

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 30.00 ha. Forest land for Assestant Engineer, Mumbai Railway Development Corporation Limited

Forest Division Wadsa

Total Area - 30.00 Ha. (1111 Plants/ha.)

Size of pits - 0.45 x 0.45 x 0.45

Spacement - 3.00 x 3.00

Wages Rate Rs. Per Days 418.96

Total Area 30.00 ha.

Sr. No.	Particulars of Works	1.00 Ha. Plantation				30.00 Ha. Plantation			
		Mandays	Wages	Material Supply	Total Amount	Mandays	Wages	Material Supply	Total Amount
1	2	3	4	5	6	7	8	9	10
1	A) Pre Monsoon Works (PPO/PYO)								
	a) Survey & Demarcation	1.00	418.96	91.00	509.96	30.00	12568.80	2730.00	15298.80
	b) Preparation of treatment map (100mmX50 m grid)	1.00	418.96	91.00	509.96	30.00	12568.80	2730.00	15298.80
	c) Digging trial pits of size 0.30x0.30x0.60 in corner of grid.	0.40	167.58	0.00	167.58	12.00	5027.52	0.00	5027.52
	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	6750.00	6750.00
	e) Clearing of bushes and preparation of site (As per requirement)	10.00	4189.60	91.00	4280.60	300.00	125688.00	2730.00	128418.00
2	Soil and moisture Conservation works including collection of rubbles from areas upto 30 m etc.	31.00	12987.76	0.00	12987.76	930.00	389632.80	0.00	389632.80
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	5485968.00	5485968.00
4	Alignment of pits at 3m x 3m spacement. 1111 pits per 100 pits 0.26 M.D. M/5 8.18 per 100 pits	2.89	1210.79	91.00	1301.79	86.70	36323.83	2730.00	39053.83

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	30722.34	0.00	30722.34	2199.90	921670.10	0.00	921670.10
6	Construction of 5.00 Rmt wide Inspection path 1 M.D. per 100 Rmt	1.00	418.96	0.00	418.96	30.00	12568.80	0.00	12568.80
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	314.22	25.00	339.22	22.50	9426.60	750.00	10176.60
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	150000.00	150000.00
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	19565.43	4798.80	24364.23	1401.00	586962.96	143964.00	730926.96
Total -		168.07	70414.61	193278.40	263693.01	5042.10	2112438.22	5798352.00	7910790.22
Contingency 3%		-	-	-	-	-	-	237323.71	237323.71
Labour welfare 4%		-	-	-	-	-	-	316431.61	316431.61
Grand Total -		168.07	70414.61	193278.40	263693.01	5042.10	2112438.22	6352107.32	8464545.53
Say Rs. -		-	70415	193278	263693	5042	2112438	6352107	8464546
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	6200.61	1079.00	7279.61	444.00	186018.24	32370.00	218388.24
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	7725.62	1944.00	9669.62	553.20	231768.67	58320.00	290088.67
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	783.46	2426.00	3209.46	56.10	23503.66	72780.00	96283.66
4	Planting of 1111 seedling (1.0 M.D. oer 100 seedlings)	11.11	4654.65	0.00	4654.65	333.30	139639.37	0.00	139639.37
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	18618.58	911.02	19529.60	1333.20	558557.47	27330.60	585888.07
6	Casualty replacement (20% 222 seedlings per ha.) (2 M.D per 100 seedlings)	4.44	1860.18	0.00	1860.18	133.20	55805.47	0.00	55805.47
7	Part Nursery cost for causally 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	3259.51	803.64	4063.15	233.40	97785.26	24109.20	121894.46

8	Watch and ward (10 months - 1 watcher per 10 ha.)	27.38	11471.12	0.00	11471.12	821.40	344133.74	0.00	344133.74
9	Soil working for naturally grower plants and singling (1.15 M.D. per 100 plants)	1.15	481.80	10.00	491.80	34.50	14454.12	300.00	14754.12
10	Fire tracing	2.00	837.92	0	837.92	60.00	25137.60	0.00	25137.60
	Total -	133.41	55893.45	7173.66	63067.11	4002.30	1676803.61	215209.80	1892013.41
	Contingancy 3%								
	Labour wlfare (medi. & water) 4%							56760.40	56760.40
	Grand Total -	133.41	55893.45	7173.66	63067.11	4002.30	1676803.61	75680.54	75680.54
	Say Rs. -	133	55893	7174	63067	4002	1676804	347651	2024454
	C) Second Year Operation								
1	Part nursery cost for seedlings for causality replacemnt (222 seedlings per ha.) labour rate @ Rs3.77 and M.S. Rs. 1.82 per seedlings.	2.46	1030.64	404.04	1434.68	73.80	30919.25	12121.20	43040.45
2	Transportation of 222 seedlings for causality replacemnt 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	129.88	404.04	533.92	9.30	3896.33	12121.20	16017.53
3	Planting for Casualty replacement 222 seedlings (2.00 M.D. per 100 seedlings)	4.44	1860.18	0.00	1860.18	133.20	55805.47	0.00	55805.47
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	11634.52	911.02	12545.54	833.10	349035.58	27330.60	376366.18
5	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	15292.04	0.00	15292.04	1095.00	458761.20	0.00	458761.20
6	Fire tracing	2.00	837.92	0.00	837.92	60.00	25137.60	0.00	25137.60
	Total -	73.48	30785.18	1719.10	32504.28	2204.40	923555.42	51573.00	975128.42
	Contingancy 3%							29253.85	29253.85
	Labour wlfare (medi. & water) 4%							39005.14	39005.14
	Grand Total -	73.48	30785.18	1719.10	32504.28	2204.40	923555.42	119831.99	1043387.41
	Say Rs. -		30785	1719	32504	2204	923555	119832	1043387

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	6984.06	911.02	7895.08	500.10	209521.90	27330.60	236852.50			
2	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	15292.04	0.00	15292.04	1095.00	458761.20	0.00	458761.20			
3	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	837.92	25.00	862.92	60.00	25137.60	750.00	25887.60			
	Fire tracing	2.00	837.92	0.00	837.92	60.00	25137.60	0.00	25137.60			
	Total -	57.17	23951.94	936.02	24887.96	1715.10	718558.30	22399.17	746638.90			
	Contingancy 3%							22399.17	22399.17			
	Labour welfare (medl. & water) 4%							29865.56	29865.56			
	Grand Total -	57.17	23951.94	936.02	24887.96	1715.10	718558.30	80345.32	798903.62			
	Say Rs. -		23952	936	24888	1715	718558	80345	798904			
E) Fourth Year Operation												
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	15292.04	0.00	15292.04	1095.00	458761.20	0.00	458761.20			
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	837.92	25.00	862.92	60.00	25137.60	750.00	25887.60			
3	Fire tracing	2.00	837.92	0.00	837.92	60.00	25137.60	0.00	25137.60			
	Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	750.00	509786.40			
	Contingancy 3%							15293.59	15293.59			
	Labour welfare (medl. & water) 4%							20391.46	20391.46			
	Grand Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	36435.05	545471.45			
F) Fifth Year Operation												
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	15292.04	0.00	15292.04	1095.00	458761.20	0.00	458761.20			
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	837.92	25.00	862.92	60.00	25137.60	750.00	25887.60			
3	Fire tracing	2.00	837.92	0.00	837.92	60.00	25137.60	0.00	25137.60			
	Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	750.00	509786.40			
	Contingancy 3%							15293.59	15293.59			
	Labour welfare (medl. & water) 4%							20391.46	20391.46			
	Grand Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	36435.05	545471.45			

G) Sixth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	15292.04	0.00	15292.04	1095.00	458761.20	0.00	458761.20
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	837.92	25.00	862.92	60.00	25137.60	750.00	25887.60
3	Fire tracing	2.00	837.92	0.00	837.92	60.00	25137.60	0.00	25137.60
	Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	750.00	509786.40
	Contingancy 3%							15293.59	15293.59
	..Labour welfare (medi. & water) 4%		..					20391.46	20391.46
	Grand Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	36435.05	545471.45
H) Seventh Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	15292.04	0.00	15292.04	1095.00	458761.20	0.00	458761.20
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	837.92	25.00	862.92	60.00	25137.60	750.00	25887.60
3	Fire tracing	2.00	837.92	0.00	837.92	60.00	25137.60	0.00	25137.60
	Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	750.00	509786.40
	Contingancy 3%							15293.59	15293.59
	Labour welfare (medi. & water) 4%							20391.46	20391.46
	Grand Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	36435.05	545471.45
	Say Rs. -		16968	25	16993	1215	509036	36435	545471
H) Eighth Year Operation									
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	15292.04	0.00	15292.04	1095.00	458761.20	0.00	458761.20
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	837.92	25.00	862.92	60.00	25137.60	750.00	25887.60
3	Fire tracing	2.00	837.92	0.00	837.92	60.00	25137.60	0.00	25137.60
	Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	750.00	509786.40
	Contingancy 3%							15293.59	15293.59
	Labour welfare (medi. & water) 4%							20391.46	20391.46
	Grand Total -	40.50	16967.88	25.00	16992.88	1215.00	509036.40	36435.05	545471.45
	Say Rs. -		16968	25	16993	1215	509036	36435	545471

ABSTRACT

S. No.	Year of Operation	Mandays	Wages	Material Supply	Total	30.00 ha. Plantation			
						Mandays	Other Expenses	Total	Total Amount (round off)
1	2	3	4	5	6	7	8	9	10
1	PPO + PYO Works	168	70415	193278	263693	5042	2112438	6352107	8464546
2	First year Operation	133	55893	7174	63067	4002	1676804	347651	2024454
3	Second Year Operation	73	30785	1719	32504	2204	923555	119832	1043387
4	Third Year Operation	57	23952	936	24888	1715	718558	80345	798904
5	Fourth Year Operation	41	16968	25	16993	1215	509036	36435	545471
6	Fifth Year Operation	41	16968	25	16993	1215	509036	36435	545471
7	Sixth Year Operation	41	16968	25	16993	1215	509036	36435	545471
8	Seventh Year Operation.	41	16968	25	16993	1215	509036	36435	545471
9	Eighth Year Operation.	41	16968	25	16993	1215	509036	36435	545471
10	Nineth Year Operation.	41	16968	25	16993	1215	509036	36435	545471
11	Tenth Year Operation.	41	16968	25	16993	1215	509036	36435	545471
	Total-	716	299820	203282	503103	21469	8994610	7154981	16149591

Rs. 16149591/- (Rs. One caror, Sixty one Lakh, Forty nine Thousand, Five hundred, Ninety one) only.

Asstt. Conservator Of Forest
Wadsa Forest Division, Wadsa

Dy. Conservator of Forests
Wadsa Division, Wadsa