

### CHECK LIST NO. 18

Full Title of Project: - Diversion of 1.61 ha. Forest Land in favour of HPPWD for the Construction of Sanoti to Dhawas road within the jurisdiction of Karsog Forest Division, Distt. Mandi HP.

**File No** :- **FP/HP/ROAD/22377/2016**

### "SCHEME FOR COMPENSATORY AFFORESTATION"

Detailed scheme for 3.22 ha. area for Compensatory Afforestation and its maintenance for 10 years to be carried-out in lieu of diversion of 1.61 ha. forest land for the construction of Sanoti to Dhawas road, 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 : Jhunjan

Tehsil: Karsog

Distt.: Mandi, HP

Name of Forest Division:-Karsog Range: Seri

Block/ Compartment/ Survey No. H43F7

Area to be afforested: 3.22 hac.

2. Description of area:-

- I) Whether the site selected for Penal compensatory Afforestation is a land bank or not:  
Yes.
- II) If CA site is other than the land bank, reasons be given: NA
- 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:-**

**DETAIL OF YEAR-WISE BREAK UP OF REQUIREMENTS OF FUNDS IS AS PER GENERAL ABSTRACT GIVEN BELOW:-**

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 3.22 ha. Over in D-214 Jhunjan	3.22	2020-21	100400	10%	110440	355617
2	1st year maintenance	3.22	2021-22	14900	20%	17880	57574
3	2nd year maintenance	3.22	2022-23	10000	30%	13000	41860
4	3rd year maintenance	3.22	2023-24	5100	40%	7140	22991
5	4th year maintenance	3.22	2024-25	5100	50%	7650	24633
6	5th year maintenance	3.22	2025-26	5100	60%	8160	26275
7	6th year maintenance	3.22	2026-27	5100	70%	8670	27917
8	7th year maintenance	3.22	2027-28	5100	80%	9180	29560
9	8th year maintenance	3.22	2028-29	5100	90%	9690	31202
10	9th year maintenance	3.22	2029-30	5100	100%	10200	32844
11	10th year maintenance	3.22	2030-31	5100	110%	10710	34486
Total initial planting and 10 year maintenance:-							684959
12	Vegitative, Dry Stone, Brushwood Check Dam	3.22		35000	10%	38500	123970
Total initial planting alongwith its 10 year maintenance & soil conservation works:-							808929
Added Departmental Charges @17.5%							141563
Contingency Charges @5%							40446
Grand Total							990938


**5. Technical Details: -**

- i) **General Details:-** An area of 3.22 hac. will be taken up for planting under compensatory scheme in D-214 Jhunjan forest. The area will be protected by Barbed wire be fencing and a mixture of Conifer and B/L species will be planted. 1100 plants will be planted in all in 1.00 hac @ 1100 plants per hac. (Mixture of plant shrubs and grasses).
- ii) **Spacing:-** 3mtr x 3mtr.
- iii) **Species:-** Pine, Robinia, Shisham, Daroo etc.

- iv) **Plantation Method:** - Nursery grown one year old plants (in Polythene bags as well as naked root) will be planted in 30x30x30cm. and 45x45x45cm pits in the selected area. Bush cutting will be done in the infested area. The plantation will be maintained for subsequent 10 years in which beater up of failures will be done. The plantation will be rain fed.
- 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.):** - Area will be protected from grazing by erecting 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.
- 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 from Karsog.
- viii) **Any other information:** - Nil

Date:

Place: Karsog

  
(R.K. Sharma) HPFS  
Divisional Forest Officer,  
Karsog Forest Division, H.P

### CHECK LIST NO. 18

Full Title of Project: - Diversion of 1.61 ha. Forest Land in favour of HPPWD for the Construction of Sanoti to Dhawas road within the jurisdiction of Karsog Forest Division, Distt. Mandi HP.

**File No** :- FP/HP/ROAD/22377/2016

### "SCHEME FOR PENAL COMPENSATORY AFFORESTATION"

Detailed scheme for 4 ha. area for Penal Compensatory Afforestation and its maintenance for 10 years to be carried-out in lieu of diversion of 1.61 ha. forest land for the construction of Sanoti to Dhawas road, 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: Jhunjan

Tehsil: Karsog                      Distt.: Mandi, HP

Name of Forest Division:-Karsog Range: Seri

Block/ Compartment/ Survey No. H43F7

Area to be afforested: 4 hac.

2. Description of area:-

- I) Whether the site selected for Penal compensatory Afforestation is a land bank or not:  
**Yes.**
- II) If CA site is other than the land bank, reasons be given: NA
- 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.

**5. Schedule of Plantation Programme:-**

**DETAIL OF YEAR-WISE BREAK UP OF REQUIREMENTS OF FUNDS IS AS PER GENERAL ABSTRACT GIVEN BELOW:-**

Penal 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 4 ha. Over in D-214 Jhunjan	4.00	2020-21	100400	10%	110440	441760
2	1st year maintenance	4.00	2021-22	14900	20%	17880	71520
3	2nd year maintenance	4.00	2022-23	10000	30%	13000	52000
4	3rd year maintenance	4.00	2023-24	5100	40%	7140	28560
5	4th year maintenance	4.00	2024-25	5100	50%	7650	30600
6	5th year maintenance	4.00	2025-26	5100	60%	8160	32640
7	6th year maintenance	4.00	2026-27	5100	70%	8670	34680
8	7th year maintenance	4.00	2027-28	5100	80%	9180	36720
9	8th year maintenance	4.00	2028-29	5100	90%	9690	38760
10	9th year maintenance	4.00	2029-30	5100	100%	10200	40800
11	10th year maintenance	4.00	2030-31	5100	110%	10710	42840
<b>Total initial planting and 10 year maintenance:-</b>							<b>850880</b>
12	Vegitative, Dry Stone, Brushwood Check Dam	4.00		35000	10%	38500	154000
<b>Total initial planting alongwith its 10 year maintenance &amp; soil conservation works:-</b>							<b>1004880</b>
<b>Added Departmental Charges @17.5%</b>							<b>175854</b>
<b>Contingency Charges @5%</b>							<b>50244</b>
<b>Grand Total</b>							<b>1230978</b>


**5. Technical Details: -**

- ii) **General Details:-** An area of 4 hac. will be taken up for planting under compensatory scheme in D-214 Jhunjan forest. The area will be protected by Barbed wire be fencing and a mixture of Conifer and B/L species will be planted. 1100 plants will be planted in all in 1.00 hac @ 1100 plants per hac. (Mixture of plant shrubs and grasses).
- ii) **Spacing:-** - 3mtr x 3mtr.

- ix) **Species:** - Pine, Robinia, Shisham, Darog etc.
- x) **Plantation Method:** - Nursery grown one year old plants (in Polythene bags as well as naked root) will be planted in 30x30x30cm. and 45x45x45cm pits in the selected area. Bush cutting will be done in the infested area. The plantation will be maintained for subsequent 10 years in which beater up of failures will be done. The plantation will be rain fed.
- xi) **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.
- xii) **Protection (Fencing, Watch man, People's Participation etc.):** - Area will be protected from grazing by erecting 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.
- xiii) **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 from Karsog.
- xiv) **Any other information:** - Nil

Date:

Place: Karsog

  
(R.K. Sharma) HPFS  
Divisional Forest Officer,  
Karsog Forest Division, H.P.

GENERAL ABSTRACT OF COMPENSATORY AFFORESTATION AN AREA OF 3.22 HA. FOREST LAND IN FAVOUR OF HPPWD IN LIEU OF DIVERSION OF FOREST LAND FOR CONSTRUCTION OF SANOTI TO DHAWAS ROAD UNDER 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 3.22 ha. Over in D-214 Jhunjan	3.22	2020-21	100400	10%	110440	355617
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Total initial planting alongwith its 10 year maintenance & soil conservation works:-							808929
Added Departmental Charges @17.5%							141563
Contingency Charges @5%							40446
Grand Total							990938

  
 Divisional Forest Officer,  
 Karsog Forest Division, HP.



GENERAL ABSTRACT OF COMPENSATORY AFFORESTATION AN AREA OF 4 HA. FOREST LAND IN FAVOUR OF HPPWD IN LIEU OF DIVERSION OF FOREST LAND FOR CONSTRUCTION OF SANOTI TO DHAWAS ROAD UNDER KARSOG FOREST DIVISION, DISTRICT MANDI, H.P.							
Penal 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 4 ha. Over in D-214 Jhunjan	4.00	2020-21	100400	10%	110440	441760
2	1st year maintenance	4.00	2021-22	14900	20%	17880	71520
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Total initial planting alongwith its 10 year maintenance & soil conservation works:-							1004880
Added Departmental Charges @17.5%							175854
Contingency Charges @5%							50244
Grand Total							1230978

Divisional Forest Officer,  
Karsog Forest Division,HP.



**SITE SPECIFIC COMPENSATORY AFFORESTATION SCHEME FOR THE DIVERSION OF 1.61 HAC. FOREST LAND IN LIEU OF DIVERSION OF FOREST LAND FOR CONSTRUCTION OF SANOTI TO DHAWAS ROAD IN FAVOUR OF HPPWD, WITHIN THE JURIDICITION OF 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	Diversion of 1.61 ha. forest land for construction of Sanoti to Dhawas road.				
II	Name of User Agency	HPPWD DIVISION KARSOG				
III	Area for Compensatory Afforestation (in ha.)	7.22 ha.				
IV	Location for Compensatory Afforestation	D-214 Jhunjan forest				
V	Type of fencing	Barbad Wire with RCC Fence				
Sr No	Particulars of work	Total KM	Quantity	Unit	Rate in Rs.	Amount
<b>FENCING</b>						
1	Survey and demarcation of plantation area		1	Hac.	184.25	184.25
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.	61.5	6150
4	Preparation of digging of holes 20x30x50 cm size		50	Nos.	16.61	830.5
5	Fixing of RCC fence posts including strutting		50	Nos.	13.14	657
6	Carriage of Barbed wire over distance 2 Km	2	0.75	Qtls.	135.5	203.3
7	Stretching and fixing Barbed Wire in 4 stands		600	Rmt.	8.8	5280
8	Interlacing of thorny bushes along the fence		150	Rmt.	7.33	1100
9	Cost of Barbed Wire (including GST)		0.75	Qtls.	6509	4882
<b>Total-A/Survey, Demarcation &amp; Fencing</b>						<b>37186</b>
<b>Or Say</b>						<b>37200</b>
<b>PLANTING</b>						
1	Bush cutting in strips (3mx3m)		1	Hac.	2186.25	2186.25
2	Digging of pits 45x45x45 cm		1100	Nos.	17.49	19239
3	Filling of pits 45x45x45 cm		1100	Nos.	4.98	5478
4	Carriage of plants in P/bags over distance 2 Km uphill/ downhill	2	1100	Nos.	3.5	7700
5	Planting of entire plant raised in P/Bags		1100	Nos.	3.99	4389
6	Construction of inspection path 60 cm width.		100	Rmt.	20.16	2016.00
7	Cost of sign board, carriage & fixing etc.		L/S		450	450
8	Nursery cost of plants		1100	Nos.	19.78	21758
<b>Total-B/Planting:-</b>						<b>63216</b>
<b>Or Say</b>						<b>63200</b>

<b>Grand Total(A+B)</b>					<b>100400</b>
<b>1st YEAR MAINTENANCE (30% BEATING UP)</b>					
1	Re-digging of pits 45x45x45 cm		330 Nos.	8.74	2884
2	Filling of pits 45x45x45 cm		330 Nos.	4.98	1643
3	Planting of P. bag plants		330 Nos.	3.99	1317
4	Carriage P. Bag plants distance 2 Km uphill/ downhill	2	330 Nos.	3.5	2310
5	Repair of fencing		60 Rmt.	3.2	192
6	Nursery cost of plants		330 Nos.	19.78	6527
<b>Total/1st Year Maintenance:</b>					<b>14874</b>
<b>Or Say</b>					<b>14900</b>
<b>2nd YEAR MAINTENANCE (20% BEATING UP)</b>					
1	Re-digging of pits 45x45x45 cm		220 Nos.	8.74	1923
2	Filling of pits 45x45x45 cm		220 Nos.	4.98	1096
3	Planting of P. bag plants		220 Nos.	3.99	878
4	Carriage P. Bag plants distance 2 Km uphill	2	220 Nos.	3.5	1540
5	Repair of fencing		60 Rmt.	3.2	192
6	Nursery cost of plants		220 Nos.	19.78	4352
<b>Total/2nd Year Maintenance:</b>					<b>9980</b>
<b>Or Say</b>					<b>10000</b>
<b>3rd YEAR to 10th YEAR MAINTENANCE (10% BEATING UP)</b>					
1	Re-digging of pits 45x45x45 cm		110 Nos.	8.74	961
2	Filling of pits 45x45x45 cm		110 Nos.	4.98	548
3	Planting of P. bag plants		110 Nos.	3.99	439
4	Carriage P. Bag plants distance 2 Km uphill	2	110 Nos.	3.5	770
5	Repair of fencing		60 Rmt.	3.2	192
6	Nursery cost of plants		110 Nos.	19.78	2176
<b>Total</b>					<b>5086</b>
<b>Or Say</b>					<b>5100</b>

Divisional Forest Officer,  
Karsog Forest Division, HP.