

Environmental and Social Data Sheet

Overview

Project Name:	JIRAMA ANDEKALEKA HYDRO EXPANSION
Project Number:	2014-0378
Country:	MADAGASCAR
Project Description:	<i>Expanding an existing hydropower station (Andekaleka) by two further turbines (unit size 33 MW) including associated equipment and an upstream sand trap; reinforcing existing substations and networks associated transformers, switchgear, cables and various auxiliary and control equipment to enable evacuation of the additional power to the main network.</i>
EIA required:	No, Annex II, screened out
Project included in Carbon Footprint Exercise ¹ :	yes

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

If located within the EU, the expansion of a hydropower plant and the substations would fall under Annex II of the EIA Directive 2011/92/EU (amended by 2014/52/EU). Thus the competent national authority would have to determine based on a case-by-case assessment or defined criteria whether an EIA would be required. According to national environmental legislation in 2008, the capacity expansion of the project fell below the national threshold (150 MW) above which an EIA would be mandatory; thus the authorities have not requested an EIA. Nevertheless, the promoter has - in 2008 - submitted an environmental impact study and an approval application to the authorities. Public consultation was neither required nor foreseen.

Environmental and Social Assessment

Environmental Assessment

The project site is isolated with no immediate neighbours. The works will be within existing infrastructure, mainly inside existing buildings. The environmental study thus concluded that residual impacts of the project on the environment will be non-significant. The main temporary impact is expected during construction. The project requires transporting materials and staff to the site by a single railway line. This would be exposed to increased traffic, the impact of which is however assessed to be minor, particularly as the promoter will apply adequate safety and proper information policies. Except for the families of the operating staff, the project site is not inhabited and resettlement is not required. Any possible negative social impact is thus expected to be negligible. According to the promoter there is no nature conservation site in the vicinity that could be affected. The project is expected to have minor residual environmental impacts and thus is acceptable in environmental terms for Bank financing.

EIB Carbon Footprint Exercise

Absolute emissions are a result of the small flooded surface area in front of the dam. Using factors for diffusive and bubble emissions in tropical, wet climate results in ~120 t CO₂e/year; taking into account CO₂ and CH₄ emissions. Baseline emissions are assumed to stem from

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.



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current thermal power generation, which are considered to have a grid emission factor of ~490 t CO₂e/GWh. On that basis the estimated emissions savings are ~100 kt CO₂e/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.