



# Bharbhung Storage Hydropower Project

(337.1 MW)



Government of Nepal  
Investment Board Nepal



## Background

The Bharbhung Storage Hydropower Project is a storage scheme hydropower which harnesses the energy potential Thuli Bheri River. The project lies in Dopla district with installed capacity of 337.1 MW and total energy generation of 943.9 GWh. Dunai, the headquarters of the Dolpa district, is the nearest to the project. The proposed dam site lies nearly 28 km from Dunai. It takes about 3 hours walk from Dunai Bazar. The project site can also be accessed through Juphal airport. The Juphal airport is approximately 12 km away from Dunai.



**Sector:**  
Hydropower



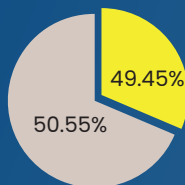
**Location:**  
Chharka Tangsang &  
Kaika Rural Municipality,  
Dolpa district



**Land Required:**  
100 hectares

### Salient Feature:

- Scheme: Storage
- Power generation of 337.1 MW
- Contribution of 943.9 GWh energy annually



■ Wet Energy: 477.17 GWh  
■ Dry Energy: 466.73 GWh

## Features/ Components

- The catchment Area at the dam site is 1434.44 km<sup>2</sup>.
- Design Discharge: 55.3 m<sup>3</sup>/s
- Net Head 712 m
- Inverted D (6m radius) diversion tunnel of 766.10 m.
- CFRD Type Dam of 168m height from foundation level.
- Ungated morning-glory crested spillway on the left bank.
- Side intake with vertical fixed wheel gate and inclined trash rack.
- Horseshoe-shaped tunnel of 1600m length and 5m height.
- The finished diameter for the concrete-lined tunnel and shotcrete-lined tunnel is 5.1 m and 5.9 m respectively.
- Underground and circular type surge shaft of 20 m diameter and 143m height.
- 2 no of Drop Shafts high-pressure shafts of 570 m length and 4 m diameter.
- Underground Powerhouse.
- 6 no of Pelton turbines
- The tailrace tunnel of 527m long, 7m in diameter, and 6.5 m high.
- 25 km long transmission line of 220kV Double Circuit transmission Voltage.

*\*Based on interim design report January 2024*

## Project Outcome



Increased electricity generation capacity



Contribution to sustainable development and environmental conservation



Enhanced regional connectivity and access to remote areas



Support for water resource management including flood control



Revenue generation and job creation during construction and operation



Job creation during construction and operation



Promote Tourism and Recreation



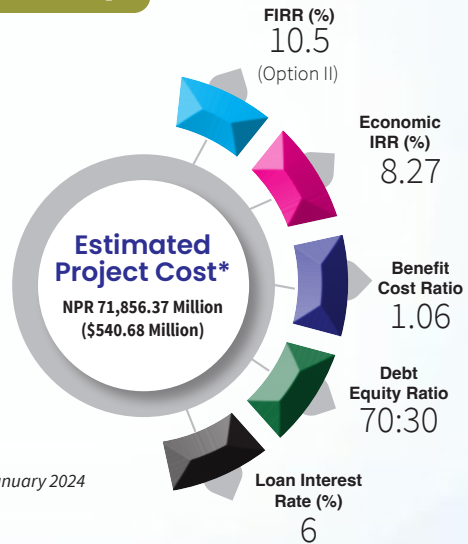
Fisheries Enhancement

## Project Implementation Modality



Public Private Partnership  
(PPP model)

## Financial Indicators



Note: 1 USD = NPR 132.9

\*Based on interim design report January 2024

## Project Implementation Timeline

Completed



Project Ideation/  
Concept Note

Completed



Pre-feasibility  
Study

Completed

Completed

July, 2024



Feasibility  
Study

July, 2024



EIA

Solicitation

April 2024

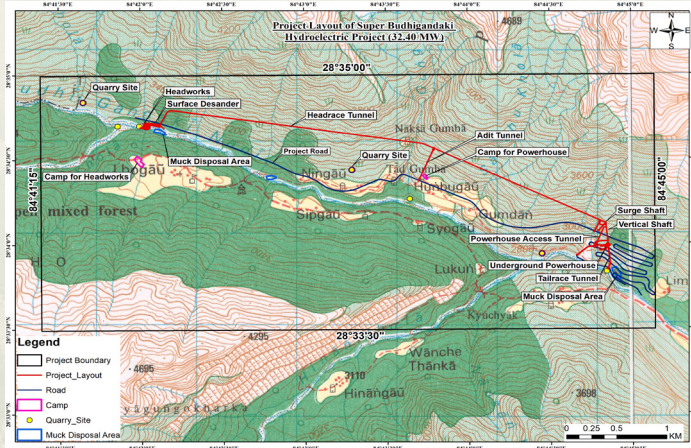




## Additional Information

The project necessitates the construction of access roads from Dunai Bazaar to the project sites, including Dam Site II and the proposed powerhouses, which are crucial for the transportation of materials, equipment, and personnel. The completion of the Dunai-Lawan-Dho Road stretch is essential to provide easier access to the project area.

As the project area lacks nearby settlements or villages, infrastructure development such as temporary housing facilities or camps for workers may be required to accommodate personnel during the construction phase.



Pic 1: Project Layout

## Relevant Agencies

- Investment Board Nepal (IBN)
- Ministry of Energy, Water Resources and Irrigation (MoEWRI)
- Department of Electricity Development (DOED)

## About the Agency

### Agency Name: Investment Board Nepal

Investment Board Nepal is a high-powered agency chaired by Rt. Hon. Prime Minister established as a nodal agency for Public Private Partnership (PPP) and investment promotion in Nepal. Since its establishment, IBN has played an instrumental role in implementing transformative infrastructure projects fundamental to bolstering socio-economic development of the country. IBN has provided investment approvals. Being guided by the Long-term Vision (2043), the 15<sup>th</sup> Plan and other subsequent policies of the Government of Nepal; and international commitments such as Sustainable Development Goals, IBN has been developing credible and bankable projects to garner investment.

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