

ESTIMATED COST FOR COMPENSATORY AFFORSTATION MODEL IN SHIWALIKS

1) Diverted Forest Area = 0.014 ha					
				Daily Wage Rate @ 383.56	
2) Comp. Aff. Schme area =0.100				Plants/Ha :1000	
3) Name of Site of Plantation : Haler Janardhan Forest					
4) No. of plants Planted =100 plants					
5. Name of speices to be planted : Shisham, Arjun, Drek etc.					
Sr. No.	Nature of Work	Unit	Unit Cost	Quantity	Amount
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	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	M3	188.29	196	36905
	(b) Earth work i.e. digging of pits 300No. X .50 Mtr x .5 Mtr x .4 Mtr = 15 M3	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	M3	30.97	42.00	1300.74
	(b)Refilling of pits 300 no. x .50 x.50 x.35 = 26M3	M3	30.97	26.00	805.22
9	Carriage of seedlings by Tractor-Trolley	No	5.75	1000	5750.00
10	Carriage of seedlings by M/L lead 500mt.	Mtr	11.58	1000	11580.00
11	Carriage of seedlings by M/L lead 500mt.	100 No	46.37	1000	463.70
12	Loading & unloading of plants	No	4.88	1000	4880.00
15	Planting of seedlings	100 No	67.00	2000	1340.00
16	Application of Insecticides 1000 x 2 times = 2000	100 No	67.00	2000	1340.00
17	Application of fertilizers 1000 x 2 times = 2000	100 No.	12.10	2000	242.00
18	Planting of Bhabbar Grass including extraction and carriage of Tussocks	No	28.76	1000	28760.00
19	Preparation of round Brush wood fencing including cutting carriage material (with binding)				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-Trolley	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

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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
					47760.39
	D. Material				
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-Trolly	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 trolly average lead 15 km (1000 plants per trolly)	No	5.75	200	1150.00
6	Loading & unloading of plants from T/ Trolly	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				

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4	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
	Contingency 10%				8272.437
	Total Cost of 2nd Year Mtc				8272.44
	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/ Trolley	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 Barwed 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 IInd 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
	Contingency 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

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					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				528529.06
	G.Total				528529.06
	Comp. Aff. Scheme for 1.00 Ha.			Or Say	528529.00
	Scheme Details				52852.90
	Compensatory afforestation scheme 0.100 ha	Rs	0.100	528529.00	18999.5
		Ha.	0.014	1357110.00	
	Net Present Value				
				G. Total	71852.44


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Compensatory Afforestation Scheme for Tall Plants Diversion of 0.014 ha of forest land approach access road to M/s HSD Retailoutlet HPCL Petroleum Corporation Ltd at village Sariana From Hajipur to Mansar Road R/s Tehsil Mukerian Distt. Hoshiarpur Proposal; No FP/PB/ Approach/147021/2021

1) Diverted Forest Area = 0.014 ha

2) Comp. Aff. Tall plants Schme area = 0.056 Ha.

3) Name of Site of Plantation = Haler Janarthan Forest.

Daily Wage Rate : 383.56/-

4) No. of plants Planted = 28 Plants

Estimate for planting of Tall plants					
	Name of Work	Unit	Unit Cost (In Rs.)	Qty	Total Amt
	Nursery	1 No	70.16	550	38589.88
	Cost of Tall plants				
	Soil Works	Ha.	6276.37	0.5	3138.19
1	Site /Jungle Clearance (50%)	Ha.	1150.68	1	1150.68
2	Alignment & Dagbailing	1M ³	118.55	90	10669.75
3	Earth Work- Digging of Pits 500 x 0.6m x 0.6m x 0.5m Heavy Soil	Ha.	31382.11	0.25	7845.53
4	Kana Stubbing 25%				
	Planting	100 cum	3212.32	72	2312.87
1	Refilling of Pits	100 No	287.67	550	1582.19
2	Loading & Unloading of Plants (500+10% Wastage=550)	100 No	230.14	1	230.14
3	Carriage of Plants (500+10% Wastage=550 avg. distance upto 10 km.) 500 Trolley	100 No	153.42	550	843.83
4	i) Carriage from site to site	100 No	1150.68	550	6328.74
	ii) Planting of Plants (500 No Including 10% replacement)	100 No	239.73	500	1198.63
5	Spot Irrigation (500 Plants)	100 No	47.95	1000	479.45
6	Application of Insecticide (2 times)	100 No	47.95	1000	479.45
7	Application of Fertilizers (2 times)	100 No	418.08	1500	6271.21
8	Weeding & Hoeing 3 times	100 No	239.73	6000	14383.50
9	Hand Water 6 months x 2 times =12 times	100 No	677.21	50	338.60
10	Replanting of Plants 10%	Per Ha.	2780.81	1	2780.81
11	Rejungle Clearance (2 times)	100 No	345.20	125	431.51
12	Covering (25% plants) of plants	100 No	38.36	125	47.95
13	Uncovering of plants	Ha.	31382.11	0.25	7845.53
14	Restubbing of Kana (1 time)	L/s			5000.00
15	Laying out & fixing of Barbed Wire	Man year	9972	1Man 7 Month	9972.00
16	Watch & Ward for every 10 Ha. (7 months)				
17	Material				
	i) Insecticides/Fertilizers	L/s			8000.00
	ii) POL	L/s			8000.00
				Sub Total	137920.40
Maintenance 1 Year					
1	Cost of plants for 30% replacement	1 No.	70.16	150	10524.51
2	Reopening of Pits 150 x 0.60 x 0.60 x 0.40	1 m3	69.73	21.6	1506.18
3	Refilling of pits with earth in other soils 150 x 0.60 x 0.60 x 0.40	1 m3	32.12	21.6	693.86
4	Loading & Unloading of Plants	1 No.	2.88	150	431.51
5	Carriage of Plants (150+10% Wastage=330 avg. distance upto 10 km.)	500 No	229.43	1	229.43
6	Spreading of plants pit to pit	100 No	153.42	165	253.15
7	Re-planting Tall Plants	100 No	384.82	165	634.96
8	Spot Irrigation	100 No.	239.73	165	395.55
9	Weeding & Hoeing (thrice)	100 No	418.08	1500	6271.21
10	App. Of Fertilizer (two times)	100 No	47.95	1000	479.45
11	App. Of Insecticide (two times)	100 No	47.95	1000	479.45

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12	Hand watering 6 months x 2 times =12 times	100 No	418.08	6000	25084.82
13	Rejungle Clearance (2 times)	Ha.	2780.81	1	2780.81
14	Restubbing of Kana	Ha.	31381.76	0.25	7845.44
15	Watch & Ward for every 10 Ha. (10 months)	Man year	9972	1/10 Man yr.	9972.00
16	POL	L/s			8000.00
17	Material and supply	L/s			8000.00
				Sub Total	83582.33
Maintenance II Year					
		No.	70.16	75	5262.26
1	Cost of plants for 15% replacement	1 m3	69.73	10.8	753.09
2	Reopening of Pits 75 x 0.60 x 0.60 x 0.40	1 m3	32.12	10.8	346.93
3	Refilling of pits with earth in other soils 75 x 0.60 x 0.60 x 0.40	1 No.	2.88	75	215.75
4	Loading & Unloading of Plants	500 No	229.43	1	229.43
5	Carriage of Plants = 75 avg. distance upto 10 km.)	100 No	153.42	75	115.07
6	Spreading of plants pit to pit	100 No	267.88	75	200.91
7	Re-planting to tall plants	100 No.	239.73	75	179.79
8	Spot Irrigation	100 No	418.08	1500	6271.21
9	Weeding & Hoeing (twice)	100 No	239.73	5000	11986.25
10	Hand Watering 10 Times	Ha.	2780.81	1	2780.81
11	Rejungle Clearance (2 times)	Ha.	31381.76	0.1	3138.18
12	Stubbing of Kana	100 No.	453.27	100	453.27
13	Pruning to plants	Man year	9972	1/10 Man yr.	9972.00
14	Watch & Ward for every 10 Ha.	L/s			8000.00
15	POL	L/s			8000.00
16	Material and supply			Sub Total	57904.95
Maintenance III Year					
		1 No.	70.16	50	3508.17
1	Cost of plants for 10% replacement	1 m3	69.73	7.2	502.06
2	Reopening of Pits 50 x 0.60 x 0.60 x 0.40	1 m3	32.12	7.2	231.29
3	Refilling of pits with earth in other soils 50 x 0.60 x 0.60 x 0.40	1 No.	2.88	50	143.84
4	Loading & Unloading of Plants	500 No	229.43	1	229.43
5	Carriage of Plants 50 avg. distance upto 10 km.)	100 No	153.42	50	76.71
6	Spreading of plants pit to pit	100 No	267.88	50	133.94
7	Re-planting to plants	100 No.	239.73	50	119.86
8	Spot Irrigation	100 No	418.08	1500	6271.21
9	Weeding & Hoeing (thrice)	100 No	239.73	4000	9589.00
10	Hand Watering (8 times)	Ha.	2780.81	1	2780.81
11	Rejungle Clearance (2 times)	Ha.	31381.76	0.1	3138.18
12	Stubbing of Kana	100 No.	453.27	100	453.27
13	Pruning to plants 20%	Man year	9972.00	1/10 Man yr.	9972.00
14	Watch & Ward for every 10 Ha.	L/s			8000.00
15	POL	L/s			8000.00
16	Material and supply			Sub Total	53149.76
Maintenance IV Year					
		1 No.	70.16	25	1754.09
1	Cost of plants for 5% replacement	1 m3	69.73	3.6	251.03
2	Reopening of Pits 25 x 0.60 x 0.60 x 0.40	1 m3	32.12	3.6	115.64
3	Refilling of pits with earth in other soils 25 x 0.60 x 0.60 x 0.40	1 No.	2.88	25	71.92
4	Loading & Unloading of Plants	500 No	229.43	1	229.43
5	Carriage of Plants = 25 avg. distance upto 10 km.)	100 No	153.42	25	38.36
6	Spreading of plants pit to pit	100 No	267.88	25	66.97
7	Re-planting to plants	100 No.	239.73	25	59.93
8	Spot Irrigation	100 No	418.08	1500	6271.21
9	Weeding & Hoeing (twice)	Ha.	2780.81	1	2780.81
10	Rejungle Clearance (2 times)	100 No.	453.27	300	1359.80
11	Pruning to plants 30%	Man year	9972.00	1/10 Man yr.	9972.00
12	Watch & Ward for every 10 Ha.				

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15	POL	L/s			8000.00
16	Material and supply	L/s			8000.00
				Sub Total	38971.19
				TOTAL	371528.63
	Over Head expenses 5%				18576.43
	Enhancement due to wage escalation @9%				33437.58
				G.Total	423542.64
				Or Say	423543
Note:- The watch and ward in subsequent years will carry out the necessary operations of Pruning					
Cost per plant (in Rs) 847					
	Total No. of effected under size pole 14*2 =28 plants	847	Rs	28	23716
	Grand Total				23716.00


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