

Government of India
Ministry of Environment, Forest and Climate Change
(Forest Conservation Division)

Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj,
New Delhi: 1100 03,
Dated: 3rd August, 2022

To

The Principal Secretary (Forests),
Government of Himachal Pradesh.
Shimla.

Sub: Proposal for seeking prior approval of the Central Government under Forest (Conservation) Act, 1980 for non-forestry use of 211.8427 ha. of forest land for construction of 500 MW Dugar Hyrdo Electric Project in favour of NHPC Ltd. under Pangri Forest Division and Chamba District of Himachal Pradesh (Online Proposal No. FP/HP/HYD/123533/2021).

Sir,

I am directed to refer to the Government of Himachal Pradesh's letter No. Ft.48-5297/2021(FCA) dated 02.07.2022 on the above mentioned subject for seeking prior approval of the Central Government under Section 2 of the Forest Conservation Act, 1980. After the examination of the proposal, the following shortcomings have been observed:

- i. The MoU has been signed by the GoHP and Chairman NHPC on dated 25.09.2019 for 449 MW, however the proposal submitted is for 500 MW. In many of other documents also, the capacity of the HEP is mentioned as 449 MW. This needs clarification and the revised documents be submitted accordingly.
- ii. As per DSS analysis, the area of the KML file of Dugar HEP is 282.9878 ha whereas actual area sought for diversion is 211.8427 ha. Hence, there is a discrepancy of 71.1451 ha in the KML file uploaded on PARIVESH portal. Many of the components of the HEP (i.e. Submergence including river area, Dam, Approach Road, Quarry area, Barrow Area etc) have been found overlapping. The revised KML file is therefore required to be submitted. The DSS report is also **enclosed**.
- iii. The CA sites are proposed on sloped surface. The state govt may therefore ensure the suitability of the sites and their feasibility for carrying out plantation.
- iv. Road is passing through the proposed CA sites and settlement is visible in CA site namely "Killar dhar. Further, out of 423.684 ha of proposed CA land, 16 ha is VDF, 82 ha is MDF as per DSS analysis. The proposed CA areas are therefore required to be revisited in view of the guidelines issued by this Ministry from time to time. The details of the non-suitable CA site are as below:

S.No.	Name of CA site	Given area (ha)	Software calculated area (ha)	VDF	MDF	Observation based on Satellite imagery
1	Killar dhar	11.06	11.063			Road and

						settlement is visible
4	Rogy	52.59	25.632		1	Road is visible
5	Chhatwani		26.869	1	16	
6	Sidh Ka Dera	38.98	38.941	9	20	
7	Chilkot 1	43.265	15.864		5	
8	Chilkot 2		27.241		8	
9	Shelli 1	12.11	9.453		3	Road is visible
10	Shelli 2		2.643			Road is visible, Area less than 5ha
11	Kanun	20.1	20.130		7	
12	Rusmus Sural	21.28	21.265			Rocky surface is visible
13	Bishtow	99.13	7.294			
14	Mehrote		89.616			
15	Sansari		2.115			Road is visible, Area less than 5ha
18	Sach Chauri 2	22.842	15.909	6		
19	Sach Chauri 1		6.904		2	Road is visible
20	Chanchalperi	15.377	15.651		1	
21	Bindrabani	37.44	37.345		19	
TOTAL		423.684	423.509	16	82	

v. Approved CAT plan duly signed by the competent authority has not been submitted.

vi. The State has mentioned in the CA scheme, that the Root stock is there in the proposed CA areas, however, the density is less due to grazing pressure. How the govt intends to

mitigate the grazing pressure for proposed CA plantations is therefore required to be submitted.

vii. The Muck dumping (8.5797 ha) and the job facility area (7 ha) can be taken on non-forest land. The justification for proposing the same on Forest land may be submitted.

In view of the above, the State Government is requested to furnish the above mentioned information to this Ministry for further consideration of the proposal.

Yours sincerely,

Sd/-

Digitally Signed by Suneet

Bhardwaj

Date: 04-08-2022 11:07:19

Reason: Approved

(Suneet Bhardwaj)

Assistant Inspector General of Forests

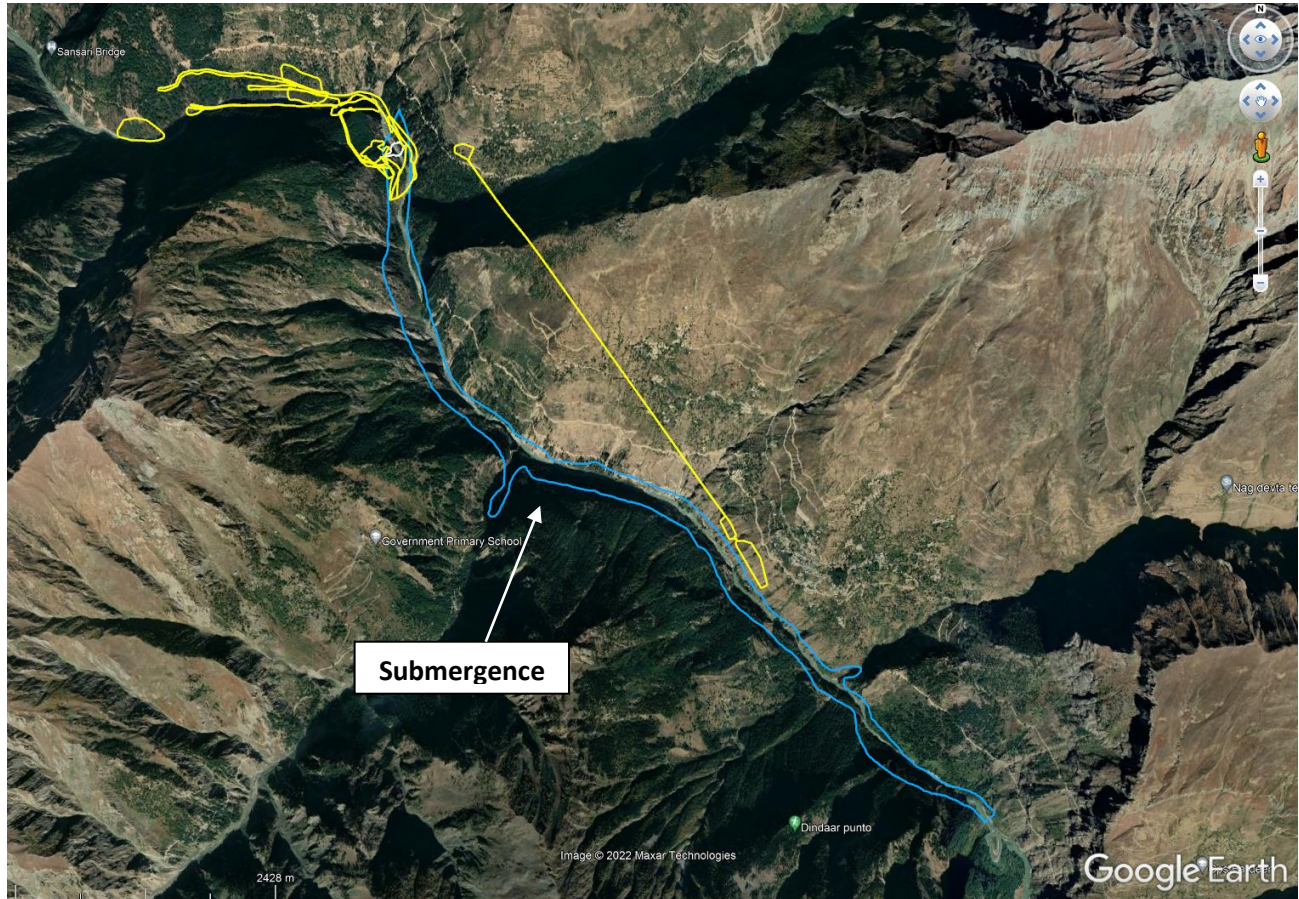
Copy to: -

1. The PCCF (HoFF), Government of Himachal Pradesh, Shimla.
2. The Regional Officer, MoEF&CC, Integrated Regional Office, Shimla.
3. The APCCF cum Nodal Officer (FCA), Forest Department, Government of Himachal Pradesh, Shimla.
4. User Agency.
5. Monitoring Cell, FC Division, MoEF & CC, New Delhi, for uploading.

Proposal: Diversion of 211.8427ha of forest land in favour of NHPC Ltd. for the construction of Dugar HE Project.

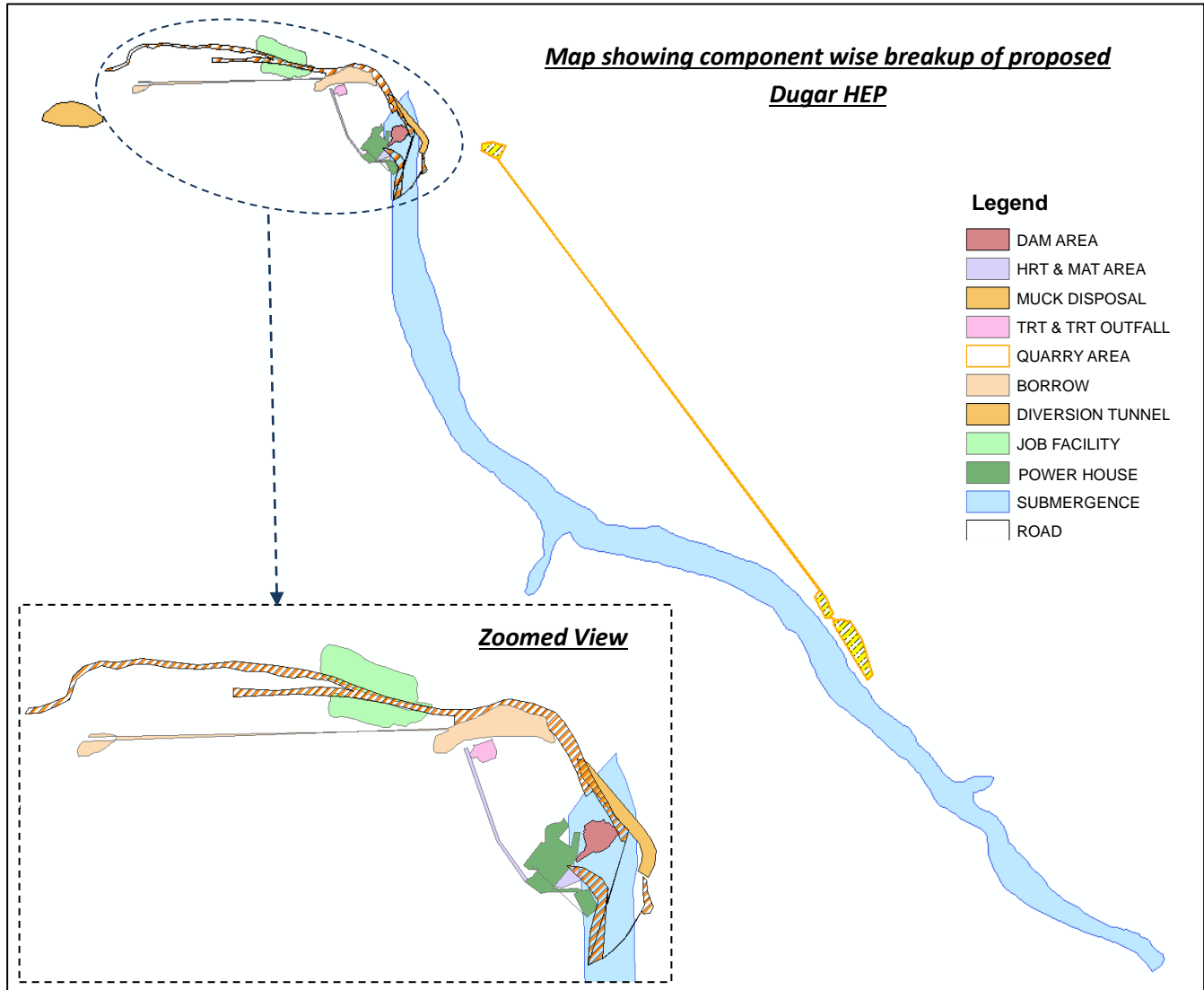
Analysis on Land under Diversion

- Proposed forest land for diversion falls under Chamba district of Himachal Pradesh State and its component wise area is given below:



Component wise breakup					
S.no	Component	Forest Land (ha.)	Non-Forest Land (ha.)	Software calculated area of KML file (ha)	Difference in the area (ha)
a	b	c	d	e	f=(c-e)
1	Submergence including River Area	160.45	0	238.6930	-78.2430
2	Dam	5.83	0	1.5697	4.2603
3	Approach Roads	8.168	0	12.2367	-4.0687
4	Quarry Area	8.625	0	6.0693	2.5557
5	Barrow Area	3.88	0	4.8704	-0.9904
6	Muck Dumping Area	8.5797	0	7.3765	1.2032
7	Job Facility Area	7.08	0	2.2363	4.8437
8	Power House	3.64	0	4.6468	-1.0068
9	HRT	0.4	0	1.5044	-0.3044
13	MAT	0.8	0	0.6956	1.8544
10	TRT	1.81	0		
11	TRT Outfall	0.74	0		
12	Diversion Tunnel	1.84	0	3.0892	-1.2492

14	Construction Facility Area	0	6.62	0
15	Owner / Developer Colony including Permanent & tem	0	1.98	0
16	Owners Office	0	0.18	0
Total		211.8427	8.78	282.9878	



- The software calculated area of the KML file of Dugar HEP is found **282.9878 ha** whereas actual area sought for diversion is **211.8427 ha**. Hence, there is a discrepancy of **71.1451 ha** in the KML file uploaded in PARIVESH.
- Overlapping has been found between many components of Dugar HEP. Therefore, revised KML file is required.
- No Protected Area/ Tiger Reserve/Tiger Corridor is located within 10 km radius of the proposed site.
- Proposed area for diversion falls in **High Conservation Value(HCV) Zone** based on Decision Rule 1 (due to hydrological rule) and **not in High Conservation Value(HCV) Zone** based on Decision Rule 2.
- Forest cover: out of total forest area proposed for diversion, 10 ha of land is classified as very dense forest, 88 ha as moderately dense forest, 72 ha as open forest, 69 ha as water and remaining 48 ha of land as Non-Forest (land without tree cover) in terms of forest classes (as per the ISFR 2019) based on the interpretation of satellite data period 2017-2018.

Decision Rule no. 1:

Whether forms part of:

- I. Hydrological Layer:
 - a. Major River: Yes (Chenab)
 - b. Wetland (Area more than 10 ha.):N/A
 - c. Water bodies (irrigation/Hydropower/water storage):N/A
- II. Very Dense Forest patch (>1 sq km): N/A
- III. Remnant Forest Type:N/A
- IV. Protected area/Tiger Reserves/Tiger corridors: N/A
- V. Wild life Species: N/A

Decision Rule no.2: (analysis is carried out using Without 50% rule for Grid selection)



DESCRIPTION	RESULT
Total Number of Grids	26
Total no. of (1 Km X 1 Km)Grids having total score above 70	1
Final Status (based on 4 parameters)	Not in High Conservation Value zone

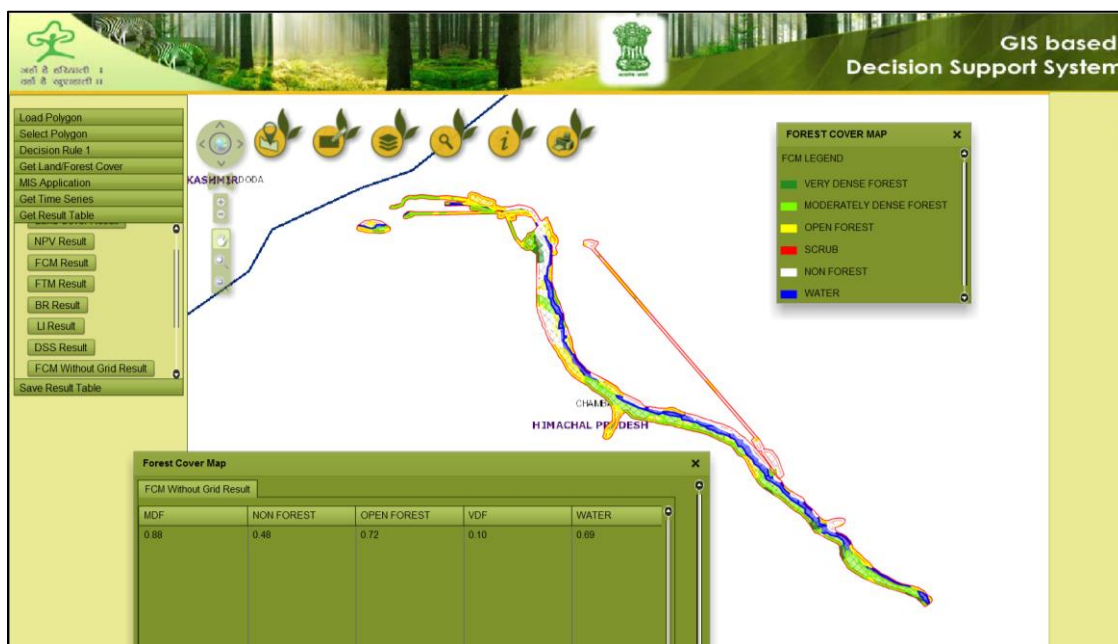
GRIDID	SCORE CM	SCORE FTM	SCORE BR	SCORE LANDSCAPE	AGGREGATE SCORE
203951	65.86	78.02	83.67	39.32	66.72
201392	19.18	9.2	46.84	48.01	30.81
201390	55.44	45.51	61.76	49.74	53.11
201391	44.34	43.19	47.82	49.03	46.1
201389	46.75	24.07	76.14	52.63	49.9
201904	48.81	50.14	73.37	46.84	54.79
201903	63.6	82.25	87.04	47.44	70.08
201901	57.1	60.13	84.89	47.82	62.48
201905	27.91	21.88	35.2	43.47	32.12

202415	45.05	51.02	61.69	45.23	50.75
202416	45.19	47.63	70.3	41.88	51.25
202928	13.15	6.07	12.14	40.77	18.03
202927	45.38	47.55	61.7	42.75	49.34
202929	3.94	0	4.84	37.23	11.5
203439	52.73	68.78	87.04	41.19	62.43
203440	42.36	50.36	45.04	40.2	44.49
203442	20.7	0	0	38.47	14.79
203441	21.76	9.51	5.37	39.57	19.05
203952	21.27	20.55	25.59	38.71	26.53
203950	55.37	76.03	87.04	39.67	64.53
204459	20.45	6.96	1.33	35.32	16.01
204458	52.51	45.77	53.67	36.53	47.12
204965	66.61	59.15	66.43	35.65	56.96
204966	49.74	40.42	1.31	33.86	31.33
205470	60.48	68.44	68.01	36.46	58.35
205469	59.27	81.69	87.05	36.1	66.03

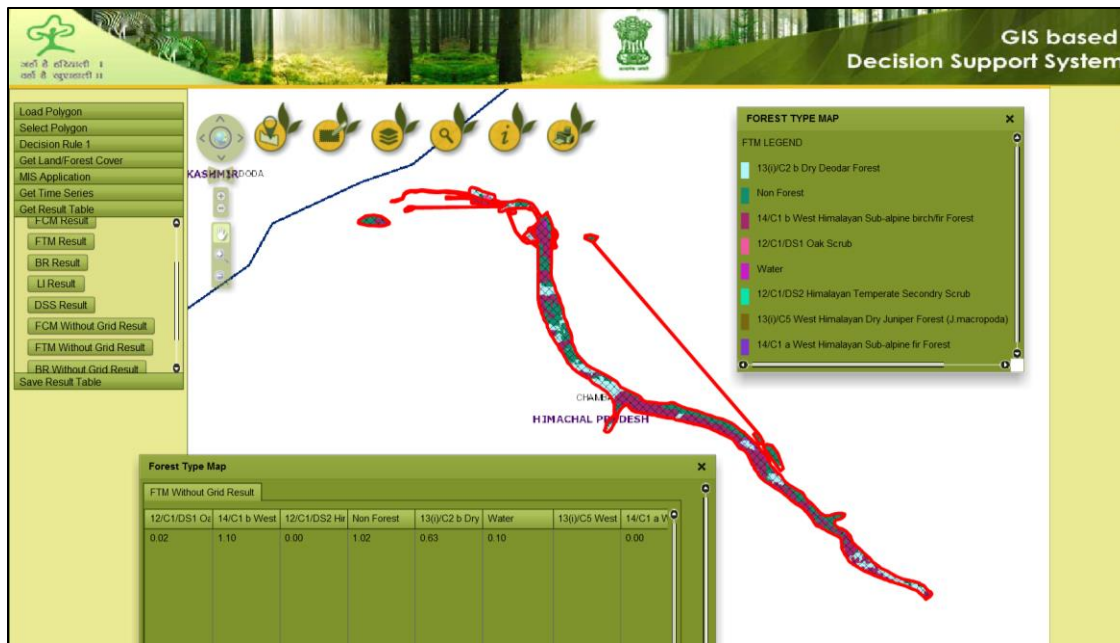
Forest Cover:

In terms of standards followed in ISFR 2019 (interpretation of satellite data period 2017-2018) regarding forest density classes:

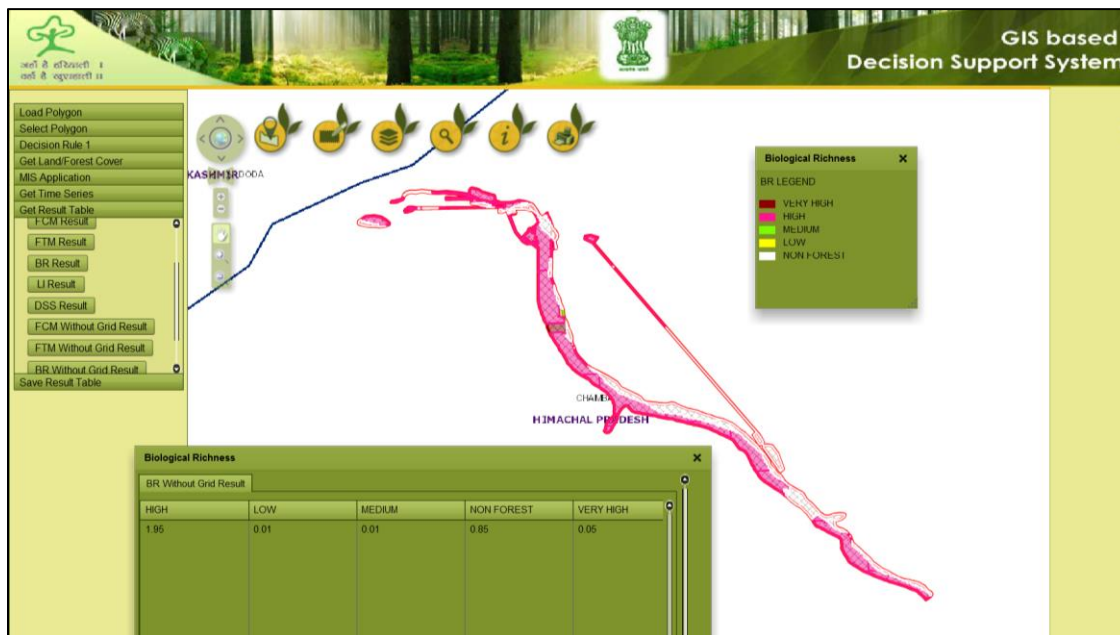
- I. Very Dense Forest (Canopy density 70% & above): 10 ha.
- II. Moderately dense Forest (canopy density 40-70%): 88 ha.
- III. Open Forest (canopy density 10-40%): 72 ha.
- IV. Water: 69 ha.
- V. Non-Forest: 48 ha.



Forest Type: 12/C1/DS2 Oak Scrub: 2 ha, 14/C1b West Himalayan Sub-alpine birch/fir Forest: 110 ha, 13(i)/C2 b Dry Deodar Forest: 63 ha, Water: 10 ha & Non-Forest: 102 ha.



Biological richness: Very High: 5 ha, High: 195 ha, Medium: 1 ha, Low: 1 ha & Non-Forest: 85 ha

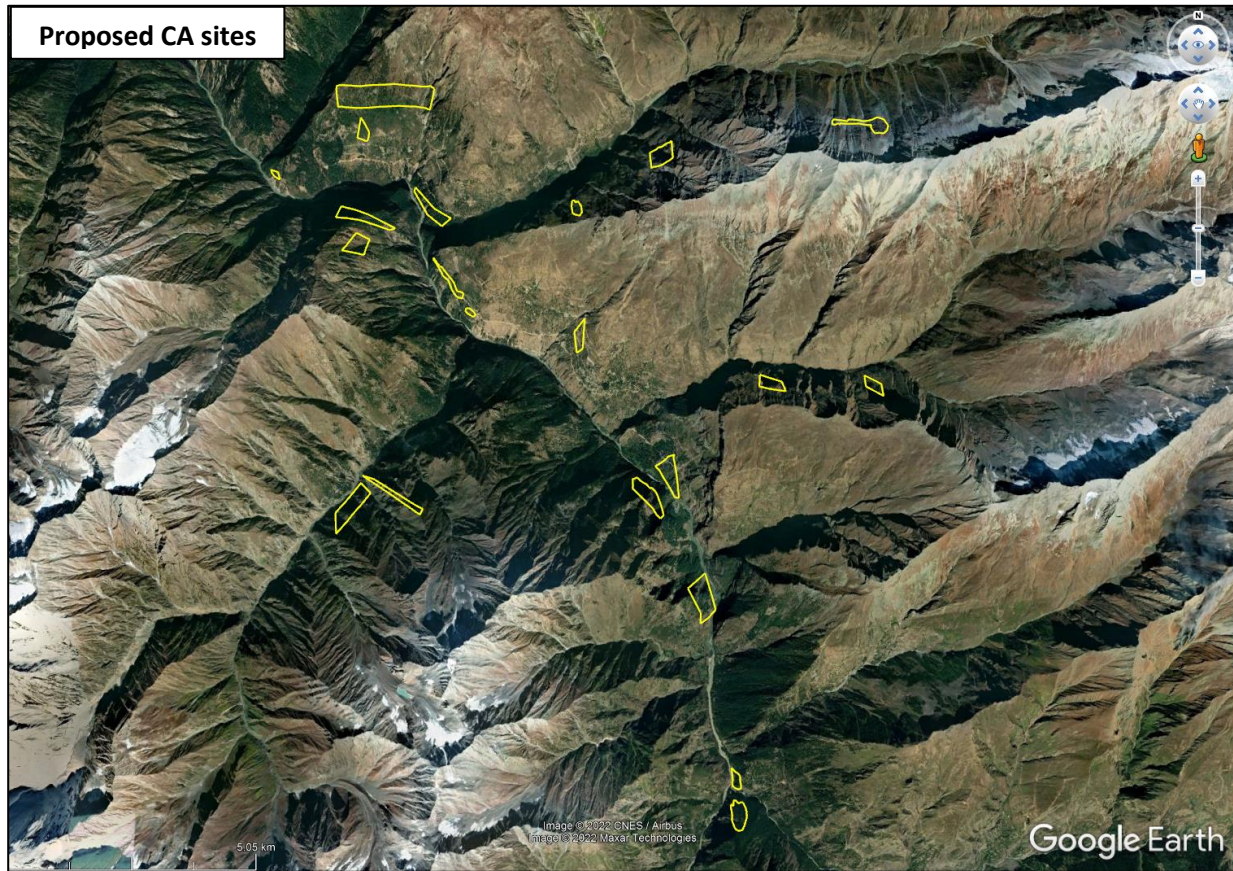


Compensatory Afforestation (CA) Land

1. Proposed CA land is double in extent to the forest land being diverted. All the proposed CA sites are located in Chamba district of Himachal Pradesh State.
2. All the CA sites are proposed on sloped surface. Road is passing through some of the proposed CA sites and settlement is visible in CA site namely "Killar dhar".
3. Forest density classes of proposed CA sites (based on interpretation of satellite data period 2017-18) as per ISFR 2019, are as follows:

S.No.	Name	Given area (ha)	Software calculated area (ha)	VDF	MDF	OF	SCRUB	WATER	NON-FOREST
1	Killar dhar	11.06	11.063	0	0	1	0	0	10
2	Shinkal Dhar 1	22.35	13.402	0	0	11	0	0	2

3	Shinkal Dhar 2		9.000	0	0	9	0	0	0
4	Rogy	52.59	25.632	0	1	18	0	2	5
5	Chhatwani		26.869	1	16	9	0	0	1
6	Sidh Ka Dera	38.98	38.941	9	20	0	0	0	10
7	Chilkot 1	43.265	15.864	0	5	2	0	0	9
8	Chilkot 2		27.241	0	8	17	0	0	2
9	Shelli 1	12.11	9.453	0	3	2	0	0	5
10	Shelli 2		2.643	0	0	3	0	0	0
11	Kanun	20.1	20.130	0	7	11	0	0	2
12	Rusmus Sural	21.28	21.265	0	0	0	0	0	21
13	Bishtow	99.13	7.294	0	0	2	0	0	6
14	Mehrote		89.616	0	0	41	0	0	49
15	Sansari		2.115	0	0	2	0	0	0
16	Pinchho	27.16	20.421	0	0	14	0	0	6
17	Urnu		6.753	0	0	7	0	0	0
18	Sach Chauri 2	22.842	15.909	6	0	10	0	0	0
19	Sach Chauri 1		6.904	0	2	1	0	2	2
20	Chanchalperi	15.377	15.651	0	1	6	0	0	8
21	Bindrabani	37.44	37.345	0	19	10	0	0	8
TOTAL		423.684	423.509	16	82	176	0	4	146



Submitted for your kind consideration.

Shivani Sood
 STA, DSS Cell
 8.07.2022