

**UNDERSTANDING THE IMPACT ZONE
IN THE
UPPER MAHAKALI BASIN**

BASED ON FIELD WORK

2018

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1. Introduction

As highlighted in the 'Compendium on Mahakali Basin' about the impacts of road development in the Himalayas, another important change-maker in the future will be the proposed large water development project on River Sharda, details of which are still being worked out by the Government of India and Government of Nepal. The Development Authority for the same purpose was created few years back. The twin dam of Pancheshwar and Roopaligad will be the first on Sharda River. With a perspective on basin planning and river valley development, the critical component will be how the existing environmental and social challenges be addressed. While the proposed project would have a long gestation period, the people were taken by surprise when the public hearings were declared in the midst of monsoon month of August in the three affected Districts of Champawat, Almora and Piththoragarh.

The DPR consist of name of villages which are affected but it has been quite open in public that the affected families and individuals have ruled out authenticity of the information contained in the report. People infact state that no one surveyed their village and the data is too old to be used for assessing the impact. A broad understanding of the basin suggests that with massive road building already in place, factors like seismicity and recurring landslides, people's apprehension that villages beyond the submergence zone will also get affected given the nature of landform, may prove right. The FRL has been suggested at 680m thus taking the impact over long distances in Kali, Saryu, Ramganga, Goriganga and tributaries in Nepal.

Garhwal region has witnessed large dams over its main rivers, Tehri is one of the highest in Garhwal regions. The issues of villages in the rim area of the dam are still alive and the process of resettlement and rehabilitation is far from satisfactory and it also reflects upon the nature of R&R the proposed project will pose which is much bigger in size than Tehri. The impetus is to move people to the plains citing the issues of unemployment, limited livelihood opportunities and difficult agriculture – the whole eco-suitability/compatible landscape focus is given a go by which makes people reinvent their lives.

This is an assessment based on field level interactions with the villages.

2. Methodology

The field visits looked at critical aspects to capture the situation

- General Information about Demographics: Panchayat wise submergence of its respective villages and/or habitations. Disable, old and school going population estimates. The DPR list consist of Villages and no criteria is provided for fully affected and partially affected villages.
- Risks or Vulnerability in the immediate catchment of the Village or Panchayat which is both current and probable activities in future
- Past incidents in the area like landslide susceptibility reports for the region have been used to earmark areas mapped within the basin

- Socio-cultural relationships among villages and likely changes
- Perceptions on impacts on women, children and old age population; impact they foresee

3. Envisioning & Contextualising The Impacts

Two kinds of categorisations have been made by authorities viz.

- *Fully affected*
- *Partially affected*

And no where it is defined by these authorities what will be meant by partially affected and fully affected respectively.

1) Overview of Fully Affected Villages

As per the available data from the public documents released by the authorities, there are 19 Gram Panchayats (22 villages) which have been categorised as fully affected. *[It may be noted that there are no families that are likely to be displaced from their homesteads only and not lose their lands]*. The spread of these Panchayats is summarised in the table below;

Count of Units	Pitthoragarh	Almora	Champawat	Total
Gram Panchayats	13	4	2	19
Villages	16	4	2	22

District	Tehsil/Block				
Pitthoragarh	Kanalichinna	Gangolihat	Munakot	Pitthoragarh	Total
	6	2	2	3	13
Almora	Dhauladevi	Bhaisiyachanna			
	3	1			4
Champawat	Pati	Barakot			
	1	1			2

Although the land to be acquired among these 22 villages is 463 hectare but the number of affected who loose land and house both number 455 whereas those who loose only land number 5424. This reflects large number of families will loose a good proportion of their land given the fact that existing land holdings in the hills are small & fragmented. There is no map of such nature which can portray the likely consequences as it requires whole cadastral maps to be digitised, neither the state nor the project authorities have produced

such maps. Post land acquisition, many land holdings may become economically unusable or redundant which should have been covered in the Social Impact Assessment. In the affected districts viz. Pitthoragarh, Almora and Champawat the proportion of marginal holdings dominates i.e. less than half hectare to less than 1 hectare. The following table provides more detail;

District	Pitthoragarh	Almora	Champawat
% of marginal holdings	88 (68)	75 (49)	76 (21)
% of small holdings	10 (24)	21 (36)	18 (14)

Source: Agricultural Census, GoI

Note: figures in parentheses represent percentage of area under respective category of % of holdings

High percentages of marginal holdings are indicated in the table above and the contrasting area is the highest in Pitthoragarh district which is the most affected. Almost 50% of the land in Champawat is under 75% of marginal holdings. But the data doesn't tell whether the land holdings are consolidated or not (spread or together), which will ultimately show the extent and burden of impact on a particular household. The intensity of situation will also be witnessed where land belongs to a joint family or brothers or where one of the brother is care-taker of land while the other works somewhere in the city. Such dynamics may turn up their head sooner or later.

Similarly, post-acquisition, reorganisation of villages and their boundaries will be required to synchronise the governance systems as the existing revenue village-hamlet dynamics might get affected or changed – say, many hamlets or villages under the Panchayat may not be listed in affected zone but their relative reach to their lands may get affected.

The total population among these villages is around 5700 persons and sex ratio of 1129 reflects more women than men hinting on probable migratory nature of hill population. Among the total population in these villages, 28% of the population is scheduled caste, none of the affected population is scheduled tribe as per data shown in the DPR. 14% of the population is less than 6 years old which also reflect requirement of education and health facilities for these respective villages. *Total area of all these villages put together is 3311 hectares and among this total geographical area 633 hectares (19%) is distributed under culturable waste + Fallow lands reflecting upon distancing of population from agriculture. The net sown area is 682 hectares (21%) catering to a population of 5700 persons, only 34% of this sown area is irrigated.*

2) Overview of Partially Affected

Count of Units	Pitthoragarh	Almora	Champawat	Total
Gram Panchayats	61	14	13	88
Villages	71	17	13	101

District	No. of affected Panchayats in respective Blocks					
Pitthoragarh	Kanalichinna	Gangolihat	Munakot	Pitthoragarh	Dharchula	Total
	10	26	14	8	3	61
Almora	Dhauladevi	Bhaisiyachanna	KanaliChina			
	8	5	1			14
Champawat	Lohaghat	Barakot				
	3	8				11

From nine villages, no private land acquisition is envisaged, these villages are

Village Name	Block	District
Sauli (Birgoli GP)	Gangolihat	Pitthoragarh
Busail (Busail GP)	Gangolihat	Pitthoragarh
Damde (Damde GP)	Gangolihat	Pitthoragarh
Duni (Duni GP)	Gangolihat	Pitthoragarh
Tulakhand (Tulakhand GP)	Gangolihat	Pitthoragarh
Sugari (Sugari GP)	Gangolihat	Pitthoragarh
Kuinar	Gangolihat	Pitthoragarh
Toli	Pitthoragarh	Pitthoragarh
Melta (Melta GP)	Dhauladevi	Almora

Total 3227 hectare of land is envisaged for acquisition under the project. 23,738 families will loose land and house, specifically as per enumeration by authorities, it is shown in the report that 809 families will loose land as well as house or eventually face displacement and 22,929 families will loose only land. On an average 1360 square meter land will be lost by a family in the process of submergence. Now whether such a land is productive and provides livelihood support to the families is unknown through these assessments by the authorities and hence inconclusive of social impact that the project may cause.

Sex ratio in these villages is 1053 which indicates more women present in the villages than their male counterparts. 32% of the total population of these villages is scheduled caste and 1% is scheduled tribe, especially Bhotias of the region, 16% of the population is of children less than 6 years which by now would have turned 13 (*referring to Census Data 2011*) by

now and even turn adults when the land is actually acquired and award settled. Most probably land acquisition date will become the cut-off date and a fresh assessment will be required by the authorities so that no person is at loss. 20% of the area under these villages is under the culturable waste and fallow land categories. Only 10% of the net sown area is irrigated.

Rupaligad

All the eleven villages are partially affected most of them in the Lohaghat block. Out of the 44 hectare land affected due to submergence, 17.27 hectare is in a single village i.e. Nidil which is right near the confluence of Saryu and Kali Rivers. Majority of the PAFs are those who loose only land (1562) and a few PAFs are those loosing both land and house.

4. Outlook of Implications in Context of Land Acquisition Act 2013

While the land acquisition impact has to be measured under the RTFCLARR¹, there is no clear distinguishing criteria as to what is meant by fully affected and partially affected. While the census households definition defines a household as a group of persons who normally live together and take their meals from a common kitchen². But when the context is land acquisition, the term family is invoked for consideration of affected and prospective affected families eligible for compensation. It is thus essential to know these.

Affected family as per the RTFCLARR includes,

- i. a family whose land or other immovable property has been acquired*
- ii. a family which does not own any land but a member or members of such family may be agricultural labourers, tenants including any form of tenancy or holding usufruct right, share-croppers or artisans or who may be working in the affected are for three years prior to the acquisition of the land, whose primary source of livelihood stand affected by the acquisition of land*
- iii. the scheduled tribes and other traditional forest dwellers who have lost any of their forest rights recognised under the STOTFD³ (Recognition of Forest Rights) Act, 2006 due to acquisition of land*
- iv. family whose primary source of livelihood for three years prior to the acquisition of the land is dependent on forests or water bodies and includes gatherers of forest produce, hunters, fisher folk and boatmen and such livelihood is affected due to acquisition of land*

¹ Right to Fair Compensation & Transparency in Land Acquisition, Resettlement and Rehabilitation

² A 'household' is usually a group of persons who normally live together and take their meals from a common kitchen unless the exigencies of work prevent any of them from doing so. Persons in a household may be related or unrelated or a mix of both. However, if a group of unrelated persons live in a census house but do not take their meals from the common kitchen, then they are not constituent of a common household. Each such person was to be treated as a separate household. The important link in finding out whether it was a household or not was a common kitchen/common cooking. There may be one member households, two member households or multi-member households.

³ The Schedule Tribes and Other Traditional Forest Dwellers

- v. *a member of the family who has been assigned land by the State Government or the Central Government under any of its schemes and such land is under acquisition*
- vi. *a family residing on any land in the urban areas for preceding three years or more prior to the acquisition of the land or whose primary source of livelihood for three years prior to the acquisition of the land is affected by the acquisition of such land*

Category ii, iii, iv need a relook in local context.

As this region is chronic to seasonal migration and even permanent migration, the role of tenant farming becomes critical and whether as per category ii, any effort has been made to include them as affected because the table in EIA reflects only those as affected who either lose their land or house – this needs to be rechecked and requires detailing.

The STOTFD is grossly misunderstood and no efforts have been entrusted to initiate the process, only when NOCs are required, a written undertaking is taken from the villages that no forest rights rest in the inhabitants, FRCs (*forest rights committee as constituted by Gram Sabha under rule 3*) are non-existent.

Category iv is also closely related to iii but in this case even the traditional van panchayats or civil forests where people are dependent and rely on forest produce as well as hindrance to access to such forests is a loss and hence affected. This category also needs to be verified.

Displaced family means any family, who on account of acquisition of land has to be relocated and resettled from the affected area to the resettlement area.

Family includes a person, his or her spouse, minor children, minor brothers and minor sisters dependent on him.

Provided that widows, divorcees and women deserted by families shall be considered separate families.

Explanation – an adult of either gender with or without spouse or children or dependents shall be considered as a separate family for the purposes of this Act.

If one goes by the definition of marginal farmers as specified in the RTFCLARR [3(t)] all the farmers fall under this category with not even irrigated land and much lesser than one hectare of land.

Whether any gauchar land (commons or traditionally used for grazing in civil forest or van panchayats) is coming under acquisition? If yes, one has to take note of the Order no. 7751 dated 27.01.2014 giving reference to the High Court Civil Appeal No. 436/2011ASLP(C) (Jharkhand Government Vs Pakur Jagran Manch) and No. 437/2011 (Rocky Murmu Vs Pakur Jagran Manch)

5. Across the Villages

Vulnerable Villages in vicinity of Submergence zone

Village & Gram Panchayat Umer
District Almora



- *Umer* is located on the banks of River Saryu in the Bhaisiyachina Tehsil of Almora District. Umer and one of its hamlet (Bijron) is listed as fully affected in the submergence zone whereas rest of the hamlets/villages like Bunja, Kimola, Kankhal, Khatwe i.e. the whole Gram Panchayat is under risk but not listed as affected.
- Apart from submergence risk, increased landslide activity has also increased the risk but the Government has kept these settlements in partially affected category. The upper portion of the village is landslide prone and the road activity has expanded the landslide influence zone. There are eight Christian families, among these seven have migrated but their land and houses are in the village. Umer is an example of coherent community which is practicing agriculture and horticulture.
- Self-reliance of the community will be impacted as the village is under the impact zone, the relation with the river and its uses will also cease to exist. People claim that while Kunj Kumola has been kept in partially affected list, it will actually fully submerge.

- Cloud bursts in 2009, 2010, 2011 and 2015 brought massive mud slides in the local streams, fields resulting in damage to the agricultural produce. The village is spread on 32.32 hectares land with these classifications viz. forests (4.86), area under non-agri uses (6.27), permanent pastures and grazing (6.09), culturable waste (3.29) and area irrigated by canals (11.81)



Near Jingal Village (Jaduri Gunth)



Road near Kunj Kimola



Village Githani, Gram Panchayat Jingal District Almora

- *Githani* is a hamlet of Jingal Gram Panchayat of Bhaisiyachinna block abutting river Saryu. Githani is inhabited by harijans and artisans (SC) and also work as share croppers and largely people manage their lives by doing labour. This village has been struck twice by landslides.

- Although this village is located near the river, still it is treated as partially affected – this is a dilemma people are facing. The total population of this village is 57 persons. The proportion of old age persons in the population is 16% whereas proportion of school going children to the total population is 35% i.e. more than half the population is dependent.
- Already there is work on Naini-Jageshwar-Almora road in the upper part of Panchayat which may affect the village in future. Fusargad raula & malli rewar ka raula are two unstable hills prone to landslides and the whole village is vulnerable. In 2009-10, the land subsided, surrounded by landslide, it was recommended that the village be rehabilitated but nothing actionable happened. All the four hamlets of the Panchayat are categorised as partially affected.
- *Jingal* (settled over wide terrace) is a Panchayat and a revenue village. Its fertile land along the Saryu is earmarked in the submergence zone but owing to its houses located above the submergence zone, it is under the partially affected list. One wonders why there is such an indifference towards reality and common sense.
- People believe that this is unjust as houses will also get damaged as time passes by. Currently, agriculture is the mainstay of livelihood but future looks bleak when all of this land will get submerged. There are family relations across the valley and these will get affected as submergence fears become real.



- Jinal got connected to road after years of wait and people have also renewed their housing stocks. To the north of village is the Fuskiya nallah which meets Saryu, during heavy rains these nallahs bring muck and an active landslide area exists along the road. With so much invested and with flourishing agriculture and horticulture, this village demands respectful resettlement after bringing them into fully affected category. People are not comfortable with the current classification of partially affected.

**Village Baruli, Gram Panchayat Nyal Dhura
Dhauladevi, District Almora**

- *Baruli* is a revenue village of Nyal Dhura Panchayat of Dhauladevi. Other habitations are *Bangtoda*, *Okhlada*, *Chaurkanpa*, *Talli Nyal/Nayal*. This is a partially affected village. Baruli hamlet is located above the confluence of Panar-Saryu where people have irrigated lands, people live in Nyaldhura as well as Baruli. This land will submerge. Almost 400 families will get affected and accessibility to all services and facilities will increase thereby increasing the time and cost for availing these services.

***Village Sidiyakheth, Gram Panchayat Chaun Dungri
Dhauladevi, District Almora***

- *Sidiyakheth* is a revenue village of Chaun Dungri Panchayat of Dhauladevi, Almora. Other hamlets are Sarera, Talli Rengal. Sidiyakheth is located on the banks of Sidiya river. People don't know whether their village will be submerged or not.
- Localised cloudburst events were reported by people, these occurred in 2008, 2013 and 2016. This resulted in loss of a watermill, animals and human lives.
- All the 24 families will be affected due to submergence whereas Chaun Dungri village may be affected by landslide in future. Challenge would be for women who are closely associated with natural resource utilisation, they are the one who will face extreme challenge from the changes.

**Village Sikda, Barakot
District Champawat**

- *Sikda*, a revenue village (and Panchayat) is located at an altitude of approx. 600m in the Barakot block of Champawat. It is located in the upper part of Kalidyon gad / stream which meets Saryu in the downstream. Its other habitations are Masad, Lisad, Maujalai, Khairali and Nitikhan.
- The fertile agriculture land of Sikda which is located close to River Saryu will submerge and people fear that this will cause the fields upwards of submergence to eventually fall prey to land subsidence and induced landslides.
- Almost 30% of the population comprise of old age people and school going children. There are water supply pipelines passing through the village and currently the Tanakpur-Pitthoragarh road is being widened which will become a potential recurring

landslide zone in future – there have already been 3 instances of landslide in Kherani tok due to NH widening.

- As per people, there were 3 instances of cloudburst in 2017 which remains to be ascertained. Worry is reflected on the face of the farmer due to loss of irrigated land and that the remaining unirrigated land is not sufficient to support livelihood.

Out of the 200 families, 100 are in the partially affected category and their concern stems from the fear that their livelihood is supported by the River but now they are on the verge of loosing whatever they created and even their relationship with the river will end.

Simalkhet, Barakot, District Champawat

Simalkhet is just a few meters above the river bed of Panar with near to gently sloping terrace where agricultural fields are located. This is the only fully affected village in Barakot tehsil. People have settled here from their original village which lies further up. But their plea is that they will leave their place once land in their original village is also considered as affected because it is not possible for them to go up and do activities now. It was pointed that several other villages which are not considered in the submergence zone will also be affected in the long run viz. Badiyar (around 200 families) which can be seen from Simalkhet; Joul (125 families); Sabsil (150 families).





Village Sabsil (Hamlet of Gram Panchayat Jingoli Toli)
District Champawat

- *Sabsil* is a hamlet of Jingoli Toli Panchayat, other hamlets are Sera, Toli, Jingoli. People consider 1993 floods as the worst where 15 agricultural fields submerged. Whole of the village will get affected and market will become farther by 20 kilometers. People expect the government to be sensitive to consider rehabilitation in the hilly region of similar physiography.
- The submergence of Simalkhet village which is the main trade centre for Sabsil and other adjoining villages, will impact many associated income earning avenues.

Village Jaul Melta

Jaul Melta is a revenue village of Jaul Panchayat with one of its hamlet called Vid Bhitak. This village in Panar valley is not affected due to submergence but people fear that in future there will be risks from landslides, land loss due to river flooding and access issues?

Village Matela, Gram Panchayat Devrala
District Pitthoragarh

- *Matela* is not listed in the submergence zone. But this is a potential affected village as it is located along the tributaries of Saryu viz. Narkul/Narkotarini. Matela's approximate population of 186 has 50 school going children and 13 old age persons above 50 years.

- *Devrala* is also not listed in the submergence zone, it is located along Narkul stream. It is hardly 2 kms from Seraghat, a fully submerging village along the Saryu. But village's lower portion is subsiding and people (mostly SCs) think that their village is going to face the ire of River in future but they are not being treated as affected. They fear that landslides will increase, the link roads/routes will get damaged and in turn cause damage to the canals and water pipelines.
- More than 50% of the population of the village is school going and around 10% is old age population. The village is located right under the Pavvadhhar-Gangolihat road and Narkul-Devrala irrigation canal and there is every likelihood of road construction work in the near future which will impact the village, people say that the slopes are unstable and landslide prone.
- Major portion of the village is abutting River Narkul and is geomorphologically weak and hence vulnerable; the lower portion of the village loses its land to the river almost every year. As the low lying land along the river is always at risk from river cutting, the one near the village (~~see pg. 10 end~~):

Devrala has socio-economic links with adjoining villages of Pitthoragarh and Almora – those links will get strained. People expect that this village shall also be included in the list due to the peculiar nature of settlement.

Village Sela, Gram Panchayat Kuntola Gangolihat, District Pitthoragarh

- *Sela* is a revenue village which has three hamlets viz. Seragada, Salad and Badhi. Although Sela has not been listed as affected but parts of this Panchayat will submerge, it is located at the confluence of Narkul-Saryu.
- Old age people and school going children form around 45% of the total population and most of the occupation is agriculture labour.
- This village has a northern aspect and its lower portion is getting washed away every season by the river. People recount two cloudburst events of 2008-09. Even the land which will not get submerged cannot be used for resettlement as the site is not stable.

Village Salan, Hamlet of Kuntola Panchayat.

- *Village Kuntola* is on hill top whereas its main hamlets viz. Seragada, Salan and Badhi are in the submergence zone. Here all agriculture land along the river is irrigated, some parts are partially affected and some are indicated as fully affected.
- Salan is located over a rocky base whereas Sela is located over loose strata. The locals also share that stable locations to settle down are in the forest.

Almost 1/3rd of the population (total 779 persons) comprises old age persons and school going children.

Village Sanwalisera, Kanalichina Block Tehsil Didihat, District Pitthoragarh

- *Sanwalisera* has partially affected families but does not form part of the list. It is located 100 to 200 m NW along the Gurjia nallah dividing Titri and Bagarihat. This village adjoins Titri and Bagadihat villages mentioned to be affected by the submergence behind the dam. Earlier, all these three villages were part of contiguous landform but now this nallah has increased erosion and a deep gorge has developed.
- Sanwalisera is very likely to be affected in case of submergence of Titri and Bagarihat. The habitation is inhabited by 274 persons comprising almost 45% population of old age people and school going children. Around 30 families of Sanwalisera are affected as more than 50% of their land is located in Titri which will submerge, rest of their land and houses remain in Sanwalisera which are also under risk.
- Occupation is dominated by agriculture and farm labour. It is observed that the land immediately surrounding the submergence here comprise of clayey soil. A gul (irrigation canal) passes through the village and also irrigates Bagarihat and above this canal is a link road where work is underway. These may get affected in the long term as a consequence of submergence and changed moisture regime.
- The sloping hill above the village brings down erosive material and also impacts the water supply scheme. In one incident, three women died due to mud slides instigated during heavy rains, many animals and land parcels have been lost to the Gurjia nallah.
- Most people remembered instances of cloud burst which occurred in the year of 1987, 1999 and 2012. In 2015, the bridge linking Titri and Sanwalisera was washed away and people fear such incidents will increase as the water fills behind the dam.
- People are vary of the technicalities of the project and question when already the land is subsiding, will it not worsen further, once water is stored behind this massive dam.
- The main Titri-Bagarihat route will get disrupted due to submergence. The old age population will face health issues and in absence of health facilities their problems will only increase. The nearest school in Titri-Bagarihat will submerge, children will have to go to Askot, Bhagichaura which is a vulnerable route because the schools in the west of village viz. Garkha region is challenged by Gurjayanallah.
- People of Sanwalisera sow their lands located in Titri and have relatives in these villages. Submergence will lead to disturbance in this social fabric and make them distant from their relatives. Sanwalisera's traditional routes pass through Bagrihat-Titri and their education, health and livelihood is dependent on Titri-Bagarihat.
- People say that survey must be reconducted because it is not clear why Bagarihat is partially affected whereas Titri is fully affected as both are almost at a similar altitude; Sanwalisera is not even in the list. This reflects that the incomplete information cannot be pushed onto people. There is no demarcation of

submergence zone which has kept people in dark and the number of affected settlements is also disputed.

Village and Panchayat Jogyura

- *Village Jogyura* is a revenue village of six hamlets viz. *Bagrihat, Dham, Bhelia, Kanar, Sera, Bagrihat Kheda*. Tanakpur Tawaghat and Jauljibi-Tanakpur road passes in vicinity to the village. Jogyura and Bagrihat kheda will loose houses and land whereas Bhelia and Bagrihat are kept in the partially affected category.
- The other hamlets like Dham, Kanar and Sera have not been kept in either of the category.
- The main connectivity to adjoining villages will be obstructed and a new route will be needed. But if the dam is constructed, these hamlets will get affected by landslides due to denuded hills. Kanar is already affected by landslides as the Gurji nallah flows wildly during rains, Bheliya & Dham are also affected by frequent erosion incidents.
- Livelihoods are land dependent – mango orchids and agriculture. Almost in 200 nali (4 hectare) mango cultivation exists will be affected. Also 1/3rd of the population is also dependent on fish catch, another 30-40 naali or 2 acres is banana orchids which will come under water.
- Apprehensions grow around unemployment and lessening of agriculture based productivity as land will come under water. The women in this region sow, plant and harvest paddy in a collective manner – this practice will end, in the aftermath of submergence.
- In post dam scenario, almost half the population will be displaced, as a consequence of this displacement the existing relations will suffer as families part away. Many people who are employed or do job outside have their lands cultivated by local people, such people who don't own land will also get affected.

People believe that survey should be reconducted – Titri, Sanwalisera and Jogura are at similar altitude but all the three Panchayats are being treated differently.

Village & Panchayat Birgoli, Tehsil Gangolihaat District Pitthoragarh

- Birgoli is a revenue village with four habitations viz. *Tutali, Garali, Saunli, Birgoli*. located along Ramganga, Saunlisera is located on the river. This village is not submerging.
- *Bopal* Village and panchayat has four hamlets viz. Sungaraula, Satgarhi, Rampur and Aonladhar.
- The village is under submergence, three of its hamlets except Aonladhar will get submerged. This village is being treated as partially affected whereas its 3 hamlets are likely to be in the submergence zone.

- Currently work is underway for Darshaichal Aonladhar road, the village is below this road level. Local say that the hill is weak and is prone to landslides.
- Two local streams named Bharadgad and Pipligad had created havoc in 2014-15 when agricultural fields were washed away and crop was lost in Satgarhi & Dansyon Rampur. This danger looms with the changing weather pattern. This village is also located along River Ramganga. Satgarhi will fully submerge alongwith Aonladhar
- People estimate that around 200 families will get affected loosing land and houses. Several people will have houses overlooking the proposed reservoir where it will become difficult to live. Every utility and land will give way to water.
- There are many impacts which cannot be conceived by authorities unless time is spent in the affected zone for a long period. Many villages have socio-cultural and traditional links with other villages, these links will be weakened due to various factors. Already people are being influenced by market forces to sell land and assets and buy somewhere else.

**Byalkatia Village and Panchayat
Gangolihaat, District Pitthoragarh**

- Byalkatia Panchayat has four revenue villages, one of the villages named 'Marbadi' will submerge. *But Byalkatia which is a revenue village is not in the affected list.* Along these villages around ½ acre land is subsided along Simigad, Dhandalpani-Chandikaghat stretch. Darshaichal-Aonladhar road passed above this village, here the lower portion of the village is weak and prone to subsidence and rock slide.
- In 2016, three houses and ½ acre was lost due to heavy rains. With the drowning of revenue village, other connectivity will get affected; people are also concerned about schemes.
- Submergence of roads and bridge enroute Chandikaghat in future will create hardship for people.
- Right and timely information is not provided and people want to understand future impacts in order to take wise decision.

**Village Chaniyagaon, Panchayat Khulet
Gangolihaat, District Pitthoragarh**

Chaniyagaon has one more habitation which is uninhabited (Ghatpathar) and Chaniyagaon itself has only five families. This village is not in submergence but it may get impacted in future

**Village Garali-Belkot, Gram Panchayat Byalkatia
Gangolihaat, District Pitthoragarh**

- The village has one hamlet by the name of Saijar. These are considered as partially affected but the revenue villages of Garalai & Belkot are located along Ramganga (East), Belkot has less population whereas Garali has nearly 25 families.

- The village should have been in fully affected list but it has been kept in partially affected category.
- Currently Chandikaghat road work is progressing, the slopes are unstable and prone to landslide leading to subsidence.
- In 2010 and again in 2016 flash floods resulted in damage through the Chandikaghat bridge and road which resulted in death of animals and loss to property, even the bridge was damaged. In quantification terms, 3 houses, ½ acre land, 10 animals, many fields and trees were lost to the floods.
- People think that the area will become unlivable and displacement will be the ultimate way out. Concerns are being also raised for the old aged people and women.
- While foreseeing the future of families, people think that before displacement, resettlement and rehabilitation has to be completed only then they should be uprooted. People haven't found anything for them in the DPR, neither the fixed compensation nor the relocation area/locality is mentioned.

**Village Jamtadi, Gram Panchayat Bakshil
Vin, Distt. Pitthoragarh**

- The village has three hamlets i.e. lower & upper Bakshil, Jamtadi and Sochyagada. Bakshil is located along banks of Ramganga along the Aonlaghat road and is being kept in partially affected category but its hamlet Jamtadi is fully affected.
- Ramganga cuts through the agricultural fields from time to time, apart from this people do not remember any other disaster. With the submergence of Jamtadi, houses and cultivable land will be lost, even lands of other hamlets will get damaged and only houses will remain which themselves will become vulnerable to subsidence over time. The village has cordial relations on both sides of the river – their links to communities and religious places.

**Village and Panchayat Khulet
Gaongolihat, District Pitthoragarh**

- *Khulet* is an affected village. It is one of the biggest villages in the valley. It has four revenue villages and one uninhabited village 'ghat paathar'.
- It is expected that lower part of Khulet will get submerged. Gangolihat-Anwlaghat road is under construction and visually the place seems much stable. No untoward natural disaster events were mentioned by locals.
- Khulet is an affected village but only the lower portion is being declared as affected and rest of the area will eventually get affected in future. Other villages will lose their connectivity too.
- At this time, the village seems stable and safe but in future children and women might have to face challenges. So far migration is less, agriculture is progressive and basic facilities are being developed but looking at near future, the situation looks bleak. Accessibility will be curtailed. People have demanded to declare whole Gram

Panchayat in the affected category. People also do not have validated information and data.

**Village Skaar, Panchayat Khulet
Gangolihat, District Pitthoragarh**

- *Skaar* is a revenue village of this Panchayat which has 22 families.
- This is not an affected village but its lower portion is not very far from the river. In future, the river might also erode the hill side by its flow.
- Even if the village is not in the affected category, it will be affected due to lack of attention for basic needs in the future, say the locals.
- People have done gram sabha and have written to the administration to count them as affected.

**Village Suwal, Panchayat Khulet
Gangolihat, District Pitthoragarh**

- This village is termed as fully affected. It's a revenue village located along the bank of Ramganga which makes it vulnerable to erosion. Road is blocked near a place called 'patal'.

**Village Naegadi, Panchayat Byal Katia
Gangolihat, District Pitthoragarh**

- This revenue village is affected which has seven families and is kept in totally affected category, it is located along River Ramganga. It has two hamlets viz. Chandikaghat and Kapargada.
- The surrounding area is prone to landslides. People cite an incident of 2016 of flash floods when the village suffered loss of cultivated land, crops and houses.
- As the village is just abutting the banks of river, people will have to leave this place in the eventuality of water rise.
- People are concerned about loss of their rights which are not being talked about or discussed. People also think that their livelihood should be ensured before they are displaced.

**Village Dhamigaon, Dyogara Panchayat
Kanalichina, District Pitthoragarh**

- *Dhamigaon* is a hamlet and is being kept in partially affected category and will be submerged from three sides. Agricultural land of 25 families will be under the influence of submergence.
- People practice collective farming which will get affected due to submergence of land, especially sowing. Defragmentation of village and hamlets will result in

disruption of existing route i.e. Dyora to Diwalisera, any proposed new route will be long.

- Most of the people are dependent on agriculture and labour. A road is proposed in the upper side of the village and this is a landslide prone area. Micro level incidents of landslide and rockfall keep happening. People apprehend that erosion of lower portion will increase and landslide incidents will increase in the upper reaches.

People also list the following social concerns in the long run;

- Relatives become a support system in case of need and also provide moral support in difficult time, they will be distanced
- Uprooting from existing place will have impact on people of marriageable age as situations might bring challenges

People raised few relevant issues;

- If dam has to be built, survey should be reconducted and whole region should be declared affected
- Livelihoods, resettlement and compensation should be ensured before any steps for displacement are taken
- Provisions for children's education and employment for those who are nearing the age should also be ensured before displacement

Village Dhyodi, Panchayat Ghinghrani Kanalichina, District Pitthoragarh

- *Ghinghrani* is considered as the fully affected village whereas Dhyodi at the similar altitude is considered as partially affected. Only affected land has been mentioned in the submergence zone.
- There exist an irrigation canal and motorable road located above the village. Small incidents of land slips keep recurring, especially during rains.
- 10 families will be partially affected and will loose land
- Communication link will be lost, new routes will be long and circular consuming both time and cost – market access will become difficult
- Life will become difficult, especially for those who earn two square meals from daily labour

Village Digari, Panchayat Shivban Kanalichina, District Pitthoragarh

- *Digari* village will be partially affected, its agricultural land will get submerged. There is a canal and road above the village. But this village will loose its link with main markets of Dwalisera and Jauljibi. One will have to go to Pipli through a longer and circular route.

- People apprehend that when the village will be surrounded by water, landslide incidents will increase. This region is known for collective farming during sowing, harvesting. The main village link to Dwaliseru will get disrupted.
- People opined that why cannot Dam's height be reduced to save many villages.
- Resurvey should be done to show recent information
- Whole region should be declared affected.
- Stable employment options be made available beforehand

**Village Kataal, Panchayat Ghingrani
Kanalichina, District Pitthoragarh**

- *Kataal* hamlet is in the partially affected category, all cultivable land will be affected and even the surrounding villages are also bound to face the impact. Three families live here.
- There is one Siloni-Bholtari motor road above the village whose repair work is underway. This is a landslide prone area, heavy rains lead to land slips.
- Village will surrounded by water all through which will make it vulnerable to multiple dangers and will be cut-off from main village and market of Ghingrani.

The tragedy is that the very intrinsic bond between communities and the river is least understood by the development process, river replenishes nutrients and also re-form the land and most importantly provide water to the land for productive livelihoods. Almost every person has some portion of land along the river and the other portions are not irrigated and hence liable to become unproductive assets of the land holder or land looser. Although land is the most integral part of the livelihood stream but its fragmentation and no effort for consolidation will have a much larger impact on the proposed affected population and requires a long term holistic approach to deal with just resettlement. Because productive lands will be lost, there has been no consideration for premium compensation taking into consideration the revenue structure of village and including those lands which are bound to get redundant (partial acquisition making them unfit for any economic activity due to access or size issues). The SIA fails to deal with such problems which are legacy issues.

ANNEXURE - LIST OF VILLAGES VISITED

S.No	S.No. in LUASVP.xlsx	Status	Gram Panchayat	Village Name	Village Census Code	Class of Habitation	Other Villages & Hamlets in Panchayat	Block/Tehsil	District
1	In List	Partially Affected	Duni	Duni	50148	Revenue	Talli Duni, Chavan	Gangolihat	Pitthoragarh
2	In List	do	Chaur Duroli	Chod Duroli	50147	Revenue	Kutela, Dhuroli, Chaura, Syuton La, Kalachyur, Dhurijar, Khola, Lamchad	Gangolihat	Pitthoragarh
3	In List	do	Bokata	Bokata	50112	Revenue	Kaina, Bokra, Khamari, Akoriya, Chonala, Tadaga	Gangolihat	Pitthoragarh
4	Not in List		Salyuri	Salyuri		Hamlet	Dhankhet Salyuri, Sunana	Bhaisiyachhana	Almora
5	Not in List	Padoli is shown as partially affected	Salla Bhatkote	Salla Bhatkote	52915	Revenue	Salla Bhatkote, Barwa Tana, Padoli, Kotyuda	Bhaisiyachhana	Almora
6	Not in List		Bursum	Bursum		Hamlet	Dadhaghat, Bursum	Bhaisiyachhana	Almora
7	Not in List	Kunj Kimola is listed	Naayat	Naayat		Revenue	Kunj Kimola	Bhaisiyachhana	Almora
8	In List	Fully Affected	Kunj Kimola	Kunj Kimola	52926	Revenue	Umer, Kankhal, Bijora, Kimola, Naayal, Saarbe, Kunj	Bhaisiyachhana	Almora
19	In List	Partially Affected	Kunj Kimola	Umer		Revenue		Bhaisiyachhana	Almora
9	not in list		Lwera	Pabhya/Quera		Hamlet	Kwalrana, Pabhya, Talla Pani, Baatadhar, Quera, Nwaad	Bhaisiyachhana	Almora
10	In List	Partially Affected	Damde	Damde	50115	Revenue	Tudil, Ghatijar, Damde	Gangolihat	Pitthoragarh
11	In list	Partially Affected	Dasoli Badiyar	Dasoli Badiyar	53730	Revenue	Uptola, Kadal, Sella, Rajyuda, Idani, Dashola	Dhauladevi	Almora

S.No	S.No. in LUASVP.xlsx	Status	Gram Panchayat	Village Name	Village Census Code	Class of Habitation	Other Villages & Hamlets in Panchayat	Block/Tehsil	District
12	Not in List		Jigoli Toli	Sabsil	53728	Hamlet	Sera, Sabsil, Jingoli, Toli	Dhauladevi	Almora
13	Not in List		Jaul	Jaul Melta		Revenue		Dhauladevi	Almora
14	Not in List		Chaun Dungri	Sidiakhet	53714	Revenue	Sidiyakhet, Talli Ragai, Kedia Mad, Majhera	Dhauladevi	Almora
15	In List	Partially Affected	Sigda	Sigda	54160	Revenue	Sigda, Masaad, Lisaad, Gaujali, Nitrikhan, Khorali	Barakot	Champawat
17	Not in List		Nyal Dhura	Batuli	53750	Revenue	Batuli, Vantoda, Okhalgada, Chaur Kanya, Talli Nayal	Dhauladevi	Almora
18	In List	Partially Affected	Jingal	Jingal	52927	Revenue	Jingal, Bamauri, Seraghat, Githani	Bhaisiyachhana	Almora
20	Not in List	Jingal and Bhamouri Khas in list	Jingal	Githani		Hamlet		Bhaisiyachhana	Almora
21	Not in List		Deoyrala	Matiyal (One Matiyal of Upertola is in FA cat.)	50119	Revenue	Baisali, Rangal	Gangolihat	Pitthoragarh
16	Not in List	not in list	Deoyrala	Rangal	50121	Revenue	Baisali, Matiyal	Gangolihat	Pitthoragarh
22	Not in List	not in list	Deoyrala	Deoyrala	50118	Revenue	Rangal, Matiyal, Baisali	Gangolihat	Pitthoragarh
23	Not in List	Sera Garha is in Fully Affected List	Kuntola	Sela	50122	Revenue	Kuntola, Kunaru, Vaishalia, Seragarha, Sallan, Badhi	Gangolihat	Pitthoragarh
24	Not in List		Kuntola	Salaan	50122	Hamlet		Gangolihat	Pitthoragarh
25	Not in List		Sanwali sera	Sanwali sera		Tok		Kanalichhina	Pitthoragarh
26	In List	Partially Affected	Dwali Sera	Dwali Sera	49500	Tok	Malli ganget, Ghigharani	Kanalichhina	Pitthoragarh
27	Not in List		Dwali Sera	Kalachhin manu				Kanalichhina	Pitthoragarh
28	Not in List		Dwali Sera	Malli Narangi				Kanalichhina	Pitthoragarh
29	Not in List		Dyora	Dyora Talli	49518		Heerakhan	Kanalichhina	Pitthoragarh

S.No	S.No. in LUASVP.xlsx	Status	Gram Panchayat	Village Name	Village Census Code	Class of Habitation	Other Villages & Hamlets in Panchayat	Block/Tehsil	District
30	Not in List		Dyora	Govarijar		Tok		Kanalichhina	Pitthoragarh
	Not in List		Dyora	Ghingharani			Tok	Kanalichhina	
31	In List (Bheliya+Bagari Hat partially affected)	Fully Affected	Jogyura	Jogyura	49449	4 Revenue	Bagadihaat, Dham, Jogyura, Bheliya, Kanar, Sera and Bagadihaat khera	Kanalichhina	Pitthoragarh
32	Not in List		Dyura	Talli Agar (Dyura)				kanalichhina	Pitthoragarh
33	Not in List	Partially Affected (Sauli)	Birgoli			Tutali,Garali,Sauli,Birgoli	3 revenue villages in Birgoli	Gangolihat	Pitthoragarh
34	Not in List	Partially Affected (Anwala Talla)	Boyal	Boyal		Sungarnaula, Satgari, Aawalaghat		Gangolihat	Pitthoragarh
35	Not in List		Byalkatiya	Byalkatiya			Garali, Ghajari, Ghat Patthar, Nargwari, Bahalkote	Gangolihat	Pitthoragarh
	Not in List	Partially Affected (Garali)	Garali/Bailkot	Byalkatiya	50040	Garali/Bailkot,Sayijartok		Gangolihat	Pitthoragarh
	Not in List		Nargwari	Byalkatiya		Chandikaghat, Pathargarha Tok		Gangolihat	Pitthoragarh
36	Not in List		Chaniya Gaon	Khulet		Chaniya Gaon	Sakar, Sulargaon, Chaniyagaon & Khulet	Gangolihat	Pitthoragarh
	Not in List		Khulet	Khulet		Chaniyaganv,Sakar,suwal,Ghatpathar		Gangolihat	Pitthoragarh
	Not in List		Sakar	Khulet		Sakar		Gangolihat	Pitthoragarh
	In List		Suwal	Khulet	50066	Suwal		Gangolihat	Pitthoragarh

S.No	S.No. in LUASVP.xlsx	Status	Gram Panchayat	Village Name	Village Census Code	Class of Habitation	Other Villages & Hamlets in Panchayat	Block/Tehsil	District
	Not in List	Partially Affected (Jamtari)	Bakshil	Jamtadi	50175	Talla, Mall, Baksheel, Jamtadi, Siyiya Garda		Vin	Pitthoragarh
	Not in List		Chobakya	Shivban			Tok	Kanalichhina	Pitthoragarh
	Not in List		Digarigaon	Shivban			Tok	Kanalichhina	Pitthoragarh
	Not in List		Dhanigaov	Dyogada			Tok	Kanalichhina	Pitthoragarh
	Not in List	not in list	Kataal	Ghingharani (Data)			Tok	Kanalichhina	Pitthoragarh

In List – In the DPR list of fully affected and partially affected

Not in List – Not in the DPR list of fully affected and partially affected