

**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.

Spacing - 3m x 3m

Size of Pits - 0.45 x 0.45 x 0.45m

-1111 per

No. of Seedlings

ha

Wage rate

Rs

425.96 per day

Sr.No	Particulars of works	Man days	Wages	Material supply	Total (Rs. per Ha.)	Sanction Letter Dt. / Model No. / Item No.	For	1.00	Hactors	
A. Pre Monsoon Works PPO/TYO										
							Man days	Wages	Material supply	Total (Rs. Per
1	(a) Survey and demarcation	1	425.96	91	516.96	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1a	1.00	425.96	91.00	516.96
	(b) Preparation of treatment map (100 m x 50 m grid)	1	425.96	91	516.96	Item No. 1b	1.00	425.96	91.00	516.96
	(c) Digging trial pits of size 0.30x0.30x0.60 in corner of Grid.	0.4	170.384	0	170.384	Item No. 1c	0.40	170.38	0.00	170.38
	(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	225	225	Item No. 1d	0.00	0.00	225.00	225.00
	(e) Clearing of bushes and preparation of site (As per requirement)	10	4259.6	91	4350.6	Item No. 1e	10.00	4259.60	91.00	4350.60
2	Soil and moisture conservation works including collection of rubbles from areas upto 30 m etc	31	13204.76	0	13204.76	Item No. 2	31.00	13204.76	0.00	13204.76
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 75mm above ground level complete as per SSR item No.1744 for 2017-18)	0	0	182865.6	182865.6	As per SSR rates 201718 Item No. 1744	0.00	0.00	182865.60	182865.60
4	Alignment of pits at 3m x 3m spacemnt.	2.78	1184.1688	49.77	1233.9388	Item No. 4	2.78	1184.17	49.77	1233.94
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	31235.647	0	31235.6468	Item No. 5	73.33	31235.65	0.00	31235.65
6	Construction of 5.00 Rmt wide Inspection	1	425.96	0	425.96	Item No. 6	1.00	425.96	0.00	425.96
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	319.47	25	344.47	Item No. 7	0.75	319.47	25.00	344.47
8	Providing and fixing (4 feet x 3 feet) information board each per site	0	0	5000	5000	Item No. 8	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 25.00 cm (Wages Rs.11.90 and M & S Rs.3.62 per plant)	46.71	19896.592	4825.46	24722.0516	Item No. 9 20% Casualty replacement in place of 10%	46.71	19896.59	4825.46	24722.05
Total		167.97	71548.501	193263.83	264812.331		167.97	71548.50	193263.83	264812.33
Contingency 3%			0	7944.3699	7944.36994			0.00	7944.37	7944.37
Labour Welfare 4%			0	10592.493	10592.4932			0.00	10592.49	10592.49
ran		167.97	71548.501	18536.863	283349.194		167.97	71548.50	18536.86	283349.19
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)	14.8	6304.208	1079.73	7383.938	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1 casualty replacement 20%	14.80	6304.21	1079.73	7383.94
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	7854.7024	1944.25	9798.9524	Item No. 2	18.44	7854.70	1944.25	9798.95
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	796.5452	2426	3222.5452	Item No. 3 10% Extra Plants to be transported	1.87	796.55	2426.00	3222.55
4	Planting of 1111 seedlings (1.0 M.D per 100 seedlings)	11.11	4732.4156	0	4732.4156	Item No. 4	11.11	4732.42	0.00	4732.42
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	18929.662	911.02	19840.6824	Item No. 5	44.44	18929.66	911.02	19840.6

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 water supply at @Rs.0.05 per litre and wages for watering 1 M.D. for 150 seedlings.	59.25	25238.13	54395	79633.13		59.25	25238.13	54395.00	79633.13
7	Casualty replacement (20% 222 Seedlings per ha.) (2 M.D. per 100 seedlings)	4.44	1891.2624	0	1891.2624		4.44	1891.26	0.00	1891.26
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	3309.7092	803.64	4113.3492		7.77	3309.71	803.64	4113.35
9	Watch and ward (10 months -- 1 watcher per 10 ha)	27.38	11662.785	0	11662.7848		27.38	11662.78	0.00	11662.78
10	Soil working for naturally grower plants and singling (1.15 M.D. per 100 plants)	1.15	489.854	10	499.854	Item No. 10	1.15	489.85	10.00	499.85
11	Fire tracing	2	851.92	0	851.92	Item No. 12	2.00	851.92	0.00	851.92
Total		192.65	82061.194	61569.64	143630.834		192.65	82061.19	61569.64	143630.83
Contingency 3%			0	4308.925	4308.92502			0.00	4308.93	4308.93
Labour Welfare 4%			0	5745.2334	5745.23336			0.00	5745.23	5745.23
Grand Total		192.65	82061.194	10054.158	153684.992		192.65	82061.19	10054.16	153684.99
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	1047.8616	404	1451.8616	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1 casualty replacement 20%	2.46	1047.86	404.00	1451.86
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	132.0476	404.04	536.0876	Item No. 2, 20% instead of 10%	0.31	132.05	404.04	536.09
3	Planting for casualty replacement 222 seedlings (2.00 M.D. per 100 seedlings)	4.44	1891.2624	0	1891.2624	Item No. 3, 20% instade of 10%	4.44	1891.26	0.00	1891.26
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	11828.909	911.02	12739.9292	Item No. 4	27.77	11828.91	911.02	12739.93
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	37859.325	36105	73964.3248	Item No. 5	88.88	37859.32	36105.00	73964.32
6	Watch and ward 12 months -1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Item No. 6	36.50	15547.54	0.00	15547.54
7	Fire tracing	2	851.92	0	851.92	Item No. 8	2.00	851.92	0.00	851.92
Total		162.36	69158.866	37824.06	106982.926		162.36	69158.87	37824.06	106982.93
Contingency 3%			0	3209.49	3209.49			0.00	3209.49	3209.49
Labour Welfare 4%			0	4279.32	4279.32			0.00	4279.32	4279.32
Grand Total		162.36	69158.866	7488.80	114471.73		162.36	69158.87	7488.80	114471.73
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	7100.7532	911.02	8011.7732	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	16.67	7100.75	911.02	8011.77
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	18946.701	16680	35626.7008	Item No. 2	44.48	18946.70	16680.00	35626.70
3	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Item No. 3	36.50	15547.54	0.00	15547.54
4	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	851.92	25	876.92	Item No. 5	2.00	851.92	25.00	876.92
5	Fire tracing	2	851.92	0	851.92	Item No. 6	2.00	851.92	0.00	851.92
Total		101.65	43298.83	17616.02	60914.85		101.65	43298.83	17616.02	60914.85
Contingency 3%			0	1827.4456	1827.45			0	1827.45	1827.45
Labour Welfare 4%			0	2436.5942	2436.59			0	2436.59	2436.59
Grand Total		101.65	43298.83	4264.04	65178.89		101.65	43298.83	4264.04	65178.89
E. Fourth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	36.50	15547.54	0.00	15547.54
	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	851.92	25	876.92	Item No. 2	2.00	851.92	25.00	876.92
	Fire tracing	2	851.92	0	851.92	Item No. 3	2.00	851.92	0.00	851.92
Total		40.5	17251.38	25.00	17276.38		40.5	17251.38	25.00	17276.38

Contingency 3%		0	518.29	518.29		0	518.29	518.29
Labour Welfare 4%		0	691.06	691.06		0	691.06	691.06
Grand Total		40.5	17251.38	1209.35	18485.73	40.5	17251.38	1209.35 18485.73
F. Fifth Year Operations								
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	36.50	15547.54 0.00 15547.54
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	851.92	25	876.92	Item No. 2	2.00	851.92 25.00 876.92
3	Fire tracing	2	851.92	0	851.92	Item No. 3	2.00	851.92 0.00 851.92
Total		40.5	17251.38	25.00	17276.38		40.5	17251.38 25.00 17276.38
Contingency 3%			0	518.29	518.29		0	518.29 518.29
Labour Welfare 4%			0	691.06	691.06		0	691.06 691.06
Grand Total		40.5	17251.38	1209.35	18485.73		40.5	17251.38 1209.35 18485.73
G. Sixth Year Operations								
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	36.50	15547.54 0.00 15547.54
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	851.92	25	876.92	Item No. 2	2.00	851.92 25.00 876.92
3	Fire tracing	2	851.92	0	851.92	Item No. 3	2.00	851.92 0.00 851.92
Total		40.5	17251.38	25.00	17276.38		40.5	17251.38 25.00 17276.38
Contingency 3%			0	518.29	518.29		0	518.29 518.29
Labour Welfare 4%			0	691.06	691.06		0	691.06 691.06
Grand Total		40.5	17251.38	1209.35	18485.73		40.5	17251.38 1209.35 18485.73
H. Seventh Year Operations								
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	36.50	15547.54 0.00 15547.54
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	851.92	25	876.92	Item No. 2	2.00	851.92 25.00 876.92
3	Fire tracing	2	851.92	0	851.92	Item No. 3	2.00	851.92 0.00 851.92
Total		40.5	17251.38	25.00	17276.38		40.5	17251.38 25.00 17276.38
Contingency 3%			0	518.29	518.29		0	518.29 518.29
Labour Welfare 4%			0	691.06	691.06		0	691.06 691.06
Grand Total		40.5	17251.38	1209.35	18485.73		40.5	17251.38 1209.35 18485.73
I. Eighth Year Operations								
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	36.50	15547.54 0.00 15547.54
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	851.92	25	876.92	Item No. 2	2.00	851.92 25.00 876.92
3	Fire tracing	2	851.92	0	851.92	Item No. 3	2.00	851.92 0.00 851.92
Total		40.5	17251.38	25.00	17276.38		40.5	17251.38 25.00 17276.38
Contingency 3%			0	518.29	518.29		0	518.29 518.29
Labour Welfare 4%			0	691.06	691.06		0	691.06 691.06
Grand Total		40.5	17251.38	1209.35	18485.73		40.5	17251.38 1209.35 18485.73
J. Ninth Year Operations								
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	36.50	15547.54 0.00 15547.54
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	851.92	25	876.92	Item No. 2	2.00	851.92 25.00 876.92
3	Fire tracing	2	851.92	0	851.92	Item No. 3	2.00	851.92 0.00 851.92
Total		40.5	17251.38	25.00	17276.38		40.5	17251.38 25.00 17276.38
Contingency 3%			0	518.29	518.29		0	518.29 518.29
Labour Welfare 4%			0	691.06	691.06		0	691.06 691.06
Grand Total		40.5	17251.38	1209.35	18485.73		40.5	17251.38 1209.35 18485.73
K. Tenth Year Operations								
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	15547.54	0	15547.54	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	36.50	15547.54 0.00 15547.54
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	851.92	25	876.92	Item No. 2	2.00	851.92 25.00 876.92
3	Fire tracing	2	851.92	0	851.92	Item No. 3	2.00	851.92 0.00 851.92
Total		40.5	17251.38	25.00	17276.38		40.5	17251.38 25.00 17276.38
Contingency 3%			0	518.29	518.29		0	518.29 518.29
Labour Welfare 4%			0	691.06	691.06		0	691.06 691.06
Grand Total		40.5	17251.38	1209.35	18485.73		40.5	17251.38 1209.35 18485.73

(A R Satpute)

Deputy Conservator of Forests
Junnar Forest Division, Junnar