OFFICE OF THE DIVISIONAL FOREST OFFICER CHIPLUN

Model Rate Structure for Compensatory Afforestion

Model No. 4

Model rate structure for plantation of mixed tree Species / Bamboo etc. In areas with medium density having naturel regeneration to same extent.

(Aided Natural Regeneration)

Village - Furus, Tal. Chiplun Total - Area - 5.19 Ha. Plantation area - 3.4153 Ha.

Spacment 4.00 m x 4.00 m
Size of pits 0.45 x 0.45 x0.45 m Wage Rate - Rs. 308.50 Per day
No of Seedling 625 Per Ha.

(Amount Rs.)

Sr. No.	Particulars of works	Man Days	Wages	Material supply	Total (Rs. Per Ha.)	Man Days	Wages	Material supply	Total
1	2	3	4	5	6	7	8	9	10
1	a. Survey and demarcation	1	308.5	50	358.5	3.4153	1053.6201	170.765	1224.3851
	b. Preparation of treatment map (100 m x 50 m grid)	1	308.5	50	358.5	3.4153	1053.6201	170.765	1224.3851
	c. Clearing of bushes and preparation of site (As per requirement)	10	3085	50	3135	34.153	10536.201	170.765	10706.966
2	Soil and moisture conservation works including collection of rubbles from areas upto 30 m etc	31	9563.5	0	9563.5	105.8743	32662.222	0	32662.222
3	Digging of Trench cum mound (TCM) of size 1.90 x 0.60 x 1.00 m along the periphery of plantation area including spreading/ stacking the excavated soil as directed in 1 m width and 1 M height. Length 102 Rmt per Ha (127.50 cum per ha)	82.57	25472.85	50	25522.85	282.00132	86997.408	170.765	87168.173
4	Caunting of gridwise valuable species & applying colour bands	3.5	1079.75	0	1079.75	11.95355	3687.6702	0	3687.6702
5	Singling of coppices, cut back operation, debuddig, climber cutting & soil working around natural regeneration	10	3085	0	3085	34.153	10536.201	0	10536.201

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6	Part nursery cost for raising 750 seedlings per ha in polybags of size 12.50 x 25 cm Rs.10.56 per plant	26.29	8110.47	1320	9430.47	89.788237	27699.671	4508.196	32207.867
7	Alingment of pits at 4 x 4 m spacement (Wages 0.13 M.D and MS. Rs. 2.24 per 50 pits)	1.62	499.77	28	527.77	5.532786	1706.8645	95.6284	1802.4929
8	Digging of pits 625 pits per ha (6.60 M.D Per 100 pits)	41.25	12725.62	0	12725.62	140.88113	43461.827	0	43461.827
	Total	**208.23**	**64238.96**	**1548**	**65786.96**	**711.16792**	**219395.3**	**5286.8844**	**224682.19**
	Contingency 3%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6740.4656**
	Labour Welfare 4%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8987.2875**
	Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**240409.94**

B FIRST YEAR OPRETAIONS

1	Part Nursery cost for maintainace of 750 seedlings per ha Rs. 2.64 per seedling (Wages Rs.2.20, M & S Rs. 0.44)	6.57	2026.85	330	2356.85	22.438521	7055.497	1127.049	8182.546
2	Refiliing of pits with good quality soil & single super phosphate Rs. 0.96 per pit (1.66 M.D per 100 pits)	10.38	3202.23	600	3802.23	35.450814	10936.576	2049.18	12985.756
3	Planting of agave suckers in 3 rows on TCM (306 suckers per ha @ Rs.3 per suckers)	1	308.5	918	3802.23	3.4153	1053.62	3135.2454	4188.8654
4	Transport of seedlings from nursery to plantation site (including loading & unloading) Rs.1.00 per seedling Wages 0.14 md per 100 seedlings	1.05	323.93	750	1073.93	3.586065	1161.612	2561.475	3723.087
5	Planting of 625 seedlings (1.5 M.D per 100 seedlings)	9.38	2893.73	0	2893.73	32.035514	9882.956	0	9882.956
6	Causality replacement (20% 125 seedling per ha) (2 M.D per 100 seedlings)	2.5	771.25	0	771.25	8.53825	2634.05	0	2634.05
7	3 weedings and 2 soil workings (3.50 M.D per 100 seedlings) fertilizer application Rs.0.45 per seedling	42	12957	472.5	13429.5	143.4426	44252.042	1613.7293	45865.771

8	Part Nursery Cost for raising seedling for casuality replacement in SYO. (125 seedlings per ha.) Rs. 10.56 per plant.	4.38	1351.23	220	1571.23	14.959014	4614.855	751.366	5366.221
9	Watch and ward (9 months) – 1 watcher per 10 ha	30	9255	0	9255	102.459	31608.601	0	31608.601
10	Fire tracing	2	617	0	617	6.8306	2107.24	0	2107.24
	Total	**109.26**	**33706.72**	**3290.5**	**39572.95**	**373.15568**	**115307.05**	**11238.045**	**126545.09**
	Contingency 3%	0	0	0	0	0	0	0	**3796.3528**
	Labour Welfare 4%	0	0	0	0	0	0	0	**5061.8037**
	Grand Total	0	0	0	0	0	0	0	**135403.25**

B SECOND YEAR OPRETAIONS

	Part nursery cost for seedlings for causality replacement (500 seedlings per ha)	1.1	339.35	55	394.35	3.75683	1158.9821	187.7865	1346.7686
	Transportation of seedlings for causality replacement from nursery to plantation site (including loading and unloading) wages 0.14 M.D Per 125 Seedling	0.18	55.23	125	180.53	0.614754	189.65161	426.7875	616.43911
	Causality replacement (125 seedling per ha) 2 M.D per 100 seedling	2.5	771.25	0	771.25	8.53825	2634.0501	0	2634.0501
	2 weedings and 1 soil working, with fertilizer application at Rs. 0.45 per seedling	26.5	8175.25	281.25	8456.5	90.50545	27920.931	960.27188	28881.203
	Fire tracing	2	617	0	617	6.8306	2107.2401	0	2107.2401
	Total	**32.28**	**9958.08**	**461.25**	**10419.63**	**110.24588**	**34010.855**	**1574.8459**	**35585.701**
	Contingency 3%	0	0	0	0	0	0	0	**1067.571**
	Labour Welfare 4%	0	0	0	0	0	0	0	**1423.428**
	Grand Total	0	0	0	0	0	0	0	**38076.7**

Sr. No.	Particulars of works	Man Days	Wages	Material supply	Total (Rs. Per Ha.)	Man Days	Wages	Material supply	Total
	D THIRD YEAR OPRETAIONS								
1	2	3	4	5	6	7	8	9	10
1	Singling, Cut back operations, debudding, Climber cutting and Soil working for natural regeneration.	10	3085	0	3085	34.153	10536.201	0	10536.201
2	One weeding. (1 m.d. per 100 seedlings)	6.25	1928.13	0	1928.13	21.345625	6585.1253	0	6585.1253
3	Collection and sowing of seeds of Valuable species	1	308.5	0	308.5	3.4153	1053.6201	0	1053.6201
4	Watch and ward 12 months - 1 watcher per 10.00 ha	36.5	11260.25	0	11260.25	124.65845	38457.132	0	38457.132
5	Fire tracing	2	617	0	617	6.8306	2107.2401	0	2107.2401
	Total	**55.75**	**17198.88**	**0**	**17198.88**	**190.40298**	**58739.318**	**0**	**58739.318**
	Contingency 3%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1762.1795**
	Labour Welfare 4%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2349.5727**
	Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**62851.07**

E FOURTH YEAR OPRETAIONS

1	Fire Tracing	2	617	0	617	6.8306	2107.2401	0	2107.2401
2	Watch and ward 12 months- 1 watcher per 10.00 ha	36.5	11260.25	0	11260.25	124.6584	38457.132	0	38457.132
	Total	**38.5**	**11877.25**	**0**	**11877.25**	**131.489**	**40564.372**	**0**	**40564.372**
	Contingency 3%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1216.9312**
	Labour Welfare 4%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1622.5749**
	Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43403.878**

F FIFTH YEAR OPRETAIONS

1	Fire Tracing	2	617	0	617	6.8306	2107.2401	0	2107.2401
2	Watch and ward 12 months- 1 watcher per 10.00 ha	36.5	11260.25	0	11260.25	124.6584	38457.132	0	38457.132
	Total	**38.5**	**11877.25**	**0**	**11877.25**	**131.489**	**40564.372**	**0**	**40564.372**
	Contingency 3%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1216.9312**
	Labour Welfare 4%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1622.5749**
	Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43403.878**

G SIXTH YEAR OPRETAIONS

1	Fire Tracing	2	617	0	617	6.8306	2107.2401	0	2107.2401
2	Watch and ward 12 months- 1 watcher per 10.00 ha	36.5	11260.25	0	11260.25	124.6584	38457.132	0	38457.132
	Total	**38.5**	**11877.25**	**0**	**11877.25**	**131.489**	**40564.372**	**0**	**40564.372**
	Contingency 3%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1216.9312**
	Labour Welfare 4%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1622.5749**
	Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43403.878**

H SEVENTH YEAR OPRETAIONS

1	Fire Tracing	2	617	0	617	6.8306	2107.2401	0	2107.2401
2	Watch and ward 12 months- 1 watcher per 10.00 ha	36.5	11260.25	0	11260.25	124.6584	38457.132	0	38457.132
	Total	**38.5**	**11877.25**	**0**	**11877.25**	**131.489**	**40564.372**	**0**	**40564.372**
	Contingency 3%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1216.9312**
	Labour Welfare 4%	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1622.5749**
	Grand Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43403.878**

Abstract for Model No.4

Sr. No.	Year of operation	Man days	Wages	Material supply	Total	Other expenses	Total	Total amount (rounded off)
	Pre Monsoon works	711.1679	219395.3	5286.884	224682.2	15727.753	240409.9	240410
	First Year Operations	373.1557	115307	11238.04	126545.04	8831.157	135403.25	135403
	SecondYear Operations	110.2459	34010.86	1574.846	35585.7	2490.999	38076.70	38077
	Third Year Operations	190.4023	58739.32	0	58739.37	4111.753	62851.123	62851
	Fourth Year Operations	131.489	40564.37	0	40564.37	2839.506	43403.88	43404
	Fifth Year Operations	131.489	40564.37	0	40564.37	2839.506	43403.88	43404
	Sixth Year Operations	131.489	40564.37	0	40564.37	2839.506	43403.88	43404
	Seventh Year Operations	131.489	40564.37	0	40564.37	2839.506	43403.88	43404
	TOTAL	**1910.9278**	**589709.96**	**18099.77**	**607809.79**	**42519.686**	**650350.492**	**650357**

Cost Per Plant Rs. 249.70

Note :- 1) The rates indicated are as per item No.3 of Government of Maharashtra resolution No. MREGS-2011/F.No. 85/ EGS-1, Planning department, EGS division dt.3/11/2011. The rates for item No. 4& 5 of premonsoon works and item No.2 of FYO are as per model No.7.

2) Rubble bunds of size bottom width 1.00 m, top width 0.60 m and height 1.00 m should be constructed wherever digging of TCM is not possible

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