



MODEL RATE STRUCTURE FOR COMPENSATORY AFFORESTATION

Model No. 4

Model rate structure for plantation of mixed tree species with rainfall up to 800 mm and medium quality, medium drained soil with soil depth up to 30 cm.

Propose C.A. Area for Diversion of 15.00 ha. Forest land for Balkum to Gaikmukh, DP Road Thane.

Forest Division Wadsa

Total Area - 15.00 Ha. (1111 Plants/ha.)

Size of pits - 0.45 x 0.45 x 0.45 mtr.

Spacement - 3.00 x 3.00 mtr.

Total Area 15.00 ha.

Wages Rate Rs. Per Days 445.19

Sr. No.	Particulars of Works	1.00 Ha. Plantation				15.00 Ha. Plantation			
		Mandays	Wages	Material Supply	Total Amount	Mandays	Wages	Material Supply	Total Amount
1	2	3	4	5	6	7	8	9	10
	A) Pre Monsoon Works (PPO/PYO)								
1	a) Survey & Demarcation	1.00	445.19	91.00	536.19	15.00	6677.85	1365.00	8042.85
	b) Preparation of treatment map (100mX50 m grid)	1.00	445.19	91.00	536.19	15.00	6677.85	1365.00	8042.85
	c) Digging trial pits of size 0.30x0.30x0.60 mtr in corner of grid.	0.40	178.08	0.00	178.08	6.00	2671.14	0.00	2671.14
	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	3375.00	3375.00
2	e) Clearing of bushes and preparation of site (As per requirement)	10.00	4451.90	91.00	4542.90	150.00	66778.50	1365.00	68143.50
	Soil and moisture Conservation works including collection of rubbles from areas upto 30 m etc.	31.00	13800.89	0.00	13800.89	465.00	207013.35	0.00	207013.35
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	362855.00	362855.00	0.00	0.00	542825.00	542825.00
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	1286.60	91.00	1377.60	43.35	19298.99	1365.00	20663.99

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	32645.78	0.00	32645.78	1099.95	489686.74	0.00	489686.74
6	Construction of 5.00 Rmt wide Inspection path 1 M.D. per 100 Rmt	1.00	445.19	0.00	445.19	15.00	6677.85	0.00	6677.85
7	Enumeration of all valuable 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	333.89	25.00	358.89	11.25	5008.39	375.00	5383.39
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	5000.00	5000.00
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	20790.37	4798.80	25589.17	700.50	311855.60	71982.00	383837.60
	Total -	168.07	74823.08	373267.80	448090.88	2521.05	1122346.25	5529017.00	6651363.25
	Contingency 3%							199540.90	199540.90
	Labour welfare 4%							266054.53	266054.53
	Grand Total -	168.07	74823.08	373267.80	448090.88	2521.05	1122346.25	5994612.43	7116958.68
	Say Rs. -		74823	373268	448091	2521	1122346	5994612	7116959
	B) First Year Operation								
1	Part nursery cost for maintenance of 1333 seedling per ha Rs. 2.64 per seedling (Wages Rs. 2.69, M&S Rs. 0.81)	14.80	6588.81	1079.00	7667.81	222.00	98832.18	16185.00	115017.18
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	8209.30	1944.00	10153.30	276.60	123139.55	29160.00	152299.55
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	832.51	2426.00	3258.51	28.05	12487.58	36390.00	48877.58
4	Planting of 1111 seedling (1.0 M.D. per 100 seedlings)	11.11	4946.06	0.00	4946.06	166.65	74190.91	0.00	74190.91
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	19784.24	911.02	20695.26	666.60	296763.65	13665.30	310428.95
6	Casualty replacement (20% i.e. 222 seedlings per ha.) (2 M.D per 100 seedlings)	4.44	1976.64	0.00	1976.64	66.60	29649.65	0.00	29649.65
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	3463.58	803.64	4267.22	116.70	51953.67	12054.60	64008.27
8	Watch and ward (10 months - 1 watcher per 10 ha.)	27.38	12189.30	0.00	12189.30	410.70	182839.53	0.00	182839.53

9	Soil working for naturally growing plants and singling (1.15 M.D. per 100 plants)	1.15	511.97	10.00	521.97	17.25	7679.53	150.00	7829.53
10	Fire tracing	2.00	890.38	0	890.38	30.00	13355.70	0.00	13355.70
	Total - Contingency 3%	133.41	59392.80	7173.66	66566.46	2001.15	890891.97	107604.90	998496.87
	Labour welfare (medi. & water) 4%							29954.91	29954.91
	Grand Total - Say Rs. -	133.41	59392.80	7173.66	66566.46	2001.15	890891.97	177499.68	1068391.65
	C) Second Year Operation	133	59393	7174	66566	2001	890892	177500	1068392
1	Part nursery cost for seedlings for causality replacement (222 seedlings per ha.) labour rate @ Rs.3.77 and M.S. Rs. 1.82 per seedlings.	2.46	1095.17	404.04	1499.21	36.90	16427.51	6060.60	22488.11
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	138.01	404.04	542.05	4.65	2070.13	6060.60	8130.73
3	Planting for Casualty replacement 222 seedlings (2.00 M.D. per 100 seedlings)	4.44	1976.64	0.00	1976.64	66.60	29649.65	0.00	29649.65
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	12362.93	911.02	13273.95	416.55	185443.89	13665.30	199109.19
5	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
6	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total - Contingency 3%	73.48	32712.56	1719.10	34431.66	1102.20	490688.42	25786.50	516474.92
	Labour welfare (medi. & water) 4%							15494.25	15494.25
	Grand Total - Say Rs. -	73.48	32712.56	1719.10	34431.66	1102.20	490688.42	61939.74	552628.16
	D) Third Year Operations	32713	32713	1719	34432	1102	490688	61940	552628
1	1 weeding and 1 soil working (1.50 M.D. per 100 seedlings) applying fertilizer @ Rs. 0.82 per plant	16.67	7421.32	911.02	8332.34	250.05	111319.76	13665.30	124985.06
2	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53
3	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70
	Total - Contingency 3%	57.17	25451.51	936.02	26387.53	857.55	381772.68	14040.30	395812.98
	Labour welfare (medi. & water) 4%							11874.39	11874.39
	Grand Total - Say Rs. -	57.17	25451.51	936.02	26387.53	857.55	381772.68	41747.21	423519.89
			25452	936	26388	858	381773	41747	423520

E) Fourth Year Operation													
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53				
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70				
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70				
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93				
	Contingency 3%							8124.84	8124.84				
	Labour welfare (medi. & water) 4%							10833.12	10833.12				
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88				
F) Fifth Year Operation													
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53				
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70				
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70				
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93				
	Contingency 3%							8124.84	8124.84				
	Labour welfare (medi. & water) 4%							10833.12	10833.12				
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88				
G) Sixth Year Operation													
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53				
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70				
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70				
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93				
	Contingency 3%							8124.84	8124.84				
	Labour welfare (medi. & water) 4%							10833.12	10833.12				
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88				
H) Seventh Year Operation													
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53				
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70				
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70				
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93				
	Contingency 3%							8124.84	8124.84				
	Labour welfare (medi. & water) 4%							10833.12	10833.12				
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88				
	Say Rs. -		18030	25	18055	608	270453	19333	289786				

H) Eighth Year Operation												
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53			
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70			
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70			
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93			
	Contingency 3%							8124.84	8124.84			
	Labour welfare (medi. & water) 4%							10833.12	10833.12			
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88			
	Say Rs. -		18030	25	18055	608	270453	19333	289786			
H) Ninth Year Operation												
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53			
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70			
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70			
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93			
	Contingency 3%							8124.84	8124.84			
	Labour welfare (medi. & water) 4%							10833.12	10833.12			
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88			
	Say Rs. -		18030	25	18055	608	270453	19333	289786			
I) Tenth Year Operation												
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53			
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70			
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70			
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93			
	Contingency 3%							8124.84	8124.84			
	Labour welfare (medi. & water) 4%							10833.12	10833.12			
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88			
	Say Rs. -		18030	25	18055	608	270453	19333	289786			
J) Tenth Year Operation												
1	Watch and ward 12 months - 1 watcher per 10.00 ha.	36.50	16249.44	0.00	16249.44	547.50	243741.53	0.00	243741.53			
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2.00	890.38	25.00	915.38	30.00	13355.70	375.00	13730.70			
3	Fire tracing	2.00	890.38	0.00	890.38	30.00	13355.70	0.00	13355.70			
	Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	375.00	270827.93			
	Contingency 3%							8124.84	8124.84			
	Labour welfare (medi. & water) 4%							10833.12	10833.12			
	Grand Total -	40.50	18030.20	25.00	18055.20	607.50	270452.93	19332.95	289785.88			
	Say Rs. -		18030	25	18055	608	270453	19333	289786			

ABSTRACT

S. No.	Year of Operation	1.00 ha. Plantation				15.00 ha. Plantation			
		Mandays	Wages	Material Supply	Total	Mandays	Wages	Material Supply	Total Amount (round off)
1	2	3	4	5	6	7	8	9	10
1	PPO + PYO Works	168	74823	373268	448091	2521	1122346	5994612	7116959
2	First year Operation	133	59393	7174	66566	2001	890892	177500	1068392
3	Second Year Operation	73	32713	1719	34432	1102	490688	61940	552628
4	Third Year Operation	57	25452	936	26388	858	381773	41747	423520
5	Fourth Year Operation	41	18030	25	18055	608	270453	19333	289786
6	Fifth Year Operation	41	18030	25	18055	608	270453	19333	289786
7	Sixth Year Operation	41	18030	25	18055	608	270453	19333	289786
8	Seventh Year Operation.	41	18030	25	18055	608	270453	19333	289786
9	Eighth Year Operation.	41	18030	25	18055	608	270453	19333	289786
10	Ninth Year Operation.	41	18030	25	18055	608	270453	19333	289786
11	Tenth Year Operation.	41	18030	25	18055	608	270453	19333	289786
	Total-	716	318591	383272	701863	10734	4778870	6411130	11190000

Rs. 11190000/- (Rs. One Crore Eleven Lac Ninety Thousand only.)

Asstt. Conservator Of Forests
Wadsa Forest Division, Wadsa

Dy. Conservator of Forests
Wadsa Division, Wadsa