The Project of Forestry Development In Chongqing Supported By Special Loan From European Investment Bank (Subproject of Qianjiang District)

Social Impact Assessment Report

The Forestry Bureau of Qianjiang District Southwest University May.2013

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1. Project Introduction

1.1 Background

In order to make better use of forestry in response to the change of global climate and the development of the western region, using the foreign capital to carry out forestation project has been explored actively. The National Development and Reform Commission of China organized the provinces to apply for the special loans for forestry project from the European Investment Bank actively, and issued Notice on Utilization of the Special Loans for Forestry Project from European Investment Bank (Development and Reform Commission [2012] No. 396). The government of Qianjiang District decides to apply for the special loans for forestry project from the European Investment Bank after deep consideration and dedicated deliberation, hoping that the inflow of funds and advanced management experience from Europe could help to improve the total amount of forest resources and quality, restore the ecological environment, increase the income of the farmers, help the area get out of poverty and promote the sustainable development of forestry, society and economy in Qianjiang District.

1.2 Project Contents and Scale

We will newly plant economic forests in an area of 1400 ha.

1.3 Project Goal

After the completion of the project, the forest area of this region will increase by 1400 ha It aims at significantly improving the ecological state of the environment of the project area and improve the ability of soil and water conservation in the project area. By the implementation of the project, it is aimed to cultivating a variety of forestry industries being imbued with Qianjiang characteristics. It will also support a number of leading enterprises to create more employment chances for increasing farmer's income in the project area, which will benefit a population of 8,0000 people, 8000 people in poverty include, 1, narrowing the gap between urban and rural areas, and promoting the common prosperity of urban and rural areas.

2. Procedures and Methods of the Assessment

2.1 Assessment Steps

2.1.1 Preparation

(1) Establish the "AGSI", short for the assessment group of social impact and draw up operational plan and program, including the main task, tools, sampling method, the main method and members of the group.

(2) Design questionnaires and forms; collect the primary and secondary data of county, town and village through the interview of the pivot and data sheet.

(3)Collect the national and provincial information and documents concerning the development of forestry and related policies.

2.1.2 Training of Investigators

Draw up training manuals and make it as the operations guide. The investigators were trained in Jinqiao residents committee in Chengdong street of Qianjiang district, Sunwei village of Heixi town and Zhongyuan village of Shihui town from April 25 to April 28 in 2013. The methods, processes and tools of the assessment were explained during the training; and how to carry out interviews, questionnaires and field surveys; the contents and methods of the social evaluation of the project were cleared about as well as how to collect and analysis the information and data of the social evaluation.

2.1.3 Field Surveys

AGSI conduct the survey according to the plans and requirements. Taking the limited time and the members of AGSI into account, a representative method of sampling has been used to survey the 3 representative towns and 3 villages according to the size of the project area, the area of ecological forest, the enthusiasm of the farmers to manage the forest and participate in the project. In the field survey, AGSI has collected 44 questionnaires of farmers, interviewed 10 village cadres, organized 3 village meetings and held 3 forums

The social impact assessment team, consists of forestry department and members of the AGSI, collect first-hand data and information in the district, town and villages. Investigations and consultation activities include: (1) Publicize the project, communicate and consultate with the relevant departments in order to know their attitude, management model, suggestions about how to ensure the implementation of the project and so on. (2) Make a preliminary assessment of the project by interviews and referring to the policy documents of forestry. (3) Record the data of population and resources obtained from relevant departments; (4)

Interview the leadership of the town and collect the social-economic data of the selected towns; (5) Convening village meetings, interview the village cadres, farmers and investigate the resources of the village.

2.1.4 Data Analysis and Report Writing

The data collected in this assessment includes: (1) first-hand field investigation materials, such as survey information, interviews, seminar information, community resource map, and a variety of image data. (2) Project-related background material and report about project preparation works at all levels, such as project proposals and feasibility study report of the project. (3) Official statistics, such as the Statistical Yearbook of the governments at all levels, Statistical Bulletin, 12th Five-Year Plan of Social Economic, policy documents made by the government at all levels.(4) Local Chronicles.

In the references cited above, the AGSI try to apply recent statistics, which demographic, economic and social development dates are based in 2012, and these data are also official information. The statistics involved in the village are almost first-hand information of the field survey, in order to ensure the objectivity and accuracy of the data. The analysis and discussion of issues are based in the suggestions and opinions of the primary stakeholders, the project management organization and project owners, striving to be comprehensive and objective.

AGSI collated the collected primary and secondary data in the locality. AGSI will analysis and compare these data to draw a conclusion, and write a social impact assessment report.

2.2 Method of Social Impact Assessment

The participatory method is used in the whole procedure. We gather information by publicizing the survey information and consulting with public and other means, including open interviews, group interviews, scoring and sorting, matrix analysis of project impact, investment of community resources, resource mapping method and so on, ensuring that the different interest groups and different farmers participate in the project voluntarily, equally and actively. Propagate the project to the relevant government departments, villages and farmers in the form of leaflet, notice, conferences and meetings, to make more people know the purpose, aim, content and procedures of the entire project and ensure the project can be implemented smoothly.

2.2.1 Cadres Forum

AGSI holds cadres forum and the participants are government leaders, members of the

Forestry Bureau, Finance Bureau, Development and Reform Bureau, Agriculture Bureau, Water Conservancy Bureau, the Environmental Protection Agency, the Women's Federation, the National Bureau of Religious Affairs, Cultural Affairs and other departments. The content of the meeting includes: (1) illustrate the basic information of the project and the intention of the symposium to the principal leaders of relevant departments and counties; (2) listen to the cognition, attitude, advices and recommendations of local leaders about the project; (3) carry out interviews and fill out the questionnaire. In order to understand the impact of the project on the local minorities, the AGSI and religious officials in Qianjiang District should conduct deep consultations with each other.

2.2.2 Hold Village Meetings

In the major surveyed villages, hold village meetings about the main stakeholder. The village meetings should pay attention to the interest of the poor households, minorities and women, especially the vulnerable groups. In order to encourage more villagers to participate in consultations, we should hold various meetings to ensure the participation. The meeting could be host by the leaders but the evaluation team should illustrate the requirements, attitudes, expectations and recommendations of the project.

2.2.3 Questionnaire

The assessment has designed various questionnaires. On the basis of field surveys, AGSI also need to interview the major stakeholders. The survey sample covers the different types of interest groups, and it also pays special attention to the appeals and demands of vulnerable groups such as women, minorities and poor households. The number of the valid questionnaires is 44, the resident ranging from 40 to 60 years old, account for 72.73% of the total number of the sample, among which most of the residents are 40 to 50 years old, accounting for 40.91% of the total number of the sample. In terms of ethnic composition, nationalities of the surveyed party are Han, Tujia, and Miao, among which the proportion of Tujia respondents is 50.00% of the total number of respondents, the proportion of Han is 36.36%, and the proportion of Miao is 13.64%.

2.2.4 In-depth Interview

In the major survey areas, AGSI has carried out deep interview, including a certain proportion of women, minorities and poor households, among which low-income households, middle-income households and high-income households account for corresponding proportion. Interviews take place at the appropriate time after the village meeting, at home, on farms or other suitable place.

The assessment focuses on the surveys of village and interviews. We identify the stakeholders and the impact of the project through the interviews of the village cadres, and we collect socio-economic data of the village to fill in the socio-economic data table. Participants are determined by the degree of rich and poor through scoring and sorting. Then we investigate the participants to understand the behavior, resource management and livelihood characteristics of farmers in forestry production. We go over the land resources of the village to have a concept of the utilization of forest and vegetation, the growth condition of the forest and the pattern of land use. The AGSI pay special attention to the women, minorities and poor households when interviewing the stakeholder.

2.3 The Main Findings and Suggestions

There are three main suggestions: (1)The project is suitable in Qianjiang District, the area is suitable for forestation and have much support from the government, the villagers have better recognition of the project, women and minorities have aspiration to join the project. (2) The project has positive influence on Qianjiang District. Most residents believe that the project will improve the economic income of farmers, improve the ecological environment, promote local employment and promote ethnic equality and the equality between men and women. (3) The adverse effects also exist. The project may limit food production of this area, because forestation may reduce the arable land. The suggestion is to attach importance to the design before the project; barren land and pasture which are suitable for forestation should be priority in order to ensure the production of local food. The development should be paid great attention. By these, it is suitable for Qianjiang District to conduct the projects, for it has a great positive impact on the society. But the negative impacts could be avoided as much as possible; besides, the project will make a significant contribution to the economic and social development in Qianjiang District.

3. The Basic Situation in Qianjiang District

3.1 The Social-economic Condition of the County

3.1.1 Geography

Qianjiang District locates in the southeastern edge of Chongqing, locating in the Wuling Mountains; Xianfeng County of Hubei Province is bounded in its east side; Pengshui County is bounded in its west side, Youyang county is bounded in its south side; Lichuan City of Hubei province locates in its north side. The district is the junction of Chongqing, Hubei, Hunan and Guizhou provinces, known as the "Throat of Chongqing and Hubei,". It is one of the main ethnic gathering places for minorities in Chongqing. Its geographical longitude is $108 \circ 28'04$ "~ $108 \circ 56'56$ " east , latitude $29 \circ 04'27$ "~ $29 \circ 52'10$ "north, 320 km away from Chongqing city and 45 km wide from east to west, 90 km long from north and south and it has an area of 2402 square kilometers.

3.1.2 Social-economic Condition

The Qianjiang District is the only minority area of Chongqing. The region covers an area of 2402 square kilometers, with 30 streets and towns. The total population is 5.413 million. The transportation and communications is convenient, State Road 319 and Qianxian Road intersect at this district; the Chongqing-Huaihua Railway cross Qianjiang, Zhoubai Airport had been put in use in 2010 and Yuxiang Highway runs through the whole territory. Qianjiang District is national poverty district having characteristics of being mountainous and few and aging of population and the old revolutionary base approved by Central Government. The ethnic minority population accounts for 72.8%, mainly by Tujia, and Miao. It is the border region of Chongqing and Hubei with so many Mountains. It is in the new scope of national poverty alleviation and development. It has 80 municipal poor towns, accounting for 36% of the total number of administrative villages. In 2011, the GDP is 12.919 billion RMB and the local fiscal revenue is 2.285 billion RMB, ranking 8th in the whole city's districts; the local revenue is 2.285 billion RMB; added value of the scale industry reaches 5.312 billion RMB; total fixed asset investment reaches 12.797 billion RMB; retail sales is 4.407 billion RMB; per capita income of urban and rural reaches16,007 RMB and5,452 RMB. The development of the region has gone into a fast lane.

In these areas, the farm population is 139,400people; Almost 67,000 of them are engaged in farming and surplus labor is more than 15,000. So the rich labor resources can fully meet the needs of the project, while the project can provide a way for the farmers to get rich.

3.1.3 Land Use Pattern

The total land area of Qianjiang District is 2402 km² in which the area of arable land is 49,206.67 ha, (the area of arable land with slope more than 25 degree is 16,400 ha), the area of forest land is 136,260 ha; the area of land which is not suitable to be used is 3,853.33 ha; the area of other land is 50,680 ha. The project region has a total land area of 101,012 ha among which the area of arable land is 11,986.67 ha (the area of arable land with slope more than 25 degree is 3,160 ha); the area of forestry land is 56098.4 ha (37,693.33 ha of woodland, 46.67 ha of open woodland , 7,440 ha of immature forest, 7,726.63 ha of shrub land , 53.33 ha of nursery lands , 2,486.67 ha of barren hills and uncultivated land, 280 ha of other wooded land); the area of the land difficult to use is1,446.67 ha. The area of other land is 28,073.33 ha.

3.1.4 Forestry Situation

The forestry land area in Qianjiang District reaches 149,554.86 ha (including surroundings): 99,455.46 ha of woodland, 1,206.4 ha of open forest land, 1,906 ha of immature forest land, 40,304.2 ha of shrub land, 22.8 ha of nursery land, 6,310 ha of barren hills and wasteland, 349.2 ha of other woodland, 8,84 million m³ of stumpage. The forest coverage rate reaches 47.5%. The trees statistics of the project area in Qianjiang District were showed in annex 3.

The region has identified 185 families of vascular plants, 729 generas and 1658 kinds, 36 kinds of national key protected plants; 42 families, 81 generas, 146 species of main tree, among which ginkgo and Taxus chinensis belong to plants under the first-grade state protection. The number of plants under the second-grade state protection is 8 and that of plants under the third-grade state protection is 10. Many scarce species are distributed throughout the district, such as metasequoia, cryptomeria fortunei, thin skin type of masson pine, Pinus armandi, paulownia fortunei, Chinese tulip, camphor tree, sassafrases, cedrela sinensis, birch, eucommia ulmoides , golden cypress, mangnolia officinalis and so on.

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There are eight types of vegetation, amounting to 33 groups, and could be divided into temperate coniferous forest (3 groups), moderate coniferous forest (5 groups), broadleaved deciduous forest (4 groups), evergreen broadleaf mixed forest (3 groups), evergreen broadleaved forest (3 groups), bamboo (6 groups), thrubs (5 groups), meadow (4 groups).

There are 102 kinds of terrestrial vertebrates in this area and could be divided into 4 classes, 27 orders, 76 families, 207 genera. And there are 22 classes of Amphibia, 29 of Reptilia, 190 of Aves, 61 of Mammalia with the Aves being the most accounted for 62.9% of vertebrate species.

3.2 The Social-economic Condition of Project Area

3.2.1. The Project Scope

The project will focus on the Chengdong street, Zhengyang Street, Nanhai town, Shaba town, Heixi town, Echi town, Shanling town, Apengjiang town, Baishi village, Shijia town, Wuli town and Shihui town.

Sample survey of the project area is adopted from the ones from Chengdong stree, Heixi town and Shihui town, whose population are 71,304, 14,810 and 15,205, accounting for 13.2%, 2.7% and 2.8% of the total population respectively. Total population of sampling areas is 101,319, accounting for 18.7% of the total population in Qianjiang Distrit.

3.2.2. The Population , Employment and Land Use Features

There are 8,299 people in the surveyed towns, including 4,476 males, 3,828 females. 4,290 people are labor force, including 2,430 males, 1,860 females. There are 1,820 people working in the town perennially, including 800 males and 920 females. Because most of the men work outside the home, so the number of the women is higher slightly. 5,909 minority people, consisting 71.20% of the total population, 4,829 Tujia, 58.19% of the total residents surveyed, 1,620 Miao, 19.52% of the total population.

Among the 2,193 surveyed families, the residents of the 1,420 families make a live by agriculture and animal husbandry; others almost go out to work. In the project area, 540 people are engaged in forestry, accounting for 6.51% of the total. But 470 people are also engaged in forest industry, there are 70 people only engaged in the forestry and forestry plantations is their main income; there are many residents work outside, accounting for 33.25% of the total number, most of them are engaged in the construction industry, making 170 RMB per day.

Project area	Resident	Male	Female	Labor force	Male	Female	Labor force in town	Male	Female	Minority	Tujia	Miao
Jinqiao residents committee	2365	1205	1165	950	600	350	400	150	250	2034	1729	305
Suwei village	3475	2012	1463	2170	1160	1010	720	250	370	2175	2100	615
Zhongyuan village	2459	1259	1200	1170	670	500	700	400	300	1700	1000	700
total	8299 447	5 4476 3	8283828 42 0	29 42 24 30	24360	$\begin{smallmatrix}&182\\1860\\0\end{smallmatrix}$	$\begin{array}{ccc} & 92 & 59 \\ 800 & 1820 \\ & 0 & 9 \end{array}$	$^0 800^{48}_{9}$	$\begin{smallmatrix}&&162\\&920\\&0\end{smallmatrix}$	5909	4829	1620

 Table 1: Population in project area unit(person)

 Table 2: Residents' occupation condition

Project village	Total number (family)	Totally dependent on agriculture (family)	Partly dependent on agriculture (family)	Only do forestry (family)	Net income (RMB)	Work outside (person)	Average salary work outside (RMB /Day)	Job type
Jinqiao residents committee	645	200	60	0	4900	500	120	construction industry
Sunwei village	922	720	310	30	4700	1450	190	construction industry service industry
Zhongyuan village	626	500	100	40	7710	470	200	construction industry service industry
total	2193	1420	470	70	17310	2420	170	

Project area	Farmland	Farmlan d area on average	Submerged soil	upland	Forest land	privately farmed hilly land	Hills	Constract to household	Barren hills and grasslands	Constract done
Jinqiao residents committe e	330	0.13	100	230	400	2.67	380	330	233.33	213.33
Sunwei village	472.8	0.14	263.13	209.67	658.4	0	138.4	520	104.67	104.67
Zhongyuan village	200.67	0.08	120.33	80.33	193.33	0	193.33	193.33	66.67	66.67
total	1003.47	0.12	483.47	520.00	1251.73	2.67	711.73	1043.33	404.67	384.67

Table 3: land use and ownershipunit (ha)

Farmland and woodland Resources is rich in project area, there are 1,003.47ha farmland, including 483.47ha paddy farmland, 520.00ha dry farmland, accounting for 48.18% and 51.82% respectively. The area of woodland is 1,251.73ha in the surveyed project area, only 2.67ha belong to the collective, the area of privately farmed hilly land is 711.73ha, most of which have been contracted to households; the area of barren hills and grasslands is 404.67ha, most of them have been contracted to households too. In the construction of the project, the barren hills and grassland could be developed to be the base of project.

3.2.3. Education Situation

In aspect of the education in project area, 63.01% of the population's education level is middle school, 28.41% of the population's education level is primary school or below, the number of the population whose education level is high school or polytechnic school is small, only a few receive the education in university or above, accounting for 1.87%.

Project area	Primary school or below	Middle school	High school	university	Postgraduate or above
man	27.34%	62.78%	7.57%	2.31%	0.00%
woman	29.66%	63.40%	5.64%	1.30%	0.00%
total	28.41%	63.01%	6.72%	1.87%	0.00%
man(minority nationality)	22.98%	67.97%	7.03%	2.02%	0.00%
woman(minority nationality)	23.59%	70.52%	4.70%	1.19%	0.00%
total	23.50%	68.82%	6.02%	1.65%	0.00%

Table 4: Education level of residents (标题太简单)

3.2.4. Infrastructure Construction

In aspect of the infrastructure, the road, electricity, water coverage could meet the needs of the villagers.

3.2.5. Poverty Condition in Project Area

In aspect of the poverty of the residents in project area, the middle group accounted for the vast majority of the total number, the proportion of poor households and wealthy families is rare, only a few families are wealthy. The main characteristics of Poor households are thatched cottage, no labor, no TV, the average net income is 2,100 RMB; characteristics of moderate household are having television, labor, abundant food and clothing, savings and per capita net income of 5,500 RMB; characteristics of wealthy families are living in buildings, having motorcycle, and running business or guaranteeing fixed wage, and per capita net income of more than 10,000 RMB.

3.2.6. Residents' Forestation Behaviors

In aspect of the gender, both men and women have rights to use the forestry and they are willing to participate in forestry training, but only men are willing to participate in forestation.

Project area	Right to use land	Willing to foretaste	Willing to be trained
Jinqiao residents committee	Both	Both	Both
Sunwei village	Both	Both	Both
Zhongyuan village	Both	men	Both

Table5:Participate in forestation

4. Definition and Identification of Stakeholders

After analyzing the results of the interviews and surveys, it demonstrates that farmers, forestry cooperatives, village organizations, ethnic minorities and women are the direct stakeholders. Qianjiang People's Government, The Forestry Bureau of Qianjiang District and other relevant government authorities are indirect stakeholders. They will play the default role in the project, which is designed by AGSI.

4.1 Farmers

The farmers are the direct actors of the project, but also the direct beneficiaries. In the assessment of the project, through careful survey, AGSI find that although most residents didn't run a business of forestry, but most farmers recognize the benefits of the project soon after they understand it, then they want to implement the project on their land, and accept the project management model.

In this project, the poorest farmers may live in the poorest village, and they do not have special technical and labor skills. The poorest villages always lack labor, land and forest resources. Another extreme is the large number of wealthy farmers who have a certain status in local and perhaps have business in rural areas or in town. Between these two extremes are the medium-scale farmers who account for a large proportion.

The survey shows the different participating ways: (1) Poor farmers: they do not have much woodland and they are willing to do the seasonal work. Most young farmers choose to go out to work. There are younger members working outside which is common in poor families or better families. Forestation does not require much skill, so it is always done by the poorest people. (2) General farmers: planting trees is a tradition to make a living for many farmers, especially for those live in mountain areas. In recent years, more and more farmers participate in forestation as a part of some projects of the Poverty Reduction Department or Women's Federations or others. (3) Wealthy farmers: generally, they do some management of the forest with the support of the local forestry department, have a certain degree of economic power, master some planting techniques, and also have considerable experience in business management.

Farmers	Positive effect	Negative effect	Conclusion
Wealthy	have large impact on those who contract large area of barren hills and uncultivated land; better participation	no significant effect on their livelihood	the main beneficiaries
General	Have positive effect; the main participants	have a significant effect on the farmers whose main income comes from the forestry	beneficiary groups
Poor Positive impact is less than that of wealthy farmers; weak participation		limited land, labor, and funds may limited the opportunities for participation	have risk of being marginalized

Table 6: Comparison of farmers' effects

The general livelihood of farmers is working outside and a few are engaged in agriculture, forestry and processing industry. There are also some people engaged in commercial activities. In forestry, most farmers always engaged in large-scale forestation and spontaneous sporadic reforestation and the farmers do the activities by themselves, but they'll hire idle rural labor force to do the large-scale forestation.

During the survey, AGSI feel that the farmers hold a positive attitude to the projects to be implemented consistently. Farmers have various requirements of the form of managements, such as the self-employed, joint management, cooperation and other suitable mode. The farmers who participate in the project are the direct beneficiaries and those who don't participate in are the indirect beneficiaries

4.2 Forestry Cooperation

Forestry cooperation is a form of organization. It is a mutual co-operative economic organization that the operator, the management services providers or users of similar forest products are voluntary to cooperate and manage works on the basis of household contract management. Forestry cooperation aims at providing service for the members. The members are operators who are engaged in production, managing or providing similar services of similar forest products. The purpose is to improve economy through cooperation and mutual assistance, and complete the tasks which can't be done well by single farmers, such as the implementation of the project, organization and management, the way to cooperate, labor sources, the distribution of benefits and so on.

4.3 Village Organizations

After the reform of collective forest right system, the ownership of the forest has

transferred to the former villager groups and the villagers. But in few villages, the ownership of the forest still belongs to the villages. In theory, the income should be used for the community, especially on the infrastructure construction. When forestation contract is signed by villages and other stakeholders, the administrative villages play the role of delivering information to villagers. In the administrative view, the committee of the administrative villages is in the same level with administrative village, and only the leadership of the administrative village is elected officially, thus the villages is a legal unit which is only legal body to sign the contract of forestation.

The village committee is the a basic organization and transmit the intention of the upper class to the farmers and guide them because of the close relationship with the majority of farmers; on the other hand, village committee can transmit the feedbacks of the farmers to the upper class dynamically, in order to make a summary in time, correct the deficiencies and improve the quality of project construction

4.4 Minorities

In the survey, as the evaluation team entered sample villages, it will first observe the production life of the village. Then, a forum was convened to learn about their attitude to the project, to listen to their comments on the project. The team discussed with them on some of the problems in the implementation of the project, including the form of participation, tree species selection, the various effects to jointly explore ways. In the consultations, the villager has expressed their own ideas freely, put forward their own views. Learned from field surveys, the vast majority of the minority people acknowledge the basic objectives of the project and think that it will help them improve their family income, can contribute to the improvement of the ecological environment. They generally welcome it and has expressed their willingness to participate in the project. Of course, there are some people who have concerns and worries. It has the generally urgent requirements of facilities for drinking water, agricultural irrigation and rural infrastructure such as roads; it will do good if the form of participation can be chosen autonomously, and that the choice can gain respects from government department, especially in the combination of measures; it will also do good if government officials and project office staff can be closely linked with the masses, listen to their views and demands, care about the real benefit of farmers; more loans and grants are in need; it hoped that the implementation of the project could improve their production and living conditions as soon as possible; it is also hoped that information, technology and management services could be provided from project office in the implementation process, to help them identify problems

and reduce the risk of production inputs; it is hoped that government and the project office could provide relevant training, which must in time, effective, and can be operated nearby

4.5 Women

In the survey, such questions are asked: "who has the rights to use the forest and land", "who is going to participate in forestation", "who will participate in the technical training of forestation", and only the women in Zhongyuan Village don't want to participate in forestation while the husbands and wives in the other families want to join it together. These findings indicate that women enjoy a higher status in the family and the factor of gender will not affect the farmers to participate in the project. With the improvement of the individual quality of women, women's social status has increased constantly, so most of them go out and participate in productive labor actively. And they have enjoyed the same rights in life, health, education, employment and other aspects with men and most women try to be more "self-esteem, self-confidence, self-reliance, self-reliance."

4.6 The District Government

The district government is government institutions between the municipal government and township government; District government is the main loan section of each project; district forestry sector is the subordinate of the county government, the district government has the responsibility to supervise the quality of the implementation. The district government participates in the project mainly through forestry cooperative organization and cooperating with farmers. The district government has responsibility to organize and coordinate.

4.7 The District Forestry Departments

The District Forestry Departments is also the backbone of the project, it operates the activities of the project directly, because it participates in projects as policy managers and it gives macro guidance to the farmers to organize and coordinate them. The District Forestry Bureau is the important stakeholder of the project in all matters related to forestry, ranging from policy to economic activity. The District Forestry Department plays a coordinating role in the ecological forest cultivation, and offers analysis to the villages and land involved in the project. It is the main institution to carry out the project. The township forestry department is the specific technical services department .The township forestry station builds a bridge between villagers, the government and the villagers, the forestry sector and the villagers. The township forestry station helps the township government to make development plan and annual plan, organize and guide the group and individuals to carry out forestry production and

business activities. It also promote the forestry science and technology, carry out the training of forestry technology, and offer technical advice and technical services to the villagers in all phases of the project.

4.8 Other Government Departments

Development and Reform Commission is the department to make macro decisions. In the project, it makes the development plan, coordinates the work between the forestry sector and the related departments, combines the projects related with the special loans forestry project of the European Investment Bank, makes preparation for the special loans forestry project from the European Investment Bank, organizes and guides owners and farmers to participate in the projects in the form of a cooperation.

The District Ethnic and Religious management department provides details of religious belief for ethnic minorities and residents to select the project villages, combines the ethnic and religious project with the project of European Investment Bank special forestry loans, combines with the Forestry Bureau to mobilize and organize minority villagers to make use of resources, labor, capital and provides guidance based on the characteristics of ethnic minorities in the project area, to solve the problems in the cooperative forestation, to protect the legitimate rights and interests of ethnic minorities.

The District Women's Federation offers the details of the women when choose the project village, and combine the projects related with the special loans forestry project of the European Investment Bank. It also helps the Forest Service to mobilize the women to participate in the project. District Poverty Alleviation Office offers the details of the poor when choose the project village, and combine the projects related with the special loans forestry project of the European Investment Bank. It cooperates with the forestry sectors to alleviate poverty by forestation. District Agriculture Bureau offers the details of the utilization of the land when choose the project village, and provides livestock and pasture and other technical services relating to the special loans forestry project of the European Investment Bank.

Township government is the most basic government institutions in China. In the implement of the project, it helps the county government organize the company, forestry station and farmers to participate in the forestation, provides information about administrative villages when the Forestry Bureau select the project villages, combines the projects related with the special loans forestry project of the European Investment Bank, mobilizes the administrative villages to participate in the project, and supervise the quality of the project

5. Policies and Laws

5.1 Policies and Laws on Ecological Restoration

There're many laws relating to ecology in China, such as Forest Law of the People's Republic of China, Water Law of the People's Republic of China, Grassland Law of the People's Republic of China, Wild Animal Protection Law of the People's Republic of China, Land Conversion Project Regulations, Natural Reserve Regulation, Nature Reserves Manage Regulation of the People's Republic of China and so on. Logging, hunting, fishing, reclamation, burning, mining, quarrying and other activities in protected areas are forbidden according to the Nature Reserve Management Regulations of the People's Republic of China; it also regulates housing construction standards in the region. In order to restore the ecological environment, the state has promulgated the Returning Farmland to Forest Regulations to return the farmland to forest in the nationwide.

5.2 Policies and Laws on Climate Change

In June 2007, the Chinese Government issued the National Action Plan on Climate Change and China's Scientific and Technological Actions on Climate Change. It also put forward the goal to be achieved in 2010: make significant progress on controlling of greenhouse gases emission, enhance the ability to adapt to climate change constantly, make progress in scientific research on climate change, improve public awareness of climate change greatly, and strengthen the mechanisms of institution to the climate. In addition, the government has made Law of the Cleaning Product Development, Solid Waste Pollution Prevention Law, Circular Economy Promotion Law, the Regulation of Urban Living Refuse and other laws and regulations, and issued Opinions on Accelerating the Development of Circular Economy.

5.3 Policies on Ecological Forest

In 2005, Accelerate the Development of Forestry Regulation (No.9 document) was issued according to Forest Law of the People's Republic of China and Land Management Law of the People's Republic of China, the regulations focus on the use of all kind of forestry, including economic forestry. The regulation states that the economic trees (including bamboo) occupied permanently or temporarily can get three to five times compensation according to the previous three-year average output value or the actual forestation investments and

incubation costs.

5.4 Policies on Forest Ownership

According to Forest Law of the People's Republic of China, the forest resources belong to the state except those belong to the collectivity in law. The county government or upper government should record the forests and lands belonged to the state, collective and individual, and then issue the certificates to confirm the ownership and use rights. The right of the owner is protected by law and there is no unit or individual could violate it. The owner is the people who have the right to use the forests, trees and woodlands according to Forest Ownership Registration Management Regulation. The State Council department, provincial government, autonomous regions and municipalities have the right to issue forest warrants, and the registration authority should inform relevant local government of it. No unit or individual could cut forests, engaged in infrastructure and other productive activities before the ownership is resolved by Forest Ownership Disputation Processing Methods.

In July 16 of 2008, the State Forestry Administration issued Contracted Management Regulation of Collective Forest Land. According to the regulations, the contractors have the right to operate all the collective trees or land covered by vegetation for 70 years, and the contractors could apply for extending the deadline. Besides, the contractor could transfer the land to others, could use it to mortgage the loan or make it as a capital according to the policy. The system offers more rights to the contractor and mobilizes the enthusiasm of them in the use of forest resources.

5.5 Policies on Minorities

Regional Ethnic Autonomy Laws of the People's Republic of China clarify the relevant policies on ethnic affairs. Article two of the first chapter of the law states that national regional autonomy is implemented in the place minorities live in; Article 28 of the same chapter states that, the national autonomous local governments should manage and protect local natural resources. According to the laws and plans of the state, local government in ethnic autonomous areas has priority to develop and exploit the local natural resources Article 65 states that the government should considerate the interests of the national autonomous areas when exploiting the resources and construction, then make arrangement of the areas' economic development in order to take care of the production and life of the local ethnic minorities. The State shall take measures to give some benefit compensation to national autonomous areas which output the natural resources. The preface of the Constitution made in 1982 states: the People's Republic of China is a unified multi-ethnic country made by all peoples. Equality, unity and mutual assistance has been established between peoples and it will be strengthened in future. Article 4 of the Constitution states that: all peoples share equality in the People's Republic of China. The State should guarantee the legitimate rights and interests of the minorities, build and maintain an equal, united and friendly relationship between all peoples. Discrimination, oppression of any peoples and behaviors undermining the unity of the peoples or instigating division are prohibited by laws. The state should help minorities to develop the economy and culture according to the characteristics and needs of them. In the struggle of maintaining national unity, Han chauvinism and minority chauvinism are forbidden. The state should try to promote the common prosperity of all peoples in the country. The Common Program of the Chinese People's Political Consultative Conference made in 1949 the Constitution of the People's Republic of China clearly states that the minorities have rights to maintain or reform their folkways and customs

5.6 Policies and Laws Related to the Women

The Constitution and the Law on the Protection of Women's Rights and Interests state that women enjoy the equal political, economic and cultural rights with men in the social and family life. The equality between men and women is a basic state policy. The state shall take necessary measures to improve various systems to protect the rights of women, and eliminate discrimination against women gradually. Discrimination, abuse, abandonment, mutilation of women is forbidden by laws. The sixth item in Law of Rural Land Contract states that women and men enjoy the equal rights in contracting the land. The legitimate rights and interests of women should be protected, and no organization or individual could deprive their right to manage the land. Mother and Baby Health Care Principles, mended Marriage Law and other laws and regulations have been revised. Besides, these laws have been strengthened by China's Women Development (1995-2000) and China's Women Development (2001-2010). Gender Consciousness has been made into the Development of Chinese Women (2011-2020), it puts forward to promote the overall development of women, promote the harmonious development of gender, promote the development of women and economy simultaneously, protect the right of women to access to economic resources, enable women to participate in the management of social and state equally, equal women to enjoy the social security. These regulations pay special attention to the problems related to the fundamental rights of rural women.

5.7 Credit Policy (including Private Lending)

The forth item of the Credit Rule states that the activities between the borrower and the lender should follow the principles of equality, voluntariness, fairness and sincerity. The fifth item states that the lender should follow the principles of fair competition, close collaboration, and shall not engage in unfair competition. The current credit policy in China includes three aspects generally: firstly, as for the expansion of money and credit, the policy could affect the index and fluidity of money, such as making the payment ratio of consumption of automobiles and housing, loans ratio and so on. Secondly, we could guide the credit funds to the regions and industries based on the national industrial policy in order to develop the economy through various means such as subsidizing interest on loans. Thirdly, restrictive credit policy is important. We must limit the credit funds in some industries, sectors, and regions by guiding the commercial banks to adjust the credit risk rating and risk evaluation, reflecting the principle of progress.

5.8 Labor rights and Interests

There are following regulations about the rights and interests of laborers in the Lbor Law. It is explained in article 7 that in accordance with the law, laborers are entitled to participate in or set up labor unions which represents and sticks up for the legitimate rights and interests of laborers and could independently carry out legal activities.

It is addressed in article 36 that the workers' daily and weekly working time does not exceed 8 hours and 44 hours respectively in our country. Article 38 stipulates that the employees shall be ensured at least one day off every week. Article 40 elaborates that the employers shall arrange holidays for laborers at festivals likely New Year's Day, the Chinese New Year, the International Labors' Day, the National Day, and other legal holidays. It is also addressed in article 41 that the employers could increase the work time under the

permission and consultation with the labor unions and workers themselves, but no more than one hour per day. And under the premise of the protecting the labors' health conditions, extra overtime shall not exceed three hours a day and 36 hours a month. The employers shall pay the workers more salary in accordance with the following standard. (a) if the workers are arranged to doing longer, they should be paid at least 150% percent of their ordinary salary; (2) At days off, if workers are required to work and cannot be compensated for other days off, they should be paid at least 200% percent of their ordinary salary; (3) the labors asked to keep working at legal holidays should at least 300% percent of their ordinary salary. The labors are also entitled to a paid leave for those who works continuously more than one year (article 45).

Article 52: The employer must establish and optimize the system of labor health, strictly implement the national occupational safety and health regulations or standards, and promote occupational safety and health education training for workers to prevent accidents and reduce occupational hazards.

Article 54: The employer must provide laborers safe and healthy work conditions and necessary labor protection products complied with the national regulations. And the workers engaged in hazardous occupational circumstance should be guaranteed a regularly health examination.

Article 56: workers must obey the right and safe rules during the manufacturing process. Workers have the right to refuse if they are required to do irregular and dangerous operations. And they could also have the right to criticize, report and prosecute the operations that endangering their lives safety and health.

The State must establish injuries and occupational diseases statistical reporting and handling system, and provide special protection for the female workers and juvenile workers with special protection (article 57 and 58, respectively). The underage workers are more than 16 years old but no more than 18 years old.

According to the notice of Chongqing Municipal Human Resources and Social Security Bureau on the promulgation of the minimum wage standard" (2012 No. 71), a minimum monthly wage in Wulong district is 950 yuan per month and part-time workers should at least get a hourly wage of 9.5 yuan per hour.

5.9 Complaint Mechanism

The article 77 of the Labor Law addressed that disputation occurs among the workers and the employers, the parties may apply for mediation, arbitration, litigation, and can also resolve the problem through consultation.

Article 77: It must base on a legal, fair and timely processing principle to deal with labor disputes, protecting the legitimate rights and interests of the parties involved in a labor dispute.

Article 79: At the occurrence of labor disputes, the parties concerned could apply for mediation in the labor unities. If mediation fails and one of the parties applied for arbitration, the parties may ask the labor dispute arbitration committee for help. And any side not satisfied with the arbitral decision could take action in a court of law.

Article 80: Labor dispute mediation committee could be established within the unit, and is composed of representatives of the employers, employees and labor unities. And the chairman must be a representative of labor unities. The parties must perform the agreements reached through mediation.

Article 81: The labor dispute arbitration committee is composed of representatives of labor administrative department, the same class labor unities and employers, with a representative of labor administrative department being the director.

Article 82: One aspect of the parties should send a written application to the labor dispute arbitration committee within 60 days after the occurrence of the dispute. And the arbitral decision should be made with 60 days after the application. The parties must perform the decision if have no other objection.

Article 83: The parties that have objection against the decision could lodge a lawsuit to the people's court within 15 days from receipt of the arbitral decision. If one aspect has no objection and refuses to perform, the other aspect could apply for a compulsory execution.

Article 84: When signing collective contract, the dispute occurs. But no settlement can be reached through consultation, the labor administrative department of the local government should help to coordinate and settle. If dispute merged during perform of the collective contract and could not be solved by consultation, the parities could apply to the labour dispute arbitration committee for arbitration. The parties that have objection against the decision could lodge a lawsuit to the people's court within 15 days from receipt of the arbitral decision.

6. Main Findings of the Social Impact Assessment

6.1 A Basic Overview of the Project Stakeholders

The basic overview of the project stakeholders is reflected by site interview and method of sample survey. The findings are as follows:

6.1.1	The	Basic Information	of the Farmers

9.09%
0.00%
4.55%
0.00%
0.00%
86.36%
50.00%
45.45%
4.55%
0.00%
0.00%

Table7: The basic situation of the farmers

In the survey of the subproject of the special loans project of the European Investment Bank, the basic situation of the beneficiaries is as follows: the proportion of men and women in the survey are 63.64% and 36.36% respectively. The survey mainly focuses on farmers aged from18 to 65; while most farmers are between the ages of 40-50, accounting for 40.91%. The following are farmers between the ages of 50-60, accounting for 31.82%. The number of 60-65 years old farmers accounts for 22.73%, while the number of 30-40 years old ones accounts for 4.55%. Most of the farmers' education level is primary school or below and middle school, accounting for 50.00% and 45.45% respectively; 4.55% of the farmers surveyed have an education of high school or secondary school, and no one has an education above undergraduate and Graduate as we can see in table 7. In the survey of family monthly income we find that: the farmers' monthly family income is all above 1000 RMB. Family with a monthly income of 2000-3000 RMB ranks the most, accounting for 40.91%. Family with a monthly income of 3000-5000 RMB ranks second, accounting for 27.27%. While the proportion of family with income about 1000-2000 RMB and above 5000 is relatively small(18.18% and 13.64%). Three kinds of ethnic groups are involved in: Han, Tujia and Miao, the number of Tujia accounts for 50.00 %, followed by Miao farmers, accounting for 36.36%. The number of Han accounts for only 13.64%. After the investigation of religion beliefs we found that: 86.36% of the farmers have no religion belief; 9.09% of the farmers are Buddhists; 4.55% of the farmers are Christian. In the survey, all farmers are engaged in agriculture.

6.1.2 The Economic Situation of the Surveyed Family

(1) Family income

During the investigation of the basic economic conditions of farmers, the findings show that most family consist of 4-6 people or 2 people, accounting for 50.00% and 36.36% respectively; the proportion of the family with 1, 3 or 7 people is the same, accounting for 4.55% ; the investigation of annual family income of farmers shows: last year, all farmers' annual family incomes are more than 10,000 RMB; 36.36% of the families earn 10,000-20,000 RMB annually; 40.91% of the families earn 20,000-50,000 RMB annually; 22.73% of the families earn 50,000 RMB and above annually. At the same time, the farmers' expenses are mainly at the level of more than 8,000 RMB, of which 8,000-10,000 RMB accounts for 13.64% ; 10,000-20,000 RMB account for 13.64%; expenses of 50,000 RMB or above and 3,000-5,000 RMB account for 9.09% and 4.55% respectively.

variable	sub item	percentage
.1	1	4.55%
resident population	2	36.36%
population	3	4.55%

 Table18:
 Basic economic conditions of rural households

	4-6	50.00%
	7 and above	4.55%
	¥3000	0.00%
	¥3000-5000	0.00%
Household	¥5000-8000	0.00%
income last year	¥8000-10,000	0.00%
licome last year	¥10,000-20,000	36.36%
	¥20,000-50,000	40.91%
	¥50,000	22.73%
	¥3000 and below	0.00%
	¥3000-5000	4.55%
Havaahald	¥5000-8000	0.00%
Household expenses last year	¥8000-10,000	13.64%
expenses last year	¥10,000-20,000	54.55%
	¥20,000-50,000	18.18%
	\pm 50,000 and above	9.09%

(2) The level of family life, income and expenses

The results of survey show that the incomes of the surveyed family are mainly from farming and working, among which the incomes from working occupy the largest share; while some residents' incomes are from aquaculture and wages. The top three daily expenses of the family are food, clothing and health care which account for more than half of the total expense of a family. Expenses of production, education, traveling and entertainment also account for a relatively important position of a family. The survey finds that the standard of life of the residents in the project area has basically achieved the well-off level, and that some residents have reached the intermediate levels of affluence, and that most of the residents express general satisfaction of their own economic situation.

6.1.3 The Situation of Minorities

In the survey of the living hobbits of the minorities in QianJiang district, we find that most of the local minorities think that they have their own native language, while a few people know little about this. Among the ethnic minority residents surveyed, only a few are capable of speaking native language. The vast majority of minority residents can't speak their own language; most of the ethnic minorities have their own customs, but some traditional ethnic festivals have been disappeared or are disappearing gradually, more than 90% of minority residents do not understand the traditional festival of their own nation; some minority residents have no religion belief, and only a small proportion of residents have religious beliefs; a small number of minority have national costumes, but more than 70% of minority residents don't have; 80% of the minority's hold the view that there is no difference between their own nation and Han. Besides, minority residents getting married with other ethnic has become a common phenomenon.

6.2 Stakeholders' Understanding of the Project and Their Attitude

Index	Residents' understanding of the project and their attitudes		
Understanding degree of the project	All residents having some knowledge of the project indicates that a majority of residents have a basic knowledge or rather clear understanding about the project.		
channels to know the project	The vast majority of residents are informed by others; other residents have became aware of the project after participating in village meetings		
attention about the project content	Essentially all of the residents are very concerned about the construction of new economic forest in the project.		
significance of the project	The vast majority of residents believe that the project is meaningful to socio-economic and ecological environment; About 80% of the residents hold a positive attitude to the significance of the project.		
Willingness to participate in the project	Basically, all of the residents are willing to participate in the project.		

Table9: Residents' understanding of the project and their attitudes

Results of the investigation show: the residents of the project area know some about the project. Most of them are informed by others or village meetings, which means that the propagation has been conducted well in the project area, laying a solid foundation for the project. In terms of constructing new economic forests, almost all of the residents express concern about it, meaning that the residents attach great importance to the construction in Qianjiang. The vast majorities of residents hold a positive attitude to the implementation of the project, and they are willing to support and participate in the project, which has laid a strong mass base for the implementation of the project

6.3 The Analysis of the Expected Social Benefit

6.3.1 Possible Positive Impacts of the Project

In the views of farmers, ethnic minorities or women in the project area, most of them think it will bring positive impact whereas only a small number of residents think the project will not have a positive impact. Judging from the overall perspective of the stakeholders, more than 75% of residents believe that the project will have a positive impact; a small number of residents believe that the project will not give a positive impact.

	positive impact			
stakeholder	have	have not	possibly	don't know
Farmer	86.36%	9.09%	4.55%	0.00%
ethnic minority	92.86%	7.14%	7.14%	0.00%
woman	75.00%	12.50%	12.50%	0.00%

Table10: The evaluation of stakeholders to the positive impact of the project

Farmers, women and minorities all hold the view that the project will bring economic income. For the farmers in the project area, the project has brought many positive effects in many aspects, of which the greatest impact is the project can improve farmers' income by participating in it. The ethnic minorities in the project area hold the perception that the project may bring obvious profits to them by improving the ecological environment, increasing the economic income and employment. For women, participating in the project may increase income and employment

stakeh	positive impart				
older	High level of impart	general degree of impact	low degree of impact		
formor	increase the economic income	improve the ecological	increase employment 、		
farmer		environment	recover forest resources		
ethnic minority	increase the economic income increase employment improve the ecological environment	recover forest resources、promote the development of minority	improve the equality of men and women		
woma n	increase the economic income increase employment	improve the ecological environment	recover forest resources		

Table11: Positive impacts from the project

6.3.2 Possible Negative Impacts of the Project

	negative impact			
stakeholder	have	have not	possibly	don't know
farmer	0.00%	72.73%	18.18%	9.09%
ethnic minority	0.00%	78.57%	21.43%	7.14%
woman	0.00%	75.00%	12.50%	12.50%

Table12: the evaluation of stakeholders to the negative impact of the project

The vast majority of farmers, minorities, women in the project area hold the view that the project will not bring negative impacts. Judging from the overall perspective of the stakeholders, more than 70% of residents believe that the project will not have a negative impact on their families and local development.

negative impact Stakeholder general High level of impact low degree of impact degree of impact income destruction to the customs farmer limit production and habits reduction Hinder the ethnic income acceleration in disappearance development of other of the minority cultures minority reduction industries destruction to the customs income woman limit production reduction and habits

Table13: Negative impacts from the project

Although the vast majority of stakeholders think that the project will not have a negative impact, but a small part still think that project may have a slight negative impact. One of the most obvious impacts is that the project may hinder the production activities of farmers in other industries to some extent. For the farmers in the project area, the potential negative impact is the limit to the production in agriculture, animal husbandry and other industries, which may reduce income to some extent. Furthermore, there exists a little possibility that it could undermine local customs. For minorities in the project area, the great negative effect is that the project may hinder the development in other industries, and it will also reduce income to some degree. But it has little impact on minority culture. For women in the project area, the project may bring negative impact by limiting its production in other industries; it will also reduce revenue and damage the customs.

6.4 The Conditions Needed for Forestry Development in the Project Area

From the operation and management that the farmers are willing to accept, 60% of the residents are willing to accept the co-management model with enterprise; a few residents are willing to join in the forestry cooperatives involved in the project. But as the risk of the self-employed and associated operation model is relatively high, only a handful of residents choose the two management model. To make a conclusion, most of the residents are willing to accept the market-oriented management model led by enterprise. There is also a considerable proportion of residents who are willing to accept the forestry cooperatives economic management methods, whereas the individual and associated operation are not that easy to be accepted by the residents.

6.5 Forestry Conditions of the Project Area

Through the interviews with the villagers and cadres in Jinqiao residents committee of Chengdong town ,Sunwei village of Heixi town and Zhongyuan village of Shihui town, we find that the village's overall development plans contain the development of forestry and animal husbandry development; poverty alleviation programs of project villages has been completed basically, where there are no forestry enterprises or forestry cooperatives. Killing wildlife has occurred in Sunwei and Zhongyuan village, because wild animals destroy crop plants,

From the forestry situation of the project villages, Jinqiao neighborhood committee covers an economic forest area of 33.33 ha, the area of Sunwei village is 8 ha and the area of Zhongyuan village is 66.67ha. Self-management is the main mode in project area: Jinqiao village mainly plants sericulture, Sunwei village plants Walnut, poplar, locust, toon, liquidambar and so on; Zhongyuan Village plants mulberry, poplar, bamboo. The seedlings cultivated by farmers themselves are of common quality. Reforestation seedlings are provided by the government freely. In the past forestry projects, the Ministry of Forestry provided the village number of labor migrant and low income inefficiency, there exist a labor shortage. Most farmers think that the income can be considerable if skills of maintenance of trees, management and other technical services can be provided in the future except for the service of reforestation and pest controlling. Besides, it will lead many migrant workers return to their hometown to participate in forestry projects. So it is necessary to establish the forestry cooperative organizations and there will be a sufficient labor force returning home. There is sufficient land which is suitable for forestation, Jinqiao residents committee has an area about

33.33 ha; Sunwei village has an area about 16.67 ha; Zhongyuan Village has an area of 100 ha. The benefits of the project is equal to the rich and the poor farmers, Han and minorities. And it will increase the economic incomes, improve the local environment. Poor households, medium households and wealthy farmers all wish to participate in the project; the enthusiasm of women and ethnic minorities to participate in reforestation projects is very high.

The analysis of the overall situation shows: it is suitable for the surveyed regions to develop the forestry projects and the local villagers are willing to participate it, who has some experiences in developing the forestry. The forestry projects will not only increase the economic income but also improve the local ecological environment. Therefore it is a significant project for the benefit of future generations.

7. Risk Identification and Controlling of the Project

7.1 Risk Identification and Controlling of the Beneficiary Groups

7.1.1 The Risk Identification of Beneficiary Groups

(1) The project area and its members are not only the beneficiaries of the project, but also the participants of the project activities and the main body of it. Their quality and education level can be a guarantee of the success of the project, but it will also become the risk factors of the project. The assessment shows that there exist significant differences between the ecological goals and farmers' expectation to increase incomes by participating in forestation projects. Through interviews with farmers and village cadres, it shows that the economic benefits of the project attracts their attention best, and they hope the project will improve the economy .The projects should not only focus on the ecological benefit, but also pay attention to the economic interests of the farmers appropriately.

(2) The poor farmers of the project area may be marginalized in the planning and implementation of the project, particularly in the decision-making process. There are significant differences between rich farmers and poor farmers in the opportunity and capacity to participate in the project. Generally speaking, the poor households in the community have very little land resources, lack skills, lack the capacity of self-investment and lack social capital, therefore, their ability to participate in forest restoration and development projects is rather weak. As a consequence, due to the lack of ability to participate, poor households may be marginalized in the implementation of the project.

(3) The ethnic minorities in the project area are vulnerable social groups, because they have unique social and cultural characteristics, have deep feelings towards their collective habits, living areas and natural resources. Their customs and culture are different from the mainstream culture, as well as economy, society and political system, their native language is often different from the official language of the country or region. Therefore, their ability to participate in the project is relatively weak, and may be marginalized in the implementation of the project.

7.1.2 Risk Controlling of Beneficiary Groups

(1) Strengthen propagation and the importance of the project. Illustrate the selected area repeatedly and in detail, farmers have right to choose whether to participate in the project by themselves. The famers who are not willing to participate in shall not be compelled to do it.

(2) In the development of public welfare forest, it is necessary to develop the economic

forest in order to increase the short-term income of the farmers.

(3) Emphasize the improvement of farmers' knowledge and skills. In the different stages of the project activities, the awareness of the farmers shall be improved by carrying out a variety of training with various contents and forms according to the different needs of farmers. And increase the income of the farmers by a variety of ways.

(4) Promote the establishment of the forestry cooperative organizations, in order to enable the vulnerable groups to have more opportunities to participate in the project. Pay special attention to the poor households, women and other vulnerable groups and give them equal opportunities which will attract them to join in the cooperative organization.

(5) During the consultations, the poor households, women and other vulnerable groups have right to speak and they should be invited to participate in the project. When choosing the projects farmers, the weak should be given more help.

(6) Provide technical training to poor households, women and vulnerable groups to enhance their ability.

(7)Encourage the minority farmers to participate in the assessment process to ensure minority farmers, especially those in remote mountain are able to participate in capacity and technical training.

(8) Ensure the participation of the representatives of ethnic minorities in the village-level project management team and professional associations of farmers / cooperatives.

(9) Cooperate with local District Ethnic Affairs Commission to gain preferential Policy for minorities.

7.2 Identification and Control of Managing Risks

7.2.1. Management Risk Identification

The management unit should be responsible for the risk, the mismanagement may lead to the failure of project. The risks include:

(1) Capital management. The project funds include loan funds and matching funds.Capital management includes the management of the two parts; (2) planning management; (3) project management.

7.2.2. The Controlling of Managing Risks

(1) Risk controlling of capital management

(1) separate the management of project and loan: The forestry department is only responsible for the implementation of the project, regardless of project loans. The financial

department is responsible for the release, recycle and other management work of World Bank's loans. From a certain aspect of view, this may also be risky for the success of the project. To overcome this risk, the relevant departments ought to be aware of the content, meaning and objectives of the project; secondly, we must establish communication and cooperation mechanisms between the project implementation department and loan administration department, and arrange other activities of the project comprehensively.

(2)Account and check the project funds separately to assure embarking. Loan funds, matching funds should be paid to farmers fully and in time.

(2) Risk control of the planning management

(The government department should well organize and coordinate the work to ensure the implementation of the project. Therefore it is important to strengthen the organization, planning and implementation.

(2) nreasonable forest management measures will result in the reversal of ecosystem, because forestation, cutting, reclamation, burning, tending, pruning and other measures are not operated according the standard technical procedure. Even if the project has no input in the industry of tourism, but the potential of tourism development should be taken into account in the planning and implementation of the project.

(3) Risk control of the project implementation and management

The function of the government department is to serve the people, as the forestry sector, after recovery of the forest, it should enhance fire prevention, hire more village rangers. The related departments should strengthen the propaganda of forests fire, especially in Tomb-Sweeping Day and seasons when farmers refine mountain for forestation. It is urgent to strengthen the dispatch and cooperation of human resources, material resources and vehicles.

7.3 Identification and Controlling of Natural Risks

7.3.1 Identification of Natural Risks

As is well known, forestry production is vulnerable to the effects of natural disasters. These disasters include forest fires, pests and diseases and climate disasters. Risk analysis follows as Table 14.

factor	Risk analysis	the degree of risk
fire	The project area has carried out a comprehensive monitoring and suppression to supervise and prevent	general
	fires. There is a little possibility that large-scale fires	

Table14: Analysis Form of Natural Risk

	happen in the project area.	
chilling injury	Qianjiang District has a subtropical humid monsoon climate, with abundant sunshine, humid climate and less chilling injury and the extent of tree damage is not necessarily destructive.	smaller
typhoon	The project area locates inland. Typhoons, storms have little impact on the project.	very small
drought	Qianjiang District has a subtropical humid monsoon climate with a mild climate, abundant rainfall. Meanwhile by selecting tree species and adopting cultivation technology, the impact of draughts can be alleviated.	very small
pests and diseases	The project forest may attacked by pest, but the project area has established a perfect pest quarantine system and monitoring network which is able to forecast accurately, prevent quickly.	general

7.3.2 Natural Risk Control

It is necessary to propagate the harm of forest fire, raise public awareness of fire prevention, establish a village-level fire protection system, take efforts to investigate and deal with cases of forest fires, improve the forecast ability of forest pests and diseases, enhance resistance through planting mixed forest and make contingency plans towards various disasters. Take mixed forestation mode of hardwood forest and coniferous forest and it can increase the possibility to avoid the snow, ice disasters and pests and diseases. We should operate according to the effective mode provided by the upper class in order to reduce the risk of unreasonable forestation. Strengthen fire prevention publicity and the fight against the fire perpetrators to eliminate the fires. The project forestation is mainly about mixed hardwood species whose ability to resist ice and snow is great, thus natural risks can be effectively defended.

7.4 Identification and Control of Technical Risks

The subprojects of the project will provide as many training opportunities as possible for the local communities and farmers including women, the poor and minorities. The trained personnel will receive the skills to participate in the forestation. Furthermore, it can mobilize more neighboring farmers and villages to participate in the project and expand the scope of benefits; it could also reduce the conflict between the stakeholders and non- stakeholders. At the same time, it is necessary to give more attention to the minority villages. Broaden the content of the training, add training subjects which are not directly related to forestation but contribute to the success of the project.

7.5 Identification and Control of Policy and Institution

The policies which are able to influence the project include both the state's macro policy and specific polices of the project. Macroscopically, the policy on protection of the ecological and environmental will not change, after the reform of the forest right system, the national forest land ownership policy will not change for a long time, so the policy and institutional risk is minimal. The project can make the most of the overall economic efficiency of the ecology of the forest; protect and improve the ecological environment; protect ecological security of the regional land; promote stable production of foodstuffs; improve the living environment of local people and increase the income of local residents. This is in conformity with the strategic objectives in the following policies: "The decision of the Communist Party of China State Council on the development of forestry", "National eco-environmental construction planning ", "Economic and Social Development ", " Forestry Development in twelfth Five-Year plan and long-term planning ".

In aspects of specific projects, the project can draw up policies through scientific design, which are good for the implementation of the project. For example, the project encourages women, the poor farmers and vulnerable groups to participate in the project; they just need to sign the project commitment and forest land management agreement according to the policies.

7.6 Identification and Control of Market Risk

(1) The risk of market price fluctuations: fruit forests in the project area are of high quality and in demand highly. Although in recent years the fruit prices continue to rise, but as the large number of products enters the market, the fruit market in the region will still be influenced to some extent. Chinese herbal medicines produced in the project are in huge demands. But market price fluctuates considerably and there exists risk in some degree. By strengthening market monitoring, paying attention to changes in market supply and demand, it will reduce the risk of price of Chinese herbal medicines by adopting a flexible marketing strategy.

(2) The risk of material price: Due to the need of the material required for this project is not much, expenses account for a small proportion in the cost and the materials needed are all market-oriented varieties, so the price does not fluctuate greatly. Therefore this project has little risk to be impacted by the price of the raw material.

7.7 The Risk of Loans, Commitments and Repayments

Loans of the project are carried out and repaid by government together. The Ministry of Finance, as Chinese representative of the borrower, is responsible for loans from the European Investment Bank, and lends the money to local governments according to the nature of the project and the original loan conditions. Qianjiang District government, as the debtor, is responsible for repaying the principal and interest timely. Debts are in Euros; the relative funds are paid by RMB; Foreign exchange risk is born by the project owner, according to the actual number. For the woodland operators, they have no risk of repayment. But the loans object of this project is the district-level financial sector, if the debt can't be repaid timely, one of the main stakeholders who involve in lending and loaning also are in risks of repayment.

The following measures can be taken to control these risks: (1) The project requires the loans to be carried out and repaid by the government; the district government, district-level financial apartment should issue letter of commitment to repay the loans, draw up policies of loan repayment, clear the liability relationship and repay the reserve funds in accordance with the relevant provisions of the Ministry of Finance. The risk of loans, commitments and repayments is low. (2) A repayment reserve account should be actively set up to raise repayment reserve in order to prevent the case of the repayment risk. (3) The forestry department shall actively promote enterprise that has the procurement capacity and other project owners to introduce the value of project in increasing carbon sequestration, and guide large enterprises, factories and owners of large industry to make purchase related to carbon sequestration, besides, set a new platform for the exchange of forests to reduce the risk of repayments.

7.8 Identification and Control of Nature Reserve's Risk

The project area is 2 km away from a nature reserve, so there is no risk of destruction of the nature reserve. But in the area which is close to nature reserve, the changes of forest land vegetation may cause the changes in the nature reserve's surrounding landscape. Therefore, the plan should take full account of the planning and development around the nature reserve, appropriate forestation mode should be selected to promote the well development of the ecological environment.

7.9 Identification and Control of Resettlement Risks

The project does not involve the issue of relocation, but in the implementation area, some people still live at regions with harsh natural conditions, shortage of natural resources,

deterioration of ecological environment. It is likely for those people to migrate, and settle elsewhere. The intention of relocation is to fundamentally solve the problem of food and clothing of the relocation population and promote regional economic development. Its ecological and social benefits are immeasurable. However, if not handled properly, the project will bring the following risks: (1) In order to solve the issue of land needed for the relocated household, the mass activities of reclamation for food, deforestation for charcoal, mining growing may undermine the ecological environment in the migration regions. (2) The problems that poor households will return to poverty again or move back still exist.

Therefore, in the relocation process, combined with the implementation of this project, we must handle the following relationships to control risks: (1) handle well the relationship between parties moving out and immigrant parties, resolve potential conflicts, and maintain social stability in the migrant area. (2) Handle well the relationship between government's support and self-reliance. When adopting multiple channels to increase investment in project of poverty alleviation and development, it is urgent to educate the migrant masses to establish an awareness of self-reliance, guide them to rely on their own hands and work hard to create a happy new life. (3) Handle well the relationship between the development of food production and construction of the pillar industries. It is not only necessary to help migrants to change the mode of production, develop grain production, and solve the problem of food and clothing as soon as possible, but also necessary to actively guide industrial development, increase revenue. (4) Handle well the relationship between the ecological construction of resettlement areas and relocation works. While focusing on industrial development, ecological environment construction is of the same importance.

7.10 Comprehensive Analysis

Through identifying relevant stakeholder groups, in accordance with the requirements of national and local laws, regulations and policies affected by the project, as well as risk and control, we list an analysis matrix of the project stakeholder in social impact assessment report. We comprehensively analyses the results of field survey of social assessment. The evaluation team of Qianjiang District subprojects makes the following conclusions.

(1) The purpose of the project on the development of forestry is in line with the Chinese government policy of foreign capital and national planning. The Qianjiang subproject of forestry development in Chongqing is supported by the special loan from European Investment Bank. The project will increase farmers' income, at the same time it continuously improves habitat environment, ecological environment and economic and social environment of the target area. This complies with the situation that our government focuses on people's livelihood and ecological construction.

(2) There exist no serious social risks in the implementation of this project, but it still needs to address some social development issues: Firstly, how to achieve the project's objectives of ecological protection and poor farmers' expectations to increase the economic income? If the farmers don't want to participate in the project voluntarily, this difference may result in conflicting objectives. For this reason, it is recommended that the forestry department consults with the affected individual farmers and stakeholders in order to reach a solution that can achieve both goals. Although the project will not have a negative impact on the development of women, the poor and the ethnic minorities and other vulnerable groups, the project has designed development plan for ethnic minority

(3) The project has received general supports from the various stakeholders. The implementation of the project will give the project area a profound impact and good social benefits on the ecological environment. All levels of government and beneficiary groups of the project area shows a positive attitude to this project.

(4) The project has received support from municipal government of Chongqing. The assessment team finds that the government, the forestry sector and the relevant government agencies have shown great enthusiasm and expressed the strong support of the project.

8. Recommendations on Project Design and Implementation

8.1 Consultation Mechanism

Make sure the purpose of carrying out consultations about participatory forms. (1)Ensure that beneficiaries of the project participate in the project voluntarily;

(2)To avoid social risks of the project, project will intervene in potential social conflicts, and develop measures to prevent risks and conflicts together with the relative beneficiaries;

(3)Design the project's technical program, including the selection of appropriate species, forestation forms and model design, land contracting arrangements after forestation and follow-up protection management through consultation with farmers;

(4) Enable low-income farmers and poor households, minority households, women and other groups to have a fair opportunity to participate in the project in the project area;

(5)The goal of the participatory consultations is to build and enhance farmers' awareness of the protection of woodland resource, improve their commitment to forest resources management and management capabilities. It is meaningful to ensure that the project goes smoothly in the long run.

We need to optimize further consultation mechanism. Take the methods of discussions, questionnaires, visits and information feedbacks in to consideration, strengthening exchanges and communication between the government and relevant departments of the project as well as stakeholder groups so that people automatically involve in the project design, implementation, manage and evaluation works of the whole process. The regular consultation meetings of project progress shall be called to collect the views of the government and relevant departments in time. Having consultation at regular intervals to refer to the government and manage agents and improving the measures by proposing different problem that may be came across and looking for solutions in time.

8.2 The Design of Participatory Forms

The main purpose of the design of participatory form is to ensure the voluntary participation of farmers. Under the circumstances of fully understanding the project, they will make a decision whether to participate, and come to understand the relevant forestation measures. The project has designed Participatory Manual of Chongqing Project of Forestry supported by the Special Loans from the European Investment Bank in order to facilitate the

participants to fully understand the requirements, conditions and procedures involved in the project. (For details see Project participatory Manual)

The project takes the following steps to design participatory modes (Table 15):

procedure	main activity/task	method and tool involved	output	main participant
Step one: advocacy and mobilization	1, the design and dissemination of leaflets 2,Promotional items through a variety of ways 3, issue application forms by the village cadres involved in the project 4, the design of project contract	City Forestry Department prepares leaflet design ,County Project office copies and issues leaflets	Villagers, including women and low-income and poor households fully understand the project information	County, township and village cadres and villagers
Step Two: Consultations workshops /village meetings	1,Introduction of project Information 2,Collect farmers' application form and classify them according to the type of land ownership 3, consulate with farmers with the following different types: Selection of tree species ,forestation mode; late tending of seedling production and supply arrangements; resource usage restrictions and compensation programs; needs of training and technical service 4, the design of project activities on-site 5, confirm the forestation area; discuss reforestation mode; density, spacing, and so on.	1,Consultation through the coordination group chaired by the design team staff. 2, representatives of different types of farmers attend the consultation 3, the field inspection	1, the list of the project involved 2, the compensation measures about species, models ,mana gement and protection, ,re source usage limits reached with farmers 3, the Project land after consultation with farmers	 on behalf of the project parties: the county and township forestry technicians the project participants: land contract farmers farmers who may be subject to resource usage limits township and village cadres

 Table15:
 Manual of participatory mode

Step three: the signing of the project agreement / contract to participate in	 1, sign the contract with farmers or village representatives participating in the project 2, announce the list of farmers involved in the project in the village 3, describe the project contents and results of the consultations 	1,post the relative information	1, contract signed with the farmers involved in the project 2, all the project information villagers get from the results of the	1,farmers involved in the project 2, the village cadres, as the contract party of the project of village collective management 3,representatives of the County
	the consultations		results of the consultations	of the County Forestry
				Department

(1) Propaganda and mobilization of farmers' applications: in the period of project's preparation, the project office is responsible for preparing paper, speech ciphering equipment, video and other media promotional materials. By issuing leaflets, spread information on billboards, blackboard newspaper, radio, television and in other various formats, we will carry out sensitization and mobilization for at least one week .And we will also organize farmers to complete an application form voluntarily

(2) Hold consultative seminars for relative beneficiaries: identify the farmers who may participate in the project by analyzing the application form, and then make an initial draft of the list of farmers. Group consultations or stakeholders' consultative seminars will be helpful in reaching the agreement in planting species, forestation mode, management and protection after forestation with the participation. The main purpose of this step is to ensure that farmers fully understand the project and make a voluntary decision;

(3) Sign the project agreement: sign the project with the farmers involved in the project or joint household and then publicize designs and results of the consultations.

Main requirements involved in the design of participatory modes:

(1)The advice is that during the design and construction of the proposed project, it should adjust to local conditions, plant trees appropriately and strengthen the ecological and economic benefits.

(2) Information must be open and transparent, so is the content of discussion. Give adequate discussing opportunities concentrated on the different views of the contract, and leave enough time to the community and farmers so that they can make a final decision.

(3) Take full account of the views of local people on the selection of tree species. By stressing the concept of "People foremost", it will enable the beneficiaries in project to fully express their way of thinking in the process of implementation and other sectors. To achieve

its interest demands as far as possible will promote the sustainability of the project.

(4) The project should guarantee the information publicity, especially for the use of contract-related land, and enhance technical training and promotion concerning with implementation of the project strengthen and improve research, carry out professional training and promotion, to make its stand resistance achieve the objectives.

8.3 Project Monitoring and its Target

Project's monitoring and evaluation is mainly for ensuring smooth implementation of project in accordance with the principle of design. To ensure the participation and benefits of target groups, it is advised that we establish monitoring indicators to ensure the beneficiary to participate in and enjoy the benefits from the project, taking these indicators into the monitoring and evaluation system for forest restoration and development. As direct beneficiaries and participants of the project, farmers are involved in the monitoring and evaluation of project so that problems can be found at any time and be amended timely.

(1) Project office regularly informs the villagers of the project progress and relevant organization work. It is recommended every project office edits, prints briefings, and posts them in the community.

(2) After large events, such as the implementation of forestation, forest protection, fire protection, centralized training and so on, the project office or the village project management team should collect the views of the participants and make records in different categories. This can improve the coming activities, and accumulate information and data for future projects.

(3) Each project area could employ a number of project households to operate day-to-day monitoring work which is necessary for making indicating system needed for project evaluation. In order to enable more farmers to participate in, monitoring households can be replaced periodically.

(4) Project Office need to develop a monitoring plan and monitoring objectives, and is responsible for organizing the implementation of the monitoring plan. It should organize the technical staff to set up a special monitoring group to carry out the monitoring work during any periods of the implement. In every forestry station, the office ought to set up monitoring plots and equip each monitoring sites with the necessary equipment and tools to ensure timely monitoring activities carried out smoothly.

8.4 **Recommendations on Implementation of the Project**

(1) Enhancing the related training about the implementation of the project, and strengthening the popularization of knowledge, carrying out the professional and technical training and promotion, will make forest stand resistance achieve the objectives. It is recommended that the relevant government departments carry out training of the national, local ecological knowledge and ecological environmental regulations with the help of Propaganda Department, Department of Education, women's organizations, newspapers, township / village and other departments. This can help farmers in the project area recognize the positive impact on regional development of forest restoration and development.

(2) Strengthen cooperation in various sectors. Because the project is a huge systematic work and it cannot make the project's effects continues only by the single action of the forestry sector alone. It is recommended that collaborative management by the forestry department and other departments such as, land, Hydraulic, agricultural, environmental protection to eliminate various unfavorable factors restricting the development of the project.

(3) Increase the funding of the project. The rural economy is project counties is relatively lagging behind, and dependent greatly on forest resources, while available funding is too small and farmer's participating enthusiasm may also be influenced. So there is a need for all levels of government departments to increase the input of the counterpart funds, to ensure that the project of forestry supported by the special loan from the European Investment Bank develops in a healthy and sustainable direction.

(4) Allows farmers to develop undergrowth and underbreeding. There are a number of poor households in the project area. The eradication of poverty is also one of the purposes in the implementation of the project. Therefore, the project allows farmers to properly develop planting and breeding under forest land, and make use of space in the understory rationally, and develop forest - poultry, forest - grass - livestock, forest – mushroom economic chain, to achieve the goal of both nourishing the ecology and improving forest farmers' income.

(5) Develop and implement preferential policies for vulnerable groups. The project should be open and transparent to ensure the participation of women, the poor, minority groups. The choice of tree species and mode of operation should respect the wishes of the local farmers. The project can be implemented under the premise that local farmers are informed of the situation and are willing to participate in it on their own or their trusted representatives.

(6) Take full account of the development of the poor minorities in poverty and give them more help. The forestry sector should take measures to share the results, protect farmers'

interests and minority traditional culture, and make it convenient for minority farmers to participate. The project should encourage the minority communities to build forestry cooperatives and other associations on the basis of traditional society organizations according to the principle of the autonomy of the villagers, in order to help the poor minority farmers get out of the vulnerable situation and ensure the sustainable development of the project.

(7) Construct follow-up management mechanisms of the project. It is advisable to absorb farmers in the project area to involve in the follow-up management. On the basis of the construction of community management team during the implement, management teams for project' follow-up regulation will be set up. Members of follow-up management team shall be elected by villagers, of whom there must be representatives of women and minorities.