Luxembourg, 19 May 2016

Environmental and Social Data Sheet

Overview

Project Name:	CCCFL - JIANGXI FORESTS
Project Number:	2015-0533
Country:	China
Project Description:	The project is to plant and regenerate 20,300 ha of Chinese fir, slash pine forests and Cape jasmine bush in the Jiangxi Province. It is an allocation under the China Climate Change Framework Loan (CCCFL) (2006-0086).

EIA required:	yes
Project included in Carbon Footprint Exercise[1]:	yes

Environmental and Social Assessment

Environmental Assessment

The project supports the objectives of national and provincial policies on protection of forest ecosystems and watersheds in China. It complies with national laws and has been prepared in line with the Environmental Impact Assessment Law and Forests Law. Legislation on the protection of environment, waters, air and waste, as well as land contract law set the framework for project planning and implementation.

The project is not in conflict with the international commitments on biodiversity protection or with the EU objectives stated in the Biodiversity Strategy and the Policy to Monitor and Adapt to Climate Change.

An independent Environmental Impact Assessment has been carried out and it was approved by the Jiangxi Provincial Department of Environmental Protection in April 2015. Local stakeholders had the possibility to contribute to the environmental and social assessments by replying to related questionnaires or participating in interviews.

Strengthening the ecological functions of forests in Poyang Lake Basin is the primary objective of the project. This is targeted by increasing productive forest cover and high quality regeneration of mature forests in the region. The project is partly located on areas with poor soils or steep slopes, which have not been professionally afforested and managed in the past, since these lands were not typically allocated to the villagers before the land reform in 2003. The project investments focus on planting of new forest stands. During the project cycle, forests are managed with intermediate thinning and final felling when stands reach mature age. Mixed forest structure at landscape level is promoted especially in the mountainous

[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 CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.

areas where fire resistant woody plants are grown to establish fire belts. The project aims at enhancing forest biodiversity and it is not foreseen to imply biodiversity losses.

Environmental benefits of the project include:

- Establishment of forest cover (mainly Chinese fir and pine) on erosion prone slopes and low productivity soils.
- Cultivation of Cape jasmine (*Gardenia jasminoides*) on acid and abandoned farm land maintains highly productive vegetation on these often low yielding farm lands.
- Contribution to watershed management and soil protection so as to improve the environmental protection in the Poyang Lake basin.
- Support to biodiversity and species dependent on forest habitats.
- Contribution to climate change mitigation with long-term carbon dioxide sequestration and carbon store development.

Environmental risks of the project include:

- *Forest fire*. Forest law and Forest fire prevention technology standards outline strict fire prevention measures that have efficiently mitigated fire damages in the past decade. Public is continuously informed on the fire protection measures and access to forests is limited during the high risk periods.
- Soil erosion on the sites located on mountain slopes is a risk in soil scarification, felling and skidding. The erosion risk is mitigated by imposing sustainable site preparation techniques that preserve the existing vegetation to the possible extent.

EIB Carbon Footprint Exercise

The forest will have a net carbon dioxide sequestration rate of 136,800 tons/a CO_{2e}. The estimate is conservative, including only the project sites that are established on bare or shrub land. Regeneration sites are excluded from the sequestration rate. Biomass removed in selective harvesting and stored in wood products is not counted into the carbon dioxide sequestration estimate either. The planted forests can be regenerated at the end of the project.

- The forest stands sequester CO_{2e} about 138,000 tons/a during the project cycle. The baseline is estimated at zero because the project sites taken into account in calculation (bare lands) do not produce timber. The carbon stored in soil or other woody or non-woody vegetation is not taken into account in sequestration or baseline calculations.
- The emissions in forestry projects originate from transportation and use of fertilizers that release greenhouse gases in nitrogen decomposition. The annual emissions from the use of fertilizers and transportation/machinery are estimated at 1,200 tons/a CO_{2e}.
- The net CO_{2e} sequestration of 136,800 tons/a during the project construction and operation periods represents the total CO_{2e} sequestration in new afforestation areas (52% of the project area) deducted with the emissions from transport and fertilizer use.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost'

Social Assessment, where applicable

The project sites are located mostly on remote rural areas where employment and income opportunities are limited and risk for poverty is higher than in more developed regions. Incomes from forestry work and land leasing in the project are expected to improve living standards of local farmers and villagers. Land lease options include also profit sharing arrangements and up-front payments that open business and investment opportunities to farmers. Project investments are labour intensive resulting that the funds are mainly allocated to cover labour costs which benefit the villagers.

Rural population is aging. Therefore it is important to build employment opportunities also to young people who easily migrate to urban areas. The project does not include any involuntary resettlement.

Minority groups with distinct cultural traditions do not live in the project area. Grievance procedures are in place from village level to municipal and county/city levels. Special ethnic and religious affairs' bureaus deal with local ethnic and religious affairs.

The project is committed to comply with laws and forest certification standard that include provisions for health and safety in work as well as consideration of the needs of local people. Chinese labour laws and standards, as applied in forest work, are compatible in general terms with international standards. Permanent and temporary workers should have access to social insurance and grievance procedures. Trade union for forest workers, operating with state approval, advocates the interests of workers.

The project beneficiaries commit to acceptable standards in labour contracts as well as in health and safety in work. These include, among other, timely payment of wages, appropriate insurance coverage, training and equipment for safe work and reasonable lodging conditions for migrant workers. The beneficiaries shall be responsible for requiring compliance to similar standards from sub-contractors. Commitment to certifiable forest management will require monitoring of these issues in practice.

Public Consultation and Stakeholder Engagement

The project preparation included sample based consultations on environmental and social impacts with farmers, village cadres, relevant municipal and county level government departments and companies. Information was collected with informal interviews and questionnaires.

Local people supported the project and believed that it will promote local development, provide employment and capacity building, improve road network and enhance forest cover and the ecological environment. The project would also give an opportunity for farmers to establish forests, which would be impossible without external financing.

Although forestry work is physically demanding and mostly done by men, women participate especially in planting activities and in management of Cape jasmine cultivations.

Interviewed stakeholders were of the opinion that the investments will benefit mostly the better provisioned farmers that have the capacity to invest or allocate land for lease. Also the technical quality of seedlings and forest management raised concerns because in case farmers do not achieve the expected revenues, they have difficulties to pay the loan.

The project applies different types of land lease arrangements that are based on regular payments, up-front payments or profit sharing. Poor households would need regular annual payments whereas richer households may prefer to receive a larger sum at once or participate in profit sharing. Public consultation concluded that the contracts with farmers should ensure low risk participation to the project and that the project should monitor loan burden of individual farmers and any form of joint operation between farmers and other beneficiaries.

The project manager is aware of the benefits and risks raised by stakeholders. Training programme will increase technical competence of beneficiaries and it is important to extend the capacity building to workers and non-participating farmers. Information on the management of credit risk shall also be available. Seedling production is well controlled and the project will use seedlings produced from improved seeds, collected in seed orchids. The

project is subject to annual monitoring and PMO is encouraged to continue with transparent information sharing with stakeholders on project related issues.

Other Environmental and Social Aspects

The project is committed to implement environmentally and socially sustainable forest management as defined in the China forest certification standard. The standard will be adopted as a baseline for economically, environmentally and socially sustainable management of forests. Application of a formal forest certificate will be done on pilot areas.

County and province level PMOs do external monitoring on the performance of the beneficiaries on project implementation.

Conclusions and Recommendations

The project has obtained the statutory environmental permit from the relevant authority and the project planning complies with the environmental and social requirements of the Bank.

The project contributes to increasing forest cover and good quality forest regeneration in Jiangxi province. It will also introduce sustainable management methods that integrate environmental and social aspects into forest management practices. Thus it contributes to the improvement of forest functions in Poyang Lake Basin in Jiangxi.

Since growing trees will sequester CO_2, store carbon and protect vulnerable lands against soil erosion, the project contributes to climate change adaptation and mitigation.

The project provides long-term socio-economic benefits to local people in the form of employment opportunities and regular supply of timber and other forest products (e.g. resin and Cape jasmine fruits). It also promotes compliance with labour laws as well as health and safety in work.

All project components, i.e. cultivation of Chinese fir, Slash pine and Cape jasmine, are financially profitable and will provide regular and periodic revenues.