

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

Size of Pits

No. of Seedlings

- 3m x 3m

- 0.45 x 0.45 x 0.45m

- 1111 per ha

VILLAGE Gundwal

TALUKA Mahur

Range Mahur

Compt.No -

S.N./Gut N 70

Wage Rate

387.23

Ha.

13.20

Sr.No	Particulars of works	Per Ha.				13.20 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	387.23	91	478.23	13.2	5111.44	1201.2	6312.64
	(b) Preparation of treatment map (100 m x 50 m grid)	1	387.23	91	478.23	13.2	5111.44	1201.2	6312.64
	(c) Digging trial pits of size 0.30x0.30x0.60 in corner of Grid.	0.40	154.89	0	154.89	5.28	2044.57	0	2044.57
	(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	0.00	225	225.00	0	0	2970	2970.00
	(e) Clearing of bushes and preparation of site (As per requirement)	10	3872.3	91	3963.30	132.00	51114.36	0	51114.36
2	Soil and moisture conservation works including collection of rubbles from areas upto 30 m etc	31	12004.13	0	12004.13	409.2	158454.516	0	158454.52
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	2413825.92	2413825.92
4	Alignment of pits at 3m x 3m spacement. 1111 pits per Ha (0.25	2.78	1076.50	49.77	1126.27	36.696	14209.79208	656.96	14866.75608
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	28395.58	0	28395.58	967.96	374821.60	0.00	374821.60
6	Construction of 5.00 Rmt wide Inspection Path 1M.D. per 100 Rmt	1	387.23	0	387.23	13.20	5111.44	0	5111.44

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	290.42	25	315.42	9.9	3833.58	330	4163.58
8	Providing and fixing (4 feet x 3 feet) information board each per site	0	0	5000	5000.00	0	0.00	66000.00	66000.00
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	18087.5133	4825.46	22912.97	616.57	0.00	66000.00	66000.00
	Total	167.97	65043.02	193263.83	258306.85	2217.20	619812.73	2552185.28	3171998.01
	Contingency 3%		0	7749.21	7749.21	0	0	102289.51	102289.51
	Labour Welfare 4%		0	10332.27	10332.27	0	0	136386.02	136386.02
	Grand Total	167.97	65043.02	211345.31	276388.3328	2217	619812.7294	2790860.816	3410673.55

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	5731.00	1079.73	6810.73	195.36	75649.25	14252.44	89901.69
2	Refilling of pits by good quality soil including application of single super phosphate (1.66 MD per 100 pits)	18.44	7140.5212	1944.25	9084.77	243.41	94254.87984	25664.10	119918.98
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	724.12	2426.00	3150.12	24.68	9558.38532	32023.2	41581.59
4	Planting of 1111 seedlings (1.0 M.D per 100 seedlings)	11.11	4302.13	0	4302.13	146.65	56788.05396	0	56788.05
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	17208.5012	911.02	18119.52	586.61	227152.22	12025.46	239177.68
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	22943.3775	54395.00	77338.38	782.10	302852.583	718014	1020866.58
7	Casualty replacement (20% 222 Seedlings per ha.) (2 M.D. per 100 seedlings)	4.44	1719.3012	0	1719.30	58.61	22694.77584	0	22694.78
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	3008.78	803.64	3812.42	102.564	39715.85772	10608.05	50323.90572
9	Watch and ward (10 months - 1 watcher per 10 ha)	27.38	10602.36	0	10602.36	361.42	139951.12	0.00	139951.12
10	Soil working for naturally grower plants and singling (1.15 M.D.	1.15	445.31	10	455.31	15.18	5878.1514	132.00	6010.1514
11	Fire tracing	2.00	774.46	0	774.46	26.4	10222.872	0	10222.87
	Total	192.65	74599.86	61569.64	136169.50	2542.98	984718.15	812719.25	1797437.39
	Contingency 3%		0	4085.084985	4085.08	0.00	0.00	53923.1218	53923.12
	Labour Welfare 4%		0	5446.77998	5446.78	0	0	71897.49574	71897.50

	Grand Total	192.65	74599.86	71101.50	145701.36	2542.98	984718.15	938539.87	1923258.01
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	952.5858	404.00	1356.5858	32	12574.13256	5332.8	17906.93256
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	120.0413	404.04	524.0813	4	1584.54516	5333.328	6917.87316
3	Planting for causality replacement 222 seedlings (2.00 M.D. per 100 seedlings)	4.44	1719.3012	0.00	1719.3012	59	22694.77584	0	22694.77584
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	10753.377	911.02	11664.3971	367	141944.5777	12025.464	153970.0417
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	34417.002	36105	70522.0024	1173	454304.4317	476586	930890.4317
6	Watch and ward 12 months -1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567.414
7	Fire tracing	2	774.46	0	774.46	26	10222.872	0	10222.872
	Total	162.36	62870.663	37824.06	100694.7228	2143.15	829892.749	499277.592	1329170.341
	Contingency 3%		0	3020.8417	3020.842			39875.11023	39875.11
	Labour Welfare 4%		0	4027.7889	4027.789			53166.81364	53166.81
	Grand Total	162.36	62870.663	44872.691	107743.3534	2143.152	829892.749	592319.5159	1422212.265
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	6455.1241	911.02	7366.1441	220	85207.63812	12025.46	97233
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	17223.99	16680	33903.9904	587	227356.6733	220176	447533
3	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567
4	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	774.46	25.00	799.46	26	10222.872	330	10553
5	Fire tracing	2.00	774.46	0	774.46	26	10222.872	0	10223
	Total	101.65	39361.93	17616.02	56977.9495	1342	519577.4694	232531.464	752109
	Contingency 3%		0	1709.3385				22563.268	22563
	Labour Welfare 4%		0	2279.118				30084.9573	30084

Grand Total		101.65	39361.93	21604.48	56977.95	1341.78	519577.47	285179.09	804756.56
E. Fourth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	774.46	25	799.46	26	10222.872	330	10553
3	Fire tracing	2.00	774.46	0	774.46	26	10222.872	0	10223
Total		40.50	15682.815	25	15707.815	534.6	207013.158	330	207343
Contingency 3%			0	471.23445			6220.29474		6220
Labour Welfare 4%			0	628.3126			8293.72632		8294
Grand Total		40.50	15682.815	1124.5471	15707.815	534.6	207013.158	14844.02106	221857
F. Fifth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	774.46	25	799.46	26	10222.872	330	10553
3	Fire tracing	2.00	774.46	0	774.46	26	10222.872	0	10223
Total		40.50	15682.815	25.00	15707.815	534.6	207013.158	330	207343
Contingency 3%			0	471.23445			6220.29474		6220.29474
Labour Welfare 4%			0	628.3126			8293.72632		8293.72632
Grand Total		40.50	15682.815	1124.5471	15707.815	534.6	207013.158	14844.02106	221857
G. Sixth Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	774.46	25	799.46	26	10222.872	330	10553
3	Fire tracing	2.00	774.46	0	774.46	26	10222.872	0	10223
Total		40.50	15682.815	25	15707.815	534.6	207013.158	330	207343
Contingency 3%			0	471.23445			6220.29474		6220
Labour Welfare 4%			0	628.3126			8293.72632		8294
Grand Total		40.5	15682.815	1124.5471	15707.815	534.6	207013.158	14844.02106	221857
H. Seventh Year Operations									
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	774.46	25	799.46	26	10222.872	330	10553
3	Fire tracing	2.00	774.46	0	774.46	26	10222.872	0	10223
Total		40.50	15682.815	25	15707.815	534.6	207013.158	330	207343
Contingency 3%			0	471.23445			6220.29474		6220
Labour Welfare 4%			0	628.3126			8293.72632		8294
Grand Total		40.5	15682.815	1124.5471	15707.815	534.6	207013.158	14844.02106	221857

Labour Welfare 4%										8294
Grand Total										221857
I. Eighth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567	8294
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	774.46	25	799.46	26	10222.872	330	10553	10553
3	Fire tracing	2.00	774.46	0	774.46	26	10222.872	0	10223	10223
Total										207343
Contingency 3%										6220
Labour Welfare 4%										8294
Grand Total										221857
J. Ninth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567	8294
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	774.46	25	799.46	26	10222.872	330	10553	10553
3	Fire tracing	2.00	774.46	0	774.46	26	10222.872	0	10223	10223
Total										207343
Contingency 3%										6220
Labour Welfare 4%										8294
Grand Total										221857
K. Tenth Year Operations										
1	Watch and ward 12 months 1 watcher per 10.00 ha	36.50	14133.895	0	14133.895	482	186567.414	0	186567	8294
2	Counting of survival percentage Grid wise and Species wise and to Note the same on Register in May and October.	2.00	774.46	25	799.46	26	10222.872	330	10553	10553
3	Fire tracing	2.00	774.46	0	774.46	26	10222.872	0	10223	10223
Total										207343
Contingency 3%										6220
Labour Welfare 4%										8294
Grand Total										221857

(R.A. SATELIHAR)

Deputy Conservator, of forests
Nanded Division Nanded

Abstract for Model No.5

Year of operation		(Amount in Rupees)							
S. N.		Man days	Wages	Material supply	Total	Man days	Wages	Material supply	Total
1	Pre Monsoon works	167.97	65043.02	211345.31	276388.33	2217.20	619812.73	2790860.82	3410673.55
2	First Year Operations	192.65	74599.86	71101.50	145701.36	2542.98	984718.15	938539.87	1923258.01
3	Second Year Operations	162.36	62870.66	44872.69	107743.35	2143.15	829892.75	592319.52	1422212.26
4	Third Year Operations	101.65	39361.93	21604.48	56977.95	1341.78	519577.47	285179.09	804756.56
5	Fourth Year Operations	40.50	15682.82	1124.55	15707.82	534.60	207013.16	14844.02	221857.18
6	Fifth Year Operations	40.50	15682.82	1124.55	15707.82	534.60	207013.16	14844.02	221857.18
7	Sixth Year Operations	40.50	15682.82	1124.55	15707.82	534.60	207013.16	14844.02	221857.18
8	Seventh Year Operations	40.50	15682.82	1124.55	15707.82	534.60	207013.16	14844.02	221857.18
9	Eighth Year Operations	40.50	15682.82	1124.55	15707.82	534.60	207013.16	14844.02	221857.18
10	Ninth Year Operations	40.50	15682.82	1124.55	15707.82	534.60	207013.16	14844.02	221857.18
11	Tenth Year Operations	40.50	15682.82	1124.55	15707.82	534.60	207013.16	14844.02	221857.18
Total		908.13	351655.18	356795.81	696765.71	11987.32	4403093.20	4710807.43	9113900.63

(R.A. SATELIKAR)

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