



## Dasu Hydropower Stage I Project (P121507)

SOUTH ASIA | Pakistan | Energy & Extractives Global Practice |  
IBRD/IDA | Specific Investment Loan | FY 2014 | Seq No: 5 | ARCHIVED on 21-Dec-2016 | ISR26504 |

Implementing Agencies: Water and Power Development Authority (WAPDA)

### Key Dates

#### Key Project Dates

Bank Approval Date:10-Jun-2014

Effectiveness Date:20-Nov-2014

Planned Mid Term Review Date:30-Mar-2018

Actual Mid-Term Review Date:--

Original Closing Date:30-Jun-2022

Revised Closing Date:30-Jun-2022

### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The overall project development objective is to facilitate the expansion of electricity supply of hydro-power in Pakistan. The Project would also improve access to socio-economic services for local communities in the project area and build WAPDA's capacity to prepare future hydropower projects. This would be achieved by installing a 2,160 MW hydropower plant on the main Indus River, which can be expanded to 4,320 MW in future at very low cost. The Project is a "high-risk-high reward" operation aimed at providing low cost non-carbon renewable energy.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

### Components

Name

Component A: Construction of the Main Hydraulic Structure on the Indus River (of which IDA \$10.0 million):(Cost \$1479.70 M)

Component B: Power Generation Facilities:(Cost \$1397.80 M)

Component C: Preparatory Works (of which IDA \$183.9 million):(Cost \$344.80 M)

Component D: Transmission Line (of which IDA \$15.0 million):(Cost \$350.00 M)

Component E: Implementation of Social and Environmental Management Plans, and Glacial, Sediment River Monitoring (of which IDA \$266.5 million):(Cost \$503.90 M)

Component F: Construction Supervision, Monitoring and Evaluation of the Project Impacts and Social and Environmental Management Plans (of which IDA \$53.0 million):(Cost \$99.10 M)

Component G: Project Management Support, Capacity Building of WAPDA, Technical Assistance and Training (of which IDA \$60.0 million):(Cost \$72.40 M)

### Overall Ratings



Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Satisfactory	● Satisfactory
Overall Implementation Progress (IP)	● Moderately Satisfactory	● Moderately Satisfactory
Overall Risk Rating	● High	● High

## Implementation Status and Key Decisions

Dasu Hydropower Stage 1 (DHP-1) is 2,160 MW run-of-river greenfield project located about 240km upstream from Tarbela Dam on main River Indus. It will supply 12,225 GWh annually and is part of least cost solution to mitigate power shortfall and reduce cost of generation in the country. Project comprises of 6 generating units of 360 MW each and 350km, 765kV double circuit transmission line from Dasu to Islamabad.

An IDA credit in the amount of SDR 379.7 million (US\$588.4 million equivalent) and an IDA Partial Credit Guarantee (PCG) in the amount of US\$460 million has been approved by the World Bank for DHP-I. The Credit Agreement between the government and International Development Association (IDA) was signed on August 25, 2014 and became effective on November 20, 2014. The IDA credit is structured in two portions SDR 122.8 (US\$ 190.3 million equivalent Cr. 5497) and SDR 256.9 million (US\$ 398.1 million equivalent Cr. 5498). WAPDA is expected to contribute about US\$600 million to the project. The IDA credit funds would primarily be used for project supervision, implementation of social and environmental management plans, and preparatory works such as relocation of Karakoram Highway (KKH), access roads, offices and colonies. WAPDA funding would supplement the same expenditures and would be used in outer years of the project when IDA funds are used. In addition, WAPDA funds would be used to meet counterpart funds for the main works if needed. Financing for the major works i.e. main structures, and power house and diversion tunnels, as well as mechanical and electrical equipment would be raised commercially on the balance sheet of WAPDA with credit enhancement provided by the Government of Pakistan and the World Bank.

Project implementation is progressing well and discussion with commercial banks is yielding good results. WAPDA has issued the mandate to a consortium of local banks to arrange commercial financing equivalent of US\$ 1,440 million to cover local cost component. Term sheet has been agreed and loan documents are under preparation. Structuring discussion for US\$ 800-1,000 million in a combination of loan/bond structure (supported by available IDA PCG of US\$460 million) is in progress with the two shortlisted banks. Two main civil works contracts MW01 and MW02 are ready for award and electro-mechanical equipment contract (EM01) is at the pre-qualification stage. Independent Panel of Experts and Project supervision consultants are on Board. Land Acquisition and Assessment Unit (LA&AU) has been established under District Collector (DC) Kohistan, land and property compensation rates have been approved and acquisition has started.

## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	● Substantial	● Substantial
Macroeconomic	--	● Substantial	● Substantial
Sector Strategies and Policies	--	● Substantial	● Substantial
Technical Design of Project or Program	--	● Substantial	● Substantial
Institutional Capacity for Implementation and Sustainability	--	● Substantial	● Substantial
Fiduciary	--	● Substantial	● Substantial
Environment and Social	--	● High	● High
Stakeholders	--	● Substantial	● Substantial
Other	--	● High	● High
Overall	--	● High	● High



## Results

### Project Development Objective Indicators

#### ► Generation Capacity of Hydropower constructed or rehabilitated under the project (Megawatt, Core)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2,160.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

#### ▲ Generation Capacity of Hydropower constructed under the project (Megawatt, Core Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2,160.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

#### ► Annual electricity supply renewable energy annually (Gigawatt-hour (GWh), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	12,000.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

#### ► Number of additional people in the project area with improved socio-economic services (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	20,000.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021



► Number of large hydropower project on the Indus River prepared by WAPDA (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	1.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

Overall Comments

**Intermediate Results Indicators**

► Construction of main hydraulic structure (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

► Construction of intake, waterways and power house (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

► Number of 360 MW power units installed (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	6.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021



▶ Private/Commercial Capital Mobilized (cumulative figures in million) (Amount(USD), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	2,450.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

▶ Construction of RAR KKH 1, KKH2, Power line, colonies (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

▶ 250 Km Double Circuit Transmission Line constructed and 100 KM Rehabilitated (Kilometers, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	350.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

▲ Transmission Line Rehabilitated (Kilometers, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021



▾ Transmission Line Constructed (Kilometers, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	250.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

► Implementation of SRMP and EMP (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

► Percentage of agreed local development plan implemented (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

► Hydropower Project with detailed design, environmental and social safeguards studies completed (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	1.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021



► Capacity Building of WAPDA (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	100.00
Date	01-Apr-2014	31-Mar-2016	30-Sep-2016	31-Dec-2021

## Overall Comments

### Data on Financial Performance

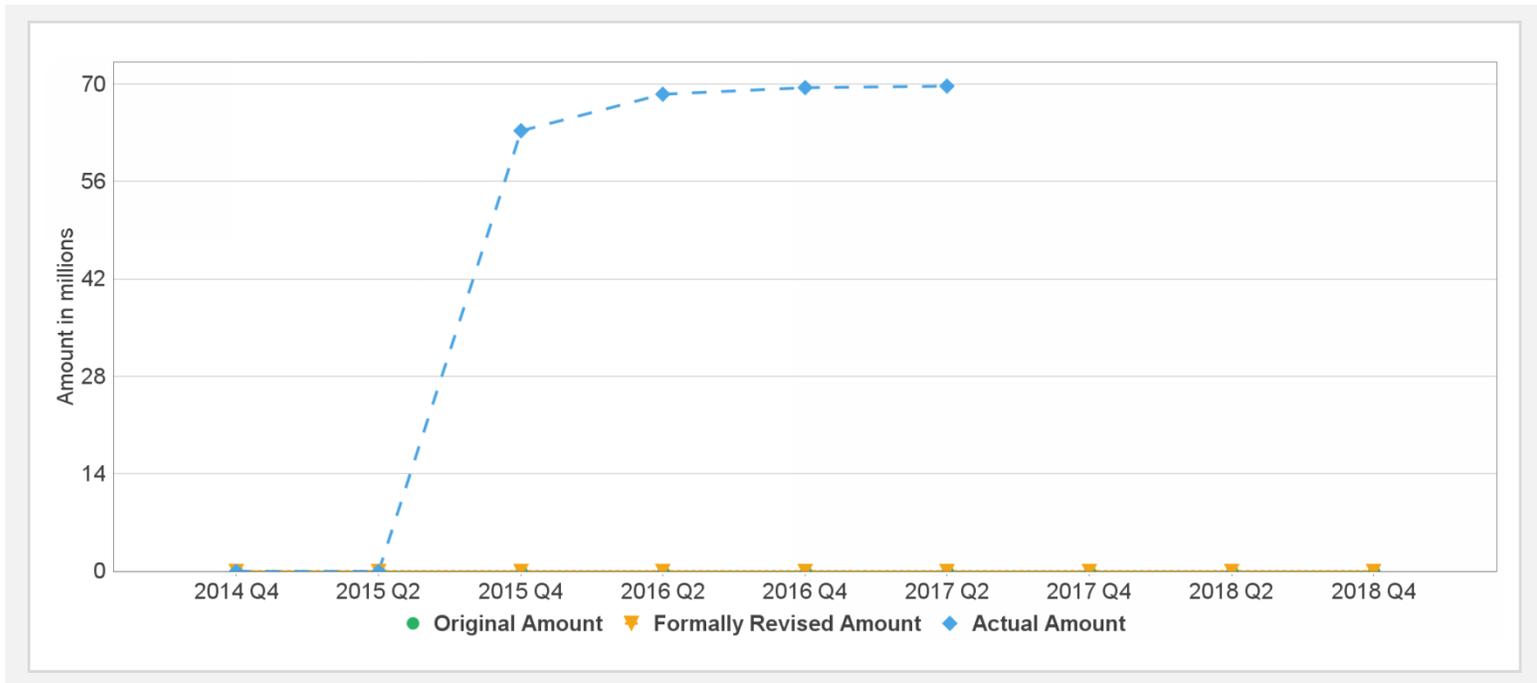
#### Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	Disbursed
P121507	IDA-54970	Effective	XDR	122.80	122.80	0.00	0.00	122.80	0%
P121507	IDA-54980	Effective	XDR	256.90	256.90	0.00	69.70	187.20	 27%

#### Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P121507	IDA-54970	Effective	10-Jun-2014	25-Aug-2014	20-Nov-2014	30-Jun-2022	30-Jun-2022
P121507	IDA-54980	Effective	10-Jun-2014	25-Aug-2014	20-Nov-2014	30-Jun-2022	30-Jun-2022

#### Cumulative Disbursements



## Restructuring History

Level 2 Approved on 14-Oct-2016

## Related Project(s)

P150756-IDA Partial Credit Guarantee for Dasu Hydropower Phase-I Project