

Project Summary

Location:

District: Rogh
District Center: Zerakee
N: 37 38 129
E: 070 30 893
Elevation: 2,421 masl

Supply Area: Zerakee

Water Source:

Ronje abe River; minimum flow > 1.5 m³/s

Accessibility: via off road during 8 months a year; distance to Faizabad: 111km

Technical Description:

The run-off the river project comprises of a 30 m wide weir of 1 m height. The water is conveyed via a 3.3 km long headrace canal to the forebay. With a gross head of 40 m and a nominal discharge of 1.78m³/s the capacity is about 500 KW.

The power is transmitted via a 7 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.

Possible connection of the district center would require a 7 km long transmission line.

Socio-Economy

- Number of population: 13,900
 - Number of households: 2,350 (5.9 persons/household)
 - Number of houses: 1,960 (1,2 households per house)
- The Bazaar is located in the center of district and comprises of 320 shops, 4 Mosques, 2 schools, 3 offices, 6 government buildings, 1 health facilities (hospital and clinic), 1 veterinary clinics, and a number of workshops.

Area Supplied

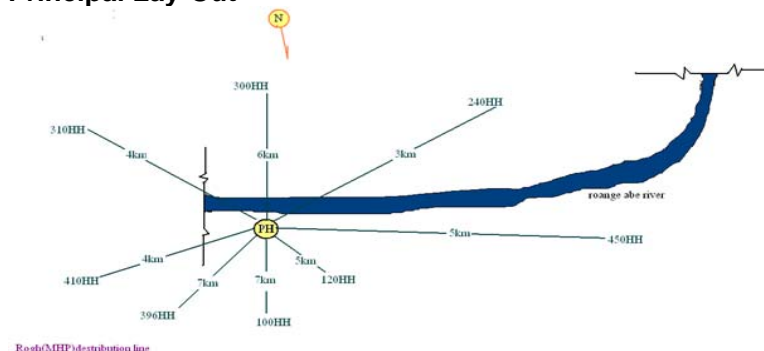
The following villages/hamlets will be connected to the supply system: Capital, Gorpala, Sare dasht Dara jaer, Koshler, Bamestan, Raedara etc

Environmental Aspects

The Ronje abe 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

Rogh

Hydropower Project

Site Reconnaissance

Project Name

Rural Electrification Concept
 Badakhshan Province

Number of people supplied

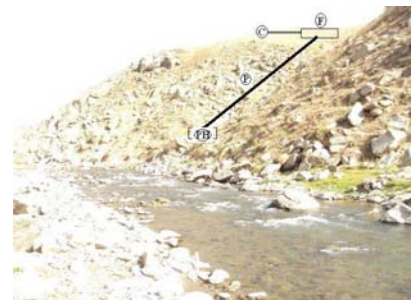
13,900 plus Bazaar

Estimated Costs

4.4 mill US\$; 8,000 US\$/kW; 317 US\$/person

Technical Details

Turbine capacity	500 kW
Rated head	40m
Rated flow	1.78m ³ /s
Turbine type	Francis
Planning and construction time	2 years



Rogh (MHP) power house location note: This river must flowy all moonsoon.

Survey implemented by:



Department of Water Management
 For the Energy Working Group
 under the PDC in Badakhshan

October 2009