

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 - 3m x 3m
 Size of Pits 0.45 x 0.45 x 0.45m
 No. of Seedlings - 1111 per ha

wage rate Rs.339.61 per day.

At- Londhe Mohitewadi Compt. No 43 Sy. No 129 Area 31.1165 Ha.

(Amount in Rs.)										
Sr.No	Particulars of works	Man days	Wages	Material supply	Total (Rs. Per Ha.)	Sanction Letter Dt. / Model No. / Item No.	For 31.1165 ha			
							Man days	Wages	Material supply	Total (Rs. Per Ha.)
A. Pre Monsoon Works PPO/PYO										
1	(a) Survey and demarcation	1	339.61	91	430.61	Letter Dt. 07/03/2018 Irrigated & fencing Plantation	31.1165	10567.47457	2831.6015	13399.07607
	(b) Preparation of treatment map (100 m x 50 m grid)	1	339.61	91	430.61	Item No. 1b	31.1165	10567.47457	2831.6015	13399.07607
	(c) Digging trial pits of size 0.30x0.30x0.60 in corner of Grid.	0.4	135.84	0	135.84	Item No. 1c	12.4466	4226.86536	0	4226.86536
	(d) Fixing 60cm x 0.05cm x12cm 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	0	7001.2125	7001.2125
	(e) Clearing of bushes and preparation of site (As per requirement)	10	3396.1	91	3487.1	Item No. 1e	311.165	105674.7457	2831.6015	108506.3472
2	Soil and moisture conservation works including collection of rubbles from areas upto 30 m etc	31	10527.91	0	10527.91	Item No. 2	964.6115	327591.7115	0	327591.7115
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	0	5690137.442	5690137.442
4	Alignment of pits at 3m x 3m spacement. 1111 pits per Ha (0.25 per 100 pits and M&S @ Rs.	2.78	944.12	49.77	993.89	Item No. 4	86.50387	29377.70998	1548.668205	30926.37819
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	24903.6	0	24903.6	Item No. 5	2281.772945	774912.8694	0	774912.8694
6	Construction of 5.00 Rmt wide Inspection Path 1M.D. per 100 Rmt	1	339.61	0	339.61	Item No. 6	31.1165	10567.47457	0	10567.47457
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	254.71	25	279.71	Item No. 7	23.337375	7925.683715	777.9125	8703.596215
8	Providing and fixing (4 feet x 3 feet) information board each per site	0	0	5000	5000	Item No. 8	0	0	155582.5	155582.5
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	15863.18	4825.46	20688.84	Item No. 9 20% Casualty replacement in place of 10%	1453.451715	493606.6405	150151.4261	643758.0666
Total		167.97	57044.29	193263.83	250308.12		5226.638505	1775018.65	6013693.966	7788712.616
Contingency 3%			0	7509.23	7509.24		0	0		233661.3785
Labour Welfare 4%			0	10012.31	10012.32		0	0		311548.5046
Grand Total		167.97	57044.29	193263.83	267829.69		5226.638505	1775018.65	6013693.966	8333922.499
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	5062.23	1079.73	6105.96	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1 casualty replacement 20%	460.5242	157518.8798	33597.41855	191116.2983
	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	6262.41	1944.25	8206.66	Item No. 2	573.78826	194864.2808	60498.25513	255362.5359
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	635.07	2426	3061.07	Item No. 3 10% Extra Plants to be transported	58.187855	19761.15566	75488.629	95249.78466
4	Planting of 1111 seedlings (1.0 M.D per 100 seedlings)	11.11	3773.07	0	3773.07	Item No. 4	345.704315	117404.7327	0	117404.7327
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	15092.27	911.02	16003.29	Item No. 5	1382.81726	469618.6195	28347.75383	497966.3733
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	20121.89	54395	74516.89	Item No. 7	1843.652625	626122.7902	1692582.018	2318704.808
7	Casualty replacement (20% 222 Seedlings per ha.) (2 M.D. per 100 seedlings)	4.44	1507.87	0	1507.87	Item No. 6 20% instead of 10%	138.15726	46919.63686	0	46919.63686
8	Part Nursery cost for casualty 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	2638.77	803.64	3442.41	Item No. 8 20% instead of 10%	241.775205	82109.28671	25006.46406	107115.7508
9	Watch and ward (10 months - 1 watcher per 10 ha)	27.38	9298.52	0	9298.52	Item No. 9	851.96977	289337.3976	0	289337.3976
10	Soil working for naturally grower plants and singling (1.15 M.D. per 100 plants)	1.15	390.55	10	400.55	Item No. 10	35.783975	12152.54908	311.165	12463.71408
11	Fire tracing	2	679.22	0	679.22	Item No. 12	62.233	21134.94913	0	21134.94913
Total		192.65	65425.87	61569.64	126995.51		5994.593725	2036944.278	1915831.703	3952775.981
Contingency 3%			0	3809.87	3809.87					118583.2794
Labour Welfare 4%			0	5079.82	5079.82					158111.0392
Grand Total		192.65	65425.87	61569.64	135885.19		5994.593725	2036944.278	1915831.703	4229470.3

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	835.44	404	1239.44	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1 casualty replacement 20%	76.54659	25995.96876	12571.066	38567.03476
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	105.28	404.04	509.32	Item No. 2 20% instead of 10%	9.646115	3275.94512	12571.066	15847.01112
3	Planting for causality replacement 222 seedlings (2.00 M.D per 100 seedlings)	4.44	1507.87	0	1507.87	Item No. 3 20% instead of 10%	138.15726	46919.63686	0	46919.63686
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	9430.97	911.02	10341.99	Item No. 4	864.105205	293458.778	28347.75383	321806.5318
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	30184.54	36105	66289.54	Item No. 5	2765.63452	939237.2389	1123461.233	2062698.471
6	Watch and ward 12 months -1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Item No. 6	1135.75225	385712.9772	0	385712.9772
7	Fire tracing	2	679.22	0	679.22	Item No. 8	62.233	21134.94913	0	21134.94913
Total		162.36	55139.08	37824.06	92963.14		5052.07494	1715735.494	1176951.118	2892686.612
Contingency 3%			0	2788.89	2788.89					86780.59837
Labour Welfare 4%			0	3718.53	3718.53					115707.4645
Grand Total		162.36	55139.08	37824.06	99470.56		5052.07494	1715735.494	1176951.118	3095174.675
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	5661.3	911.02	6572.32	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	518.712055	176159.8415	28347.75383	204507.5953
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	15105.85	16680	31785.85	Item No. 2	1384.06192	470041.1815	519023.22	989064.4015
3	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Item No. 3	1135.75225	385712.9772	0	385712.9772
4	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 5	62.233	21134.94913	777.9125	21912.86163
5	Fire tracing	2	679.22	0	679.22	Item No. 6	62.233	21134.94913	0	21134.94913
Total		101.65	34521.36	17616.02	52137.38		3162.992225	1074183.898	548148.8863	1622332.785
Contingency 3%			0	1564.12	1564.12					48669.98354
Labour Welfare 4%			0	2085.5	2085.5					64893.31139
Grand Total		101.65	34521.36	17616.02	55787		3162.992225	1074183.898	548148.8863	1735896.08
E. Fourth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	1135.75225	385712.9772	0	385712.9772
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	679.22	25	704.22	Item No. 2	62.233	21134.94913	777.9125	21912.86163
3	Fire tracing	2	679.22	0	679.22	Item No. 3	62.233	21134.94913	0	21134.94913
Total		40.5	13754.21	25	13779.21		1260.21825	427982.8755	777.9125	428760.788
Contingency 3%			0	413.38	413.38					12862.82364
Labour Welfare 4%			0	551.17	551.17					17150.43152
Grand Total		40.5	13754.21	25	14743.75		1260.21825	427982.8755	777.9125	458774.0431
F. Fifth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	1135.75225	385712.9772	0	385712.9772
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	679.22	25	704.22	Item No. 2	62.233	21134.94913	777.9125	21912.86163
3	Fire tracing	2	679.22	0	679.22	Item No. 3	62.233	21134.94913	0	21134.94913
Total		40.5	13754.21	25	13779.21		1260.21825	427982.8755	777.9125	428760.788
Contingency 3%			0	413.38	413.38					12862.82364
Labour Welfare 4%			0	551.17	551.17					17150.43152
Grand Total		40.5	13754.21	25	14743.75		1260.21825	427982.8755	777.9125	458774.0431
G. Sixth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	1135.75225	385712.9772	0	385712.9772
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	679.22	25	704.22	Item No. 2	62.233	21134.94913	777.9125	21912.86163
3	Fire tracing	2	679.22	0	679.22	Item No. 3	62.233	21134.94913	0	21134.94913
Total		40.5	13754.21	25	13779.21		1260.21825	427982.8755	777.9125	428760.788
Contingency 3%			0	413.38	413.38					12862.82364
Labour Welfare 4%			0	551.17	551.17					17150.43152
Grand Total		40.5	13754.21	25	14743.75		1260.21825	427982.8755	777.9125	458774.0431
H. Seventh Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	1135.75225	385712.9772	0	385712.9772
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	679.22	25	704.22	Item No. 2	62.233	21134.94913	777.9125	21912.86163
3	Fire tracing	2	679.22	0	679.22	Item No. 3	62.233	21134.94913	0	21134.94913
Total		40.5	13754.21	25	13779.21		1260.21825	427982.8755	777.9125	428760.788
Contingency 3%			0	413.38	413.38					12862.82364
Labour Welfare 4%			0	551.17	551.17					17150.43152
Grand Total		40.5	13754.21	25	14743.75		1260.21825	427982.8755	777.9125	458774.0431
I. Eighth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	1135.75225	385712.9772	0	385712.9772

2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 2	62.233	21134.94913	777.9125	21912.86163
3	Fire tracing	2	679.22	0	679.22	Item No. 3	62.233	21134.94913	0	21134.94913
	Total	40.5	13754.21	25	13779.21		1260.21825	427982.8755	777.9125	428760.788
	Contingency 3%		0	413.38	413.38					12862.82364
	Labour Welfare 4%		0	551.17	551.17					17150.43152
	Grand Total	40.5	13754.21	25	14743.75		1260.21825	427982.8755	777.9125	458774.0431
J. Ninth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	1135.75225	385712.9772	0	385712.9772
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 2	62.233	21134.94913	777.9125	21912.86163
3	Fire tracing	2	679.22	0	679.22	Item No. 3	62.233	21134.94913	0	21134.94913
	Total	40.5	13754.21	25	13779.21		1260.21825	427982.8755	777.9125	428760.788
	Contingency 3%		0	413.38	413.38					12862.82364
	Labour Welfare 4%		0	551.17	551.17					17150.43152
	Grand Total	40.5	13754.21	25	14743.75		1260.21825	427982.8755	777.9125	458774.0431
K. Tenth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	1135.75225	385712.9772	0	385712.9772
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 2	62.233	21134.94913	777.9125	21912.86163
3	Fire tracing	2	679.22	0	679.22	Item No. 3	62.233	21134.94913	0	21134.94913
	Total	40.5	13754.21	25	13779.21		1260.21825	427982.8755	777.9125	428760.788
	Contingency 3%		0	413.38	413.38					12862.82364
	Labour Welfare 4%		0	551.17	551.17					17150.43152
	Grand Total	40.5	13754.21	25	14743.75		1260.21825	427982.8755	777.9125	458774.0431

Abstract for Model No.5

(Amount in Rupees)

S. N.	Year of operation	Man days	Wages	Material supply	Total	Other expenses	Total amount	Man days	Wages	Material supply	Total
For 31.1165 ha.											
1	Pre Monsoon works	167.97	57044.29	193263.83	250308	17521.57	267829.69	5226.638505	1775018.65	6013693.966	8333922.499
2	First Year Operations	192.65	65425.87	61569.64	126996	8889.69	135885.19	5994.593725	2036944.278	1915831.703	4229470.3
3	Second Year Operations	162.36	55139.08	37824.06	92963	6507.42	99470.56	5052.07494	1715735.494	1176951.118	3095174.675
4	Third Year Operations	101.65	34321.36	17616.02	52137	3649.62	55787	3162.992225	1074183.898	548148.8863	1735896.08
5	Fourth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	1260.21825	427982.8755	777.9125	458774.0431
6	Fifth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	1260.21825	427982.8755	777.9125	458774.0431
7	Sixth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	1260.21825	427982.8755	777.9125	458774.0431
8	Seventh Year Operations	40.5	13754.21	25	13779	964.54	14743.75	1260.21825	427982.8755	777.9125	458774.0431
9	Eighth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	1260.21825	427982.8755	777.9125	458774.0431
10	Ninth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	1260.21825	427982.8755	777.9125	458774.0431
11	Tenth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	1260.21825	427982.8755	777.9125	458774.0431
	Total	908.13	308410.03	310448.55	618859	43320.1	662178.68	28257.82714	9597762.448	9660071.061	20605881.86

Cost per plant Rs.596.02

Note:-

1 Rates of chain linked fencing derived from SSR-2017-18 with addition for area difference and transportation lead.

2 Plantation M.D. and M.S. component derived from rate structure as approved by PCCF (HoFF) M.S. vide letter No.Desk-1/EGS/CR-10/2282/2017-18/Nagpur, Dated 07/03/2018.


 (Dhairyaashil Patil)
 Deputy Conservator of Forests,
 Solapur Forest Division, Solapur.
Dy. Conservator of Forests
Solapur Forest Dn. Solapur.

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
 No. of Seedlings - 1111 per ha

wage rate Rs.339.61 per day.

At- Katphal Compt. No 91 Sy. No 260 Area 57.3835 Ha.

(Amount in Rs.)										
Sl. No.	Particulars of works	Man days	Wages	Material supply	Total (Rs. Per Ha.)	Sanction Letter Dt. / Model No. / Item No.	For 57.3835 ha			
							Man days	Wages	Material supply	Total (Rs. Per Ha.)
A. Pre Monsoon Works PPO/PYO										
1	(a) Survey and demarcation	1	339.61	91	430.61	Letter Dt. 07/03/2018 Irrigated & fencing Plantation	57.3835	19488.01044	5221.8985	24709.90894
	(b) Preparation of treatment map (100 m x 50 m grid)	1	339.61	91	430.61	Item No. 1b	57.3835	19488.01044	5221.8985	24709.90894
	(c) Digging trial pits of size 0.30x0.30x0.60 in corner of Grid	0.4	135.84	0	135.84	Item No. 1c	22.9534	7794.97464	0	7794.97464
	(d) Fixing 60cm x 0.05cm x12cm 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	0	12911.2875	12911.2875
	(e) Clearing of bushes and preparation of site (As per requirement)	10	3396.1	91	3487.1	Item No. 1e	573.835	194880.1044	5221.8985	200102.0029
2	Soil and moisture conservation works including collection of rubbles from areas upto 30 m etc	31	10527.91	0	10527.91	Item No. 2	1778.8885	604128.3235	0	604128.3235
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	0	10493468.16	10493468.16
4	Alignment of pits at 3m x 3m spacemnt. 1111 pits per Ha (0.25 per 100 pits and M&S @ Rs.	2.78	944.12	49.77	993.89	Item No. 4	159.52613	54176.91002	2855.976795	57032.88682
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	24903.6	0	24903.6	Item No. 5	4207.932055	1429055.731	0	1429055.731
6	Construction of 5.00 Rmt wide Inspection Path 1M.D. per 100 Rmt	1	339.61	0	339.61	Item No. 6	57.3835	19488.01044	0	19488.01044
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	254.71	25	279.71	Item No. 7	43.037625	14616.15129	1434.5875	16050.73879
8	Providing and fixing (4 feet x 3 feet) information board each per site	0	0	5000	5000	Item No. 8	0	0	286917.5	286917.5
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	15863.18	4825.46	20688.84	Item No. 9 20% Casualty replacement in place of 10%	2680.383285	910284.7895	276901.7839	1187186.573
	Total	167.97	57044.29	193263.83	250308.12		9638.706495	3273401.015	11090154.99	14363556
	Contingency 3%		0	7509.23	7509.24		0	0		430906.6801
	Labour Welfare 4%		0	10012.31	10012.32		0	0		574542.2402
	Grand Total	167.97	57044.29	193263.83	267829.69		9638.706495	3273401.015	11090154.99	15369004.92
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	5062.23	1079.73	6105.96	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1 casualty replacement 20%	849.2758	290488.4752	61958.68646	352447.1617
	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	6262.41	1944.25	8206.66	Item No. 2	1058.15174	359359.0042	111567.8699	470926.8741
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	635.07	2426	3061.07	Item No. 3 10% Extra Plants to be transported	107.307145	36442.53935	139212.371	175654.9103
4	Planting of 1111 seedlings (1.0 M.D. per 100 seedlings)	11.11	3773.07	0	3773.07	Item No. 4	637.530685	216511.9623	0	216511.9623
5	5 seedlings (1 Rmt circular) and 2 soil workings (4.00 M.D. per 100 seedlings) fertilizer application Rs.0.82 per seedling	44.44	15092.27	911.02	16003.29	Item No. 5	2550.12274	866047.2755	52277.51617	918324.7917
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	20121.89	54395	74516.89	Item No. 7	3399.972375	1154664.475	3121375.483	4276039.957
7	Casualty replacement (20% 222 Seedlings per ha.) (2 M.D. per 100 seedlings)	4.44	1507.87	0	1507.87	Item No. 6 20% instead of 10%	254.78274	86526.85815	0	86526.85815
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	2638.77	803.64	3442.41	Item No. 8 20% instead of 10%	445.869795	151421.8583	46115.67594	197537.5342
9	Watch and ward (10 months - 1 watcher per 10 ha)	27.38	9298.52	0	9298.52	Item No. 9	1571.16023	533581.6224	0	533581.6224
10	Soil working for naturally grower plants and singling (1.15 M.D. per 100 plants)	1.15	390.55	10	400.55	Item No. 10	65.991025	22411.12593	573.835	22984.96093
11	Fire tracing	2	679.22	0	679.22	Item No. 12	114.767	38976.02087	0	38976.02087
	Total	192.65	65425.87	61569.64	126995.51		11054.93128	3756431.217	3533081.437	7289512.654
	Contingency 3%		0	3809.87	3809.87					218685.3796
	Labour Welfare 4%		0	5079.82	5079.82					291580.5062
	Grand Total	192.65	65425.87	61569.64	135885.19		11054.93128	3756431.217	3533081.437	7799778.54

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	835.44	404	1239.44	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1 casualty replacement 20%	141.16341	47940.47124	23182.934	71123.40524
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	105.28	404.04	509.32	Item No. 2 20% instead of 10%	17.788885	6041.33488	23182.934	29224.26888
3	Planting for causality replacement 222 seedlings (2.00 M.D. per 100 seedlings)	4.44	1507.87	0	1507.87	Item No. 3 20% instead of 10%	254.78274	86526.85815	0	86526.85815
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	9430.97	911.02	10341.99	Item No. 4	1593.539795	541182.067	52277.51617	593459.5832
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	30184.54	36105	66289.54	Item No. 5	5100.24548	1732094.551	2071831.268	3803925.819
6	Watch and ward 12 months -1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Item No. 6	2094.49775	711312.6678	0	711312.6678
7	Fire tracing	2	679.22	0	679.22	Item No. 8	114.767	38976.02087	0	38976.02087
Total		162.36	55139.08	37824.06	92963.14		9316.78506	3164073.971	2170474.652	5334548.623
Contingency 3%			0	2788.89	2788.89					160036.4587
Labour Welfare 4%			0	3718.53	3718.53					213381.9449
Grand Total		162.36	55139.08	37824.06	99470.56		9316.78506	3164073.971	2170474.652	5707967.026
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	5661.3	911.02	6572.32	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	956.582945	324865.2086	52277.51617	377142.7247
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	15105.85	16680	31785.85	Item No. 2	2552.41808	866826.5435	957156.78	1823983.323
3	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Item No. 3	2094.49775	711312.6678	0	711312.6678
4	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 5	114.767	38976.02087	1434.5875	40410.60837
5	Fire tracing	2	679.22	0	679.22	Item No. 6	114.767	38976.02087	0	38976.02087
Total		101.65	34521.36	17616.02	52137.38		5833.032775	1980956.462	1010868.884	2991825.345
Contingency 3%			0	1564.12	1564.12					89754.76036
Labour Welfare 4%			0	2085.5	2085.5					119673.0138
Grand Total		101.65	34521.36	17616.02	55787		5833.032775	1980956.462	1010868.884	3201253.119
E. Fourth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	2094.49775	711312.6678	0	711312.6678
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 2	114.767	38976.02087	1434.5875	40410.60837
3	Fire tracing	2	679.22	0	679.22	Item No. 3	114.767	38976.02087	0	38976.02087
Total		40.5	13754.21	25	13779.21		2324.03175	789264.7095	1434.5875	790699.297
Contingency 3%			0	413.38	413.38					23720.97891
Labour Welfare 4%			0	551.17	551.17					31627.97188
Grand Total		40.5	13754.21	25	14743.75		2324.03175	789264.7095	1434.5875	846048.2478
F. Fifth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	2094.49775	711312.6678	0	711312.6678
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 2	114.767	38976.02087	1434.5875	40410.60837
3	Fire tracing	2	679.22	0	679.22	Item No. 3	114.767	38976.02087	0	38976.02087
Total		40.5	13754.21	25	13779.21		2324.03175	789264.7095	1434.5875	790699.297
Contingency 3%			0	413.38	413.38					23720.97891
Labour Welfare 4%			0	551.17	551.17					31627.97188
Grand Total		40.5	13754.21	25	14743.75		2324.03175	789264.7095	1434.5875	846048.2478
G. Sixth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	2094.49775	711312.6678	0	711312.6678
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 2	114.767	38976.02087	1434.5875	40410.60837
3	Fire tracing	2	679.22	0	679.22	Item No. 3	114.767	38976.02087	0	38976.02087
Total		40.5	13754.21	25	13779.21		2324.03175	789264.7095	1434.5875	790699.297
Contingency 3%			0	413.38	413.38					23720.97891
Labour Welfare 4%			0	551.17	551.17					31627.97188
Grand Total		40.5	13754.21	25	14743.75		2324.03175	789264.7095	1434.5875	846048.2478
H. Seventh Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	2094.49775	711312.6678	0	711312.6678
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October	2	679.22	25	704.22	Item No. 2	114.767	38976.02087	1434.5875	40410.60837
3	Fire tracing	2	679.22	0	679.22	Item No. 3	114.767	38976.02087	0	38976.02087
Total		40.5	13754.21	25	13779.21		2324.03175	789264.7095	1434.5875	790699.297
Contingency 3%			0	413.38	413.38					23720.97891
Labour Welfare 4%			0	551.17	551.17					31627.97188
Grand Total		40.5	13754.21	25	14743.75		2324.03175	789264.7095	1434.5875	846048.2478
I. Eighth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	2094.49775	711312.6678	0	711312.6678

2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	679.22	25	704.22	Item No. 2	114.767	38976.02087	1434.5875	40410.60837
3	Fire tracing	2	679.22	0	679.22	Item No. 3	114.767	38976.02087	0	38976.02087
	Total	40.5	13754.21	25	13779.21		2324.03175	789264.7095	1434.5875	790699.297
	Contingency 3%		0	413.38	413.38					23720.97891
	Labour Welfare 4%		0	551.17	551.17					31627.97188
	Grand Total	40.5	13754.21	25	14743.75		2324.03175	789264.7095	1434.5875	846048.2478
J. Ninth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	2094.49775	711312.6678	0	711312.6678
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	679.22	25	704.22	Item No. 2	114.767	38976.02087	1434.5875	40410.60837
3	Fire tracing	2	679.22	0	679.22	Item No. 3	114.767	38976.02087	0	38976.02087
	Total	40.5	13754.21	25	13779.21		2324.03175	789264.7095	1434.5875	790699.297
	Contingency 3%		0	413.38	413.38					23720.97891
	Labour Welfare 4%		0	551.17	551.17					31627.97188
	Grand Total	40.5	13754.21	25	14743.75		2324.03175	789264.7095	1434.5875	846048.2478
K. Tenth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.5	12395.77	0	12395.77	Letter Dt. 07/03/2018 Irrigated & fencing Plantation Model no. 1 Item No. 1	2094.49775	711312.6678	0	711312.6678
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2	679.22	25	704.22	Item No. 2	114.767	38976.02087	1434.5875	40410.60837
3	Fire tracing	2	679.22	0	679.22	Item No. 3	114.767	38976.02087	0	38976.02087
	Total	40.5	13754.21	25	13779.21		2324.03175	789264.7095	1434.5875	790699.297
	Contingency 3%		0	413.38	413.38					23720.97891
	Labour Welfare 4%		0	551.17	551.17					31627.97188
	Grand Total	40.5	13754.21	25	14743.75		2324.03175	789264.7095	1434.5875	846048.2478

Abstract for Model No.5

(Amount in Rupees)

S. N.	Year of operation	Man days	Wages	Material supply	Total	Other expenses	Total amount	Man days	Wages	Material supply	Total
								For 57.3835 ha.			
1	Pre Monsoon works	167.97	57044.29	193263.83	250308	17521.57	267829.69	9638.706495	3273401.015	11090154.99	15369004.92
2	First Year Operations	192.63	65425.87	61569.64	126996	8889.69	135885.19	11054.93128	3756431.217	3533081.437	7799778.54
3	Second Year Operations	162.36	55139.08	37824.06	92963	6307.42	99470.56	9316.78506	3164073.971	2170474.652	5707967.026
4	Third Year Operations	101.65	34521.36	17616.02	52137	3649.62	55787	5833.032775	1980956.462	1010868.884	3201253.119
5	Fourth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	2324.03175	789264.7095	1434.5875	846048.2478
6	Fifth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	2324.03175	789264.7095	1434.5875	846048.2478
7	Sixth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	2324.03175	789264.7095	1434.5875	846048.2478
8	Seventh Year Operations	40.5	13754.21	25	13779	964.54	14743.75	2324.03175	789264.7095	1434.5875	846048.2478
9	Eighth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	2324.03175	789264.7095	1434.5875	846048.2478
10	Ninth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	2324.03175	789264.7095	1434.5875	846048.2478
11	Tenth Year Operations	40.5	13754.21	25	13779	964.54	14743.75	2324.03175	789264.7095	1434.5875	846048.2478
	Total	908.13	308410.03	310448.55	618859	43320.1	662178.68	52111.67786	17699715.63	17814622.07	38000341.34

Cost per plant Rs.596.02

Note:-

1. Rates of chain linked fencing derived from SSR-2017-18 with addition for area difference and transportation lead.

2. Plantation M.D. and M.S. component derived from rate structure as approved by PCCF (HoFF) M.S. vide letter No.Desk-1/EGS/CR-10/2282/2017-18/Nagpur, Dated 07/03/2018.


 (Dhanyashil Patil)
 Deputy Conservator of Forests,
 Solapur Forest Division, Solapur.

Dy. Conservator of Forests
Solapur Forest Dn. Solapur.