# WB-P150066

Nepal: Power Sector Reform and Sustainable Hydropower Development (PSRSHD)



\$ 24.00 million

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#### **Quick Facts**

**Project Cost (USD)** 

Countries	Nepal
Specific Location	Ikhuwa Khola Hydropower Project, Sankhuasabha District
Financial Institutions	World Bank (WB)
Status	Active
Bank Risk Rating	A
Voting Date	2015-09-25
Borrower	Government of Nepal
Sectors	Hydropower
Potential Rights Impacts	Healthy Environment, Housing & Property, Indigenous Peoples, Right to Health, Right to Water
Investment Type(s)	Loan
Investment Amount (USD)	\$ 20.00 million



WB-P150066

Nepal: Power Sector Reform and Sustainable Hydropower Development (PSRSHD)

#### **Project Description**

The purpose of the project is to "(a) strengthen the capacity of the power sector agencies to plan and prepare hydropower and transmission line projects following international standards and best practices; and [to] (b) improve the readiness of the power sector agencies for regulatory and institutional reforms."

The project has three components:

- Component A: Preparation of Hydropower and Transmission Line Investment Projects This component will include preparation of the 335MW Upper Arun Hydroelectric Project and the 30 MW Ikhuwa Khola Hydropower Project, as well as one "priority high voltage transmission line project to be identified."
- Component B: Studies and Preparation for Policy Recommendations and Sector Reform
- Component C: Capacity Building for Safeguard Management and Hydropower This component aims to provide recommendations and improve "the environmental and social safeguard management system in Nepal" by "implementing capacity-building activities to strengthen relevant government institutions for the energy sector."

Though only Component A will directly result in the creation of hydropower facilities, the power sector reforms, capacity-building activities, and policy dialogues financed by this project will enable future hydropower development in Nepal.

**Location**: The Upper Arun Hydroelectric Project will be located on the Arun River in the Sankhuasabha District of eastern Nepal. The Ikhuwa Khola Hydropower Project will be located "on a tributary to the Arun River approximately 8 km downstream of the proposed UAHEP powerhouse site." The site for the transmission line project has not yet been identified. Power sector studies, improvements, and reforms under Components B and C will have nationwide impacts.

Resources needed: Possible land acquisition under the UAHEP and IKHP, most likely due to the construction of access roads, including a 24 km road and 1.7 km road tunnel connecting the UAHEP powerhouse with the dam site.

1.7 km of road tunnel and a bridge over the Arun River

Project Number: P150066



WB-P150066

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#### **Early Warning System Project Analysis**

#### Risk Assessment: Category A.

The World Bank classifies proposed projects based on the type, location, sensitivity, and scale of the project and the nature and severity of its potential environmental impacts. Category A is assigned to a project only if it is likely to have "significant adverse environmental impacts that are sensitive, diverse, or unprecedented."

#### **APPLICABLE SOCIAL & ENVIRONMENTAL STANDARDS**

Based on World Bank documents, the following environmental and social safeguard policies are triggered:

#### **Environmental Assessment OP/BP 4.01**

triggered because under Component A, as part preparation of the [Upper Arun Hydroelectric Project (UAHEP)] and [Ikhuwa Khola Hydropower Project (IKHP)], a full Environmental and Social Impact Assessment and corresponding Environmental and Social Management Plans are required. Bank documents state that future infrastructure investments being prepared under Component A may have significant environmental and social impacts. A Cumulative Impact Assessment is also required because the UAHEP and IKHP are part of a proposed system of cascading dams in the Arun Watershed. Furthermore, the basin-level planning activities, sector-wide policy analysis and reform recommendations under Components B and C may have significant environmental and social impacts, and will require a Strategic Environmental and Social Assessment as well as an Environmental and Social Management Framework. According to Bank documents, guidelines on cumulative and strategic impact assessment as well as ecological flows will be developed, and safeguard capacity building across key government agencies will be supported.

#### Natural Habitats OP/BP 4.04

triggered due to the UAHEP and the IKHP, though the project documents do not describe the specific impacts. Additionally, investment-specific [Environmental and Social Impact Assessments will be] carried out under the project to ensure that any potential impacts to natural habitats are appropriately assessed and managed in accordance with this policy. Forests OP/BP 4.36 - triggered due to the UAHEP and the IKHP, though the project documents do not describe the specific impacts.

#### Physical Cultural Resources OP/BP 4.11

triggered due to potential impacts to physical cultural resources.

#### **Indigenous Peoples OP/BP 4.10**

triggered because the proposed [UAHEP] and IKHP projects are expected to have both positive and negative impacts on indigenous communities. An Indigenous and Vulnerable Community Development Plan will be prepared for the projects.

#### **Involuntary Resettlement OP/BP 4.12**

triggered because the proposed [UAHEP] and IKHP projects are expected to have impacts of land acquisition and possible resettlement, though at the time of writing none of the project documents describe the extent of the impact.

#### Safety of Dams OP/BP 4.37

triggered due to the UAHEP and IKHP. A Panel of Experts appointed by The Nepal Electricity Authority will advise it on all aspects of safety of these two dams.

#### **Projects on International Waterways OP/BP 7.50**

triaggred because the LINHED is located on a trans boundary waterway and the IVHD is located on a tributary of this waterway



WB-P150066

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#### **People Affected By This Project**

#### **OUR RISK ASSESSMENT**

Based on the World Bank's project documents, this project poses potential risks to the following human rights:

#### Right to Property & Adequate Housing

According to the Nepal Electricity Authority's draft Terms of Reference for the Upper Arun Hydroelectric Project (UAHEP) and the Ikhuwa Khola Hydropower Project (IKHP), the proposed UAHP and IKHP are expected to require land acquisition and possible resettlement. Though the two projects themselves will not cause large-scale displacement due to their remote locations and low population density, the access roads and other ancillaries will likely require more significant land acquisition. At the time of writing, a Resettlement Action Plan for these projects has been proposed but not completed or published on the Nepal Electricity Authority's website. As a result, the exact resettlement impacts under Component A are unknown.

#### **Rights of Indigenous Peoples**

According to the Nepal Electricity Authority's Terms of Reference: About a third of the Nepali population belongs to indigenous communities classified and officially recognized by the GoN... The Project area is inhabited by several indigenous communities who are expected to be impacted both positively and adversely by the Project. A Vulnerable and Indigenous Peoples Development Plan has been proposed to assess the situation in the project area. However, specific information about the project area demographics as well as possible impacts have not yet been disclosed.

#### **Right to Water**

According to the Environmental and Social Management Framework, it will be important to manage water quality in the upstream areas and [ensure] adequate environmental/riparian flows. Cumulative effects on hydrology due to hydropower development in the Arun River watershed must be taken under consideration in a Cumulative Impact Assessment.

According to the draft Terms of Reference, water-related impacts could include fishery activities and possible other uses of the river, such as domestic water use and irrigation as well as local/ national tourism activities. Impact assessments have been proposed to mitigate downstream effects, because they may experience significantly reduced flows, according to the Integrated Safeguards Data Sheet.

#### Right to a Healthy Environment

According to the Environmental and Social Management Framework, the two projects supported under Component A (the Upper Arun Hydroelectric Project and the Ikhuwa Khola Hydropower Project) will have widespread and potentially severe impacts on the surrounding environment, including the land, water, flora, and fauna. Additionally, the influx of workforce and changes to local livelihoodsmay indirectly increase pressures on forests and other natural resources in the broader project area.

Bank documents describe the region as mountainous and untouched. However, according to the Bank, long-term and indirect environmental and social impacts from the development of the UAHEP and IKHP may include aquatic effects to the morphology of the channel of the Arun River immediately downstream of the dam sites and from impacts associated with erosion and sedimentation in the catchment area and along the corridors of the access roads.

The integrated basin planning processes and expanded hydropower development supported under Component B will have nationwide implications for future development activities in the basins, with related environmental and social effects.

#### Right to Health

- Public health concerns related to UAHEP and IKHP construction include: dust, noise, pollution, and migration of construction workers into the project, as well as accidents and injuries caused by the transportation of machinery and equipment. Another



WB-P150066

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#### **Investment Description**

• World Bank (WB)

Bank financing: World Bank Borrower: \$1.5 million

Amount of bank loan or investment: World Bank: \$20 million; South Asia Water Initiative: \$2.5 million

Total project cost: \$24 million



WB-P150066

Nepal: Power Sector Reform and Sustainable Hydropower Development (PSRSHD)

#### **Contact Information**

World Bank

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#### **CONSULTATIONS**

According to Bank documents, two public consultations have been conducted. The first round was held in Kathmandu on April 30, 2014, regarding the initial draft Terms of Reference for the Environmental and Social Impact Assessments for the UAHEP and IKHP. The consultation brought together all stakeholders including government agencies, international agencies, academic institutions, NGOs, INGOs, local representatives, and representatives of the tourism sector. The Nepal Electricity Authority updated the Terms of Reference based on feedback from stakeholders.

The second consultation was held on December 23, 2014, to discuss the Environmental and Social Management Framework of the UAHEP and IKHP. Future consultations will take place regarding the transmission line investment that has yet to be identified as well as the consultations for the activities under Component C that will involve "updating... environmental and social regulations and procedures for hydropower." According to Bank documents this will "include a broad consultation with public sector and civil society stakeholders at the national level, in addition to private sector."

Bank documents state that the Nepal Electricity Authority "will establish a project-specific website, where information about the specific investments being prepared under the project (for now covering UAHEP and IKHP) can be accessed." Until this project-specific website is created, information regarding the UAHEP and IKHP can be accessed on: http://www.nea.org.np/publications.html

#### PROJECT-LEVEL GRIEVANCE MECHANISMS

The Resettlement Action Plan will contain information about the grievance redress mechanism. Similarly, the draft Terms of Reference requires creation of a project-level grievance mechanism. However, at the time of writing, there is no specific information about redress mechanisms.

#### **ACCOUNTABILITY MECHANISM OF WORLD BANK**

The World Bank Inspection Panel is the independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by a World Bank-financed project. If you submit a complaint to the Inspection Panel, they may investigate to assess whether the World Bank is following its own policies and procedures for preventing harm to people or the environment. You can contact the Inspection Panel or submit a complaint by emailing ipanel@worldbank.org. You can learn more about the Inspection Panel and how to file a complaint at: http://ewebapps.worldbank.org/apps/ip/Pages/Home.aspx.



WB-P150066

Nepal: Power Sector Reform and Sustainable Hydropower Development (PSRSHD)

#### **Bank Documents**

- Integrated Safeguards Data Sheet (Appraisal Stage) Nepal: Power Sector Reform and Sustainable Hydr [Original Source]
- Integrated Safeguards Data Sheet (Concept Stage) Nepal: Power Sector Reform and Sustainable Hydrop [Original Source]
- Nepal Nepal: Power Sector Reform and Sustainable Hydropower Development (PSRSHD): P150066 Imple [Original Source]
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- Nepal Power Sector Reform and Sustainable Hydropower Development (PSRSHD) Project : environmental [Original Source]
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- Nepal Power Sector Reform and Sustainable Hydropower Development (PSRSHD) Project : environmental [Original Source]
- Nepal Power Sector Reform and Sustainable Hydropower Development (PSRSHD) Project : environmental [Original Source]
- Nepal Power Sector Reform and Sustainable Hydropower Development Project (English) [Original Source]
- Official Documents- Disbursement Letter for Credit 5728-NP (Closing Package) (English) [Original Source]
- Official Documents- Financing Agreement for Credit 5728-NP (Closing Package) (English) [Original Source]
- Official Documents- Project Agreement for Credit 5728-NP (Closing Package) (English) [Original Source]
- Official Documents- Supplemental Letter Ref. Financial Data for Credit 5728-NP (Closing Package) (En [Original Source]
- Project Information Document (Appraisal Stage) Nepal: Power Sector Reform and Sustainable Hydropow [Original Source]



WB-P150066

Nepal: Power Sector Reform and Sustainable Hydropower Development (PSRSHD)

### **Other Related Projects**

WB-P175306 Additional Financing for Nepal: Power Sector Reform and Sustainable Hydropower Development (PSRSHD)
Project