Luxembourg, 03.02.2015

Environmental and Social Data Sheet

Overview

Project Name:	CFFL - CHONGQING FORESTS
Project Number:	2013-0496
Country:	China
Project Description:	The project is an allocation under the China Forestry Framework Loan (2010-0330). It is to establish 940 ha of timber tree forests and 5 500 ha of 'cash crop' tree plantations providing fruits, nuts, etc., and 1300 ha of medicinal plants. As supporting facilities, the project will include the construction of 133 ha jujube disease control area, 15 km long isolation strip for biological control of pine disease, 100 km long fire breaks and seven fire-watch towers. The project is implemented in the counties of Wulong and Qianjiang.

EIA required:	Yes
Project included in Carbon Footprint Exercise[1]:	No

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

The protection of soil and water, improving biodiversity, and climate change adaptation and mitigation are the main objectives of the project. It has a clear environmental orientation as properly designed and implemented forestry has a positive impact on the environment. Environmental and social impact assessment (ESIA) reports were prepared for both counties by the Chongqing Environmental Protection Bureau. The reports were officially approved in October 2013 which established the environmental permit for the project implementation.

The project sites are located in two counties in South and South-West of the Chongqing Municipality. The counties are mountainous with severe erosion problems. The project involves 12 villages in Qianjiang District and 19 villages in Wulong County. All project areas are classified and registered as forest land or abandoned agricultural land that can be cultivated with woody plants (forest or fruit trees, woody bushes).

Most of the natural forests in this erosion-prone region have been logged in the past and better soils have been used for growing of edible crops. Due to loss of soil productivity and/or lack of profitability to grow on remote slopes, many sites have been abandoned. The establishment of forest or cash tree stands restore bare and degraded areas, and provide a long term pool for carbon storage and production of various ecosystem services. Plantations of fruits and medicinal plants provide regular income without extraction of the ecologically beneficial forest habitat.

In addition to the global benefits delivered by the project's sequestration of carbon, the project is also expected to contribute to climate adaptation and to improve the local environment, stabilising steep slopes and strengthening resilience against extreme weather events, such as exceptional rains and storms.

The EIB's support to the project is accompanied by an undertaking that a roadmap towards forest certification be developed. Consequently, the project has the potential to encourage the use of more sustainable management regimes that enhance biodiversity, soil protection and appropriate use of chemicals compared to current management regimes. The chemicals used must meet both Chinese and EU standards. Only those chemicals that are registered both in China and the EU can be used. The project advocates the use of organic fertilizers and biological control measures.

[1] 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 CO_2e/year absolute (gross) or 20,000 tons CO_2e/year relative (net) – both increases and *savings.*

With the above-mentioned conditions and mitigation measures in place this project is considered to be acceptable for Bank financing from an environmental and social perspective.

Environmental and Social Assessment

Environmental Impact and Mitigation

The People Republic of China's 12th Five Year Plan and China's National Climate Change Program (CNCCP) have the objective of increasing the forest area by 12.5 million hectares in order to reach a forest coverage ratio of 21.7% by 2015. The CNCCP confirmed the important role of China's forestry sector in reinforcing the capacity to absorb greenhouse gases, and to support ecological protection and development. This target is ambitious and represents the world's largest afforestation programme.

The project will have a positive climate impact through establishing and improving forest stands in the region. Long term vegetation increases carbon store in the region, and the carbon foot print remains positive despite increased emissions from transport and fertilizing.

Chongqing is situated in the sub-tropical climate zone and its mountainous topography provides suitable conditions for fruit and nut production. Also specific medicinal plants are traditionally grown in the region. The plantation establishment requires heavy soil preparation on eroded slopes. With proper management techniques, erosion risk can be minimized and during the rotation time forest vegetation can increase organic material on the soil. Appropriate management and use of fertilizers and pesticides is a condition to avoid pollution of water bodies and ground waters. The project will have positive environmental benefits in soil protection, carbon accumulation and when properly implemented, also in biodiversity management. There are no obvious environmental constraints for the project construction.

Most of the 25 species planted in the project are native to China and there is regional and local expertise on their cultivation. The project cooperates with research organisation and has the possibility to introduce new and environmentally friendly management regimes.

Project mitigation measures include appropriate site selection, selection of suitable varieties of planted species as well as appropriate management regimes and adequate training and technical assistance to farmers for their implementation. The project sites target compliance with China Forest Certification Scheme's standard for sustainable management of forests. Certification will provide evidence that the project is environmentally, socially and economically viable.

Social Assessment

The project has positive social impacts by providing new income opportunities for rural population, often living in remote areas with limited access to other employment. Many project sites are located in the areas where tenure right holders belong to various minority groups, thus the project specifically provides improvements to their income levels. Farmers benefit from a variety of income streams generated through land leasing, labour inputs or sales of products. This variety gives earning opportunities also for women and elderly people who are not necessarily able to do full time physical work in agriculture. Project also helps farmers to get revenues from remote and degraded lands that are often abandoned.

The business models that are applied develop increased cooperation and partnerships between farmers and private companies. The project also supports building of farmers' cooperatives that strengthens their marketing capacity.

Project preparation included comprehensive social impact analyses that had an influence on development of project implementation plans.

County forest bureaus provide technical assistance to project beneficiaries. Chinese labour legislation and regulations apply to all work on project sites. Remuneration rates are defined by the labour market.

The project does not threaten the interests of particular minority groups and it does not

include any involuntary resettlement.

Public Consultation and Stakeholder Engagement

A participatory consultation at village and township levels was carried out in April 2013 in both counties. The study was based on questionnaires, interviews with village cadres and participation in village meetings. The consultation provided information on the planned project and discussed options for its implementation. Consultation also contributed to the identification of potential project beneficiaries in different project locations and development of different land lease and employment models for individual farmers to associate with the project.

Carbon footprint

The project has a net carbon sequestration balance due to long-term sequestration of carbon into vegetation. The average annual sequestration is approximately 17,200 t/y of CO_2 eq. for the project area.

Emissions include transport of fertilizers and other materials, and GHGs released in fertilizer use. Manufacture of fertilizers is not included. It is assumed that the baseline would entail little or no use of the land, with minimal sequestration due to growth of sparse vegetation.

The project provides an opportunity to further improve management regimes to optimize fertilization regimes with desired yields to minimise N_2O and other greenhouse gas emissions from nitrogen fertilizers.