

CHECK LIST NO: - 27

"SCHEME FOR COMPESATORY AFFORTATION"

Detail scheme for compensatory Afforestation to be carried out over 6.22 hectare of forest land for the construction of **DIVERSION OF FOREST LAND FOR THE C/O LINK ROAD DHURASAPAR TO PURKHARA** Within the jurisdiction of Dalhousie Forest Division, HP. The detail of CA scheme for on 9.2184 is as under:-

1). Details of degraded forest Land / Non-forest land:-

a) District	Chamba
b) Village (Name of land Bank)	Parwat No 8 DPF (9.2184Ha)
c) Tehsil	Bhattiyat
d) Name of Forest Division	Dalhousie
e) Range	Chowari
f) Scale	1.50000
g) Block/Compartment/Survey No.	52/D/3
h) Area to be afforested	9.2184 hectare

2). Description of Area:-

a) Whether the site selected for compensatory afforestation is a land bank or not:

Yes. The selected site is a land bank.

b) If the CA site is other than the land bank reason be given:

Not applicable as the site selected is a land bank.

c) In the case of non-forest area identified for CA, then what is the distance of CA site from adjoining forest boundary?

Not applicable as the site selected is a forest area.

- d) Aspect: *Western*
e) Topography: *Hilly*
f) Slope: *Moderate to steep*
g) Soil Type: *Sandy loom*
h) Soil depth: *shallow*
i) Area Dimensions: *9.2184 ha*

f) Whether the area is bearing any root stock of vegetation: *Area comprises of very few Scattered trees of Kainth (Pyrus pashia), Chil (Pinus roxburghii) and mainly have bushes of, Berberis, Lantana (Lantana camara), Kari patta (Murraya koenigii). Adjoining area consists of trees of Dhaman (Grewia tiliifolia Vahl), Kachnar (Bauhinia variegate), Chil (Pinus roxburghii), Shisham (Dalbergia sissoo) etc.*

3) Plantation Model:-

Compensatory afforestation over an area of 9.2184 of degraded forest land is proposed to be raised. The area selected for this purpose is in **Parwat No 8 DPF (9.2184 Ha)** which is a degraded forest area and has been a land bank. Whole of the plantation of 9.2184 will be raised in a single compact block inside the degraded forest for such purpose. The area identified for plantation has also been shown on the attached map. Plants @1100 plants per hectare i.e. 800 normal plants & 300 tall plant per hectare will be planted. Thus **10140** plants under this diversion proposal will be planted in the land bank. The species to be planted will be mainly broad leaved. The plantation will be raised in the following year after the approval of FCA proposal and further maintenance and beating up of failures will be done for the subsequent ten years. The scheme will be implemented by Forest Department through DFO, Dalhousie. Total financial outlay for compensatory plantation scheme is Rs. **36,18,650/-**. Certificate of the DFO Dalhousie regarding suitability of area identified for compensatory plantation is attached. The monitoring will be done as per existing monitoring mechanism in the Forest Department at present and also as per G.O.I. instructions.

(4) CA Plantation Model 1100 Plants/ Hac.

Sr. No.	Particulars of Works	Unit	Qty	Rate per Unit at wage rate of RS. 400/-	Rate per unit for material	Amount at wage rate 425/Mandays & Material cost
1	Survey & Demarcation of Plantation area	ha.	9.2184	101		989
2	Digging of Pits of 60x60x60 cm Size for tall plants	No	2765.5	17.45		51274
3	Filling of Pits of 60x60x60 cm Size for tall plants	No	2765.5	2.54		7463
4	Digging of Pits of 45x45x45 cm Size	No	7374.7	9.54		74752
5	Filling of Pits of 45x45x45 cm size	No	7374.7	2.72		21313
6	Planting of Tall Plants	No	2765.5	6.543		19226
7	Planting of Normal Plants	No	7374.7	2.18		17082
8	Construction of Inspection Path	Rmt.	921.84	11		10774
9	Construction of stagarred contour trenches	Rmt.	5531	12		70521
10	Planting in gradional trenches	No	18437	L/S		19589
11	Cost of RCC Fence posts	No	460.9		510	235069
12	Fixing of RCC fence posts	No	460.92	696.35		341022
13	Fixing of RCC Fence post i/c structting	No	460.92	L/S		36874
14	Carriage of B/Wire over a distance of 2 Kms	Km/Qtl	6.9138	73.65		541
15	Stretching & Fixing of barbed Wire in 5 stands	Rmt.	6913.8	4.8		35260
16	interlacing of Throny Bushes along the Fence	Rmt.	1382.8	4		5877
17	Cost of Barbed Wire	Qtl	10.14		9000	91262
18	Cost of U-Nails	Qtl	0.4609		8800	4056
19	Carriage of Tall Plants over distance 2 km uphill/downhill	No	2765.5	14.76		43370
20	Carriage of normal Plants over distance 2 km uphill/downhill		7374.7	1.9		14888
21	Cost of manure, carriage and application in pits		27655		L/S	27655
22	Mulching with local grasses/shrubs		10140	0.848		9136
23	weeding and hoeing		10140	0.708		7628
24	Watering during leing season	M/D	277	425		117725
25	Sign Board, Carriage & Fixing		1000		L/S	1000
26	Eradiction of Lantana by CRS method	50%	2	33600		71400
27	SMC Work Gully Plugging		20		4500	90000
28	Biofertilizer , Hydrogel , verming composet		9.2184		3000	27655
(A)	wage rate from Rs. 150/- to Rs 425/- per day (Sl. No. 1 to 10, 12 to 16, 19,20, ,22, 23, 24,&26)					976704
(B)	Cost of material etc. (Sl. No. 11,17,18,21,25,27,28)					476698
(C)	Total (A) + (B)					1453402
(D)	Total Cost of Maintenance (Planting)					1124248
(E)	Total Cost of Maintenance (Lantana)					32780
(F)	Total C+D+E					2610430
(G)	Cost of Tall Plants	No	2765.5	68.68		189936
(H)	Cost of Normal Plants	No	7374.7	20.83		153615
	Grand Total F+G+H					2953981
	Or Say Rs					2954000
	5% Contingency					147700
	Add Departmental Charges @ 17.5%					516950
	Grand Total					3618650

(D) Scheduled of Maintenance Planting

A	B	C	D	E	F		G	H
Year wise maintenance	Unit in ha	Number of Plants	Cost of Plant	Total cost plant	Rate per hact.		Total amount of column E+F	Total Amount including escalation
1st year Maintenance	9.2184	3042	75	76052	12540	115599	191650.536	229981
2nd Year Maintenance	9.2184	2028	75	50701	8470	78079.8	128781.048	167415
3rd Year Maintenance	9.2184	1014	75	25351	4290	39546.9	64897.536	90857
4th year Maintenance	9.2184	1014	75	25351	4290	39546.9	64897.536	90857
5th year Maintenance	9.2184	1014	75	25351	4290	39546.9	64897.536	90857
6th Year Maintenance	9.2184	1014	75	25351	4290	39546.9	64897.536	90857
7th Year Maintenance	9.2184	1014	75	25351	4290	39546.9	64897.536	90857
8th Year Maintenance	9.2184	1014	75	25351	4290	39546.9	64897.536	90857
9th Year Maintenance	9.2184	1014	75	25351	4290	39546.9	64897.536	90857
10th year Maintenance	9.2184	1014	75	25351	4290	39546.9	64897.536	90857
Total Cost of 10 years Maintenance								1124248

(E) Scheduled of Maintenance Iantana/Eupatorium

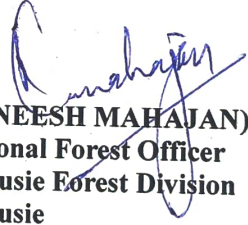
[illegible]

5). Technical details:-

Technical details of Compensatory Afforestation Scheme are as follows:-

- (a) **General Details:** - An area of **9.2184** will be taken up for planting under compensatory afforestation scheme in **Parwat No 8 DPF (9.2184)** in a single compact block. The area will be protected by Barbed wire fencing and a mixture of broad leaved species with wild fruit bearing plants will be planted. Plants will be planted @ 1100 plants per hectare.
- (b) **Spacement:-** 3m × 3m
1. **Species:-** Broad Leaved plants i.e, Ban oak (*Quercus leucotrycophora*), Akhrot (*Juglans regia*), Kainth (*Pyrus pashia*), Chuli (*Prunus arminiaca*), Khirak (*Celtis australis*), Dhamman (*Grewia optiva*), Daru (*Punica granatum*), etc.
- (c) **Plantation Method:-** Nursery grown one and half year to two and half year old seedlings of Mixed species of Broad Leaved and wild fruit plants in Polythene bags will be planted in 45cm×45cm×45cm for normal sized seedlings and 60cm×60cm×60cm pits for tall sized seedlings in the selected area. Bush cutting will be done around the pits and as per minimum requirement but, Eupatorium weed will be removed being exotic, species and infestation is upto 50% in 2 hectare area. The plantation will be maintained for subsequent 10 years in which beating up failures will be done. The plantation will be rain faded.
- (d) **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 dam will be made where ever required.
- (e) **Protection (Fencing, Watch man, People's Participation etc.):**- Area will be protected from grazing by erecting barbed wire fencing at all vulnerable place around the plantation. Further watch and ward as also fire protection will be ensured through regular departmental staff.

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 monitoring will be done as per existing monitoring mechanism in the Forest Department at present and also as per G.O.I. instructions.


(RAJNEESH MAHAJAN)HPFS
Divisional Forest Officer
Dalhousie Forest Division
Dalhousie