

## ESTIMATED COST FOR DEGRADED IN SHIWALIKS

Diversion of 0.8053 ha (instead of 0.57 ha) of forest for Development of Malwa Stone Crusher (M/s Malwa Concrete Plant) at village Dhulal H.B No 609 Khasra No 19, 20 which is a Delisted area of Section 4 of PLPA 1900 Tehsil Mukerian Distt. Hoshiarpur Under Dasuya Forest Division.  
User Agency:- Sh Gurdev Singh S/o Sh Karnail Singh

1) Diverted Forest Area = 0.8053 ha		Daily Wage Rate @ 342
2) Comp. Aff. Schme area = 2.0132 + 2 times Penal CA = 0.53 Total 2.5432 ha		Plants/Ha :1000
3) Name of Site of Plantation : Sarinpur Forest		
4) No. of plants Planted = 2.5432 * 1000 = 2543 Plants		

Sr. No.	Nature of Work Component	Unit	Unit Cost	Quantity	Amount
	<b>A. Nursery</b>				
1	Cost of seedling (upto tall plants) including (a) Original planting=1100 per ha. (b) Replacement 10%= 100 per ha Total 1100 No. in P. bag	No	75.00	1100	82500
	<b>B. Soil /Adv Works.</b>				
2	Lantana stubbing	Ha.	27981.10	0.60	16788.66
3	Survey and alignment	Ha.	1368.00	1.00	1368.00
4	Earth work i.e. digging of Pits of Bouldry Soil size 1000 No. x .50 Mtr. x .50 Mtr x .40 Mtr	M3	149.23	100	14923.00
					<b>115580</b>
	<b>C. Plantation.</b>				
5	Refilling of pits 1000 No x .0.50 Mtr x .50 Mtr x .30 Mtr =75 m3	M3	27.62	75.00	2071.50
6	Carriage of seedlings (Tall Plants) by Tractor- Trolly	No	10.83	1000	10830
7	Carriage of seedlings (Tall Plants) by M/L lead 500mt.	Mtr	9.60	1000	9600
8	Loading & unloading of plants (Tall Plants)	100 No	85.46	1000	854.60
9	Planting of seedlings (Tall Plants)	No	10.26	1000	10260
10	Fixing of cement concrete fence post including digging of pits 1/2 Mtr deep.	100 No.	1026.00	130	1334
11	Layout and Fixing of barwed wire per stand	100 Mtr	171.00	1950	3335
12	Application of Insecticides 1000 x 2 times = 1000	100 No	59.83	2000	1196.60
13	Application of fertilizers 1000 x 2 times = 1000	100 No	59.83	2000	1196.60
14	Prepration of inspection path in Bouldry Soil 50 Mtr x .10 Mtr x 1Mtr= 5 M3	M3	149.23	5	746.15
					<b>41423.75</b>
	<b>D. Mtc on Planting Year</b>				
15	Repair i.e. cleaning and dressing of inspection path	M3	149.23	5	746.15
16	Watch and ward for every 10 ha. Of plantation x 2.6 days	No.	342	26	8892.00
17	Cutting of lantana/mallaha 2nd and 3rd times. 0.50 x 2= 1	Ha	17890.00	1.00	17890.00
18	Weeding hoeing i.e. 1000m x 3 = 3000 m	No.	3.00	3000	9000
19	Application of Insecticides 1000 x 2 times = 2000	100 No	59.83	2000	1196.60
20	Application of fertilizers 100 x 2 times = 2000	100 No	59.83	2000	1196.60
21	Re-Opening of pits 100 No x .0.50 Mtr x .50 Mtr x .30 Mtrm = 2.18 m3	Mtr	56.43	7.5	423.23
22	Carriage of seedlings (Tall Plants) by Tractor- Trolly	No	10.83	1000	10830
23	Carriage of seedlings (Tall Plants) by M/L lead 500mt.	Mtr	9.60	100	960

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24	Loading & unloading of plants (Tall Plants)	100 No	85.46	100	85.46
25	Re -Planting of seedlings (Tall Plants)	No	10.26	100	1026
26	Covering (25% Plants)	No.	3.05	250	762.50
27	Uncovering	No.	0.33	250	82.50
					<b>53091</b>
	<b>E. Material</b>				
28	Insecticides including carriage	litre	452.35	10	4523.50
29	Fertilizers i.e. urea etc. including carriage	kg	33.92	200	6784.00
30	Misc. Items ( tools, etc)	L/S			5000
31	Fence Post (Concrete)	No.	350.00	130	45500
32	Barwed Wire	kg	85.00	325	27625
					<b>89433</b>
	<b>Total Cost of Planting Year</b>				<b>299527</b>
	Countigency 10%				<b>29953</b>
	<b>Total Cost of Planting Year</b>				<b>329480</b>
	<b>1st year Maintenance (Labour rate Rs. 366/-)</b>				
1	Re-opening of pits for replacement 250 no x .50m x .50m x .30m = 18.75 m3	M3	60.39	18.75	1132.31
2	Refilling of pits 250 No. x 0.50m x 0.50m x 0.30m = 18.75 m3	M3	37.99	18.75	712.34
3	Nursery cost of seedling (Tall Plants)	No	107.02	250	26754.39
4	Carriage of seedlings (Tall Plants) by Tractor-Trolly	No	11.59	250	2897.50
5	Carriage of seedlings (Tall Plants) by M/L labour lead 500mt.	100 Mtr	10.27	250	2568.42
6	Loading & unloading of plants (Tall Plants)	100 No	91.46	250	228.64
7	Re- Planting of seedlings (Tall Plants)	No	10.98	250	2745.00
8	Repair of Barwed Wire fence in hills	100 Mtr	109.16	1950	2129
9	Weeding and hoeing to trenches (Twice)	Mtr	2.28	4000	9117.89
10	Application of insecticides (Twice)	100 No	64.03	2000	1280.57
11	Application of fertilizers (twice)	100 No	64.03	2000	1280.57
12	Repair of inspection path (Twice )	Mtr	159.70	100	15970.22807
13	Cutting of lantana/mallah etc. per ha II & III times	Ha	6654.09	1.00	6654.09
14	Watch and ward for every 10 ha. Of plantation	No	366.00	26.00	9516
15	Covering (25% Plants)	No.	3.264035	250	816.01
16	Uncovering	No.	0.353158	250	88.29
					<b>83890.84</b>
	<b>Cost of material</b>				
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			5000
					<b>16307.50</b>
	<b>Total</b>				<b>100198.34</b>
	Countigency 10%				<b>10019.83</b>
	<b>Total Cost of 1st Year Mtc</b>				<b>110218.17</b>
	<b>2nd Year Maintenance (Labour Rate Rs. 392/-)</b>				
1	Reopening of pits for replacement 150 no x .50 m x .50 m x .30m = 11.25 m3	M3	64.68	11.25	727.65
2	Refilling of pits 150 No. x 0.50m x 0.50m x 0.30m = 11.25 m3	M3	40.69	11.25	457.75
3	Nursery cost of seedling (Tall Plants)	No	114.62	150	17193.38
4	Carriage of seedlings (Tall Plants) in P bags i) M/L Average Lead 1.5 km	No	11.00	150	1649.93
5	ii) Tractor trolly average lead 15 km (1000 plants per trolly)	No	12.41	150	1862.00
6	Loading & unloading of plants (Tall Plants) from T/ Trolly	100 No	97.96	150	146.94
7	Re -Planting of seedlings (Tall Plants)	No	11.76	150	1764
8	Repair of Barwed Wire fence in hills	100 Mtr	116.91	1950	2280

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	Weeding and hoeing to tranches (Twice)	Mtr.	2.44	4000	9767.87
10	Application of insecticides (Twice)	100 No	68.58	2000	1371.57
11	Application of fertilizers (Twice)	100 No	68.58	2000	1371.57
12	Repair of inspection path (Twice)	M3	171.04	100	17104.48
13	Lantana cutting (subsequent time 0.50 Ha) x 2 times = 1.00	Ha	6413.84	1.00	6413.84
	<b>Total</b>				<b>62110.81</b>
	<b>Cost of material</b>				
14	Insecticide	Kg	452.35	10.00	4523.50
15	Fertilizers i.e. urea etc.	Kg	33.92	200.00	6784.00
	<b>Total</b>				<b>11307.50</b>
	<b>Total</b>				<b>73418.31</b>
	<b>Contingency 10%</b>				<b>7341.83</b>
	<b>Total Cost of 2nd Year Mtc</b>				<b>80760.14</b>
	<b>3rd Year Maintenance (Labour Rate Rs. 419/-)</b>				
1	Reopening of pits for replacement 100 no x 0.50 x .50 m x .30m	M3	69.14	7.50	518.51
2	Refilling of trenches 100 No. x 0.50m x 0.50m x 0.30m	M3	43.49	7.50	326.19
3	Nursery cost of seedling (Tall Plants)	No	122.51	100	12251.47
4	Carriage of seedlings (Tall Plants) by mannual labour lead 500mt.	100 Mtr.	11.76	100	1175.77
5	Loading & unloading of plants (Tall Plants) from T/ Trolly	100 No	104.71	100	104.71
6	ii) Tractor trolly average (Tall Plants) lead 15 km (1000 plants per trolly)	No	13.26	100	1326.48
7	Re-Planting of seedlings (Tall Plants)	No	12.57	100	1257.00
8	Repair of Barwed Wire fence in hills	100 Mtr	124.96	1950	2437
9	Weeding and hoeing to tranches (Twice)	Mtr.	2.61	4000	10432.24
10	Cutting of lantana/mallaha IInd and IIIrd times.	Ha	7617.66	0.70	5332.36
11	Application of fertilizers	100 No	73.30	1000	733.04
12	Repair of inspection path (Twice)	Mtr	182.82	100	18282.08
13	Pruning of plants	No.	3.33	150	500.23
14	Jungle Clearance i.e. Bhang, Jhau tall weed etc.	No.	6856.07	0.2	1371.21
	<b>Total</b>				<b>56048.07</b>
	<b>Cost of material</b>				
15	Fertilizers i.e. urea etc.	Kg	33.92	56.00	1899.52
	<b>Total</b>				<b>1899.52</b>
	<b>Total Cost of 3rd maintenance</b>				<b>57947.59</b>
	<b>Contingency 10%</b>				<b>5794.76</b>
	<b>SubTotal Cost of 3rd year maintenance</b>				<b>63742.35</b>
	<b>4th Year Maintenance (Labour rate Rs. 448/-)</b>				
1	Watch and ward for every 10 ha. Of plantation	No	448.00	26.00	11648
	<b>Total</b>				<b>11648.00</b>
	<b>5th Year Maintenance (Labour rate Rs. 479/-)</b>				
1	Watch and ward for every 10 ha. Of plantation	No	479.00	26.00	12454
	<b>Total</b>				<b>12454.00</b>
	<b>6th Year Maintenance (Labour rate Rs. 513/-)</b>				
1	Watch and ward for every 10 ha. Of plantation	No	513.00	26.00	13338
	<b>Total</b>				<b>13338.00</b>
	<b>7th Year Maintenance (Labour rate Rs. 549/-)</b>				
1	Watch and ward for every 10 ha. Of plantation	No	549.00	26.00	14274
	<b>Total</b>				<b>14274.00</b>
	<b>8th Year Maintenance (Labour rate Rs. 587/-)</b>				


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	Watch and ward for every 10 ha. Of plantation	No	587.00	26.00	15262
	<b>Total</b>				<b>15262.00</b>
	<b>9th Year Maintenance (Labour rate Rs. 628/-)</b>				
1	Watch and ward for every 10 ha. Of plantation	No	628.00	26.00	16328
	<b>Total</b>				<b>16328.00</b>
	<b>10th Year Maintenance (Labour rate Rs. 672/-)</b>				
1	Watch and ward for every 10 ha. Of plantation	No	672.00	26.00	17472
	<b>Total</b>				<b>17472.00</b>
	<b>ABSTRACT</b>				
1	<b>Total Cost On Plantation Works</b>				<b>329479.64</b>
2	<b>Total Cost of 1st year Maintenance</b>				<b>110218.17</b>
3	<b>Total Cost of 2nd year Maintenance</b>				<b>80760.14</b>
4	<b>Total Cost of 3rd year Maintenance</b>				<b>63742.35</b>
5	<b>Total Cost of 4th year Maintenance</b>				<b>11648.00</b>
6	<b>Total Cost of 5th year Maintenance</b>				<b>12454.00</b>
7	<b>Total Cost of 6th year Maintenance</b>				<b>13338.00</b>
8	<b>Total Cost of 7th year Maintenance</b>				<b>14274.00</b>
9	<b>Total Cost of 8th year Maintenance</b>				<b>15262.00</b>
10	<b>Total Cost of 9th year Maintenance</b>				<b>16328.00</b>
11	<b>Total Cost of 10th year Maintenance</b>				<b>17472.00</b>
	<b>G.Total</b>				<b>684976.30</b>
	<b>Comp. Aff. Scheme for 1.00 Ha.</b>				<b>684976.00</b>
	Compensatory afforestation scheme 0.8053 ha X 2.5 = 2.0132	Ha.	2.0132	684976	1378993.68
	Entry Point activity 10 % (Development works of village under concern JFMC/VFC)				137899.37
				<b>Total</b>	<b>1516893.05</b>
	Cost of per Ha. For 7-10 Year 2 Times Penal CA violated area 0.53 ha. (0.265 X 2 = 0.53 (265 plants )	Ha.	0.53	684976	363037.28
	<b>Total of 2.013 ha + 2 Time Penal CA area is 0.53 ha</b>	Ha.	<b>2.5432</b>		<b>1879930.33</b>
	Net Present Value 626000 x 0.8053 ha	Ha.	0.8053	626000	504117.8
	2 time Penal NPV amount (50417.8 x 2 = 1008236				1008236.0
	Simple Interest 12% on 2 Penal NPV amount for 1 year (1008236 X 12% X 1 Year)				120983.00
	Total NPV+ Penal NPV including 12% interest				<b>1633336.80</b>
			<b>Grand Total</b>		<b>3513267.13</b>
			<b>Or Say</b>		<b>3513267.00</b>

Note:- Labour Rate increased average 7% every year

  
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 27/12/21