

Project Summary

Location:

District: Keshem

District Center: Keshem

Location of Power house

N: 36° 37 45.8´

E: 70° 09 46.0´

H: 1.725 masl

Supply Area: Paleran and below mention villages

Water Source:

Paleran River; minimum flow > 0.5 m³/s

Accessibility: good via off road throughout the year; distance to Faizabad: 125 km

Technical Description:

The run-off the river project comprises of 70 m wide weir of 1 m height. The water is conveyed via a 1.15 km long headrace canal to the forebay. With a gross head of 107 m and a nominal discharge of 0.5m³/s the capacity is about 420 KW.

The power is transmitted via a 20 km long 20 kV transmission line and distributed via a 0.4 kV network. Houses are connected via service cable and equipped with electronic meter and RCBOs.

Socio-Economy

- Number of population: 7,380
- Number of households: 1,230; (6 persons/household)
- Number of houses: 840 (1.4 households per house)

The Bazaar is located in the center of district and comprises of 30 shops, 7 Mosques, 2 schools, 0 offices, 0 government buildings, 0 health facilities (hospital and clinic), 0 veterinary clinics, and a number of workshops.

Area Supplied

The following villages/hamlets will be connected to the supply system:

Paleran, Khwaja Baghe, Jangal dara, Dashte khawruk, Ashanha, Dehebaba, Sare tundak, Hashrma royeabe, Yawerzan

Environmental Aspects

The Paleran river is perennial. A fish pass is required to allow fish migration.

The project will have no negative impact to houses, land and irrigation.

Principal Lay-Out



Afghanistan Keshem (Paleran) Hydropower Project Site Reconnaissance

Project Name

Rural Electrification Concept
Badakhshan Province

Number of people supplied

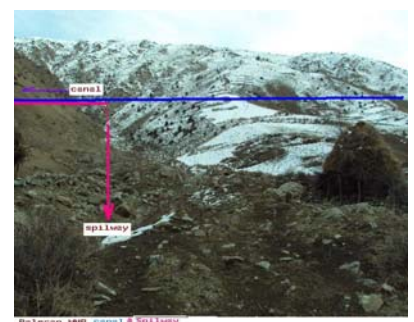
7,380 plus Bazaar

Estimated Costs

2,060,000 US\$, 279/Person,
4,400 US\$ /KW

Technical Details

Turbine capacity	420 kW
Rated head	107 m
Rated flow	0.5m ³ /s
Turbine type	Pelton
Planning and construction time	15 months



Survey implemented by:



Department of Water Management

For the Energy Working Group
under the PDC in Badakhshan

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