Luxembourg, 12 June 2018

Environmental and Social Data Sheet

Overview

Project Name:	HUNAN FORESTRY
Project Number:	20160746
Country:	China
Project Description:	The operation consists of planting and rehabilitating about 58,600 ha of forests. The plan is to afforest about 6,100 ha of abandoned lands, to further diversify the tree species composition in about 27,300 ha of existing forests, to tend some 24,900 ha of low quality young forests, and to enrich the underwood species composition of some 300 ha of forests, using native tree/shrub species that are adapted to local site and climatic conditions. The project will also include a biodiversity conservation and forest protection component, as well as the necessary investments in forest infrastructure (i.e. forest roads, firebreaks, fire watch towers), and a capacity building component.

EIA required: yes/no[1]

Project included in Carbon Footprint Exercise[2]: yes

(details for projects included are provided in section: “EIB Carbon Footprint Exercise”)

Environmental and Social Assessment

Environmental Assessment

The project sites are located across the Hunan Province. State forest farms and private forest enterprises are the main project implementing entities. Hunan Province is a hilly and mountainous region abundant with rivers feeding into the water catchment area of Yangtze River. Climate is sub-tropical with rainy spring and summer and dry fall and winter. Summers are hot and moist, and winters are cold and dry, but drought is not a severe threat in the province. Climate change may increase the frequency of extreme weather conditions and their consequences in the Province, i.e. irregular torrential rains, flooding or extremely high temperatures.

[1] Decision whether a full EIA is required or the project will be screened-out is expected in due course in May 2018 from the Department of Environmental Protection of Hunan Province.
[2] 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.

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In April 2018, the Promoter submitted the relevant documentation (i.e. environmental impact assessment form) to the Department of Environmental Protection of Hunan Province, and a decision whether a full EIA is required or the project will be screened-out is expected in due course in May 2018. A disbursement requirement will be the submission of the environmental permit and/or screening-out decision of the relevant environmental authorities, and in case of any non-screening out, the relevant EIA and approval documents.

Currently, the project areas are covered mainly by monoculture forest plantations and plots of abandoned farmlands or burned areas on hillsides. Biodiversity and value growth in the dense monocultures is low, which justifies measures to diversify the forest structure and to produce larger diameter timber of different species.

The project focuses on afforestation of bare lands as well as tending, thinnings and supplementary planting with diversified native tree species, adapted to the local climatic and site specific conditions. The project will also include sites where medicinal plants will be cultivated under the forest cover. Investments in forest infrastructure (i.e. access roads and fire breaks) are expected to better protect the forest ecosystems from wildfires.

The new management regime applied in this project, with selective intermediate harvesting and establishment of mixed forests will form multi-layered forest stands and habitats with higher biodiversity, and will increase soil's water retention capacity and soil organic material content in the area. Increases in yield and wood stocks will result in higher CO_2 sequestration compared with the situation without project investments.

Building of forest roads might increase the risk for soil erosion, if adequate mitigation measures are not taken. The project takes precautionary measures to avoid unnecessary clearance of forest cover. Clear cutting and prescribed burning are prohibited measures, and conservative soil preparation methods are used on planting sites. Proper drainage is ensured in forest road construction and tree skidding is not used in selective harvesting. Steep slopes are especially prone to erosion and increase risks for work related accidents. Project sites will not be located on extremely steep slopes (over 35 degrees) with high erosion risk.

The use of chemicals is expected to be limited to the use of pesticides in case of local pest infection and to the occasional use of fertilizers in planting holes. The Promoter will ensure that the use of chemicals will comply with the approved list for forest use in China and in the EU.

The project also supports international commitments on biodiversity protection and it is in line with the EU Strategy on China (2016), that calls for an increased cooperation on climate change, and with the EU-China 2020 Strategic Agenda for Cooperation, of which one of the main themes is sustainable development, biodiversity and responsible management of forests and, in particular safeguarding of ecosystem services in China.

This project is compatible with the strategic targets of *Decisions on Accelerating Forestry Development* (defined by the State Council), *Planning for National Ecological Environment Construction*, the *13th Five-year Plan for Economic and Social Development* and the *13th Five-year and Medium and Long-term Plan for Forestry Development*. Project investments to support the new activities in state-owned forest farms are also in conformance with the strategic objectives of the *Reform Plan for State-owned Forest Farms* (defined by the Central Committee of CPC[3] and the State Council)

[3] CPC - Communist Party of China

The project has an Environmental Management Plan in place and is preparing a Project Implementation Handbook that shall guide the implementing entities to achieve the targeted environmental and social standards. The Promoter has the responsibility to ensure that beneficiaries and their contractors are committed to implement the plan and adopt related standards on sustainable management. Capacity building provided by the PPMO to implementing entities and final beneficiaries will increase the professional competence in sustainable management of forests.

EIB Carbon Footprint Exercise

Through the newly planted and rehabilitated forests, the project will lead to sequestration of about 5,764.4 kt CO_{2e}/year (in absolute terms). Emissions from synthetic nitrogen fertilizers and fuel consumption by trucks are relevant during the implementation phase (5 years) and in minor scale in tending activities. Based on a life cycle assessment (LCA) approach, their level is estimated to be about 1,000 t CO_{2e} / year over the project cycle. The emissions from organic fertilizers are not taken into account as direct project related emissions because they originate from recyclable sources that would lead to the same emissions also if not used in the project. Based on these gross sequestration and emission parameters, the project's net carbon dioxide sequestration is in average 192.7 kt CO_{2e} per year.

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

Project sites are in remote areas where the selected state-owned forest farms operate. Employment based migration to cities is common and households are often led by women or elderly people. In some project regions, about 70% of women work for third parties. The national *Reform Plan for State-owned Forest Farms* and mechanisation have introduced more business oriented management to the Forest Farms which has led to a decrease in employment opportunities in remote rural areas.

There are 20 different minority groups living in the project counties of which five major groups (Tujia, Yao, Miao, Dong, Hui) have communities in the project areas. In six counties the share of people belonging to one of these minority groups is over 60%. In general, the minority groups are well integrated into the dominant Han population and legally they have the same rights. However, decision making procedures, traditions and sometimes languages are different in ethnic communities. The social impact assessment describes the presence and expectations of minority groups and helps county-level project organisations to address these needs in planning and decision-making. The Promoter is requested to present more detailed procedures to ensure that the minority groups can fully participate in project planning and that they have equal opportunities to gain benefits from the project. The project implementation does not require voluntary or involuntary resettlement of people.

The project provides seasonal employment to rural areas. Planting, tending and partly also intermediate harvesting are tasks that are also done by women, who are active in forest-related decisions. The required work inputs correspond to over 33,300 person-years (full time employment) during the project's implementation period of 5 years. Forestry works in mountainous areas are risky and appropriate measures to organise the work safely and to provide and use appropriate safety devices are preconditions for safe work.

Chinese labour laws on forest work set the minimum requirements for health and safety of work. The project shall be aligned to the international best practices in labour standards and work safety. Therefore, the Promoter has the responsibility to ensure that forest farms and contractors will comply with the Bank's social standards regarding labour conditions and work safety.

State forest farms and workers expect good economic returns from project investments in a timely manner. They have to wait for income over a long rotation cycle, generated through timber sales from tending and thinning. High financial expectations from marketable timber may be in conflict with the project's environmental objectives. County administrations, to which the funds will be on-lent by the Provincial authorities, will have a role in securing adequate resources for employment of local people for forestry activities and also for the environmental management of project sites. The project also includes a management model where high value medicinal plants and other plants are grown under the forest cover to produce income within a shorter rotation.

Public Consultation and Stakeholder Engagement

The Department of Forestry of Hunan Province published in July 2017 the Social Impact Assessment report that included a questionnaire for households from project areas on the foreseen activities and impacts of the project. The survey was conducted in summer 2017. Different stakeholder groups (i.e. state forest farm employees, farmer households, women, minority groups, village councils and provincial level government entities, as well as private forest companies) support the project implementation.

The consultation gives detailed information on the expectations of the different stakeholders and introduces measures to address any risks identified in the interviews. Farmers and Implementing entities (workers, forest farms, companies) emphasise early participation, capacity building in sustainable management of forests and cooperation with other forest users (cattle keepers, etc.) to protect the natural resources, as the main drivers for the successful project implementation. Government organisations emphasise also planning, respecting the multiple values of forests, competence and good management regimes, control and good management and timely allocation of financial resources.

The Promoter published a Guide for Participatory Planning (July 2017) that fosters the government of Hunan province, the county governments and the county forest bureaus to support continuous stakeholder engagement at village and county levels in project planning and implementation.

Other Environmental and Social Aspects

The project is committed to implement environmentally and socially sustainable forest management in line with the internationally accredited forest certification standards (i.e. China Forest Certification Scheme endorsed by the Programme for Endorsement of Forest Certification (PEFC)).

Conclusions and Recommendations

The project will increase the forest cover and growth in mountainous areas which in turn contributes to climate change mitigation by increased carbon stocks. Mixed stands improve the resilience of forest ecosystems to adapt to the adverse weather conditions. Continuous

vegetation cover will also increase the water retention capacity and mitigate the risk for soil erosion.
The project provides employment opportunities to local people and introduces sustainable and certifiable management regimes. Sites with high value medicinal and other plants may introduce early sources of income during the lengthy rotation cycle of timber tree species. However, the cultivation of medicinal and other cash crop plants is limited to about 300 ha.

The Promoter shall ensure the following environmental and social conditions and undertakings are met throughout the project implementation period:

Disbursement conditions:

- Submission of the project's formal environmental permit and/or the EIA screening-out decision and in case of any non-screening out, the relevant EIA and approval documents from the relevant environmental authorities (i.e. Department of Environment Protection of Hunan Province).

Project undertakings:

i. Adequate capacity building is provided to implementing entities, in order to enhance the final beneficiaries' own operational, management and business decisions.
ii. Adequate, continuous and pro-active coordination and communication is in place among project stakeholders (i.e. provincial, county and local level administrations, and implementing entities / final beneficiaries) regarding project's objectives, procedures and standards, in order to ensure that best practices and information is passed from the Provincial Department of Forestry all the way down the chain to the implementing entities.
iii. The project is aligned with the international forest certification standards, such as China Forest Certification Scheme (CFCS) endorsed by PEFC, i.e., as a minimum, a roadmap to certification.
iv. Large scale soil movements, heavy terracing, interventions on slopes steeper than 35 degrees, and clearing of the project sites by slash and burn practices shall not be allowed in this project.
v. Not invest in irrigation structures. No permanent irrigation of the new plantation / existing forests is allowed. Only temporary watering of the newly planted trees is permitted for a period of up to three years after planting, for the trees to develop good rooting systems and to survive later without watering/irrigation.
vi. Land lease contracts and land compensations are based on fair terms for all parties, and include fair price revision mechanisms, exit clause, complaint mechanism and other potential benefit sharing arrangements, that shall be clarified explicitly in the contract. The promoter shall follow the FAO Voluntary Guidelines on the Responsible Governance of Tenure (VGGT) of land, fisheries and forests, and shall include references to the VGGT in the Project Implementation Handbook.
vii. Recommendations and conclusions of the EIA and SIA shall be reflected in the Project Implementation Handbook.
viii. Ensure that appropriate health and safety measures are reflected in the Project Implementation Handbook and applied during project implementation and operation by all parties to prevent work-related health and accident risks.
ix. Only the chemicals approved for use by the relevant EU and Chinese laws and regulations shall be used in the project. The Promoter shall define operational guidelines that specify precautionary measures needed for chemical use, storage and end use to avoid any uncontrolled leaching to waters, air or soil, and include reference to such guidelines in the Project Implementation Handbook.

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Taking into account the conditions on the project, the capacity of the Promoter and the systems in place to manage environmental and social impacts and issues, the project is acceptable to the Bank.