: Environmental Studies for Vishnugad - Pipalkoti Hydro-electric Project **Project** 

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### ARCHAEOLOGICAL SURVEY REPORT

## **EXECUTIVE SUMMARY**

#### 1.0 HISTORICAL BACKGROUND

The Vishnugad Pipalkoti Hydroelectric Project (VPHEP) is a run-of-the river hydro power project proposed on River Alaknanda in district Chamoli in Uttarakhand. Archaeologically and culturally, the entire area from the foothills to the higher Himalayan mountain upto the source of Alaknanda is considered as the land highly sacrosanct. Moreover, because of its religious significance due to the great Himalayan shrines, it has remained culturally and historically inseparable from the rest of India

The archaeological researches in India since independence have brought forth a rich data of our cultural heritage. The extensive explorations and assiduous excavations undertaken throughout the country have succeeded in unearthing a plethora of new evidences. In the same way, regional studies in archaeology have also contributed in discovering India's past in no lesser terms. However, the region of the Garhwal-Himalaya has comparatively been less studied.

**Pre-History:** The prehistory past of the Garhwal-Himalaya is not known with certainty. The reasons are two fold, firstly, topographically it was a most difficult region and secondly, the extreme climatic cycles made it more inhospitable for the early man. Further more, the recurrence of the tectonic fluctuations resulting physiographic changes along with frequent landslides all around in the valleys and mountains disturbed the entire sequence everywhere an obliterated totally all evidence of the past.

Paleolithic Tools: Exploration for Stone Age artifacts were conducted at Srinagar and Dang in the Alaknanda Valley as for back as 1977, when a few flacks resembling the pebble tools were picked up from terrace 1(at village Dang). Exploration in 1980-81 however, brought to light a sizable collection of Paleolithic implements. The artifacts range from the pebble tools to the middle Paleolithic implement found from the river terrace

Prehistoric Art: Prehistoric art is yet one more significant aspect generally associated with the Prehistoric cultures. The discovery of prehistoric art in central Himalayan region furnishes a new evidence for it. The evidence of rock shelters having paintings, come from the Alakananda Valley of the central Himalayan region. A Rock shelter depicting painting was discovered by Nautiyal at Kimni in Karnaprayag-Gwaldam road in Chamoli district. The other Rock shelter is at Dungri village on the Chamoli-Badrinath road in Chamoli District. The cave is about 2 km away from Chhinka on the high Mountain to wards Chamoli.

Proto-History: In the later phase of the proto history in the Alakananda Valley, the people who occupied the region were using painted Grey Ware as their principal pottery.

Archaeologically and culturally, the entire area from the foothills to the higher Himalayan mountain upto the source of Alaknanda is considered as the land highly sacrosanct. Moreover, because of its religious significance due to the great Himalayan shrines, it has remained culturally and historically inseparable from the rest of India. Unfortunately, the early history of the entire region of Uttrakhand is disjointed, as also that of this

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valley. There are, however, some stray materials, which need to be supplemented by future investigations.

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#### 2.0 HISTORICAL ARCHAEOLOGY

The 6th century B.C. witnessed a cultural renaissance, giving birth to new ideas and traditions. However, the study of the cultural evolution in the Garhwal Himalaya region has not yet become an established fact of history. Therefore, archaeological discoveries in recent years through exploration and excavations are gradually bringing forth new evidences for the formulation of cultural background of this area. The recent discoveries brought out in this valley and elsewhere in the Garhwal-Himalayas, indicate that the area was serving as a meeting ground of various cultural waves flowing from different directions. The new material evidence has proved that this was a pivotal region and so almost every traveler from Fa-hien in the 4th -5th century AD to Heiun-tsang in the 7th century AD had visited either its heartland or places of peripheral zone.

## Some Important Explored and Excavated Archaeological Sites in the Region

a) Ranihat: It is an excavated site Ranihat (30° 12'N, 78° 47'E) is a small village about nine kilometers from the town of Srinagar on Srinagar-Badiyaragarh road. The cultural sequence of this site is as follows:

circa 600 to 400 BC Painted Grey Ware Culture (PGW) Period-I

circa 400 to 200 BC Mauryan Period-II A

circa 200 BC to AD 20 Sunga-Kushana Period-II B

Period-III circa 800 to AD 1200 Sultanate

- b) Thapli: It is an excavated site Thapli (30° 12' N & 78° 47' E) is a small village about thirteen kilometers from the town of Srinagar on Srinagar - Badiyaragarh road. It is a single culture site of Painted Grey Ware (PGW) and is placed around 1100 BC to 800 BC.
- c) Mana: The site, situated 3 km beyond Badrinath, is a big village of tribal Marchhas. A few sherds of fine plain grey ware and fine red ware can be placed in pre-Christian era. The rest of the finds from Mana are assignable to the post-Gupta period.
- d) Tapoban: The site is situated about 15 km from Joshimath on the Malari road on the left bank of Dauliganga. It has several temples and the ancient pottery is scattered all around the fields. The pottery is assigned to the post-Gupta period, to which period the temples of the site also belong.
- e) Rein: The site is situated about 18 km from Joshimath on Joshimath-Malari road on the left bank of Dhauliganga. This site is ascribed to the post-Gupta period.
- **Subhaien:** The site is situated at a height of 7000ft about 23 km from Joshimath on Joshimath-Malari road on the left bank of Dhauliganga. This site is assigned to the post-Gupta period.

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g) Gopeshwar: This site is situated 10 km west of Chamoli. This site is assigned to the post-Gupta period.

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- h) Simli: This site is situated 8 km from Karnaprayag on the Karnaprayag-Ranikhet highway. This site is assigned to the post-Gupta period.
- i) Chandpurgarhi: This site is situated 11 km from Karnaprayag on the Karnaprayag-Ranikhet highway. This site is assigned from about 4th century onwards and continued so up to the early medieval period.
- j) Adibadri: Like Chandpurgarhi, Adibadri is also a significant ancient site, yielding red ware of the post-Gupta period and early medieval period.
- k) Kameda: The site is situated 2 km east of the town of Gaucher on the left bank of Alaknanda. This site is assigned to the Sunga-Kushana period.
- Ratura: This site is situated on the left bank of Alaknanda, 7 km from Rudraprayag on the Badrinath highway. This site is assigned to pre-Christian era and post-Gupta period.
- m) Ufalda: This site is situated 4 km south of Srinagar town on the left bank of Alaknanda. This site is assigned to the post-Gupta period.
- n) Dhandri: This site is situated 8 km south of Srinagar town. This site is assigned to 4<sup>th</sup> -5<sup>th</sup> century AD.
- o) Naithana: This site is situated around 6 km of Ranihat on the right bank of Alaknanda. This site is assigned to the post-Gupta period.
- p) Supana: This site is situated around 7 km north of Ranihat on the right bank of Alaknanda. This site is assigned to the early historical period.

#### 3.0 **EXPLORATION RESULTS**

On the basis of village to village Survey (Exploration), a list of 63 villages has been prepared in Joshimath tehsil, Distt. Chamoli. These villages falls under the area of Vishnugarh-Pipalkoti Hydro Electric Dam project area, covering an area of 7 km from river Alaknanda covering the stretch length of 28 km. from Chhinka village to 3 Km upstream towards Joshimath from Helong Dam site in district Chamoli Joshimath. Out of these 63 villages surveyed 10 villages have archaeological / heritage remains.

Besides archaeological remains such as cultural properties, sites, folklores, legends, buildings almost all 63 villages have preserved their paleontological, natural religious and sacred heritage in a very ritualistic and traditional manner. An overall idea of Project : Environmental Studies for Vishnugad – Pipalkoti Hydro-electric Project

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number of villages surveyed containing archaeological sites etc., is given in **Table** below.

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Table 1: Typological Distribution of Archaeological Remains discovered during Survey

Type of Archaeological Remains	Number of Villages	Total
Pre-historic Rock-shelter	1	1
Megalithic Site	1	1
Historical Site	2	2
Temples (Historical)	5	5
Structural remains of Heritage Buildings	2	2

The Archaeological sites present in the Project Influence Area (PIA) - 7 km radius from project sites, Project Immediate Affected Area (PIAA) - 500m from project site and Project Affected Area (PAA) are given in the table below.

**Table 2: Archaeological Sites of Project Area** 

0.11	Table 2. Archaeological Sites of Project Area		
S.No	Site	Archaeological Monument	
1	Dungri - (PIA)	Pre-historic rock-shelter site.	
	N 30°25'30.97"	The rock-shelter is about 10 mts high and the paintings are drawn on huge, flat rock (4 x 6 mts) overlooking the deep valley towards the north-east. The paintings have been done in deep red ochre showing a hoard of animals. A few motifs represent human and animal forms.	
	E 79°22' 11.74" ± 11 m		
	1572 m above MSL		
2.	Amarpur - (PIA)	Megalithic burial site consisting the types:	
	N. 30°25′11.5″	a) Menhirs.	
	E. 79°26'15.6" ± 8 m	b) Crain circles.	
	1353 m above MSL	c) Rectangular Crain burials	
3.	Sirkot-1 and Sirkot-2 - (PIA)	Pot sherds	
	N-30° 24 37.3″	Historical period site consisting of red ware po	
	E-79° 24′ 41.3″ ± 5 m	sherds (mid and rim part) and a stone pounder. These findings are from about 2-3 feets below the	
	N-30° 24' 27.1"	present working level of the field.	
	E-79° 24' 36.0" ± 5 m		
	1307 and 1311 m above MSL		
4.	Mahargaon-(Kyontha) - (PIA )	Pot sherds	
	N - 30° 24 <sup>'</sup> 35.5 <sup>''</sup>	Historical period site consisting of red ware potsherds in the agriculture fields.	

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S.No	Site	Archaeological Monument
	E - 79° 25 24.6″ ± 6m	
	1364 m above MSL	
5.	Darmi - (PIA) N - 30° 28' 37.2" E - 79° 23'14.2"± 9 m 1557 m above MSL	Narsimha Temple  Temple is an archaeological monument. The plinth stone of the <i>garbhgrih /</i> sanctum sanctorum is intact and original, where as the part of <i>Shikhar</i> and <i>Mukha mandap</i> a is renovated / altered recently.
6.	Gulabkoti - (PIA) N- 30° 30′ 15.8″ E-79° 29′31.8″± 37 m 1507 m above MSL	Lakshmi Narain Temple  Temple is made up of local dressed stones in dry masonry, the temple is intact and bears old paintings on the inner walls of the <i>mukha mandapa</i> . The wooden doors are also original and no structural addition and alterations to the temple architecture has been made. This village falls on the ancient route to Badrinath.
7.	Tangni Malli - (PIA) N- 30° 28' 36.7" E-79° 28'19.6"± 10 mts. 1547 m above MSL	Heritage building Profusely carved and decorated wooden balcony of Rajput art tradition. This master piece of local art is a very rare master piece.
8.	Pakhi - (PIA) N-30°27'50.0" E- 079°26'42.4" ± 8m 1372 m above MSL	Garud Temple.  It is a living temple located just close to the Garud Ganga bridge. It has been totally renovated with cement plaster and white washed.  Godess Durga Temple  It is a living temple located in the heart of the village. It has been totally renovated with cement plaster and white washed.
9	Haat Village - (PIAA) N - 30° 25′ 18.8″ E - 79° 24′ 53.7″± 8 m 1075 m above MSL	Lakshmi-Narayan Temple  Lakshmi-Narayan temple is located in PIAA area at Hat. The temple can be dated to 9-10 <sup>th</sup> century A.D. This temple has gone under many structural alterations & additions, but the garbhgrih / sanctum sanctorum is in its insitu position, partly buried
10	Siyasain - (PAA) N - 30° 25 <sup>°</sup> 18.8 <sup>°°</sup> E - 79° 24 <sup>°</sup> 53.7 <sup>°</sup> ± 8 m 1075 m above MSL	Heritage Building  The Archaeological site consists of Heritage Building on the way to Seasain village. These are the remains and abandoned structures of Hat ( <i>Bazar</i> ) and transit camps of the pilgrimagers, who used to halt at this place en- route to Badrinath from Chamoli and vice-versa in early times. It can be dated to 1800 A.D.

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Only one archeological site at village Siyasain – heritage building and pilgrim path fall in project affected area, this site may be conserved by THDC.

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#### 4.0 MITIGATION MEASURES AND RECOMMENDATIONS

These heritage structures are in a bad state of conservation and preservation, it is suggested for their proper documentation, conservation and preservation. *Major portions of the heritage building are in a very dilapidated and poor condition, which makes them impossible to be restored or preserved. This is the reason why the local people are using the stones and other structural members of these Heritage Buildings for their modern structures, which have fallen apart. Therefore it is suggested to conserve and preserve those portions of the structural members of the Heritage Building which can be restored and preserved and for which the exact age can also be ascertained.* 

It is suggested that the temples falling in the villages on the Right Hand Side of river Alaknanda may be considered for enhancement and beautification. The villages on RHS are Tirosi, Tapon, Dwing, Kimana, Palla, Lanji, Pokhani, Hyuna, Guniyala, Biamaru, Surenda, Kanda, Bedumath, Bajani, Math Jharetha, Haat, Siyasain, Jaisal, Durgapur, Kunj, Bowala and Chhinka.

An **Archeological museum** may be opened in the project area for display of Archaeological findings of the area, in consultation with Archaeological Survey of India.

## **Archaeological Chance Find Procedure:**

Sites and properties that are buried or not identified by the survey undertaken by THDC may be discovered during project implementation, especially in the course of construction or excavation. Such unanticipated discoveries of remains of an archaeological and/or historical nature are termed archaeological chance finds. Most often they are concentrations of pottery, worked stone, and human and animal bones, without commercial value, but of significance to archaeologists, historians, anthropologists, and paleontologists.

The following archaeological chance find procedures are adopted in project design and construction contracts:

- The responsibility for preservation, maintenance and assessment of historical and cultural monuments rests with the Department of Archaeology, State Govt., and in specific cases, with the Archaeological Survey of India.
- Whenever chance finds of cultural or historical artifacts (moveable and immovable) are made the Department of Archaeology of the state Government, the Archaeological Survey of India will be informed. Should the continuation of work endanger the historical and cultural artifacts, the project work will be suspended until a solution is found for the preservation of these artifacts, or advice from the Archaeological Survey of India is obtained.

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 Contractors, employees of the contractors and all project employees will be responsible for informing the Project Director immediately after discovery of the chance find, without any judgment on their own on the value of the chance find. The Project head will be responsible to inform the Department of Archaeology of the State Government, and the Archaeological Survey of India, local Office, within 48 hours of such discovery.

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- The Project Head will request for a representative of the State Department of Archaeology, Government of Uttrakhand, and/or the Archaeological Survey of India, local Office in Uttrakhand to make a site inspection.
- Project Head will order cessation of work in the vicinity of the chance find until the visit
  of a representative (usually required within 48-72 hours of notification); and follow the
  advice by the State Department of Archaeology, and/or the Archaeological Survey of
  India on possible salvage or excavation (usually required within 48-72 hours of
  notification).
- Failure to report a chance find within the 48 hours of discovery, is a punishable offence under the relevant Indian legislation. Similarly, (intentional) damage to a historical or cultural artifact is a punishable offence.

THDC will also seek the support of the Archaeological Survey of India, local Office to periodically inspect the sites of construction, excavation and muck disposal to detect any chance finds.

# Recommendations for management/conservation measures required to be taken by THDC.

- A joint body may be formed either by involving local people i.e. (gram panchyat/sabha) or (state/ central govt.) with THDC for monitoring and execution of the work.
- Role of THDC in this respect:
   Conservation of cultural resources providing appropriate infrastructure for the:
  - a. Conservation of archaeological / heritage / sacred sites and objects in the project and its surrounding areas.
  - b. Display of the archaeological / heritage finds/objects collected/acquired in the local site museum.
  - c. Awareness among locals at school, college and village level

An Architect / Archaeologist may be employed in THDC management cell for suggesting conservation and architectural measures.

For Eco-view points Pakhi and Agthala village are selected which can be developed as tourist view point in the Project area.

A tentative budget of **Rs.25,00,000/- (Rupees Twenty Five Lakhs)** is proposed for Archaeological Management. For structural Conservation, Preservation and Restoration of Archaeological sites tentative budget of Rs 10,00,000/- (Rupees Ten lakhs) and Rs.15,00,000/- (Rupees Fifteen lakhs) for Archaeological museum.