

## Environmental and Social Data Sheet

### Overview

Project Name: *KEYAL KHWAR HYDROPOWER PROJECT*  
 Project Number: *2012-0678*  
 Country: *Pakistan*  
 Project Description: *Keyal Khwar Hydropower comprises a medium-sized (122 MW) run-of-river hydropower plant with a small 1.5 ha reservoir for daily regulation (dam height of 38m). It is located on a tributary of the Indus River in northern Pakistan. This operation is proposed for co-financing with KfW as Lead Financier under the Mutual Reliance Initiative (MRI).*

EIA required: yes

Project included in Carbon Footprint Exercise<sup>1</sup>: yes

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

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

This project, if within EU, would be classified as an Annex II project under the Directive on Environmental Impact Assessment, requiring the competent authority to decide or screen the necessity for Environmental and Social Impact Assessment (ESIA). Pakistani national environmental regulations require an EIA for this type of project. The project promoter has made the relevant studies and produced the EIA according to Pakistani legislation. KfW has with its consultants made a gap analysis comparing the EIA to the ESIA requirements of KfW, and has undertaken the supplementary studies to cover these gaps.

The environmental impacts of the project are considered limited, as the main works are underground tunnel structures. The largest impacts during construction arise from the disposal of excavated tunnel material and from the general impact of the civil works (including traffic, noise, working camps). The site of the reservoir is unpopulated and will not affect residents or cultivation. The main social effects are associated with the widening and improvement of the access road that will affect people, housing and livelihoods along the route. The road and the power plant construction will also provide benefits through improved transportation and employment opportunities.

The implementation of the environmental and social studies and the standards applied by KfW to the project will be monitored, as foreseen under the Mutual Reliance Initiative, to confirm alignment with the Bank's environmental and social standards

### Environmental and Social Assessment

#### Environmental Assessment

Pakistan environmental law requires an IEE (Initial Environmental Examination) and an EIA (Environmental Impact Assessment) to be completed for the project. The Environmental Management Plan and Resettlement Action Plan are not mandatory components of the EIA as defined by Pakistan environmental law. The original Environmental Impact Assessment

<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<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

(2008) did not include a detailed Environmental Management Plan or a Resettlement Action Plan. These have been prepared during the planning phase according to the specifications of the implementation agency and the KfW (2011). The national Environmental Protection Agency is the authority responsible for issuing the approval. As part of the feasibility study, the compliance of the project with the WCD recommendations has been established in a separate study.

WAPDA will establish its own local site management team for the implementation and supervision of the construction project. It will also transfer the responsibility for the implementation of the Environmental Management Plan (EMP) and Resettlement Action Plan (RAP).

The implementation agency must appoint an international panel for the technical monitoring of the project which includes an expert known to us and experienced in environmental and social aspects with regard to water engineering projects.

### **EIB Carbon Footprint Exercise**

Estimated emissions savings are 125 000 tonnes of CO<sub>2</sub> equivalent per year.

The project includes a ponding reservoir. According to the UNFCCC methodology, (for CDM registration), GHG emissions can be neglected from hydropower plants with a power density higher than 10W per m<sup>2</sup>. Keyal Khwar reservoir is significantly smaller than this threshold, and the carbon footprint exercise does not include such emissions. The project boundaries are the power plant and the reservoir. No emissions or savings outside this boundary have been taken into account. The climate change models indicate that precipitation in Pakistan may to decrease in winter months. The hydrology and emission savings of the project are considered to be stable. 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 site is remote and rural, but accessible via main regional highway. The surrounding areas are of great natural beauty, and also have a history of security incidents and earthquakes. The population of the province is among the poorest and least educated in Pakistan, with literacy rate around 10-15%. The rule of law and obedience of the central government is not strong. The project's social implications to local population have been appropriately assessed and minimised.

Although the small reservoir does not require resettlements, the auxiliary works of the project do require resettlements. The RAP for these works; improvement of the narrow mountain road (22 houses, 232 persons) and establishment of the workers camp (25 persons) and establishment of the permanent power plant operation colony (92 persons), has been set up according to KfW requirements.

The work conditions and the implications to vulnerable group will be monitored during the implementation according to KfW standards.

### **Public Consultation and Stakeholder Engagement, where required**

Consultation carried out under the EIA process. Scoping sessions and household interviews had been conducted with the affected household heads, starting in 2006, repeated in 2007 and 2008, which were updated by several campaigns in 2011.

### **Other Environmental and Social Aspects**

None

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