The Village of Haat, built around the 1000 year Laxmi Narayan temple, is a unique part of our village community and even of our national culture and heritage, in that the traditional and ancient practices of worship that link the village with the historical temple since centuries are still alive. However since 2007 when our entire village land was acquired by the THDCIL (Tehri Hydro Development Corporation India Limited) company as a muck dumping site for its Vishnugad-Pipalkoti hydro project. We have been scattered on the opposite (left) flank of the river and there has been a break in our traditional way of life. Our livelihood since that time is entirely dependent on THDCIL who has given some villagers jobs but mostly temporary. Coupled with loss of land, and the loss of our earlier agriculture based (cattle, orchards, farming, dairy) means of livelihood, the resulting insecurity and stress is tremendous. We were once self-reliant, and now reduced to the mercy of a company that looks solely to its own commercial interests.

The ancient temple is a sacred bond and heritage to us, which now stands endangered by muck dumping and which may be permanently destroyed. Such treasures, once destroyed can never be rebuilt; once the intimate and sacred bonds of village community to the temple are cut they can never be revived. After almost a decade of scattered existence we have realized keenly the adverse consequences from the break in our social community and social fabric and are feeling profoundly the loss of identity, social well-being and security.

Recently the Archaeological Survey of India (ASI) itself has suggested that muck should not be dumped in the vicinity of the temple. Moreover an ancient copper plate inscription is also in the process of being studied by them which further proves the historicity of Haat. However the THDCIL has been brazen and callous enough to dump muck right behind this ancient monument. This massive neglect, this underplaying of the significance of the Haat site and the temple has brought us to the brink of losing this priceless heritage. It is monuments like this, traditions like these that teach us - as no text books can - about our identity, about our civilization, and what it means to be a mountain man and an Indian. They are India, because no country can exist without a profound sense of its own past, its own beginnings, its own roots. It is deplorable that such a site should be chosen for dumping muck, when a recent scientific study shows a stable site for dumping muck, nearby, just on the opposite flank of the river, moreover that is also uncultivated and uninhabited. It is an act of shameless convenience and arrogance by the company to act in this high-handed, thoughtless manner. It is a disservice to the entire nation, and not just to the limited community of Haat village.

The issues covered by the Inspection Panel in 2014 were dealing largely with the environment and the cultural significance or the river Alaknanda largely, on which river the hydroproject was planned. The local problems of Hatsaari hamlet were also addressed, which however is no longer an issue after the company switched the location of its switch yard from that hamlet. Moreover, since then the situation has drastically changed in terms of our awareness of our rights, the threat to the temple, the new site available for muck dumping, and bulldozing of 16 houses whose families had refused compensation. Critically, after nearly 8 years a clear picture has emerged about our livelihood problems and the horrific impact of a scattered existence, which was not evident at the time and not addressed. Hence the entire village community of Haat through the three undersigned, are filing the following complaint (attached below) and requesting the Inspection Panel to investigate the matter.
2. What is the name of the World Bank project? (If known)
   Vishnugad-Pipalkoti hydro electric project (VPHEP)

3. Where is the World Bank project located? (Please include country name)
   District- Chamoli, State-Uttarakhand, Country- India

4. Do you live in the project area?
   Yes

5. Have you previously reported your concerns to World Bank management? If yes, please provide the details about those communications and explain why you are not satisfied with the Bank’s action in response.
   Yes, the concerns were duly communicated to the world bank management. All the relevant communications related to our dissatisfaction were already communicated to the Inspection Panel in our first complaint of March 2022.

6. If known, please list the World Bank’s operational procedures you believe have not been followed.
   Operational Policies with regard to Rehabilitation and Resettlement, Physical and cultural resources and safeguard policies have been violated.

7. Do you expect any form of retaliation or threats for filing this complaint to the Inspection Panel?
   Yes

Section 2: Contact Information

8. Are you complainants or a representative of complainants?
   Gram Sabha ‘Haat’ is the complainant which is being represented by its representatives here (resolution of Gram Sabha Haat is attached as Annexure-1).

9. Would you like your name and contact details to be kept confidential? (The Inspection Panel will not disclose your identities to anyone without your prior consent.): Yes

10. Complainants' Names (Minimum two names and signatures are required):
11. We, the undersigned, request the Inspection Panel to investigate the issues described above.

Signatures (More signatures can be sent as an attachment document):

NOTES:
- Please attach supporting documents, if available.
- If you have any difficulty in completing the form, please contact the Inspection Panel at ipanel@worldbank.org or by phone: +1-202-458-5200.

DETAIL COMPLAINT:

To,

The Chair, Inspection Panel

Subject: Complaint regarding involuntary displacement, loss of cultural heritage via muck dumping in the vicinity of 9th century historical Laxmi Narayan temple, demolition of 16 houses of villagers who refused any compensation; inadequacy of livelihood and lowering of socio-economic well-being of Haat villagers after being shifted out from their village; the tearing apart of social fabric of Haat village
through scattered and isolated rehabilitation by the THDCL Vishnugad-Pipalkoti Hydro Electric Project (VPHEP), Chamoli, Uttarakhand.

Represented by: The entire village of Haat, as passed in an official resolution of the Village Panchayat, dated: 20.02.2022 and 08.07.2022 authorizing And to be the official representatives to the Inspection panel, World bank, for all its communications and interactions.

INTRODUCTION – PRESENTING NEW EVIDENCE NOT COVERED IN 2014 IP REPORT

We would like to file a fresh application for registering our complaint in view of the fact that all the evidence we are giving here is new, i.e. after 2014 when the IP made an inspection report. All the documents, evidence, events which we are referring to herein have taken place only after 2014 and hence could not in any manner have been covered at the time of 2014 inquiry; and for identical reasons, nor could they have been included in the original complaint of 2012.

1. UNIQUE HISTORICITY OF HAAT

That the village of Haat is an ancient hamlet deeply connected to the history of India. Around the 9th century Adi Shankaracharya established Laxmi-Narayan temple and along with it the village community of Haat for the continual worship. To this end he brought Gaud brahmns from Bengal and they settled here. In ancient time it was the main base (mukhyapadaav) of the pilgrims visiting Sri Badrinath shrine. The temple of Lakshmi Narayan established by Adi Shankaracharya still stands today in Haat and all rituals were being observed until 2007 onwards when the THDCL began acquiring land for the hydroproject. Being the last stop before Badrinath, this temple provided an alternative place for worship for those who could not make the difficult trek all the way to Badrinath, thus making it an important heritage site. Around the main Laxmi-Narayan temple, there are group of temples of other deities namely Shiv, Chandika, Ganesh and Surya Kund all dated 8-9th Century. Besides, there are local deities (Bagadwal, Bhymyal, Hanuman, Bilweshwar) which were established by our forefathers centuries ago and represents our rich culture and thriving traditions.

2. HISTORICITY OF HAAT ACKNOWLEDGED BY ASI—ON 04.04.2022

The Archaeological survey of India (ASI) visited the site of Haaton 15.03.2022 and submitted a report on 04.04.2022. Since the Laxmi Narayan temple is an astounding 1000 years old, with the inner sanctum sanctorum still the original structure, it should have received immediately recognized the temple as an ancient monument and granted it due protection. The ASI in its report has admitted that the ‘Laxmi Narayan temple is found to be worthy enough to be considered as ancient structure...’ and yet it is deplorable that such a site has not been protected and instead has been selected for dumping of debris. The report of ASI dated 04.04.2022 is hereby attached as Annexure-2.

3. INTACH ALSO STRESSES THAT SITE OF HAAT VILLAGE SHOULD BE PROTECTED—ON 21.12.2021

Taking cognizance of the cultural importance of the village and ancient temple structures, the Indian National Trust for Art and Cultural Heritage (INTACH) also recommended restoring the entire village. A letter sent by INTACH which is copied to the World Bank and THDCIL states as follows:

"Due to the high significance attached to the ancient temple site and Haat village, we urge THDC to recognize the ancient temples and remains as assets of national importance, and the funding agency,
World Bank to restore the impacted sites and also conserve the historic village in entirety as part of the project, to encourage World Bank’s mandate of sustainable livelihood.”


4. VILLAGERS IN A WORSE SOCIO-ECONOMIC CONDITION THAN BEFORE RESETTLEMENT

Almost 99% of the families of Haat have reiterated very strongly that after resettlement they are much worse off than before, not just in social welfare and security but even in economic terms, despite the compensation package. To more accurately ascertain in what manner, on what basis, and why the villagers felt that they are worse off than before the circled a survey sheet with 20 questions (sample in English attached, along with all 92 filled in sheets). 92 families out of a total aprox 142 agreed to fill it in. 4 families (including ) who because they refused to take any compensation and whose houses were forcefully destroyed in September 2021, did not fill the sheet. The 30-32 families whose family person is either permanent or temporarily employed in THDCIL felt pressurized and therefore refused to give any feedback. Other 8-10 families who are currently residing far away from the village, have not been responded yet.

The main facts that emerge from the data of these circulars is –

a. **Only 1 person said they were better off than before.**
   - All the rest 91 families stated that they were worse off than earlier. The reasons they gave were:
   
   (i) ‘Stress due to temporary nature of jobs with THDCIL on which they are wholly reliant without knowing if we will be removed the next day, thereby also creating an overwhelming dependence on the company.
   
   (ii) The socio-cultural fabric of village has been destroyed. We are struggling for our identity. We are socially weakened. Before we were like one family but no longer.

   (iii) Lack of basic amenities and facilities in the displaced area
   
   (iv) Economically deprived. Before we used to do farming in the village but now we are scattered and cut off from the rest of village community.

   (v) We had water, wood and grass for animal husbandry and we were well-off in our village earlier. Now we are destroyed with neither a good water supply nor any permanent source of income.

   (vi) Now financially we are solely dependent on THDCIL. We have lost our independence and self-reliance. Before displacement, we had many other means for livelihoods that are no longer available. Before with less money we were living better lives.

   (vii) We are landless and are in minority because we belong to schedule tribe.

   (viii) We were exploited by the project authorities. We had no prior assessment of the situation after displacement that our life will be in such a deep hole.

   (ix) We are helpless now. No one is listening.

   (x) We are losing the heritage of our forefathers, how can we hope for a better social and economic life.’

b. Of the 92 interviews temporary jobs with them and not employed by the THDCIL.
c. 28 families stated that the money they received as the compensation package was enough to rebuild and resettle. 50 said the sum they received was not sufficient. 10 did not receive compensation and 4 did not respond.
d. Almost 70 people reported that they only received water for 0-2 hours daily, while 12 people received water for 2-5 hours daily. The others had other sources and were staying elsewhere.
e. 57 people stated that animal rearing, orchards and farming were their livelihood before resettlement. 35 stated that they had other employment means.
f. However after land acquisition only 24 continued with animal rearing, orchards or farming. 68 quit these livelihood means.
g. A majority of 69 found their earlier farming etc as sufficient means for livelihood, or at least providing some income. 22 found it insufficient. After land acquisition 41 found it insufficient.

Therefore a clear picture emerges of a community that is highly insecure and deprived of steady livelihood. Not only has economic losses been sustained bringing them to a lower economic condition but permanent losses through loss of land, water, field, orchard, access to fodder and fuel have been sustained, that effectively prevents any potential for future growth. The villagers have stated that they are now entirely dependent on market produce, thereby needing cash, whereas earlier they produced most of their own requirements and hence were self-reliant. Then there is irreversible loss of social fabric which cannot even be evaluated in monetary terms, it being far too intangible and far too valuable, which fact has unfortunately only hit home now in all its entirety, after a decade of uprooted, scattered existence. Finally, to crown the entire tragedy the village now faces the annihilation of 1000 years of heritage, and the devotion of generations, in the slow but irreversible destruction of a 1000 year old temple that is daily being buried under muck.

The copy of 92 survey sheets and English translation of survey sheet is attached herewith as Annexure-4.

5. THDCIL ENDANGERS TEMPLE BY DUMPING MUCK RIGHT BEHIND THE TEMPLE – March 2022

Tonnes of debris generated since 2016 by the Tunnel borer machine (TBM) machine has been dumped just behind the Laxmi Narayan temple at a distance of barely 10 meters from the sanctum sanctorum. The wall supporting this debris is a weak gabion wall, and liable to fall. Further in case of extreme weather events, cloudbursts and concentrated rainfall due to climate change, as Uttarakhand has been regularly witnessing since the last decade, the ancient temple is highly endangered from burial under tonnes of flowing debris.

After the demolition of houses and forceful eviction of last cluster of 16 families on September 2021, THDCIL also started the muck dumping inside the village area in March-2022 even while our interaction with the World Bank and the Inspection Panel regarding rehabilitation was going on. It is still continuing till date and the height of muck has crossed the height of the Chandika temple and the other group of temples. Since the work on the main Head race tunnel has not even started, we can expect the height of the muck to also exceed the Laxmi Narayan temple eventually, which will then literally be a death sentence to the monument.

6. ASI REPORT APRIL-2022 INFORMS THAT MUCK IS ENDAGERING TEMPLES:
On application of the Prime Ministers office (PMO) directed Archaeological Survey of India (ASI) to conduct a site visit at Haat. Thereafter officials of ASI Dehradun circle visited the area and prepared a report on 04.04.2022 which also accepts the presence of ancient Lakshmi-Narayan temple and recommends its conservation measures. ASI also recommended to stop muck dumping and remove the dumping zone far away from the temple. The report of ASI dated 04.04.2022 states as following:

1. 'At present a breast wall made of wire cages filled with rock, is provided by THDC on the upperside of the temple which seems to inadequate to withstand the trust of the dumped soil/waste material. The pressure may increase during the rainy season due to formation of aquifer within the soil. THDC may provide a well designed RRC or Masonry wall and if possible, minimum dumping is suggested on the upperside of the temple.'
2. 'The dumping area should be away from the temple.'
3. 'THDC first should stop the muck dumping near the temple complex and should use other available area and construct outer boundary including main temple and other subsidiary shrine for the better preservation and protection of existing shrines.'

In spite of this ever today muck dumping is ongoing unabated.

7. ANCIENT COPPER INSCRIPTION (TAMRAPATRA) FOUND AT HAAT
That, in addition an ancient copper inscription 'tamrapatra' also exists dating to the 8-9th century which proves the ancient historicity of the village Haat. The epigraphic study of this copper inscription is under process in the ASI and final report is expected in August. Yet initial information has confirmed that the inscription has been deciphered to have been made by a 9th century trader, it also mentions the Haat village and refers also to a temple. Thus validating the historicity of the place. The picture of copper inscription of Haat village is hereby attached as Annexure-5.

8. THDCIL CONDUCTS ARCHAEOLOGICAL SURVEY OF TEMPLE IN 2009 FOR ITS EIA
The archaeological report made in 2009 by the THDCIL itself acknowledges that Lakhmi-Narayan temple is located in 'project immediate affected area' (PIAA) i.e within 500 m of project site. It states as under:

"Lakshmi-Narayan is located in PIAA area at Hat. The temple can be dated to 9-10th century A.D. This temple has gone under many structural alterations & additions, but the garbhgrih / sanctum sanctorum is in its insitu position, partly buried."

Further the living traditions of the mountain villages has been acknowledged in the archaeological survey report which states –

'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.'

9. BUT THDCIL SUPPRESSES HISTORICAL IMPORTANCE OF LAXMI NARAYAN TEMPLE
Our village should never have been uprooted and rehabilitated in the first instance if the project authority (THDCIL) had accurately reported the presence of this ancient temple to which our village community is inextricably attached, and which makes it a protected site. But, unfortunately the company in its Environmental Impact Assessment (EIA) report stated as under:

"7.6 Impact on Physical and Cultural Resources:
The project does not have any impact on cultural resources within the project influence area and project immediate affected area. -(THDC, EIA report)"
The report made by the THDC in its EIA dated (uploaded) 2009, acknowledges that while the outer structure of the temple may have been partially overlaid and repaired in the past, the inner sanctum of the temple is still original. But this critical fact was concealed at the time of seeking clearance and land acquisition, and our village thoughtlessly designated as a muck dump zone. In fact the authorities if they were sincere, and had good intentions, would have restored the temple using experts to its old traditional architectural design and beauty. In fact they should have notified the ASI at the time itself and shifted the project elsewhere. However they did not contact the ASI except as late as 2016. This has resulted in a grave injustice not only to our community but to our national heritage.

10. ENTIRE GRAM SABHA OF HAAT PASSES RESOLUTION TO DECLARE TEMPLE AS PROTECTED HERITAGE SITE.

On 28.03.2022, in the meeting of gram sabhaHaat, a resolution declaring Lakhmi-Narayan and other temples as protected by the gram sabha, was passed. The resolution states as follows:

"आज सर्व स्मार्तिसे ग्रामसभा हाट केसमेल प्रतिनिधि और निवासी हम सभी ग्रामवासी हमारे इस भगवान श्री लक्ष्मीनारायण के मंदिर और इसके साथी हाटगांव के सभी मंदिर समूह विविधकार्य, शिवमंदिर, विश्वकर्मांंदिर, सूर्यकुंड आदि को अपनी ग्राम सभा द्वारा संरक्षित घोषित करते हैं।जिसमें या जिसके इडिय गिर्द कोई भी क्षति या हानिकारक क्रिया स्वीकार नही किये जाेंगे।आमे हम यह घोषित करते हैं कि हाटगांव भगवान लक्ष्मीनारायण मंदिर और अन्य मंदिर समूहों का समर्थन द्वारा स्थानित धारी है...."

"Today we all representatives and members of gram sabha Haat unanimously declare the temple of our Lord, Lakhmi-Narayan along with other group of temples of Haat i.e. Chandika devi, Shiv temple, Vishwakarma temple, Suryakund etc., as protected by our gram sabha. In and around which, no damaging or harmful activities would be acceptable. Further we declare that village Haat is the owner of temple of Lord Lakhmi-Narayan and other group of temples for centuries...." (English translation)

Thus even if the initially in 2009, the then village headman along with 7-8 villagers signed some sort of agreement with the company, today the entire village stands united claiming for protection of their heritage, social community, and traditions. In fact the MoUs signed by the villagers was done under pressure, in ignorance of their rights and without any legal aid. It was done because they felt they had no choice and were bullied by telling them that those who did not accept the deal now would get nothing at all in the future. The resolution dated 28.03.2022 passed by Haat village is hereby attached as Annexure-6.

11. FORCEFUL EVICTION AND DEMOLITION OF 16 HOUSES IN HAAT ON 22.9.21

On 22.09.2021, in violation of all the fundamental rights, the THDCL along with more than 200 policemen, 2 Poklan excavators and 1 bulldozer, forcefully entered the houses of villagers, threw out luggage/belongings and completely demolished their homes. THESE WERE VILLAGERS WHO HAD REFUSED TO TAKE ANY COMPENSATION AND WHO HAD REFUSED TO RELOCATE.

The eviction was done in a brutal and heavy-handed manner. Some protestors, including a widow whose house was being razed was locked up in the police station and only in the evening was she dropped off on the main road. Her only son who serves in the army, was away from home serving his country. In some cases where the owners were absent, they bulldozed the house along with all its furniture and belongings. Anonymous reports that all her savings from selling milk, and stored under her bed was lost. Worship places in houses with ancient inherited deities, temples, cow shelters, pathways, and electricity
cables of village Haat were also destroyed, thereby making the villagers homeless, shelterless, helpless and devoid of their livelihood activities.

12. ALTERNATIVE SITE FOR MUCK DUMPING IDENTIFIED BY SCIENTIST IN 2022
That, since the THDCIL company has refused to acknowledge the concerns of the villagers and continues dumping muck in the site of village Haat and particularly in the close vicinity of the Laxmi Narayan temple, without searching for alternatives, the Gram Sabha Haat took its own initiative in the matter. It invited an eminent geologist of the region Dr. Navin Juyal, Ex-Scientist of PRL Ahmedabad, who has been extensively working in the Himalayan terrain for past 40 years along with his colleague Prof. Y.P. Sundriyal who is currently the head of department of geology in Garhwal University to address the issue. These expert scientists identified an alternate site which was not only very stable, resting on 10,000 year old rock formation, but also uninhabited and uncultivated. This site was also close by on the opposite left flank of the river and the muck could be transported there via trolleys their report states. Consideration of an alternate muck dump site would be a critical step to save the existence of our ancient historical village from extinction. The report prepared by Dr Juyal and Prof Sundriyal suggesting alternate dump site is hereby attached as Annexure-7.

13. WORLD BANK POLICIES VIOLATED:

(1) INVOLUNTARY RESETTLEMENT-

The method of operation of the THDCIL has also been in direct violation of this policy both in terms of livelihood and in avoidance of shifting communities. In light of the alternative muck dumping site available, (a) further becomes a very critical issue.

‘INVOLUNTARY RESETTLEMENT

Policy Objectives

2. Involuntary resettlement may cause severe long-term hardship, impoverishment, and environmental damage unless appropriate measures are carefully planned and carried out. For these reasons, the overall objectives of the Bank's policy on involuntary resettlement are the following:

(a) Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.

(b) Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits. Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.

(c) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.’

(2) PHYSICAL CULTURAL RESOURCES OPERATIONAL MANUAL
In severely endangering a 1000 year old temple and sacred place of living worship, and destroying existing heritage and traditions the THDCIL has done a grave disservice to the village of Haat and to the nation as a whole. It has proceeded without due consideration of the villagers or their traditional
practices, and it even had the arrogance and deceit to conceal the relevance of the temple in its EIA. This is in direct violation of the world bank policy on this matter as evident below -

'Physical cultural resources are important as sources of valuable scientific and historical information, as assets for economic and social development, and as integral parts of a people's cultural identity and practices.

Objective
3. The Bank assists countries to avoid or mitigate adverse impacts on physical cultural resources from development projects that it finances.

The following projects are classified during the environmental screening process as Category A or B, and are subject to the provisions of this policy: (a) any project involving significant excavations, demolition, movement of earth, flooding, or other environmental changes; and (b) any project located in, or in the vicinity of, a physical cultural resources site recognized by the borrower. Projects specifically designed to support the management or conservation of physical cultural resources are individually reviewed, and are normally classified as Category A or B.'

(3) DAM SAFETY REGULATIONS
Increasing threats of Climate change induced disasters and extreme weather events like flooding, high and concentrated rainfall, flash floods, etc have not been accounted for at all. The recent human tragedy in Chamoli (2021) not far from Haat village, has shown how vulnerable the entire area is. HEPs are NOT safe. Point 12 below explains in detail how expert studies are now voicing against the building of HEP's, not only because of the likelihood of human disaster involved but also because of the very high threat of these expensive HEP's being washed away or thoroughly damaged themselves, as has been seen.

14. ENVIRONMENTAL CONCERNS VIOLATED:

(i) After June 2013 Kedarnath flood, concerns were raised on mushrooming of bumper to bumper hydro projects on Ganga and her tributaries. The Hon'ble Supreme Court in the matter of Alakananda Hydro power Vs Anuj Joshi &Ors, Civil Appeal 6736 of 2013, took suo moto cognizance of this disaster and in its judgment dated 13.08.2013 directed to not grant any further clearances to hydro projects. Supreme Court also constituted an Expert Body for examining the adverse impacts of hydro projects in the Himalayan Ecology. The Expert Body submitted its report in April 2014, thereafter Supreme Court stayed the 24 proposed future projects on Ganga and her tributaries through its order dated 07.05.2014. The matter on under construction hydro projects (which includes Vishnugad-Pipalkoti project also) is still to be decided by the Supreme Court.

(ii) MoEF&CC also accepted the findings of Expert Body and admitted that existing and under construction Hydro projects have caused irreversible damage to Himalayan ecology and have played direct and indirect role in aggravation of June 2013 flood. MoEF&CC in its affidavit of 5.12.2014 also concluded on the basis of Expert Body findings, that 'It is pertinent to conclude that there has been a direct and an indirect impact of the HEP's in the aggravation of the floods of 2013.'

(iii) Ministry of Jalshakti (then the MoWR&GR) also submitted its view before the Supreme Court on 31.05.2016 which raised serious question mark on the construction of these projects and concerns related to the security of these areas and rejuvenation of National river Ganga. It states as under:
“18.5 The region around these projects is located in a geologically unstable and seismically active area. Hence, the impact of any of the disasters will have a devastating effect on the people, flora and fauna and on the entire ecosystem as a whole, which is uncalled for and unwarranted for.

18.8 In the larger public interest, safety of the people living in these areas along with the interest of pristine environment, biodiversity, the unique ecological character of the area as well as the river and the commitment for the concept of sustainable development and precautionary principle (which has been reiterated by various judgments of the Hon’ble Supreme Court), there is a need for a review of these projects.”

(iv) Since then, in 2013, even after witnessing the ravages of the Kedarnath floods, which shook the nation, the Vishnugad-Pipalkoti project commenced its construction work in a sporadic and haphazard manner even though the matter of HEP’s in the Ganga-Himalaya was sub-judice and the projects were under a freeze. This demonstrates the utter irresponsibility of the project proponents in their mad haste, greed, and desire to undertake such projects. More recently the Prime Minister’s office stated in its minutes dated 25.02.2019 that ‘No new hydro electric project shall be taken up on River Ganga or its tributaries in the State of Uttarakhand......with respect to the projects under construction, the seven projects as recommended by MoWR, which are reported to be more than 50% complete (listed at Annexure I) may be taken up for further construction.’

The villagers claim from their own observations that hardly 30 percent of the work must be completed. The minutes showing decision of PMO is hereby attached as Annexure-8.

(v) That, the law (MoEF&CC Notification dated18.03.2021) mandates that if the physical progress of a project is below 50% during the expiry of its environmental clearance, then it has to go through a proper public hearing process to apply for fresh environmental clearance. However, THDCIL made a false claim in May 2021 to the MoEF&CC that the project had achieved a 51% physical progress. On this false claim it was granted a fresh environmental clearance. However, the Environmental appraisal committee (EAC) itself in its meeting minutes dated 29.07.2020 recorded the physical progress of the project is below 30%. It shows their total unconcern with public safety and welfare; it reveals their casual, unscientific and uniformed attitude towards a highly threatened and unstable environment. It shows the villagers that the THDCIL are not to be trusted with an honest dealing in any matter whatsoever.

15. HYDRO ELECTRIC PROJECTS (HEP’S) NOT A VIABLE OPTION ANY LONGER AS FLOODING EVENTS INCREASE

One of the major impacts of climate change is the receding of glaciers. Glaciers in the Himalayas especially are reported to be retreating faster than anywhere else in the world. Therefore extreme flooding in river beds and glacial streams is expected. Studies predict an increase in the magnitude of these extreme flows and the occurrence of floods in the Ganga basin. The melting glacier results in the formation of glacial lakes (GLOF) that can burst at any moment, and cause flooding in the river downstream. This was what occurred in the 2013 Kedarnath disaster. In this disaster not only were several HEP’s damaged badly, but the maximum damage was also found to be in the vicinity of the HEP’s. In the 2021 Chamoli disaster in the glacial stream of Rishiganga, Rishi-Ganga HEP was wiped out and Tapovan-Vishnugad HEP buried under tonnes of debris.

(1) IIsc study dated 30.09.2021

The Indian Institute of Science (IISc) and the Indian Institute of Technology-Kanpur report provides insights into how climate change and human activities like building dams affect the region. It
analyses the effects of past human activity on the mountainous regions, focusing on two significant tributaries, Bhagirathi and Alaknanda.

It states, "The impact of changing climatic conditions are more predominant in the Alaknanda basin. Our extreme frequency analysis also suggests an increase in the magnitude of extreme flows for different return periods in the Alaknanda basin. Further, the observed records indicate an increase in the frequency of extreme flood events in the UGB (upper Ganga Basin), especially in the Alaknanda basin."

(2) **53 scientist study dated 10.06.2021**

Moreover, last year a detailed scientific report on the flood of 7th February by a group of 53 field experts across the world, is published on 10th June 2021 in a renowned journal ‘Science’. This report also concluded as under;

"The Chamoli event also raises important questions about clean energy development, climate change adaptation, disaster governance, conservation, environmental justice and sustainable development in the Himalaya and other high mountain environments. The disaster tragically revealed the risks associated with the rapid expansion of hydropower infrastructure into increasingly unstable territory."

(3) **NDMA study dated April-2022**

And now, on similar lines, the National Disaster Management Authority (NDMA) too in its recent report of April-22 said that the government may need to pursue alternative sources of energy in the long run instead of relying on hydropower from Uttarakhand. The report of NDMA recommends as under:

"In the long run, the pursuit of alternative sources of energy will need to be looked at since this zone appears to be environmentally fragile. A separate study on that may be set up by the Ministry of Power." The relevant pages of the NDMA-2022 report is hereby annexed.

16. **HEAVY ECONOMIC LOSSES SUSTAINED TO DOWNSTREAM HEP’S IN LAST DECADE**
   (i) The initial project cost of Vishnugad-Pipalkoti (444 Mw) was set to Rs 2800 crore, which as per 2021 report of Central Electricity Authority (CEA) has risen up to Rs 4900 crores. Further the physical progress of the project is below 30% as per EAC minutes. Further, much more increase in the project cost is anticipated due to harsh ecological challenges of the Himalayan terrain.
   (ii) In a similar way, the initial cost of Tapovan-Vishnugad (520 Mw) project just upstream of the Vishnugad-Pipalkoti was set to Rs 4200 crore, which crossed a figure of Rs 13,000 crore in last year when the project was 70% completed. After this, barrage and tunnels were buried under debris in Rishi-Ganga flood, this flood further caused loss of about Rs 1600 crore. The past 15 years history of ecological challenges faced by these projects, is the testimony of economic non-viability of such projects in this highly sensitive Himalayan terrain.
   (iii) Rishiganga HEP (13.5 Mw), located above Vishnugad-Pipalkoti, was completely washed away, total loss of about Rs 150 crore in February 2021.

17. **ISSUES NOT COVERED IN 2014 IP REPORT**

1. The 2014 report has not covered the issues reported above. In fact this is quite clear in the Executive summary itself where in outlining ‘MAIN CLAIMS IN THE REQUEST’ it states –The key issues are: environmental impacts from construction and operation of multiple dams; cultural and spiritual significance and special qualities of Alaknanda river and consideration of project externalities. The second state of claims relates to local environmental and socio economic impacts. Specifically these refer to issues of loss of water etc. in surrounding villages, risks relating to structures, landslides and
earthquakes, risk to aquatic life and ecology from altered flow, and effects of sediment release. Local socio-economic impacts include: resettlement and restoration of livelihoods, gender impacts and local benefit sharing.”

2. The 2014 investigation was mainly concerned with Hatsaari hamlet and not with Haat village.

3. The only cultural significance addressed was that of the Alaknanda river itself.

18. THE MAIN ISSUES NOT COVERED in 2014 WITH SPECIFIC REFERENCES FROM THE REPORT ITSELF ARE –

1. CULTURAL AND HERITAGE LOSS BY DESTRUCTION OF LAXMI NARAYAN TEMPLE

The report itself states that the Laxmi Narayan temple is considered a swayamprakat temple, implying that it is not the temple or the idol therein that is the primary object of holiness but the site itself. However no alternative site for muck dumping was ever considered. On page 57 pt 209 it states: ‘While the VHEPP will not submerge this swayamprakat temple and it does not have to be relocated it may experience construction related disturbance as one of the main tunnel adits is located near the temple.’

There is no other reference to the great importance of this 1000 year old structure or the impact of muck dumping in its vicinity, or the sense of loss to the villagers by way of loss of centuries old traditions and heritage.

2. LIVELIHOOD LOSS OF HAAT VILLAGERS

The request did not include Haat livelihood but only Hatsaari. It states on page 69, pt 255, ‘Because these issues of livelihood at Haat village were not raised explicitly in the Request for inspection, they are not addressed in the Management response.

It also expresses concern about restoring pre-project livelihoods, which is exactly what the villagers are experiencing today. In page 71, pt 263 it states regarding Haat, ‘This suggests a risk that vulnerable households may not succeed in restoring their pre-project livelihoods.’

3. DESTRUCTION OF COMMUNITY OF HAAT VILLAGE

This issue finds no mention at all in the report. In fact it states on pg 70, pt 258, that the villagers ‘welcomed the opportunity’ to re-locate to self-owned lands across the river. The consequent loss of community and torn social fabric which the villagers are now deeply affected and traumatized by, have occurred over the last 8 years, subsequent to this scattering. Therefore this situation went uninvestigated in 2014. Even at the time the villagers felt they had no choice, but today with increased education and awareness, and a first-hand bitter experience of their plight, and the immensity of what they have lost, the entire village has united in opposition.

4. VIABILITY OF HYDRO PROJECTS GIVEN RECENT DISASTERS VIA NEW STUDIES.

This issue has not been addressed as the Chamoli disaster (Haat is located in Chamoli district) took place in 2021, and the studies referred to are all new and updated on the current situation and rethink of hydro-power. Even the 2013 Ravi chopra Committee report referred to in the IP report had nonetheless voiced these concerns.

5. ALTERNATIVE SITE FOR MUCK DUMPING
This finds no mention at all in the report although on pg 72, pt 265 it mentions that the World bank policy favours that involuntary resettlement should be avoided, by quoting policy, ‘should be avoided where feasible, or minimized, exploring all alternative project designs.’

This is precisely what the THDCIL company failed to do. And this is what the desperate villagers of Haat undertake to do on their own by inviting scientists.

6. THE VIEW OF THE ENTIRE VILLAGE COMMUNITY REGARDING ITS CURRENT DEGRADED SITUATION.

The IP report 2014 states that it only met a few people of Hatsuari. The villagers of Haat claim not to be have represented at all. Today the entire village is signing this Request, as we had done in the past, by an official resolution of the entire village. Also the resolution of the entire village as mentioned earlier, declaring their temple and village site as protected is an entirely new evidence and circumstances, showing most clearly just how tormented the entire village is.

7. COPPER INSCRIPTION FOUND IN VILLAGE DATING TO 9TH CENTURY.

This artifact of great historical value and evidence, finds no mention at all. This is not surprising since the 2014 team did not investigate the immense cultural and heritage loss of the site and the temple in any manner whatsoever. Today however, after the villagers realized they could raise their voice, the ASI and INTACH admit that the site and temple are worthy of conservation.

CONCLUSION:

2014 was 8 years ago, and in that time our world and lives have changed drastically. Mostly we are more aware of our rights, we have learnt the hard way of all that we have lost, and the insufficiency of any ‘package’ to compensate 1000 years old traditions and culture.

We are presenting new evidence and circumstances that were not considered at all at the time, since these were not part of the request investigated then, and further that nearly all the events related here occurred post 2014.

The threat to the 1000 year Laxmi Narayan temple, which has now been acknowledged also by the ASI, was not considered by the project seriously in 2009, or by the 2014 report since it was not their mandate. However this issue needs the most focused attention if we want to preserve irreplaceable and priceless nuggets of not just our village’s but our nation’s history.

We repeat our initial hopes that once again a thriving, living village emerges from the dust. We would like you to immediately recommend to stop muck dumping in the site of village Haat since there is an alternate site available. We would like you to recommend that our original village site become a model rehabilitation site, so that we can regain all our lost human rights and have all those essentials taken from us like fresh water, grazing land etc. and once again build our torn social fabric and community life. We would like each family to have cows and dairy; revival of lost crafts and permanent livelihoods independent of THDCL which can be worked out with us. We can rebuild our houses using organic materials as close to the original as is possible in todays times – without cement. We would like to regain our lost dignity. We would like to put an end to this struggle for justice and honesty and get on with our lives. In short we would like to achieve what has been professed by the World bank and
promised in the National rehabilitation policy – to be the same, if not better off than before, and to be rehabilitated en masse to avoid tearing apart the social fabric that holds our lives together. This is a humanitarian issue. We are willing to cooperate. We want a better life for our future generations. We hope by this complaint that we have accurately portrayed our plight and inspired you to take an active stand. So far as the minutes show, our meeting with the world bank team and the THDCL have been fruitless. We are fighting from under rented roofs and losing our lives meanwhile. Hence we are reposing a lot of faith in the panel. We request you to investigate this issue in light of the new evidence and circumstances that have clearly emerged, and help us regain our lost heritage, social well-being and livelihoods.
हम ग्राम सभा हाट के निवासी आज सर्व सम्मति से विश्व बैंक, इंस्पेक्शन पैनल के समक्ष, ग्राम सभा हाट के पनवस और विस्थापन सम्बन्धी विषयों पर दूसरी याचिका दायर करने हेतु [black redacted text] को अधिकृत करते हैं. इंस्पेक्शन पैनल के समक्ष ग्राम हाट से सम्बन्धित सभी विषयों को प्रस्तुत करने, पत्राचार और बैठक/वार्ता हेतु उक्त जन पूरी ग्राम सभा का प्रतिनिधित्व करेंगे.
सेवा में,

निदेशक (स्मारक)
भारतीय पुरातत्त्व सर्वेक्षण
24-लिलक मार्ग, नई दिल्ली

ध्यानाकर्षण— अनुभाग अधिकारी (संस्थान), भारतीय पुरातत्त्व सर्वेक्षण, 24-लिलक मार्ग, नई दिल्ली।

विषय—जिला चनोली के हाट गाँव, शीपल कोटी में लक्ष्मी नारायण मंदिर की निरोधक आख्या के सम्बन्ध में।

महोदय,

उपरोक्त विषयक आपके कार्यालय द्वारा प्राप्त ईमेल दिनांक 17.01.2022 एवं पत्रांक संख्या T-19024/12/2022-Monument दिनांक 14.03.2022, नई दिल्ली का संदर्भ प्राप्त करने, जिसके संदर्भ में दिनांक 14.03.2022 को जिला चनोली के हाट गाँव, शीपल कोटी में लक्ष्मी नारायण मंदिर का दौरा अधीक्षकास्त्री तथा विभाग के अन्य सदस्यों के द्वारा किया गया जिसकी निरोधक आख्या आपके सुलभ संज्ञान हेतु प्रस्तुत हैं।

भवदीय

[Signature]

अधीक्षक पुरातत्त्वविद्या (प्रभारी)
Inspection Note of Lakshmi Narayan temple at Hatgaon (Village Hat), Pipal Koti, District Chamoli.

With reference to email dated 17.01.2022 received from A.O. Conservation Directorate Office, New Delhi and letter No. T-19024/12/2022-Monument dated on 14.03.2022 for conservation of Lakshmi Narayan temple at Hat Village, Pipalkoti, district Chamoli, Uttarakhand, undersigned visited on 14.03.2022 above village along with Sh. R K Meena ASAE Dehradun Circle, Sh. Neeraj Maithani CA Almora, Sh. Ashish Prasad Semwal Jr. CA Gopeshwar Sub Circle. During the visit Sh. Anirudh Bishnoi General Manager THDC, Dr. Manoj Ranger Manager Environment, Sh. J. S. Bisht AGM Mechanical, Sh. Ashutosh Pratap Singh, Sr. Engineer THDC, of the Hat village were also present and shown village area of Hatgaon and Laxmi Narayan Temple and few other shrine located in vicinity.

The temple is situated in the village which is about 2 K.M. from Pipalkoti on the way to Chamoli, Hatgaon on the right bank of the Alaknand River. The village has now been relocated on the left bank of the river on an elevated flat surface. The area of the old village acquired by THDC for dumping and under their Hydro Electric Power Project.

The Lakshmi Narayan temple is a simple architecture both internally and externally. The temple on plan is consists of a garbhgraha (sanctum), an antarala (vestibule) and a mandapa (Portico). The temple is north facing. Except the sanctum, rests of the components are not old and are later added. The sanctum is tri-ratha on plan. On elevation, it is composed of Jangha and shikhara which
are devoid of any decorations. The temple is of nagara style (curvilinear spire) however, upper part of shikhara has undergone massive alternations. A mutilated Gaja simha (rampant lion on elephant) is seen over the newly added roof of the mandapa which might be originally placed over the sukanasa. A projected sukanasa front over the antarala is generally adorned with Gajasimha which is a common feature of the temples located in Garhwal region. The elevation of the temple is simple and consists of vedibandhana, jangha and sikhara. The lintel on doorway is depicted with Ganesha on the Ialatbimbha.

During inspection, it was noticed that upper portion of the temple elevation was renovated in the past, however, lower portion of the temple is original. The top of the shikhara is camouflaged by wooden canopy which is surmounted with amalakas. The madapa is constructed of stone masonry and is rectangular on plan with slanting roof of R.C.C structure which is raised up to the jangha portion of the temple. The mandapa is a later added modern structure to the temple.

There is a modern structure to the east of the temple which is used as Bhogasala. The whole complex is provided with a boundary wall. Various levels of the temple, architectural members (amalakas, dwarshakhas) etc. suggest that the temple complex has gone through many alterations and additions. One isolated dwarshakha which is placed inside the madapa is badly mutilated and depicted with deities among whom only Surya can be identified. The western jangha portion of the Garbhagriha is seen bulging out.

The whole shikhara portion of the temple requires dismantling and resetting to achieve original shape of the temple. Although, there is no evidence to ascertain the date of the temple but on the basis of architectural features it may be dateable to 11th – 12th century A.D. The image of Lakshmi Narayan enshrine sanctum is fully covered with clothes.

**Other structures in the Hatgaon:** [Redacted] other local residents of the village has shown some other structures in the Hatgaon which they supposed to be of ancient in nature but on observation they are found to be simple houses or their remains which are devoid of any archaeological or artistic
feature. There might have been few ancient structures at some point of time but at present only ruins and scattered stone fragments were seen at the site.

During site visit, massive agitation was received from the local residents stating that the heritage village (Hatgoan) is being used only for purpose of muck dumping by THDC and substantial artistic and archeological structures are being buried under the dumps. However only Lakshmi Narayan temple is found to be worthy enough to be considered as ancient structure which is renovated many times and altered with cement, concrete roof of mandapa and walls.
There are Chandika temple and temple of Mahadev is also located in the vicinity about 150-200 mtr. away from the Lakshmi Narayan temple but these ancient temples also altered with cement mortar. A small Nandi is also installed facing Mahadev Temple. The sanctum is square one. The Chandika temple is also having sanctum almost square on plan. A few other ancient ruined structures also noticed in the vicinity of Chandika and Mahadeva temple. A structure of Ganesha is also noticed kept on top of one such structure.

As per the discussion with villagers it is brought to our knowledge that there were few Naulas in the hat village but now ruins of the few such structures noticed. Ancient village which said to be established before the visit of Sankracharaya i.e. 8th – 9th Cent. This village perhaps the halting place for the pilgrims bound to Badrinath. But the structures of houses demolished by THDC after acquiring are mainly renovated time to time and converted into cement concrete R.C.C. houses are now covered with muck dumping carried out by THDC.
THDC officials approaching ASI since last 2-3 years for conservation of Lakshmi Narayan temple by ASI by depositing money under civil deposit work.

Recommendations/suggestion for restoration/conservation of Lakshmi Narayan Temple:

1. **Safety of the Temple:** At present a breast wall made of wire cages filled with rock, is provided by THDC on the upper side of the temple which seems to inadequate to withstand the trust of the dumped soil/waste material. The pressure may increase during the rainy season due to formation of aquifer within the soil. THDC may provide a well designed RRC or Masonry wall and if possible, minimum dumping is suggested on the upper side of the temple.

2. The dumping area should be away from the temple complex.

3. **Approach pathway:** There is no proper approach pathway is available. A proper approach pathway may be provided.

4. **Vestibule (Mandapa):** First the modern plaster provided on the mandapa should be removed and the original structure may be inspected closely and further course of action will be decided accordingly. The documentation for Lakshmi Narayan temple and other temples is essential.

5. **Sanctum (Garbhgrah):** The whole shikhara portion of the temple requires dismantling and resetting to achieve original shape of the temple.

6. **Temple Ambiance:** The premise seems to be in good condition during the preliminary inspection. Although it can be improved by providing flooring and addressing minor repairing work in the boundary wall.

7. THDC acquired land and promised the restoration of the Lakshmi Narayan temple and other minor shrine in the vicinity. They rehabilitated villagers from right bank of Alaknanda to left bank of Alaknanda and provided basic facilities to the villagers. However, are not interested in rehabilitation and demanding the entire village to be conserved as heritage village including temples. Since this is policy matter ASI not having any say.

8. THDC first should stop the muck dumping near the temple complex and should use other available area and construct outer boundary including main temple and other subsidiary shrine for the better preservation and protection of existing shrines.

Archaeological Survey of India, Dehradun Circle can work under civil deposit scheme if directorate office agreed and instructed us to bringing the
ancient temple remains along with other remains located near the temple to their past glory but first it is required that THDC make peace with the local resident otherwise team of Dehradun circle won’t be able to perform their duties efficiently. Officials of THDC, are on liberty to approach the Director General, Archaeological Survey of India, New Delhi for taking up to the conservation/restoration works of the ancient remains as a deposit work.

THDC officials present at site were in opinion that the entire temple complex can be rehabilitated if villagers agreed for that and can be built temple on a road side location with the help of Heritage conservators or ASI.

They were also in opinion that entire temple complex can be lifted up on the same ground as Dhari Devi temple lifted up during Srinagar Hydro Electric Power Project on their own expenses.

(Manoj Kumar Saxena)
Superintending Archaeologist (I/c)
Archaeological Survey of India
Dehradun Circle, Dehradun
21st December 2021

Sub: Significant ancient village and temple sites at urgent risk from hydroelectric project

Dear [Name],

This is in reference to the temples, remains and settlement of Haat Village that are very significant due to their historical and archaeological value. It is brought to our attention that these sites are under serious threat of disappearance owing to the ongoing Vishnugad-Pipalkoti Hydroelectric power project. Haat village is among the places that are impacted by the project. Other than its historicity, it also holds immense importance because of its sacred value and association with Adi Shankaracharya who established it.

The Archaeological Survey Report dated September 2009 was conducted by Archaeological Survey of India (ASI) for Environmental Studies for Vishnugad-Pipalkoti Hydroelectric power project. The report cites Lakshmi Narayan Temple located in ‘Project Immediate Affected Area’ and dates the temple to 9-10th century AD. Furthermore, based on the ground evidence, the remains and the entire settlement has significant historical and religious value and would date to similar ancient period.

The significant ancient complex (including the temple sites and remains) and village settlement must be included in the protected list of ASI. Instead, the hydroelectric power project is in dangerously close vicinity to the ancient settlement and sacred sites. Sadly, they are designated as ‘muck dumping sites’ of the power project, which renders this important heritage site at serious risk of permanent loss.

Due to the high significance attached to the ancient temple sites and Haat village, we urge THDC to recognise the ancient temples and remains as assets of national importance, and the funding agency, World Bank to restore the impacted sites and also conserve the historic village in entirety as part of the project, to encourage World Bank’s mandate of sustainable livelihoods.

As the nation’s premier organisation working in the field of heritage, especially unprotected heritage since 1984, we would be happy to provide any technical assistance for conservation of Haat village and ancient sites and remains.

Thanking you,

Regards,

[Name]

Architectural Heritage Division, INTACH

CC: Shri R.N. Singh, Unit Head, THDC Vishnugad Pipalkoti

CC: Chairperson, World Bank Inspection Panel
Sheet: Details of Social/Financial status  
Village Haat, Pipalkoti, Chamoli, Uttarakhand

Sheet No. ………….       Name:……………………………………………………………………….                                                                                             Date:…………………..

1. Total no. of members in the family:
2. Place of residence after rehabilitated from Haat village: (a) Dashwana;   (b) Eldana;                (c) Mayapur ;   (d) Some other place
3. Total compensation given for rehabilitation: (along with 10 lakh rupee pkg): Rs.............
4. Cost incurred for constructing a house after rehabilitation: (a) Upto 10lakh;   (b) 10-20 lakhs;    (c) 20-30 lakhs;      (d) More than 30 lakh
5. Did you have to buy land for constructing a house? (a) yes;         (b) No, I constructed on my own available land.
6. Did you manage to construct a house within the compensation money? (a) yes;                              (b) No.
7. Status of running water supply on rehabilitated site: (a) 0-2hrs;        (b) 2-5hrs;              (c) 5-10hrs;               (d) More than 10hrs.
8. Agricultural land available with the family: (a) 1-5Naali;     (b) 5-15 Naali;            (c) 15- 25 Naali;              (d) More than 25 naalis.
9. Before the land was taken, how much land was owned by you: ; (a) 1-5Naali;   (b) 5-15 Naali; (c) 15- 25 Naali; (d) More than 25 naalis.
10. Did you have fruit trees before the land was acquired? (a) Yes – Number:…… Species: Guava, Mango etc.  (b) No
11. Profit from agriculture before the rehabilitation: (a) Rs.10000-20000; (b) Rs 20000 to 30000; (c) More than 30000; (d) Fulfilling the basic requirements of the family; ( 6) No benefit
12. Profit from agriculture after the rehabilitation: (a) Rs.10000-20000; (b) Rs 20000 to 30000; (c) More than 30000; (d) Fulfilling the basic requirements of the family; ( 6) No benefit
13. What was the source of income prior to rehabilitation: (a) Farming; (b) Animal husbandry; (c) Horticulture; (d) Other service/ business etc
14. Source of income after rehabilitation: (a) Farming; (b) Animal husbandry; (c) Gardening; (d) Other service/ business etc; (e) Job in THDC
15. Monthly income of the family: (a) Rs 10-20,000; (b) Rs 20000 to 30000; (c) Rs 30000 – 40000; (d) More than Rs 40000
16. Is any member of the family employed in THDC?  (a) Yes;     (b) No. If Yes, how many members of the family are employed: .............
        Monthly income of the employed individual: (a) Rs 5-15000; (b) Rs 15-25000; (c) Rs 25-35000; (d) More than Rs 35000.
        Nature of employment: (a) Permanent;              (b) Temporary
17. Are you totally dependent upon THDC for your financial status: (a) Yes ;                                      (b) No.
18. Is anyone unemployed in the family in the age of 18-50? (a) Yes                        (b) No.      If yes then how many members are unemployed-..............
19. Do you find your financial and social status better than prior to rehabilitation? (a) Yes;                      (b) No.
20. If no then why is it so? ........................................................................

Signature-...........................................
ग्राम पंचायत हाट: प्रस्ताव

आज सब सम्मिलित में ग्राम सभा हाट के समस्त प्रतिनिधि और निवासी हम सभी ग्रामवासी हमारे इस भगवान श्री लक्ष्मीनारायण के मंदिर और इसके मध्य ही हाट गाँव के सभी मंदिर समूह (चंद्रिका देवी, निखिल मंदिर, विष्णुक्षेत्र मंदिर, सुर्य कुण्ड आदि) को अपनी ग्राम-सभा द्वारा समर्थित कीये जाते हैं। जिसमें या जिसके इर्द-गिर्द कोई भी क्षति या हानिकारक कृषि स्थिति नहीं किये जाएं। आगे हम यह घोषित करते हैं कि हाट ग्राम भगवान लक्ष्मी

नारायण मंदिर और अन्य मंदिर समूहों का समर्थन के साथ समर्थित किया जाना चाहिए।

पूर्व में पुरातात्त्विक तथ्यों और सत्य को दूर करके, विपक्ष, अवधार रूप से गाँव की मूलभूत के अधिग्रहण किया गया। विना ग्राम सभा के प्रस्ताव के अन्दर-पूर्वक चंद लोगों के साथ समझौता कर पूरे गाँव को विभाग में जवाब दीया गया और अंत में बल-पूर्वक गाँव नहीं छोडने वाले परिवारों को घर से बाहर खड़े मदरार्केर कर दिया गया। अंत: इस दिवस अन्य अभियान के बिस्तर हमारी मांग है कि हाट गाँव के पुरातात्त्विक, ऐतिहासिक और राष्ट्रीय महत्व के मद्देश, समूह गाँव को एक विरासत ग्राम के आधार पर उसकी मूल शैली में पुनर्निर्मित किया जाए। हमारी मांग है कि हमारे पूर्वजों की इस धर्म ग्राम-हाट का पुनर्निर्माण कर हम सभी जानियों को पुन: अपने मूल स्थान हाट में पुनर्निर्मित किया जाए। ताकि हम हमारे पूर्वजों की सामूहिक और धार्मिक परम्परा और विरासत को संभाले और निभाते हुए अपना जीवन जी सकें.
Suggestion for alternate location for muck dumping from edit tunnel at Hat village

Y.P. Sundriyal and Navin Juyal

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Environmentally safe muck disposal in mountainous terrain during construction activity (be it hydropower tunnel or roads) poses a serious challenge to our engineers. This is because of the availability of adequate and geomorphologically safe accommodation spaces. This we have witnessed and still witnessing in the Chardham road widening project. The project proponents, out of compulsion, have to compromise by selecting the geologically unstable muck dumping sites such as the seasonal (dried) stream channels or the steep valley slopes. Such sites in Himalaya are prone to muck remobilization (if not adequately treated), during extreme weather events. If that happens, it would be a disaster for the people and infrastructures located in the lower reaches, as observed during June 2013 flash flood (Sundriyal et al., 2015). Therefore, it is prudent that before selecting a site for disposing of the muck, authorities must consider ecological, economic, social and cultural ramifications on the terrain and the people.

Figure 1. Three level of terraces carved on hard rock. The terrace sediments were deposited during last 10 thousand years and are fairly stable due to the presence of lime binding material (Juyal et al., 2010). The red triangle is the suggestive location for wall.
Recently during our geological study in the upper Alaknanda valley, we visited a village called Hat which is located on the northwestern flank of the Pipalkoti valley. This valley lies on the southern slope of the Main Central Thrust (MCT), which passes through Helong. The MCT is not only a tectonic boundary but also a physiographic division between the less rugged lesser Himalaya and the steeply rising Higher Himalaya. Consequently, the rocks are weak and fissile and frequently witness focused rainfall events in the form of cloud bursts. During the last 200 years or so, major flash floods were triggered from the zone of MCT. For example, in the sub recent to recent times, the most talked was the July 1970 and the recent one was the June 2013 disaster. The July 1970 Alaknanda flood devastated an entire roadside settlement called Belakuchi (located barely 5 km upstream from Hat village; Rana et al., 2013). The extreme topography coupled with focused rainfall leads to extremely vigorous earth surface processes around Pipalkoti valley. In view of this, engineering structures and the excavated sediment piles (muck) are highly prone to erosion. Hence the loose sediments (excavated muck from tunnels) must be securely protected so that during infrequent cloud bursts events, this sediment should not act as a force amplifier as observed during June 2013 Kedarnath and February 2021 Rishi Ganga floods (Sundriyal et al., 2015; Rana et al., 2021).

The current hydropower project’s edit tunnel is being excavated above the Hat village, which has an extremely high slope (>45°). Around Hat village, the river bed is located around 1000 m (river bed) to a height of 2800 m. The course of the Alaknanda River is broadly north-south and has cut a deep gorge in fissile dolomite, quartzite and slate rocks. These rocks belong to the calc zone of Chamoli and are sheared due to the presence of multiple local transverse faults (Gaur et al., 1977). A major third-order stream that flows along the eastern slopes (2800 m) and meets the Alaknanda River opposite Hat village. Besides this, there are few lower-order steams on the eastern slope. Along with the Alaknanda River, the streams have incised the older fluvial and alluvial fan deposits into three relatively flat surfaces (terraces T1 to T3), which occur between 140 m and 40 m above the river bed (see figure 1). The muck which is coming out of the tunnel is kept above the village, particularly above the 9th century Laxmi Narayan temple. This temple which the Shankaracharya established, has enormous religious and archeological significance. Considering the fragility of the terrain (discussed above), it is feared that in case of extreme weather events that are quite frequent during the Indian Summer Monsoon, the kind of protection is currently being given to the muck (above the temple) may not withstand the fury of the nature.
Also, this area lies in earthquake zone V, the last earthquake that riddled this area was in 1999 (Chamoli earthquake). Therefore, an alternate site should be selected for muck disposal so that the temple is protected and brought back to its pristine glory. Towards this, we suggest that the terrace T1 (youngest terrace), carved on the hard rock on the opposite flank (see Figure 2) and is around 20 mt above the river bed, can be used as an alternate site for muck disposal. However, the terrace surface is not absolutely horizontal (which can be modified) and is uncultivated and uninhabited. The appropriate levelling and construction of an adequate RCC wall along the river will ensure the protection of the muck from erosion. Since the river cut through ~20 m dolomite rock, which would provide strong basement support for the RCC wall, ensuring muck does not get into the river during extreme weather events. The excavated much can be transported by putting a ropeway across the river from the edit tunnels above the Hat village.

Figure 2. Alternate site located immediately opposite to Hat village. Details are discussed in the text.
References:


List of Participants: