

CHECK LIST NO- 16

Full Title of Project: - Construction of Small Hydel Project Kandha (0.40 MW).

File No :-FP/HP/HYD/148892/2021

LOCATION MAP

Location Map of Non Forest / Degraded Forest land identified for Compensatory Afforestation in 1.48 ha in lieu of proposal for diversion of 0.74 hac. of forest land for construction of Small Hydel Project Kandha (0.40 MW) under Pangna Forest Range, Karsog Forest Division as under:

Type of land : Degraded Forest Land Name of Muhal : Kot-Kapadyas


Tehsil : Karsog District : Mandi

Forest Range : Pangna Forest Division : Karsog

Block No./ Compartment/No./ Survey No. : H43F3

Area proposed for planting :: 1.48 ha. .

Map attached of the area to be taken for compensatory afforestation


**Divisional Forest Officer,
Karsog Forest Division,HP.**

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"SCHEME FOR COMPENSATORY AFFORESTATION"

Detailed scheme for Compensatory Afforestation to be carried-out in lieu of 0.74 ha. forest area to be diverted for construction of Small Hydel Project Kandha (0.40MW), in Tehsil Karsog, Distt. Mandi, HP in jurisdiction of Karsog Forest Division in Distt. Mandi HP is given as under:-

1. Detail of degraded forest land/ non-forest land:-

Distt.:- Mandi

Village:-Kapadyas

Tehsil Karsog,

Distt. Mandi, HP

Name of Forest Division:-Karsog Forest Division

Name of Range: Pangna

Type of forest land proposed for CA:- Degraded forest land

Name of planting area:- D-76 Kapadyas (Patch No. 6)

Block/ Compartment/ Survey No.:- H43F3

Area proposed for CA:- 1.48 ha.

2. Description of area

I) Whether the site selected for compensatory Afforestation is a land bank or not: **No, (Degraded forest land).**

II) If CA site is other than the land bank, reasons be given: **Yes (Degraded forest land)**

III) In case of non-forest area identified for CA, then what is the distance of CA site from the adjoining forest boundary: **NA**

IV) Soil type: **Sandy loam**

V) Topography:

(a) Hilly/undulation/Plain: **Hilly**

(b) Slope : **Steep/ Medium/ Gentle : Medium to Gentle**

VI) Whether the area is bearing any root stock of vegetation: No tree species exist in the area expect for some bushes stuff.

3. Plantation Model:-

Copy of the approved Compensatory Afforestation Scheme/ Model showing component-wise physical and financial break-up to be enclosed.

4. Schedule of Plantation Programme:-

GENERAL ABSTRACT OF COMPENSATORY AFFORESTATION AN AREA OF 1.48 HA. FOREST LAND IN FAVOUR OF SHRI MOHAN SINGH NEGI MANAGING DIRECTOR BHAGWATI HYDRO POWER PROJECT (OPC) PVT. LTD. VILLAGE MUMAIL PO & TEHSIL KARSOG DISTT. MANDI HP IN LIEU OF DIVERSION OF 0.74 HA. FOREST LAND FOR CONSTRUCTION OF SMALL HYDEL PROJECT AT KANDHA, WITHIN THE JURISDEICTION OF KARSOG FOREST DIVISION, DISTRICT MANDI, H.P.							
C A BILL							
Sr. No.	Particulars	Area in ha.	Year	Rate per hac.	Cost escalation	Rate after applying cost of escalation	Amount
1	New plantation over in area of 1.48 ha. in D-76 Kapadyas forest (Patch No. 6)	1.48	2023-24	109000	10%	119900	177452
2	1st year maintenance	1.48	2024-25	16700	20%	20040	29659
3	2nd year maintenance	1.48	2025-26	11200	30%	14560	21549
4	3rd year maintenance	1.48	2026-27	5700	40%	7980	11810
5	4th year maintenance	1.48	2027-28	5700	50%	8550	12654
6	5th year maintenance	1.48	2028-29	5700	60%	9120	13498
7	6th year maintenance	1.48	2029-30	5700	70%	9690	14341
8	7th year maintenance	1.48	2030-31	5700	80%	10260	15185
9	8th year maintenance	1.48	2031-32	5700	90%	10830	16028
10	9th year maintenance	1.48	2032-33	5700	100%	11400	16872
11	10th year maintenance	1.48	2033-34	5700	110%	11970	17716
Total initial planting and 10 year maintenance:-							346764
Added Departmental Charges @17.5%							60684
Contingency Charges @5%							17338
Grand Total							424786

5. Technical Details: -

- i) **General Details:-** Plantation will be done through Pit method as per plantation norms.
- ii) **Spa cement:-** Pits size 90x90x90 cm will be used for planting of 60% naked root stock and 40% of P/Bags stock.
- iii) **Species:-** Based on locality factor and demand of people.
- iv) **Plantation Method:-** Pit planting method.
- v) **Soil and Moisture Conservation Works:-** Contour trenching will be done over the entire area to conserve the available moisture during rainy season so that moisture regime in the area is improved. Minor Soil conservation works like gully plugging, check walls will be done wherever required.
- vi) **Protection (Fencing, Watch man, People's Participation etc.): -** B/wire fencing using concrete fence posts.
- vii) **Proposed Monitoring Mechanism:-** The plantation will be monitored as per existing monitoring mechanism in the forest department. The plantation will also be monitored by GOI representatives as per instructions. The plantation site will be approachable from NH – 21 Shimla- Karsog road from Mahota.
- viii) **Any other information:-** Nil

Date: 22.02.2022

Place: Karsog


(Krishan Bhag) HPFS
Division Forest Officer
Karsog Forest Division
Karsog (H.P.) - 171304

SITE SPECIFIC COMPENSATORY AFFORESTATION SCHEME FOR THE DIVERSION OF FOREST LAND 0.74 HAC. FOREST LAND FOR THE CONSTRUCTION OF SMALL HYDEL PROJECT (0.40 MW) UNDER KARSOG FOREST DIVISION DISTRICT MANDI HIMACHAL PRADESH COST ANALYSIS OF PLANTATION OVER AN AREA OF 1 HACTORS OF KARSOG FOREST DIVISION (Per ha. cost norms, 1100 Nos. plants

I	Name of Project	Construction of Small Hydel Project Kandha (0.40 MW)				
II	Name of User Agency	Bhagwati Hydro Power Project (OPC) Pvt. Ltd. village Mumail PO & Tehsil Karsog, Distt. Mandi, HP.				
III	Location for Compensatory Afforestation	List attached				
IV	Type of fencing	Barbad Wire with RCC Fence				
Sr No	Particulars of work	Total KM	Quantity	Unit	Rate in Rs.	Amount
FENCING						
1	Survey and demarcation of plantation area		1	Hac.	202	202.00
2	Preparation/ purchase of RCC Fence post (including GST @18%)		50	Nos.	358	17900
3	Carriage of RCC fence post up to 165cm long over distance 2 Km uphill/ downhill	2	50	Nos.	67	6700
4	Preparation of digging of holes 20x30x50 cm size		50	Nos.	18.12	906.0
5	Fixing of RCC fence posts including strutting		50	Nos.	14.32	716
6	Carriage of Barbed wire over distance 2 Km	2	0.75	Qtls.	147.25	220.9
7	Stretching and fixing Barbed Wire in 4 stands		600	Rmt.	9.6	5760
8	Interlacing of thorny bushes along the fence		150	Rmt.	8.18	1227.00
9	Cost of Barbed Wire (including GST)		0.75	Qtls.	6509	4882
Total-A/Survey, Demarcation & Fencing						38513.63
Or Say						38500
PLANTING						
1	Bush cutting in strips (3mx3m)		1	Hac.	2385.6	2385.60
2	Digging of pits 45x45x45 cm		1100	Nos.	19.08	20988
3	Filling of pits 45x45xx45 cm		1100	Nos.	5.44	5984
4	Carriage of plants in P/bags over distance 2 Km uphill/ downhill	2	1100	Nos.	3.8	8360
5	Planting of entire plant raised in P/Bags		1100	Nos.	4.36	4796
6	Construction of inspection path 60 cm width.		100	Rmt.	22	2200.00
7	Cost of sign board, carriage & fixing etc.		L/S		450	450
8	Nursery cost of plants		1100	Nos.	23	25300
Total-B/Planting:-						70464

					Or Say	70500
					Grand Total(A+B)	109000
1st YEAR MAINTENANCE (30% BEATING UP)						
1	Re-digging of pits 45x45x45 cm		330	Nos.	9.54	3148.2
2	Filling of pits 45x45x45 cm		330	Nos.	5.44	1795.2
3	Planting of P. bag plants		330	Nos.	4.36	1438.8
4	Carriage P. Bag plants distance 2 Km uphill/ downhill	2	330	Nos.	3.8	2508
5	Repair of fencing		60	Rmt.	3.6	216
6	Nursery cost of plants		330	Nos.	23	7590
Total/1st Year Maintenance:						16696.2
					Or Say	16700
2nd YEAR MAINTENANCE (20% BEATING UP)						
1	Re-digging of pits 45x45x45 cm		220	Nos.	9.54	2098.8
2	Filling of pits 45x45x45 cm		220	Nos.	5.44	1196.8
3	Planting of P. bag plants		220	Nos.	4.36	959.2
4	Carriage P. Bag plants distance 2 Km uphill	2	220	Nos.	3.8	1672
5	Repair of fencing		60	Rmt.	3.6	216
6	Nursery cost of plants		220	Nos.	23	5060
Total/2nd Year Maintenance:						11203
					Or Say	11200
3rd YEAR to 10th YEAR MAINTENANCE (10% BEATING UP)						
1	Re-digging of pits 45x45x45 cm		110	Nos.	9.54	1049.4
2	Filling of pits 45x45x45 cm		110	Nos.	5.44	598.4
3	Planting of P. bag plants		110	Nos.	4.36	479.6
4	Carriage P. Bag plants distance 2 Km uphill	2	110	Nos.	3.8	836
5	Repair of fencing		60	Rmt.	3.6	216
6	Nursery cost of plants		110	Nos.	23	2530
Total						5709
					Or Say	5700

Divisional Forest Officer,
Karsog Forest Division, HP.