### **Environmental and Social Data Sheet**

# **Overview**

Project Name: CCCFL – Guizhou Forestry

Project Number: 2015-0414 Country: China

Project Description: The project is to rehabilitate 4,800 ha of degraded forest lands and

afforest 9,600 ha of abandoned agricultural lands so as to establish ecological barriers in the environmentally vulnerable catchment areas of the Yangtze River and Pearl River in the Guizhou Province, China.

EIA required Yes
Project included in Carbon Footprint Exercise<sup>1</sup>: Yes

# Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The main objective of the project is to build ecological barriers for the Yangtze River and the Pearl River water catchment areas. The project introduces a range of broadleaved species and shrubs that diversify forest structure and enhance biodiversity. It will provide environmental benefits through carbon sequestration and storage, and soil protection against erosion. It will also produce merchantable timber, fire wood, bamboo, forest fruits, tea, vegetal oils and medicinal plants.

Social benefits include employment opportunities and income generation from timber and cash crop production and/or land leasing, and improved living environment for rural households. In addition, the project provides capacity building on improved forest management techniques related to variety of timber and cash crop species.

An Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) were prepared in 2014. Under Chinese regulations an environmental permit is needed and it is part of the overall project approval. The EIA was approved and the environmental permit was granted in July 2015.

#### **Environmental and Social Assessment**

### **Environmental Impact and Mitigation**

The project will have a positive impact on climate change mitigation, ecological resilience and biodiversity through the establishment of new forests and improvement of the existing ones. The project is aligned with the People's Republic of China's 12<sup>th</sup> Five Year Plan and China's National Climate Change Program (CNCCP) and consequently with the Provincial and Prefecture level afforestation policies, all with ambitious targets for increasing forest cover.

In addition to the net carbon sequestration, the environmental benefits include protection of the upper watershed areas of the Yangtze and Pearl rivers through the decrease in soil erosion and improved water quality. The project enhances biodiversity by planting about ten different tree species, bamboo and three cash crop shrubs in monoculture or mixed stands. All species are native and many of them are rare due to habitat loss in history.

Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO₂e/year absolute (gross) or 20,000 tons CO₂e/year relative (net) – both increases and savings.

The main environmental risks are related to soil erosion in site preparations required for planting and leaching of nutrient or toxic chemicals to water bodies due to the use of fertilizers or pesticides. To mitigate erosion risks, the project sites may not be established on very steep slopes and buffers are required to sensitive areas or main water bodies. Due to the rapid recovery of vegetation in the good growing conditions, the erosion risk is high only the first year after soil disturbance. Nutrient leaching is mitigated by using mainly organic fertilizers in line with environmental instructions and pesticide use is minimized with integrated pest management.

### **Social Assessment**

There are more than 1.9 million people living in the project counties and the share of agricultural population is 84%. The number and share of ethnic minorities is very high in the region (33 ethnic groups in the whole prefecture accounting for nearly 80% of the prefecture level population) and there are several minority groups living in project areas and in their neighbourhood. One of the project counties (Liping) has the largest settlement of Dong ethnic minority in China. In addition to Dong, other ethnic minorities in the project area are e.g. Miao, Shui and Buyi. Ethnic minority people are also very eager to take part in the project and often have the experience of cultivation of some of the project's trees or plants. Therefore, it can be concluded that the project does not threaten the interests of particular minority groups neither does it include resettlement.

Based on a comprehensive social impact assessment the key project stakeholders were identified. They include collectively-owned forest farms, state-owned forest farms, farmer cooperatives (special forestry cooperatives), private companies/entrepreneurs and individual farmers. Village committees play an important role in the decision making, sometimes on behalf of individual farmers, when signing commitments to allocate land and resources to the project. Village committees represent individual villagers in negotiations and dispute resolution.

Due to the high investments in afforestation and current marginal and poor status of most project areas, planting entities are often larger entities, e.g. farmer entrepreneurs, or collective- or state-owned forest farms. Small households have limited resources to allocate for afforestation.

The largest number of individual farmers benefit from the project through employment opportunities. When individual farmers belong to collectively-owned forest farms that participate in the project, they can also benefit through land rents or product sales revenues. Most individual farmers have other/additional income sources than those related to the project. This indicates that the project does not form their only source of income (e.g. small scale rise, pepper, sweet potato or cotton cultivation and small animal husbandry) and, thus, does not make them dependent on the project revenues only. This also reduces the risk that, in some project locations, work can only be provided on seasonal basis.

The project will have a positive social impact in general. The potential social risks relate to unmaterialized market expectations for blueberry and Camellia seeds due to heavily increased cultivation in the region. Both products are raw-materials for a range of high quality and often niche products consumed by high income people, mostly in urban cities.

Land leasing provides a way to gain additional income from land assets. The lease contracts do not traditionally have proper provisions for price indexing and exit clauses. The project is advocating for fair and explicit contracts and the signed preliminary contracts already included mechanisms for land lease price indexing. In case of death, relatives automatically inherit the contract

In case of conflicts related to land lease contracts or other project related issues, households can appeal to village committees and township/county level judicial (arbitration) bureaus and finally to the court. Stakeholders are well aware of this possibility.

#### **Public Consultation and Stakeholder Engagement**

A social survey and participatory consultation at county, township village, and individual stakeholder/beneficiary level was carried out in 2014 (starting in May, first SIA draft submitted in November 2014).

Farmer and villager participation in the project is voluntary. During the appraisal mission in June 2015, the villagers, farmers and other stakeholders were well aware of the project and on its benefits for the participants and had signed contracts on land lease and benefits sharing.

## **Carbon footprint**

On the one hand, the project implementation increases carbon sequestration to tree and shrub stands but, on the other hand, transportation and decomposing of nitrogen fertilizers cause some emissions. In total, the project has a positive net carbon sequestration rate of 136,000 tonnes  $CO_2$  eq per year. The estimate is conservative and includes only the carbon stored to standing stock, excluding soil carbon.