

BUDHI GANGA HYDROPOWER PROJECT (20 MW)

COMPREHENSIVE MONTHLY PROGRESS REPORT — AUGUST 2026

EMPLOYER:

Budhiganga Hydropower Project

REPORTING PERIOD COVERAGE:

July 2026

SOURCE:

Owner's Engineers Monthly Report

1. Executive Summary & Contract Health

The Budhi Ganga Hydropower Project (20 MW), being executed under the EPC Contract (BHP/ICB/EPC/Lot 1-2022/23), reached a critical transition period during August 2026. As of August 31, 2026, exactly **11.5 months (27.38%)** of the total 42-month construction timeline have elapsed since the official commencement date of September 14, 2025. Overall physical progress stands at approximately **6.50%**, primarily reflecting pre-construction design, site mobilization, camp establishment, and equipment assembly.

Financial progress stands at **14.24% (NRs. 87.30 Crore)** in advance disbursements against Advance Payment Guarantees (APG). This includes the full utilization of the First Installment of Advance (10.00% / NRs. 61.30 Crore) and the partial disbursement of the Second Installment of Advance (4.24% / NRs. 26.00 Crore), following the Owner's Engineer's technical advisory issued on August 7, 2026. No Interim Payment Certificates (IPC) have been issued to date, as major permanent civil works remain pending design finalization and explosive licensing.

Key Milestone: Kuwait Fund (KFAED) Mission & Advance Disbursement

Between August 6 and August 13, 2026, the Kuwait Fund for Arab Economic Development (KFAED) mission successfully visited Nepal. An initial draft was prepared for the finalization of amendments to the KFAED Loan Agreement. Simultaneously, all mandatory insurance policies (CAR, GPA, and PI) required under GCC 23.2 have been fully finalized and approved.

2. Project Profile & Technical Salient Features

The Budhi Ganga Hydropower Project (20 MW) is located in the Achham and Bajura districts of Sudurpashchim Province, Nepal. Operating as a Peaking Run-of-River (PRoR) project on the Budhi Ganga River, it is designed to generate 109.61 GWh of clean energy annually (33.54 GWh during dry season and 76.07 GWh during wet season).

Civil / Mechanical Component	Technical Design Specifications
Catchment Area & Hydrology	Catchment Area (Dam axis): 1,075 km ² 90% Dependable Flow: 0.9 m ³ /s Average Annual Flow: 53.04 m ³ /s Design Flow: 26.0 m ³ /s
Design Floods	Spillway Design Flood (1,000-year return): 3,900 m ³ /s Stilling Basin Design Flood (100-year return): 2,700 m ³ /s Probable Maximum Flood (PMF): 5,100 m ³ /s
Dam Structure	Conventional Concrete Gravity Dam, 86.00 m long x 44.00 m high, Top width: 8.35 m
Spillway & Under-Sluice	Spillway: 3 radial gates, each 8.0 m wide x 12.50 m high Under-sluice (Single Bay): 4.0 m wide x 12.50 m high
Side Intake	Side Intake, 2 openings, each 4.8 m wide x 6.4 m high
Settling Basin	Surface Closed Dufour Type, Double Chamber. Dimensions: 92 m long x 12 m wide x 13 m high per chamber, with conventional flushing system
Peaking Pond	Storage capacity: 1.05 MCM at Full Supply Level (FSL El. 718.00 masl). Minimum Operating Level (MOL El. 712.00 masl). Active reservoir length: 2.06 km
Headrace Tunnel	Length: 5.602 km Excavated diameter: 4.775 m (D-shape) Finished diameter: 4.00 m with concrete lining throughout
Surge Shaft	Restricted Orifice type, underground. Height: 53.35 m, Diameter: 7.50 m (Max Upsurge: 734.50 masl Min Downsurge: 694.31 masl)
Penstock Pipe	Length: 182.80 m (Covered and exposed sections), Diameter: 2.80 m, Pipe thickness: 10 mm to 20 mm
Powerhouse Structure	Surface type, situated at Thapagaon on the left bank of Budhi Ganga. Dimensions: 39.70 m long x 14.80 m wide x 26.30 m high
Tailrace Channel	Box culvert type, Length: 69.90 m, Width: 4.45 m, Height: 3.00 m (equipped with freeboard and concrete cover)
Turbine Units	Francis, horizontal axis orientation. 2 units of 10.0 MW each. Installed Capacity: 20 MW
Generators	3-Phase Synchronous AC, 3 units, unit capacity: 12.93 MVA
Power Evacuation System	3 substations: Thapagaon (Powerhouse), Chapartola, and Pahalmanpur (bay extension). 81.70 km, 132 kV double circuit Transmission Line (separated from Lot 1 Scope)
Overall Cost & payback	Total Project Cost: NRs. 10.33 Billion (including TL) Cost per MW: NRs. 318,464,152.77 Simple Payback Period: 9.54 years

3. Engineering Surveys, Geotechnical & Review Progress

During August 2026, the Owner's Engineer (PINI-BIDR-SIDEF JV) continued rigorous technical oversight across engineering surveys, geological investigations, and layout optimization:

- **Project Layout & Design Optimization:** Following the joint technical review meeting held on July 29, 2026, the Owner's Engineer issued a Provisional No-Objection for the revised Project Layout on August 4, 2026. Advisories were issued regarding specific hydraulic parameters, including desilting basin dimensions, lateral HRT cover, dam foundation levels, and flood diversion planning.
- **Geotechnical Report & ERT Surveys:** The comprehensive Geological and Geotechnical Investigation report—incorporating core log results from 8 drilled boreholes and 1,800 meters of Electrical Resistivity Tomography (ERT) across 7 survey lines—was finalized. Comments and review notes were transmitted to the Contractor on July 30, 2026.
- **Bailey Bridge & Access Road Alignment:** Designs for the Bailey bridge and powerhouse access road were reviewed. The Engineer flagged width discrepancies against the required 4.25-meter clear width. Reconfirmation cadastral surveys for the access road alignment leading to the Adit were conducted on August 27, 2026.

4. Site Infrastructure & Preparatory Works

Preparatory civil works and temporary camp construction progressed significantly across multiple site fronts during August 2026:

- **Owner's Engineer Executive Camp (BudaBagar):** Structural frame erection and masonry works advanced rapidly. CGI roofing sheets and purlin installation were completed on August 21, 2026, with interior partition and finishing ongoing.
- **Contractor's Main & Labor Camps (Budhabagar):** Stone masonry protection walls, plinth-level masonry, septic tank excavation, and RCC toilet slab works progressed continuously. CGI roofing for the site godown was completed on August 21, and truss fabrication for the meeting hall began on August 30.
- **Construction Power Supply System:** All 38 electric poles (11m steel tubular poles) have been delivered and stockpiled at Budhabagar and Tashi Bazar. A total of 26 poles have been fully erected at the headworks and adit areas.
- **Site Material Laboratory:** Earthwork excavation and PCC foundation slab casting are complete at the headworks area. To prevent quality control bottlenecks prior to lab commissioning, preliminary sampling of coarse/fine aggregates and cement/rebar factory test certificates were processed.

5. Plant, Equipment & Mobilization Status

The Contractor (Superpower - Baniya JV) expanded construction plant installation and machinery mobilization during August 2026:

- **Crusher Plant Setup (Budhabagar):** Secured on a rental basis, site development, fencing, and PCC foundation works for the Siemens 280S (80–100 TPH capacity) crusher plant were completed. Heavy mechanical assembly of the jaw crusher, cone crusher, and screening plant was actively underway between August 19 and August 21, 2026.
- **Batching Plant Installation (Headworks):** Land leveling and PCC foundation casting at the headworks site were completed early in August. Concrete batching plant components were delivered to the site on August 20, 2026, and mechanical assembly commenced on August 24.
- **Mobilized Fleet:** Heavy machinery active on site includes JCB NXT 221 LC excavators (equipped with hydraulic rock breakers), CASE 1107 EX-D vibratory rollers, Shantui motor graders, concrete mixers, mobile water tankers, and Mahindra pickup utility vehicles.

6. Environmental, Social & Administrative Compliance

Key statutory and environmental compliance milestones achieved during August 2026 include:

- **Environmental & Social Management Plan (ESMP):** Following comments issued on July 31, the Contractor submitted a revised Year One ESMP on August 16, 2026. A formal coordination meeting was conducted on August 31 between the Consultant's and Contractor's Environmentalists to finalize site-specific mitigation measures, targeting final submission by mid-September 2026.
- **Forest Clearance & Tree Enumeration:** Formal coordination with Division Forest Offices (Achham and Bajura) and local Community Forestry Users Groups (CFUGs) continued. Physical tree numbering and enumeration field surveys across affected forest patches (Jukens, Imeltukra, Rakshe, Sukethan) progressed as part of the forest clearance dossier.
- **Land Acquisition Process:** Cadastral verification surveys conducted on June 15 and August 27, 2026, finalized land parcels required for the Adit access road and Bailey bridge. Formal acquisition proceedings under the Compensation Determination Committee (CDC) are ongoing.

7. Critical Bottlenecks & Strategic Action Plan

While pre-construction mobilization has progressed smoothly, several critical path constraints require urgent resolution to prevent further schedule slippage:

Critical Bottleneck	Impact on Construction Schedule	Recommended Action Plan
Explosive Import & Usage Permit	Halts commencement of underground excavation for the Diversion Tunnel and Adit.	Accelerate DoED/Ministry approval and finalize subcontractor explosive storage arrangements.
Access Road Land Possession	Restricts heavy machinery movement to Bailey bridge abutments and headworks.	Expedite Compensation Determination Committee (CDC) land payout and formal land handover.
Site Quality Laboratory Commissioning	Prevents formal testing and certification of structural concrete and aggregates.	Complete equipment calibration and staff deputation immediately to grant lab No-Objection.

Summary Outlook: With KFAED financing finalized, advance disbursements processed, and major plants mobilized, August 2026 has established a firm foundation for site activities. Expediting explosive permits and land handover remains the top priority for the Employer and Owner's Engineer heading into September 2026.