

Luxembourg, 27 October 2017

# **Environmental and Social Data Sheet**

| Overview  |   |
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| Project Name:   | Shaanxi Forestry  |
| Project Number:   | 2016-0280   |
| Country:  | China   |
| Project Description:  | The project is an allocation under the China Climate Change<br>Framework Loan II. It is the Bank's 15 <sup>th</sup> project in the forestry<br>sector in China since 2009. The project afforests 3,105 ha of<br>bare or degraded lands and rehabilitates 4,425 ha of existing<br>low quality forests. The total project area is 7,530 ha. The<br>project also upgrades 83 km of forest roads and builds two<br>fire watch towers. |
| EIA required:   | yes   |
| Project included in Carbon Footprint Exercise <sup>1</sup> : no |   |
| Environmental and Social Assessment                             |   |

# **Environmental Assessment**

The project is located in Hancheng City, Shaanxi Province in China. The project sites are situated i) along the Yellow River valley between the Provinces of Shaanxi and Shanxi, ii) on the industrial zone North of the Hancheng City, and iii) on the banks of the Jushui River. Trees are also planted for urban greening in the hills in the west of Hancheng City.

The project establishes mixed stands of tree and shrub species suitable to the specific, local site conditions. Only native, drought and frost resistant species (eleven native tree species and seven native shrub species) will be planted in mosaic structures with the main objective to protect and improve the ecological conditions of the project area. The project excludes investments in permanent irrigation, but in the case of prolonged droughts, the planted trees can be temporarily watered within three years after planting to increase survival rates. The whole project area serves only for ecological purposes (i.e. protection forests) and no commercial loggings will be allowed, i.e. no felling rights to cut the trees will be given.

An independent Environmental Impact Assessment (EIA) of the project was completed in January 2017 and the EIA report has been submitted to the Hancheng Municipal Environmental Authority (HMEA) for approval. After the HMEA's technical review of the EIA in August 2017, the environmental permit is expected to be formally issued by end September 2017. The promoter shall submit to the Bank the approval document (corresponding to the project's environmental permit) prior to the first loan disbursement.

The project benefits include increase in forest cover, carbon stocks and landscape quality, improved soil water retention capacity and increase in soil organic material content and

<sup>&</sup>lt;sup>1</sup> 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.



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stabilisation, better absorption of dust raised by wind and higher biodiversity in the area. Local people viewed the reduction of sand storms and air pollution as the primary benefits from the project, followed by water and soil protection.

The potential adverse impacts and risks are related to soil erosion, low survival rates of planted trees and forest fires. To mitigate these risks, the project avoids disturbing slopes steeper than 25 degrees and applies conservative site preparation techniques on all sites to protect the existing vegetation as much as possible. The species and types of seedlings are selected to match with the site specific conditions. Residual risk: Low.

The project may include chemical (e.g. pesticide) applications, necessary to protect the growing crops against insect or disease outbreaks. This may have negative impact on the surrounding environment. The risk is mitigated by respecting both EU and national laws and regulations concerning chemical applications. Only chemicals approved by both the EU and Chinese regulations will be applied. The project will use only certified seedlings produced in licensed nurseries that respect the quarantine rules for seedling production and sale. The Forestry Quarantine Department monitors forest health and guides all measures to combat any insect or disease epidemics. Operational guidelines will further specify precautionary measures needed for chemical use, storage and end use to avoid leaching to waters, air or soil. Residual risk: low.

Precautionary measures are applied also in improvement of roads that can be used for fire protection. Appropriate drainage systems and road surface materials will also decrease erosion risks.

The project has an environmental management plan that gives general principles for sustainable management. Operators and their contractors shall implement the plan and related standards on sustainable management. The promoter shall submit to the Bank the final environmental management plan prior to the first loan disbursement.

# **EIB Carbon Footprint Exercise**

The planted and rehabilitated forests will sequester annually about 51.2 kt of CO<sub>2</sub>e. The existing forests (to be rehabilitated in the project) would grow without the project as well, thus setting an estimated baseline sequestration rate at 4.7 kt of CO<sub>2</sub>e per annum. The emissions from organic fertilizers are taken into account as additional emissions of the project. Fertilizer applications and fuel consumption by trucks, mainly at the project implementation phase, will emit about 110 t of CO<sub>2</sub>e per annum, averaged over the project's economic life. When compared to the benchmark (without the project), the project is estimated to sequester about 46.5 kt of CO<sub>2</sub>e per annum, net of emissions.

# Social Assessment, where applicable

An independent research institute completed the Social Impact Assessment (SIA) of the project in January 2017, classifying the project as low risk in terms of social impacts.

Different industries are important employers in Hancheng City and they offer salaries that exceed the traditional income level achievable in the agriculture/forestry. Yet, the poverty rate is above the average national level and the poorest people live in aged and/or small rural households. The project areas do not have communities with ethnic minorities. The project does not include resettlement.

The establishment of protection forests in the project is supported by 70% of interviewed farmers. The farmers who were reluctant to participate in the project, worked typically for other businesses and they did not have excess labour resources available for the project.



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The project will provide temporary employment opportunities to rural people during the five year construction period and some work on fire watching and limited tending thereafter in the operation phase. The project will employ local people without any discrimination of women or poor farmers. Sharing of employment related benefits in the local communities would increase the commitment to the project. Safety and health measures will be adopted and implemented to prevent any work related accident or health risks.

Most of the project land is leased from the state farms and village collectives and only a minor share from individual households. In most of the cases, the lessors give the land to the project free of charge and it is given back to them with the growing trees after the five-year project implementation period. The further forest maintenance is the responsibility of the lessor who also can benefit from the eco-services of the forest without cutting the trees.

Only in few exceptions the project will generate cash revenues and in these cases the project will pay a rent from the land. The land is leased for 30 years and the contracts shall include explicit terms on the annual rent, periodical price revisions e.g. against inflation, exit clauses and compensation for the existing trees and cash crop perennials, if any.

# **Public Consultation and Stakeholder Engagement**

The project preparation included public information sharing and participatory consultations on environmental and social impacts during December 2016 and January 2017. However not all households in the project area did feel of being fully informed about the project objectives and conditions. Therefore, the City Government shall support further consultations on the management and protection of the planted sites.

The majority of rural people support the project activities. The concerns expressed during the consultations relate to potential compensations of existing trees/cash crops, restrictions to use the project sites e.g. to fire wood collection and access to the benefit from the employment opportunities. Farmers need also better information in advance concerning the terms of the land leasing arrangements. Given the Bank's positive experience in previous forestry sector projects in China (under China Climate Change Framework Loan I and China Forestry Framework Loan) in dealing with land tenure issues, it is expected that the promoter will implement the project in compliance with EIB's undertakings related to social standards.

# **Other Environmental and Social Aspects**

The project is committed to implement environmentally and socially sustainable forest management in compliance with the internationally accredited China Forest Certification Scheme (CFCS).

# **Conclusions and Recommendations**

The project complies with the environmental and social standards of the Bank, has applied for the statutory environmental permit from the relevant authority and shall submit a copy of this document to the Bank prior to the first disbursement.

The project activities improve the quality of environment in the erosion prone and polluted region of Shaanxi. It is expected to mitigate climate change and improve the ecosystem resilience to adapt to adverse weather conditions. Vegetation cover will stabilise soils and improve their water catchment and retention capacity.

The project provides employment opportunities to local people and introduces sustainable and certifiable forest management regimes.