

Full Title of the Project : Diversion of 0.5845 Hec. of forest land for construction of 220 Kv D/c Mund-IOCL Transmission Line in District Karnal, Haryana.

File No. : FP/HR/TRANS/153329/2022

CHECK LIST SERIAL NUMBER: 18
“SCHEME FOR COMPENSATORY AFFORESTATION”

Name of the Forest/Reach to be diverted: Diversion of 0.5845 Hec. of forest land for construction of 220 Kv D/c Mund-IOCL Transmission Line in District Karnal, Haryana.

Forest Area = 0.5845 Hect.

Details of degraded forest land/non-forest land where C.A. is to be carried out.

C.A. Site name: Drain No.2, Munak Head to Dadlana Bridge

Area to be Afforested: - 3.5 Hect.(3500 Plants)

- a) Whether the site selected for Compensatory Afforestation is a Land bank (Yes or No):-
No, the site selected for compensatory Afforestation is not a land bank. It is a Degraded Forest Land.
- b) If the CA site is other than the land bank, reasons be given:- There is no land available in the land bank in Karnal. Plantation will be carried out in protected forest area.
- c) In case of non-forest area identified for CA, then what is the distance of CA site from the adjoining forest boundary:- **C.A. will be carried out in protected forest Area.**
 - i) Soil type: **Sandy Loam**
 - ii) Topography
 - a. Hilly/Undulating/Plain: **Plain**
 - b. Slope:-Steep/Medium/Gentle: **Gentle**
 - iii) Whether the area is bearing any root stock of vegetation:- **No**

Plantation Model:-

Copy of the approved Compensatory Afforestation Scheme/Model showing component wise physical and financial break up is as under:

Detail of year wise break-up of requirements of funds is as under:-

The plantation cost is calculated for TP & NP norms as per PCCF, Haryana, Panchkula letter no. FCA/396 dated. 15.05.2023 wages rate @ of Rs.405.11/- per day(Plain Areas).

Year	Rate per Plant
1 st Year cost of afforestation	Rs. 192.87/- Per Plant
2 nd Year maintenance	Rs. 77.48/- Per Plant
3 rd Year maintenance	Rs. 36.60/- Per Plant
4 th Year maintenance	Rs. 12.83/- Per Plant
5 th Year maintenance	Rs. 12.83/- Per Plant
6 th Year maintenance	Rs. 12.83/- Per Plant
7 th Year maintenance	Rs. 12.83/- Per Plant
8 th Year maintenance	Rs. 12.83/- Per Plant
9 th Year maintenance	Rs. 12.83/- Per Plant
10 th Year maintenance	Rs. 12.83/- Per Plant
Total	396.77/-

Area to be Diverted :- **0.5845 ha.**

No. of trees to be felled :- 250

Plants to be damaged:- 500

Plants to be planted (Ten time of the trees to be felled): 250x10=2500

Area to be Planted = Double area@ 1000 plant per ha. = NA

Minimum Plants to be Planted: - (CA)Plants = 2500(CA)+1000(ACA)Plants Total 3500

plants to be damaged (Double the plants to be damaged) :- NIL

Sr. No.	DESCRIPTION		RATE	TOTAL AMOUNT (Rs.)
A	Compensatory Afforestation Charges	No. of Plants		
	(1) 1 st Year cost of afforestation	2500 Plants	Rs.192.87/- Per Plant	482175
	(2) 2 nd Year maintenance		Rs. 77.48/- Per Plant	193700
	(3) 3 rd Year maintenance		Rs. 36.60/- Per Plant	91500
	(4) 4 th Year maintenance		Rs. 12.83/- Per Plant	32075
	(5) 5 th Year maintenance		Rs. 12.83/- Per Plant	32075
	(6) 6 th Year maintenance		Rs. 12.83/- Per Plant	32075
	(7) 7 th Year maintenance		Rs. 12.83/- Per Plant	32075
	(8) 8 th Year maintenance		Rs. 12.83/- Per Plant	32075
	(9) 9 th Year maintenance		Rs. 12.83/- Per Plant	32075
	(10) 10 th Year maintenance		Rs. 12.83/- Per Plant	32075

	Fencing/Miscellaneous/Overhead Charges		(20% of CA Amount)	198380
	Total CA Charges			1190280
B	Additional Compensatory Afforestation Charges			
	(1) 1 st Year cost of afforestation	1000	Rs.192.87/- Per Plant	192870
	(2) 2 nd Year maintenance		Rs. 77.48/- Per Plant	77480
	(3) 3 rd Year maintenance		Rs. 36.60/- Per Plant	36600
	(4) 4 th Year maintenance		Rs. 12.83/- Per Plant	12830
	(5) 5 th Year maintenance		Rs. 12.83/- Per Plant	12830
	(6) 6 th Year maintenance		Rs. 12.83/- Per Plant	12830
	(7) 7 th Year maintenance		Rs. 12.83/- Per Plant	12830
	(8) 8 th Year maintenance		Rs. 12.83/- Per Plant	12830
	(9) 9 th Year maintenance		Rs. 12.83/- Per Plant	12830
	(10) 10 th Year maintenance		Rs. 12.83/- Per Plant	12830
	Fencing/Miscellaneous/Overhead Charges		(20% of ACA Amount)	79352
	Sub Total (B) Total Addl. C.A. Charges			476112
	C	Penal C.A.	-	NA
D	Catchment Area Treatment			
	Soil and Moisture Conservation charges	30% of the Total CA	0	
	Sub Total (D)		0	
E	Safety Zone		NA	
F	Additional Charges			
	Tree Guard @2000x100		0	
		0	
	Sub Total (F)			
G	Plantation damage charges = Not app	Rs. 236/- per plant	0	
	GRAND TOTAL (A+B+C+D+E+F+G) to be deposited in CAMPA Fund			1666392

2. Technical details:-

Technical details of Compensatory Afforestation Scheme are as follows:-

- General Detail :-** Compensatory Afforestation will carried out along With,
Drain No.2, Munak Head to Dadlana Bridge
- Spacing:-** 4x4mtr a Part
- Species:-** Neem & Shisham, Jamun/Jamoa etc.
- Plantation method :-** Tall Plantation
- Soil and Moisture Conservation Works :-** -Nil-

- f) Protection (Fencing, Watch man, People's, Participation etc) :- Fencing
- g) Proposed Monitoring Mechanism: - Checking of Plantation work will be done by
RFO,DCF,CF&DCF(M&E)
- h) Any other information :- Nil

Place:- Karnal


Divisional Forest Officer,
Karnal Forest Division
KARNAL

Annexure -II

Norms of Tall plants under Compensatory Afforestation demanded from User Agency in FCA diversion proposals at a wage rate of Rs. 405.11/- per day(in Plain Areas)					
No . of plants per Ha. = 1000					
Sr no.	Item of Work	Unit	Qty.	405.11 /- Rate/unit(Rs)	Amount (Rs.)
1st Year Plantation					
1	Jungle Clearance	Ha.	0.5	6076.65	3038.33
2	Raising of plants in nursery (30cmX45cm):	No.	480	101.57	48753.60
3	Raising of plants in nursery (15cmX22cm):	No.	720	13.38	9633.60
4	Dag bailing and alignment	RKM	3	283.58	850.74
5	Digging of pits (400x0.6mx0.6mx0.6m)	M3	86.4	172.17	14875.49
6	Digging of pits (600x0.45mx0.45mx0.45m)	M3	54.675	141.77	7751.27
7	Loading and unloading of plants in Tractor/Cart. (30X45cm)	No.	440	3.06	1346.40
8	Loading and unloading of plants in Tractor/Cart. (15cmX22cm)	No.	660	0.45	297.00
9	Carriage of plants (30X45cm)	No.	440	25.45	11198.00
10	Carriage of plants (15cmX22cm)	No.	660	2.53	1669.80
11	Plantation of plants including 10% replacement (30X45cm)	No.	440	16.22	7136.80
12	Plantation of plants including 10% replacement (15cmX22cm)	No.	660	6.09	4019.40
13	Application of fertilizer(One time DAP+ One time Urea)	No.	2000	0.8	1600.00
14	Irrigation five times	No.	5000	6.09	30450.00
15	First Weeding and Hoeing (30X45cm)	No.	400	8.08	3232.00
16	First Weeding and Hoeing (15cmX22cm)	No.	600	6.09	3654.00
17	Subsequent weeding and hoeing two times (30X45cm)	No.	800	6.09	4872.00
18	Subsequent weeding and hoeing two times (15cmX22cm)	No.	1200	4.05	4860.00
19	Cost of Wages of protection watcher (one protection watcher for six months for plantation area of 10 ha.)	LS			7292
20	Miscellaneous Expenditure(Urea Dap, tools etc.)				1000
	Total				167530.43
	Added EPF@13%				
	Added ESI @3.25%				
	of wages component 50% of the total				13611.85
	Added Contractor Profit@7 % total				11727.13
	Net Total				192869.40
2nd Year Plantation					
1	Cleaning of weed/bushes between plantation	Ha.	0.5	1908.14	954.07
2	Raising of plants in Nursery (30cmx45cm)	No.	96	101.57	9750.72
3	Raising of plants in Nursery (15cmx22cm)	No.	144	13.38	1926.72
4	Re-opening of pits 80x0.6mx0.6mx0.6m	M3	17.28	81.03	1400.20
5	Re-opening of pits 120x0.45mx0.45mx0.45m	M3	10.93	81.03	885.66
6	Loading and unloading of plants (30X45cm)	No.	88	3.06	269.28
7	Loading and unloading of plants (15cmX22cm)	No.	132	0.45	59.40
8	Carriage of plants (30X45cm)	No.	88	25.45	2239.60
9	Carriage of plants (15cmX22cm)	No.	132	2.53	333.96
10	Planting of plants (30X45cm)	No.	88	16.22	1427.36
11	Planting of plants (15cmX22cm)	No.	132	6.09	803.88
12	Irrigation four times by hired tractor	No.	4000	6.09	24360.00
13	Weeding and Hoeing Three times (30X45cm)	No.	1200	6.09	7308.00
14	Weeding and Hoeing Three times (15cmX22cm)	No.	1800	4.05	7290.00
15	Misscellaneous Expenditure	LS			1000
16	Cost of Wages of protection watcher (one protection watcher for six months for plantation area of 10 ha.)				7292
	Total				67300.85

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	Added EPF@13%				
	Added ESI @3.25%				5468.19
	of wages component 50% of the total				4711.06
	Added Contractor Profit@7 % total				77480.10
	Net Total				

3rd Year Plantation

		Ha.	0.5	1908.14	954.07
1	Cleaning of weed/bushes between plantation	No.	48	101.57	4875.36
2	Raising of plants in Nursery (30cmx45cm)	No.	72	13.38	963.36
	Raising of plants in Nursery (15cmx22cm)				295.35
3	Re-opening of pits 40x.60 mx.60mx.60m	M3	3.645	81.03	443.03
	Re-opening of pits 60x.45 mx.45mx.45m	M3	5.4675	81.03	134.64
4	Loading and unloading of plants (30X45cm)	No.	44	0.45	29.70
	Loading and unloading of plants (15cmX22cm)	No.	66	25.44	1119.36
5	Carriage of plants (30X45cm)	No.	44	2.53	166.98
	Carriage of plants (15cmX22cm)	No.	66	16.22	713.68
6	Planting of plants (30X45cm)	No.	44	6.09	401.94
	Planting of plants (15cmX22cm)	No.	66	6.09	12180.00
7	Irrigation two times	No.	2000	6.09	2436.00
8	Weeding and Hoeing (30X45cm)	No.	400	4.05	2430.00
	Weeding and Hoeing (15cmX22cm)	No.	600		1000
9	Misscellaneous Expenditure	LS			
10	Cost of Wages of protection watcher (one protection watcher for three months for plantation area of 10 ha.)	LS			3646
	Total				31789.48
	Added EPF@13%				
	Added ESI @3.25%				2582.89
	of wages component 50% of the total				2225.26
	Added Contractor Profit@7 % total				36597.63
	Net Total				

4th Year Plantation

	Cost of Wages of protection watcher (one protection watcher for three months for plantation area of 10 ha.)				3646
1		LS		0	5000
2	Cleaning , pruning, Spacing and thinning	LS			2500
3	Misscellaneous Expenditure	LS			11146
	Total				
	Added EPF@13%				
	Added ESI @3.25%				905.61
	of wages component 50% of the total				780.22
	Added Contractor Profit@7 % total				12831.83
	Net Total				

5th Year Plantation

	Cost of Wages of protection watcher (one protection watcher for three months for plantation area of 10 ha.)				3646
1		LS		0	5000
2	Cleaning , pruning, Spacing and thinning	LS			2500
3	Misscellaneous Expenditure	LS			11146
	Total				
	Added EPF@13%				
	Added ESI @3.25%				905.61
	of wages component 50% of the total				780.22
	Added Contractor Profit@7 % total				12831.83
	Net Total				

6th Year Plantation

	Cost of Wages of protection watcher (one protection watcher for three months for plantation area of 10 ha.)				3646
1		LS		0	5000
2	Cleaning , pruning, Spacing and thinning	LS			2500
3	Misscellaneous Expenditure				11146
	Total				
	Added EPF@13%				
	Added ESI @3.25%				905.61
	of wages component 50% of the total				780.22
	Added Contractor Profit@7 % total				

Net Total				12831.83
7th Year Plantation				
1	Cost of Wages of protection watcher (one protection watcher for three months for plantation area of 10 ha.)			3646
2	Cleaning , pruning, Spacing and thinning	LS	0	5000
3	Misscellaneous Expenditure			2500
	Total			11146
	Added EPF@13%			
	Added ESI @3.25%			905.61
	of wages component 50% of the total			780.22
	Added Contractor Profit@7 % total			12831.83
	Net Total			
8th Year Plantation				
1	Cost of Wages of protection watcher (one protection watcher for three months for plantation area of 10 ha.)			3646
2	Cleaning , pruning and Spacing	LS	0	5000
3	Misscellaneous Expenditure			2500
	Total			11146
	Added EPF@13%			
	Added ESI @3.25%			905.61
	of wages component 50% of the total			780.22
	Added Contractor Profit@7 % total			12831.83
	Net Total			
9th Year Plantation				
1	Cost of Wages of protection watcher (one protection watcher for three months for plantation area of 10 ha.)			3646
2	Cleaning , pruning, Spacing and thinning	LS	0	5000
3	Misscellaneous Expenditure			2500
	Total			11146
	Added EPF@13%			
	Added ESI @3.25%			905.61
	of wages component 50% of the total			780.22
	Added Contractor Profit@7 % total			12831.83
	Net Total			
10th Year Plantation				
1	Cost of Wages of protection watcher (one protection watcher for three months for plantation area of 10 ha.)			3646
2	Cleaning , pruning, Spacing and thinning	LS	0	5000
3	Misscellaneous Expenditure			2500
	Total			11146
	Added EPF@13%			
	Added ESI @3.25%			905.61
	of wages component 50% of the total			780.22
	Added Contractor Profit@7 % total			12831.83
	Net Total			
ABSTRACT OF COST NORMS				
YEAR OF PLANTATION		Cost (in Rs.)	Cost per plant	
FIRST YEAR PLANTATION		192869.40	192.87	
SECOND YEAR PLANTATION		77480.10	77.48	
THIRD YEAR PLANTATION		36597.63	36.60	
FOURTH YEAR PLANTATION		12831.83	12.83	
FIVE YEAR PLANTATION		12831.83	12.83	
SIX YEAR PLANTATION		12831.83	12.83	
SEVEN YEAR PLANTATION		12831.83	12.83	
EIGHT YEAR PLANTATION		12831.83	12.83	
NINE YEAR PLANTATION		12831.83	12.83	
TEN YEAR PLANTATION		12831.83	12.83	
TOTAL		396769.97	396.77	

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