

Full Title of the project:- C/o Gravity Zip Ropeway From Nag Devta to Kufri Fun Campus

File. No. \_\_\_\_\_

Date of Proposal- \_\_\_\_\_

**CHECK LIST SERIAL NUMBER 17**  
**“SCHEME FOR COMPENSATORY AFFORESTATION”**

Detailed scheme for 0.72 hectare area for Compensatory Afforestation to be carried out in lieu of diversion of 00-48-67 forest land for C/o Gravity Zip Ropeway From Nag Devta to Kufri Fun Campus.

**1. Detail of degraded forest land/ Non- Forest land**

Village	Kuinal
Tehsil	Theog
District	Shimla, H.P.
Forest Division	Theog Forest Division
Forest Range	Theog
Block No./Compartment No./Survey No	U-86 Sholvi, Chadara Beat, Matiana Block, Theog Range , Theog Division Survey-53 E/8NE
Area to be afforested	0.7 ha

**2. Description of the Area**

i)	Whether the site selected for Compensatory Afforestation is a land bank or not	No, the area selected is a degraded forest land patch
ii)	If the CA site is other than the land bank, reasons be given	CA has been proposed in 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	Clayey loam.
v)	Topography a) Hilly / Undulating /Plain b) Slope: Steep/Medium/Gentle	a)Undulating b) Medium
vi)	Whether the area is bearing any root stock of vegetation.	No

**3. Plantation Model**

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

Sr. No.	Particulars of work	Unit	Quantity	Rate per unit at the wage rate of 350	Rate
<b>Survey, Démarkation &amp; Fencing</b>					
1	Survey, Demarkation & Fencing	Hec	0.7	235.66	164.962
2	Cost of RCC poles and planting	No.	36	600	21600
3	Cost of carriage of RCC Poles upto 2 ks uphill/downhill	No.	36	78.17	2814.12
4	Preparation/Digging of holes of 20x30x50 cm size for fixing of fence	No.	36	21.14	761.04
5	Fixing of RCC fence posts in concrete i/c structure	No.	36	16.71	601.56
6	Carriage of B/wire from store to to nearest road head near plantation site in motor transport (average carriage 10 kms)	Qntl	0.63	700	441
7	Carriage of B/wire manually over a distance of 2 kms uphill/downhill from road side to plantation site	Per Km per Qntl	0.63	171.85	108.2655
8	Streaching and fixing of b/wire in four strands	Rmt	504	11.2	5644.8
9	Interlacing of thorny bushes along the fence	Rmt	126	9.53	1200.78
10	Cost of procurement of B/wire	Qntl	0.63	12128	7640.64
<b>Total A/Survey, Demarcation &amp; Fencing</b>					<b>40977.1675</b>
<b>Or Say</b>					<b>40977</b>
<b>B. Planting</b>					
1	Clearing the site of weeds/Bush cutting in strips of 1 to 2 mtr wide	Hec	0.7	2783.13	1948.191
2	Digging of pits 90 x 90 x 90 cm	No.	36	145.54	5239.44
3	Filling of pits 90 x 90 x 90 cm	No.	36	12.39	446.04
4	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 10 kms)	No.	36	30	1080

5	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill manually	No.	36	55	1980
6	Addition of fertilizers/FYM to plantation pits	No.	36	20	720
7	Plantation of tall plants in pits i/c ramming	No.	36	15.31	551.16
8	C/o inspection path 60 cm wide	Rmt	70	25.67	1796.9
9	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	36	78	2808
10	De-weeding and hoeing twice a year	No.	36	19.09	687.24
11	Watering the plants during the months of strees	No.	36	15	540
12	Plantation display boards (depicting the name of name of the compensatory of the compensatory plantation, total number of plants, species planted and the name of all the proposals with corresponding number of plants planted against each, for which the land was diverted)	No.	1	2500	2500
<b>Total planting</b>					<b>20296.971</b>
<b>Total (A +B)</b>					<b>20297</b>
<b>Cost escalation @ 10%</b>					<b>2030</b>
<b>Total Fencing and plantation (A +B+Cost escalation)</b>					<b>22327</b>
<b>Maintenance</b>					
<b>1st year maintenance (10% beating up to failure)</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	4	87.3	349.2
2	Filling of pits 90 x 90 x 90 cm	No.	4	12.39	49.56
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 10 kms)	No.	4	30	120
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	4	55	220
5	Plantation of tall plants in pits i/c ramming	No.	4	15.31	61.24



	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	4	78	312
6		Rmt	50	4.2	210
7	Repair of fencing				
<b>Total</b>					<b>1322</b>
<b>Or Say</b>					<b>1322</b>
<b>Cost escalation @ 20%</b>					<b>264</b>
<b>Total 1st year maintenance</b>					<b>1586</b>
<b>2nd year maintenance(5% beating up of failures)</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	2	87.3	174.6
2	Filling of pits 90 x 90 x 90 cm	No.	2	12.39	24.78
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	2	30	60
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	2	55	110
5	Plantation of tall plants in pits i/c ramming	No.	2	15.31	30.62
6	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	2	78	156
7	Repair of fencing	Rmt	50	4.2	210
<b>Total</b>					<b>766</b>
<b>Or say</b>					<b>766</b>
<b>Cost escalation @ 30%</b>					<b>230</b>
<b>Total 2nd year maintenance</b>					<b>996</b>
<b>3rd year maintenance (5 % beating up of failures)</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	2	87.3	174.6
2	Filling of pits 90 x 90 x 90 cm	No.	2	12.39	24.78
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	2	30	60
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	2	55	110
5	Plantation of tall plants in pits i/c ramming	No.	2	15.31	30.62

	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	2	78	156
7	Repair of fencing	Rmt	50	4.2	210
<b>Total</b>					<b>766</b>
<b>Or say</b>					<b>766</b>
<b>Cost escalation @ 40%</b>					<b>306</b>
<b>Total 3rd year Maintenance</b>					<b>1072</b>
<b>4th year maintenance (3 % beating up of failures)</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	1	87.3	87.3
2	Filling of pits 90 x 90 x 90 cm	No.	1	12.39	12.39
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	1	30	30
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	1	55	55
5	Plantation of tall plants in pits i/c ramming	No.	1	15.31	15.31
6	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	1	78	78
7	Repair of fencing	Rmt	50	4.2	210
<b>Total</b>					<b>488</b>
<b>Or say</b>					<b>488</b>
<b>Cost escalation @ 50%</b>					<b>244</b>
<b>Total 4th year Maintenance</b>					<b>732</b>
<b>5th year maintenance (3% beating up of failure)</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	1	87.3	87.3
2	Filling of pits 90 x 90 x 90 cm	No.	1	12.39	12.39
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	1	30	30
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	1	55	55
5	Plantation of tall plants in pits i/c ramming	No.	1	15.31	15.31



6	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	1	78	78
7	Repair of fencing	Rmt	50	4.2	210
<b>Total 5th year Maintenance</b>					<b>488</b>
<b>Or say</b>					<b>488</b>
<b>Cost escalation @ 60%</b>					<b>293</b>
<b>Total 5th year Maintenance</b>					<b>781</b>
<b>6th year maintenance (2% beating up of failure)</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	1	87.3	87.3
2	Filling of pits 90 x 90 x 90 cm	No.	1	12.39	12.39
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	1	30	30
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	1	55	55
5	Plantation of tall plants in pits i/c ramming	No.	1	15.31	15.31
6	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	1	78	78
7	Repair of fencing	Rmt	50	4.2	210
<b>Total</b>					<b>488</b>
<b>Or say</b>					<b>488</b>
<b>Cost escalation @ 70%</b>					<b>342</b>
<b>Total 6th year Maintenance</b>					<b>830</b>
<b>7th year maintenance (2% beating up of failure)</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	1	87.3	87.3
2	Filling of pits 90 x 90 x 90 cm	No.	1	12.39	12.39
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	1	30	30
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	1	55	55
5	Plantation of tall plants in pits i/c ramming	No.	1	15.31	15.31

6	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	1	78	78
7	Repair of fencing	Rmt	50	4.2	210
<b>Total</b>					<b>488</b>
<b>Or say</b>					<b>488</b>
<b>Cost escalation @ 80%</b>					<b>390</b>
<b>Total 7th year Maintenance</b>					<b>878</b>
<b>8th year maintenance 2% beating up of failure</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	1	87.3	87.3
2	Filling of pits 90 x 90 x 90 cm	No.	1	12.39	12.39
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	1	30	30
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	1	55	55
5	Plantation of tall plants in pits i/c ramming	No.	1	15.31	15.31
6	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	1	78	78
7	Repair of fencing	Rmt	50	4.2	210
<b>Total</b>					<b>488</b>
<b>Or say</b>					<b>488</b>
<b>Cost escalation @ 90%</b>					<b>439</b>
<b>Total 8th year Maintenance</b>					<b>927</b>
<b>9th year maintenance (2% beating up of failure)</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	1	87.3	87.3
2	Filling of pits 90 x 90 x 90 cm	No.	1	12.39	12.39
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	1	30	30
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	1	55	55
5	Plantation of tall plants in pits i/c ramming	No.	1	15.31	15.31

6	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	1	78	78
7	Repair of fencing	Rmt	50	4.2	210
<b>Total</b>					<b>488</b>
<b>Or say</b>					<b>488</b>
<b>Cost escalation @ 100%</b>					<b>488</b>
<b>Total 9th year Maintenance</b>					<b>976</b>
<b>10th year maintenance 2% beating up of failure</b>					
1	Re-digging of pits 90 x 90 x 90 cms	No.	1	87.3	87.3
2	Filling of pits 90 x 90 x 90 cm	No.	1	12.39	12.39
3	Carriage of poly plants from nursery to nearest road head near plantation site in motor transport (average distance 15 kms)	No.	1	30	30
4	Carriage of plants in Poly bags (18"x24") from road side to plantation site over a distance of 2 kms uphill/downhill	No.	1	55	55
5	Plantation of tall plants in pits i/c ramming	No.	1	15.31	15.31
6	Cost of tall plants raised in departmental nurseries (3 year old in 18" x 24" bags)	No.	1	78	78
7	Repair of fencing	Rmt	50	4.2	210
<b>Total 10th year Maintenance</b>					<b>488</b>
<b>Or say</b>					<b>488</b>
<b>Cost escalation @ 110%</b>					<b>537</b>
<b>Total 10th year Maintenance</b>					<b>1025</b>
<b>C</b>	<b>Total maintenance cost of 10 years</b>				<b>9803</b>
<b>D</b>	<b>Total new + maintenance D=A+B+C</b>				<b>32130</b>
<b>E</b>	<b>Contegency 5% of all above</b>				<b>1607</b>
	<b>Total Plantation + Contigency (D+E)</b>				<b>33737</b>
<b>F</b>	<b>Departmental charges (17.5% of D+E)</b>				<b>5904</b>
					<b>39641</b>
	<b>Amount to be deposited in CAMPA</b>				<b>33737</b>
	<b>Amount to be deposited in 8782 forest remittance</b>				<b>5904</b>

  
**D.F.O.**  
**Theog**



## 5. Technical Details:

Technical details of Compensatory Afforestation Scheme are as follows:

- a) General Details: An area of 0.7 hectare will be taken up for planting under Compensatory Afforestation scheme in U-86 Sholvi, Chadara Beat, Matiana Block, Theog Range, Theog Division. The area will be protected by RCC, Fence Post with four strands of Barbed wire fencing and a mixture of conifer and broad leaved species will be planted @ of 500 tall plants per hectare.
- b) Spacement 3 mtrx3 mtr.
- c) Species: Cedrus deodara, Easculus indica, Juglans regia, Alnus nitida, Robinia Pseudoacacia, Punus roxbueghi, etc.
- d) Plantation Method: Nursery grown 3.5 year old pants (in Polythene bags) will be planted in 60x60x60cm pits/patches in the selected area. Bush cutting will be done in the infested area. The plantation will be maintained for subsequent ten years in which betting up of failures will be done. The plantation will be rain-fed.
- e) Soil and Moisture Conservation works.
- f) Protection(Fencing, Watch man, People's Participation etc.): Area will be protected from grazing by erecting RCC fence Post with barbed wire fencing at all vulnerable places around the plantation. Further watch and ward as also fire protection will be ensured through regular departmental staff.
- g) 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 Theog, Matiana Kotighat road. )
- h) Any other information: Nil

Dated: 26.12.2022  
Place: Theog.

Sheetal Sharma, HVES  
Divisional Forest Officer,  
Theog Forest Division, Theog