



Naumure

Multipurpose Project

(281.04 MW)



Government of Nepal
Investment Board Nepal



Background

The Naumure Multipurpose Project integrates three hydro schemes: Naumure (218.34 MW), Lamatal (8 MW), and Surainaka (54.7 MW), alongside the Kapilvastu Irrigation System which harnesses the potential of West Rapti River. It covers the existing irrigation system of Duekhuri Valley (10,800 ha) and Banke (42,766 ha), including the proposed Kapilvastu Irrigation System (29,736 ha). The Kapilvastu Irrigation System diverts water from the West Rapti River, serving areas of Kapilvastu district encompassing 29,736 hectares, supporting diverse agricultural activities.



Sector:
Hydropower,
Irrigation



Location:
Pyuthan, Arghakhanchi,
Kapilvastu districts

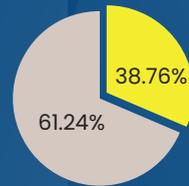


Land Required:
2534.99 hectares

Salient Feature:

- Scheme: Storage Multipurpose
- Naumure Hydropower (218.34 MW)
 - Total energy: 874 GWh
- Lamatal Hydropower (8 MW)
 - Total energy: 38.90 GWh
- Surainaka Hydropower (54.7 MW)
 - Total energy: 362.81 GWh
- Kapilvastu Irrigation System
 - Agricultural Area: 29,736 hectares

Total energy from all 3 hydropower:
1275.71 GWh



■ Wet Energy: 781.28 GWh
■ Dry Energy: 494.43 GWh

Features/Components

Naumure Hydro Scheme

- Concrete Face Rockfill Dam (CFRD) with a height of 169 m
- 2 number of Power Intake
- Design Discharge: 154 m³/s
- Net Head: 160.3 m
- Underground Cavern type powerhouse
- 3 units of Francis turbine
- D-shaped Tailrace tunnel of length 1.2 Km
- 55 Km 220KV transmission line up to New-Lamahi Substation

Surainaka Hydro Scheme

- Design discharge: 41.6 m³/s
- Net Head: 148.66 m
- Length of Tailrace canal: 259.67 m
- Tunnel length 18 Km with diameter 5.5 m
- Orifice type surge tank
- Semi surface type powerhouse
- 2 units of Francis turbine
- 22 Km (220 KV) transmission line to Naumure (main dam) switchyard

Lamatal Hydro Scheme

- Design discharge: 136.2 m³/s
- Net Head: 6.65 m
- 3 Submerged Bellmouth Type power intakes
- Orifice Type Spillway equipped with Radial Gates
- Semi-Surface Powerhouse at Barrage Toe
- 3 units of Kaplan turbine
- 4.6 Km 33 KV transmission line connected to Naumure (main dam) switchyard.

Kapilvastu Irrigation System

- Maximum design discharge: 43.2 m³/s
- Length of main canal: 65.729 km (23.99 km in East & 41.73km in the West)
- Length of secondary canal: 152.24 km (85.26 km in the East & 67.08km in the West)
- Length of Tertiary canal: 272.65 km (134.32km in the East & 138.33km in the West)
- Normal pond level: 186.75 m

Project Outcome



Increased electricity generation capacity



Enhanced regional connectivity and access to remote areas



Revenue generation and job creation during construction and operation



Promote Tourism and Recreation



Contribution to sustainable development and environmental conservation



Support for water resource management including flood control



Improved irrigation infrastructure for enhanced agricultural productivity



Fisheries Enhancement

Project Implementation Modality

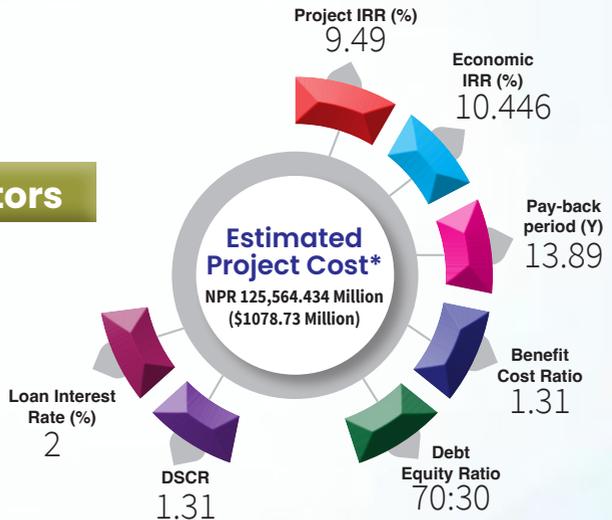


Public Private Partnership
(PPP model)

Financial Indicators

Note: 1 USD = NPR 116.44

*Based on report of June 2022

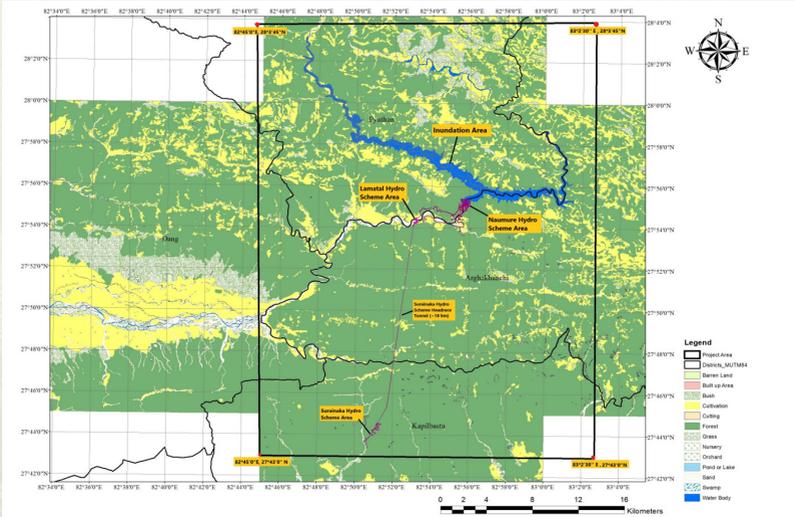


Project Implementation Timeline



Additional Information

The project's road head, Jhilibang, is accessible via an all-weather 7.38 km road. From the Jhilibang intersection, an access road of a total length of 22.94 km will be built to connect several areas of the project area, including the Naumure and Lamatal sites. A Surainaka Hydro Scheme is located close to the East-West Highway, Shivraj Municipality of Kapilvastu district. An access road measuring 5.17 km in total will be built from Surainaka to the powerhouse, surge tank, and tailrace.



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 15th 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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