BUDHIGANGA HYDROPOWER PROJECT

SITE PROGRESS & MONITORING REPORT

System-Generated Executive Output | Daily Site Monitoring System (DSMS)

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Reporting Cut-off Date:	Shrawan 20, 2080 BS (August 4, 2026 AD)
Project Phase:	Infrastructure Mobilization & Camp Construction
Methodology :	AI-linked daily progress forms were issued to the Owner's Engineers and Contractor's Site Engineers. The generated progress reports were reviewed and verified.

1. Executive Summary

This progress report compiles comprehensive site-monitoring data for the Budhiganga Hydropower Project covering the period from the inception of systematic reporting on July 9, 2026, to the cut-off date of Shrawan 20, 2080 BS (August 4, 2026 AD). Under the close technical supervision of the Consultant (Owner's Engineer Team), the project has progressed steadily through foundational infrastructure development, housing mobilization, and critical utility installations.

Key structural achievements during this timeframe include the final placement and erection of all columns for the Contractor's Guest House and Owner’s Engineer camp, the completed welding of the truss and purlins for the main Project Laboratory, the excavation and backfilling of the Crusher Plant's septic tank, and the successful completion of the labor camp's civil work (including 32 square meters of Plain Cement Concrete (PCC) and fencing work at Crusher Camp. Furthermore, comprehensive environmental groundwork has been executed, with tree-marking activities fully completed at the Audit Site and and at the Headworks/Dam Site.

2. Meteorological Conditions and Protective Mitigation Protocols

The reporting period fell squarely within the peak monsoon season, exposing the site to severe and frequent rain disturbances. Heavy rainfall was recorded on multiple critical working days, specifically on July 14, 20, 22, 23, 27, and August 3 and 4, 2026. On days with severe weather (such as August 4, when 'Heavy Rain' was officially logged across all fronts), outdoor civil

activities—such as excavation, grading, and concrete casting—were suspended to ensure safety and structural integrity.

3. Detailed Construction Progress by Work Front

3.1 Headworks and Project Laboratory Site

Activities at the headworks front were split between technical camp setup and lab construction. The structural welding of the truss and purlins for the Project Laboratory was 100% completed by July 9, followed by the completion of the supporting stone walls. For the Executive Camp, foundation excavation was finalized, enabling subsequent structural work. Steel fabrication of the lintels and their loading/welding over the truss columns was completed successfully on July 28 under sunny conditions. By August 1, PCC casting for the Executive Camp foundation and the excavation/clearing for the stone retaining wall were finalized. However, heavy rains on August 3 and 4 limited subsequent masonry wall assembly, forcing a temporary site suspension on August 4.

3.2 Owner's Engineer (Army) Camp Area

The Army/Owner's Engineer Camp has been a major hub for civil and masonry works. Early in the reporting period, 50 square meters of stone soling, 15 square meters of Plain Cement Concrete (PCC), and necessary stone dressing were fully completed. From mid-July to early August, focus shifted to structural retaining stone walls. Daily outputs ranged from 4 to 8.32 cubic meters, with rain causing a drop to 4 cubic meters.

3.3 Contractor's Camp Area & Guest House

At the Contractor's Camp, the fabrication of the executive guest house has made excellent progress. Foundation excavation commenced on July 9, and column placement followed immediately. By July 15, all 12 structural steel columns/pillars were successfully placed, leveled, and finalized. Truss preparation, leveling, and welding of the roof purlins were completed by July 20. Ground leveling and data collection using a Total Station for final grading were conducted, and grading work was done despite rain interference.

3.4 Crusher Plant & Labor Camp Site

This site represents the industrial core of the mobilization works. Earthwork, trenching, and backfilling for the septic tank were completed, with stone soling inside the tank finished by July 28, and plum wall/masonry finishing completed . For the labor camp, 32 square meters of PCC floor casting and underlying soling were completed. Exterior GI sheet wall cladding and partition works were finalized. Fencing around the plant and camp area progressed steadily; vertical posts were fully completed and fixed in concrete, and horizontal member connections reached completion.

3.5 Audit Tunnel Site

Activities at the Audit Site were primary environmental and preparative. The field team successfully executed the mandatory tree-marking activities for scheduled clearing in the tunnel

portal zone. This clearance is a prerequisite for the heavy machinery mobilization and portal excavation scheduled for subsequent phases.

4. Workforce Mobilization Scale Analysis

Manpower levels are logged daily in the DSMS database using a numeric rating system: 1-3 workers = Rating 1, 4-6 workers = Rating 2, 7-9 workers = Rating 3, and so on. Higher ratings represent denser labor deployment. The following stacked chart displays the workforce mobilization ratings across the four main site categories during the period. The significant spike towards the end represents concentrated foundation casting and steel fabrication efforts.

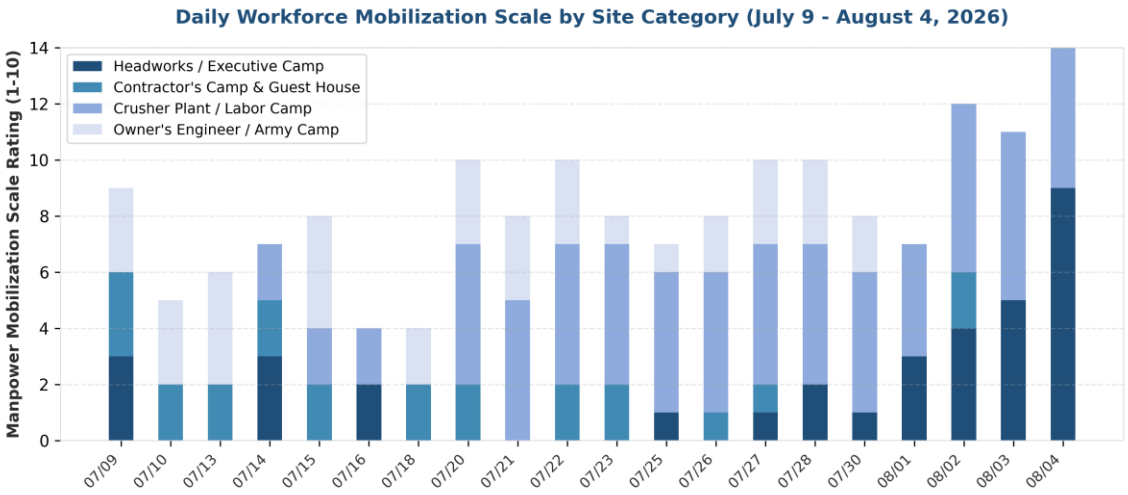

Figure 5.1: Daily Workforce Mobilization Scale by Site Category (July 9 - August 4, 2026)

6. Project Challenges and Incident Logs

6.1 Health, Safety, and Environmental (HSE) Compliance

Snake Bite Incident (July 25, 2026): A serious occupational health and safety (OHS) incident occurred during the manual transfer of a heavy electric construction power pole into its foundation hole. A laborer was bitten by a snake at the site. Work at that specific front was immediately suspended. Following this, emergency first-aid kits and quick evacuation procedures have been strictly reinforced.

Labor Regulations (July 18, 2026): During a routine inspection at the Army/Owner's Engineer Camp area, a potential underage laborer was observed. The Owner's Engineer immediately intervened, raising formal concerns. The contractor then presented the verification.

6.2 Logistical and Utility Hurdles

Communication & Network Limits: In the Buddhabugar area, persistent communication network outages severely delayed real-time data transmission and site photo uploads to the DSMS. Additionally, local contractor vehicle problems occasionally impeded staff movement

and material transit.

Utility Grid Outages: Severe, unscheduled electricity cut-offs frequently disrupted welding and steel fabrication work few days. This issue directly caused the temporary suspension of GI sheet roofing/cladding works for the Crusher Plant's labor camp.

6.3 Quality Control and Supervision Concerns

Contractor Site Engineer Absence: The Owner's Engineer noted multiple instances, particularly on July 13 and 15, where the Contractor's Site Engineer was entirely absent from the active work fronts. This lack of daily, on-site supervision from the contractor directly contributed to poor workmanship quality that fell short of the strict project technical specifications.

Unapproved Material Usage: The Consultant repeatedly intervened to halt the incorporation of cement, sand, and aggregate batches into active civil structures (such as camp foundations and masonry walls) prior to formal laboratory testing and approval.

7. Actionable Recommendations for Contractor Compliance

- Mandatory Materials Testing: The contractor must strictly adhere to project technical specifications. No cement, aggregate, or reinforcing steel shall be incorporated into permanent or temporary works without receiving a formal laboratory test approval certificate.
- On-Site Engineer Presence: The Contractor's Site Engineer must maintain a full-time, active presence across all work fronts during construction hours. Multi-front operations must not proceed unsupervised.
- Workforce and Progress Mobilization: To overcome the 'Slow' progress rate resulting from monsoon rains, the contractor must increase the skilled and semi-skilled labor force, particularly at the Headworks and Camp construction sites.
- Strict Regulatory Compliance: The contractor must maintain a robust verification process for worker ages to prevent any regulatory non-compliance. Zero tolerance is maintained for child labor.

Emergency and Utility Preparedness: The contractor should mobilize back-up diesel generators (DGs) to maintain welding and fabrication activities during grid outages, and establish a dedicated emergency transport vehicle on-site.

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