

Environmental and Social Data Sheet

Overview

Project Name:	CCFL: LIAONING FORESTRY	
Project Number:	2013-0284	
Country:	China	
Project Description:	<p>The project is an allocation under the China Forestry Framework Loan (2010-0330). The purpose of the project is to establish and rehabilitate approximately 23,700 ha of forest land. Three types of forests are established i) Ecological forests for soil and water conservation on arid, barren sites (57% of area), ii) Poplar timber plantations on suitable sites (25%), and iii) Economic fruit forest plantations on high quality sites (18%).</p> <p>The plantations will be established in nine counties: Fuxin, Zhangwu, Beipiao, Kazuo, Jianping, Chaoyang, Lingyuan, Longcheng and Shuangta.</p>	
EIA:	Required	Yes
Project included in carbon footprint exercise:		Yes

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

The key objective of this project is to supply valuable environmental services that support climate action, water quality and biodiversity. The forests established will sequester carbon and protect against harmful soil erosion and desertification in the area.

Ecological plantations, in particular, reduce the ecological vulnerability of the region considerably by decreasing erosion rate and building multi-layered vegetation that has a positive impact on climate and biodiversity. Lower erosion rates and wind breaks have positive impact on agricultural yields and related incomes.

Poplar timber production plantations and fruit tree plantations are located on good soil on fairly flat terrain. Poplar plantations are monocultures with average rotation of 16 years. Regeneration includes heavy soil scarification and removal of stumps. Fruit and seed tree plantations provide regular produce and income up to 30-50 years. They also establish multi-layered vegetation that supports biodiversity and protects soil and water in the region compared to the non-project situation where the sites would be open lands or covered with low shrub vegetation.

The major risks related to ecological plantations are driven by extreme weather conditions with frequent droughts and frost periods that may result in low survival rates of seedlings. Forest fires are also a risk during dry periods. Especially in poplar plantations heavy soil scarification and monoculture structure may result in biodiversity loss and increased erosion.

Project mitigation measures include selection of suitable species and varieties, implementation of intensive planting regimes with fertilization and irrigation when needed and replanting the gaps in case of seedling mortality. Fire guards and other measures to combat fires will be taken.

Environmental permit, i.e. formal approval for the environmental and social impact assessment (ESIA), will be a condition for the first loan disbursement. At this point, the ESIA report will be available for EIB website.

Environmental and Social Assessment

Environmental Impact and Mitigation

The project will increase the land under forest cover in China which is still below the international standards. The People Republic of China's (PCR's) 12th Five Year Plan and China's National Climate Change Program (CNCCP) have a main forestry objective: to increase the forest area by 12.5 million hectares in order to reach a forest coverage ratio of 21.7% by 2015. These targets are ambitious and configure the world's largest forestation program.

New sustainable forest plantations, with their high efficient wood volumes increment and high production capacity have an indirect but significant effect on protecting primary forests from unsustainable logging. The program will reinforce PRC's sustainable development capacity and reduce its net timber import position.

Specific to Liaoning, it is expected that this project will increase the total forest volume and forest coverage to mitigate harmful wind and sand, prevent soil erosion from desertification and stop expansion of the Khorchin desert to further south, by creating a large-scale ecological forest, economic forest and other technical means in the region of northwest of Liaoning Province where the ecological environment is fragile. In addition, the forests should conserve soil and water; increase carbon sequestration and oxygen release, increase timber yields and reserves, improve the local ecological environment and improve the forest sustainable management level and increase the incomes of local foresters.

The project introduces best management practices and their transparent verification through targeting voluntary certification of sustainable forest management. The project aims at certifiable management and will apply for first voluntary certifications for selected project areas during the loan period.

The project should have a positive climate impact through the creation of large scale ecological plantations. New forests sequester carbon and have positive impact on microclimate. Reliable estimates on the net climate impacts are not yet available. However, the project area is located in a region with extreme climate conditions. Global warming may increase droughts in the region, which is a risk for project success. Project gives due consideration to the selection of appropriate species and varieties, and the implementation of efficient planting and growing methods in order to ensure high survival rates. Promoters have long term experience in managing of the different types of forests.

Social Assessment, where applicable

The project engages state forest farms and local farmers. Most of the project activities involve manual work and the availability of labour is an issue for project success. Farmers provide their own labour and hire seasonal workers when needed. Shortage of labour is not considered to be a problem.

Forest farms work to national labour standards and regulations that outline the terms for working hours, safety and remuneration. The legislation also applies to private sector workers but enforcement may not reach the short term seasonal workers. Remuneration rates are defined by the labour market.

Farmers lease out their land user rights either to state forest farms or to private entrepreneurs under long term contracts that are typically based on fixed prices with only limited exit options. This arrangement may result in unfair benefit sharing with the passage of time especially in case of productive poplar plantations or seed orchards. The contract prices should be linked to appropriate indexes, and farmers should have an exit option and some freedom to deliver the products to other companies. Middlemen traders are not entitled as the final beneficiaries in the project financing. The promoter is requested to assure and monitor that the planters (the farmers) receive the payments as final beneficiaries.

The project does not threaten the interests of any specific minority groups. Local farmers, among others, are beneficiaries of the project.

The project does not entail resettlement.

Public Consultation and Stakeholder Engagement

State forest farms carried out meetings and surveys on planned project activities. A large majority of project affected people were favourable towards the project. It was confirmed that the farmer participation is voluntary.

Carbon footprint

The project has net carbon sequestration balance due to long term sequestration of carbon into forest vegetation. Average estimate for the project cycle is 16 kt C sequestration. The rotation of planted forests is estimated at 30 years which multiplies the estimated sequestration rates in the long term. Carbon sequestration per year in the project area (4 year planting period) is 675 kg/ha per year. In the total project area annual sequestration is 16 kt C/a and during the project cycle it is on average 64 kt C over 4 years. This corresponds to 59 kt CO₂ per year and 234 kt CO₂ during the 4 year planting period.