European Investment Bank Loan-Financed Project
Woody Oil Development Project in Zhejiang Province

Social Impact Assessment Report

Zhejiang Academy of Forestry
Office of Zhejiang Afforestation Projects on World Bank Loans

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Chapter 1 Introduction

The woody oil development project of Zhejiang Province is a forestry special project loan-financed by European Investment Bank (EIB). The main content of the project is the *Torreya grandis* afforestation and the low-yield bamboo forest transformation. The woody oil industry is a basic and strategic industry of Zhejiang Province as a part of agriculture with great potential to improve efficiency. And the benefit improvement of the bamboo industry has been listed as one of the major transformation of agricultural technological achievements in Zhejiang provincial "the 12th Five-Year Plan". Therefore, these two sectors are encouraged by the State in line with the national industry policy. Five cities, Lin'an, Fuyang, Zhuji, Lanxi and Longquan are selected as the project targeted area to develop *Torreya grandis* and bamboo industry, aims to further promote the efficiency of forestry and foresters’ income by developing the woody oil and the bamboo industry, and to expand experience and demonstration nationally as well.

The main objective of this social assessment is to ensure that the design and implementation of the project can promote relevant interest groups, especially the minorities, women, the poor farmers and other disadvantageous social groups, to participant in and benefit from this project. At the same time, the social assessment needs to identify and analyze the social risks and opportunities of different interest groups. A set of data and information of the baseline survey have been established through this social assessment, as a reference for future monitoring and evaluation.

The contents of social assessment mainly are:

(1) To assess and clarify the will and reasons for farmers to
participate in the project;

(2) To understand the obstacles that influence the farmers to participate in such project activities;

(3) To find the project's benefits for different beneficiary groups (and possible adverse effects) and to make suggestions/recommendations on how to enhance project benefits (to reduce the adverse effects);

(4) To analyze and propose the approaches for disadvantaged groups to actively participate in the project;

(5) To set up basic indicators for the monitoring and evaluation of the project.
Chapter 2 Procedures, Tasks and Methods of the Social Assessment

2.1 Procedures and Tasks of the Social Assessment

The social assessment procedures have four steps:

2.1.1 Survey Preparation

(1) A questionnaire and survey tables have to be designed, and survey data from levels of county, township and village are collected through interviews with key persons;

(2) National and provincial information and documents concerning forestry development and related policies are collected.

2.1.2 Sampling

Based on each city's geographical location, ecological characteristics, forest resources, forestry industrial base and other factors, three typical project cities are sampled to carry out the social assessment, among which three townships are selected from each city and three villages are selected from each town for field survey. Selected samples are shown in table 2-1.

<table>
<thead>
<tr>
<th>Cities</th>
<th>Towns</th>
<th>Villages</th>
<th>Number of Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lin’an</td>
<td>Qianchuan</td>
<td>Kuotan, Machebu, Qingshandian</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Banqiao</td>
<td>Douchuan, Qiukou, Toayuan</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Linglong Street</td>
<td>Linglong, Qiaoling, Xiangli</td>
<td>30</td>
</tr>
<tr>
<td>Zhuji</td>
<td>Fengqiao</td>
<td>Quantang, Daxi, Daganxi</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Lingbei</td>
<td>Meiwu, Lingding, Jinwan</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Dongbaihu</td>
<td>Shangjiahu, Xinshangquan, Xiongju</td>
<td>30</td>
</tr>
<tr>
<td>Longquan</td>
<td>Lanju</td>
<td>Anji, Guantian, Dasai</td>
<td>30</td>
</tr>
</tbody>
</table>
2.1.3 Field Survey

Most surveys were conducted at village-level and interviewed with farmer’s group.

In the selected sampling cities, towns and villages, the main survey includes:

(1) To visit municipal forestry bureaus, and identify potential social conflicts between the project and the reform of forest land use right;

(2) To evaluate the policy through interviews and reference forestry policy documents;

(3) To interviews with township leaders and collect social economic data of the selected towns;

(4) To identify the stakeholders in the sampling village through interviews with village leaders; to understand the farmers' behaviors in forestry production, their livelihood and the willingness to participate in the project through interviews with farmers who are selected by grade sorting of the farmers' wealth level, and more survey done for women and minorities; to understand the vegetation, utilization and its types of the forest land-use through field surveys of land resources at village-level.

2.1.4 Data Analysis and Report Writing

The collected first-hand and second-hand data are recorded and dealt, drawing relevant conclusions and writing the social assessment reports by analysis and comparation.

2.2 Methodology

Methods of the social assessment are mainly adopted to extensively
collect all kinds of information, and thus the content of two items "social factors affecting the project implementation" and "possible impact of the project implementation on beneficiaries” are analyzed and measured. The following two investigation methods are mainly applied in the on-site assessment:

2.2.1 Literature Method (Second-hand Material Method)

Literature reviews and collection of socio-economic statistics and information related to project are conducted to understand more background and situation of socio-economic development in general in the project area, so as to prepare a field survey scheme and an interview questionnaire.

2.2.2 Participatory Rural Appraisal Methodology

The participatory rural appraisal methodology is applied to ensure different interest groups and different types of farmers from the village participate in making decision in the project, including open-ended semi-structured interviews, group interviews, community resources field investigation, participatory score sorting, the matrix analysis of the project impact, etc.
3.1 Reform of Collective Forest Right System

In 2008, the "Opinions on Boosting the Reform of Collective Forest Property Right System in an All-round Way" was issued by the State Council. The "Opinions" put forward that the contract period of forest land-use right is 70 years, and when the contract period expires, the forest land can be continually contracted in accordance with relevant state regulations. Under the premise that the use of forestland does not change, the contractor may subcontract, lease, transfer, buy a share or mortgage the owned contractual management right of forestland and the ownership of forest legally, or use them as conditions for investment and cooperation, to develop and utilize the contracted forestland and woods according to law. This arrangement of property rights system provides contractors greater freedom of using and allocating the land resource, and mobilizes the farmers' enthusiasm of utilizing forestland resources as well.

Zhejiang is a southern collective forest province with collective forest accounting for more than 95% of all the forest. In the early 1980s, Zhejiang province launched a forestry working framework of "stabilizing the ownership of the mountain and forest, identifying the private hilly land and determining the forest production responsibility", which was the first stage of Zhejiang provincial reform of collective forest property right system. Then a two-tier forestry operation system, under which centralized operation and decentralized operation are combined on the basis of household contracted management, has been established in our province with 72% of the province's collective forest being contracted by farmers whose enthusiasm of forestry production and management was
greatly mobilized.

Between the late 1980s and early 1990s, which was the second stage of the provincial reform of collective forest property right system, the principle of "clarifying the ownership, stabilizing the contract right, and invigorating the management right" was adhered to. With the implementation of "three rights" separation, the large-scale intensive management of the forestry has been promoted. In the subsequent transfer of forestland, leasing, buying a share and other operation forms emerged.

Entering the new century, Zhejiang Province has launched a supporting reform of collective forest property right, which included standardizing the transfer of forest resources, strengthening the registration and management of forest rights, developing policy-based insurance for forestry industry, fostering professional cooperatives, and promoting forestry investment and financing reform. With the overall progress of the supporting reform, the transfer of forest resources have been accelerated, the forest assets have been revitalized, the operating mechanism has been changed, the organization degree has been promoted, farmers’ income has been increased, and the production enthusiasm has been improved.

The majority farmers of the province have gained the maximum benefits from the reform of forest property right system. In 2012, per capita forestry net income of Zhejiang Province's rural residents increased 13% over the previous year; the contribution rate of forestry increased income to farmers' income growth was 21.3%. In nine key forestry counties like Lin'an and Longquan, 50% of the farmers' increased income came from forestry.

3.2 Other Relevant Policies

Zhejiang Province highly values the development of *Torreya grandis*
and the transformation of low-yield bamboo forest. “The Twelfth Five-Year Plan for Forestry Development of Zhejiang Province” proposed to implement promotion project of bamboo sector, base construction project of special dry fruit and fresh fruit, fine-processing industry project and forest road construction project, simultaneously and powerfully supported the development of \textit{Torreya grandis} and intensive management of the low-yield bamboo forest. Zhejiang province has issued “Views on Accelerating the Development of Agricultural Leading Industry and Promoting Modern Agriculture Construction”, in which it clearly put forward that development and production funds should be mainly used to support major area and key links of leading industry, and \textit{Torreya grandis} and \textit{Phyllostachys heterocycla} (Moso bamboo) are major support objects. In 2011, Zhejiang Provincial Department of Finance and Zhejiang Provincial Department of Forestry issued "The guideline on integration and coordination of local funds to support the development of the woody oil industry" (Zhejiang Financing & Farming (2011) No. 288), focusing on the support of development of the \textit{Torreya grandis} and other industry. Zhejiang province highly values the construction of industry associations of \textit{Torreya grandis} and bamboo, and sets up industry associations of \textit{Torreya grandis} and bamboo respectively in 2002 and 2003, which play an important role in strengthening industry self-discipline, standardizing industrial management, and promoting healthy and orderly development of \textit{Torreya grandis} and bamboo industries.

With the Government’s strong support, Zhejiang Province is currently implementing a number of provincial forestry projects related to this project. See table 3-1.
<table>
<thead>
<tr>
<th>Name of Item</th>
<th>Main Contents</th>
<th>Implementation Area</th>
</tr>
</thead>
</table>
| Woody oil industry improvement                   | 1. Develop *Camellia Oleifera*, *Torreya grandis* and *Carya cathayensis*;  
2. Construction of forest road, irrigation facilities and other supporting facilities                                                                                                                   | The forest counties (county-level cities or districts) of Zhejiang Province, including Lin’an, Fuyang, Longquan, Zhuji, and Lanxi |
| One million mu (1ha=15 mu) of bamboo sector benefit-improvement project | Promote and demonstrate the following techniques:  
1. Superior and new economic bamboo industry development technology;  
2. Eco-efficient management techniques of Moso bamboo forest;  
3. Eco-efficient cultivation techniques of shoot-used bamboo forest with small and medium diameter like *Phyllostachys praecox*, etc.;  
4. Efficient management techniques of *Dendrocalamopsis oldhamii*;  
5. Safety processing technology of bamboo shoots;  
6. Bamboo deep processing key technologies                                                                                                                   | 14 counties (county-level cities or districts), including Lin’an, Fuyang and Longquan. |
| Forest road construction                          | Forest road 90,000 km, among which main road open to traffic is 48,000 km, and work service road is 42,000 km.                                                                                                  | 53 counties (county-level cities or districts), including Lin’an, Fuyang, Longquan, Zhuji and Lanxi |
| Modern forestry park                              | Build three main categories of modern forestry park including timber, economic forest, flowers and nursery stock in areas with good infrastructure, which mainly focus on promoting elite cultivar with cultural techniques, roads, irrigation and other infrastructures. | Counties (county-level cities or districts) in the province, including Lin’an, Fuyang, Longquan, Zhuji and Lanxi |
| Forest product fine-processing industry project    | Encourage and nurture four wood process industries including bamboo products, artificial board (floor), wooden handicrafts and wooden furniture, as well as non-wood forest products processing industries like forestry food processing, forest bio-pharmaceutical and domesticated animal fur processing. | Key counties (county-level cities or districts) of forest products processing industry |
Chapter 4 Major Stakeholders of the Project

We have analyzed the stakeholders in the social assessment, classified and identified the stakeholders. See table 4-1.

4.1 Village-level Stakeholders

Leading households: farmers who contract for large areas of forestland, and holders with the current use right of forest land and management right.

Medium-sized households: farmers who own medium-sized forestland;

Small households: farmers who own very small forestland area and lack the technology and finance as well, but can provide labour for the implementation of the project. The establishment of cooperative institution and groups made up of farmers are needed to help the small-scale households to participate in the project.

Village leaders and village committees, as the main organizers of project implementation, are the major coordinators of negotiations and decision-makings, and the mediators of land contract and auctions as well.

4.2 Township-level Stakeholders

The leaders of the township and the technology promoters are the major organizers and technical service providers to implement afforestation, who also supervise the project construction and the use of forestland.

4.3 County-level Stakeholders

County-level Forestry Bureaus participate in project design,
implementation, monitoring and evaluation; and County-level Financial Bureaus guarantee loans.
<table>
<thead>
<tr>
<th>Stakeholders and village committees</th>
<th>Roles and functions in the project</th>
<th>Views and expectations of the project</th>
<th>Recommendations for project design</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Village-level stakeholders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Leading households</td>
<td>- As the forestland contractors, they are the principal beneficiaries of the project.</td>
<td>- As the usufruct holders of the forest land, they are very interested in participating in the project.</td>
<td>During the project design, consulting and negotiation with them about the choice of tree species etc. shall be conducted.</td>
</tr>
<tr>
<td></td>
<td>- Provide the demonstration for small and medium-sized farmers.</td>
<td>- Through improving the forestry land productivity, farmers' income will be increased.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Experienced, have the advanced afforestation techniques and investment capabilities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Medium-sized households</td>
<td>- Contract medium-sized forestland area from the village.</td>
<td>- A higher interest in the project.</td>
<td>They are encouraged to participate in the project design, implementation and evaluation.</td>
</tr>
<tr>
<td></td>
<td>- Major beneficiaries of the project.</td>
<td>- Increase revenues through the afforestation.</td>
<td></td>
</tr>
<tr>
<td>- Small households</td>
<td>- Own only small forestland area with low income.</td>
<td>- Participate in the project equally.</td>
<td>They are encouraged to participate in the project design, implementation and evaluation.</td>
</tr>
<tr>
<td></td>
<td>- The labour force of the afforestation.</td>
<td>- Increase revenues through participating in the project.</td>
<td></td>
</tr>
<tr>
<td>- Women</td>
<td>- Take care of the family and do the farm work.</td>
<td>- Raise income by planting economic forest.</td>
<td>They are encouraged to participate in the project design, implementation and evaluation.</td>
</tr>
<tr>
<td></td>
<td>- Participate in some forestry activities.</td>
<td>- Receive technical training in the project.</td>
<td>They are provided with specialized training, such as forest conservation, breeding and how to manage the economic forest.</td>
</tr>
<tr>
<td>- Village leaders and village committees</td>
<td>- Major organizers of the project.</td>
<td>- Promote the development of village economy.</td>
<td>Consult with village cadres.</td>
</tr>
<tr>
<td></td>
<td>- The advocates and initiators of farmers' associations.</td>
<td>- Improve the environment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Township level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Township leaders</td>
<td>- Afforestation coordinators.</td>
<td>- Township's economic development.</td>
<td>Provide technical training.</td>
</tr>
<tr>
<td></td>
<td>- Supervise the tree planting and maintenance.</td>
<td>- Improve the ecological environment.</td>
<td></td>
</tr>
<tr>
<td>- Technical staff from township forestry station</td>
<td>- Participate in project design.</td>
<td>- Improve the efficiency of forest management.</td>
<td>Train the promotion methods.</td>
</tr>
<tr>
<td></td>
<td>- Provide related technical services of breeding, cultivation and conservation in later period.</td>
<td>- Improve personal qualifications and abilities through training.</td>
<td>Provide technical training.</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>Roles and functions in the project</td>
<td>Views and expectations of the project</td>
<td>Recommendations for project design</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td><strong>3. County level</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- County Forestry Bureaus</td>
<td>➢ Develop the afforestation program&lt;br&gt; ➢ Manage, coordinate, monitor and evaluate the project implementation, and project acceptance inspection&lt;br&gt; ➢ Coordination with County Finance Bureaus for the loan guarantees&lt;br&gt; ➢ Train the farmers in forestry production</td>
<td>➢ Achieve the ecological sustainability of forest resources&lt;br&gt; ➢ Improve land efficiency and productivity&lt;br&gt; ➢ Increase farmer’s income</td>
<td></td>
</tr>
<tr>
<td>- County Forestry Service Stations</td>
<td>➢ Participate in the project design&lt;br&gt; ➢ Provide farmers with related technical services of breeding, conservation and economic forest management&lt;br&gt; ➢ Train the farmers</td>
<td>➢ Enhance service capabilities&lt;br&gt; ➢ Receive training through the project</td>
<td></td>
</tr>
<tr>
<td>- County seed stations</td>
<td>➢ Provide tree seedlings to farmers&lt;br&gt; ➢ Provide relevant training to farmers</td>
<td>➢ Improve forest land productivity by providing high-quality seedlings</td>
<td></td>
</tr>
<tr>
<td>- County Financial Bureaus</td>
<td>➢ Provide loan guarantees on behalf of the county governments</td>
<td>➢ Ecologically sustainable development&lt;br&gt; ➢ Economic development</td>
<td></td>
</tr>
</tbody>
</table>
Chapter 5 Major Findings of the Social Assessment

5.1 Recommended Project Content from Different Regions

Zhejiang Province is the birthplace and major producing area of *Torreya grandis*, also the main producing area of bamboo. Among the five project cities (Lin'an, Fuyang, Zhuji, Lanxi and Longquan), Zhuji is the main producing area of *Torreya grandis*, which is located in Kuaiji Mountain; Fuyang and Lin'an are also the *Torreya grandis* producing area which are located in Tianmu Mountain; Lanxi and Longquan are key counties of *Torreya grandis* producing when it is expanding to the south. Lin'an, Fuyang and Longquan cover a large area of bamboo, due to the lack of reconstruction funds, plentiful of these bamboos are low-yield bamboo forest, which need transformation and efficiency improvement. Thus, according to the local land resources, climate characteristics, socio-economic situation and other relevant conditions, *Torreya grandis* afforestation and the low-yield bamboo forest transformation are recommended by local governments through participatory consultations. Detailed information is shown in table 5-1.

<table>
<thead>
<tr>
<th>Project area</th>
<th>Type of afforestation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lin'an</td>
<td><em>Torreya grandis</em> afforestation</td>
</tr>
<tr>
<td></td>
<td>Transformation of low-yield bamboo forest</td>
</tr>
<tr>
<td>Fuyang</td>
<td><em>Torreya grandis</em> afforestation</td>
</tr>
<tr>
<td></td>
<td>Transformation of low-yield bamboo forest</td>
</tr>
<tr>
<td>Zhuji</td>
<td><em>Torreya grandis</em> afforestation</td>
</tr>
<tr>
<td>Lanxi</td>
<td><em>Torreya grandis</em> afforestation</td>
</tr>
<tr>
<td>Longquan</td>
<td><em>Torreya grandis</em> afforestation</td>
</tr>
<tr>
<td></td>
<td>Transformation of low-yield bamboo forest</td>
</tr>
</tbody>
</table>
5.2 Farmers' Wishes to Participate in the Project

The survey results show that 97% of the farmers involved in such projects are highly motivated, who believe that the implementation of such projects can increase family incomes, promote the employment, improve the living environment and life quality, thus, they are willing to participate in the project. The other 3% of the farmers have no willing to participate in the project, mainly because these families do not engage in forestry related work, instead, their household incomes mainly come from aquaculture industry (raising pigs, fish or sericulture), real economy, transportation and going out as migrant workers, or with only the elderly at home, there being no surplus labourers for forestry-based earning activities.

5.3 Different Stakeholders' Views on the Project

The survey results showed that different stakeholders (leading households, medium-sized households, small households and women) agree that in the long term, the implementation of the project will increase revenues, improve the ecological environment and promote people's quality of life. Compared with those leading households, the project has more obvious impact on medium-sized and small households, who do not have enough money to put into this project. If they are hired through the project, their income will get increased as well. For women, through participation in the project, they will get paid, improve their lives and raise their status in families and communities, but the project will increase their working burden. To the leading households, they hope for increased forestry investment, so as to expand their production scale.
Table 5-2 Analysis of different interest groups' views

<table>
<thead>
<tr>
<th>Leading households</th>
<th>Medium-sized households</th>
<th>Small households</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It can improve the ecological environment and increase the farmers' family income</td>
<td>1. To improve the ecological environment and enhance the quality of life</td>
<td>1. If they are hired through the project, their income will get increased</td>
<td>1. The impact is not obvious</td>
</tr>
<tr>
<td>2. In the long run, it can increase revenue</td>
<td>2. In the long run, it can increase revenue</td>
<td>2. The short-term gains is not obvious, instead, it may affect their household income</td>
<td>2. If their family members get jobs through the project, this will increase their family income</td>
</tr>
<tr>
<td>3. The short-term gain is not obvious</td>
<td>3. The short-term gain is not obvious</td>
<td>3. They do not have enough money to put into this project</td>
<td>3. They are highly motivated to participate in the project as it can increase revenues</td>
</tr>
<tr>
<td>4. To increase the capital investment and expand the production scale</td>
<td>4. Farmers with middle-income lack the capital and labour to implement this project</td>
<td>4. Need relevant training in order to better participate in the project</td>
<td>4. The project will increase their working burden</td>
</tr>
<tr>
<td>5. It is necessary to provide the corresponding training</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In general, to different interest groups, the project has both positive and negative effects:

(1) Positive effect: to improve the ecological environment and promote people's quality of life; to increase forestry output value and forestry income; to provide job opportunities so that vulnerable groups (such as small households and women) can get job opportunities and increase their income; women can get paid by participating in the project, so as to improve their lives and raise their position in families and communities.

(2) Possible negative effect: the project requires abundant fund input but it is difficult to yield profit in the short term, so farmers may lack the funds in the short term; the project demand for labours may raise local labour costs, so employment of local labourers is recommended and those of low income should have prior employment; although the project will
create some jobs, low-income farmers have no advantages over leading households when competing the jobs, so it is proposed that the project shall provide relevant trainings for some vulnerable groups such as women and low-income farmers, who should get the priorities under the same conditions.

In addition, the successful execution of the project also depends on the cooperation between the project implementers and local foresters, as the relationships of different types of farmers are differently with the project.

In the survey, it is also found that forest land is not averagely arranged, some farmers have large area of forestland, while others own a small area. As a result, they shall be given different concerns in the project. See table 5-3.

Table 5-3 Relevance of different types of farmers with the project

<table>
<thead>
<tr>
<th>Farmers</th>
<th>Relevance of socio-economic characteristics with the project</th>
<th>Countermeasures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading households</td>
<td>Accounts for 22% of all households; there are 4-67 hectares of forestland or mountain for forestry production; Highly dependent on forestry revenues; Very interested in the project and related to the project in a high degree.</td>
<td>Pay great attention to them, mainly negotiate and consult with them.</td>
</tr>
<tr>
<td>Medium-sized households</td>
<td>Accounts for 32% of all households; Each family has an average of 0.7-3 hectares of forestland or mountain field contracted from the village; Dependence on forestry income is relatively high; Associated with the project in a relatively high degree.</td>
<td>Pay attention to these farmers, especially to the farmers whose income mainly comes from forestry.</td>
</tr>
<tr>
<td>Small households</td>
<td>Accounts for 46% of all households; The average contracted woodland of each household is less than 0.7 hectares; Low dependence on forestry income; Relevance to the project is not so high.</td>
<td>Avoid the marginalization of small farmers, especially those who are low-income households.</td>
</tr>
</tbody>
</table>

5.4 Female Labor’s Role in the Project

Household survey indicates that men are the main labor force in forestry production. See table 5-4.
### Table 5-4 Labor resource allocation

<table>
<thead>
<tr>
<th>Activities</th>
<th>Male (the average percentage)</th>
<th>Female (the average percentage)</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breeding</td>
<td>63</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Plant</td>
<td>86</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Management and protection</td>
<td>79</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Pest control</td>
<td>84</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Felling</td>
<td>89</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>55</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

The male are the main labor in forestry production activities while the female only take few part of work.

As shown by the above table, the male account for 76% of forestry production activities and the female less than 24%.

Interviewees believe that conventionally, women are not suitable for most forestry production activities, such as felling and transportation and other high-intensity work which is hard for them.

While in this project, except for felling bamboos and burrowing that require physically high-demanding work, the rest, like to grow seedling, forest management, cultivation, disease and pest controlling picking, are all suitable for women. Therefore, participatory consultations should be adopted to help women to participate in decision-makings and design activities. Besides, the project should provide training opportunities to women to prevent them from being marginalized in the project, and it should actively support their participation and increase their participation degree.

### 5.5 Impact on Minorities

The survey shows that there is no minority within the project area, so the project will not have any direct impact on minorities.

### 5.6 Project Land

The land used in this project is forestland with no cultivated land
involved. There are no residents within the project area so no farmers need to be relocated.

5.7 Services Provided by Governments

Governments at all levels from project cities provide policy advisory and complaint mechanism, from which farmers can receive advisory services on policy and technology, and complaint opportunities as well.

(1) Forestry service window of the Municipal Administrative Service Center, with its office generally located in the municipal public service center. It provides the administrative examination and approval of forestry services, such as forest ownership or use right certificate registration and re-submit, forests dispute resolution process, quarantine permits and transport permits of forest products and their products, trees and flowers and nursery stock, forest land requisition, preliminary examination of occupation, forest pest prevention and forest plant quarantine supervision, as well as hunting licenses issuing. With its one-stop service mode, some simple items could be accepted and concluded through the day. Service process: acceptance → material first instance → exploration → publicity → final judgment → issuing approval decision→ certificating and conclusion.

(2) The forestry services platform of township (street) administrative service hall which deal with administrative approval of forestry services with authorization.

(3) The relative departments and units of forestry bureau will accept the corresponding policy advice and complaints respectively. Town forest stations also accept the policy advice from farms.

(4) Convenient service centers in administrative villages and communities will accept all kinds of social affairs.
Chapter 6 Social Risk Analysis

6.1 Opportunity Differences Between Leading Households and Small Households

Generally speaking, with more forest resources, the leading households have strong forestry production and innovation abilities, and the advantages of funds and technology. The survey indicates that the leading households with large area of forestland or mountain field account for 22% of the total households, who will obtain high benefits from the project; while the medium-sized and small farmers account for more than 78% of the total households, who own a relatively small forestland and thus are less enthusiastic than the leading households on the project. During the stage of project design and selection of farmers, if the project gives priority to the leading households as the main beneficiaries without considering the medium-sized and small farmers, it is likely to restrict the development opportunities of small land contractors or low-income farmers, which will result in different opportunities for the leading households and small farmers in participating in the project.

6.2 Lack the Ability to Participate in the Project for Poor and Vulnerable Farmers

Based on the stakeholder analysis and evaluation results of project impact, the social impact matrix is listed in table 6-1.
### Table 6-1 Comparison of leading households and small households

<table>
<thead>
<tr>
<th>Farmer</th>
<th>Positive effects</th>
<th>Negative effects</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leading households</td>
<td>High participation ability</td>
<td>No significant effect</td>
<td>Main beneficiaries of the project</td>
</tr>
<tr>
<td>Small farmers</td>
<td>Weak participants ability</td>
<td>Lack of capital leads to limited participation opportunities</td>
<td>There is risk of them being marginalized if no measures will be taken</td>
</tr>
</tbody>
</table>

At present, in respect of the investment and forestland scale, the leading households have much higher participation abilities than the medium-sized and small households, with much higher expected benefits from the project as well. Besides, it is easier for leading households to obtain loans and other supports, which further widens the participation ability compared to medium-sized and small ones. If the stakeholders do not participate in consultation and planning, it is possible that the low-income farmers and vulnerable groups will be marginalized. Even the auction of land-use right indicates that low-income farmers are not likely to win the action due to lack of labour, personal ability, social network and social capital.

Therefore, during the project preparation, it is necessary to adopt the participatory consultation to improve the participation abilities of small farmers and vulnerable group. If they do not want to be directly involved in the project, they can transfer the forest land-use right to the leading households, under the precondition that the two sides must reach a consensus about the benefit sharing mechanism in later period.
Chapter 7 Suggestions to Project Design and Implementation

7.1 Participatory Consultations

In determining the implementation bodies of the project, the participatory consultation mechanism is established to ensure that all target groups will naturally and equally participate in the project decision-making, and the certain of project content, afforestation patterns and management and protection measures.

(1) Community mobilization and voluntary application: the main task is to inform farmers of the project area and other interested farmers of the project objectives, the selection criteria of the project content, funding, application conditions and procedures for participating in the project, forest protection and management responsibilities for sustainable resources etc. and to issue the application forms.

(2) Relevant stakeholders' consultations: the major task is to negotiate with the applicants to confirm the afforestation species, afforestation area and technical models, so as to determine the list of implementation bodies who voluntarily participate in the project. Then the on-site investigation and execution of the project land will be carried out.

(3) Agreement signature: the main task is to design the agreement, including the area, afforestation species, the rights and obligations of both parties, distribution methods of the economic income of the project, etc. Negotiate the content of the agreement with farmers and then sign the agreement after the consensus is reached.
7.2 Provide more Opportunities for the Vulnerable to Participate in the Project

(1) In order to increase opportunities of females to participate in the project, and to ensure their beneficiaries, women involved in the project should participate in all stages of the project, including planning, implementation, monitoring and evaluation, etc. In the stage of project design, to consult and negotiate with women is an important step to ensure their active participation in the project, and interviews with female groups should be carried out; the project should ensure that women receive the forestry technical training; it should also encourage women in project villages to set up support groups or cooperative organizations, and try to make use of relevant policies to support them in the project.

(2) With a relatively small area of forestland but a large number of households, the medium-sized and small households should be paid special attention to while choosing the project to ensure their participation in consultations and policy-decisions; in the implementation process, they shall be actively provided with policy support and technical services. It is important to strengthen the technical training for the medium-sized and small farmers to help them to grasp technologies of afforestation, pest control and others as soon as possible.

7.3 Health and Safety Management of Workers

In the implementation process, appropriate measures shall be taken to ensure the health and safety of the workers.

(1) Based on the regulations and standards, such as the "Safety Production Law", "Regulations on Safety and Health in Forestry Work", "Occupational Health and Safety Management Systems Specifications", the policy of "Safety First, Prevention First" is carried out to ensure the
safety and health of workers in the process of production and work.

(2) Deep development of safety production management. Education on safety production should be carried out actively with the dissemination of national policies, laws, regulations and safety knowledge on safety production. Safety education for forestry leaders, workers, farmers and migrant workers should be strengthened to constantly enhance their self-protection awareness, improve their prevention capabilities of security accidents, and eliminate incidents caused by negligence and careless. Besides, a safety management system shall be developed and, if necessary and conditional, the injury insurance shall be purchased to provide protection to personal accidental injuries.

(3) Safety management of objectives shall be executed, and safety production responsibility system shall be practiced. The production responsibility system of safety objective management shall be continually improved and implemented, dividing safety production targets into pieces. Responsibilities shall be taken by each basic level, each position and targeted person, at the same time, the tracking and supervision shall be strengthened.

(4) Forestry workers shall master the techniques of safety production. And site safety management shall be strengthened to ensure labor safety. During the process of seed carrying, stand clearance, soil preparation, digging and planting, workers should be careful to prevent slipping and falling. While in bamboo felling, operators shall maintain a certain distance from others to prevent injuries when bamboos fall down.

(5) Preparation of labor protection and health care, such as work clothes, safety glasses, protective gloves, straw hats, sunstroke prevention drugs and anti-virus antidote drugs. The harmful environmental impact on work shall be minimized to protect the safety of field work.

(6) Pay attention to fire use in the field to prevent forest fires and
resulting casualties.

(7) Popularize the first aid knowledge of forestry production, so that a timely on-site rescue will be carried out in emergency.

(8) Improve the emergency management of forestry safety production, daft the contingency plans, and handle the accident investigations.

7.4 Monitoring and Evaluation of the Social Impact

7.4.1 Establishment

To ensure the achievement of project objectives, a monitoring and evaluation system of social impacts will be separately established at levels of province, county and township; the monitoring of social impact and participatory design effects is an important part of the monitoring and evaluation of the overall project performance. The monitoring and evaluation system of social impacts of the project is as follows:

Table 7-1 Monitoring and evaluation framework of the project social impact

<table>
<thead>
<tr>
<th>Step</th>
<th>Main tasks and content</th>
<th>Responsible agencies and levels</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| 1. Establish the monitoring and evaluation system and personnel team | - Determine the task of the provincial-level monitoring team  
- Confirm personnel  
- Identify job responsibilities | Provincial project office | Personnel support |
| 1.1 Establish the provincial-level monitoring team | - Determine the task of the county-level monitoring and evaluation team  
- Confirm county-level personnel  
- Identify job responsibilities | County Forestry Bureaus | |
| 1.2 Establish the county-level monitoring team | - Determine the task of the project monitoring and evaluation  
- Confirm personnel | Township forestry stations | |
| 1.3 Establish the basic-level (township and villages) monitoring team | - Select and confirm the ecological indicators  
- Select and confirm the economic indicators | Provincial- and county-level project offices | |
<table>
<thead>
<tr>
<th>Step</th>
<th>Main tasks and content</th>
<th>Responsible agencies and levels</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Establish the framework and identification methods of the monitoring and evaluation</td>
<td>- Set up the performance monitoring and evaluation matrix: Content and tasks of the monitoring and evaluation Methods of information collection Objects and levels Responsible agencies and levels</td>
<td>Provincial project offices County-level project offices shall participate in the feedback</td>
</tr>
<tr>
<td>4.</td>
<td>Train all levels of monitoring and evaluation staff</td>
<td>The training will be held for 2-3 days which mainly includes: Purposes and tasks of the monitoring and evaluation Procedures and methods of the monitoring and evaluation Participatory methods: group interviews, household interviews and on-site investigation Questionnaire Collect statistics data and other secondary data</td>
<td>Provincial personnel train people form counties and townships</td>
</tr>
<tr>
<td>5.</td>
<td>The bottom-up implementation of the monitoring and evaluation</td>
<td>- Data collection from project villages - Township data collection - Integration-analysis of the county-level - Write the monitoring and evaluation report</td>
<td>County-level forestry professionals Township-level forestry technicians</td>
</tr>
<tr>
<td>6.</td>
<td>Circulate and share the results of monitoring and evaluation</td>
<td>Monitoring and evaluation results of the county-level will be submitted to the provincial project office According to the results, necessary adjustments will be made to the implementation of the project</td>
<td>County-level project offices Provincial-level project offices</td>
</tr>
</tbody>
</table>

### 7.4.2 Indicators

The following indicators are recommended:

(1) The number of villages, entities and the farmers of different land-scale that participate in the project;

(2) The number of farmers who are affected and participate in the consultations and its proportion (%) to all farmers.

(3) The number of women who participate in and benefit from the project and its proportion (%) to the total number.

(4) The total amount of labor cost (yuan/household) got by the
farmers who attend the reforestation, management and protection of the forest in the project after 5 years.

7.4.3 Methodology

It is recommended that a bottom-up and participatory monitoring and evaluation system shall be established. The participation of communities and farmers is the main feature. Recommended specific steps are listed below:

(1) Collect farmers' information via questionnaires, recordings and the open-style interviews with farmers;

(2) Score the performance, benefit and profit of the project through group interviews (including female groups), informant interviews and cooperative representatives;

(3) Institutional interviews are carried out in the county and township levels to collect performance information, among which the collected quantitative and qualitative information will be analyzed to draw conclusions of impact and performance. Then write reports and share the monitoring and evaluating information with relevant departments.

7.4.4 Implementation

(1) Monitoring the effect of participatory design in the project design stage: the county project offices are responsible for the monitoring and evaluation of participatory consultations effects of village-level planning;

(2) Monitoring and evaluating of the implementation stage: the monitoring and evaluation of the participation, benefits and social effects of farmers shall, in theory, be carried out simultaneously with the monitoring and evaluation of the project performance. Generally speaking, the participation of the implementation and data collection of
social effects should be dynamic and coherent. Township forestry stations shall be responsible for the collection of the dynamic data of social impacts.

(3) According to the collected data, the assessment of the project's social impacts shall be conducted every six months. The results and conclusions of the assessment should be an integral part of the semi-annual and annual progress reports. The county project offices are responsible for the monitoring and evaluation reports of the project effect, and the reports submission to the provincial project office.
Annex 1 Participatory Consultation Report of Woody Oil Development Project in Zhejiang Province

To ensure that all target groups (beneficiaries) from project cities of Zhejiang Province are able to take part in the project voluntarily and equally, each project city performed the comprehensive participatory consultations of the project, and relevant information is briefed as follows:

I. Overview of the participatory consultations

(i) Time and scope

From April, 2013 to May, 2013, such five project cities as Lin'an, Fuyang, Zhuji, Lanxi and Longquan launched the participatory consultations successively, which involved all 64 towns (residential districts), 685 administrative villages and 33,919 households (there are no poverty families and ethnic minorities in the project area).

(ii) Working staff

Participatory consultations staff consist of provincial social assessment experts and staff members from project cities, making 44 working groups in the province with 149 staff members.

(iii) Implementation methods

The provincial social assessment experts guided and participated in the consultations of Lin'an, Zhuji and Longquan directly; while the consultations of Fuyang and Lanxi were conducted by themselves after working staff there received uniform training from provincial social assessment experts.

II. Approach of participatory consultations

Participatory consultations are divided into three steps: first, the community mobilizations and voluntary applications; second, consultations of relevant stakeholders; and the last, signing a project agreement.

(i) Community mobilizations and voluntary applications

1. Community mobilizations. All target groups (beneficiaries) fully understand the information related to the project through the project introduction. Project information mainly includes: project objectives, project content, project fund raising, application conditions and procedures, alternative cooperation forms, environmental protection and management responsibilities of sustainable resources.

2. Voluntary application. Its main content includes: the village committees distribute project profiles to the villagers 10 days before the participatory consultations; the village leaders, county-level and township-level forestry technicians organize the village mobilization meetings to publish project information, and explain in details of the project content to the participants (all household representatives are required to attend the meeting); issue project application forms to farmers and assist them farmers in completing the forms.
During the participatory consultations, five project cities posted 990 copies of the project introduction, distributed 9,563 project brochures, and issued 3,725 copies of the application forms with 796 copies recovered and a total of 457 subjects applied for the project.

(ii) Relevant stakeholders' consultations

1. Identified the implementation bodies. Through discussion with village leaders and village group leaders, potential participatory farmers or farmer unions are evaluated to be identified based on recovered application forms. All the applicants are classified into six categories, listing applicants from each group, i.e. village-level economic cooperative organizations, professional cooperatives, forestry enterprises, leading households, farmer unions, and forest farms.

2. Relevant stakeholders' consultations. The consultations mainly include: forest species and models for the new afforestation and low-yield forest transformation; technical measures of the afforestation and transformation; forest management in later period; restrictions on resource usage resulted from the project implementation to related stakeholders and corresponding solutions.

   (1) Forest species and models for the new afforestation and low-yield forest transformation. The consultation results show that the implementation bodies have the highest enthusiasm on Torreya grandis afforestation and transformation model of low-yield bamboo forest, which reach 91.4% and 88% respectively; while the enthusiasm on intercropping of Torreya grandis in tea land and transformation of low-yield timber forest is not high, which only reach 8.6% and 12%. This is mainly because the latter's income is not as good as the former.

   (2) Technical measures of the afforestation and transformation. Technical measures of Torreya grandis afforestation include forestland clearing, soil preparation, burrowing and planting etc.; and transformation of low-yield bamboo forest includes forestland clearing, soil digging and fertilizer, etc. In addition, the implementation bodies always ask for more technical training and guidance of breeding and afforestation, etc.

   (3) Forest management in later period. Management of Torreya grandis afforestation in later period include plant overshadow, soil digging and hole expanding, fertilizing, shaping and pruning, artificial pollination, increasing fruit output, harvesting, pest control and forest fire prevention, etc.. Among them the plant overshadow, shaping and pruning, artificial pollination and other technical aspects shall be performed under professional guidance; and the management of low-yield bamboo forest in later period include soil loosening and hole expansion, fertilization, felling and remaining, diseases and pests control and forest fire prevention, etc.. Diseases and pests control and forest fire prevention are integrated into the existing prevention system in project cities.

   (4) Potential restrictions on resource usage resulted from the project implementation to related stakeholders and corresponding solutions. Pasture and poultry are prohibited in the forestland area to avoid the adverse impact on the growth of young trees.

3. On-site survey and plot selection. The on-site survey and selection of the final project land have three major tasks: firstly, to verify the area of Torreya grandis afforestation and low-yield bamboo forest transformation; secondly, to confirm the planting density, the reasonable unit set
amount of bamboos and ideal bamboo age structure; and lastly, to verify the small boundary plan.

4. Project publicity. The final statistical results of the participatory consultations include the roster of final implementation bodies of the project, the construction content and scale summary tables of village-level projects, etc. which will be posted and notified in the public columns of the administrative villages to accept social supervision.

(iii) Sign the project agreement

According to the final confirmed implementation bodies of the project, terms and content of the project agreement are worked out based on frank and friendly consultations. The project offices of each city sign the official project agreement with the implementation bodies under voluntary and open principles. The agreement mainly contains the area, tree species of the afforestation, both parties' rights and obligations, distribution method of the project economic incomes of and so on.

III. Results of the participatory consultations

(i) Identify the construction scale. According to the statistical results from five project cities, the project plans to cover an area of 8,083.8 ha, among which there are 3,223.3 ha of *Torreya grandis* afforestation, and 4,860.5 ha of low-yield bamboo forest transformation.

(ii) Identify the implementation bodies. With the joint effort of all 149 staff working in the participatory consultations, 64 towns (residential districts), 685 administrative villages, and 33,919 households (there are no poverty families and ethnic minorities in the project area) from five project cities participated in the consultations, which released 3,725 copies of application forms with 796 copies recovered and a total of 457 village-level economic cooperation organizations, professional cooperatives, forestry enterprises, leading households, farmer unions and forest farms issued the project applications, and finally 335 copies of project agreements were signed.

(iii) Ensure fairness. During the consultation design process, interests of women and low-income farmers were taken into account; during the stage of community mobilizations and voluntary applications, women and low-income farmers from villages with participatory intention to the project were invited to the community mobilization meetings, to listen to the project introduction, so as to ensure that they could enjoy the same access to information and the sake participation rights.
Annex 2 Introduction of Forestry Project Loan-financed by European Investment Bank

I. Aims of the project

The project aims to increase the woody oil resources in the project area, improve the quality of forest resources, increase local farmers' incomes, create job opportunities, promote the advanced technology and management experience from foreign investment projects, and provide demonstrations of special economic forest base construction and transformation of low-yield bamboo forest for other regions.

II. Project content and selection criteria of project area

Project content: This project consists of three parts, i.e. afforestation of non-wood forest and transformation of low-yield forest, supporting infrastructure construction and capacity building.

Selection criteria of project area:

1. There are rich forest land resources for the project and adequate institutional and technical capabilities, besides, rich experience in forestry management is also necessary for the implementation bodies to be highly motivated for project earning activities.

2. The project site should be located at least 2 km away from the habitat of rare wildlife and plants, various nature reserves and cultural heritage of human history. In addition to that, the land shall not be in dispute.

3. The ability to voluntarily provide supporting funds for the project in full is necessary.

4. The project corresponds with local long-term forestry development targets, so the farmers are generally willing to accept the project and will actively take part in the project.

III. Fund raising for the project

1. Fund raising for the project

Total investment of the project is € 50 million (about RMB 400 million), of which the EIB loans € 25 million, the remaining € 25 million is domestic counterpart funds, among which the financial supporting accounts for 30%, while the self-financing from the implementation bodies (including the commutation of labour inputs) accounts for 20%.

2. On-Lending procedures and repayment obligations of the EIB loans

Ministry of Finance borrows loans from the EIB on behalf of the Chinese Government and lends to provincial governments of the project, then provincial Finance Departments will eventually lend loans to the municipal governments on behalf of the provincial governments. Municipal governments are responsible for repaying the principal, interest and other costs of the loan to provincial Finance Departments, and assume all risks of the project. If the delinquency occurs, the provincial Finance Departments will deduct the repayment through the budget or other effective methods in order to ensure the repayment and maintain the province's credibility.

3. Premise of EIB loans
Currency in the loan agreement is Euro, while currency of the repayment could be Euro or U.S. dollars. A fixed interest rate or a fixed interest margin of floating rate of interest could be adopted. The fixed interest margin of floating rate of interest refers to the six-month European Interbank Offered Rate (EURIBOR, applies for Euro loans) or the London Interbank Offered Rate (LIBOR, applies for U.S. dollar loans), with the fixed spread at the time of withdrawal. Loan period shall not be exceeding 25 years, including a grace period of 5 years. Commitment fees, front-end fees and management fees are exempted. The procurement is mainly based on International Competitive Bidding (ICB).

4. Characteristics of the EIB loan

The EIB loan is featured with a reimbursement system, which means the lenders need to use their own funds (including the supporting funds provided by the government) for the afforestation per standards, and after the project is accepted, they will apply to the EIB for the reimbursement and withdrawals with the acceptance documents. The reimbursement criteria are determined in accordance with the cost per unit area of afforestation confirmed in advance. The first amount of reimbursement withdrawal is the invested amount plus the amount of investment in the following 6 months, and the premise of the second reimbursement is that more than 80% of the first withdrawals must have been used. The number of reimbursement withdrawals for each province's project is up to four times, in other words, the loan amount for each project must be drawn in less than 4 times. The advantage of the reimbursement system is that the loan funds can be guaranteed for the specified project only, which lays a foundation for the successful implementation of the project.

IV. Conditions and procedures of the application for participating in the project

1. Conditions for participating in the project

The units (villages, farmers, forest farms, and other afforestation entities, etc.) participating in the project shall meet the following conditions:

(1) They clearly demand for taking part in the project and are willing to comply with the technical requirements and management regulations of the project;

(2) The forestland whose land-use right or the title of ownership they own is located in the project planning area;

(3) They have the practices and experiences of forestry management;

(4) There is a reliable guarantee for the supporting funds (labour can be set off against part of the investment).

2. Procedures of the application for participating in the project

Farmers who are voluntarily participating in the project (including other afforestation entities) shall submit an application to the villages; the village directors shall summarize the applications, then submit to townships (towns), and make the applications to the townships (towns) which will apply to the municipal Forestry Bureaus after reviewing.

V. Cooperation forms chosen
1. An autonomous operation model by farmers themselves or farmer unions + base

Farmers or farmer unions provide the forestland, financing and labour, and then according to project requirements, they adopt the independent construction mode and autonomous operation model, make the self-development and assume their own risks.

2. A combined business model of enterprises + farmers + base

Enterprises provide the financing and technology, and are responsible for the production, management, and product sales; while farmers provide the forestland and labour shares. Economic benefits of the project shall be shared according to the agreement of both sides. Under this model, a joint operation is adopted to make the development and share the risks together.

3. Other cooperation forms.

VI. Environmental protection

The project as a whole will not destroy the current forest ecological environment, even improve it on the contrary. But if inappropriate measures are taken for the new afforestation and transformation of forest, they will bring an adverse impact on the ecological environment. Therefore, the environment protection regulations shall be strictly enforced in the implementation of the project, to minimize the adverse impact of the project on the environment.

During the preparation stage, the following issues shall be paid special attention to:

1. Any form of damage to the existing natural forest for the development of artificial forest is strictly forbidden.

2. The biodiversity conservation shall be placed at an important position during the project implementation, with the existing vegetation well protected. The embedded afforestation is encouraged.

3. Biological measures shall be considered to prevent future forest diseases and pests, which will be cured by pesticide varieties permitted for use by the government of China and EIB, while highly toxic and high residue pesticides are prohibited.

4. While choosing the fertilizers, it is necessary to use the types that can promote the plant growth in short-term, at the same time, their long-term impact on the soil and the environment shall be considered. Use of organic fertilizers is advocated.

VII. Contact information

If you have any questions, comments or suggestions for this project, please call XXX City Forestry Bureau.

Phone:

Contact:

E-mail address:
Annex 3 Application Sample Form for the Project

XXX Village Participate in the Woody Oil Development Project of Zhejiang Province Supported by European Investment Bank Loans

**Application Form**

<table>
<thead>
<tr>
<th>Content</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village information</td>
<td>Village name:</td>
</tr>
<tr>
<td></td>
<td>Population:</td>
</tr>
<tr>
<td></td>
<td>Total land area (mu):</td>
</tr>
<tr>
<td>Land ownership</td>
<td>XXX village committee, On behalf of all the villagers, we voluntarily apply for participation in the woody oil development project of Zhejiang Province supported by European Investment Bank loans.</td>
</tr>
<tr>
<td>(1) Proposed land area for the afforestation project (mu)</td>
<td></td>
</tr>
<tr>
<td>(2) Land ownership</td>
<td></td>
</tr>
<tr>
<td>(3) Current situation of land use</td>
<td></td>
</tr>
<tr>
<td>Statement of taking part in the project</td>
<td>XXX village committee, On behalf of all the villagers, we voluntarily apply for participation in the woody oil development project of Zhejiang Province supported by European Investment Bank loans.</td>
</tr>
<tr>
<td>Representative from village committees</td>
<td></td>
</tr>
<tr>
<td>signature or seal</td>
<td></td>
</tr>
<tr>
<td>Application date</td>
<td></td>
</tr>
</tbody>
</table>
## Application Form

<table>
<thead>
<tr>
<th>Content</th>
<th>Specific description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the farmer representative</td>
<td></td>
</tr>
<tr>
<td>Project land and land ownership</td>
<td></td>
</tr>
<tr>
<td>(1) Proposed land area and its location</td>
<td>People who sign this application form voluntarily apply for participation in the</td>
</tr>
<tr>
<td>for the afforestation project (mu)</td>
<td>woody oil development project of Zhejiang Province supported by European Investment</td>
</tr>
<tr>
<td>(2) Land ownership</td>
<td>Bank loans.</td>
</tr>
<tr>
<td>(3) Current situation of land use</td>
<td></td>
</tr>
<tr>
<td>Statement of taking part in the project</td>
<td></td>
</tr>
<tr>
<td>Signature of the applicant</td>
<td></td>
</tr>
<tr>
<td>Application date</td>
<td></td>
</tr>
</tbody>
</table>
Annex 4 Selection of Project Candidate Models

Farmers’ Selection of Project Candidate Models

<table>
<thead>
<tr>
<th>Farmer</th>
<th>Project model selection (tick the following alternative models)</th>
<th>Design Area (ha)</th>
<th>Demand for project support (seedlings, training, and technical guidance)</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1: Torreya grandis afforestation</td>
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<td>Model 2: Intercropping of Torreya grandis in tea land</td>
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<td>Model 3: Transformation of low-yield bamboo forest</td>
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<td>Model 4: Transformation of low-yield timber forest</td>
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Annex 5 Example Agreement of Afforestation Cooperation

Woody Oil Development Project of Zhejiang Province
Supported by European Investment Bank Loans

Agreement of Reforestation Cooperation

Party A: XXX City Forestry Bureau Project Office, XXX Province
Party B:

For the effective organization and implementation of the woody oil development project of Zhejiang Province supported by European Investment Bank loans (hereinafter referred to as the "Project"), on the basis of equality and voluntarily, both parties negotiated the cooperative arrangements of afforestation and transformation of the project, and reached the following agreement. Therefore, this agreement is concluded for both parties to comply with.

Article I Project information

Before entering into this Agreement, Party A shall provide Party B with promotional materials of the basic information concerning the project in advance. After confirming the receipt of the promotional materials, Party B shall correctly understand and grasp the content of the material.

Article II Project involvement

Based on the conditions and procedures of participating in the project described in the materials, Party B shall voluntarily apply to Party A for participating in the afforestation activities (including new afforestation or transformation forest, seedling breeding base and infrastructure construction, the same below). As the legitimate users of the project forestland, Party B voluntarily provide the land of ________, totally _______ mu for the use of ______ in accordance with the project requirements; and Party A agrees that Party B participate in this project.

Article III Cooperative methods for joining the project

Both Parties agree that the following method will be carried out for the cooperation:

1. Party A provides funds for new afforestation or forest transformation, while Party B provides the forestland with legal land-use right or contractual right and labour services, and performs the afforestation, management, protection and tending, then the latter will claim the economic benefits resulting from the project.

2. Other methods.

Article IV Mutual rights and obligations of involving in the project

(i) Party A’s main rights and obligations

1. Major rights of Party A: Party A is entitled to provide policy and technical guidance to
Party B concerning the afforestation, and verify and supervise the quality of Party B’s afforestation.

2. Major obligations of Party A: Based on the project afforestation model, Party A shall provide technical guidance of the afforestation and relevant technical training for the management and pest control; in addition, Party A shall pay costs of qualified afforestation to Party B within a reasonable period based on afforestation unit cost determined by the project.

(ii) Party B's main rights and obligations

1. Major rights of Party B: Party B owns the ownership, management rights and all the usufructs from the project forest.

2. Major obligations of Party B: Party B shall pay the cost of reforestation in advance, and strictly comply with the technical requirements and management regulations of the project, in order to achieve the required quality indicators. If part of or all the afforestation does not reach the quality standards, Party B shall not claim reimbursement for the reforestation cost; as for the disposal acts like tending and felling the project trees, the specific time and design requirements of the project shall be strictly carried out, and no self-decision is allowed.

Article V Distribution methods and time of the project economic revenues

The economic benefits from the project forest during the construction and after the completion of the project shall be distributed by both parties under the following ___ method:

☐ 1. Party A does not take part in the distribution of economic benefits from the project's output, and Party B owns the total economic benefits from the project.

☐ 2. Party A owns ___% of the annual increase of the economic benefits from the project, and Party B has all the remaining part.

☐ 3. Party A owns ___% of the economic incomes from ___model forest at year, while Party B possesses the remaining income of that same year and economic benefits of all other years.

This agreement is valid upon signature of both parties. Any single Party shall not change or cancel the agreement. The disputes arising from the implementation of the agreement shall be resolved through the negotiation. If the negotiation fails, either Party has the right to take a legal action to the local people's court.

This Agreement is done in four copies, with two copies in each side.

Party A (Seal): Party B:
Legal Representative (Signature): Signature or (Stamp):
Year  Month  Date  Year  Month  Date