think so as to make a final decision.

(3) Emphasizes the concept of people-oriented and involve relevant stakeholders in the planning, implementation, and other aspects of the project so as to fully express their views and thoughts, try to achieve their interests and promote sustainable development.

(4) Information publicity should be carried out, particularly information publicity of land-use contracts. Strengthen project implementation related to business and management training and carry out professional training and promotion.

8.3 Project Monitoring and Goal

Project monitoring and evaluation is to ensure the smooth implementation of the project in accordance with the design. It is recommended to develop monitoring indicators to ensure beneficiaries' participation and benefits within project monitoring and evaluation system in order to ensure the participation and benefits of target groups. As the direct beneficiaries of the project and participants, peasants participate in project monitoring and evaluation so as to promptly correct when issues occur.

(1) It's recommended that the project office inform the community on a regular basis of the progress and work organization of the project, edit and print bulletins, and post in the community.

(2) In the course of project implementation (such as afforestation, forest protection, fire prevention, training, etc), project office or project management team should seek the views and suggestions of participants, prepare records and archives by category. This will be used for improving future activities and will be necessary information and data for the future project evaluation.

(3) Each project office can employ a number of project households and carry out daily monitoring for certain indicators. To let more peasants to participate in the project and ensure

equity, the monitoring household should be changed periodically.

(4) Project Office should develop monitoring plans and monitor goals and is responsible for monitoring the implementation of monitoring plans. It should also set up a special monitoring group consisted of the technical staff, carry out monitoring work at different links. Set monitoring location at forestry stations and equip each monitoring station with the necessary equipment and tools so as to ensure timely and smooth implementation of monitoring activities.

8.4 Suggestions on Project Implementation

(1) The unit in charge of the project should strengthen the management of project construction and implementation and authorize relevant units to monitor indicators during the project construction and operation period so as to ensure the project is implemented as planned.

(2) Strengthen the promotion and training of project related business, strengthen the popularization of relevant knowledge, as well as carry out professional training and promotion. It's recommended that county forestry department carry out promotion and training on related national and local forestry laws and regulations, ecological and environmental knowledge, cultivation of rare tree species, and maintenance and management under the assistance of promotion sectors, agricultural bureau,

women organizations, newspaper office, township government and village committee in order to help peasants learn the positive effects of the project construction, restoration and development of the forest on regional development.

(3) Strengthening the cooperation of each sector. This project is a large systematic project. It's difficult to achieve the targeted objectives of the project only relying on the forestry sector. It's recommended the cooperative management of the Forestry Department, Land and Resources Bureau, Water Conservancy Bureau, Agriculture Bureau, Environmental Protection Bureau and other sectors so as to fundamentally eliminate various negative factors restricting project development.

(4) Increase the input of project funds. Project villages are not wealthy enough and have strong dependence on forest resources. If project funding is too small, it may affect the enthusiasm of peasants. Hence it's suggested that government sectors at all levels should ensure the readiness of supporting funds in order to ensure the smooth implementation of the project.

(5) Allow farmers to develop understory planting and breeding. There are some poor households in the project area. Poverty eradication is one of the project objectives. Therefore, the project should allow appropriate development of understory

planting and breeding and rational use clearing space under the forest, developing economic links of forest-stock, forest-grass-livestock and forest-fungus so as to improve peasants' income.

(6) Formulate and implement preferential policies for vulnerable groups. The project should ensure that poor households, women and vulnerable groups participate in the project in an open and transparent way. The project should also respect peasants' willingness in selecting tree species and operating mode. The project implementation should be participated by trusted representatives of vulnerable people or be accepted by the party.

(7) Establish project follow-up management mechanisms. It's recommended to involve peasants in the project area in the follow-up management. Based on the community project management team during the project construction period, establish community project follow-up management team. Members of the follow-up management team should be elected by the villagers, which must include representatives of women and ethnic minorities.

(8) Appropriately plant some economic forest with shorter growth cycle. When selecting tree species and model design, efficient species that better adapt to local climate and grow fast should be selected in order to increase peasants' incomes.

(9) Fully take the poor minority development into account. Show preferential to ethnic minorities in the project design. The government and forestry sectors should initiatively take measures to facilitate the participation of ethnic minorities, result-sharing, protection of minority rights and traditional culture, promote economic and social development in ethnic minority areas and eliminate the disparity between minority areas and other places.