

Model Rate Structure for Compensatory Afforestation
Model No.5.

Fencing and Irrigated Plantations

Model rate structure for plantation of mixed tree species having rainfall less than 800 mm and medium quality, medium drained soil.

Spacement
Size of Pits
No. of Seedlings

- 3m x 3m
- 0.45 x 0.45 x 0.45m
- 1111 per ha

VILLAGE
Wai-Warda Tanda

TALUKA
Range
Mudkhed
Nanded

Compt.No
S.N./Gut N
401 B, 403 A
117 / 139

Wage Rate
Ha.
371.15
10.68

Sr.N o	Particulars of works	S.N./Gut N 117 / 139 Ha. 10.68							
		Per Ha.				10.68 Ha.			
		Man days	Wages	Material supply	Total (Rs. Per Ha.)	Man days	Wages	Material supply	Total (Rs. Per Ha.)
A. Pre Monsoon Works PPO/PYO									
1	(a) Survey and demarcation	1	371.15	91	462.15	10.68	3963.88	971.88	4935.76
	(b) Preparation of treatment map (100 m x 50 m grid)	1	371.15	91	462.15	10.68	3963.88	971.88	4935.76
	(c) Digging trial pits of size 0.30x0.30x0.60 in corner of Grid.	0.40	148.46	0	148.46	4.272	1585.55	0	1585.55
	(d) Fixing 60cm x 0.05cm 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	0.00	225	225.00	0	0	2403	2403.00
	(e) Clearing of bushes and preparation of site (As per requirement)	10	3711.5	91	3802.50	106.80	39638.82	0	39638.82
2	Soil and moisture conservation works including collection of rubbles from areas upto 30 m etc	31	11505.65	0	11505.65	331.08	122880.342	0	122880.34
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/- p	0	0	182865.6	182865.60	0	0	1953004.608	1953004.61
4	Alignment of pits at 3m x 3m spacement. 1111 pits per Ha (0.25	2.78	1031.80	49.77	1081.57	29.6904	11019.59196	531.54	11551.13556
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	27216.43	0	27216.43	783.16	290671.47	0.00	290671.47
6	Construction of 5.00 Rmt wide Inspection Path 1M.D. per 100 Rmt	1	371.15	0	371.15	10.68	3963.88	0	3963.88

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	278.36	25	303.36	8.01	2972.91	267	3239.91
8	Providing and fixing (4 feet x 3 feet) information board each per site	0	0	5000	5000.00	0	0.00	53400.00	53400.00
9	Part Nursery cost of raising 1333 seedlings per ha (including 20% casually replacement) in polygons of size 12.50 x 25.00 cm (Wages Rs.11.90 and M & S Rs.3.62 per plant)	46.71	17336.4165	4825.46	22161.88	498.86	0.00	53400.00	53400.00
	Total	167.97	62342.07	193263.83	255605.90	1793.92	480660.33	2064949.91	2545610.24
	Contingency 3%		0	7668.18	7668.18	0	0	81896.13	81896.13
	Labour Welfare 4%		0	10224.24	10224.24	0	0	109194.84	109194.84
	Grand Total	167.97	62342.07	211156.24	273498.3082	1794	480660.3313	2256040.879	2736701.21

B. First Year Operations

1	Part Nursery cost for maintenance of 1333 seedling per ha Rs. 3.77 per seedling (Wages Rs.2.69, M & S Rs. 0.81)	14.80	5493.02	1079.73	6572.75	158.06	58665.45	11531.52	70196.97
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	6844.006	1944.25	8788.26	196.94	73093.98408	20764.59	93858.57
3	Transportation of 1333 seedlings from Nursery to plantation site including loading & unloading (0.14 M.D. per 100 seedlings & M.S. Rs.1.82 Per seedlings)	1.87	694.05	2426.00	3120.05	19.97	7412.45934	25909.68	33322.14
4	Planting of 1111 seedlings (1.0 M.D per 100 seedlings)	11.11	4123.48	0	4123.48	118.65	44038.72902	0	44038.73
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	16493.906	911.02	17404.93	474.62	176154.92	9729.69	185884.61
6	Watering 1111 seedlings November and December 1 time each, January to March 2 times each per seedlings 5 litre water, purchase of 1111 plastic can of 5 litre / matka @Rs.25/- each and 100 litre capacity 11 drums @Rs.400/- each for supplying water and wate	59.25	21990.6375	54395.00	76385.64	632.79	234860.0085	580938.6	815798.61
7	Casualty replacement (20% 222 Seedlings per ha.) (2 M.D. per 100 seedlings)	4.44	1647.906	0	1647.91	47.42	17599.63608	0	17599.64
8	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)	7.77	2883.84	803.64	3687.48	82.9836	30799.36314	8582.88	39382.23834
9	Watch and ward (10 months – 1 watcher per 10 ha)	27.38	10162.09	0	10162.09	292.42	108531.09	0.00	108531.09
10	Soil working for naturally grower plants and singling (1.15 M.D.	1.15	426.82	10	436.82	12.28	4558.4643	106.80	4665.2643
11	Fire tracing	2.00	742.30	0	742.30	21.36	7927.764	0	7927.76
	Total	192.65	71502.05	61569.64	133071.69	2057.50	763641.87	657563.76	1421205.62
	Contingency 3%		0	3992.150625	3992.15	0.00	0.00	42636.16868	42636.17
	Labour Welfare 4%		0	5322.8675	5322.87	0	0	56848.2249	56848.22

Grand Total		192.65	71502.05	70884.66	142386.71	2057.50	763641.87	757048.15	1520690.02
C. Second Year Operations									
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	913.029	404.00	1317.029	26	9751.14972	4314.72	14065.86972
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	115.0565	404.04	519.0965	3	1228.80342	4315.1472	5543.95062
3	Planting for causality replacement 222 seedlings (2.00 M.D. per 100 seedlings)	4.44	1647.906	0.00	1647.906	47	17599.63608	0	17599.63608
4	2 weedings and 1 soil working, with fertilizer application 2.5 M.D. per 100 seedlings at M.S. Rs. 0.82 per seedling	27.77	10306.836	911.02	11217.8555	297	110077.0031	9729.6936	119806.6967
5	Watering 1111 seedlings in November, December, January and June 1 time each and in February to May 2 times each total 12 times 5 litre per seedlings, replacing 10% plastic can / matka @Rs.25/- each replacing 111 cans / matka, supplying water @Rs.0.50/- per litre and watering 150 seedlings per M.D.	88.88	32987.812	36105	69092.812	949	352309.8322	385601.4	737911.2322
6	Watch and ward 12 months -1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144681.693
7	Fire tracing	2	742.3	0	742.3	21	7927.764	0	7927.764
Total		162.36	60259.914	37824.06	98083.974	1734.00	643575.8815	403960.9608	1047536.842
Contingency 3%			0	2942.5192	2942.519			31426.10527	31426.11
Labour Welfare 4%			0	3923.359	3923.359			41901.47369	41901.47
Grand Total		162.36	60259.914	44689.938	104949.8522	1734.0048	643575.8815	477288.5398	1120864.421
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	6187.0705	911.02	7098.0905	178	66077.91294	9729.69	75808
2	Watering 556 seedlings in November, December, January and June 1 time each and February to May 2 times each total 12 times per seedlings 5 litre, water supply @Rs.0.50/- litre and watering 150 seedlings per M.D.	44.48	16508.752	16680	33188.752	475	176313.4714	178142.4	354456
3	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
4	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.3	25.00	767.3	21	7927.764	267	8195
5	Fire tracing	2.00	742.3	0	742.3	21	7927.764	0	7928
Total		101.65	37727.398	17616.02	55343.4175	1086	402928.6053	188139.0936	591068
Contingency 3%			0	1660.3025				17732.031	17732
Labour Welfare 4%			0	2213.7367				23642.708	23643

Grand Total		101.65	37727.40	21490.06	55343.42	1085.62	402928.61	229513.83	632442.44
E. Fourth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.30	25	767.3	21	7927.764	267	8195
3	Fire tracing	2.00	742.30	0	742.3	21	7927.764	0	7928
Total		40.50	15031.575	25	15056.575	432.54	160537.221	267	160804
Contingency 3%			0	451.69725			4824.12663		4824
Labour Welfare 4%			0	602.263			6432.16884		6432
Grand Total		40.50	15031.575	1078.9603	15056.575	432.54	160537.221	11523.29547	172061
F. Fifth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.3	25	767.3	21	7927.764	267	8195
3	Fire tracing	2.00	742.3	0	742.3	21	7927.764	0	7928
Total		40.50	15031.575	25.00	15056.575	432.54	160537.221	267	160804
Contingency 3%			0	451.69725			4824.12663		4824.12663
Labour Welfare 4%			0	602.263			6432.16884		6432.16884
Grand Total		40.50	15031.575	1078.9603	15056.575	432.54	160537.221	11523.29547	172061
G. Sixth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.30	25	767.3	21	7927.764	267	8195
3	Fire tracing	2.00	742.30	0	742.3	21	7927.764	0	7928
Total		40.50	15031.575	25	15056.575	432.54	160537.221	267	160804
Contingency 3%			0	451.69725			4824.12663		4824
Labour Welfare 4%			0	602.263			6432.16884		6432
Grand Total		40.5	15031.575	1078.9603	15056.575	432.54	160537.221	11523.29547	172061
H. Seventh Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.30	25	767.30	21	7927.764	267	8195
3	Fire tracing	2.00	742.30	0	742.30	21	7927.764	0	7928
Total		40.50	15031.575	25	15056.575	432.54	160537.221	267	160804
Contingency 3%			0	451.69725			4824.12663		4824
Labour Welfare 4%			0	602.263			6432.16884		6432
Grand Total		40.5	15031.575	1078.9603	15056.575	432.54	160537.221	11523.29547	172061
I. Eighth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.30	25	767.30	21	7927.764	267	8195
3	Fire tracing	2.00	742.30	0	742.30	21	7927.764	0	7928
Total		40.50	15031.575	25	15056.575	432.54	160537.221	267	160804
Contingency 3%			0	451.69725			4824.12663		4824
Labour Welfare 4%			0	602.263			6432.16884		6432
Grand Total		40.50	15031.575	1078.9603	15056.575	432.54	160537.221	11523.29547	172061

	Labour Welfare 4%		0	602.263				6432.16884	6432
	Grand Total	40.50	15031.575	1078.9603	15056.575	432.54	160537.221	11523.29547	172061
L. Eighth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.30	25	767.30	21	7927.764	267	8195
3	Fire tracing	2.00	742.30	0	742.30	21	7927.764	0	7928
	Total	40.50	15031.575	25	15056.575	432.54	160537.221	267	160804
	Contingency 3%		0	451.69725				4824.12663	4824
	Labour Welfare 4%		0	602.263				6432.16884	6432
	Grand Total	40.50	15031.575	1078.9603	15056.575	432.54	160537.221	11523.29547	172061
J. Ninth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.30	25	767.30	21	7927.764	267	8195
3	Fire tracing	2.00	742.30	0	742.30	21	7927.764	0	7928
	Total	40.50	15031.575	25	15056.575	432.54	160537.221	267	160804
	Contingency 3%		0	451.69725				4824.12663	4824
	Labour Welfare 4%		0	602.263				6432.16884	6432
	Grand Total	40.50	15031.575	1078.9603	15056.575	432.54	160537.221	11523.29547	172061
K. Tenth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	13546.975	0	13546.975	390	144681.693	0	144682
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	742.30	25	767.30	21	7927.764	250	8178
3	Fire tracing	2.00	742.30	0	742.30	21	7927.764	0	7928
	Total	40.50	15031.575	25	15056.575	433	160537.221	250	160787
	Contingency 3%		0	451.69725				4824.12663	4824
	Labour Welfare 4%		0	602.263				6432.16884	6431
	Grand Total	40.50	15031.58	1078.96	15056.58	432.54	160537.22	11506.30	172042

(R.A.SATELIKAR)
Deputy Conservator, of forests
Nanded Division Nanded

Abstract for Model No.5

(Amount in Rupees)

S. N.	Year of operation	Man days	Wages	Material supply	Total	Man days	Wages	Material supply	Total
1	Pre Monsoon works	167.97	62342.07	211156.24	273498.31	1793.92	480660.33	2256040.88	2736701.21
2	First Year Operations	192.65	71502.05	70884.66	142386.71	2057.50	763641.87	757048.15	1520690.02
3	Second Year Operations	162.36	60259.91	44689.94	104949.85	1734.00	643575.88	477288.54	1120864.42
4	Third Year Operations	101.65	37727.40	21490.06	55343.42	1085.62	402928.61	229513.83	632442.44
5	Fourth Year Operations	40.50	15031.58	1078.96	15056.58	432.54	160537.22	11523.30	172060.52
6	Fifth Year Operations	40.50	15031.58	1078.96	15056.58	432.54	160537.22	11523.30	172060.52
7	Sixth Year Operations	40.50	15031.58	1078.96	15056.58	432.54	160537.22	11523.30	172060.52
8	Seventh Year Operations	40.50	15031.58	1078.96	15056.58	432.54	160537.22	11523.30	172060.52
9	Eighth Year Operations	40.50	15031.58	1078.96	15056.58	432.54	160537.22	11523.30	172060.52
10	Nineth Year Operations	40.50	15031.58	1078.96	15056.58	432.54	160537.22	11523.30	172060.52
11	Tenth Year Operations	40.50	15031.58	1078.96	15056.58	432.54	160537.22	11506.30	172042.33
Total		908.13	337052.45	355773.62	681574.31	9698.83	3414567.23	3800537.47	7215103.51

(R.A.SATELIKAR)

Deputy Conservator, of forests

Nanded Division Nanded