

MODEL RATE STRUCTURE FOR COMPENSATORY AFFORESTATION
Model No. 4

Del rate structure for plantation of mixed tree species in areas with rainfall 800 m to 1200 m and medium quality, medium drained soil with depth above m.

Propose C.A. Area for Diversion of 9.00 ha. Forest land for Hedri-Bande Road.

Forest Division Bhamragad

Total Area - 9.00 Ha. (1111 Plants/ha.)

Size of pits - 0.45 x 0.45 x 0.45

Spacement - 3.00 x 3.00

Total Area 9.00 ha.

Wages Rate Rs. Per Days 406.46

Sr. No.	Particulars of Works	1.00 Ha. Plantation			9.00 Ha. Plantation			Total Amount	
		Mandays	Wages	Material Supply	Total Amount	Mandays	Wages		Material Supply
1	2	3	4	5	6	7	8	9	10
1	A) Pre Monsoon Works (PPO/PHY)								
	a) Survey & Demarcation	1.00	406.46	91.00	497.46	9.00	3658.14	819.00	4477.14
	b) Preparation of treatment map (100mX50 m grid)	1.00	406.46	91.00	497.46	9.00	3658.14	819.00	4477.14
	c) Digging trial pits of size 0.30x0.30x0.60 in corner of grid.	0.40	162.58	0.00	162.58	3.60	1463.26	0.00	1463.26
	d) Fixing 60cm x 0.05 cm x 12cm cement pillars upto 30cm deep in corner of grid painting with Grid no. etc complete (3 pillars Rs. 75/- for each pillars)	0.00	0.00	225.00	225.00	0.00	0.00	2025.00	2025.00
	e) Clearing of bushes and preparation of site (As per requirement)	10.00	4064.60	91.00	4155.60	90.00	36581.40	819.00	37400.40
2	Soil and moisture Conservation works including collection of rubbles from areas upto 30 m etc.	31.00	12600.26	0.00	12600.26	279.00	113402.34	0.00	113402.34
3	Providing and fixing chain link fencing, 102 Rmt per ha. (with one gate + two wickets gates for one site) (Rs. 1494/- per Rmt of basic rate +20% for transportation of ave. Leadplus 20% for tribal/remote area (by tender process) (Rs.1494+149+149=1792/- per Rmt (1.60 Rmt height with G.I Chain link size 50mmx50m, 8 gauge thick and fixed 75 mm above ground level complete as per SSR item No. 1744 for 2017-18)	0.00	0.00	182865.60	182865.60	0.00	0.00	1645790.40	1645790.40
4	Alignment of pits at 3m x 3m spacement. 1111 pits per 100 pits 0.26 M.D. M/S 8.18 per 100 pits	2.89	1174.67	91.00	1265.67	26.01	10572.02	819.00	11391.02

5	Digging of pits of size 0.45 X 0.45 X 0.45 m (1111 pits per ha.) 6.60 M.D. per 100 pits. Note :- As per local conditions provision for mechanized digging can be made	73.33	29805.71	0.00	29805.71	659.97	268251.41	0.00	268251.41
6	Construction of 5.00 Rmt wide inspection path 1 M.D. per 100 Rmt	1.00	406.46	0.00	406.46	9.00	3658.14	0.00	3658.14
7	Enumeration of all valuelabel plant species at plantation site and grid wise counting and providing color band and recording the same in Register (0.75 M.D.) per 100 plants.	0.75	304.85	25.00	329.85	6.75	2743.61	225.00	2968.61
8	Providing and fixing (4 feet x 3 feet) information board each per site	0.00	0.00	5000.00	5000.00	0.00	0.00	45000.00	45000.00
9	Part Nursery cost of raising 1333 seedlings per ha (including 20% casualty replacement) in polygons of size 12.50 x 25.00cm (wages Rs.11.90 and M& S Rs. 3.62 per plant)	46.70	18981.68	4798.80	23780.48	420.30	170835.14	43189.20	214024.34
	Total -	168.07	68313.73	193278.40	261592.13	1512.63	614823.59	1739505.60	2354329.19
	Contingancy 3%							70629.88	70629.88
	Labour wifare 4%							94173.17	94173.17
	Grand Total -	168.07	68313.73	193278.40	261592.13	1512.63	614823.59	1904308.64	2519132.23
	Say Rs. -		68314	193278	261592	1513	614824	1904309	2519132
B) First Year Operation									
1	Part nursery cost for maintainace of 1333 seedling per ha Rs. 2.64 per seedling (Wages Rs. 2.69, M&S Rs. 0.81)	14.80	6015.61	1079.00	7094.61	133.20	54140.47	9711.00	63851.47
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	7495.12	1944.00	9439.12	165.96	67456.10	17496.00	84952.10
3	Transportation of 1333 seedlings from nursery to plantation site including loading & unloading (0.14 M.D. per 100 seedling & M.S. Rs. 1.82 per seedlings.)	1.87	760.08	2426.00	3186.08	16.83	6840.72	21834.00	28674.72
4	Planting of 1111 seedling (1.0 M.D. oer 100 seedlings)	11.11	4515.77	0.00	4515.77	99.99	40641.94	0.00	40641.94
5	3 Seedlings (1 Rmt circular) and 2 soil workings (4.00 M.D per 100 seedlings) fertilizer application Rs. 0.82 per seedling.	44.44	18063.08	911.02	18974.10	399.96	162567.74	8199.18	170766.92
6	Casualty replacement (20% 222 seedlings per ha.) (2 M.D per 100 seedlings)	4.44	1804.68	0.00	1804.68	39.96	16242.14	0.00	16242.14
7	Part Nursery cost for causality replacement in SYO (222 seedlings per ha.) (wages Rs. 11.90 and material supply Rs. 3.62 total Rs. 12.55 per seedling.)	7.78	3162.26	803.64	3965.90	70.02	28460.33	7232.76	35693.09

8	Watch and ward (10 months - 1 watcher per 10 ha.)	27.38	11128.87	0.00	11128.87	246.42	100159.87	0.00	100159.87
9	Soil working for naturally grower plants and singling (1.15 M.D. per 100 plants)	1.15	467.43	10.00	477.43	10.35	4206.86	90.00	4296.86
10	Fire tracing	2.00	812.92	0	812.92	18.00	7316.28	0.00	7316.28
	Total -	133.41	54225.83	7173.66	61399.49	1200.69	488032.46	64562.94	552595.40
	Contingancy 3%							16577.86	16577.86
	Labour wlfare (medi. & water) 4%							22103.82	22103.82
	Grand Total -	133.41	54225.83	7173.66	61399.49	1200.69	488032.46	103244.62	591277.08
	Say Rs. -	133	54226	7174	61399	1201	488032	103245	591277
C) Second Year Operation									
1	Part nursery cost for seedlings for causality replacemrnt (222 seedlings per ha.) labour rate @ Rs3.77 and M.S. Rs. 1.82 per seedlings.	2.46	999.89	404.04	1403.93	22.14	8999.02	3636.36	12635.38
2	Transportation of 222 seedlings for causality replacement from nursery to plantation site (including loading and unloading) wages 0.14 M.D per 100 Seedling & M.S. Rs.1.82 per seedlings	0.31	126.00	404.04	530.04	2.79	1134.02	3636.36	4770.38
3	Planting for Casuality replacement 222 seedings (2.00 M.D. per 100 seedlings)	4.44	1804.68	0.00	1804.68	39.96	16242.14	0.00	16242.14
4	2 weedings and 1 soil working with fertilizer application at 2.5 M.D. per 100 seedlings M.S. Rs. 0.82 per seedling	27.77	11287.39	911.02	12198.41	249.93	101586.55	8199.18	109785.73
5	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11
6	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28
	Total -	73.48	29866.68	1719.10	31585.78	661.32	268800.13	15471.90	284272.03
	Contingancy 3%							8528.16	8528.16
	Labour wlfare (medi. & water) 4%							11370.88	11370.88
	Grand Total -	73.48	29866.68	1719.10	31585.78	661.32	268800.13	35370.94	304171.07
	Say Rs. -		29867	1719	31586	661	268800	35371	304171

D) Third Year Operations									
1	1 weeding and 1 soil working (1.50 M.D. per 100 seedlings) applying fertilizer @ Rs. 0.82 per plant	16.67	6775.69	911.02	7686.71	150.03	60981.19	8199.18	69180.37
2	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11
3	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	812.92	25.00	837.92	18.00	7316.28	225.00	7541.28
	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28
	Total -	57.17	23237.32	936.02	24173.34	514.53	209135.86	8424.18	217560.04
	Contingancy 3%							6526.80	6526.80
	Labour welfare (medi. & water) 4%							8702.40	8702.40
	Grand Total -	57.17	23237.32	936.02	24173.34	514.53	209135.86	23653.38	232789.25
	Say Rs. -		23237	936	24173	515	209136	23653	232789
E) Fourth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	812.92	25.00	837.92	18.00	7316.28	225.00	7541.28
3	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28
	Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	225.00	148379.67
	Contingancy 3%							4451.39	4451.39
	Labour welfare (medi. & water) 4%							5935.19	5935.19
	Grand Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	10611.58	158766.25
F) Fifth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register In May and October	2.00	812.92	25.00	837.92	18.00	7316.28	225.00	7541.28
3	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28
	Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	225.00	148379.67
	Contingancy 3%							4451.39	4451.39
	Labour welfare (medi. & water) 4%							5935.19	5935.19
	Grand Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	10611.58	158766.25

G) Sixth Year Operation										
1	Watch and ward 12 months - 1 watcher per 10.00 ha.		36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	812.92	25.00	837.92	18.00	7316.28	225.00	7541.28	
3	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28	
	Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	225.00	148379.67	
	Contingancy 3%									
	Labour welfare (medi. & water) 4%									
	Grand Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	10611.58	158766.25	
H) Seventh Year Operation										
1	Watch and ward 12 months - 1 watcher per 10.00 ha.		36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	812.92	25.00	837.92	18.00	7316.28	225.00	7541.28	
3	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28	
	Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	225.00	148379.67	
	Contingancy 3%									
	Labour welfare (medi. & water) 4%									
	Grand Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	10611.58	158766.25	
H) Eighth Year Operation										
1	Watch and ward 12 months - 1 watcher per 10.00 ha.		36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register In May and October	2.00	812.92	25.00	837.92	18.00	7316.28	225.00	7541.28	
3	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28	
	Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	225.00	148379.67	
	Contingancy 3%									
	Labour welfare (medi. & water) 4%									
	Grand Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	10611.58	158766.25	
	Say Rs. -		16462	25	16487	365	148155	10612	158766	


H) Ninth Year Operation										
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11	
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	812.92	25.00	837.92	18.00	7316.28	225.00	7541.28	
3	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28	
	Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	225.00	148379.67	
	Contingency 3%							4451.39	4451.39	
	Labour welfare (medi. & water) 4%							5935.19	5935.19	
	Grand Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	10611.58	158766.25	
	Say Rs. -		16462	25	16487	365	148155	10612	158766	
I) Tenth Year Operation										
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	14835.79	0.00	14835.79	328.50	133522.11	0.00	133522.11	
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	812.92	25.00	837.92	18.00	7316.28	225.00	7541.28	
3	Fire tracing	2.00	812.92	0.00	812.92	18.00	7316.28	0.00	7316.28	
	Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	225.00	148379.67	
	Contingency 3%							4451.39	4451.39	
	Labour welfare (medi. & water) 4%							5935.19	5935.19	
	Grand Total -	40.50	16461.63	25.00	16486.63	364.50	148154.67	10611.58	158766.25	
	Say Rs. -		16462	25	16487	365	148155	10612	158766	

ABSTRACT

S. No.	Year of Operation	Mandays			Wages	Material Supply	Total	9.00 ha. Plantation			Total Amount (round off)
		Mandays	Wages	Material Supply				Mandays	Other Expenses	Total	
1	2	3	4	5	6	7	8	9	10		
1	PPO + PYO Works	168	68314	193278	261592	1513	614824	1904309	2519132		
2	First year Operation	133	54226	7174	61399	1201	488032	103245	591277		
3	Second Year Operation	73	29867	1719	31586	661	268800	35371	304171		
4	Third Year Operation	57	23237	936	24173	515	209136	23653	232789		
5	Fourth Year Operation	41	16462	25	16487	365	148155	10612	158766		
6	Fifth Year Operation	41	16462	25	16487	365	148155	10612	158766		
7	Sixth Year Operation	41	16462	25	16487	365	148155	10612	158766		
8	Seventh Year Operation.	41	16462	25	16487	365	148155	10612	158766		
9	Eighth Year Operation.	41	16462	25	16487	365	148155	10612	158766		
10	Nineth Year Operation.	41	16462	25	16487	365	148155	10612	158766		
11	Tenth Year Operation.	41	16462	25	16487	365	148155	10612	158766		
	Total-	716	290875	203282	494157	6441	2617875	2140859	4758733		

Rs. 4758733/- (Rs.Forty seven Lakh, Fifty eight Thousand, seven hundred, thirty three) only.

Sub. Divisional Forest Officer, Kurkheda
Wadsa Forest Division, Wadsa


Dy. Conservator of Forests
Wadsa Division, Wadsa