



# JAGDULLA HYDROPOWER COMPANY LIMITED

Progress Report  
September 2022

नेपालको पानी, जनताको लगानी

## Contents

1.	PROJECT BACK GROUND.....	1
I.	Brief Description of Project.....	1
II.	Capital structure.....	1
III.	Share structure.....	1
IV.	Board Members and Management Team .....	2
a.	Management Team: .....	3
2.	BROAD SCOPE OF WORK .....	3
	Survey license: .....	3
	Lot-1: Infrastructure Development work.....	4
	Lot-2: Civil and Hydro-mechanical work.....	4
	Lot-3: Electro-mechanical work .....	4
	Lot-4: Transmission Line and Sub-station work.....	4
3.	Jagdulla PRoR Hydroelectric project (106 MW) .....	4
3.1	Project Layout of JHEP:.....	5
3.2	Salient Features of the JHEP: .....	5
3.3	Detail feasibility/Engineering study.....	10
3.4	Environment Impact Assessment (EIA).....	12
3.5	Project Land .....	18
3.6	Test Adit Tunnel.....	19
3.7	Prefab Office cum Residential Building.....	22
3.8	Bridge.....	24
3.9	Power Purchase Agreement (PPA).....	29
3.10	Financial Closer (FC) .....	31
i.	Promoters shares .....	31
ii.	General Public shares .....	31
3.11	Procurement status .....	39
4	Jagdulla A Hydropower project (JAHEP) .....	41
4.1	Survey License:.....	41
4.2	Project Layout:.....	41
4.3	Detail Feasibility and Engineering Study .....	41
5	Budget Summary of Previous Year .....	43
6	Main objectives, policies and programs of fiscal year 2079/80 .....	44
6.1	Main Objectives:.....	44
6.2	Policy and Program: .....	45

## 1. PROJECT BACK GROUND

### I. Brief Description of Project

Government of Nepal intends to develop the hydropower potential of Nepal in an economically efficient and sustainable manner to meet the much needed and growing power demand in the country. Nepalese Government has taken an initiation to establish a company to develop the various sustainable potential projects and diversified investors of Nepal and abroad in Public-Private-Partnership and the BOOT (Built-Operate-Own-Transfer) Model in the process of developing large scale hydropower projects. As a result, Vidhyut Utpadan Company Limited (VUCL) came into picture and was established and registered in Department of Industries, Government of Nepal under Company Act 2063 BS. Jagdulla Hydropower Company Limited (JHCL) is a subsidiary company of Vidhyut Utpadan Company Limited (VUCL) established in 2017 to develop Jagdulla Peaking Run-of-River Hydroelectric Project (JHEP). The JHCL-HEP (106 MW) Hydro power project is located on Jagdulla River, in Dolpa District of Nepal, which is 748.3 Km from Kathmandu via Nepalgunj. Jagdulla Hydropower Company Pvt. Ltd (JHCL) was incorporated & registered on 2074 Jestha 16 as a private limited company under the Nepalese Companies Act 2063 duly floated by public-private shareholding of VUCL and General public with an aim to plan, promote, organize & execute the Jagdulla Hydro-electric Project.

### II. Capital structure

S. N.	Company capital structure	NPR
1.	Authorized Capital	8 Arab
2.	Issued Capital	7.1 Arab
3.	Paid up Capital	58 Crore

### III. Share structure

After the Revision of Company Regulation 2078 from the Special AGM of Jagdulla Hydropower Company Limited on dated 2078/10/24, here is the updated Share Structure of the Company.

➤ Promoters share holding

Promoters	Total percentage	Percentage of equity
VUCL	51%	26
HIDCL		10
NEA		9
Karnali Province		5
Jagdulla/ Mudkechula RM		1

➤ General public shares

Description	Total percentage	Percentage of share holding
Overall District	49%	33%
Project affected local people (Dolpa District)		10%
TL affected people		3%
JHCL Employee		3%

#### IV. Board Members and Management Team

Jagdulla holds well experienced board members and management team for the execution of timely completion of the project. The board and team members with their names and designation are presented below:

As per the Second Revised Company Regulation 2078, The number of the Board Member will be 7. Here is the Details of the representative from Respective Organizations.

SN	Organization	No of Boar Member	Remarks
1	VUCL	2	
2	HIDCL	1	
3	NEA	1	
4	Independent Director (Infra)	1	
5	From General Public Shareholders	2	
Total No's of Representatives on BoD		7	

#### Board members:

Only two Number of the Persons are representing on the board on the behalf of the VUCL and One number from Independent Director.



**Chiranjibi Chataut**  
Joint Secretary, Ministry of Energy,  
Water Resources and Irrigation  
**Chairman**



**Arjun Kumar Gautam**  
Chief Executive Officer,  
Hydroelectricity Investment And  
Development Company Limited  
**Director**



**Surya Prasad Rijal**  
Managing Director, Vidhyut Utpadan  
Company Limited  
**Director**



**Prakash Adhikaree**  
Managing Director, JHCL  
**Independent Director**  
(Infrastructure Expert)

## a. Management Team:



**Prakash Adhikaree**  
Managing Director, JHCL



**Sanjay Sapkota**  
Project Manager  
Email: pmjhep10@jhcl.com.np



**Suresh Olee**  
Deputy Project Manager - JHEP  
Cell: 01-4479242  
Email: soli@jhcl.com.np |  
olisuresh128@gmail.com



**Prabhu Ram Silwal**  
Site Incharge - JHEP  
Email: prsilwal@jhcl.com.np



**Mandira Khadka**  
Administration Officer  
Email: mkhadka@jhcl.com.np



**Parwat Krishna Pokharel**  
Account Officer  
Email: pkpokharel@jhcl.com.np



**Man Prasad Neupane**  
Public Relation Officer



**Mamata Sharma**  
Sub-Engineer



**Dipak Thapa**  
Sub Engineer

## 2. BROAD SCOPE OF WORK

### Survey license:

#### a) Jagdulla PROR project

The project received the survey license for PROR of 106 MW issued by DoED on dated 05 Kartik 2076 and upto 05 Ashoj 2078.

#### b) 132 KV power evacuation transmission line.

Transmission survey License of 132KV TL from powerhouse to Nalgad Hub substation, Danipeepal issued by DoED on 04 Poush 2076.

Transmission survey License of 132KV TL from powerhouse to Bafikot Hub substation, Rukum (West) issued by DoED on 15 Falgun 2078 and up to Magh 2080.

The projects hold four packages for its COD in 2028. The brief information about the packages is as under:

#### **Lot-1: Infrastructure Development work**

The first contract package (Lot-1) is proposed as Infrastructure Development work which includes the pre-construction works like construction of access road, camp facilities, bridges, construction power, water supply, etc. These works are proposed to be carried out by local contractors before the start of main construction work of project. Domestic Bidding Competition has been envisaged for Lot-1 on BOQ Model and some of works has already been awarded to Nepalese contractors.

#### **Lot-2: Civil and Hydro-mechanical work**

The second package (Lot-2) is proposed for Civil and Hydro-mechanical work, which includes civil works of Dam, power house, surge shaft, descanding basin, cofferdam, and tunnel works etc. Hydro-mechanical works include fabrication and erection of gates, penstock tunnel, tailrace gates etc. International Bidding Competition has been proposed for Lot-2 on EPC Model.

#### **Lot-3: Electro-mechanical work**

The third package (Lot-3) is proposed for Electro-mechanical work which includes design, manufacturing and supply of electromechanical equipments including electric overhead travelling (EoT) cranes, firefighting equipment, and equipment for compressed air supply, HVAC etc. International Bidding Competition has been proposed for Lot-3 on P&DB Model.

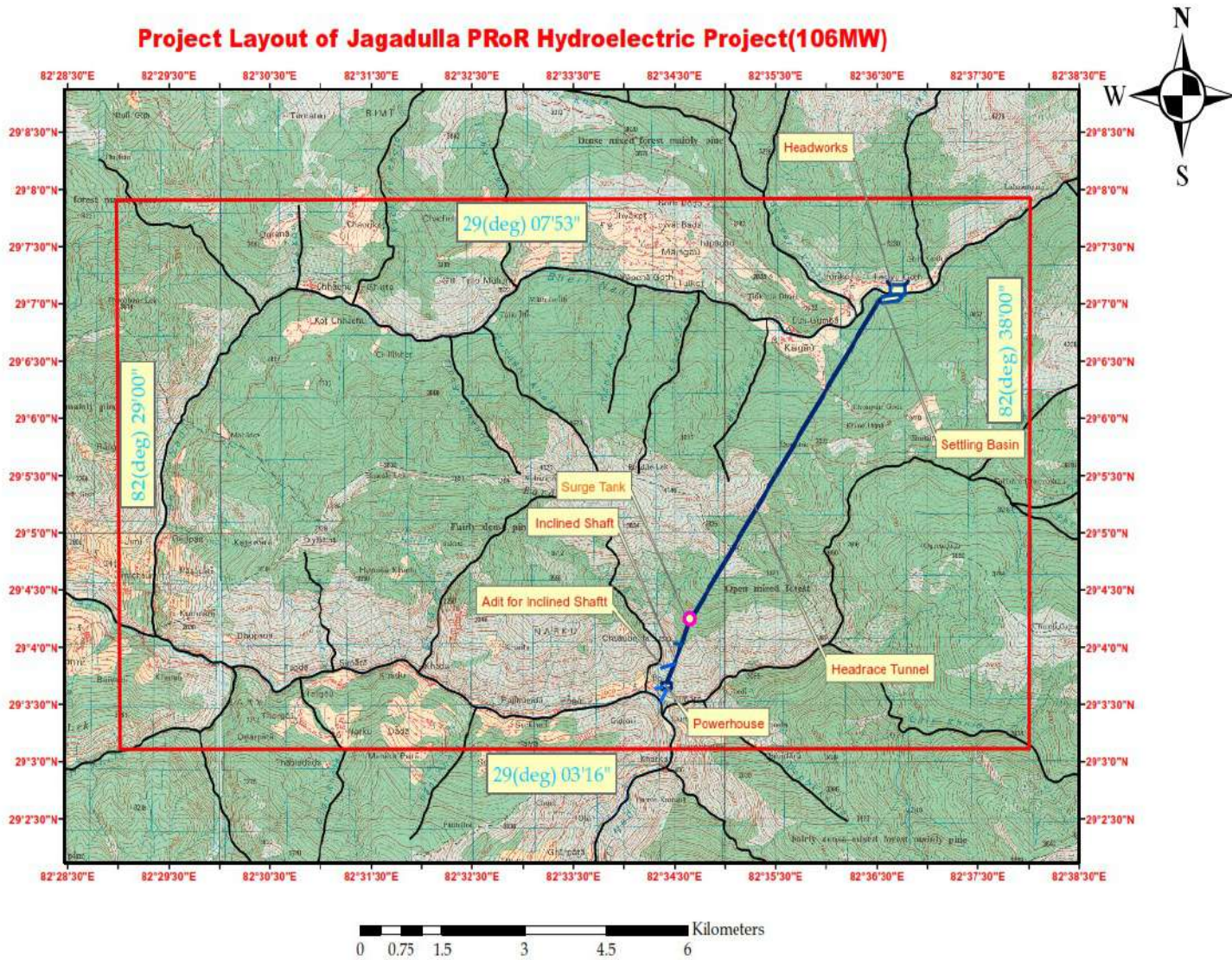
#### **Lot-4: Transmission Line and Sub-station work**

The fourth Package (Lot-4) is proposed for Transmission Line and Sub-station work, which will include the building of 132KV transmission line from powerhouse Illa village to NEA 132KV Bafikot Substation including installation of substation at Bafikot substation. International Bidding Competition has been proposed for Lot-4 on P&DB Model.

### **3. Jagdulla P<sub>RoR</sub> Hydroelectric project (106 MW)**

JHEP is Peaking Run of the River (P<sub>RoR</sub>) project of 6 hours of peaking capacity with dam of height 23 m. and discharge of 16.2 m<sup>3</sup>/s. It consists vertical pelton turbines of 3 units with capacity of 36 MW each. More information regarding JHEP is detailed as under:

### 3.1 Project Layout of JHEP:



### 3.2 Salient Features of the JHEP:

#### 1 Project Location

Province	: Karnali Province
Zone	: Karnali
District	: Dolpa
Intake Site	: Hurikot, Dolpa
Powerhouse Site	: Ila, Dolpa
<i>Geographical Co-ordinates</i>	
Latitude	: 82°29'00" E to 82°38'00" E
Longitude	: 29°03'16" N to 29°07'53" N
Conservation Area (if any)	: No

## 2 General

Name of River	: Jagdulla
Nearest Town	: Kaigaun and Ila
Type of Scheme	: Peaking Run off River (PROR)
Gross Head	: 789.60 m
Net rated Head	: 767.68 m
Installed Capacity	: 106.52 MW
Average Annual Energy after Outage	: 615.32 GWh

## 3 Hydrology

Catchment Area	: 633.83 sq. km.
Mean Annual Discharge	: 28.83 m <sup>3</sup> /s
Design Discharge (at 40%PoE)	: 18.01 m <sup>3</sup> /s
Riparian Release	: 0.467 m <sup>3</sup> /s
Design Flood Discharge	: 1141 m <sup>3</sup> /s
Average Annual Precipitation	: 638 mm

## 4 Diversion Weir

Type of Weir	: Barrage (3 nos. opening) with emergency spillway
Length of Weir	: 38 m (Barrage), 45.70 m (Emergency Spillway)
Crest Elevation	: 2696.00 m asl
Spillway type	: Uncontrolled Ogee shaped
Undersluice Opening (W X H)	: 7.0 m X 7.0 m
Undersluice Crest Level	: 2678.00 m asl

## 5 Intake Structure cum Gravel Trap

Type of Intake	: Side Intake
Nos of Opening	: 2
Size of Intake (W x H)	: 2.0 m (B) x 2.0 m (H)
Intake Sill Level	: 2683.70 m asl
Length of Gravel Trap	: Not Applicable
Width of Gravel Trap (Avg.)	: Not Applicable
Overall depth	: Not Applicable
Particle size to be trapped	: Not Applicable

Flushing Channel	: Not Applicable
<b>6 Approach Canal</b>	
Type	: Underground, pressurized
No. of canal	: 2
Length	: 36.10 m and 49.00 m
Size (W x B)	: 2 m (B) x 2 m (H)
<b>7 Desanding Basin</b>	
Type	: DuFour with intermittent flushing
Dimension (L x B x H)	: 120 x 13 x 9.30 m
Inlet Transition Length	: 25.50 m
Particle Size to be settled	: 0.1 mm
Trapping Efficiency	: >90%
<b>8 Headrace Pipe/Tunnel</b>	
Type	: Inverted D-shaped tunnel
Internal Diameter	: 2.90-3.50 m, varies
Length	: 6135 m
Steel Thickness/Type of Lining	: 150 mm-450 mm, varies
Nos. of Anchor Blocks	: Not Applicable
<b>9 Surge Tank/Forebay</b>	
Type	: Restricted orifice
Effective Depth	: 49.85 m
Diameter (Or size)	: 7 m (1.2 m)
Up Surge Level	: EL. 2708.76 m asl
Down Surge Level	: EL. 2666.73 m asl
Normal Operation Level	: EL. 2683.53 m asl
<b>10 Steel Penstock Pipe</b>	
Type	: Underground, pressurized
Internal Diameter	: 2.10 m
Length	: 1406.69 m
Steel Thickness	: 10- 48 mm
Nos. of Anchor Blocks	: Not Applicable
Nos. of Saddle Supports	: Not Applicable
<b>11 Powerhouse</b>	
Type	: Underground
Size (L x W)	: 77.80 m x 14.00 m

Height	: 33.45 m
Turbine Axis Level	: 1906.40 m asl
<b>12 Tailrace</b>	
Type	: Inverted D-shaped tunnel
Tailrace Length	: 330 m
Size (W x D)	: 5 m x 5 m
Tailrace Water Level	: El. 1900.50 m asl
<b>13 Turbine</b>	
Type	: Pelton, Vertical axis
Number	: 3
Rated Output Capacity per unit	: 35.50 MW
Turbine Axis Level	: 1906.40 m asl
Net Head	: 767.68 m
Discharge per Unit	: 5.40 m <sup>3</sup> /s
Efficiency	: 90 %
<b>14 Governor</b>	
Type	: Digital Governor
Adjustment for Speed Drop	: 0-10%
<b>15 Generator</b>	
Type	: Vertical shaft
Rated Output Capacity per Unit	: 41.98 MVA
Power Factor	: 0.85
Generation Voltage	: 13.80 kV
Frequency	: 50 Hz
No of Units	: 3
Excitation System	: Brushless
Efficiency	: 97.50 %
<b>16 Transformer</b>	
Type	: 3x1 Ph, Oil Immersed
Rated Capacity	: 42 MVA
Voltage Ratio	: 13.80 kV/132 kV
No of Units	: 9+1
Vector Group	: Ynd11
Frequency	: 50 Hz

- Efficiency : 99.50 %
- 17 Transmission Line**
- Voltage Level : 132 kV
- Length : 45 km
- Conductor Type : BEAR
- From : Ila
- To : Banfikot, West Rukum
- 18 Project Cost Estimate**
- Total Cost of the Project : NRs. 19,901,454,303 (W/O financing)
- 19 Construction Period** : 5 years

### 3.3 Detail feasibility/Engineering study

An agreement was signed between NEA engineering, a subsidiary company of NEA and JHCL-HEP for the study of feasibility study and preparation of cost estimate and tender documents in respect of JHEP. Brief information about agreement reflecting all of its aspect is detailed as below.

Agency	Agreement Signed Date	Agreement end Date	Scope of work	Status of work	Contract award amount (NPR)	Amount released to Agency (NPR)	Ld/ Retention (NPR)	EOT	Remarks
NEA Engineering Co. Pvt. Ltd	6 Dec 2017	6 Jun 2019	Detail Design	Detail Design completed on Ashad 2077	34,87,00000 Revised contract amount 27,69,73,806.83	223,825,944.12 (For due amount final RA bill has been submitted by consultant.)			Completed
NEA Engineering Co. Pvt. Ltd	24 Dec 2017	24 Aug 2019	EIA Study	EIA is under progress	2,00,55,550.75	4011110.15		Chaitra 2079	Final Stage of Approval

The progress of aforesaid contract to till date is as under:

Event	Completion Date (in months)	Status
Inception Report	3	Received
Design Basis Memorandum (DBM)	8	Received
Hydrological, Sedimentation and GLOF Report	10	Received
Geological Baseline Report including ERT	14	Received
Interim Design Report	18	Received
Draft Final Report including Tender Documents and Drawings	19	Received
Final Report	20	Received



*Figure 1: Drilling For Geotechnical Study*

Besides above, progress of additional works as per the company requirement assigned to above contract is tabulated as under:

<b>Event</b>	<b>Status</b>
Feasibility Study Report	Received
Topographic Survey Report	Received
Cadastral Analysis	Received
Updated Report	Received
Transmission Line Reconnaissance Survey Report	Received
Interim Drilling Report	Received
Design Cost Estimate and Preparation of the Tender Document of Test Adit and TRT	Received
Design Cost Estimate and Preparation of the Tender Document of 100 m Long Bridge over Bheri River in Tribeni	Received
Design Cost Estimate and Preparation of the Tender Document of Camp facilities	Received
Desk Study Report of the TL from Ila to Bafikot Substation ( 132 KV)	Received
Power Evacuation Report of the TL from Ila to Bafikot Substation ( 132 KV)	Received

### 3.4 Environment Impact Assessment (EIA)

EIA is required to implement any kind of structure with subsequent approval of same from GoN. Status of EIA of the project JHEP is as follow:

<b>Activity</b>	<b>Status</b>	<b>Completion Date</b>	<b>Remarks</b>
Contract Agreement of EIA between VUCL and NEAEC	Completed	14-Dec-017 and updated to 11-Feb-2022	Contract between VUCL and NEAEC
Permission from department of NATIONAL Park and Wildlife Conservation (DNPWC) and Ministry of Forest and Environment (MOFE)	Completed	18-May-018	EIA Study
Feasibility Study permission			EIA Study

from Ministry of Forest and Environment	Completed	25-Nov-018	permission from MOFE
Permission from Ministry of Forest and Environment (MOFE) for EIA Study	Completed	28-Nov-18	Letter from NEAEC to JHCL
Condition for EIA Study of JHCL.	Completed	31-Jan-020	Letter from MOFE to JHCL
Scoping and TOR letter from JHCL to DOED	Completed	28-Aug-020	
Extension of time for EIA Study upto February 11, 2022	Completed	6- Nov-020	Meeting between JHCL and NEAEC
Presentation in DOED	Completed	5-Apr-021	
Comments from DOED	Completed	9-Apr-021	
Modification of Scoping and term of reference	Completed	12- Apr-021	letter from DOED
Modified Scoping and TOR forward for approval	Completed	14-Jun-021	Letter from JHCL to DOED
Letter from DOED to MoF	Completed	30-Jun-021	
Comments from DoF	Completed	4-Jul-021	
Approval from MoFE of TOR and Scoping Works	Completed	17 Mangsir 2078	
Public Hearing	Completed	Public Hearing was Completed <ul style="list-style-type: none"> <li>• In HW on dated 2 Poush 2078</li> <li>• In Dewatering Zone on Dated 4 Poush 2078</li> <li>• In PH on dated 6 Poush 2078</li> </ul>	
Tree Counting Works	Completed	25 Chaitra 2078	
Final EIA Report	Presented	Submitted to the DoED on 2079/06/06 revised submission on 2079/07/21 and Presentation date is on 2079/08/01	

## Revised Time Schedule for EIA of Jagdulla HEP (FY 2079/80)

Activity No.	Activity	Months of 2079/80										Deliverables
		Shrawan	Bhadra	Asoj	Kartik	Mangsir	Poush	Magh	Falgun	Chaitra		
1	Scoping and TOR											Already approved
2	Environmental baseline report											Already prepared and submitted as part of the EIA Report. It will be revised/improved (if necessary) according to comments on EIA report from presentation to be held in DOED and MOFE.
3	Draft EIA Report											Already prepared and submitted to JHCL
4	<b>Approval Process of EIA Report</b>											
4.a	Report Submitted to DOED for approval process											Already Submitted
4.b	12 copies of 12 Submitted to DOED for presentation											Already Submitted
4.c	Presentation at DOED											We are waiting for DOED for the date of presentation
4.d	Submit Revised Report to DOED after incorporating comments											
4.e	Forward report by DOED to MOEWRI											
4.f	Forward report by MOEWRI to MOFE											
4.g	Presentation at MOFE											
4.h	Submit Revised Report to incorporating comments received from MOFE Presentation											
4.i	Notice in national daily (7 days) and publish in website also											
4.j	Submit final revised report incorporating all comments received (if any) on the version published in website and notice in national daily											
4.k	Approval of EIA Report											<b>EIA REPORT APPROVED</b>



Figure 2: Public Hearing Program at Powerhouse





Figure 3: Public Hearing Program at Dewatering Zone



Figure 4: Public Hearing Program at Powerhouse

**जगदुल्ला हाईड्रोपावर कम्पनी लिमिटेड**

जगदुल्ला अर्ध-जलाशययुक्त जलविद्युत आयोजना (१०६ मेगावाट) को

**वातावरणीय प्रभाव मूल्याङ्कनको**

**सार्वजनिक सुनुवाई**

स्थान : जगदुल्ला गाउँपालिका, वडा नं. ५, माझगाउँ, गाउँपालिका कार्यालय

मिति र समय : २०७८ पुष २ गते, बिहान ११ बजे

**प्रस्तावक:**  
जगदुल्ला हाईड्रोपावर कम्पनी लिमिटेड  
बानेश्वर-१०, काठमाडौं, नेपाल  
फोन : ०१-४४७८४२  
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**परामर्शदाता:**  
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फोन : ०१-५१११०२४  
ई-मेल : info@neaec.com.np  
वेबसाईट : www.neaec.com.np



Figure 5: Public Hearing Program at Headwork Area

### 3.5 Project Land

Land acquisition of the JHEP was completed on Falgun 2076. A detail of project land is as below.

Description	Area	Status	Remarks
Private Land	260 ropani	acquired	



*Figure 6: Public Interaction Program During Land Acquisition*

As per the project requirement additional Land is to be acquired for which rate finalization from CDO office of Dolpa has been accomplished. Due to Worldwide Nobel Covid pandemic the distribution of compensation for additional land to the affected people is on hold.

### 3.6 Test Adit Tunnel

For geological study at powerhouse a drift of 2.5/2.5 was proposed by JHEP and accordingly for executions of the works of the drift LOA was awarded to M/S Sherpa/P.S JV. The details of the contract and its status to till date is as under:

Activity	Contract award Date	Contract Completion Date	Name of Agency	Status till date	Contract amount inc VAT (NPR)	Amount paid to contractor till date (NPR)	Retention amount (NPR)	Remarks
Test Adit Tunnel	15-JUN-2020	JUL-13-2022	Sherpa/P S JV	Completed	87,41,6,331.86	86,288,747.98	38,18,086.23	Completed

## Status of Explosive

On Dated 2077/10/15 a request letter for approval from the Nepal Army for the use of explosives to execute the works of drift was submitted and permission of same was granted from Nepal Army on dated 2077/05/04. However, the explosive was not instantly handed to the contractor from Nepal Army due to the shortage of explosives at army storage. To resolve the crisis of explosive further request letter for approval regards to purchasing of explosives from the neighboring country India was submitted to the army on dated 2077/12/23 and waiver of same from Nepal Army was issued on dated 2077/12/23. Subsequently, explosive was purchased from India and same has been transported to Site. Explosive has been used for the excavation of test tunnel and the excavation work of test tunnel is completed.



*Figure 7: Test Adit Tunnel Completed*



*Figure 8: Test Adit Tunnel Photos*



### 3.7 Prefab Office cum Residential Building

Necessary accommodation & offices for the employees at the site for the supervision of the pre-construction activities a pre-fab office cum residential building was planned and to execute the construction of the pre-fab office cum residential building contract was awarded to M/S Sherpa Hydro on dated 31-AUG-2020. Accordingly, M/S Sherpa Hydro executed the works of the pre-fab office cum residential building and the same is completed.

Brief overview of the aforesaid contract is as below:

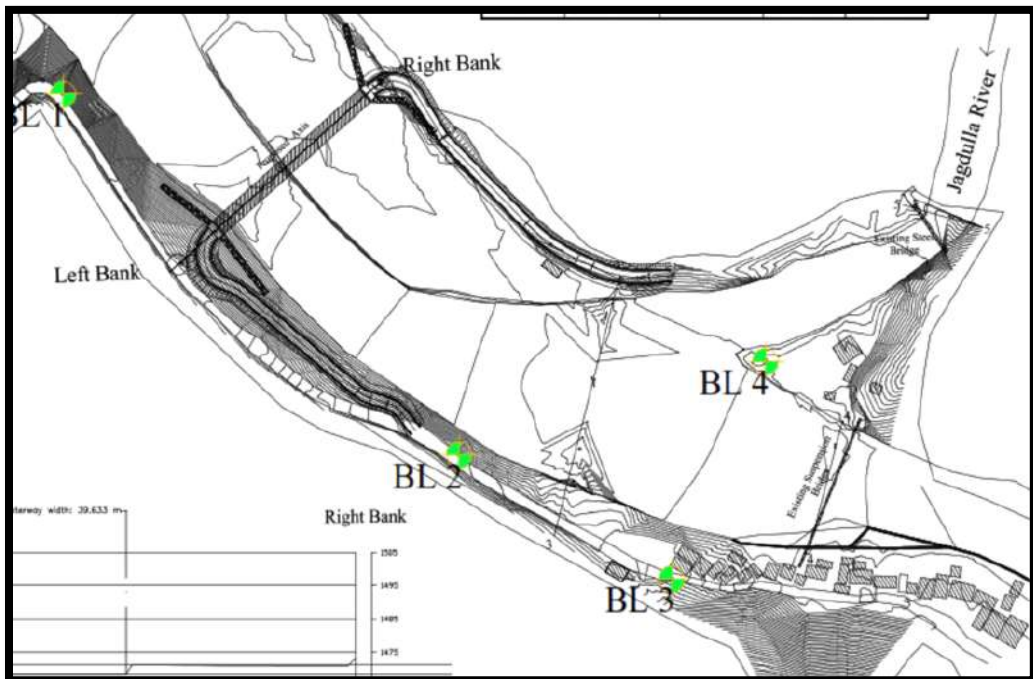
<b>Pre-fab Building</b>			
<b>Contract award Date</b>	31 -AUG -2020	<b>Contract amount inc VAT (NPR)</b>	17,25,3,827.79
<b>Contract Completion Date</b>	31-APR-2021	<b>Amount paid to contractor till date (NPR)</b>	1,58,29,359.19
<b>Name of Agency</b>	Sherpa hydro	<b>Retention amount (NPR)</b>	698,038.1
<b>Status till date</b>	Completed		



*Figure 9: Completed Prefab Office cum Residential Building*

### 3.8 Bridge

Under the access road, a bridge is to be built at Triveni, Jajarkot over the Bheri River. For construction of the Bridge over Bheri River a contract agreement was performed between Jagdulla Hydropower Company Limited and Caravan/Hirachan JV on dated 29-July-2020. As per contract Caravan/Hirachan JV has completed the design works of the bridge and the IEE of the Bridge is completed. The excavation and river training work of bridge is started and is in progress.



The details of contract between Jagdulla Hydropower Company Limited and M/S Caravan/Hirachan JV pertaining to the Bridge at Triveni over Bheri river is as under:

<b>RCC Motarable Bridge</b>			
<b>Contract Award Date</b>	2077-04-14	<b>Contract amount inc VAT (NPR)</b>	14,89,25,928.27
<b>Contract Completion Date</b>	2079-10-13	<b>Amount paid to contractor till date (NPR)</b>	62,00,000.00 (Advance) 4,357,901.09 (1st Running Bill) 4,584,571.43 ( 2 <sup>nd</sup> Running Bill)
<b>Name of Agency</b>	Hirachan /Caravan JV	<b>Retention amount (NPR)</b>	192,827.5+202857.14= 395684.5
<b>Status Till Date</b>	Ongoing	<b>EOT</b>	2080-04-12



Figure 10 : Technical Team of of RCC Bridge.



*Figure 11 : Carrying and River Crossing of the Equipment of RCC Bridge.*



*Figure 12: River Training work and Excavation work of RCC Bridge.*



*Figure 13: Construction preparation of RCC Bridge and Construction Materials.*

### 3.9 Power Purchase Agreement (PPA)

For the evacuation of power of JHEP after the completion of the project JHEP has approached the only one distribution company of Nepal - NEA for Power Purchase Agreement, continuous follow-up is being going on with NEA for the same and is on the final stage.



Figure 14: Slide Presentation of PPA at NEA Office



Till date, achievements regarding PPA between NEA and JHEP are as follows:

Activity	Status	Application submission date	Completion date	Remarks
Application to PDD of NEA,	completed	05-03-2021	On 27-6-2021 PDD of NEA called for Energy Locking.	Delay for energy locking due to covid-restrictions.
PPA Slide presentation at NEA office	completed		30/07/2021	
Energy locking signing	completed		28/06/2021	

Grid impact study presentation	completed		9/03/2021	
Connection agreement with NEA	Completed		10/06/2078	In NEA Substation (Banfikot)
Approval from Electricity Regulatory Commission	To be submitted		Within this fiscal year	
Final PPA with NEA	Final Stage		Draft PPA is signed with NEA on 21/07/2079	

*Figure 15: Connection Agreement with NEA of Power Evacuation of Jagdulla PRoR HEP (106 MW)*



### 3.10 Financial Closer (FC)

Financing of project is associated to the Cabinet decision made on 2075-11-27. The Cabinet concluded a program 'JANTA KO JALVIDHYUT' which brought a platform for Nepalese people for developing hydropower of Nepal by their involvement and ownership by means of shareholding. The program has also framed the shareholding of GoN agency for financing of the projects listed within the program. The share structure as define by the program is tabulated below.

#### i. Promoters shares

Description	Total percentage of share	Percentage of shareholding
Associated Province	51%	5%
Local Government		5%
GoN and its Agency		41%

#### ii. General Public shares

Description	Total percentage of share	Percentage of share holding
JHEP/Promoters Employee	49%	3%
Project affected local people		10%
District locals		33%
TL affected people		3%

Note: In case percentage of shareholding of JHEP/Promoters Employee, Project affected local people and TL affected people would not be achieved fully or partially than by means of notice share shall be sell out.

On the basis of above share structure, the FC works is in full swing and its progress till date is as under.

- **Equity Management Plan**

- Promoters share holding

Promoters	Total percentage of share	Percentage of equity	MOU	Remarks
VUCL	51%	26	Completed	
HIDCL		10		
NEA		9		
Associated province		5		
Local GoN		1		

- General public shares

Description	Total percentage of share	Percentage of share holding	Remarks
JHCL/Promoters Employee	49%	3%	Share shall be issued after achieving 10% of progress of project.
Project affected local people		10%	
District locals		33%	
TL affected people		3%	

- **Proposed Loan Structure Plan**

- The board meeting number 81 of dated 2078/11/25 has formed subcommittee for finalization financial closure for the development of Jagdulla Hydropower Project 106 MW in request of HIDCL. The subcommittee has formed as coordinator director Mr. Mahesh Rimal with two member Mr Sanjay Sapkota Acting CEO and Mr. Parwat Krishna Pokharel, Account Officer.
  - Different meeting held with interested consortium partner HIDCL, EPS, NIFRA Bank, NABIL Bank, as per the discussion it is finalized NIFRA will lead the consortium and NABIL will be Co-lead as Commercial Bank. Consortium Partner decided to sign Term Sheet in suitable and favorable time.

- On 2079/03/17 Board Meeting number 90 draft Term Sheet has been presented and board of director instruct management to finalize Term Sheet with minor correction.
- Here is the Finalized Consortium for the Project financing for the Jagdulla PROR HEP (106 MW).

<b>Name of the Bank</b>	<b>Pattern</b>	<b>Percentage</b>
NIFRA	Lead Partner	26%
HIDCL	CO-Lead Partner	25%
EPF	CO-Lead Partner	25%
NABIL	CO-Lead Partner	24%



*Figure 16: Meeting with EPF*



*Figure 17 : Interaction with NIFRA related to FC*





*Figure 18: Project Financing Consortium Finalization on HIDCL Office in the presence of BOD of JHCL ( Mr. Mahesh Rimal)*





Figure 19: Interaction with Karnali Province related to Equity Investment





*Figure 20: Secretary, Ministry of Energy, Water Resources and Irrigation, Joint Secretary (Dinesh Ghimire) and the Team on Site Visit*

A team of high officials consisting Secretary, Ministry of Energy, Water Resources and Irrigation, Joint Secretary, Ministry of Finance, Deputy General Manager of National Insurance Committee, Managing Director of Vidhyut Utpadan Company Limited on dated 2077/11/24 visited the site and observed the progress of the project subject to financial management with respect to investment of JHEP. Project overview via PPT presentation at NIFRA, Provident Fund, Others Banks and Financial intuitions viz-aviz financing (loan) the project has already been completed.

### 3.11 Procurement status

Procurement of the Good and Works of the Jagdulla PProR HEP (106 MW) on Fiscal Year 2079/80 are ongoing to achieve the goal of the Procurement Plan of JHCL. Here is the Details of the Procurement.

Description of Works	Notice Publication	Technical Evaluation	Financial Evaluation	Awarded
Consulting Services for Complete Project Contract Management/Construction Supervision works including Review and Finalization of Detailed Project Report and assistance in Bidding Process.	August 14, 2021 and Re-notice on October 23, 2022	Completed but According to Public Procurement Rules (PPR) 2064, Rule 70 (8) and VUCL/JHCL Procurement Rules 2077, Rules 98 (7), The Procurement was cancelled.		
EOI for Consulting Services for Environment Impact Assessment (EIA) of Jagdulla -A Hydroelectric Project (82.3 MW).	EOI: August 21, 2022 RFP: September 30, 2022	Completed	Completed	ERMC-SHRESTHA -GRID J/V
EOI for Consulting Services for Detailed Feasibility Study of Transmission Line of Jagdulla PProR Hydroelectric Project (106 MW).	EOI: August 21, 2022 RFP: September 30, 2022	Completed	Completed	ERMC-UDAYA J/V
Construction of Camp Facilities at HeadWorks Site of Jagdulla PProR Hydroelectric Project.	14 August 2022	Completed	Completed	Sherpa Hydro Construction P.ltd
DESIGN, SUPPLY, DELIVERY AND INSTALLATION OF SINGLE SPAN BAILEY BRIDGE OVER JAGDULLA RIVER	07 <sup>th</sup> November 2022	Ongoing		

Construction of Access Road (TRIBENI TO ILLA), at Different Chainages	Planning to Publish on Date : 13 <sup>th</sup> November 2022			
PREQUALIFICATION DOCUMENT OF BIDDERS FOR THE PROCURMENT OF CONSTRUCTION OF LOT NO.2 CIVIL AND HYDRO-MECHANICAL WORKS UNDER EPC CONTRACT	Biding Document Preparation has been completed			
Video Modeling of the Jagdulla P <sub>RoR</sub> HEP	Completed			
Management Information System of the JHCL	Completed			
Others Procurement	Biding Document Preparation has been completed			

## 4 Jagdulla A Hydropower project (JAHEP)

Besides executing the works of JHEP the team members and board management are also engaged in developing of Jagdulla-A HEP, a cascade project of Jagdulla Hydropower Company Limited.

### 4.1 Survey License:

The Survey license received from DoED on 09.04.2077 for a feasibility study of Jagdulla-A and it is renewed at 2079.04.20.

### 4.2 Project Layout:

The project layout of JAHEP is as below:

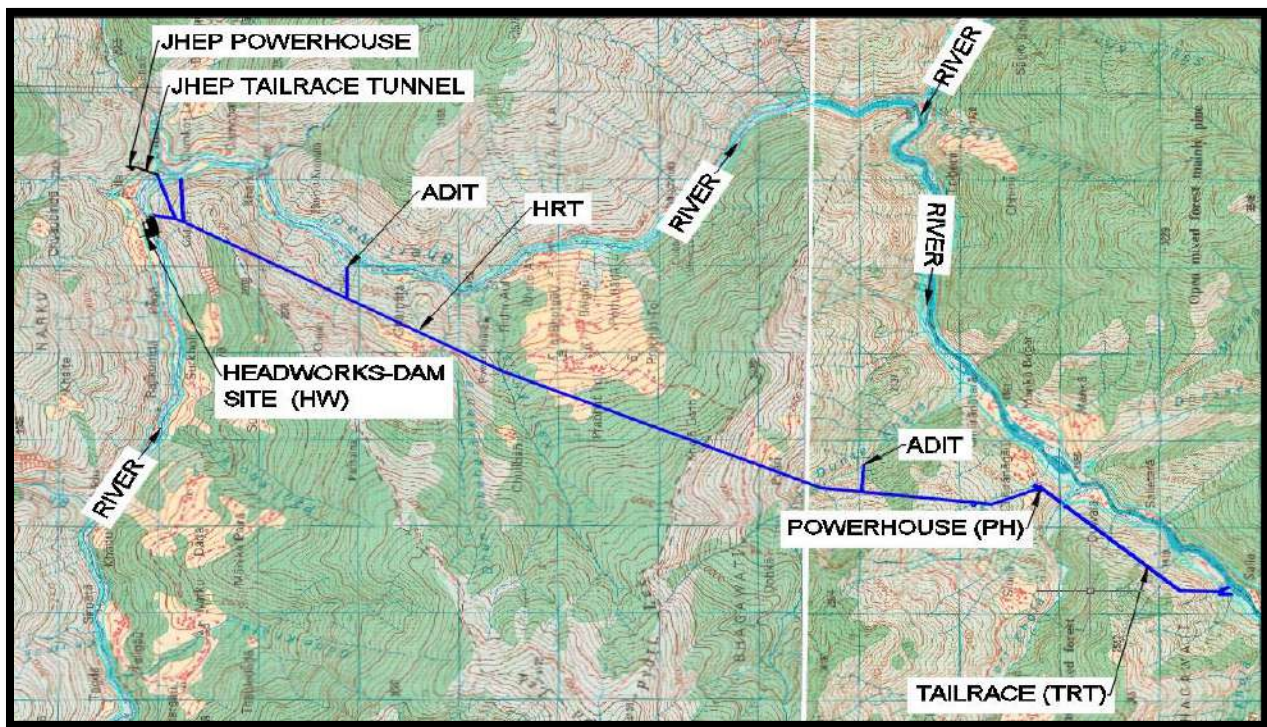


Figure 21: Layout of the JAHEP

After the visit of the site of JAHEP the consultant submitted the various layout along with the inception report. On the basis of the report JHEP selected above feasible project layout.

### 4.3 Detail Feasibility and Engineering Study

Contract agreement for detail design study of Jagdulla-A was signed with NEA Engineering on 30.08.2077.

As per the contract the deliverables that is to be provided by the NEA Engineering and its progress till date is tabulated as below:

<b>Event</b>	<b>Completion Date (in months)</b>	<b>Status</b>
Draft Inception Report	3	Received
Inception Report	6	Received
Topographical Survey and Mapping Report	8	Received
Design Basis Memorandum (DBM)	10	Received
Draft Hydrological, Sedimentation and GLOF Report	10	Received
Hydrological, Sedimentation and GLOF Report	14	Received
Interim Design Report	12	Received
Power Market, Power System and Evacuation Study Report	13	
Geological Baseline Report	14	Received
Draft Feasibility Study Report	19	
Feasibility Study Report	20	
Design Workshop	21	
Draft Tender Document and Tender Drawing	22	
Final Detailed Engineering Study Report	24	
Final Tender Document and Tender Drawings	24	
Bio Monthly Progress Report with Presentation	Within 15 days of the Reporting Month	

After Submission of the Inception report of JAHEP by the Consultant, The team of the Consultant and Client had visited to the site and discussed on so many times, concluded that the capacity will be increased from 82.3 MW to 120 MW. After the JHCL submitted to the DoED for the Amendment of the Area and Capacity and also presented to DoED by the Consultant and JHCL for the Amendment.

## 5 Budget Summary of Previous Year

The project and administrative expenditure of fiscal year 2078-2079 of JHEP was affected by worldwide Pandemic Nobel Corona Virus.

It was deemed the completion of detail Feasibility/Engineering of JHEP and EIA study of JHEP in the fiscal year 2078-79. However covid-19 affected the schedule works and its proposed budget. In similar manner Compensation distribution to the land affected owners of additional land required for JHEP was too affected by the Covid-19. The time consuming approval from army for use of explosive, shortage of same at Nepal Army storage and purchasing of the explosive from neighboring country INDIA as is resulted JHEP a long period for the use of explosive, ultimately halted the test audit tunnel works for long period and consequently fall in the proposed budget of the works. Because of aforesaid reasons only expenditure of 34 % (Twenty Five Crore Thirty Five lakh Sixty Six Thousand Nine Hundred Five Rupees and Eighty Three Paise Only) of the total revised approved budget of fiscal year 2078-79 was achieved.

Information regarding the approved budget and expenditure of same of fiscal years 2078-79 is tabulated as below.

S. N.	Budget	Fiscal year 2078-79			Progress in percentage
		Approved Budget	Revised Budget	Expenditure till end of fiscal year.	
1	Current expenditure	47,294,928.53	49,394,928.53	30204547.39	63 %
2	Project Expenditure				
2.1	Jagdulla PProR Hydroelectric Project	590,070,459.75	587,970,459.75	208353127.09	32 %
2.2	Jagdulla-A hydropower project	108,059,641.94	108,059,641.94	34,018,943.84	31 %
3	Capital expenditure	1,865,000	1,865,000	434,533.01	23 %
<b>Total</b>		<b>747,290,030.22</b>	<b>747,290,030.22</b>	<b>253,566,905.83</b>	<b>34 %</b>

## 6 Main objectives, policies and programs of fiscal year 2079/80

### 6.1 Main Objectives:

1. As detailed engineering study report and bidding documents have been received for the development of the project, the necessary pre-construction activities such as obtaining the approval of the EIA report from DoED , financial closure required for the construction of the project , PPA between NEA and JHEP for the evacuation of the JHEP power after the completion of the project and obtaining the generation license shall be achieved before the commencement of the construction works.
2. Hiring of main consultant for the regular monitoring and supervision of the construction works during the construction of the project and engaging it to accomplish the pre-qualification works of Lot 2 (civil and hydro-mechanical) & float the NIT of Lot-2 package and evaluate the bids of same.
3. Commencement of upgrading of access road, concrete and Bailey Bridges and office cum residential building before the construction of the project.
4. Under the social responsibility for the local residents of the project affected villages and wards programs is to be created for better relationship between project, the local government and the residents as it to create an environment to support and facilitate the completion of the project by mitigating the obstacles during the construction of the project.
5. To expedite the detailed Feasibility and Engineering study work of the company's new project Jagdulla-A Hydropower Project (82.3 MW).

## 6.2 Policy and Program:

S. N	Policy and Programs	Goal
1.	Approval of EIA report from GoN	Getting Approval of ToR and Scoping of the Environmental Impact Assessment Study from Ministry of Forest & Environment and receiving the final approved report of the Environmental Impact Assessment Study from the aforesaid Ministry.
2.	Hiring of main consultant	Hiring of main Consultant for regular monitoring and supervision of construction works during project construction.
3.	Pre-qualification and tender works related to Lot 2 (Civil and Hydro-Mechanical)	Floating notice for the pre- qualification of contractors of LoT-2 and completion of evaluation of same. Floating NIT for financial and technical bids to the contractors selected under PQ.
4.	Power chase agreement works	Since Energy locking has been completed with regards to applied application to NEA in respect of PPA between NEA and JHEP for the evacuation of the JHEP power after the completion of the project further works of PPA shall be carried out to accomplish the PPA between NEA and JHCL.
5.	Financial closing	Since the projects falls under 'JANTA KO JALVIDHYUT' accordingly equity required to be revised and concerned stakeholder has been intimated of same .The aforesaid works shall be completed within this fiscal year. Financial Closing will be completed by coordinating with the financial institution and banks for the loan required for the construction of the project.
6.	Obtaining generation license	Application shall be applied to DoED to obtain the generation License after receiving the approval of ToR and Scoping of EIA from DoED.
7.	Construction works of Test adit tunnel	The excavation works of 485 meter Test adit for additional geological study of powerhouse is completed.

		NIT shall be floated as required to carried out the geological study of tailrace tunnel and construction works of same shall be commence.
8.	Construction of Bridge and access road	<p>Under the concept of Design &amp; Build, contract of bridge at the starting point of the access road of the project (in Triveni, Dolpa) has been started and design and IEE of same has been approved from the JHEP. Consequently as per the approved construction schedule woks shall be executed.</p> <p>Commencement of construction of additional Bailey Bridges on the access road of the project in coordination with the Karnali State Government.</p> <p>As the state government has already started the work of opening the track of the access road of the project (Tribeni-Illa-Kaigau Road), NIT shall be floated for upgrading of road and accordingly commencement of construction works of same.</p> <p>To start the process of construction of the road from the power house of the project to the surge tank.</p>
9.	Construction works of residential cum office buildings	<p>As the construction work of the temporary prefab building at the power house site, Illa is completed.</p> <p>Construction work has been awarded for the required office cum residential buildings (Main Building) at Headwork's Site and will be started to powerhouse site after the connection of the road.</p>
10.	Additional land acquisition work	As the consultant has submitted a report to acquire additional 50 ropanis of land, distribution of compensation to the affected land owners based on the rate finalized by the District Compensation Determination Committee Dolpa shall be performed.
11.	Training and career development	By identifying appropriate programs for the career development of the working employees, training including field visit shall be performed.
12.	Social Responsibility Program (CSR)	In coordination with the concerned local bodies track road and gabion in the river for protection of Illa Village has been conducted and additional work will be started.

13.	Jagdulla-A Hydropower Project (82.3 MW)	Obtaining reports from the consultant accordingly to the agreement reached between NEA Engineering and JHCL associated to Detail Engineering study of Jagdulla-A Hydropower Project(82.3MW)
14.	Other works	For further study of the project Gauge Reading, Discharge Measurement and Sediment Sampling work shall be continued. Hiring of consultancy services as required by the JHEP during course of time.



*Figure 22: Access Road to the Project Site*





*Figure 23: Access Road to the Project Site*



*Figure 24: Site Visit by CDO, DSP, Army Major and Journalist of Dolpa Districts*



*Figure 25: Discussion with Karnali Province Government*