Luxembourg, 11.05.2015

Environmental and Social Data Sheet

Overview

Project Name:	CFFL – Regional Forestry Program
Project Number:	2014-0073
Country:	China
Project Description:	The project is the fifth allocation under the China Forestry Framework Loan (2010-0330). It will support the establishment and improvement of sustainable forests, with a particular focus on rare species and high-quality timber trees. The project will cover 74,217 hectares, with 45,244 hectares of afforestation, and 28,973 hectares of reforestation and tending, as well as construction of auxiliary facilities.
EIA required	Yes
Project included in Carbon Footprint Exercise[1]:	Yes

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

The project is expected to generate significant environmental benefits. It includes afforestation of degraded, low-productivity land, improvement of low-yield forests and tending of existing stands. It will increase forest cover, help to combat harmful soil erosion, and the growth of the trees will sequester carbon. Sustainable forest management practices that comply with internationally accredited forest certification standards are being promoted by the project. The project is expected to enhance biodiversity by imposing mosaic structures (where relevant) and by including about a total of approximately 80 species which are grown in mixed stands. Supporting infrastructure will be constructed, management data systems built, and a road map towards eventual achievement of forest certification will be implemented.

The project will support the Chinese forest authorities' policy of establishing a planted managed resource of selected high-quality, high-value timber species which are under severe pressure in the wild due to sustained overexploitation and illegal logging. The project will increase the planted areas, growth and standing volumes of these rare tree species. Illegal logging of slow-growing, high quality and rare tree species has been a persistent problem in remote rural regions.

The project will also have a positive impact on the social livelihoods and will create employment opportunities in rural villages so as to reduce pressures of rural emigration.

An EIA (Environmental Impact assessment) as well as an SIA (Social Impact Assessment) were prepared in 2013 separately for all three provinces. These EIAs and SIAs have been reviewed and are satisfactory to the Bank.

The State Forest Administration (SFA) has defined rare species according to its Directory of Major Rare Tree Species Planted in China (BZZ[2006]No.94). The timber of rare tree species is characterized by high density, high hardness, dark colour and beautiful texture. The current natural stands of rare tree species are scarce although some species listed are commonly

[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.*

used. For the purposes of cultivation, relatively mature seedling and afforestation technologies are required, as well as sufficient availability of seeds and seedling sources.

The project areas are located in the Provinces of Hainan and Henan and Guangxi Autonomous Region in 51 counties in total. Geographically the project is spread over a huge area (from North latitude 3° to 36° and East latitude 104° to 116°) with a wide range of ecological zones. The annual average precipitation varies from 600-1200 mm in Henan up to 1000 and 2600 mm in Hainan.

The EIB's support to the project is accompanied by an undertaking that a roadmap towards forest certification be developed and implemented. Consequently, the project has the potential to encourage the use of more sustainable management regimes that enhance biodiversity, soil protection and water issues compared to current management regimes. It is important to recognize the baseline requirements for biodiversity and soil erosion protection already in the project site preparation phase in order to avoid management measures that decrease the biological value of sites. In the project implementation it is important to share the knowledge of biologically sustainable management to all project promoters and implementing entities.

Although the project is expected to be associated with environmental improvements, there are two risks which should be highlighted: soil erosion and water availability / quality. The construction phase is crucial in this regard.

The mountainous project sites in the three Provinces are prone to soil erosion which will be taken in due consideration in the project site preparations. In the long run, forest cover will decrease the risk for erosion. A number of project sites, especially in Hainan and Henan are prone to drought and young trees will require watering during the first 1-3 years until development of root systems. The project shall assure the water needed for this purpose is from sources that do not compete with other uses of water, such as household consumption. Sites for which this is not the case will be excluded.

With the conditions and appropriate environmental and social management systems in place, the project is acceptable for financing in environmental and social terms.

Environmental and Social Assessment

Environmental Impact and Mitigation

The project will have a positive climate impact through establishing and improving forest growth and standing forest volumes in the region. Long term vegetation increases carbon storage, and the carbon footprint remains positive despite increased emissions from transport and fertilizing. The result is compatible with the PR China 12th Five Year Plan and China's National Climate Change Program (CNCCP) and its target to increase the share of forests up to 21.7% from all land by 2015. The CNCCP also confirmed the important role of China's forestry sector in reinforcing the capacity to absorb greenhouse gases, and to support ecological protection and development.

The project is also expected to contribute to adaptation to climate change, in particular by stabilising steep slopes, decreasing run-off and restoring soil productivity, all of which are jeopardised by intensive storms and precipitation.

In addition to the carbon sequestration, the environmental benefits include water and soil conservation and positive impact on biodiversity by broadening the gene pool of planted forests. In the long term, it is hoped that a planted resource of rare, high-value timber may ease pressure on wild forests and reduce levels of illegal logging to better meet Chinese demand for these species.

The main environmental concerns are the use of water for irrigating trees for first years after planting, and soil erosion during the construction period. The State Forest Administration (SFA) and Provincial forest administrations are aware of this and have plans for measures to

mitigate any negative impact. The mitigation measures related to soil and water conservation shall be monitored during the implementation phase. In some regions project sites are vulnerable to heavy storms. Hurricane level storms are likely to occur during the long project rotation period especially in Hainan even if the project sites are on the western parts of the island that are not the most prone areas for wind damage.

Social Assessment

There are more than 19 million people living in the project areas. About 840,000 persons belong to different ethnic minorities and around 40,000 of these will participate in the project. A Social Impact Assessment (SIA) was carried out starting in May 2013 and a draft was ready in November. The finalised versions are dated April 2014.

The direct stakeholders, as they are defined in the SIA, are farmer households which apply for participation in the project, village collectives, companies/specialised afforestation households, the State Forestry Administration, governments in Henan, Guangxi and Hainan, forestry bureaus and township forestry stations in the 51 project counties, state-owned forest farms in the project and disadvantaged groups such as ethnic minorities. Indirect stakeholders include governments of project counties, township governments as well as households in project areas which do not participate directly in the project.

In the villages, the main beneficiary of the project is usually an active household who leases the land from other households. This arrangement brings income to local farmers through land leasing but it also provides work opportunities for all households in the area. Overall, the project will have a positive role for the employment in the rural areas.

Many of the listed rare species – especially in Hainan – are scarce and valuable. Despite a fairly long rotation period, they are expected to have rather satisfactory economic return which is beneficial for the rural areas.

The project will have a positive social impact in general. However, the SIA defines some potential social risks. These are mainly connected with the terms of benefit sharing mechanisms and exit clauses in project related land lease contracts. In some contracts, the rent is very low (e.g. on lands already abandoned) and/or lacks indexing clauses for updating the nominal cash rents with inflation over a long lease period. The terms to terminate the contract during the rotation period or after it are often not defined in detail. Thus, farmers are unaware on the conditions of transferring land and/or the trees when the contract expires. Usually farmers do not negotiate with third parties when making the contracts e.g. with influential households. The SIA noted this gap and the benefits of a third-party review or consultation on the rent, profit-sharing or other aspects of the land lease contract.

In case of conflicts related to lease contracts, households can appeal to Village Committees and township/county level arbitration bureaus.

Project takes measures to improve labour safety and gender equality. The project does not threaten the interests of particular minority groups and it does not include resettlement.

Public Consultation and Stakeholder Engagement

A participatory consultation at village, township and county level was carried out in April - May 2013. The consultation provided information on the planned project and discussed options for its implementation (species selection, management principles, impacts on land use, etc.). Consultation also contributed to 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. During consultation, farmers were also informed on contractual terms on land leasing.

Project areas and implementing bodies were identified and contracts for project participation were signed as a result of the consultation. Farmer and villager participation is voluntary.

During the mission in February 2014, the villagers, farmers and other stakeholders were well aware of the project and of its benefits for the participants.

Carbon footprint

The carbon calculations in the project are done according to the “China Technical Guide for Forest Carbon Sink Measuring and Monitoring” by the State Forestry Administration issued in 2011.

The project has a positive net carbon sequestration balance due to long-term sequestration of carbon into vegetation and soils. The carbon calculations are done by the Chinese experts and are based on scientific research. During the project period of 25-years, the carbon stock will increase by 6.97 million tonnes, consisting of 3.44 million tonnes in Henan, 3.13 million tonnes in Guangxi and 0.40 million tonnes in Hainan.

Converting to CO_2e, the total amount sequestered is around 25.6 million tonnes.

The CO_2 emissions from the project are estimated at 123,000 tonnes from fertilisers and 24,000 tonnes from fuel, which add to a total of 147,000 tonnes. When the emissions are deducted from the increased stock of CO_2e, the net carbon sink as a result of the project is around 25.4 million tonnes CO_2e over 25 years.

Without the project, the shrubs and the existing forests would sequester 2.45 million tonnes of carbon – compared to 6.97 million tonnes in the project. This means that the additional amount of sequestered carbon is 4.52 million tonnes, which is equivalent to around 16.6 million tonnes of CO_2e. This amount is the additional contribution of the project.