

ESTIMATED COST FOR COMPENSATORY AFFORSTATION MODEL IN SHIWALIKS

1) Diverted Forest Area = 0.6926		Daily Wage Rate @ 383.56
2) Comp. Aff. Schme area = 1.7315 ha + 2 times Penal CA = 0.257 ha Total 1.9885 ha		Plants/Ha : 1000
3) Name of Site of Plantation : Haler Janardhan Forest		
4) No. of plants Planted = CA Plant 1732 + Penal CA's 257 Plant planted		

5. Name of speices to be planted : Shisham, Arjun, Drek etc.		Unit	Unit Cost	Quantity	Amount
Sr. No.	Nature of Work Component				
	A. Nursery				
1	Cost of seedling including development of Nursery (a) Original planting = 1000 per ha. (b) Replacement 10% = 100 per ha No. in P. bag Total 1100	No	40.00	1100	44000
	B. Soil /Adv Works.				
2	Cutting of Lantana Malha	Ha.	20921.36	0.60	12552.81
3	Lantana stubbing	Ha.	31381.49	0.20	6276.30
4	Uprooting of old stumps & Disposal	100 No.	76.70	100.00	76.70
5	Preparation of inspection path in Bouldary Soil 100 Mtr x .10 Mtr x 1Mtr = 10 M3	M3	153.42	10.00	1534.20
6	Survey And Alignment	Ha	1533.97	1	1533.97
7	(a) Earth work i.e. digging of trenches Bouldary Soil Size 700No. x 2 Mtr. x .40 Mtr x .35 Mtr = 196 m3 (b) Earth work i.e. digging of pits 300No. X .50 Mtr x .5 Mtr x .4 Mtr = 15 M3	M3	188.29	196	36905
		M3	188.29	30	5649
					108528
	C. Plantation				
8	(a) Refilling of trenches 700 No x .0.50 Mtr x .40 Mtr x .30 Mtr = 42 m3 (b) Refilling of pits 300 no. x .50 x .50 x .35 = 26M3	M3	30.97	42.00	1300.74
		M3	30.97	26.00	805.22
9	Carriage of seedlings by Tractor-Trolly	No	5.75	1000	5750.00
10	Carriage of seedlings by M/L lead 500mt.	Mtr	11.58	1000	11580.00
11	Loading & unloading of plants	100 No	46.37	1000	4637.00
12	Planting of seedlings	No	4.88	1000	4880.00
15	Application of Insecticides 1000 x 2 times = 2000	100 No	67.00	2000	1340.00
16	Application of fertilizers 1000 x 2 times = 2000	100 No	67.00	2000	1340.00
17	Planting of Bhabbar Grass including extraction and carriage of Tussocks	100 No.	12.10	2000	242.00
18	Preparation of round Brush wood fencing including cutting carriage material (with binding)	No	28.76	1000	28760.00
					56461.66
	D. Maintenance of Planting Year				
19	Repair i.e. cleaning and dressing of inspection path	M3	153.42	10	1534.20
20	Watch and ward for every 10 ha. Of plantation x 26 days	No.	38.36	52	1994.72
21	Re-Cutting of lantana/mallaha 2nd and 3rd times. 1.00 x 2 = 2	Ha	6961.00	2.00	13922.00
22	Weeding hoeing i.e. 2000mtr x 3 = 6000 mtr	Mtr	2.38	6000	14280.00
23	Application of Insecticides 1000 x 2 times = 2000	100 No	67.00	2000	1340.00
24	Application of fertilizers (twice) 1000 x 2 times = 2000	100 No	67.00	2000	1340.00
25	Desilting of Tranches 1000 No x 1.50 x .35 x .25 = 131.25	Mtr	69.73	131.25	9152.06
26	Carriage of seedlings by Tractor-Trolly	No	5.74	100	574.00
27	Carriage of seedlings by M/L lead 500mt.	Mtr	11.58	100	1158.00
28	Loading & unloading of plants	100 No	76.37	100	76.37
29	Cutting of Tall Weeds 2 mtr wide (100 x 2)	100 mtr	95.87	200	191.74
30	Providing thorny protection to plants against parcupine damage	100 No	191.70	400	766.80
31	Re-Planting of seedlings	No	4.88	100	488.00
32	Covering (25% Plants)	No.	3.41	250	852.50
33	Uncovering	No.	0.36	250	90.00

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	D. Material				47760.39
34	Insecticides including carriage	litre	452.35	10	4523.50
35	Fertilizers i.e. urea etc. including carriage	kg	61.70	200	12340.00
36	Misc. Items (tools, etc)	L/S			2500
					19364
	Total Cost of Planting Year				232113
	Contingency 10%				23211
	Total Cost of Planting Year				255324
	1st Year Maintenance				
1	Re-opening of trenches for replacement 210 x .50 m x .40 x .40m = 16.80 m ³	M3	63.29	16.80	1063.23
2	Refilling of trenches 210 No. x 0.50m x 0.40m x 0.35m = 14.70 m ³	M3	39.81	14.70	585.25
3	Reopening of Pits 90 x .50 x .50 x .35 = 7.88 M3	M3	63.29	7.88	498.73
4	Refilling of Pits 90 x .50 x .50 x .35 = 7.88 M3	M3	39.81	7.88	313.70
5	Nursery cost of seedling	No	59.67	300	17901.00
6	Carriage of seedlings by Tractor-Trolley	No	5.75	300	1725.00
7	Carriage of seedlings by M/L labour lead 500mt.	100 Mtr	11.58	300	34.74
8	Loading & unloading of plants	100 No	46.37	300	139.11
9	Re- Planting of seedlings	No	4.88	300	1464.00
10	Weeding and hoeing to trenches (Twice)	Mtr	2.38	2000	4760.00
11	Application of insecticides (Twice)	100 No	67.00	2000	1340.00
12	Application of fertilizers (twice)	100 No	67.00	2000	1340.00
13	Repair of inspection path (Twice)	Mtr	153.42	200	30684
14	Cutting of lantana/mallah etc. per ha II & III times	Ha	6961.00	2.00	13922.00
15	Watch and ward for every 10 ha. Of plantation	No	38.36	26.00	997.36
16	Covering (25% Plants)	No.	3.41	250	852.50
17	Uncovering	No.	0.36	250	90.00
					77710.61
	Cost of material				
17	Insecticides including carriage	litre	452.35	10	4523.50
18	Fertilizers i.e. urea etc. including carriage	kg	33.92	200	6784.00
19	Misc. Items (tools, etc)	L/S			2500
	POL	L/S			5000
					18807.50
	Total				96518.11
	Contingency 10%				9651.81
	Total Cost of 1st Year Mtc				106169.92
	2nd Year Maintenance				
1	Reopening of trenches for replacement 200 no x .50 m x .35m x .25m = 8.75 m ³	M3	63.29	8.75	553.79
2	Refilling of trenches 200 No. x 0.50m x 0.35m x 0.24m = 8.75 m ³	M3	39.81	8.75	348.34
3	Nursery cost of seedling	No	59.67	200	11934.00
4	Carriage of seedlings in P bags i) M/L Average Lead 1.5 km	No	11.58	200	2316.00
5	ii) Tractor trolley average lead 15 km (1000 plants per trolley)	No	5.75	200	1150.00
6	Loading & unloading of plants from T/ Trolley	100 No	46.37	200	92.74
7	Re -Planting of seedlings	No	4.88	200	976
8	Weeding and hoeing to tranches (Twice)	Mtr.	2.38	2000	4760.00
9	Application of insecticides (Twice)	100 No	67.00	2000	1340.00
10	Application of fertilizers (Twice)	100 No	67.00	2000	1340.00
11	Repair of inspection path (Twice)	M3	153.42	200	30684.00
12	Lantana cutting (subsequent time 1.00 Ha) x 2 times =2.00	Ha	6961.00	2.00	13922.00
	Total				69416.87
	Cost of material				
14	Insecticide	Kg	452.35	10.00	4523.50
15	Fertilizers i.e. urea etc.	Kg	33.92	200.00	6784.00
	POL	L/S			2000.00
	Total				13307.50
	Total				82724.37
	Contingency 10%				8272.44

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27/4/22

	Total Cost of 2nd Year Mtc				
	3rd Year Maintenance				90996.80
1	Reopening of trenches for replacement 100 no .50m x .35 m x .25m = 4.38 M3	M3	63.29	4.38	277.21
2	Refilling of trenches 100 No. x 0.50m x 0.35m x 0.25m = 4.38 M3	M3	39.81	4.38	174.37
3	Nursery cost of seedling	No	59.67	100	5967.00
4	Carriage of seedlings by mannual labour lead 500mt.	100 Mtr.	11.58	100	1158.00
5	Loading & unloading of plants from T/ Trolly	100 No	46.37	100	46.37
6	ii) Tractor trolly average lead 15 km (1000 plants per trolly)	No	5.75	100	575.00
7	Re-Planting of seedlings	No	4.88	100	488.00
8	Repair of Barved Wire fence in hills	100 Mtr	122.52	3900	4778
9	Weeding and hoeing to tranches (Twice)	Mtr.	2.38	2000	4760.00
10	Cutting of lantana/mallaha IIInd and IIIrd times.	Ha	6961.00	1.40	9745.40
11	Application of fertilizers	100 No	67.00	1000	670.00
12	Repair of inspection path (Twice)	Mtr	153.42	200	30684.00
13	Pruning of plants	No.	10.00	125	1250.00
14	Jungle Clearance i.e. Bhang, Jhau tall weed etc.	No.	6276.10	0.2	1255.22
	Total				61828.81
	Cost of material				
15	Fertilizers i.e. urea etc.	Kg	33.92	28.00	949.76
	Total				949.76
	Total Cost of 3rd maintenance				62778.57
	Contigency 10%				6277.86
	SubTotal Cost of 3rd year maintenance				69056.43
	4th Year Maintenance				
1	Watch and ward for every 10 ha. Of plantation	No	38.36	26.00	997.36
	Total				997.36
	5th Year Maintenance				
1	Watch and ward for every 10 ha. Of plantation	No	38.36	26.00	997.36
	Total				997.36
	6th Year Maintenance				
1	Watch and ward for every 10 ha. Of plantation	No	38.36	26.00	997.36
	Total				997.36
	7th Year Maintenance				
1	Watch and ward for every 10 ha. Of plantation	No	38.36	26.00	997.36
	Total				997.36
	8th Year Maintenance				
1	Watch and ward for every 10 ha. Of plantation	No	38.36	26.00	997.36
	Total				997.36
	9th Year Maintenance				
1	Watch and ward for every 10 ha. Of plantation	No	38.36	26.00	997.36
	Total				997.36
	10th Year Maintenance				
1	Watch and ward for every 10 ha. Of plantation	No	38.36	26.00	997.36
	Total				997.36
	ABSTRACT				
1	Total Cost On Plantation Works				255324.38
2	Total Cost of 1st year Maintenance				106169.92
3	Total Cost of 2nd year Maintenance				90996.80
4	Total Cost of 3rd year Maintenance				69056.43
5	Total Cost of 4th year Maintenance				997.36
6	Total Cost of 5th year Maintenance				997.36
7	Total Cost of 6th year Maintenance				997.36
8	Total Cost of 7th year Maintenance				997.36
9	Total Cost of 8th year Maintenance				997.36
10	Total Cost of 9th year Maintenance				997.36
11	Total Cost of 10th year Maintenance				997.36
	G.Total				528529.06
	Comp. Aff. Scheme for 1.00 Ha.				528529.06
				Or Say	528529.00

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Scheme Details				
Compensatory afforestation scheme 0.6926 ha X 2.5 = Rs 1.7315		1.7315	528529.00	915147.96
Cost of per Ha. For 7-10 Year 2 Times Penal CA violated area. ha.0.1285 (0.1285 X 2 =257)	Ha.	0.257	528529.00	135831.95
Total of CA and 2 Time Penal CA area is	Ha.	1.9885		1050979.92
Net Present Value	Ha.	0.6926	957780.00	663358.4
2 time Penal NPV amount	Ha	0.257	957780.00	246149.5
Simple Interest 12% on 2 Penal NPV amount for 1 year (246149.50 X 12% X 1 Year)				29550.00
Total NPV+ Penal NPV including 12% interest				939057.89
			G. Total	1990037.80


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