

# NUPCHE LIKHU HYDROPOWER PROJECT (57.5 MW)

Ramechhap, Nepal



## Project Progress Report Baisakh, 2080 – Ashadh, 2080



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## Executive Summary

This Progress Report is prepared for providing information about the progress of Nupche Likhu Hydropower Project (NLHP), Ramechhap (57.5MW) executed by Vision Energy & Power Ltd. It contains the information about the project activities and progress of the months from **Baisakh 2080 to Ashadh 2080**. The major achievements during the period are:

### A. Forest and EIA/IEE Related Works

1. Submission of half yearly Environment, Health & Safety (EHS) Self-Audit Report to Ministry of Forest and Environment;
2. Conduction of Awareness program about conservation of wildlife;
3. Continuation of Tree Plantation in overall Project site;
4. Construction of Wildlife Timber Bridge to facilitate river crossing for wildlife habitat;
5. The construction of Marbu River Crossing under “Community Support Program” has been finished, and it is currently operational;
6. Distribution of computer and printers to enhance education quality to local people;
7. Provide free health services to local people in the project site;
8. Fencing works around schools and village area along with drinking water works completed;

### B. Preliminary/Preparatory Works

1. The construction of Nupche Bailey Bridge – 1 has been completed.
2. The construction of Nupche Camp Facilities is in final stage;
3. Commissioning of construction power line up to Outlet has been completed;
4. Completion of 90% of Construction Power Line of Nupche Headworks;
5. Re-establishment of Workshop of Sandblasting & Painting;

### C. Civil Works

1. Completion of Excavation of Vertical Shaft. Breakthrough of Vertical Shaft is 2nd milestone achieved after Adit tunnel;
2. Excavation of HRT (Headrace Tunnel) from Outlet about 424m (29.64%) completed out of 1400m;
3. Excavation of Adit Tunnel 345 m (100%) completed;
4. Excavation of HRT from Likhu Inlet to Nupche Likhu Junction about 972.2m (74.78%) has been completed out of 1300m;
5. Excavation of HRT from Nupche Inlet about 391 m (26%) has been completed out of 1599m;

6. Excavation of HRT from Adit Junction to D/S-F7 about 105m (9%) has been completed out of 1329.4m.
7. Excavation of HRT from Adit Junction to U/S-F6 about 105m (46%) has been completed out of 228m.
8. Excavation of 20m Surge Shaft Connecting Tunnel has been (100%) completed;
9. The total Tunnel of 3470.7 (46.6%) has been completed out of 7450.21m;
10. Completion of construction of Weir and Floodwall at Likhu Headworks;
11. Construction of Gravel Trap, Approach Canal and Spillway at Likhu Headworks has been 70% completed;
12. Construction of Likhu Headworks Settling Basin has been 85% completed;
13. Concreting and backfilling works of Anchor Block from 4 to 8 for Likhu Headrace Pipe has been completed;
14. Completion of concreting and backfilling of Anchor Block (AB) 10,11,12,14 and 15 (5 out of 27 nos.) in Penstock Pipe alignment has been completed and excavation of alignment and concreting of remaining Anchor Blocks is in progress;
15. Overall Civil works progress is approx. 45%.

#### **D. Electromechanical (EM) Works**

1. The manufacturing of the horizontal Pelton Turbine (3 set+1 Spare) of the project is in progress;
2. Manufacturing of EOT Crane is in progress;
3. Extension of Earth Mat Riser towards the Control room building is in progress;
4. Submission and approval of design memo of different EM equipment is in progress;
5. 3 nos. Power Transformers are being dispatched from vendor works to Raxaul/Project site;
6. Factory Inspection Tests (FATs) of Transformer were conducted at the premises of the manufacturer;
7. Overall EM works progress is approx. 25%.

#### **E. Hydromechanical (HM) Works**

1. Manufacturing and Transportation of Penstock Pipes has been completed;
2. Pipe accessories has been manufacturing and are expected to be completed within Bhadra 2080;
3. Design and approval for fabrication of bends for penstock alignment and other HM compounds are completed;
4. Erection and testing of bends with stiffener rings are completed;
5. Erection of 233.93m (15%) Penstock Pipe out of 1527.54m is completed and installation of stiffener and welding is in progress;

6. Erection of 401m (37%) Headrace Pipe out of 1096m is completed and installation of stiffener and welding is in progress;
7. Fabrication of embedded parts and gates parts of Likhu Desander, flushing gates stoplogs trash rack is in progress;
8. Nondestructive testing (DPT, UT, MPI) of Penstock is in progress;
9. Overall progress of the erection of pipe works is 15%; Overall progress of pipe manufacturing is 100%.

#### F. Transmission Line

1. Tower Scheduling and design works of towers have been completed;
2. Structure Design Drawing and BOM has been completed;
3. LC establishment work for the tower materials has been completed;
4. Manufacturing of stub and earthing material for Tower foundation work has been completed;
5. Construction material test for Tower Foundation works is in progress ;
6. Land acquisition works for the Transmission line is in progress & in final stage;
7. Overall progress of TL works is approx. 10%.

#### G. Planning, Governance and Other Works

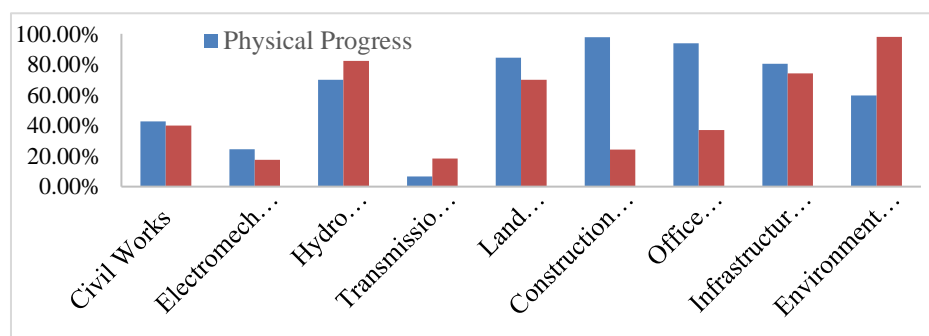
1. Investment in nearby small and other large projects has been started;
2. Some of the major plan for next quarter is discussed in detail report. Please refer to the status of the project below;
3. Development and Implementation of Strategy to increase Productivity (SIP);
4. Amendment-III of Project Implementation Plan;
5. Preparation of Civil works cost optimization Report;

#### H. Any Bottlenecks

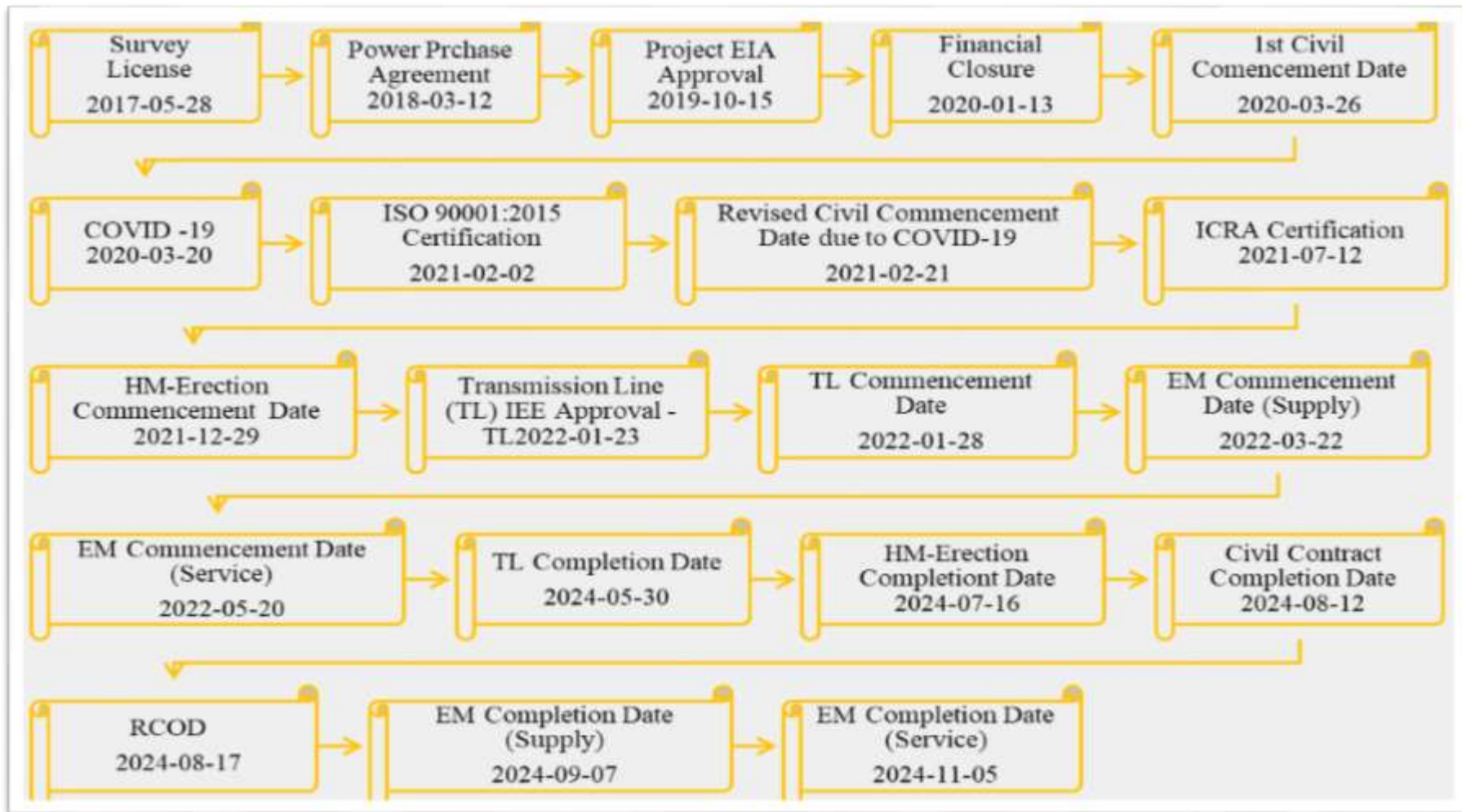
1. Approval of Tree Cutting from Cabinet of Government of Nepal for Transmission Line;
2. Collection and management of Wooden logs;

#### I. Financial and Physical Progress

1. Till the date 41.54% of the budget has been utilized and about 47.28% of the overall physical progress has been achieved;

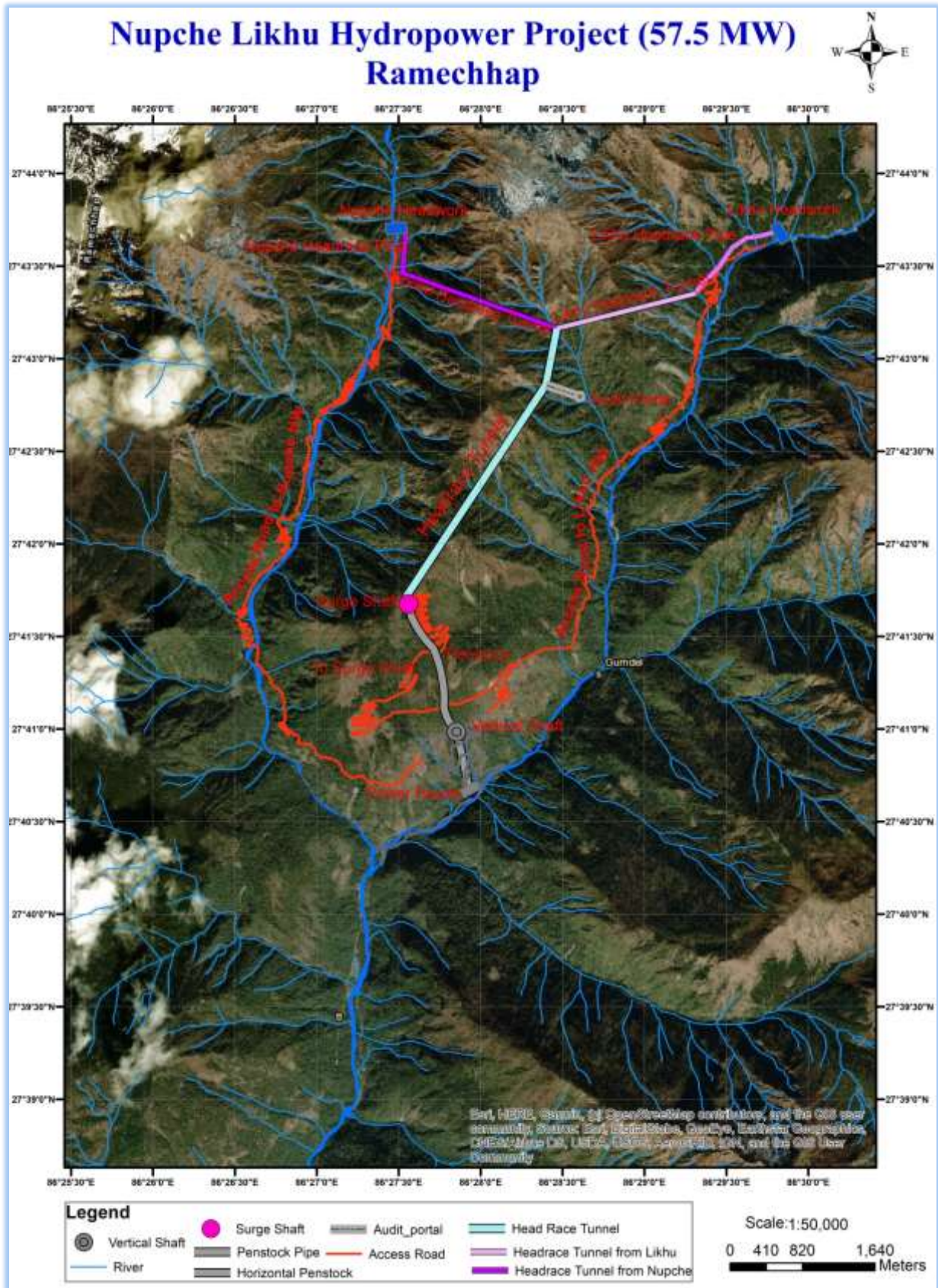


**J. NLHP Project's Major Timeline**





## Section A: About the Project





## 1. Introduction

### 1.1 Background

Vision Energy & Power Ltd (VEPL) aims to develop Nupche Likhu Hydropower Project (57.5 MW) in Ramechhap District using local technical, managerial and financial capability and is dedicated to supply the power to the National Grid to fulfill domestic energy demand. The project is a run-of-river (RoR) hydropower project.

### 1.2 About the Project

The proposed Nupche Likhu Hydropower Project is located in Umakunda Rural Municipality of Ramechhap district of Nepal. The source of water for the project is originated from Nupche and Likhu rivers which are snow-fed Rivers starting from the High Mountain/Hilly areas. The proposed intake of the Nupche Likhu Hydropower Project is located north of Lahaksewar village in left bank of Nupche Khola with its weir crest level at an elevation of 3338 m above amsl and the right bank of Likhu Khola with its weir crest level at an elevation of 3338 m above amsl. The powerhouse is located on the right bank of the Likhu Khola with the turbine center line level at 2336 m amsl. The gross head estimate is 1003.65 meter and design discharge are 7.11 m<sup>3</sup>/sec.

### 1.3 Location & Access:

The project can be access from Kathmandu through an existing all-weather road up to Manthali (131 km) or 94 km road from Bardibas. After Manthali, following about 125 km partly stone paved earthen road reaches up to Kyama, Gumdel VDC. Furthermore, from Kyama an access road has been reached near to Kongematar village, the proposed Powerhouse site, Lahaksewar village which is also the residential area for the project employees, Outlet/Surge Shaft, Adit Tunnel, Likhu Headworks and Nupche Headworks.

### 1.4 Main Features of the Project

- a) Total project cost of the project: 10,578,458 thousand and total cost per MW = NRs. 183,973 thousand
- b) Internal Rate of Return (IRR): 17.50 %, Equity Internal Rate of Return (EIRR): 27.57%
- c) Simple Payback Period: 4.75 Years; Discounted Payback Period: 7.68 years.
- d) High Energy per MW (6.63 GWh p.a.), Dry Energy 36.61% and Wet Energy 63.29%
- e) Income Per MW: More than NPR 4 Crore.
- f) The Project has high head. It ensures cost efficiency and high energy.
- g) Professional, Transparent and Responsible Management.

- h) Aims to benefit Small Investors too.
- i) Focused on high Return on Investment and high value in secondary market.

### 1.5 Salient Features of the Project

S.N.	Particulars	Remarks
1.	<b><u>General</u></b>	
	Name of the Project	Nupche Likhu Hydropower Project
	Type of the Project	Snow fed Run-off River Hydropower Project
2.	<b><u>Location</u></b>	
	Zone/ Development Region	Janakpur Zone/Central Development Region
	<b>District</b>	Ramechhap
	Project Location	Umakunda Rural Municipality, (Gumdel VDC)
	River	Nupche Khola and Likhu Khola
	<b><u>License Boundary</u></b>	
	Longitude	86°26'30" E - 86°30'30" E
	Latitude	27°40'37" N - 27°43'43" N
3.	<b><u>Hydrology</u></b>	
	Catchment Area at Headworks	150 Km <sup>2</sup> (Nupche 82km <sup>2</sup> &Likhu 68 km <sup>2</sup> )
	Design Discharge (Q 45 %)	3.89 m <sup>3</sup> /s+ 3.22 m <sup>3</sup> /s (Nupche & Likhu) = 7.11m <sup>3</sup> /s
4.	<b><u>Nupche &amp; Likhu- Headworks</u></b>	
	<b>Weir</b>	
	Type	Boulder line weir
	<b>Bed Load Sluicer</b>	
	Type	Bed Load
	<b>Intake</b>	
	Type	Orifice, Side Intake
	<b>Gravel Trap</b>	
	Type	Single, Dufour
	<b>Settling Basin</b>	
	Type	Double Bay Dufour Type
5.	<b><u>Headrace Pipe</u></b>	
	Headrace Pipe	504 m & 1158 m (Nupche & Likhu)
6.	<b><u>Tunnel Length</u></b>	
	Total Length	7475 m
	Tunnel Size	3.2 m x 3.8m (Excavation Size)
7.	<b><u>Surge Tank</u></b>	
	Type	Surface, Circular
8.	<b><u>Penstock Pipe Length</u></b>	
	Total Steel Penstock Pipe	2712 m
9.	<b><u>Power House</u></b>	
	Type	Surface
10.	<b><u>Turbine</u></b>	
	Type	Horizontal Pelton
	Number of units	3
	Rated Output Capacity per unit	20.26 MW

11.	<b><u>Generator</u></b>	
	Type	Solid State, PID Governor
	Number of units	3
	Rated Output Capacity	22.55 MVA
	Excitation System	Brushless Type
12.	<b><u>Transformer</u></b>	
	Type	Outdoor, Oil immersed, Three Phase
	Rated Capacity	23 MVA
	Number of Units	3
13.	<b><u>Tail-Race Canal</u></b>	
	Type	Box Culvert
14.	<b><u>Transmission Line &amp; Grid</u></b>	24 km 132 kV line up to National grid at 132 kV switchyard of Proposed NEA Hub at Garjyang Substation, Ramechhap district.
15.	<b><u>Power and Energy</u></b>	
	Gross Head	1005.65m
	Net Head at Full Flow	968.33 m
	Installed Capacity	57.5 MW
	Generated Energy per Annum	139.757 GWh, 36.61% (Dry) and 241.978 GWh, 63.39% (Wet) <b>Total: 381.735 GWh</b>
16.	<b><u>Project Road to HW &amp; PH</u></b>	38.90 km
17.	<b>Approximate Cost of Project</b>	10,579 Million NPR (As per DDS report by DDS consultant for bank “Sanima Hydro & Engineering Pvt. Ltd.”)
18.	<b>Approximate Construction Period:</b>	4 Years
19.	<b>Required Commercial Operation Date (RCOD)</b>	2081/05/01 BS 2024/08/17 AD

## 1.6 Investment Module

The debt equity ratio of the project is 75:25%.

## 2. Human Resources and Good Governance

### 2.1 Organization Chart

The organization structure of Nupche Likhu Hydropower Project has been prepared considering Construction, Operation & Maintenance phases of the Project. The detained organization chart is presented in the official website of the company i.e., [www.veplinfo.com](http://www.veplinfo.com).

## 2.2 Good Governance

Nupche-Likhu Hydropower Project has proposed Performance Based Incentive program for its employee. The key performance area (KPA) and Key performance index (KPI) is developed for whole project period. Based on the developed KPI the performance evaluation mechanism is developed. Further,

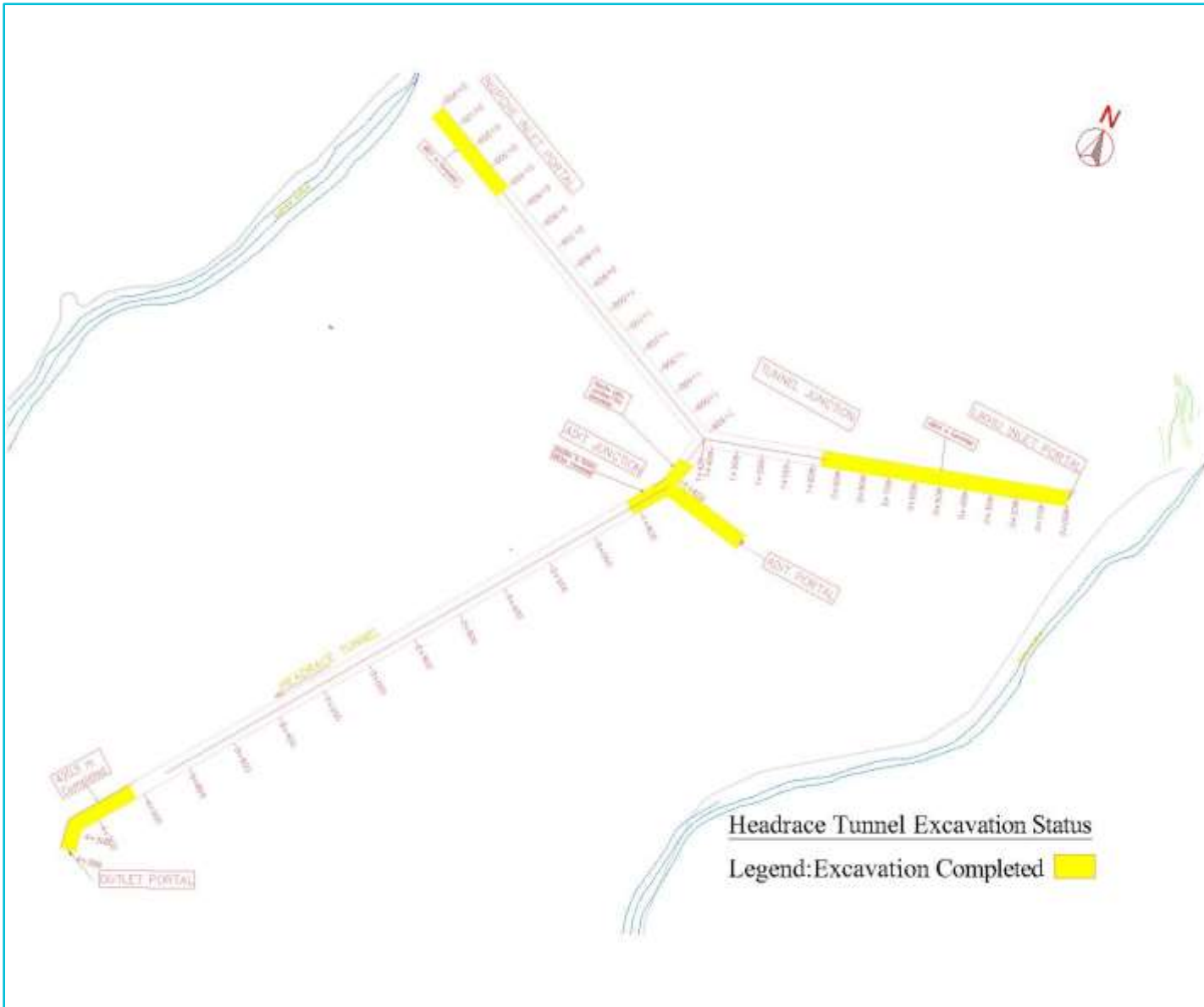
1. Various manuals such as Finance Manual, Human Resource Manual, Investment Manual, Corporate Governance Guidelines, Performance Evaluation Guidelines, Project Management Guidelines, Branding Guidelines, etc. are in practice.
2. Formation of various committees such as High-level coordination sub-committee, Audit Committee, Local Area Co-ordination Sub-Committee and International Co-ordination Sub-Committee.
3. Recruitment of highly professional Consultants.
4. Work plan assigned to each executive level and working level personnel.
5. Performance evaluation of each personnel conducted on quarterly basis.
6. Compliance officer appointed for legal and internal guidelines compliance.
7. Regular meeting of Board of Directors and Various Committees.
8. Participative & quality investment module and mechanism to select quality investors.
9. Integrity, transparency, legal compliance, team work, higher return, responsibility, safe investment, accountability are the core values of the Company.

## 3. Project Implementation

### 3.1 General

The company has already obtained the Generation License and planned to generate electricity within the period of 4 years from the commencement of construction work. The Environmental Impact Assessment (EIA) for the project and Initial Environmental Examination (IEE) for the Transmission Line has been approved. The Supervision & Management Consultants, Civil Contractor, Explosives Suppliers, Electromechanical Contractor, Hydromechanical Contractor and Transmission Line Contractor has been selected and agreement has been signed. The Civil and HM Contractor has been mobilized to the project construction site and has achieved material achievement in work. Detailed progress of the project is also presented in the official website of the company i.e., [www.veplinfo.com](http://www.veplinfo.com).

### Section B: Current Status of the Project





## 4. Current Status of the Project

### 4.1 Completed Works of the Project

#### 4.1.1 Forest, EIA & IEE Related

##### A. Major Completed Works

1. **Environmental Impact Assessment (EIA)** study of Project has been approved.
2. The application for approval of '**Tree Cutting and use of Government Land**' has been approved from the Cabinet.
3. Buying of Land for the replacement of the government land used by the Project has been completed.
4. The agreement between Department of National Parks and Wildlife Conservation, Department of Forests and Soil Conservation and Vision Energy and Power Pvt. for use of '**Tree Cutting and use of Government Land**' has been signed on 30<sup>th</sup> Chaitra, 2077.
5. Field Work for Tree Counting and Stamping for the project is completed in pursuant to EIA.
6. Initial Environmental Examination (IEE) study report of the transmission line has been approved from the Ministry of Energy, Water Resources and Irrigation. Now the file for the approval of tree cutting is in cabinet.
7. Submission of self EHS Audit Report to ministry of Forest and Environment.

#### 4.1.2 Preliminary/Preparatory Works

##### A. Major Completed Works

1. **Survey License** of the project was obtained for 57.5 MW on 2074/06/29 (15/10/2017).
2. **Power Purchasing Agreement (PPA)** has been done with Nepal Electricity Authority (NEA) on 2074/11/28 (12/03/2018).
3. **Financial Closure** has been completed with Machhapuchchhre Bank Ltd. (Lead Bank), Himalayan Bank Ltd. (Co-Lead Bank), Citizens Bank International Ltd., Kumari Bank Ltd., Agriculture Development Bank Ltd., Rastriya Banijya Bank Ltd., Global IME Bank Ltd., Kamana Sewa Bikash Bank Ltd.
4. **Generation License** has been obtained on 2076/10/12.
5. The **Survey License of Transmission Line** for the 4th year i.e., up to 2078/12/14 has been renewed and has been completed.
6. The License for Transmission Line has been obtained on 2078/12/30.
7. **Automatic Gauge Station** has been installed at Nupche & Likhu Intake site and is being operated.

8. **Hydroelectricity Investment and Development Company** (HIDCL) has approved to invest in equity share capital of Vision Energy and Power Pvt. Ltd (VEPL) and all the committed fund has already been disbursed.
9. All the contractors are selected.
10. **Detailed Engineering Design** of the Project & Transmission Line has been completed.
11. The **Construction of main Camp House and associated facilities** has been completed.
12. **Bank's consultants** for the project have been selected.
13. The Company's Senior Management team including the Chairman, Board of Directors, General Manager, Project Director **launched blasting process** for the Penstock Tunnel and Vertical Shaft construction work on *12<sup>th</sup> Ashwin 2078*.
14. Land acquisition for the Project has been completed.

#### **B. Other Completed Works**

1. Development and Implementation of "Strategy to Increase Productivity".
2. Preparation of Project Implementation Plan-Amendment III completed.
3. Preparation of Civil Works Cost Optimization Report & approved by the management.
4. Construction of Nupche Bailey Bridge 1 has been completed.
5. Construction of Marbu Culvert has been completed.
6. Completion of Construction Power Line of Outlet.

#### **4.1.3 Civil Works**

##### **A. Major Completed Works**

1. Concreting works in super structure of powerhouse up to crane beam level, HM interface.
2. Breakthrough of Vertical Shaft of length 295.3m (100%) has been achieved.
3. Construction of Likhu Headworks components i.e., Weir, Intake, Flood wall, Gravel Trap, Settling Basin is in progress and 85% completed of Works by end of Ashar 2080;
4. Excavation of Vertical Shaft of length 295.5 m and diameter 2.9m has been completed.
5. Excavation of HRT (Headrace Tunnel) from Outlet about 424m (30.35%) completed out of 1400m;
6. Excavation of Adit Tunnel 345 m (100%) completed;
7. Excavation of HRT from Likhu Inlet to Nupche Likhu Junction about 972.2m (74.78%) has been completed out of 1300m;
8. Excavation of HRT from Nupche Inlet about 391.0m (24.45%) has been completed out of 1599m;

9. Excavation of 20m Surge Shaft Connecting Tunnel has been (100%) completed;
10. Excavation and support work in Surge Shaft area in progress;
11. The total Headrace Tunnel of 3470.7 (46.6%) has been completed out of 7450.21m;
12. Construction of Likhu Headrace Anchor Block No. 6& 7 completed.
13. Along the penstock alignment, 8 Anchor Blocks out of 27 has completed.
14. About 10% of Nupche Headworks has been completed till end of Ashar 2080.

#### **B. Other Completed Works**

1. Construction of Operation building for Nupche Headworks

### **4.1.4 Electromechanical Works**

#### **A. Major Completed Works**

1. Detailed final assembly drawings of all major equipment (Turbine, Generator, MIV, Governor, EOT crane etc.) completed.
2. Placement of order for major components in switchyard and semantics components.
3. Procurement activities for CWS, CAS, Drainage and Dewatering system is in process.
4. Earthing materials, 1<sup>st</sup> stage Embedment (pipes and fittings) delivered at site, while 3 nos of Transformer have reached at Raxaul Border.

#### **B. Other Completed Works**

1. System engineering for fire protection system, ventilation and Air conditioning, workshop and LP compressed system.
2. Cable-Cable accessories system engineering is in progress.

### **4.1.5 Hydromechanical Works**

#### **A. Major Completed Works**

1. Fabrication of embedded parts and gates parts
2. Erection and testing of bends and stiffener rings
3. Installation of 401m of Likhu Headrace pipe has been completed till date.
4. Installation of 234m of Penstock Pipe has been completed till date.
5. Transportation of Lot-02 pipes to NLHP site from Birgunj custom has been completed and delivery to site is expected to be completed

#### **B. Other Completed Works**

1. Transportation of pipes to respective yards

#### **4.1.6 Transmission Line**

##### **A. Major Completed Works**

1. Manufacturing of stub and earthing material for Tower foundation work has been completed.
2. Revision and Signing of BoQ.
3. PO signing with Tower and Earthing Material suppliers and Conductor, insulator, Hardware, OPGW suppliers.
4. Site Mobilization of Senior Executive officers.
5. Opening of LC for tower materials has been completed.

##### **B. Other completed works**

1. Initiation of testing of civil construction material for foundation works.
2. Approval of Soil Investigation Report, Earthing Design Drawings and Insulator data sheet and Drawing.

#### **4.1.7 Planning, Governance and Other Works**

##### **A. Major Completed Works**

1. The Company has received ISO 9001:2015 Certificate on 2021-02-02.
2. Annual renewal of ISO certificate has been also certified.

#### **4.2 Ongoing Works of the Project**

##### **4.2.1 Forest and EIA Related Works**

###### **A. Major Ongoing Works**

1. Approval of government land use and tree cutting for the Transmission Line from the Cabinet of Government of Nepal is in final stage.
2. Implementation and follow-up of environmental and social management plan throughout the construction phase to achieve good environmental outcomes as per approved EIA.

##### **4.2.2 Preliminary/Preparatory Works**

###### **A. Major Ongoing Works**

1. Completion of 85% of Construction Power Line of Nupche Headworks.
2. Maintenance of Access Road within the Project area as per required basis.

###### **B. Other Ongoing Works**

### 4.2.3 Civil Works

#### A. Major Ongoing Works

1. Structural works in superstructure of powerhouse.
2. Preparation to start concreting of column of Powerhouse.
3. Clearing of vertical Shaft and preparation to handover to HM.
4. RCC works in Likhu Settling Basin.
5. Stone Masonry works in Settling Basin.
6. RCC works in Flushing gates and approach culvert.
7. HRT excavation from 5 tunnel faces.
8. Preparatory works for Base Preparation, Stone Masonry & Anchoring, PCC and RCC for Anchor Blocks (AB) 9 to 22 in Penstock Alignment is in progress (Total AB-27 nos);
9. Portal preparation and erection of gantry crane is in progress for Surge Shaft.
10. RCC works of Likhu Gravel Trap, Bedload Flushing, approach culvert, Spillway.
11. Concreting and backfilling works of Anchor Block for Likhu Headrace Pipe.
12. Excavation and PCC along the Nupche Headrace Pipe alignment.

#### B. Other Ongoing Works

1. Storage of adequate construction material and provision of equipment at site is in progress.
2. Preparation for shifting Batching plant to Nupche headworks

### 4.2.4 EM (Electromechanical) Works

#### A. Major Ongoing Works

1. Transportation of Crane beam and embedded parts to the site.
2. Extension of Earth Mat Rise towards the control room Building is in Progress.
3. Forging of 4 sets of runners (3 main + 1 spare) received, and under machining.
4. Generator in advance stage of manufacturing.

#### B. Other Ongoing Works

1. Manufacturing of Turbine has been 75% completed.

### 4.2.5 HM (Hydromechanical) Works

#### A. Major Ongoing Works

1. Manufacturing of Penstock Pipe Accessories, gate embedded parts are in progress.
2. Installation of remaining pipes along Penstock alignment is in progress.
3. Installation of remaining Likhu Headrace Pipe is in progress.



**B. Other Ongoing Works**

1. Storage of Pipes in various required fronts is in progress.
2. Preparatory works for the erection of vertical shaft pipe and horizontal pipes.
3. Installation of bend at AB 20
4. Workshop drawing for fabrication of gates and finalization of procuring material.
5. Non- destructive tests of penstock pipes.
6. Transportation of Lot-03 Pipes to the construction site is on progress.

**4.2.6 Transmission Line****A. Major Ongoing Works**

1. Inspection of Tower material
2. Preparation for Site-Mobilization of the Contractor.

**B. Other Ongoing Works****4.2.7 Planning and Other Works****A. Major Ongoing Works**

1. Investment in nearby small and other large projects has been started;

**B. Others Ongoing Work****4.3 Challenges Faced:**

Though the company is committed to complete the work in stipulated time and schedule, company struggles to tackle the project management challenges and issues related to the processes and directions of government, local community, site condition etc. The major challenges we have faced are.

1. Approval of Tree Cutting from Cabinet of Government of Nepal for Transmission Line.
2. Collection and management of wooden logs previously cut.
3. Concreting in Monsoon and breakdown related to climatic conditions.
4. Delay in supply of Explosives due to changes in embassy's approval procedures.

**Management Plan for the Mitigation of Challenge:**

1. Get the approval in coordination with Government authority as soon as possible.
2. Frequent change of Project Manager in EM portion.

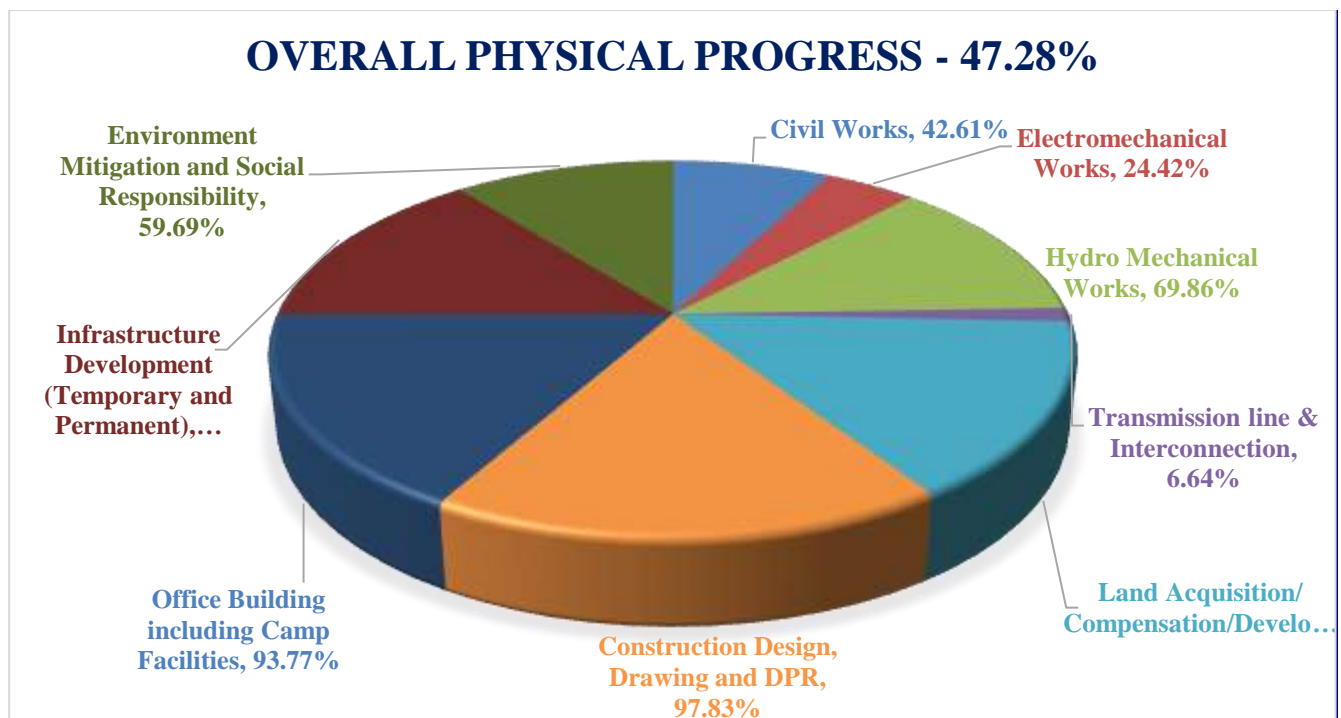
### 4.4 Physical Progress

Vision Energy & Power Ltd records physical progress data on every construction work of the Nupche Likhu Hydropower Project. The objective and realistic measurement of physical progress during a construction project is a key element for successful project management in providing as-built information for project planning, control, cost engineering, and many others. Progress measurement is an input directly used to help determine the earned value of a project and forecasts such as cost at completion and estimated finished date. The evaluation of project physical progress has been prepared by weighted method which is highlighted as the best and realistic technique to determine the percentage complete of the overall project. Below is the physical and financial progress data up to **31<sup>st</sup> Ashad 2080**.

#### Physical Progress vs. Financial Progress

SN	Activities	Physical Progress	Financial Progress
1	Civil Works	42.61%	39.96%
2	Electromechanical Works	24.42%	17.53%
3	Hydro Mechanical Works	69.86%	82.25%
4	Transmission line & Interconnection	6.64%	18.28%
5	Land Acquisition/ Compensation/Development	84.31%	69.85%
6	Construction Design, Drawing and DPR	97.83%	24.25%
7	Office Building including Camp Facilities	93.77%	37.10%
8	Infrastructure Development (Temporary and Permanent)	80.32%	74.04%
9	Environment Mitigation and Social Responsibility	59.69%	97.93%

**OVERALL PHYSICAL PROGRESS ACHIEVED: 47.28%**



## 4.5 Financial Progress

Vision Energy & Power Ltd. records important financial data on every aspect of a business activities. As such they can be evaluated on the basis of past, current, and projected performance. Below is the financial progress data to manage the operations of our business and also to provide reporting transparency to our stakeholders

### Allocated Budget Vs. Actual Utilization Up to 31<sup>st</sup>Ashadh, 2080

SN	Particulars	Amount (Rs.)	Utilization Up to 31st Ashadh, 2080 (Rs.)	Utilization %
1	Preliminary Works	24,69,69,000	246,051,846	99.63%
2	Civil Works	3,76,57,06,000	1,504,915,248	39.96%
3	Electromechanical Works	1,56,64,38,000	274,665,453	17.53%
4	Hydro Mechanical Works	1,13,33,71,000	932,176,602	82.25%
5	Transmission line & Switchyard	47,40,75,000	86,670,852	18.28%
6	Land Acquisition/ Compensation/Development	12,70,50,000	88,745,586	69.85%
7	Project Supervision/Management and Engineering	41,45,49,000	194,045,580	46.81%
8	Construction Design, Drawing and DPR	11,43,56,000	27,728,818	24.25%
9	Office Building including Camp Facilities	22,64,79,000	84,017,100	37.10%
10	Office Equipment	4,03,42,000	13,714,063	33.99%
11	Vehicle	8,89,90,000	20,228,434	22.73%
12	Infrastructure Development (Temporary and Permanent)	78,04,70,000	577,875,159	74.04%
13	Environment Mitigation and Social Responsibility	10,66,80,000	104,467,702	97.93%
14	General Expenses	7,35,01,000	-	0.00%
15	Loan Documentation Fee	6,96,85,000	58,349,000	83.73%
16	Interest During Construction	1,34,97,97,000	180,260,787	13.35%
	<b>Total</b>	<b>10,57,84,58,000</b>	<b>4,393,912,230</b>	<b>41.54%</b>

## 4.6 Loan Details

Total loan from eight Consortium Banks is 7 Arab 93 Crores. Members of the Consortium are Machhapuchchhre Bank Ltd. (Lead Bank), Himalayan Bank Ltd. (Co-Lead Bank), Citizens Bank International Ltd., Kumari Bank Ltd., Agriculture Development Bank Ltd., Rastriya Baniya Bank

Ltd., Global IME Bank Ltd. and Kamana Sewa Bikash Bank Ltd. Loan disbursement during this period is **NPR 2,60,68,66,095.00**

#### **4.7 Planning for the next quarter**

- a) Commissioning of Construction Power Line up to Nupche Headworks.
- b) Re-establishment of Fabrication Workshop, Relocation of Batching plant to Nupche Headworks.
- c) Major structural works in Powerhouse and initiate Switchyard works.
- d) Infilling works inside Vertical Shaft.
- e) Completion of concreting and backfilling of Anchor Block (AB) from 9 to 17.
- f) Completion of Likhu Headworks up to Settling Basin.
- g) Start excavation and support works of Surge Shaft.
- h) Excavation of 70% of the Headrace Tunnel.
- i) Completion of 50% of Likhu Headrace Pipe Works.
- j) Completion of 50% of Penstock Pipe Works.
- k) Complete erection of EoT Crane
- l) Installation of gate at panel 2 Tailrace.
- m) Start Vertical and Inclined Shaft erection.
- n) Start receiving material at site.

**ANNEX – 1: Some Photographs of Work Progress**



**Progress in Powerhouse**





Tailrace Works



Tailrace Works



Erection of Powerhouse Column





Vertical Shaft



Outlet HRP (Tunnel Face)



Backfilling of Anchor Blocks







Concreting of Anchor Blocks



Penstock Alignment





Nupche Settling Basin









Likhu Headrace Pipe





Likhu Headworks Components; Headworks, Settling Basin, Flood Wall





**Tunnel Excavation Process and Support Works**





Execution Infrastructures in Construction Site



Nupche Bailey Bridge1



Landslide in Surge Shaft area



Additional Support in Surge Shaft



Embedded Part for Crane Beam



Community Support Programme



Water Reservoir



Marbu Bridge



Wooden Bridge

**THANK YOU!**